NORNICKEL

Navigating the Transition to a Net Zero World

Strategy Day

November 2021

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Introduction

A year of 2021 for Nornickel

- Resilience of the business model enhanced
- Delivery on the comprehensive environmental programme: interim milestones achieved
- Ramp-up of the investment programme on track

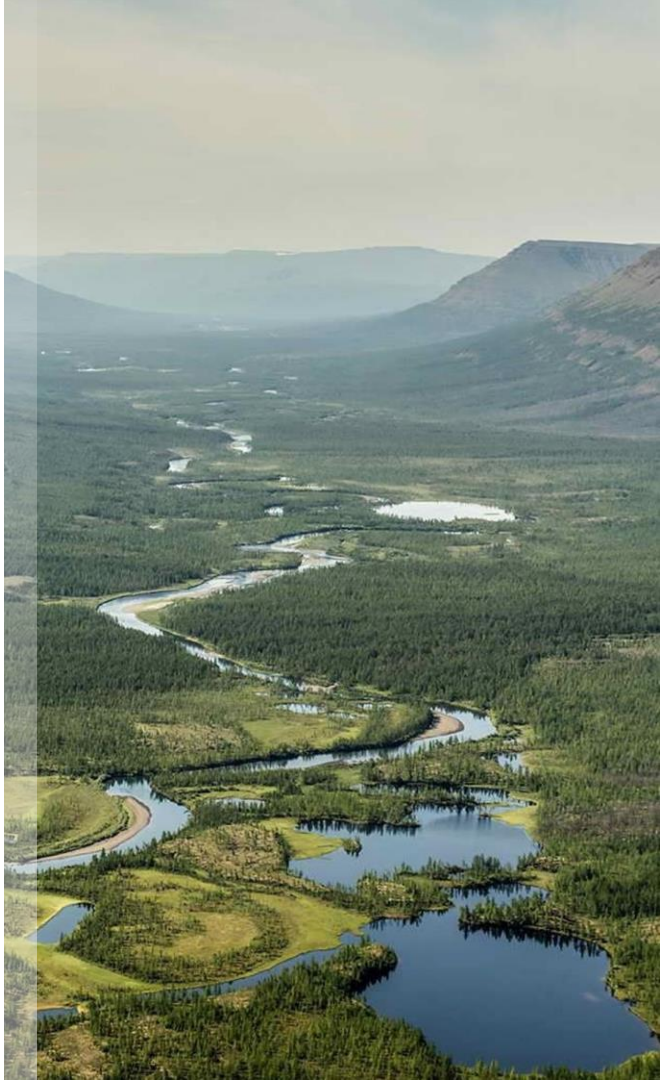
“Sustainable Growth” strategy for core operations intact, focus on emerging challenges

- Production growth ambitions in line with increasing demand for metals, which are critical for the global transition to a carbon free world
- Transformational ESG strategy in action with re-enhanced focus on Health & Safety performance and reduction of environmental footprint
- Robust operating and financial performance through the cycle

NORNICKEL

Sustainable Development Update

Andrey Bougrov
Senior Vice-President



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 CO_2 carbon intensity target announced: 16% cut
- 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

Sustainable Development Strategic Focus

E Environment & Climate Change

- Cleaning up legacy pollution and environmental rehabilitation after incidents in Norilsk
- Reducing significantly SO_2 emissions at two largest operating sites
- 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

HPP-3 Incident: Full Environmental Remediation in Progress

2020: Completion of Phases 1&2 (clean-up) and Phase 3 (transportation and utilization of contaminated materials)

- Over 90% of leaked fuel was collected and all of the contaminated soil removed
- Collected water-fuel mixture was transported to an industrial site near Nadezhda smelter, where it was separated into a fuel and water
- Contaminated soil was placed into sealed-off hangars to prevent further risk to the environment
- River shores were treated with sorbents and washed off
- Fuel residues in soil and water were collected (with a help of sorbent bons)

Independent Impact Assessments:

- Root causes investigation by ERM
- Impact assessment on local indigenous population via ethnological survey and expedition
- Scientists' field work assessment – Great Norilsk Expedition, Phase-1 completed in 2020
- Land rehabilitation plan prepared by ECOTERRA (1)

2021+: Phase 4 (rehabilitation) in progress

2021

- Settled damages to wildlife from the regional government (Krasnoyarsk region) and fully settled the claims for the damages to soil and water from Environmental Watchdog (Rosprirodnadzor)
- Settlement in kind of damages to fish resources are being negotiated with the regulator
- Washing of river shores and treating contamination residues on the land with sorbents (continued from 2020)
- Rehabilitation of the collected contaminated soil using microbiological technology
- Land reclamation, grass seeding (continued from 2020)
- Monitoring of water bodies, soil, flora and fauna (continued from 2020)
- Reproduction of aquatic bio-resources (ongoing program)

Independent assessment and advisory

- Scientists' field work assessment – Great Norilsk Expedition, Phase-2
- Program for the remediation of damages to wildlife prepared by the Institute of Ecology and Geography of the Siberian Federal University
- Comprehensive survey of Norilsk-Pyasino water system carried out by a non-profit organization "Fund of Polar Research"

Source: Company data
Note: 1. Independent non-profit organization Expert-Analytical Center on Environmental Problems
Read more: https://www.nornickel.com/news-and-media/press-releases-and-news/updates-on-the-clean-up-operation-following-diesel-spill-in-norilsk/

Clean-up and Collection of Legacy Waste in Norilsk Area

The first phase of the clean-up and removal program for legacy industrial and construction waste in Norilsk area launched

- A dedicated Department, Work with Territories and Landscaping, has been created in Norilsk Division: with over 750 employees and 121 units of specialized machinery and equipment
- The program aims at the 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
- **Program Targets:** demolition of 467 abandoned buildings and structures, collection of 2+ mln tons of waste and 600+ kt of metal scrap

2021 Targets:

- Clean up of waste and old equipment at over 2.1m m^2 area
- Dismantle 171 obsolete buildings and structures
- Collect and remove 377kt of waste and 115kt of metal scrap
- Sanitary treatment of the cleaned-up area after scrap and waste have been removed

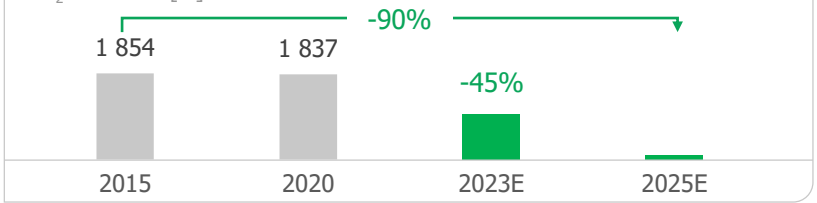
$0.6 bn expected spending over 2021-2030 (1)

Source: Company data
Note: 1. Equivalent to RUB40 bn
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

Environmental Program: Reduction of SO_2 Emissions on Track

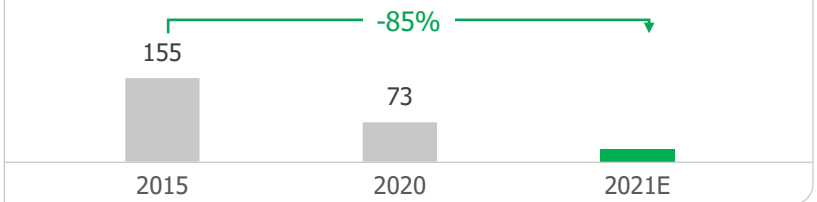
Norilsk Division: SO_2 Emissions Practically Unchanged in 2020, Sulphur Programme in Active Construction Phase

SO_2 Emissions [kt]



Kola Division: SO_2 Emissions on Track to Reduce 85% in 2021 vs 2015

SO_2 Emissions [kt]



Strategic target: achieve industry-leading SO_2 utilization rates

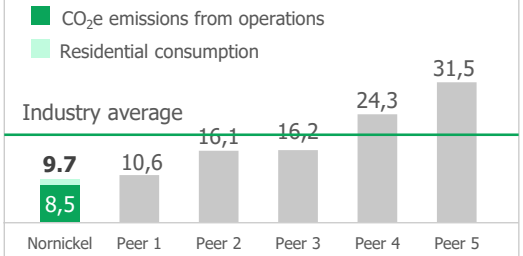
- Kola Division: All smelting facilities have been shut down, with the copper refining line shut in March 2021
- In addition to overall reduction of SO_2 emissions at Kola, cross-border emissions have been completely ceased
- Norilsk Division: Construction of sulphur capture and neutralization at Nadezhda smelter in progress
- In 2021, testing of a real-time air quality monitoring system was launched in the city of Norilsk, with 14 air quality control points have been installed within the city limits
- Automated air quality monitoring system at the Company's industrial sites to be launched in the mid-term

Source: Company data
Note: https://www.nornickel.com/news-and-media/press-releases-and-news/nornickel-to-help-organise-air-quality-monitoring-in-russia/type=news

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

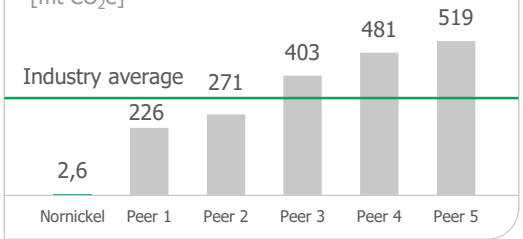
Greenhouse Gas Emissions Scope 1&2 (CO_2e) (1), 2020

[mt CO_2e]

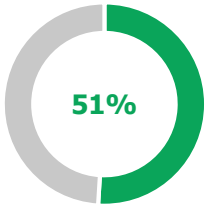


Greenhouse Gas Emissions Scope 3 (CO_2e) (1,2), 2020

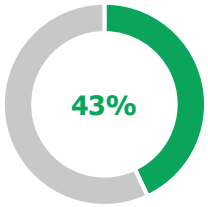
[mt CO_2e]



Share of Renewables



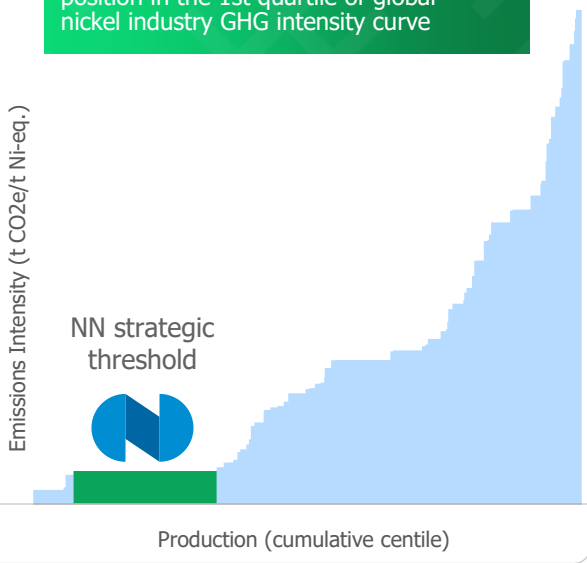
2017-2020 average share of renewables in total electricity consumption in the Norilsk Region



2017-2020 average share of renewables in total electricity consumption for the Group as a whole

Nornickel's CO_2 Nickel Emissions (3) (per tonne of Ni-eq.)

2030 target: to sustain industry-leading position in the 1st quartile of global nickel industry GHG intensity curve

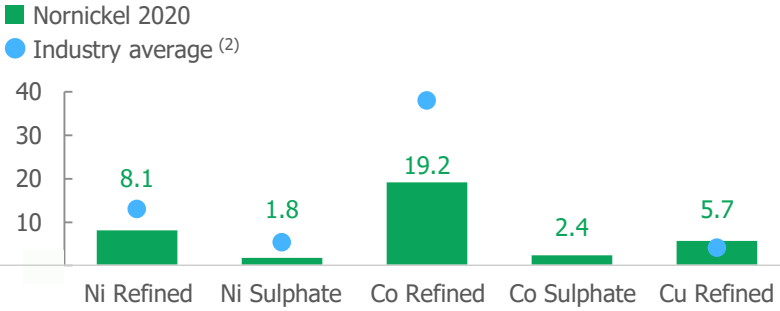


Source: Wood Mackenzie, Company's estimates, Company's analysis, peer group include leading diversified peers BHP Billiton, Rio Tinto, Vale, Glencore, Anglo American. Most recent available data (2019-2020). Notes: 1. Assessment under GHG Protocol Corporate Accounting and Reporting Standards. Nornickel GHG emissions include amount of emissions that come from providing Norilsk with electricity by NTEK, and reserve for CO2 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 CO2 emissions from Sulphur Programme 2.0 execution

Industry's Lowest Carbon Footprint of the Entire Commodities Basket

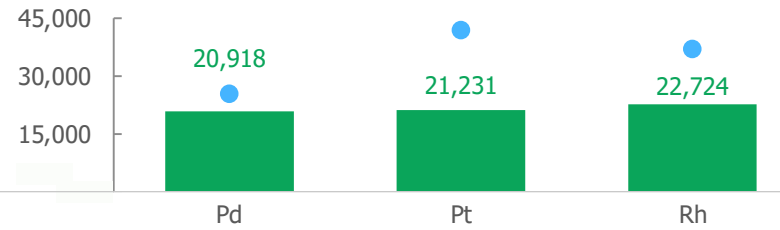
Global Warming Potential (GWP 100 years)

[kg CO_2e per kg of product] [Base metals (1)]



Global Warming Potential (GWP 100 years)

[kg CO_2e per kg of metal] [PGMs]



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)

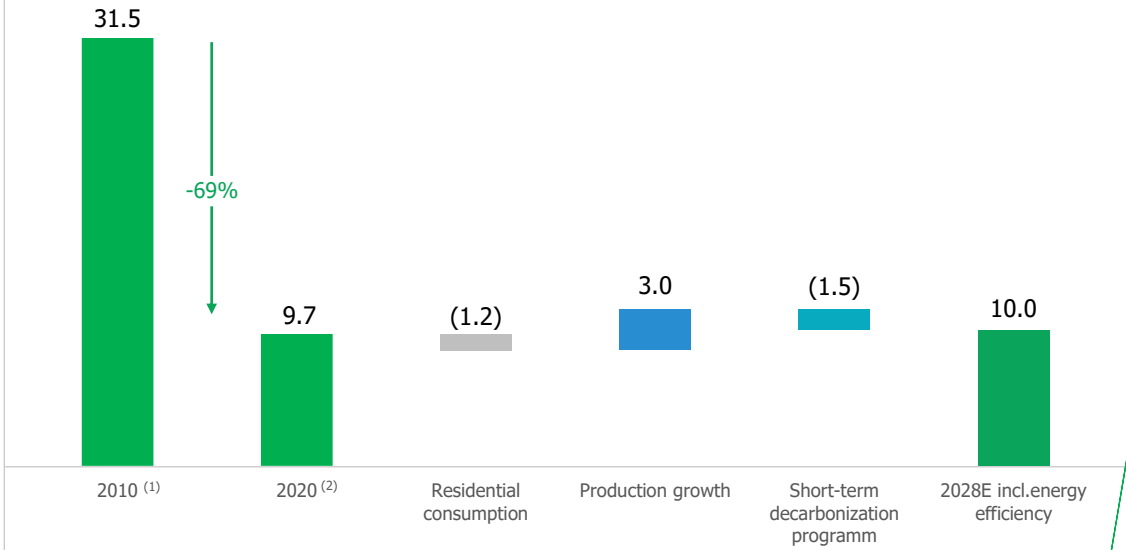
Sources: Ni - Nickel institute, Sphera GMBH, report "Life Cycle Assessment of Nickel Products, 2017", Co - Cobalt Institute, 2015 https://www.cobaltinstitute.org/sustainability/life-cycle-assessment/, Cu - The International Copper Association, "Copper Environmental Profile, 2018", PGM – IPA (International 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 Carbon Intensity and Maintaining Absolute Emissions

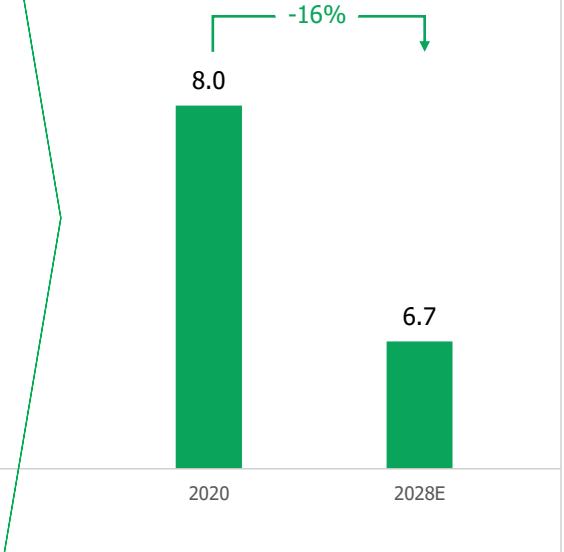
GHG Emissions from Operations, Scope 1&2

[mt CO_2e]



Reduction of Carbon Intensity per Ni Equivalent (3)

[per tonne of Ni equivalent]



Source: Company's analysis

Note: 1. Incl. OGK-3, 2. Incl. reserve for CO_2 emissions from Sulphur Programme 2.0 execution, 3. Ni equivalent volume has been calculated assuming 2020 average commodity prices, incl. reserve for CO_2 emissions from Sulphur Programme 2.0 execution, ex. residential consumption

Biodiversity: Reducing a Negative Impact

Support of natural reserves and protection of rare animal species

- Support of Russia's largest natural reserves, study and protection of rare and endangered species listed in the Red Book of the Russian Federation, including Siberian bighorn sheep, polar bears and lesser white-fronted geese
- A long-standing corporate project of breeding and releasing valuable fish species into Siberian rivers to replenish their populations

Support of research and development initiatives

- In 2020, the Great Norilsk Expedition, bringing together experts from 14 research institutes of the Siberian Branch of the Russian Academy of Sciences, carried out a comprehensive study of Norilsk area and the Company's environmental impact
- In 2021, the Expedition's interdisciplinary field teams examined surface water, soils and bottom deposits, plants and animals, and permafrost soils; the scientists will create a GIS model of the Norilsk Industrial District's ecosystem
- A number of baseline studies are scheduled to inspect impacts and risks to biodiversity in the areas of the Companies' operations, which will serve as a basis for a credible biodiversity management plan as well as conservation programmes

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/

Social: Investing into Local Communities and Charity

~ $500 mln

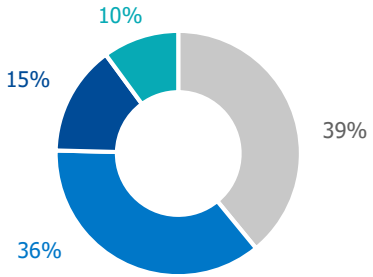
total spending in 2020 on social infrastructure development, charity and sponsorship programmes

~ 3% of revenue

one of the Russian industry highest ratios of social expenses/revenue

Breakup of Charity Expenditures in 2020

- Public initiatives
- Sport (infrustracture and other)
- Other (region, culture, education)
- COVID-19



Ayka Sports and Recreation Center Launched in Norilsk in 2020

Supporting Local Communities

Source: Company data

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

Reducing Impact on Local Communities

- Since the closure of the Nickel Plant in Norilsk in 2016, SO_2 emissions within city limits reduced by 30-35%
- According to the government's agency supervising human wellbeing and protection of consumer rights, Rosportebnadzor, a number of newly identified deceases in blood, blood making organs and other disfunctions, engaging immune system, reduced almost 40%, respiratory deceases – over 15% and circulatory diseases – 11%

Launch of the Corporate Healthcare Centre

- Corporate Healthcare Project: launch of private healthcare to complement the state run healthcare system in the regions of operations: Norilsk Industrial District and Kola Peninsula
- The goal is to provide high-quality and affordable medical care to the Company's employees and their families
- Budget: ₽10 bn (circa $141 mln) until 2025

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 to launch in December 2021

Source: Company data

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

Norilsk Social & Economic Development Program

- Social & economic development program for Norilsk city until 2035 is being prepared
- ₽120 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 ₽81 bn will be contributed by Nornickel

Social Infrastructure Development

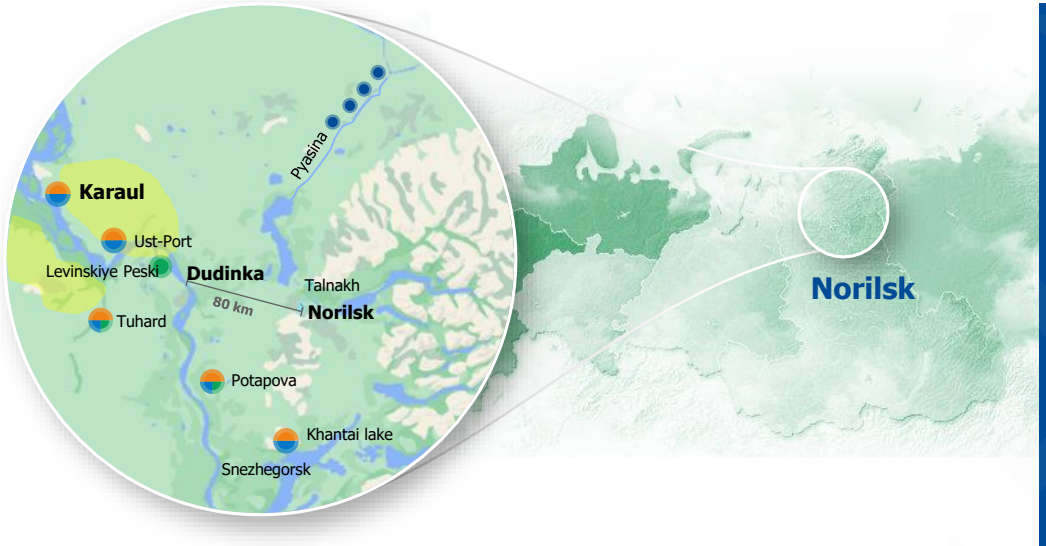
- Construction and overhaul of social infrastructure facilities (clinics, kindergartens, a sports centre, Arctic Museum of Modern Art, tourism infrastructure and etc.)
- Landscaping (urban redevelopment of public spaces, improvement of areas adjacent to city parks and recreation centres)

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)

Source: Company data

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 Nornickel'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: Support of Indigenous People

- Nornickel 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
- 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

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 Nornickel and the Kola Sami Association

Source: Company data

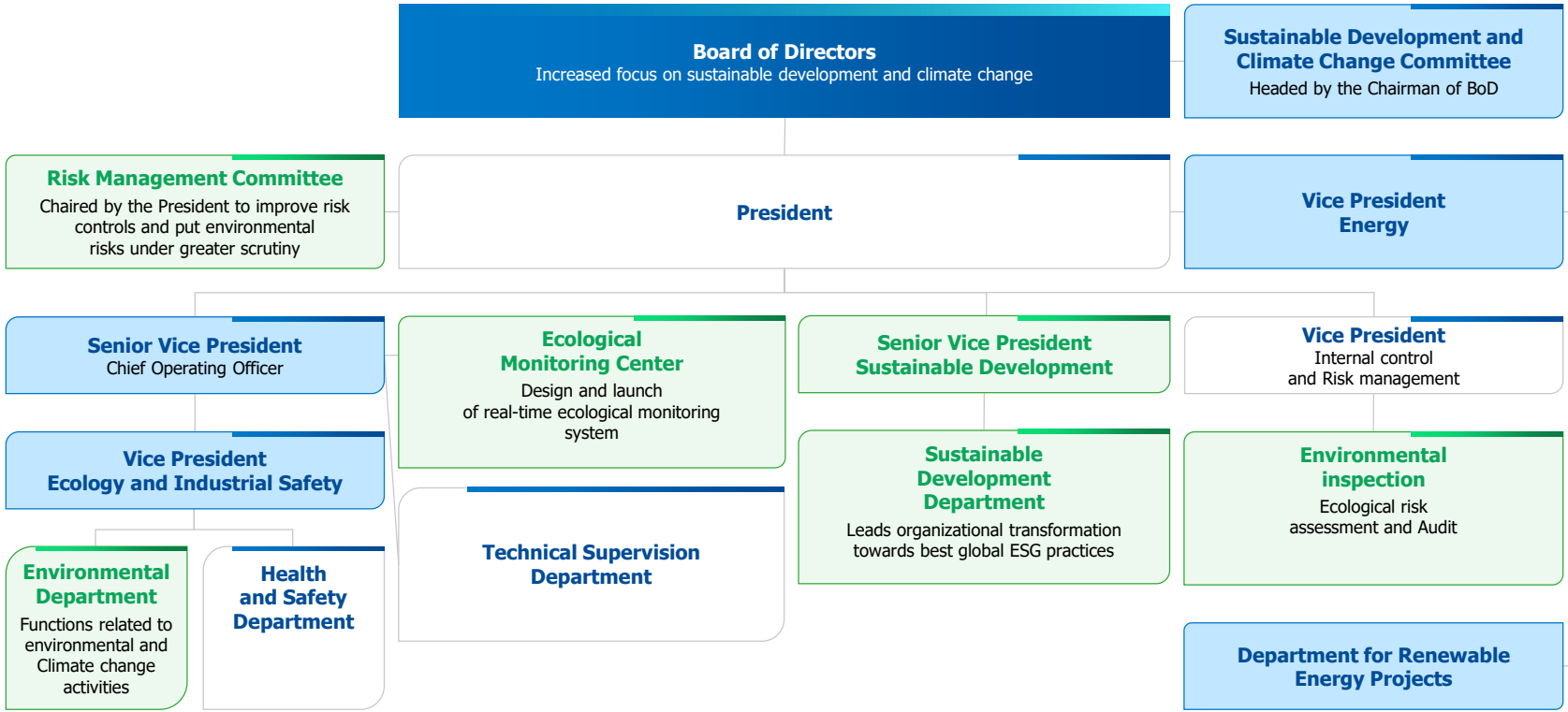
Case Study: Obtaining a Free Prior Consent from Indigenous People for a Resettlement Project in Tukhard Settlement

- 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 Nornickel 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 chooses 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
- Subject to the residents' consent, 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

Corporate Governance: Adjusting Organizational Structure to Respond to New Challenges



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 [1])
Area	Health and Safety	Environment	Environment & Climate Change
Weight	20%	20%	30%
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_2 emissions Absolute Scope 1+2 GHG emissions from operations to remain below 10 Mt CO_2e

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

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
Global Certification	
ECOVADIS (ESG Rating)	✓
IRMA (Initiative for Responsible Mining Assurance)	
TFS (Together for Sustainability)	✓
Responsible Sourcing Blockchain Network	✓
Responsible Minerals Initiative (Co, Ni, ESG)	
Proprietary Certification	
Global certification of carbon savings (by EY auditors, independent assurance of methodology by Sphera Solutions GmbH)	✓
Carbon Neutral Nickel (used in stainless steel)	✓
International Sustainability Standards	
ICMM (The International Council on Mining and Metals)	
Extraction Industry Transparency Initiative	
Global Industry Standard on Tailings Management	

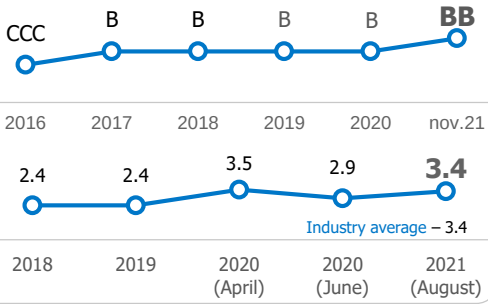
Source: Company data
Note: 1. Responsible steel is the steel industry's global multi-stakeholder standard and certification initiative for steelmakers, but not a special steel brand which can be traded

ESG Ratings – on Par or Above Global Mining Industry Averages

SUSTAINALYTICS

- ESG Risk Rating "High" Reiterated
- ESG Risk Rating [1] improved to 36.9/100 (from 38.3/100)
- Exposure Score 68.7/100, risk rating "High"
- Management Score 51.1/100, risk rating "Strong"

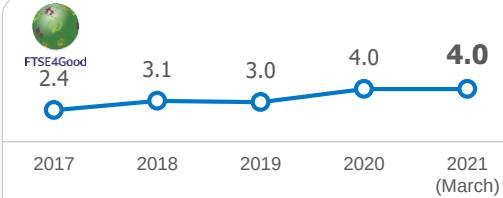
MSCI



ISS ESG

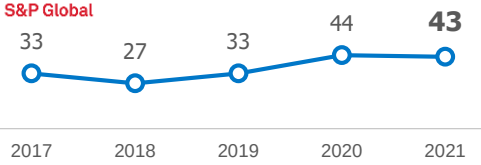
- ESG score "C"/medium
- Environmental score 1/10 [1]
- Social score 3/10 [1]
- Governance score 6/10 [1]

FTSE4Good



- Reiterated as an index constituent (July'21)
- Overall ESG score 4/5 (improvement from 2.4 since 2017), which puts Nornickel in the top percentile
- Industry average – 2.2/5

S&P Global



- ESG score 43/100 (59% score improvement since 2018)
- Industry average – 34/100

CDP

- Disclosure to CDP launched in 2020
- Climate Change score – "D" (M&M sector average - "C")
- Water Security score – "C" (M&M sector average - "B-")
- Forest Questionnaire - Submitted in 2021

Source: Company and public data as of November 2021, Notes: 1. The lower the better
Learn more on Norilsk Nickel ESG assessment: https://www.nornickel.com/sustainability/esg-highlights/assessment/

Selected International Sustainable Development Initiatives

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

GRI

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

- Signatory to UN Global Compact since 2016

IRMA
Initiative for Responsible Mining Assurance

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

BETTER MINING
RCS | GLOBAL GROUP

ReSource

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

Nickel INSTITUTE

IPA

GLOBAL BATTERY ALLIANCE

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

Source: Company and public data as of November 2021, Notes: 1. The lower the better
Learn more on Norilsk Nickel ESG assessment: https://www.nornickel.com/sustainability/esg-highlights/assessment/

Advancing Sustainable Development Agenda

2021

- Prepare sustainable development strategies at the divisional level and decompose Group strategic KPIs to management levels
- Prepare for the approval of the Board of Directors a set of 12 new ESG policies, including Human rights, Responsible Sourcing, Tailings Management, position statements on Water and Biodiversity as well as Supplier Code of Conduct
- Receive independent verification of the methodology for the calculation of the carbon footprint of the Company's key metals
- Launch forest disclosure to CDP
- Prepare TCFD roadmap
- Development of decarbonization initiatives

2022

- Prepare and review "green financing" opportunities
- Support of EITI
- Roll-out of matrix-based ESG governance system
- Improvement of internal procedures, systems and risk management in accordance with ICMM, IRMA and Global tailing standard principles
- Scenario analysis of climate-related physical and transition risks
- Integration of climate-related risks into corporate risk management system
- Progress with applications to IRMA
- RMI Certification for Polar Division

2023

- Issue a Climate change report
- Compliance with Global Tailings Standards
- Resubmission to ICMM
- Launch of Sulphur Programme 2.0 project at Nadezhda smelter to capture furnace gases

NORNICKEL

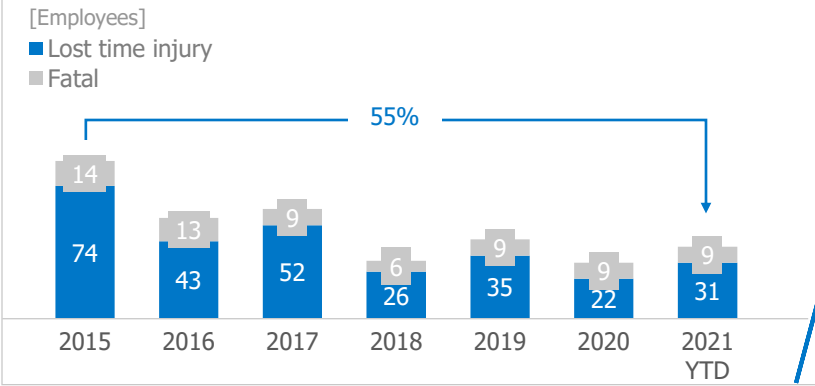
Operations Update

Sergey Stepanov

Senior Vice-President
Chief Operating Officer

Health and Safety Update

Number of Fatal Accidents Unchanged in 2021 Due to the Incident at Norilsk Concentrator



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

- Regrettably, there were 9 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
- Zero tolerance towards fatal incidents and violation of cardinal safety rules reiterated
- A comprehensive review of industrial safety requirements and standards is scheduled for 2022

Source: Company data

Reduction of Fatal Accidents is the Main Focus for 2022 - 2025

Key Health and Safety Initiatives

Mining operations

- Setting up a management expert group with the sole purpose to assess and raise safety standards in mining operations
- Enhance safety culture: improve management commitment and staff involvement in industrial safety activities (safety culture sessions, training of line management to develop safety competency)
- Strengthen risk-based approach to work activities
- Improve collision avoidance system for mining transport
- Use of modern training facilities, including underground polygon, simulators for operators of LHD machines, drillers and roof bolters
- Expand dispatching and digitalization of operations

Maintenance and repairs

- Rollout intelligent video analytics and positioning system
- Provide modern training sites to develop safe practical skills when working at height
- Renovate staircases, technological platforms and in-shop flyovers

Source: Company data

Recovery of Oktyabrsky and Taimyrsky Mines and Norilsk Concentrator – Full Capacity Resumed by December

Mines

- On February 24th, the two underground mines of Norilsk Division: **Oktyabrsky (5 mtpa),** mining rich, cuprous and disseminated ores, and **Taimyrsky (4.3 mtpa),** mining rich ores, were temporary suspended due to the increased inflow of natural groundwater
- Estimate of 2021E production losses: 30 kt of Ni, 55 kt of Cu and 470 koz of Pd+Pt
- Recovery to full capacity: the Oktyabrsky mine – May 13th, the Taimyrsky mine – the beginning of December

Risk mitigation – upgrade of hydrogeological risk monitoring system

- Additional drilling and seismic exploration for a more accurate determination of the location of underground water bodies
- Areas at risk of large water inflows have been localized

Norilsk Concentrator

- **Norilsk Concentrator (9.2 mtpa)** includes disseminated (5.2 mtpa) and cuprous ore (4.0 mtpa) circuits, which process disseminated ore mined at the "South Cluster" and cuprous ore from Talnakh deposit, respectively
- On February 20th, the building of the ore reloading facility of secondary crushing unit, part of the disseminated ore circuit, collapsed during repairs causing 3 fatalities among the repairing team
- Norilsk Concentrator has already restored its full operational capacity

Risk mitigation

- Zero tolerance for violations of industrial safety reiterated
- Capital repair risks being re-assessed and additional corrective industrial safety measures developed
- Changes to the technical audit system introduced: the reporting line of integrity engineers raised to the first deputy Head of Norilsk division, critical repair reports escalated to the Head of the division
- Ad hoc inspections launched focusing on the defects
- Complete revamp of the Concentrator is currently studied

Source: Company data

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 (in progress), with a prime focus on fuel storage (completed)
- 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

Source: Company data

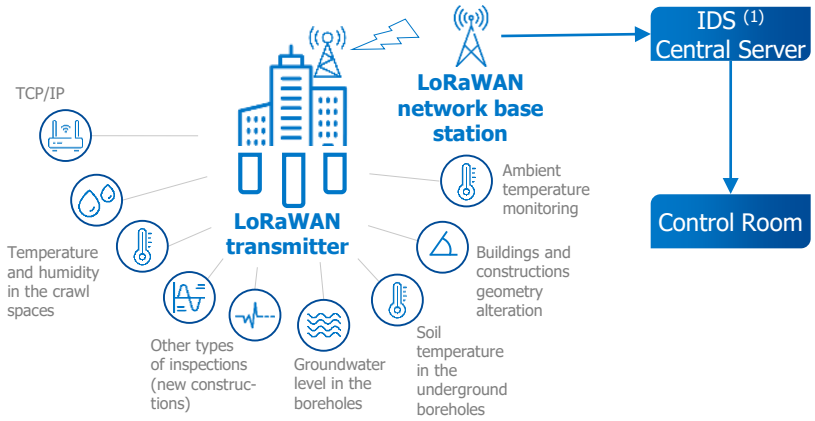
Physical Risks: Monitoring of Permafrost-Based Foundations in Norilsk

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

Geotechnical monitoring system



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

Phase 1

- Fuel storage facilities and other buildings hosting large groups of people or cultural heritage buildings

Phase 2

- Facilities of Norilsk Fuel and Energy Company (NTEK), tailing dams and ponds of Norilsk Division

Phase 3

- Building and structures of Norilsk Division, including main mining and processing facilities
- Long structures such as various pipelines (including pulp, gas and others) and railroad infrastructure as well as 39 bridges

Phase 4

- All remaining facilities located in Norilsk Industrial area, including overpasses, pipelines and power lines

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)

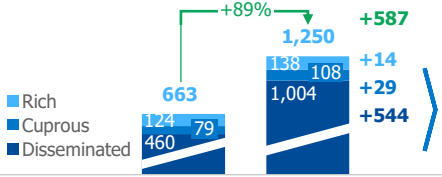
Nornickel is making a comprehensive, long-term effort in monitoring assets to assess the impact of permafrost thawing in the Norilsk region

Source: Company data

Major Addition to Mineral Resource Base of Taimyr Peninsula

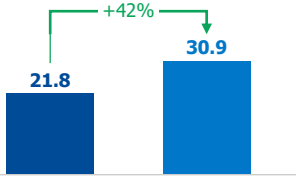
P&P Reserves (1)

[Mt]



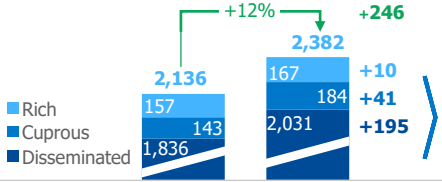
Contained Metal in Reserves

[Mt of NiEq. (2) for Ni, Cu, Pd and Pt]



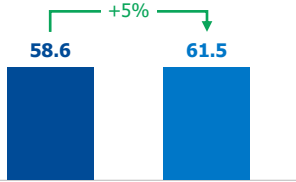
M&I and Inferred Resources (1)

[Mt]



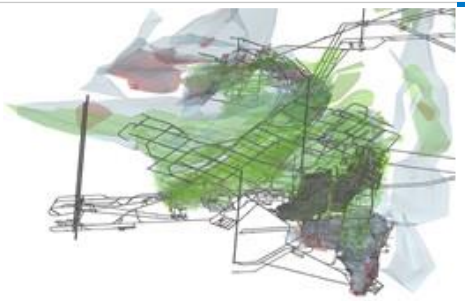
Contained Metal in Resources

[Mt of NiEq. (2) for Ni, Cu, Pd and Pt]



- "Technological breakthrough 1.0" reinvented our traditional approach to resource base management and unlocked additional value in reserves and resources of Norilsk Division (1)
- Selected programme instruments and achievements:
  - 3D-digital resource models of all ore deposits: **2+ bn tonnes of ore digitalized**
  - Digital mine planning to year 2040
  - Underground remote control centers for mining equipment

Example of a digital mine in 3D



Full digitalization of ore deposits as well as completion of long-term mine plans for the new projects at Talnakh ore field and Norilsk-1 deposit ("South Cluster" project) enabled significant increase of mineral resource base

Notes: 1. JORC-audited data for Oktyabrskoye, Talnakh and Norilsk-1 deposits (not including Maslovskoye deposit), Nov2021. 2. Nickel equivalent at spot prices

"Technological Breakthrough": Delivering Tangible Results

- Digital models for all of the Company's deposits, over 2 bn tonnes of ore
- Mining operations planning and design in 3D ranging from one day to the full life of a mine
- Simulation models for 7 mines
- Metal Balance used for analysis during each shift and at each phase, from ore to finished products
- Global base of guidelines, audits, and work permits comprising 66,000 documents

+246 mln t

mineral resources increase

6,500 workers

connected to on-line underground positioning system

Source: Company data

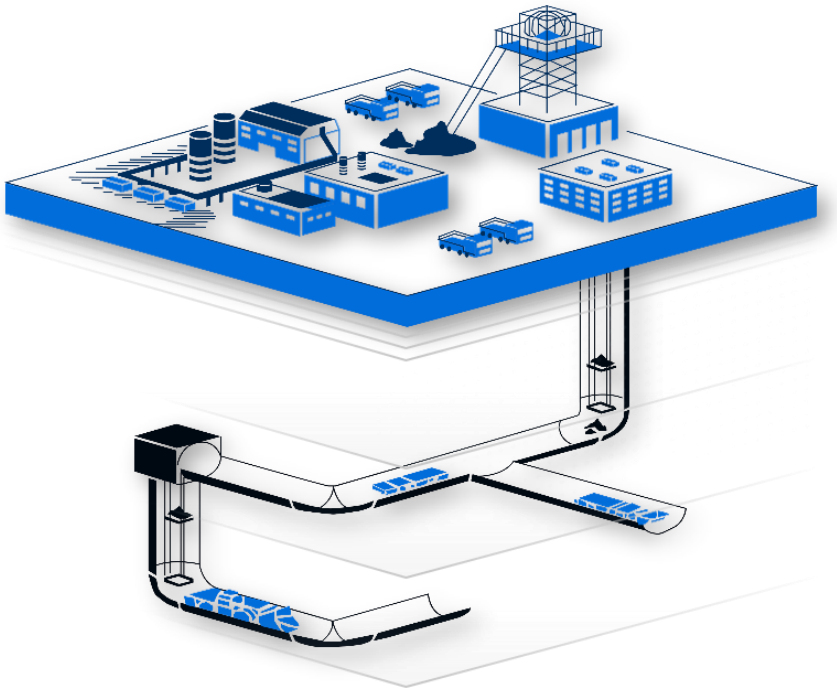
Skalisty Update: Autonomous Mine Solutions

Project overview

- Launch of autonomous mining in 2025
- The deepest mine in Eurasia – over 2 km
- Ore body depth – over 1,550 m
- Ore reserves – over 32 mln t of rich ore
- Current production – over 2,5 Mtpa
- Feasibility study has been developed introducing autonomous mine solutions to facilitate 25% efficiency increase

Planned autonomous solutions based on best practices

- IoT in mining operations
- Remote control of mining equipment (online)
- Battery-powered equipment
- Water recycling system
- Automated production processes resulting in substantial reduction of people's presence in hazardous areas
- State-of-the-art infrastructure, including communications, accurate positioning, digital mine surveying network, water resource management, etc.



"Technological Breakthrough 2.0" Focus on HSE and AI Implementation in Downstream

Zeroing in on HSE

- Environmental monitoring solutions
- Health and safety solutions powered by advanced video analytics

Scaling production solutions and reaping the benefits

- Precious metal balance
- Advanced mine surveying solutions
- Geological and engineering data management

Implementing new projects

- AI-powered solutions in concentration and metallurgy
- End-to-end solutions (mine-to-mill optimization, digital management of maintenance and repair operations, etc.)

Source: Company data and estimations

Bystrinsky Update

- One of the largest greenfield projects in the Russian mining industry
- 50.01% owned by Nornickel
- Ore reserves: 301 Mt @ Cu ~0.7%; Fe ~22.4%; Au ~0.84 g/t (1)
- Reserve life – 31 years
- Target capacity achieved in 2Q 2020
- 1H 2021 EBITDA: $566 mln

Operating Performance Outlook

		2021E	2022E
Ore (2)	Mt	10.4	10.5
Cu in conc.	Kt	66-67	64-68
Au in conc.	Koz	245-250	225-245
Fe in conc.	Mt	1.5-1.7	1.5-1.7

Note: 1. According to the Russian classification (A+B+C1+C2), 2. Processed ore

“South Cluster”: Ramping-up

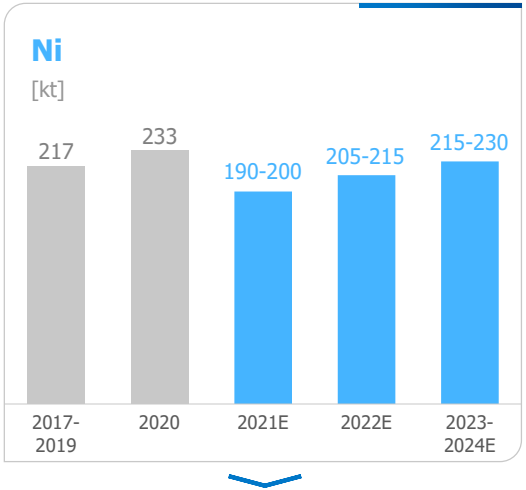
- Large-scale (156+ Mt of disseminated ore [1]), long life (25+ years) brownfield asset at the bottom of the global PGM cost curve
- FS, detailed engineering and contractors selection tenders completed in 2021
- Expansion of open-pit ore mining to commence in Q1 2022

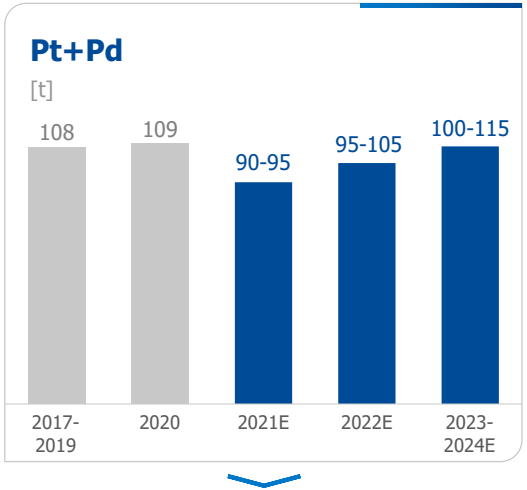
Target Annual Capacity by 2027-2028

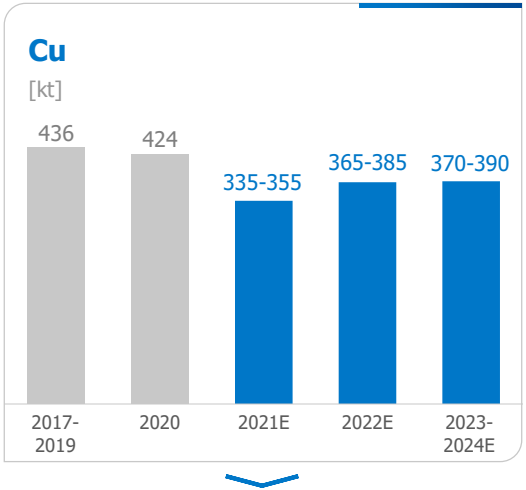
Ore	Mt	9
PGMs	Koz	750-850
Ni	Kt	13+
Cu	Kt	20+

Note: 1. According to the Russian classification (A+B+C1+C2)

Production Guidance for 2021-2024 (1)



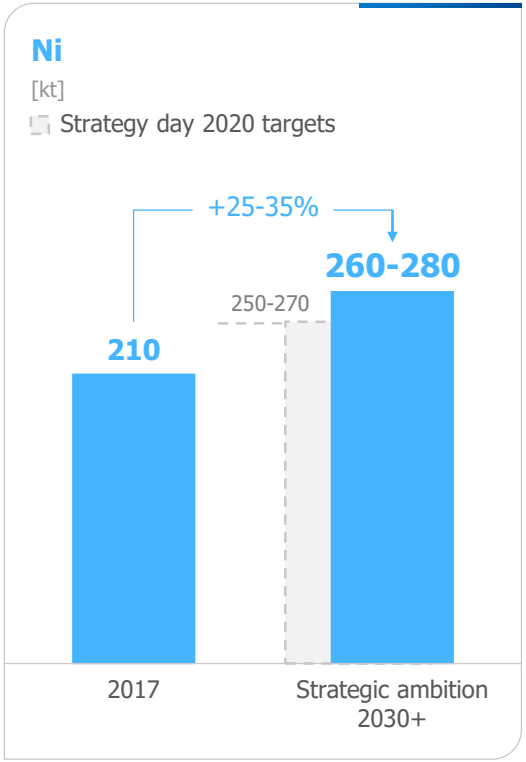


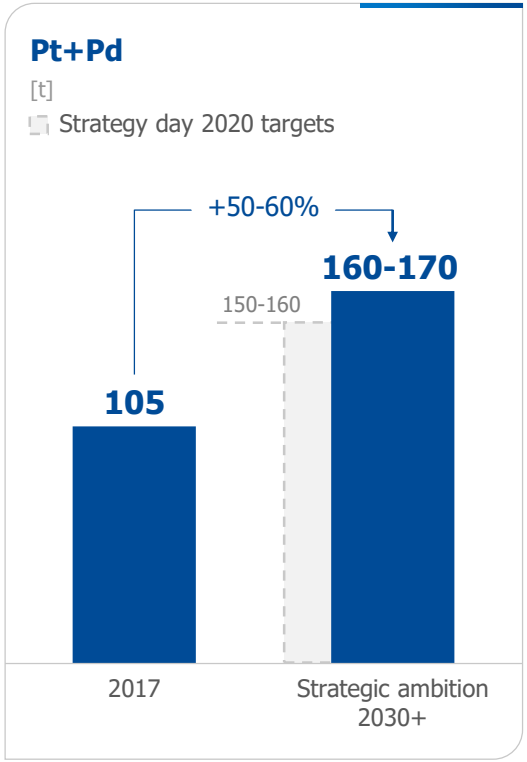


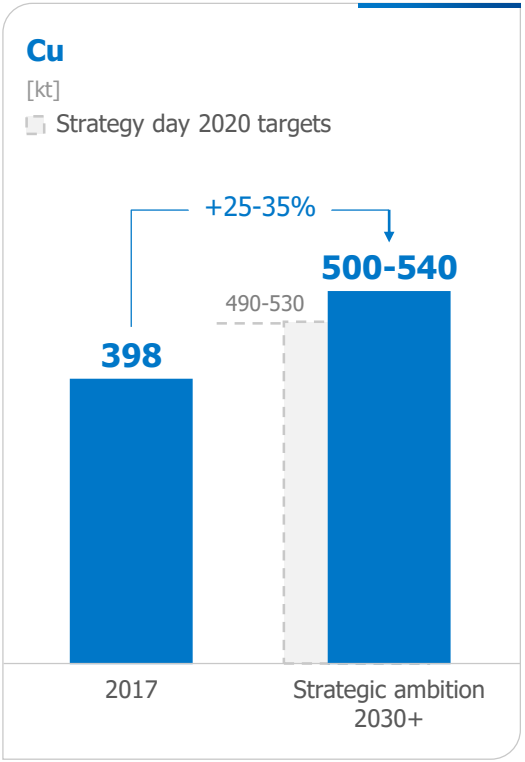
- 2021 production volumes were impacted negatively by the temporary suspension of two underground mines at Norilsk Division as a result of their flooding and Norilsk Concentrator after an industrial incident in 1H 2021
- Both mines and the Concentrator are recovering production and are expected to operate at full capacity already in December 2021
- In 2022-2023, Ni and PGM volumes will be affected by the planned furnaces maintenance at Nadezhda Smelter

Notes: 1. Metals produced from own feedstock (including metals in saleable semi-products), excluding production of Bystrinsky project and Nkomati

Strategic Ambitions for 2030+ Metal Production[1]







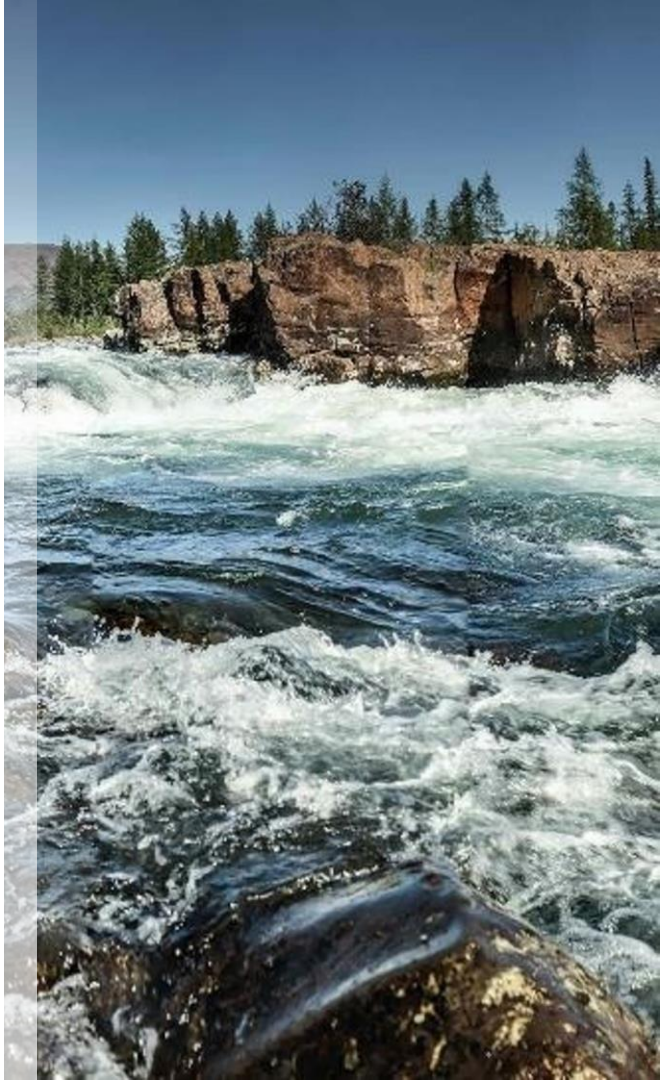
Notes: 1. Metals produced from own feedstock (including metals in saleable semi-products), excluding production of Bystrinsky project and Nkomati

NORNICKEL

Strategy Update

Sergey Dubovitskiy

Senior Vice-President Strategy,
Strategic Projects, Logistics & Procurement



Nornickel's Strategic Priorities

MORE...

...GREENER METALS...

...FOR A GREENER WORLD

Sulphur Programme 2.0: Execution on Track

- Full completion at Kola Division: 85%+ reduction in SO_2 emissions delivered
- Sulphur Programme in Norilsk Division entered active construction phase

Production and Infrastructure Development: New Projects Approved

- Production configuration roadmap updated
- Execution of key projects progresses as planned
- Area for strategic consideration identified: vertical integration into battery materials value chain

Investment Cycle Expanded

- CAPEX guidance updated
- Necessary capital projects capabilities scaled up / upgraded

Sulphur Programme 2.0: Environmental Roadmap

SO_2 Emissions in the border zone reduced by 71% in 2020 (1)

Kola's SO_2 emissions to reduce 85%, cross-border down to zero in 2021 (1)

2020 ✓

Optimization of smelting operations to cut SO_2 emissions in Russia-Norway border zone

Outdated smelting shop was shut down in Nickel town in December 2020.

50% (2) reduction in SO_2 emissions in Nickel town and city of Zapolyarny — 2x

2021 ✓

Shutdown of obsolete Copper refining line

Metallurgical shop was shut down on March 20th 2021.

85% (1) reduction in total SO_2 emissions at Kola Division — 7x

2023 In progress

Launch of Sulphur Programme 2.0 project at Nadezhda smelter to capture furnace gases

45% (1) reduction in total SO_2 emissions of Norilsk Division — c.2x

2025 In progress

Launch of Sulphur Programme 2.0 at Copper Plant to capture furnace and converter gases

90% (1) reduction in total SO_2 emissions of Norilsk Division — 10x

Strategic Aspiration 2030+

Capturing of SO_2 low-grade gases (incl. converter gases) at Nadezhda Smelter

95+% (1) reduction in total SO_2 emissions of Norilsk Division — 20x+

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

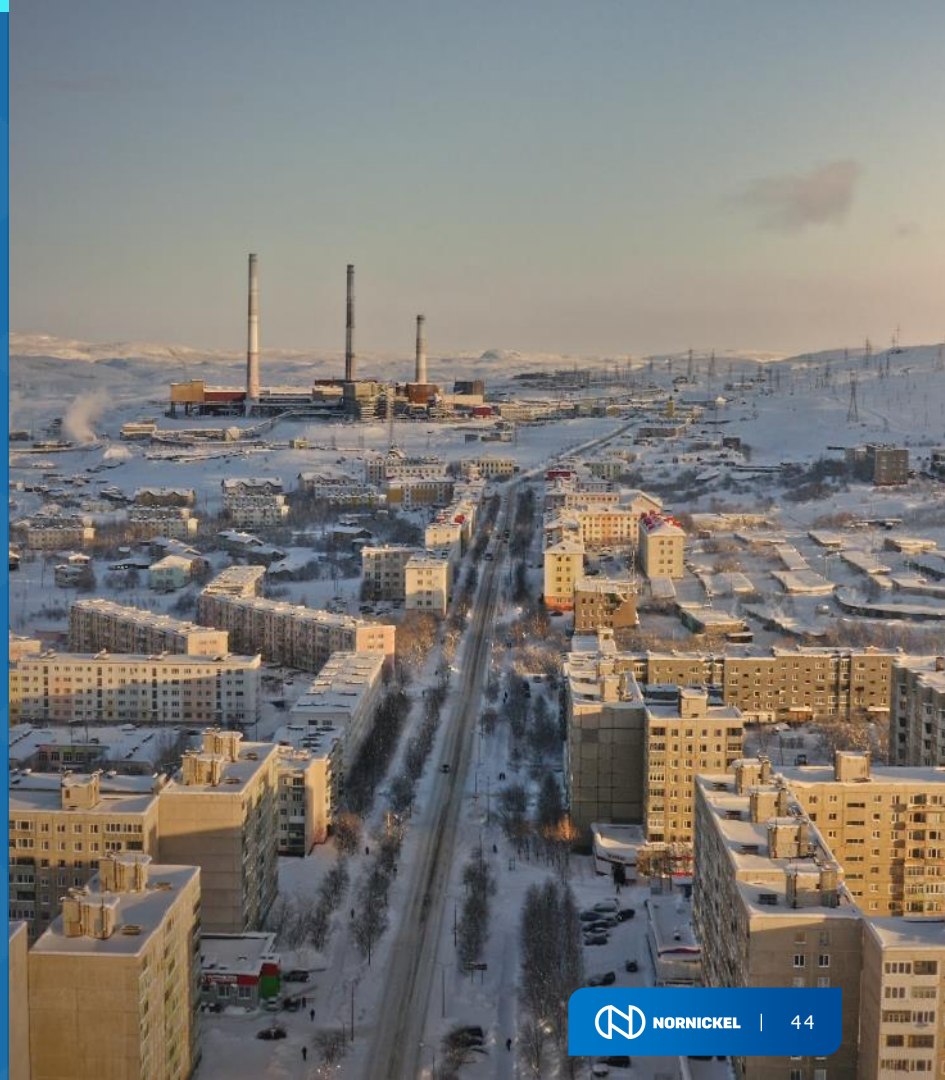
Sulphur Programme 2.0 at Kola Division – Completed

Smelter in Nickel town – shut down in December 2020

- Complete eradication of cross-border emissions

Copper refining line in Monchegorsk – shut down in March 2021

- Phase-out of obsolete production facilities
- Significant air quality improvement in Monchegorsk
- Expected reduction of Kola sulphur dioxide emissions in 2Q-4Q 2021 – 85% (compared to 2015 "base" year emissions level)
- New copper line to be based on modern environmentally-friendly technology
- Production flows to be redirected to Norilsk Division, with optionality of partial sales to third-parties



Sulphur Programme 2.0: Norilsk Division

CAPEX $4.1-4.3 bn

Nadezhda Smelter: Flagship Project

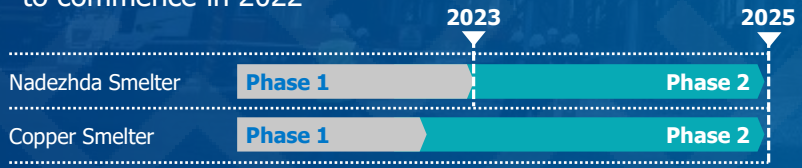
Construction of furnace gases capturing, sulfuric acid neutralization line and supporting infrastructure:

- All key contracts signed
- Piling, steel works, gypsum storage dam raising – in progress
- Project design allows for an expansion of the smelter's capacity (construction of a 3rd furnace)

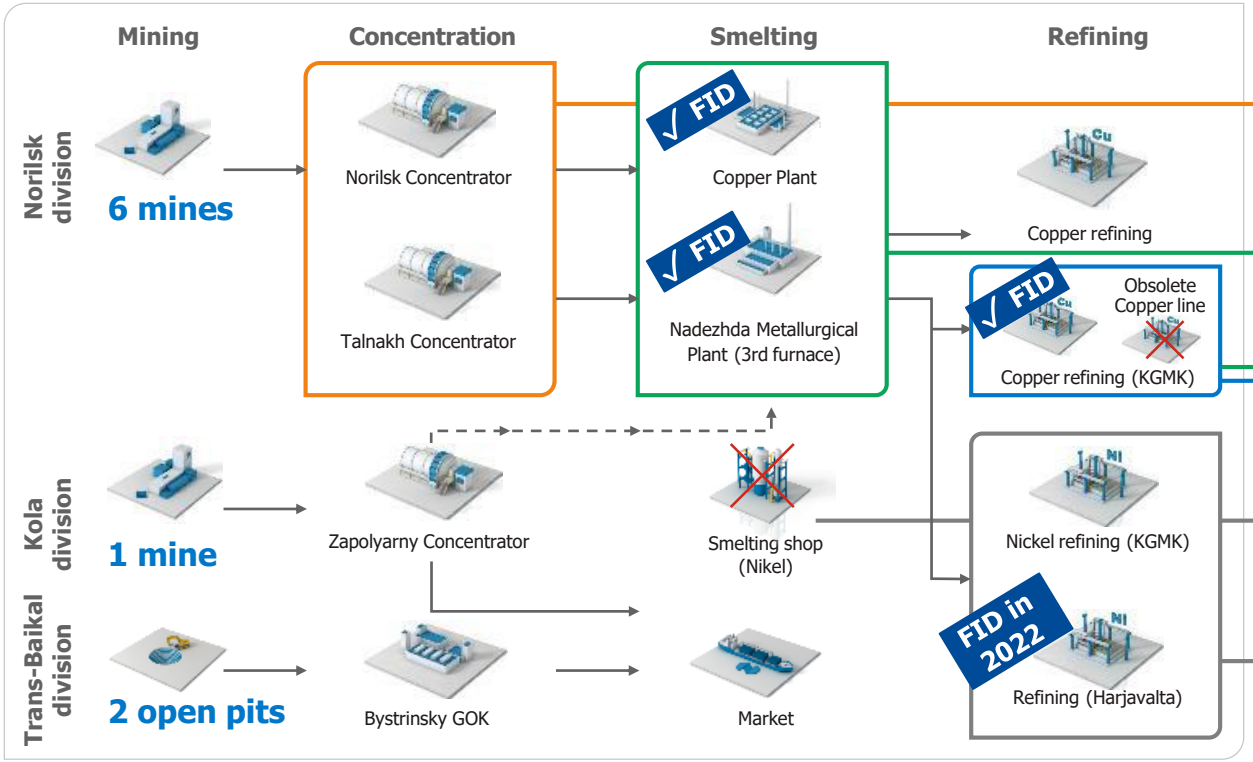
Copper Smelter

Project aims to capture 99-99.5%+ of SO_2 (in line with global benchmarks) and includes construction of a new continuous converting unit and acid neutralization line:

- Phase 1: Gas cleaning unit reconstruction – in progress
- Phase 2: Basic engineering / design completed
- FID taken in June 2021, construction to commence in 2022



Production Flow and Key Projects Update



Upgrade of Talnakh concentrator in progress (from 10 to 18 Mtpa by 2024YE, EBITDA +USD 150 mln)

New Norilsk concentrator in scoping study

"Sulphur Programme 2.0" projects at Copper and Nadezhda smelters in progress

Expansion of Nadezhda (3rd furnace +960 ktpa capacity) – FID approved in 2021, launch in 2025

Obsolete capacities shut down in March 2021

Construction of a modern 150 ktpa copper refinery – FID approved in 2021

Upgrade of Tankhouse-2 completed

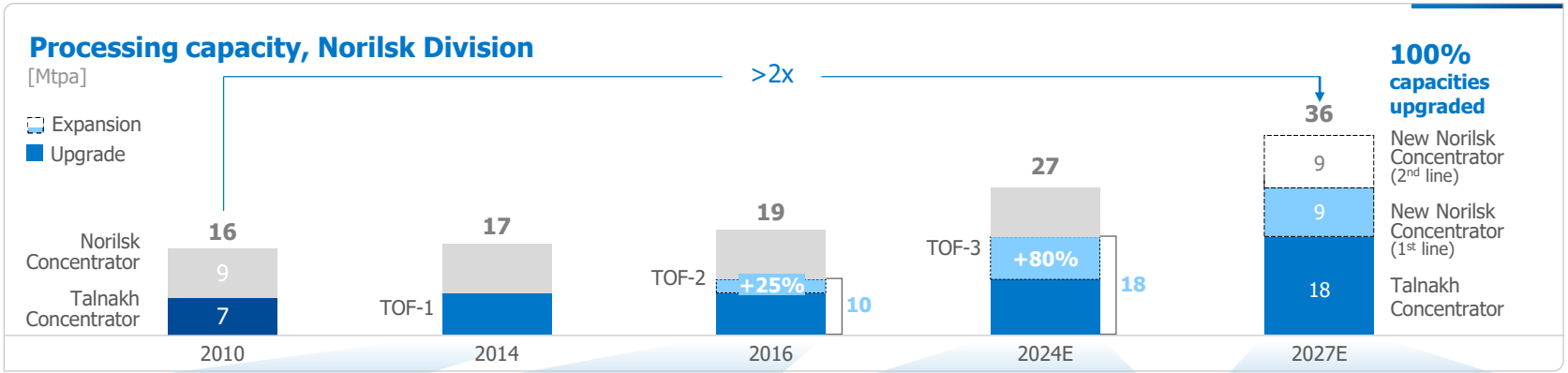
Long-term configuration solution improving efficiency and product offering – in scope

Expansion of Harjavalta refinery capacity to over 100 ktpa

Source: Company data

Evolution of Concentration Facilities Upgrade (Norilsk Division)

Upgrade Completed | **Under Construction** | **PFS/FS**



Stage 1: Talnakh Concentrator Upgrade

- Optimized utilization
- Improved Ni recovery rate (+1%)
- Renewed facilities

Stage 2: Talnakh Concentrator Upgrade

- Capacity increased to 10.2 Mtpa
- New technology adopted

Stage 3: Talnakh Concentrator Upgrade

- Under construction
- Target capacity: 18 Mtpa
- Higher Ni recovery rates (+4-7%)

New Norilsk Concentrator

- Target capacity addition: up to 18 Mtpa
- New construction based on proven modern technology

Source: Company data

Upgrade of Talnakh Concentrator: Phase-3

CAPEX $1 bn

Project overview

Major capacity expansion based on proven technology to process growing Talnakh ore volume and to unlock strategic optionality of the "South Cluster" development project

Project update

- Piling in progress
- All tender procedures for long-lead equipment items completed
- Tailings dam construction in progress

Project timeline

Ramp-up: 2023-2024

+8 Mtpa

Additional capacity

+4% to **7**%

- Expected improvement in metal recoveries
- Expected annual EBITDA impact of additional $150 mln

New Norilsk Concentrator

Project overview

Construction of a new concentrator to replace outdated facilities and further expand concentrating capacities to support growth plans

Project rationale

- Complete renovation and expansion of processing capacity to process increasing feed from Norilsk Division
- Improve metal recovery rates
- Processing new mine feed from “South Cluster”

Project timeline

- Expected ramp-up: 2026-2027

Up to **18** Mtpa

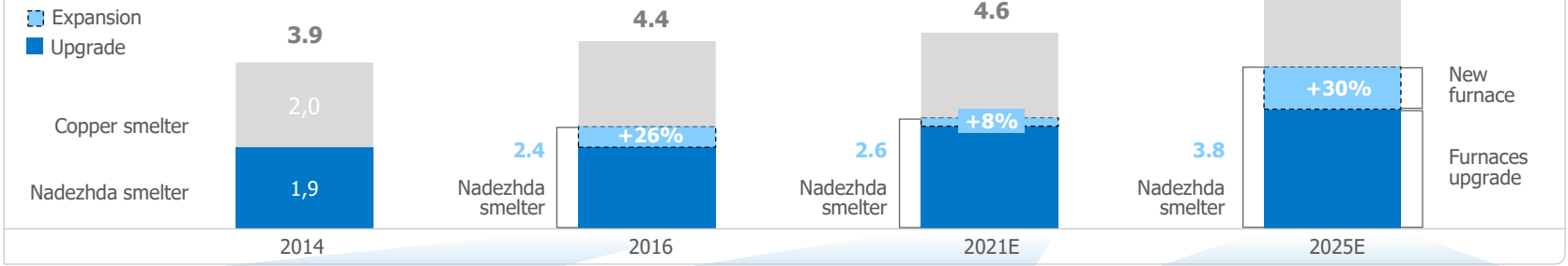
Target capacity

Evolution of Smelting Facilities Upgrade (Norilsk Division)

Upgrade Completed | **Under Construction**

Smelting facilities throughput

[Mtpa]



Nadezhda Smelter Upgrade 1

- Upgrade of flash furnaces to expand throughput to 2.4 Mtpa
- Upgrade of smelting, concentrate drying and filtering facilities

Nadezhda Smelter Upgrade 2

- Debottlenecking initiatives
- Throughput increased to 2.6 Mtpa

Flash furnaces' maintenance in 2022-2024

3rd Production Line at Nadezhda Smelter

Continuous Converting Unit at the Copper Smelter

Source: Company data

Expansion of Nadezhda Smelter: New 3rd Furnace

CAPEX $1.4 bn

Project overview

- Target: increase total throughput and provide a back-up capacity when either of two existing furnaces is shutdown for maintenance
- Fits into the Nadezhda Smelter's existing production site
- New line to be fully integrated in Sulphur Programme 2.0 (gases to be captured and SO_2 neutralized)

Project update

- Basic engineering / design solutions completed
- FID taken

Project timeline

Expected launch: 2025

Up to **960** Ktpa

Additional throughput capacity

\+ over 30%

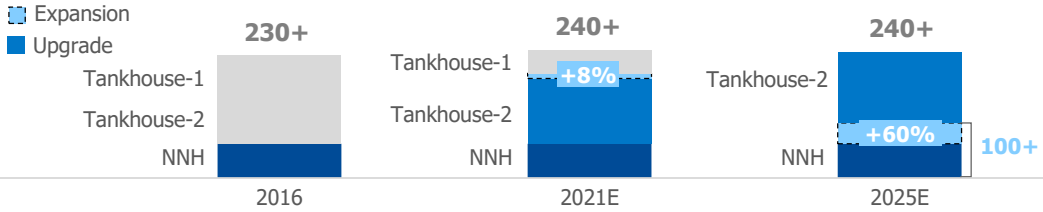
Additional smelting of Ni concentrate

Evolution of Refining Capacities Upgrade and Expansion

Upgrade Completed | **Under Construction**

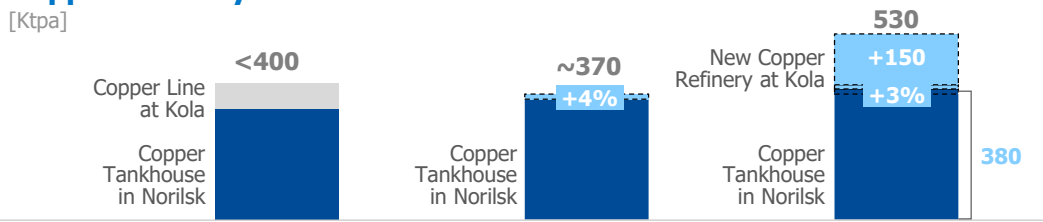
Nickel Refinery

[Ktpa]



Copper Refinery

[Ktpa]



Kola Division

- Tankhouse-2: Technological upgrade & capacity expansion
- NN Harjavalta (NNH) capacity expansion to 100+ Ktpa of high quality Ni products

Kola division

- Outdated Copper line shut down in Monchegorsk (2021)
- Construction of new copper refining line based on technology of "roasting-leaching-electrowinning" with capacity 150 Ktpa

Norilsk Division

- Incremental capacity expansion of Copper Tankhouse in Norilsk

Source: Company data

New Copper Refinery: Modern Environmentally-Friendly Technology

CAPEX $1.4 bn

Project overview

- New copper refining hub based on a modern efficient technology of "roasting-leaching-electrowinning" at Kola Division
- Fully environmentally compliant

Project update

Investment decision made in June 2021

Project timeline

- 2022-2024 – copper intermediate production flows (high-grade matte separation) to be redirected to Norilsk Division, with optionality of partial sales to third-parties
- 2025 – expected launch

+150 Ktpa

Additional copper refining capacity

Harjavalta Nickel Refinery: Capacity Expansion

Project overview

- Capacity expansion of high quality Ni product offering
- Leverage operational synergies from existing infrastructure

Project rationale

- Decision to increase capacity is driven by growing European market demand for battery raw materials responsibly produced, utilizing the Company's lowest carbon footprint in the industry

Project timeline

- 2023: Phase 1 (Total capacity - 75k Ni)
- 2026: Phase 2 (Total capacity - 100k+ Ni)

100+ Ktpa of Ni products

Target capacity

Areas For Strategic Consideration: Battery Materials Value Chain

Targeting a substantial market share in the battery segment through supply agreements and deeper integration into the European battery value chain:

- Capacity expansion of Ni products fit to serve the forming battery materials ecosystem in Finland
- Considering potential customers' requirements regarding establishing a foothold in battery materials downstream to support and promote a European battery supply chain
- Looking at widening our capabilities through research and partnerships to propose closed-loop solutions to the battery supply chain in the future

Traditional Products	Enhanced Product Offering for Battery Sector	Further Value Chain Integration
• Nickel Sulphate • Briquettes • Nickel Powder • Carbonyl Powder • Cut Cathodes • Co products	• Custom product offering tailored to the needs of prospective battery materials producers	• Precursors and cathode materials • Black mass production and processing

Expanded and Accelerated Energy Infrastructure Modernization

Programme Expansion Rationale:

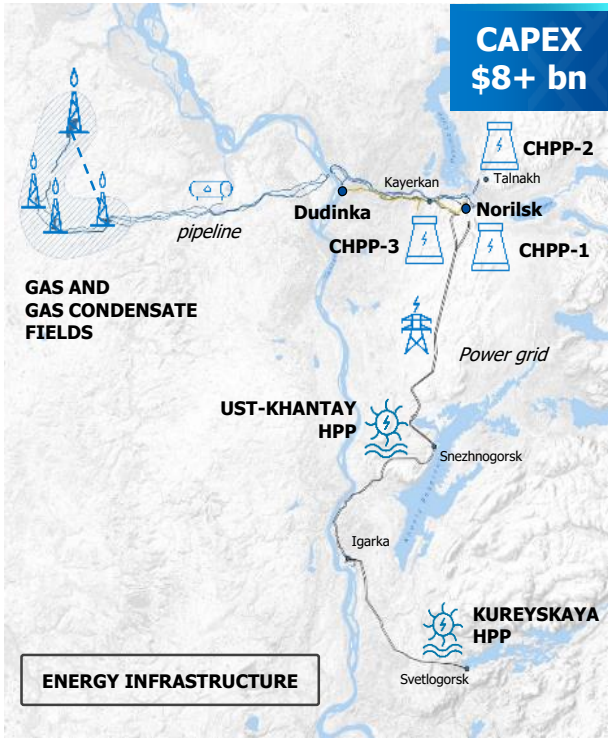
New energy and infrastructure projects have been added to secure accelerated replacement of obsolete equipment and ensure physical risk mitigation and long-term reliability

Gas and Gas Condensate Upstream & Transportation

- Construction of new 70+ km gas and gas condensate pipeline (Pelyatkinskoye – Messoyakhskoye)
- Upgrade of 150+ km gas and condensate pipelines
- Ramp-up of gas wells drilling at Pelyatkinskoye field post 2028

Power Grid & Heat and Water Supply Networks

- Accelerated replacement of 110 kV and 220 kV power lines (over 1,000 km)
- Modernization of heat and water supply networks



Contribution to Decarbonization & Energy Efficiency:

Reinforced emphasis on higher productivity rates of the new power generating units at CHPPs and TPPs and comprehensive energy loss reduction across the entire energy value chain

Combined Heat & Power Plants

- Replacement of 2 power generating units at CHPP-2 and installation of 2 new power generating units at CHPP-3
- Potential construction of new power generating units at CHPP-1 and CHPP-3
- New equipment significantly more productive and fuel efficient, ensuring minimal energy losses

Hydro Power Plants

- Upgrade of all 7 hydro turbines at Ust-Khantay hydro power plant was completed. CO_2 savings to exceed 300 Ktpa
- Kureyskaya hydro power plant upgrade is scheduled for 2023-2030 targeting higher efficiency and installed capacity resulting in CO_2 emission reduction

Note. CHPP – Combined Heat and Power Plant, HPP – Hydro Power Plant

Logistics Infrastructure Development Program

Programme Rationale

- Growing shipment of construction equipment and raw materials volumes as investment programme is entering an active phase
- Accelerated pace of production equipment renovation
- Expansion of Northern Sea Route operations and contract freight volumes for major investment projects of the Russian Arctic

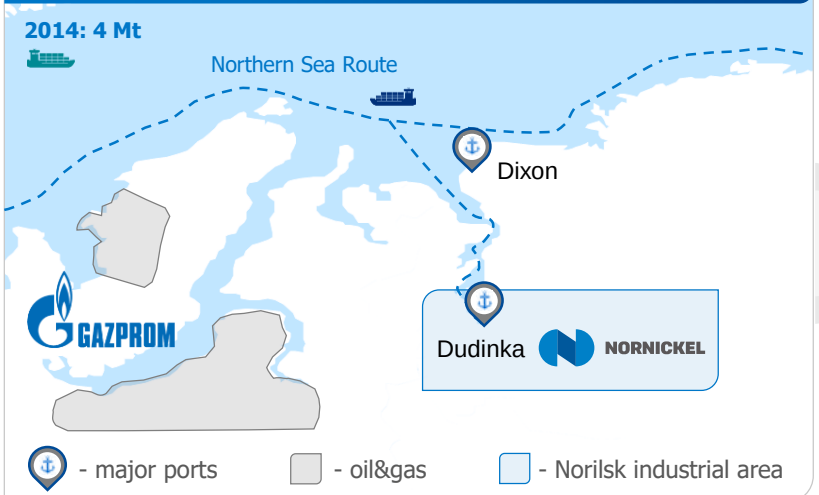
Selected Major Projects

- Targeting +50% Dudinka port ("Gate to Taimyr") throughput expansion
- New LNG dual-fuelled icebreaker is contracted – pioneering new environmentally friendly and more efficient vessel type for the Russian Arctic region
- All port cranes at Dudinka port to be renewed by 2027

New Era of Russian Arctic Development: Challenges and Opportunities

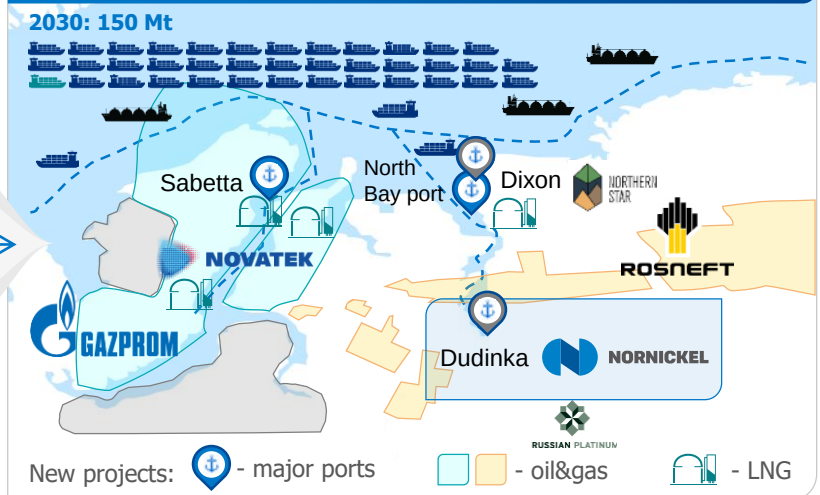
Russian Arctic Development: From Remote Region…

Northern Sea Route Freight Volumes



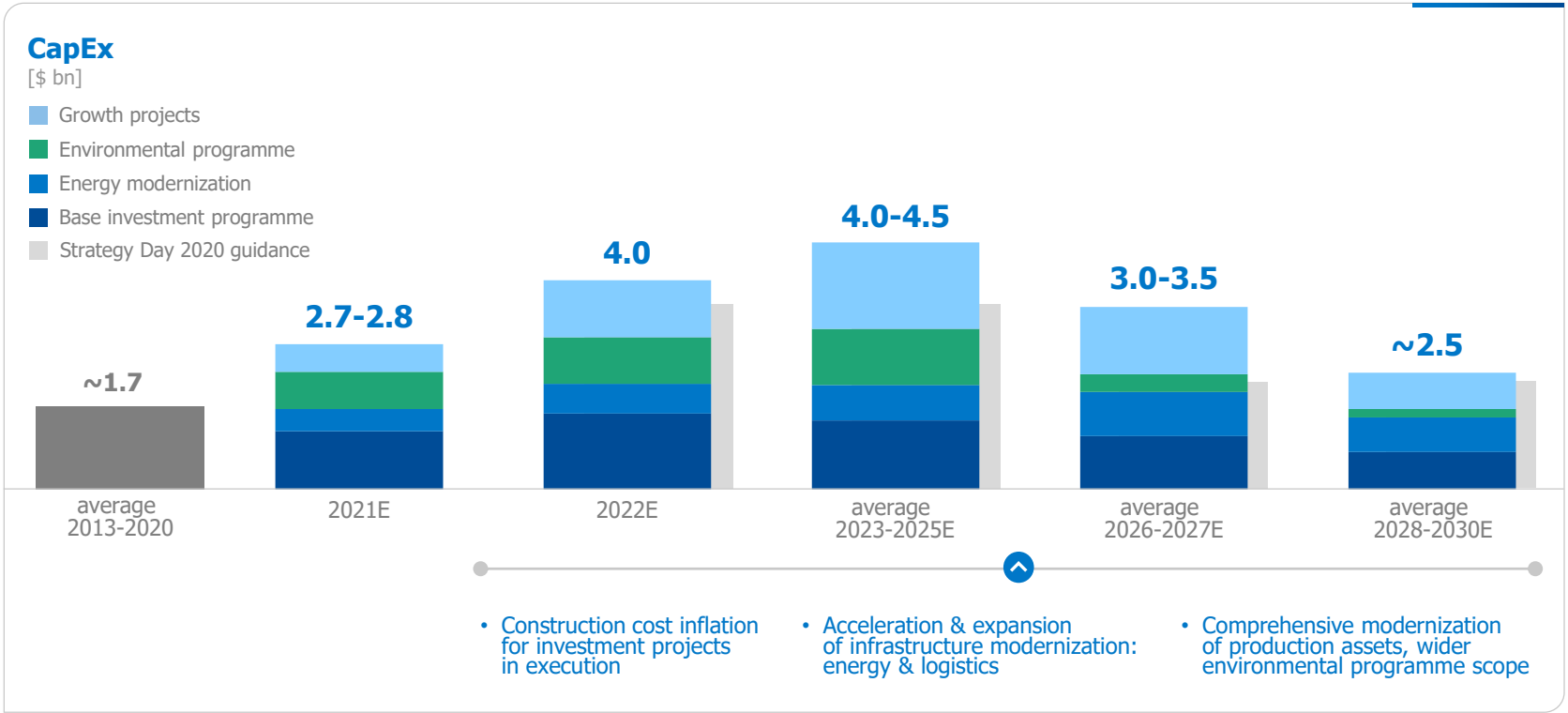
…to Exponential Growth in Investments

Northern Sea Route Freight Volumes



- New level of competition for resources – logistics & supply chain, human capital and other resources
- Nornickel is uniquely positioned to leverage its vast expertise and capabilities to facilitate accelerated development of major investment projects alongside the Northern Sea Route

Expanded Investment Cycle



Source: Company data

Developing Capabilities to Deliver on Investment Programme

Contractor Pool

- Doubling the number of contractors in Norilsk
- Several major construction companies started mobilization in 2020-2021
- Independent supervision services rolled out at several key projects

Infrastructure

- Construction camps / housing for contractors: current 3,000 beds to be further extended to over 11,000 beds in 2022-2023
- Logistics de-bottlenecking program under way with 1,5x throughput increase
- 300+ new units of construction machinery in 2022

Internal Capabilities

- Developing in-house engineering capabilities (“Girponickel Institute” with over 1,000 engineering & design professionals) along with project design & management toolkit (3D/BIM, value / cost engineering)
- Dedicated Major Projects organization (“Nornickel Development”) established
- Headcount of project management offices and supporting & controlling functions to exceed 2,900 employees in 2022-2023 (compared to 1,235 employees in 2019)

Source: Company data

NORNICKEL

Markets Update

Anton Berlin

Vice President
Sales and Distribution

Swan's Lake: Beware of Black Swans!

COVID Epidemic: How Many More Waves?

SARS-CoV-2 will not stop evolving — and that the arms race between the virus and us is just beginning.

The New York Times, October 12, 2021

Global Economy: Riding a Roller Coaster

The global economic recovery is losing momentum as the resurgence of the coronavirus and widespread supply chain disruptions threaten to be a drag on a world economy.

The New York Times, October 12, 2021

Chip Shortage: When Will It End?

Volkswagen executive sees global chip shortage running well into 2022

Reuters, October 19, 2021

Power Crunch and Construction Crisis in China: Who Could Have Possibly Imagined?!

Several leading China economists expect growth in the world's second-largest economy to slow appreciably in coming months as power shortages hit industrial output and a property sector downturn further reduces activity.

Financial Times, October 08, 2021

Power Crisis in Europe: Sky-rocketing Gas Prices and Underperforming Renewable Power Generation

On Sep 6 in the UK, wind provided only 2.5% of electricity generation vs 18% in 2020. This led to last remaining coal-fired power plants being switched on to help with the shortfall.

The trend threatens the UK's pledge for electricity generation to be carbon neutral by 2035.

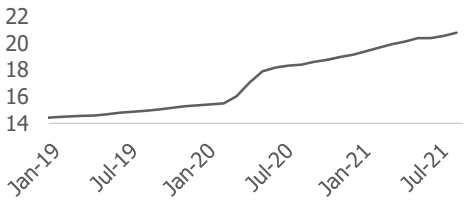
Financial Times, October 08, 2021

Source: The New York Times, Reuters, Financial Times

Long-term Macro Backdrop for Commodities: Not All Swans are Black, but Beware of Elephants in the Room

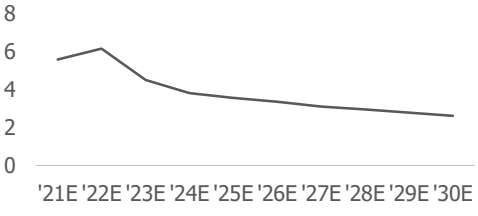
Global Liquidity Injection: Inflationary Support of Commodities

US M2 Money Supply [trillion USD]



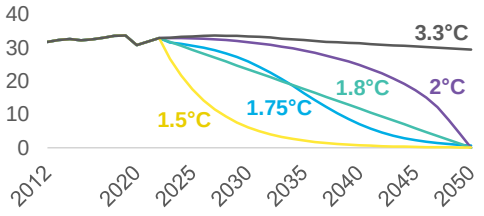
Chinese' Construction Sector Slowdown: A New Norm is Near

China Construction GDP in Constant Prices [%]



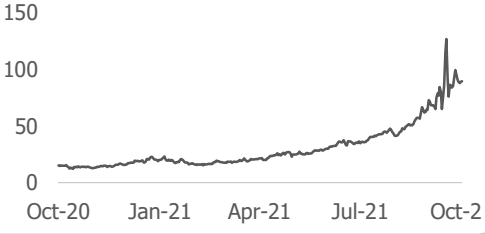
Aggressive Climate Change Scenarios Require Prompt Responses

CO2 emission [Gt]

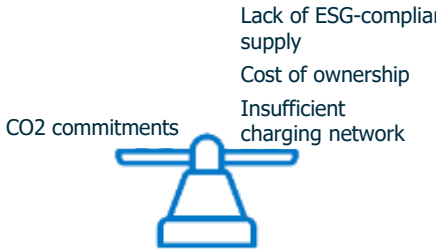


Global Energy Transition: Not Expected Challenges in Renewables

Price of natural gas at the Dutch TTF [EUR/MWh]

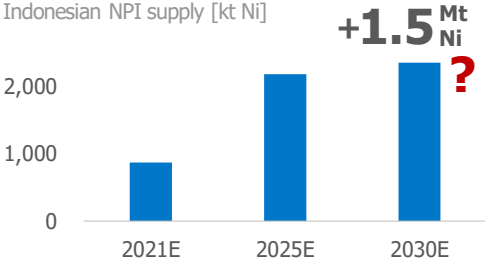


Global Autos Electrification: Very Exciting, but How Realistic?



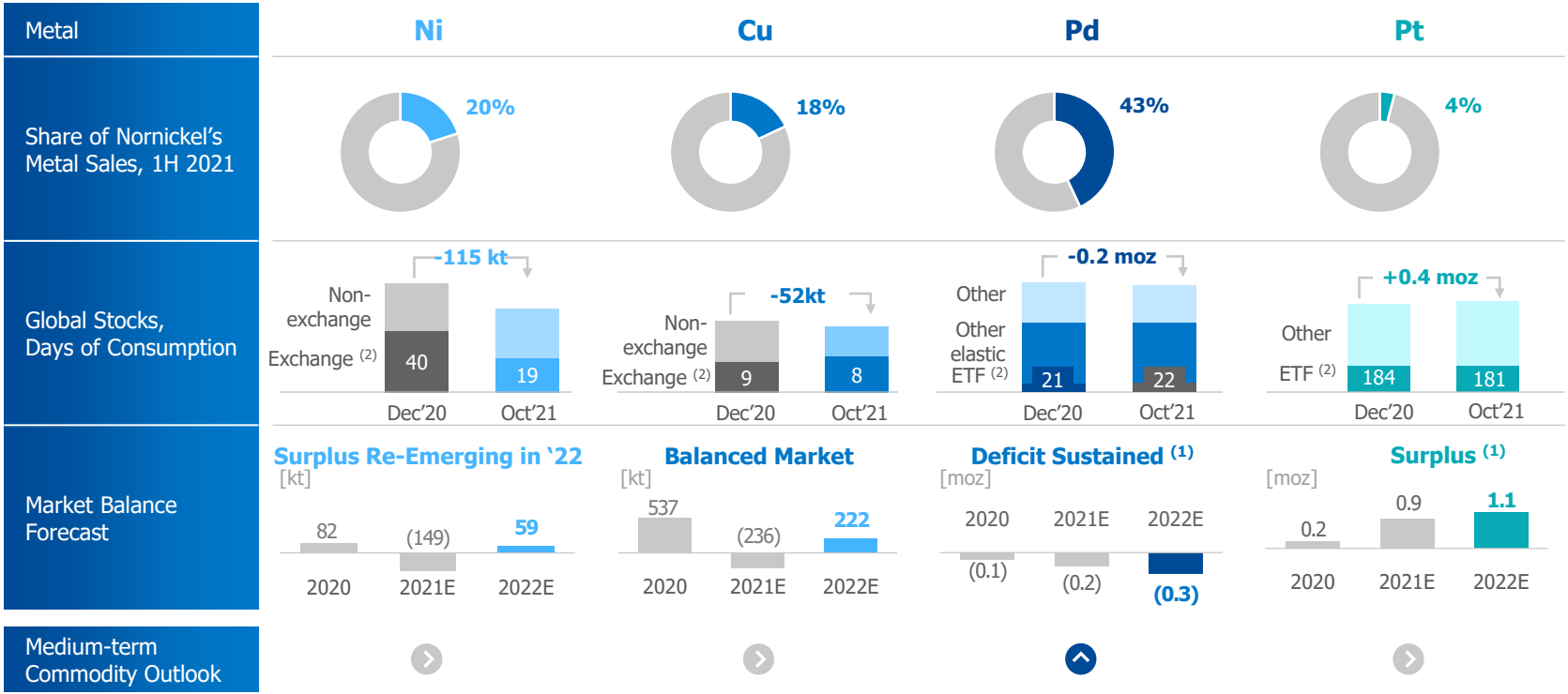
Wall of Nickel Supply from Indonesia: Elephant in the Room?

Indonesian NPI supply [kt Ni]



Source: Bloomberg, BNEF, Refinitiv, Company estimates

Metal Markets: Outlook on Medium-Term Fundamentals

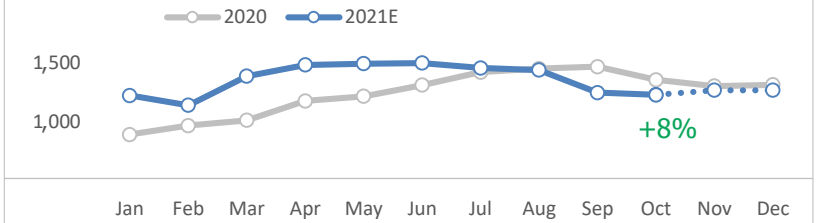


Source: Company estimates. Figures may not sum up due to rounding.
Notes: 1. Excluding investments 2. In days of consumption

Stainless Steel (70%+ of Global Ni Demand): Double Digit Growth in 2021 Led by China and Indonesia

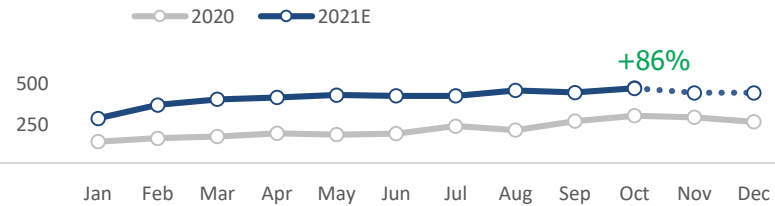
China Stainless 300s [1,2]: Strong 1H21, But Slowdown in 2H21 Due to Power Shortages

[kt] [Jan-Dec 2021E YoY,%]



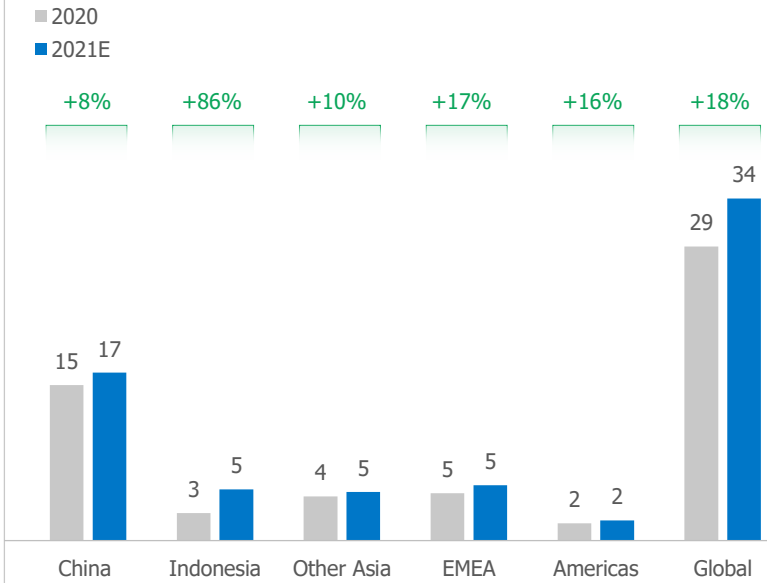
Indonesia Stainless 300s [2]: Production Growing as New Tsingshan and Delong Mills Are Ramping Up

[kt] [Jan-Dec 2021E YoY,%]



2021E Stainless 300s Outlook: +18% y-o-y as China and Indonesia +3.5 Mt, Others +1.5Mt

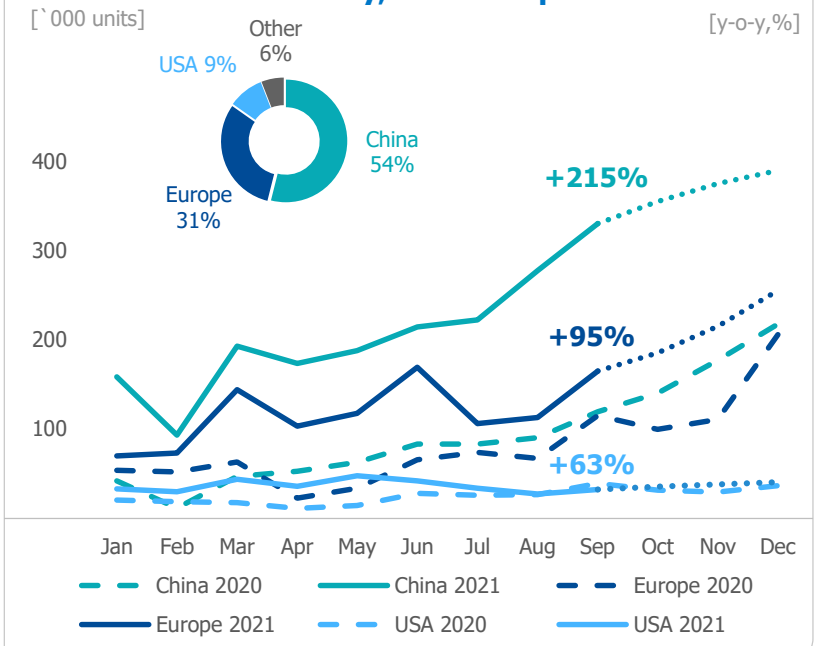
[mt] [y-o-y,%]



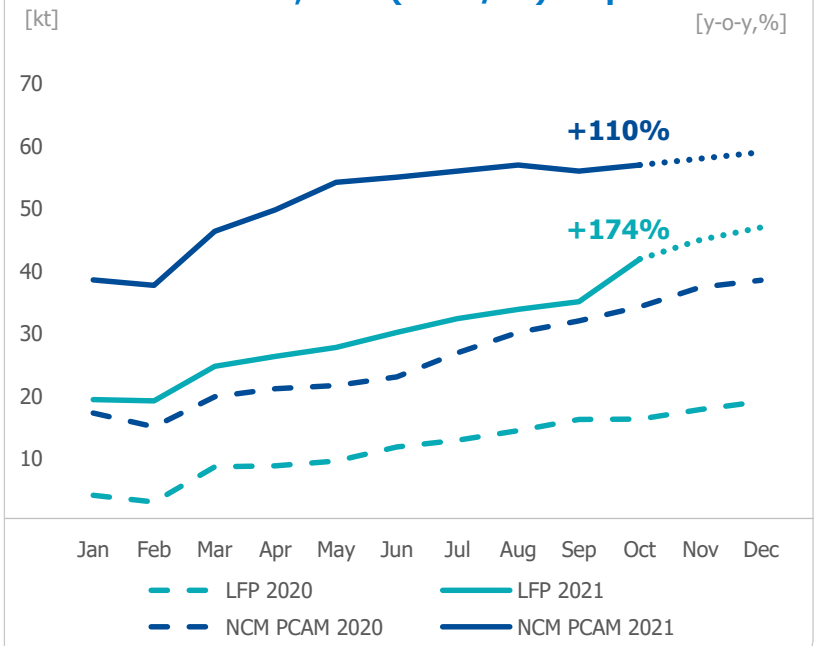
Sources: Zljsteel, Eurofer, SMR, METI, TSIIA, ISSF, Company estimates
Notes: 1. 30 largest producers with 97% market share in 300 series production 2. 300 series stainless steel is the main type of Ni-containing steels with a nickel content of ~8-20%

Batteries (10% of Global Ni Demand): Strong Rebound in Global NEV Sales in 2021 YTD

BEV Equivalent Sales (1) in 9M 2021 Increased 2.5x Globally, China – Up 3x



Battery Materials Production in China: NCM Increased 2x, LFPs (no Ni/Co) – Up 3x

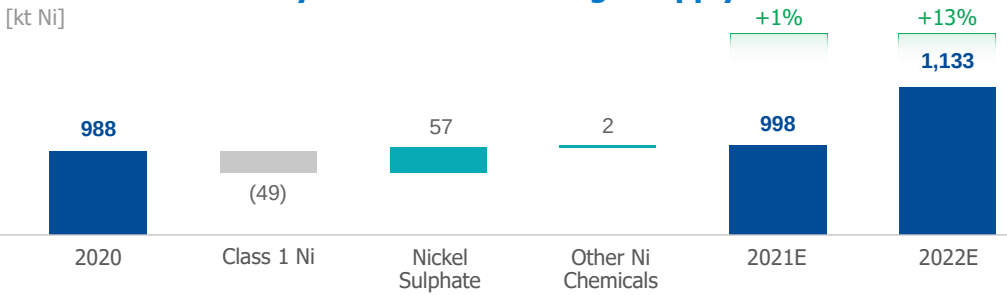


Sources: SNE Research, Company estimates
Notes: 1. BEV equivalent – HEV and PHEV are recalculated according to the relative battery capacity ratio: HEV 2KWh vs PHEV 12KWh vs BEV 55KWh

Nickel Supply: >500kt Addition in Low Grade/High Carbon Supply, but Little in High Grade/Low Carbon in 2021-2022

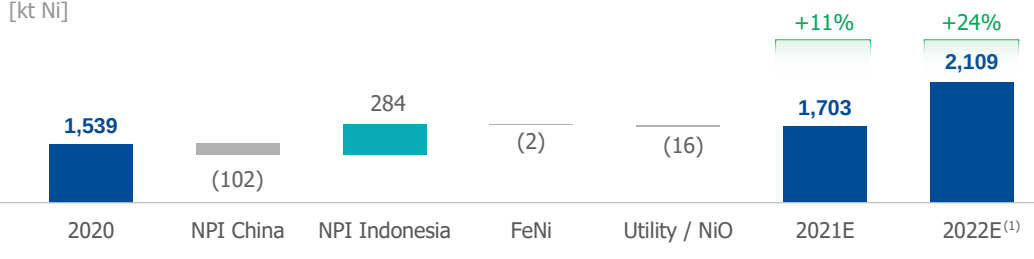
High-Grade Ni Supply in 2021 Practically Unchanged, Post Incidents Production Recovery to Drive Double Digit Supply Growth in 2022

[kt Ni]



Low-Grade Ni Supply: Indonesia Adding ~285kt Nickel-Contained in NPI in 2021E and Another 360kt+ in 2022E

[kt Ni]

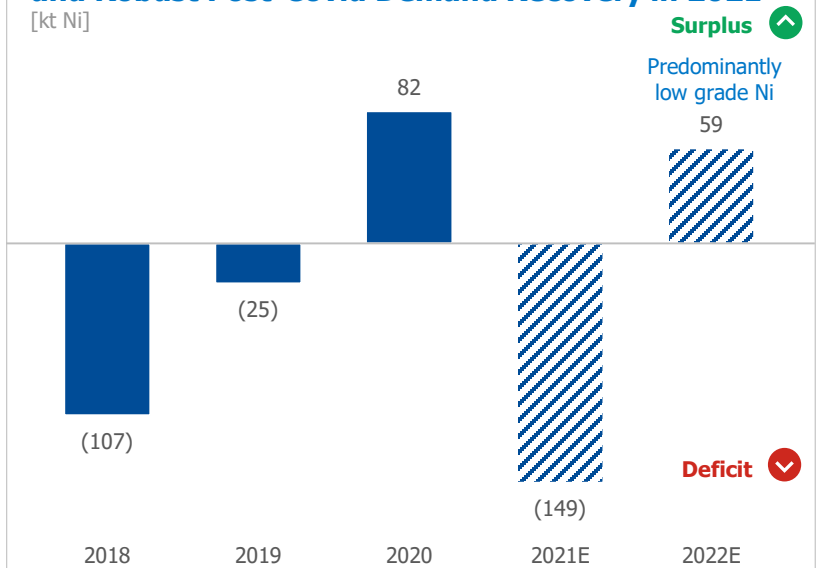


- 2021E: production cuts in high grade as well as low grade Chinese NPI were more than well offset by the strong growth of low grade/high carbon Indonesian NPI
- 2022E: high grade Ni production recovers, nickel sulphate in China grows and low grade/high carbon Indonesian NPI continues surging

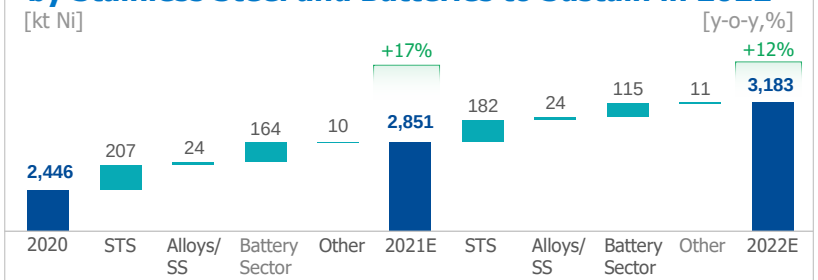
Sources: Felo, Mysteel, Company estimates
Notes: 1. Including NPI-to-matte conversion

Nickel Market Balance: Temporary Deficit in 2021, Mild Surplus in 2022

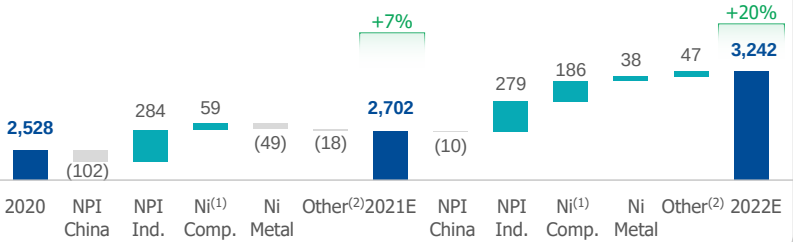
Market Balance: Deficit Due to Production Losses and Robust Post-Covid Demand Recovery in 2021



Global Demand: Double-Digit Growth of 2021 Driven by Stainless Steel and Batteries to Sustain in 2022



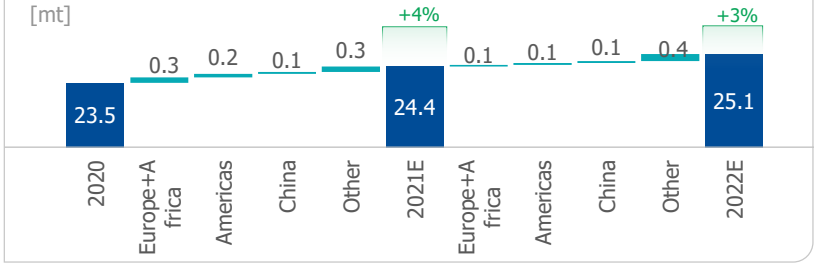
Global Supply: Indonesian NPI, Ni Compounds from HPAL and Scrap – Main Drivers of Supply Growth



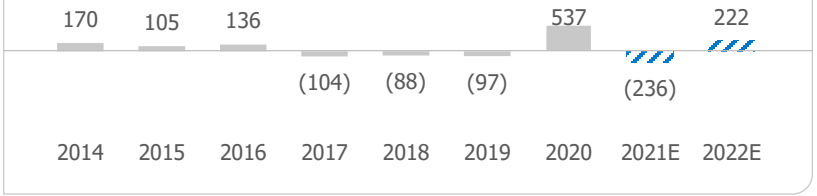
Source: Company estimates
Notes: 1. Excluding Class 1 Ni dissolution in order to avoid double counting, 2. Other includes FeNi and Utility/NiO

Copper Market: a Long-Run Balance, with a Temporary Deficit in 2021

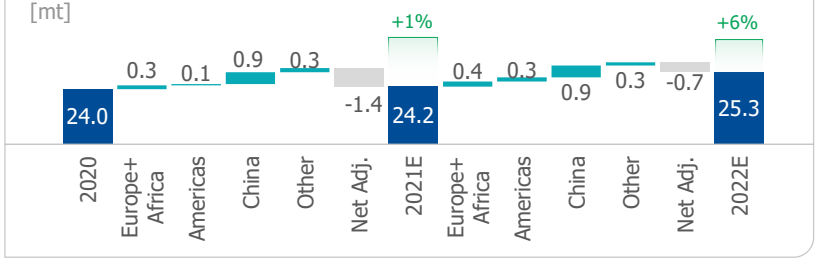
Copper Consumption: Expected to Increase 4% in 2021 and 3% in 2022



Market Balance: Supply Lagging Behind Fast Demand Recovery Caused Temporary Deficit in 2021



Refined Copper Production: After Almost Flat 2021, Expected 6% Increase in 2022



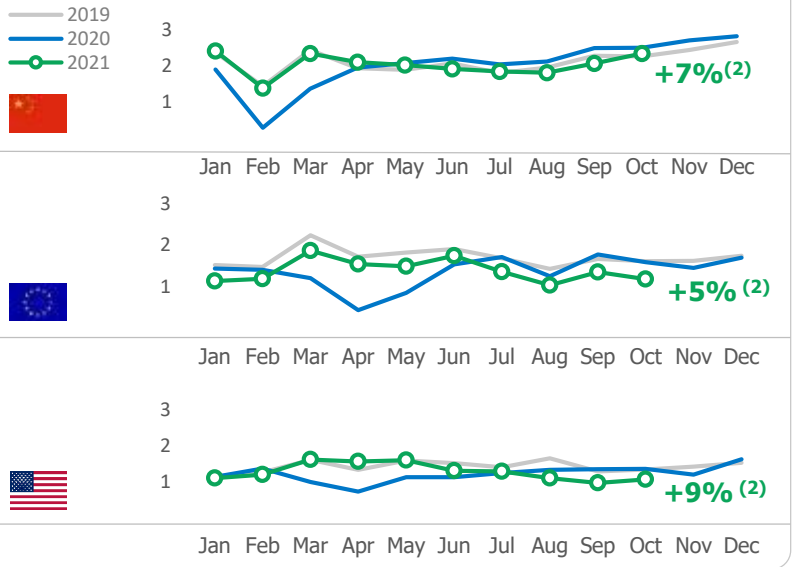
- **Copper demand** is supported by the government-backed infrastructure and green-economy projects as well as environmental initiatives
- **Substitution of copper with aluminum** is very limited as aluminum prices grew to multi-year highs
- **Copper price** is benefiting from low interest rate environment accompanied by global liquidity injection as the most investable among base metals

Source: Company estimates, Wood Mackenzie

PGMs: Global Autos (83% of Global Pd and 38% Pt Demand) Recovery Is Deferred until 2023 Due to Chip Shortage

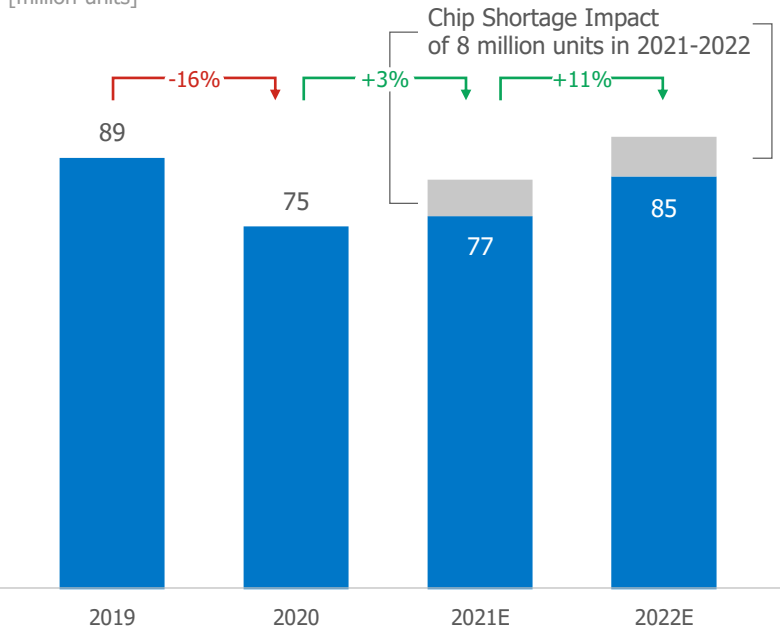
Global Auto Sales: Strong Post-COVID Recovery in 1H2021, but a Weaker 2H Expected (+8% in 10M 2021)

[million units]



Global Auto Production: Chip Shortage to Push Back Recovery to Pre-Covid Volumes Beyond 2022

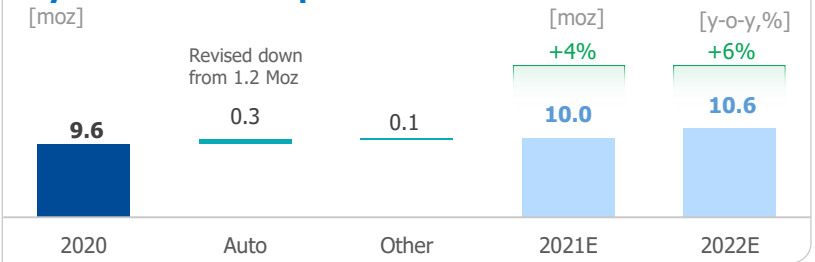
[million units]



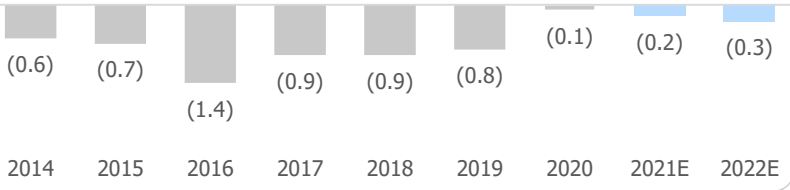
Source: Company estimates, Wood Mackenzie

Palladium Market: Long-run Structural Deficits to Moderate in 2021-22 Owing to Temporary Hiccups in Global Autos

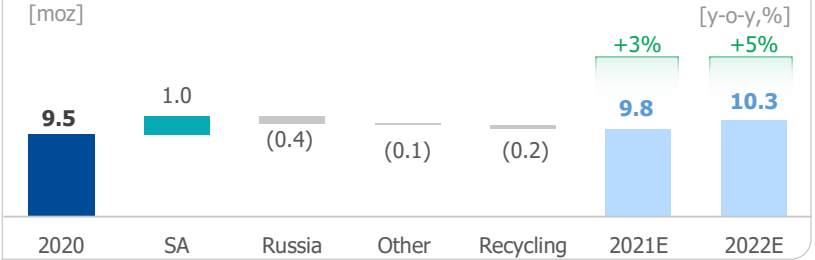
Demand: 2021 Recovery Somewhat Undermined by Lower-Than-Expected Auto Production



Market Balance [1]: Mild (Relative to Recent History) Deficits in '21-22 due to Slower Recovery in Autos



Supply: Strong Recovery in 2021 Despite Nornickel's Cuts Owing to Release of WIP in South Africa



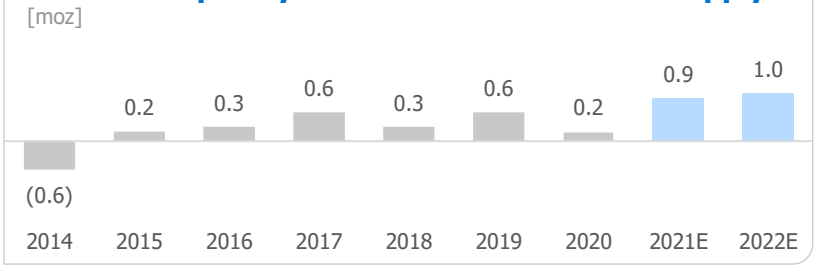
- **2021E palladium output:** lower Nornickel's production was offset by the release of work-in-progress materials in South Africa. Lower recycling volumes are caused by reduced new cars availability and increased used car prices
- **2021E demand:** impacted negatively by the slow recovery of auto production owing to the shortage of chips. A recovery to pre-COVID volumes is expected in 2023
- **Palladium substitution with platinum:** very limited of approximately 0.1 Moz in 2021E

Source: Company estimates
Note: 1. Excluding ETF

Platinum Market: Structural Surpluses to Expand in 2021-2022 as South Africa Increasing Refined Metal Supply

Demand: Strong Recovery in '21 Driven by Higher HDD Loadings in China and Other Industries

Market Balance (1): Surplus to Widen in 2021-2022 Due to Temporary Growth of South African Supply



Supply: Surged in 2021 Owing to Release of WIP and Higher Primary Supply from South Africa

- **2021E platinum supply:** recovered completely predominantly due to the release of work-in-progress materials and strong primary production growth in South Africa
- **2021E demand:** the recovery was supported by the introduction of China VI HDD(2) emission legislation, driving up platinum consumption in the segment; whereas diesel share in light vehicles in Europe declined ahead of expectations to 17% in 3Q 2021 vs 28% in 3Q 2020
- **Demand from fuel cells (hydrogen cars) remains marginal,** not exceeding 0.1 Moz in 2021E

Source: Company estimates
Note: 1. Excluding ETF 2. Heavy duty vehicles

Metal Markets: Outlook on Long-Term Fundamentals

Metal	Ni	Cu	Pd	Pt
Estimated share of Nornickel metal sales 2030(1)	28%	22%	31%	7%
Market Balance Forecast	Deficit	Balanced	Surplus	Deficit
Supply	+6% CAGR	+3% CAGR	+3% CAGR	+1% CAGR
	2020 2030E	2020 2030E	2020 2030E	2020 2030E
	Low-Grade High-Grade	Asia Americas Other	Africa Russia Others Recycling	Africa Russia Others Recycling
Demand	+7% CAGR	+3% CAGR	+2% CAGR	+2% CAGR
	2020 2030E	2020 2030E	2020 2030E	2020 2030E
	Stainless Batteries Others	Constuction Electrical Network Others	Automotive Others	Automotive Jewellery Others
Long-term fundamentals	▲	▶	▶	▲

Source: Company estimates. Figures may not sum up due to rounding.
Note: 1. Revenue estimate is based on production forecast from Nornickel Strategy Day Presentation Nov 2021, LT consensus price forecast and CPI projections by the US Congressional Budget Office

Long-term Metals Consumption Outlook: Short-term Sentiment Is Fueled by (Very!) Long-term Decarbonization Ambitions

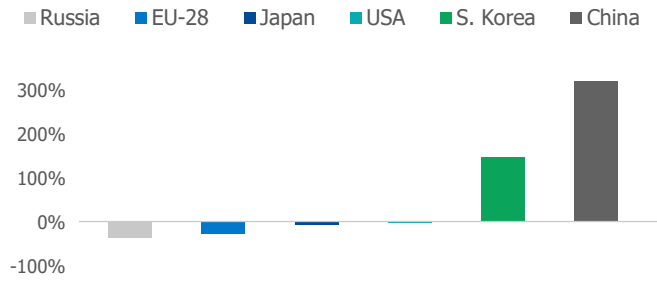
COP26: The initiative to completely decarbonize road transport by 2040 was supported by 38 countries (**only 16% of auto market** [2]) and 11 automakers, but the resolution was not signed, among others, by the USA, China, Germany, VW, Toyota, Stellantis, Renault-Nissan and Hyundai-Kia

Carbon neutrality by 2050

- Rejoined the Paris Agreement
- Approved $1.2 trillion investments under Biden's "Build Back Better" Plan, including $7.5 billion funding for EV charging network under the Bipartisan Infrastructure Deal
- 2030 CO_2 emissions target: 50% cut

Carbon neutrality by 2060

CO_2 emission, 1990=100%



Carbon neutrality by 2050

- Proposal to eliminate CO_2 emission by transport i.e. zero ICE sales by 2035
- CBAM introduced for some materials starting from 2023 (1)
- 20+ battery gigafactories announced by 2025
- EUR 1 trillion investments over 10 years under the European Green Deal

Carbon neutrality by 2060

- CO_2 quotas trading mechanism launched in 2021
- NEV sales target: 20% in 2025 and 50% by 2035, with the rest of autos being hybrids

Carbon neutrality by 2050

State-backed hydrogen economy programs

Source: Company estimates

Note: 1. Nornickel's metals are not subject of the proposed Cross Border Adjustment Mechanism 2. Based on automotive production in countries who signed the agreement as a portion of global automotive production 2021E

Global Decarbonization – Risk Assessment for Nornickel's Metals

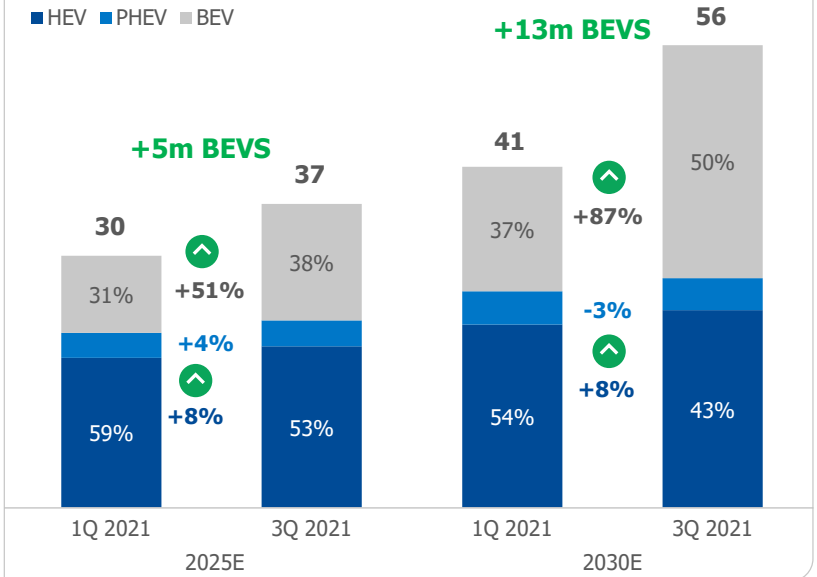
	Ni	PGMs	Cu
Growth of market share of BEVs	↑	↓	↑
Growth of hybrids	↑	↑	↑
Fuel cells	→	↑	→
Growth of renewables/ low carbon fuel in power generation	↑	↑	↑
Storage and grid expansion to support growth of xEVs	↑	→	↑
Net impact	↑	→	↑

Source: Company data

Nickel Demand Long-term Growth Expectations: Rising on Aggressive Upward Revisions of Fleet Electrification Targets

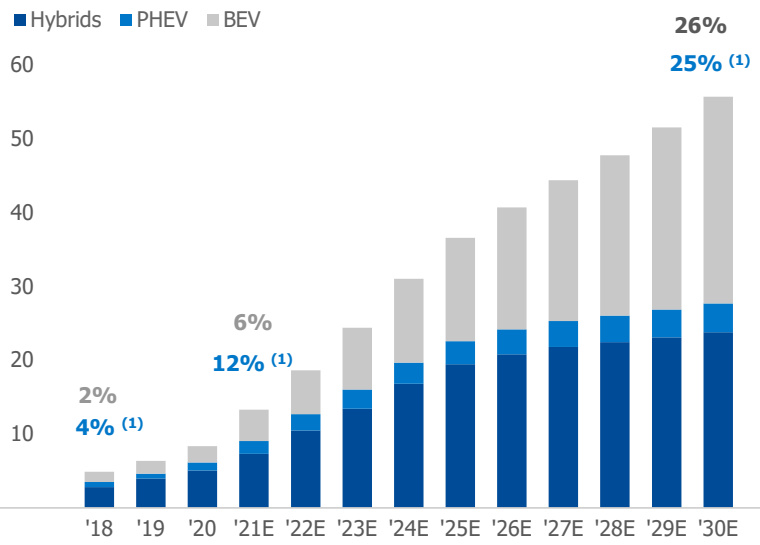
Revision of Long-Term EVs Outlook: BEVs in 2030E Up to 28m from 15m 12M Ago

[million units] [change in forecast,%]



Global Autos: EVs to Increase to 51% in 2030E from 7% in 2020, with 50/50 Mix of BEVs/Hybrids

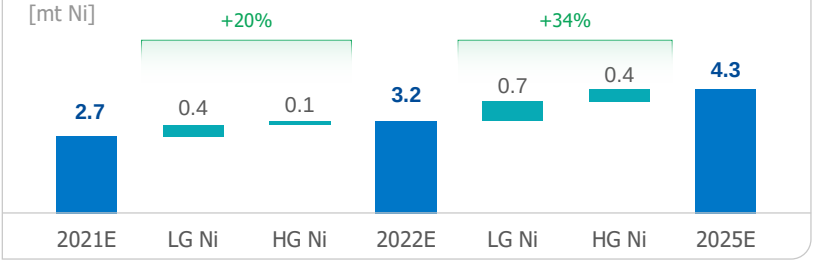
[million units] [share in global LV production,%]



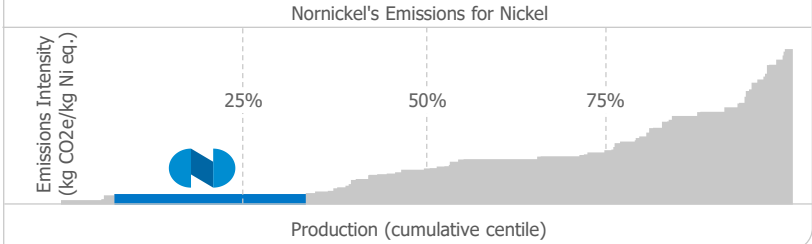
Source: LMC Automotive, Company estimates
Note: 1. Hybrids and PHEV share in global LV production

Nickel Supply Medium-Term Challenge: "Wall of Supply" of High Carbon Footprint and Not a Battery Grade Nickel

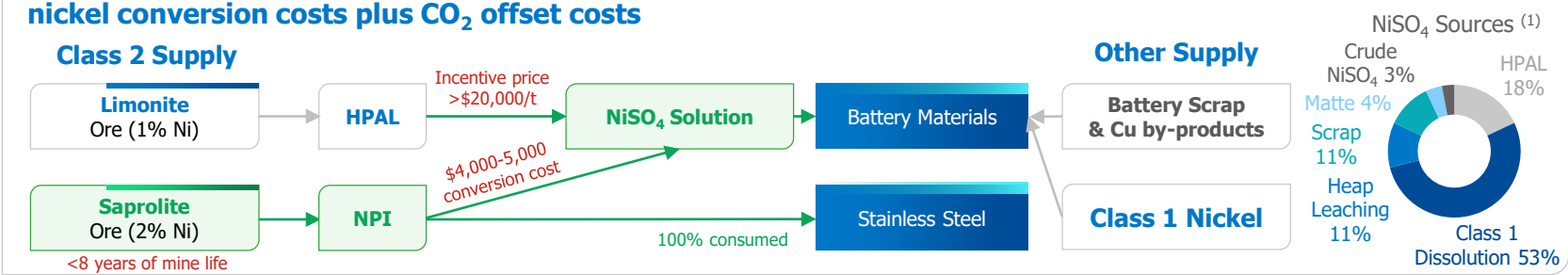
Long-term Supply: +1.1Mt of High Carbon/Low Grade NPI vs +0.5Mt of High Grade by 2025E



Carbon Intensity: Indonesian NPI is 9x Higher than Nornickel's Nickel Equivalent



Incentive Price for the Conversion of Indonesian Ore into Battery Grade Nickel: $4,000 – 5,000 per tonne of nickel conversion costs plus CO_2 offset costs

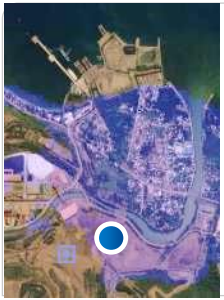


Sources: Wood Mackenzie, SMM, Roskill, Company estimates
Notes: 1. Based on NiSO4 production in 2021 by estimated feed source

Nickel Supply Long-Term Challenge: Will It Still be There Under a Climate Change Risk (1)

	China	Indonesia	The Philippines
Limited Impact	Sulphide ore production Nickel metal production	Laterite ore production	
Significant Impact(2)	40% $NiSO_4$ 90% NPI	90% NPI and MHP	70% laterite ores 60% MSP

Selected Sites Under a Flooding Risk Assuming the 2°C Global Warming Scenario

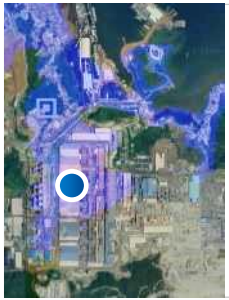


Claver Nickel Project

~25% of the Philippines Ni ore production

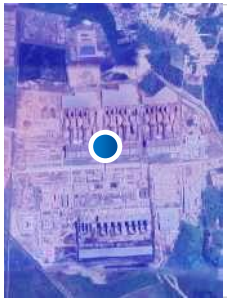
Cagdianao Nickel Project

~10% of the Philippines Ni ore production



Tsingshan Indonesian Projects

~60% of the Indonesian NPI production



Delong Indonesian Projects

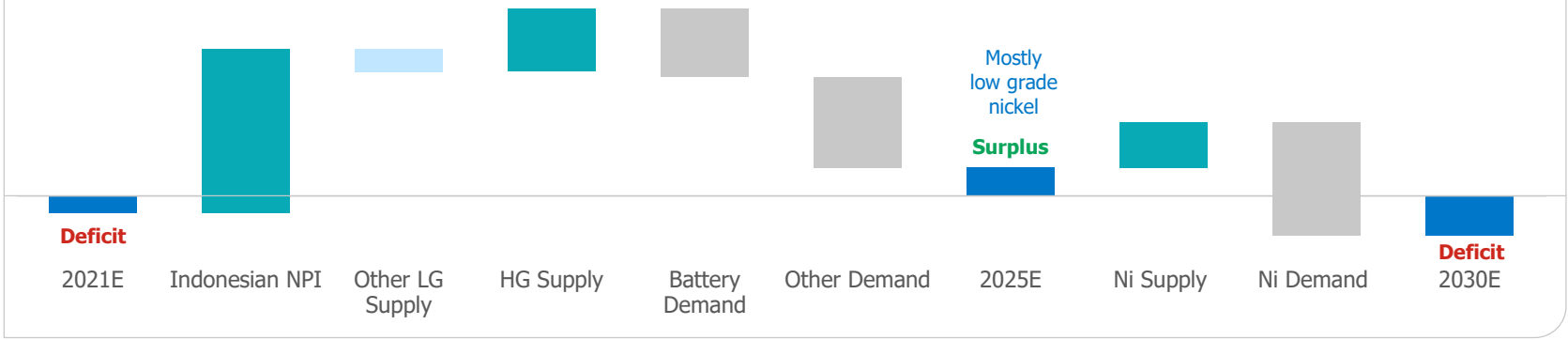
~30% of the Indonesian NPI production

Source: Climate Central, Department of Natural Resources of the Philippines, Macquarie, Company estimates
Notes: 1. Assuming a 2°C warming scenario 2. Based on current production

Nickel: "Wall of Supply" of Low-Grade/High Carbon Intensity Material in the Medium-Term vs Long-Term Demand Prospects

Nickel Market Balance: Risk of Major Surpluses in the Medium Term Are Overlooked as Long-term Deficit Prospects Excite the Sentiment, while Major Uncertainty over BEVs Expansion Remains

[Ni market balance]

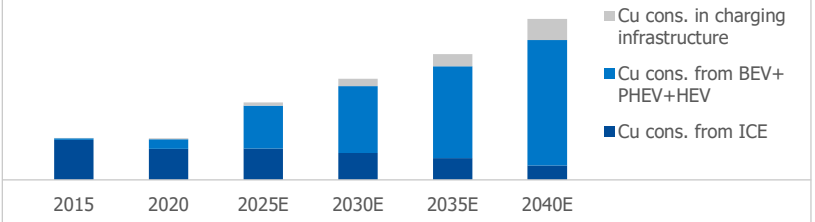


Source: Company estimates

Copper Long-Term Outlook: Strong Demand Prospects Matched by Plentiful Projects in the Pipeline at Early Stage of Development

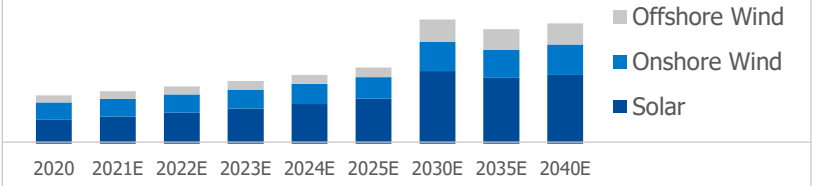
Copper Consumption: Impact from BEVs' Growth

[kt]



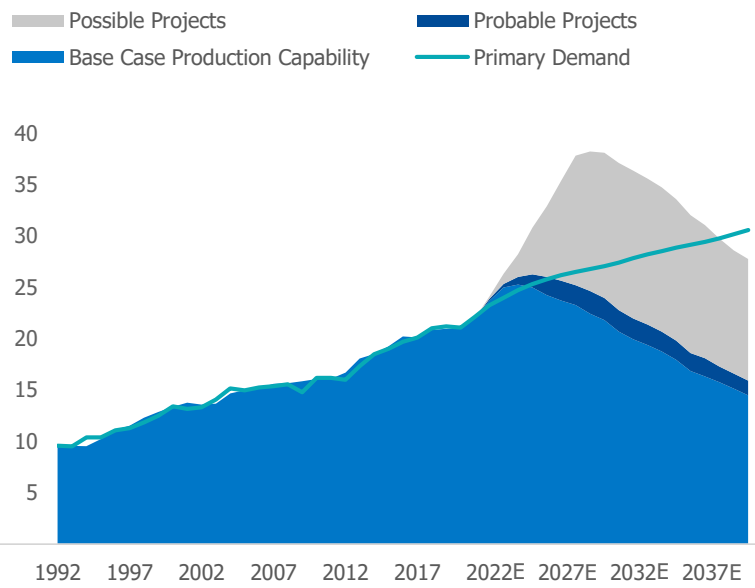
Copper Consumption: Impact from Expansion in Renewable Energy

[kt]



Copper Supply: Plenty in the Pipeline, But Possible Projects Are Needed Beyond 2026

[mt]

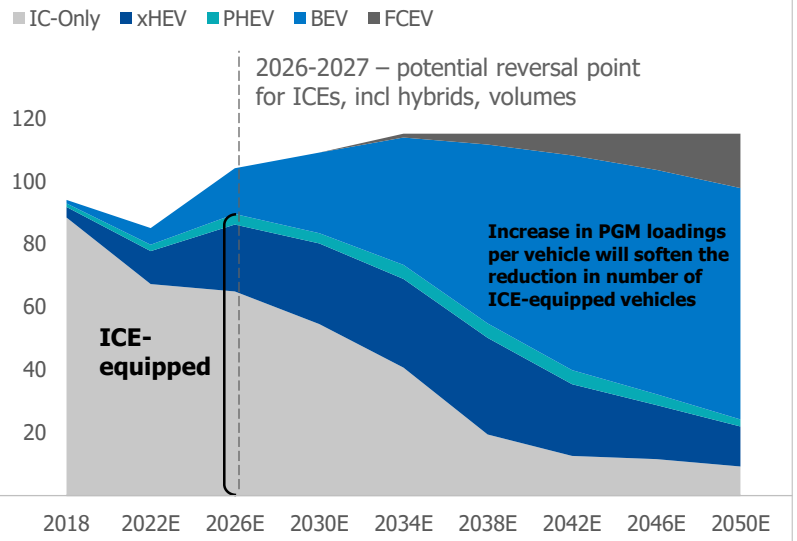


Source: Company estimates, Wood Mackenzie, CRU

Long-term Outlook for PGMs Demand: Risks Emerging Only Beyond 2026, with a Major Uncertainty over BEVs

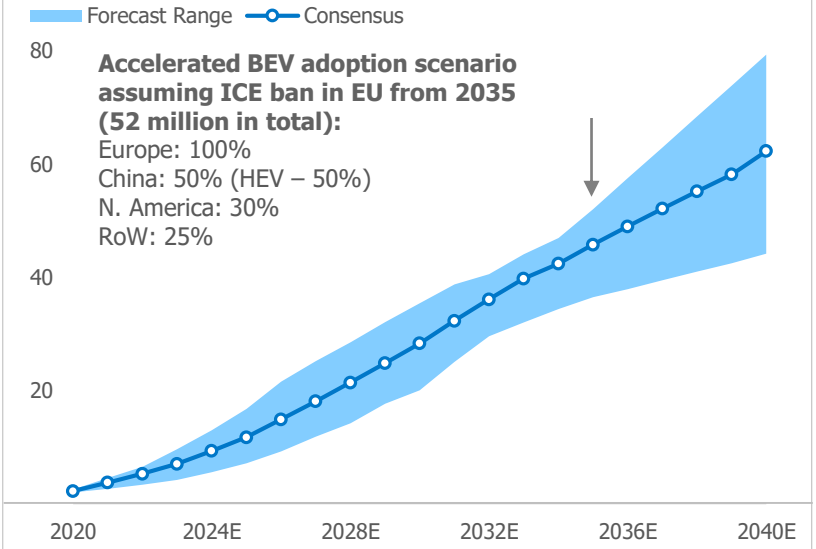
Production of ICEs Including Hybrids Is Strong in the Medium-term Accompanied by Rising PGM Loadings

[million vehicles]



A Wide Range of Opinions Regarding the Long-Term Prospects of BEVs

[BEVs, million units]



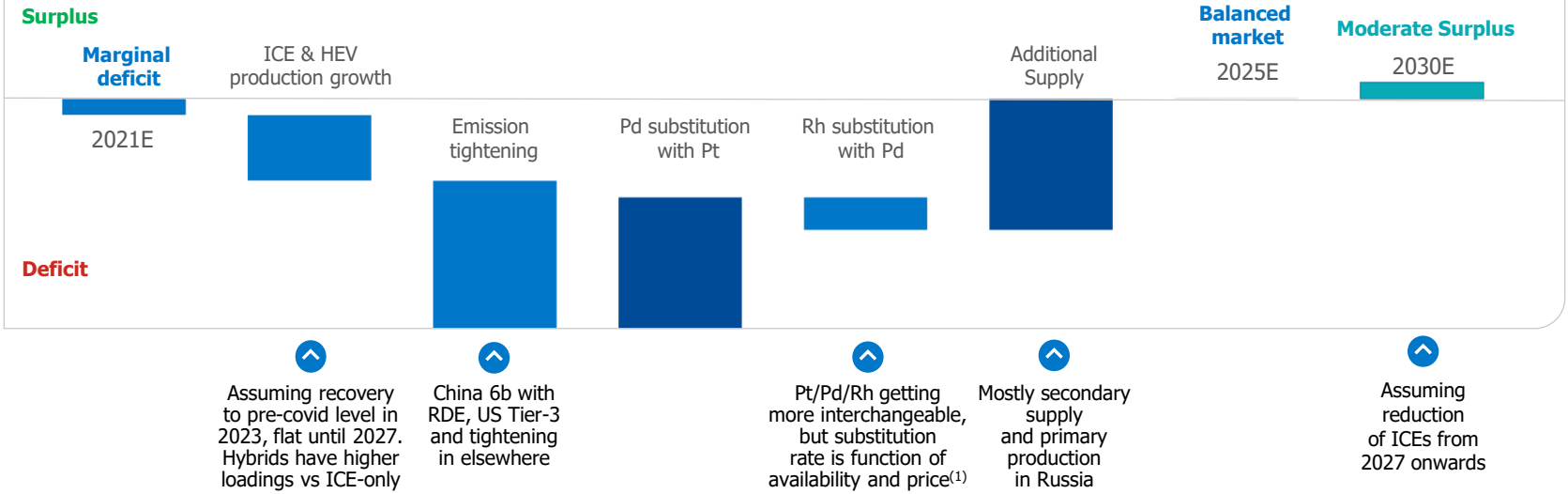
Source: Consensus forecast is based on projections published by LMC Automotive, IHS, Goldman Sachs, Morgan Stanley, BMO, Bloomberg NEF, UBS, BCG, Deloitte, S&P Global, HSBC, CRU

Palladium: Strong Medium-Term Market Outlook vs. Long-term Demand Uncertainty

Palladium Market Balance: Structural Deficits to Remain Until 2025+, Risk of Major Surpluses Arising Towards 2030 Subject to a Number of Difficult to Evaluate Major Risks/Uncertainties

[Pd market balance]

Major risks: Pace of BEVs penetration; government incentives for BEVs; the roll-out of charging infrastructure; introduction of new environmental regulations for ICEs such as Euro 7, China 7, US post-Tier-3



Source: Company estimates

Note: 1. Pt/Pd and Pd/Rh substitution is becoming more viable, however Pt/Rh substitution is impossible due to the metals physical characteristics

A New Era in Metal Trade

Nornickel staged for the new era of digital transactions, which will optimize supply chain efficiency and transparency

- Nornickel has joined the Responsible Sourcing Blockchain Network (RSBN), an industry collaboration among members across the minerals supply chain using blockchain technology to support responsible sourcing and production practices from mine to market. With Nornickel joining the RSBN, a series of its supply chains will be audited annually against key responsible sourcing requirements by RCS Global
- In January 2021, The Global Palladium Fund, founded by Nornickel, launched Exchange Traded Commodities (ETC) for precious metals on Deutsche Börse and LSE giving markets low-cost access to commodity investment opportunities
- Simultaneously, the GPF has issued the first industrial tokens involving metal contracts to its major industrial partners Traxys SA and Umicore SA
- In June 2021, the Fund issued the first-ever physically-backed nickel and copper ETCs
- In 1H2021, the Company commenced production of certified carbon-neutral nickel. The carbon-neutral nickel will be tokenised on Atomyze and the tokens will be listed on the Vienna Stock Exchange by Global Palladium Fund

We envisage offering a part (up to 20%) of our sales to industrial customers in 2022 through digital transactions

RSBN
RESPONSIBLE SOURCING BLOCKCHAIN NETWORK

GLOBAL PALLADIUM FUND

NORNICKEL | CARBON NEUTRAL

Source: Company data

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 was tokenised on Atomyze, a Blockchain platform, and the tokens are listed on the Vienna Stock Exchange by Nornickel's EU-based Global Palladium Fund
- 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_2 emission by 48kt over 2019-2020**, which has been independently **verified by Ernst & Young (EY)**
- Further CO_2 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**

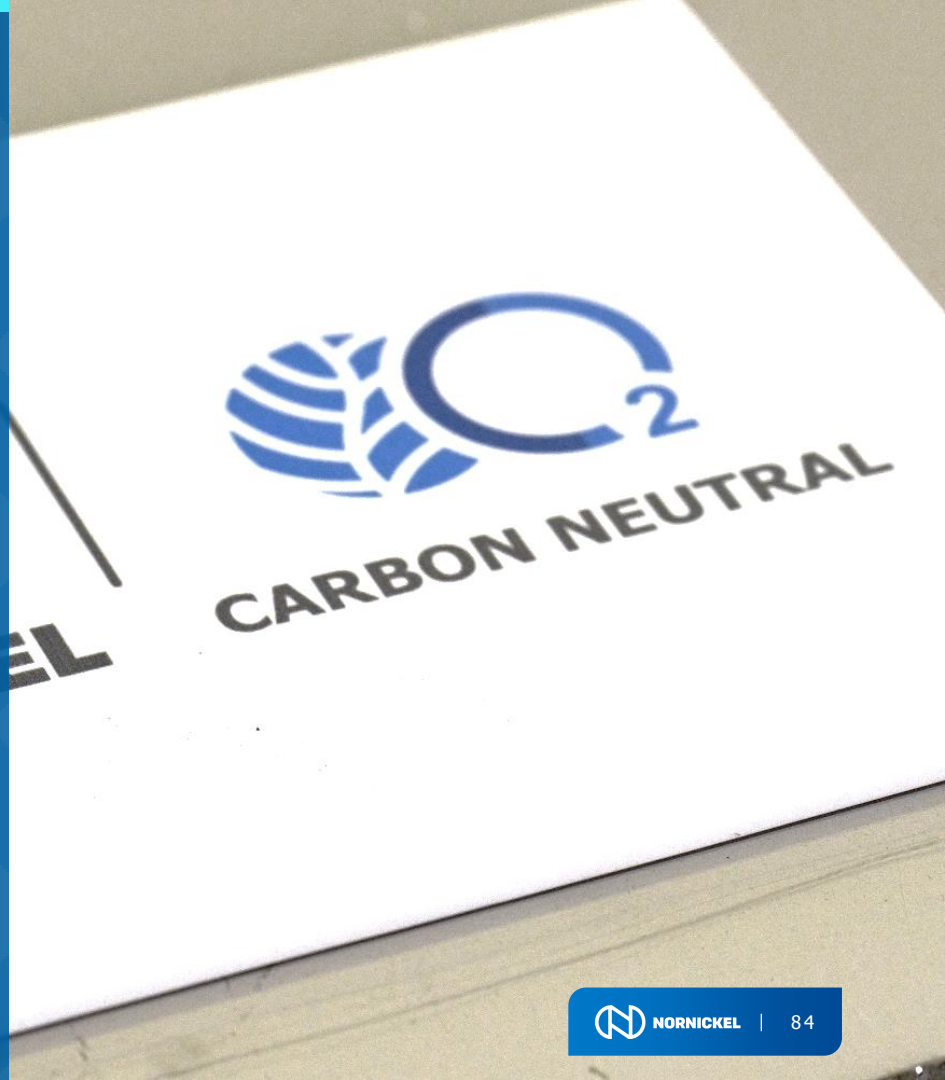
8.1 (1) t

of CO_2 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_2 has been calculated per tonne of the Company's refined nickel production assuming 2020 CO_2 emissions level

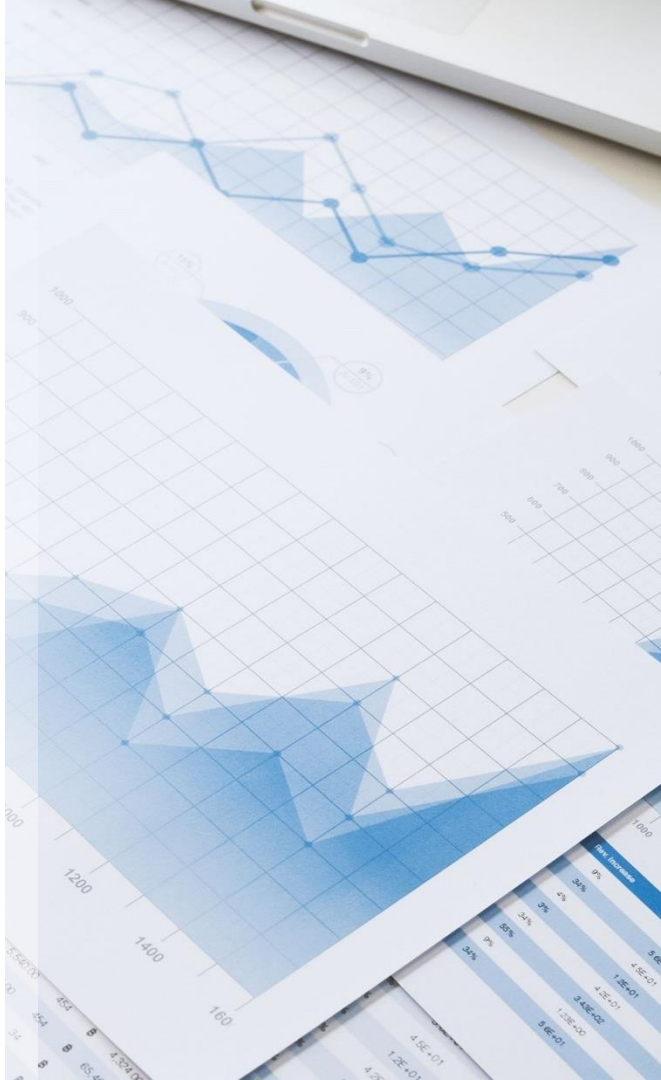


NORNICKEL

Financial Performance

Sergey Malyshev

Senior Vice-President
Chief Financial Officer

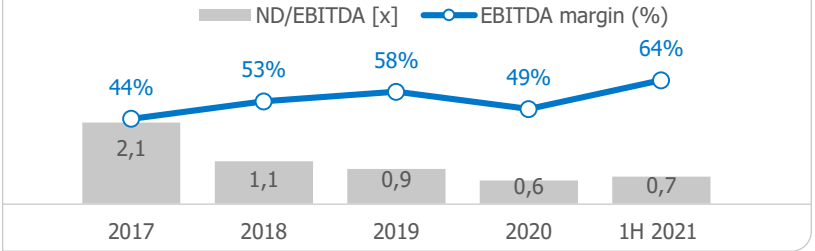


Reiterating Attractive Investment Case

Key Highlights

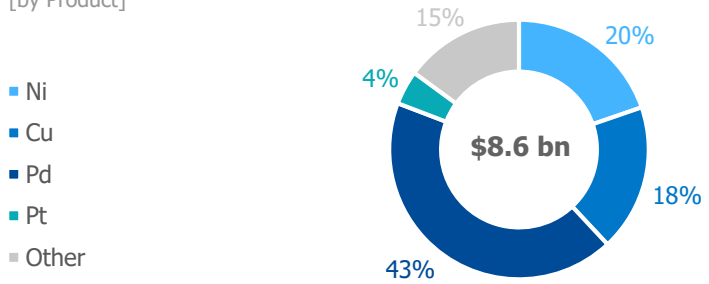
- The world's largest producer of "green" metals, which help to meet stringent emission standards of global auto industry and facilitate decarbonization of the global economy
- The world's best polymetallic reserve base: the highest grade of the metals basket (base metals and PGMs together) and a long mine life
- The world's lowest cash cost and carbon footprint of nickel production
- Sustainably high EBITDA margin and conservative leverage through the cycle
- Commitment to financial metrics supporting investment grade credit ratings: S&P "BBB-", Moody's "Baa2" and Fitch "BBB-"

Strong EBITDA Margin and Conservative Balance Sheet through the Cycle

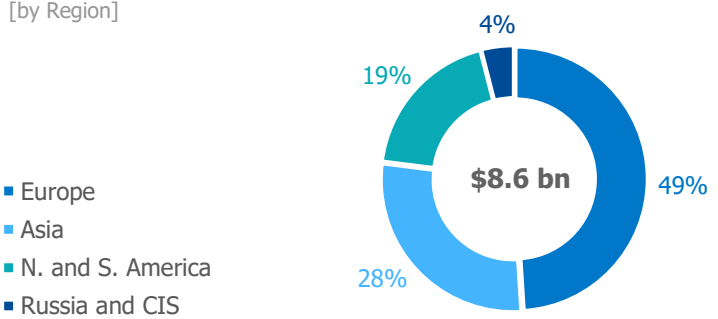


Naturally Diversified Revenue Mix (1)

[by Product]



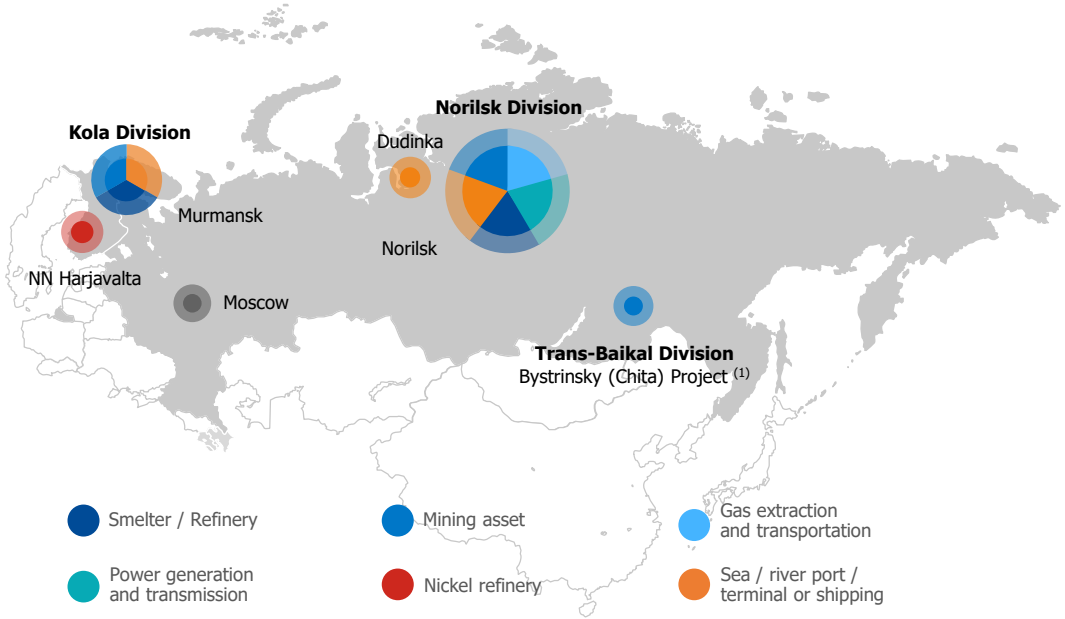
[by Region]



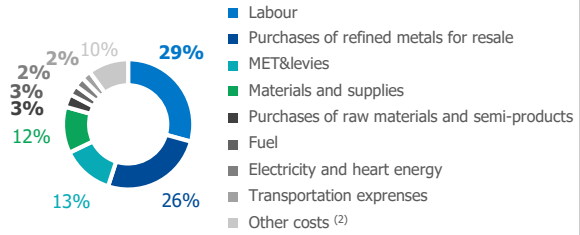
Source: Company data
Note: 1. Metals sales as of 1H 2021

High Degree of Upstream and Downstream Integration

- Downstream integration of mining into refined metals production with access to captive logistics infrastructure (sea and river fleet)
- Full self-sufficiency in power, fuel, water and key raw materials – significantly smaller % in cash costs vs peers
- Unique polymetallic ore reserves (high grades and long minelife) support most competitive cash cost position in the global mining

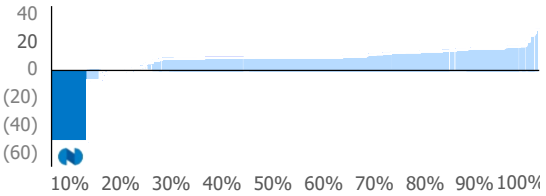


Cash Costs Breakdown (as of 1H 2021)



Lowest Cash Cost in the Global Nickel Industry (3)

C1 cash costs 2021E, [USDk / t Ni]

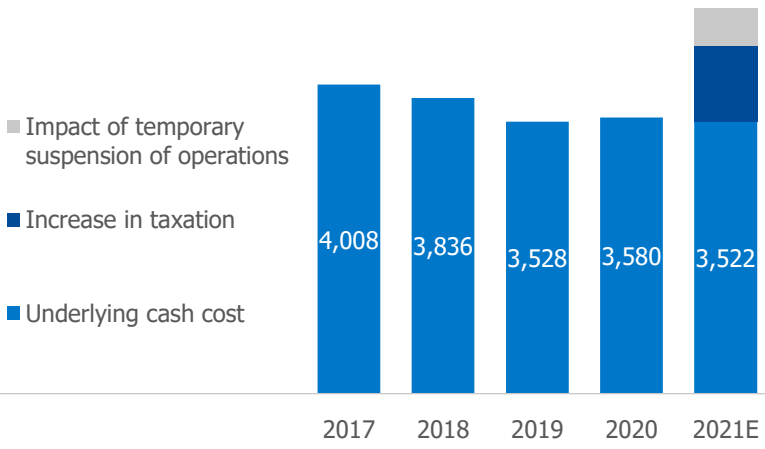


Sources: Company data, IFRS financial statements, Wood Mackenzie
Notes: 1. Bystrinsky project was fully commissioned in September 2019. 2. Other costs include third party services and sundry costs.
3. Global nickel industry cash cost curve as estimated by Wood Mackenzie

Strong Control Over Cash Costs Accompanied by Metals Production Growth Delivered

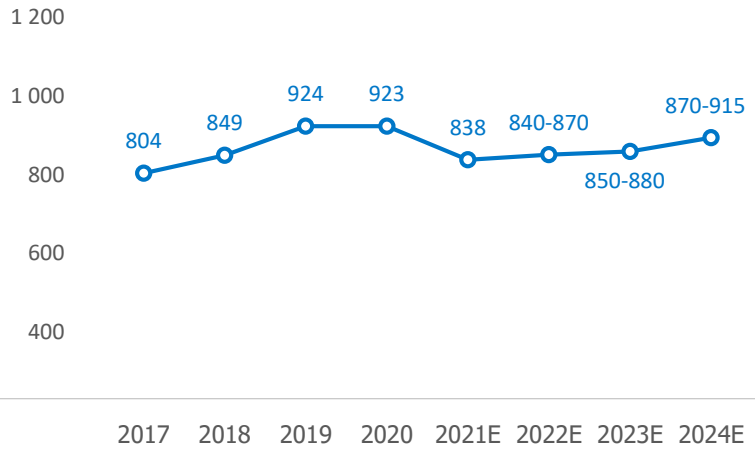
Strong Cash Cost Controls: Excluding One-offs Unit Cash Cost to Reduce 12% by 2021E vs 2017

[$ per tonne of Ni equivalent] (1)



Nickel Equivalent Production: Increased 15% by 2020, 2021E – Negative Impact from One-offs

[kt of Ni equivalent]

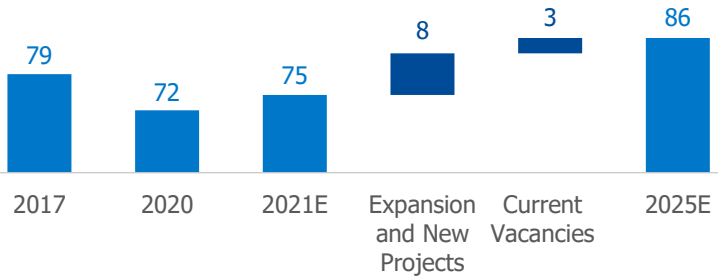


Source: Company data
Notes: 1. Ni equivalent calculated based on average metals prices

Managing Labour – a New Strategy of Raising Attractiveness and Improving Retention of Employees

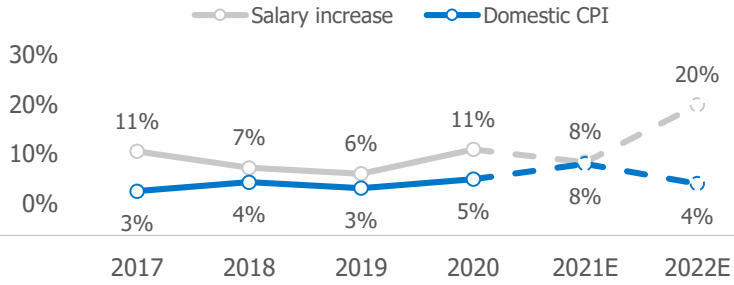
Headcount to Increase as Operations Expand and Environmental Projects Roll-out

['000 people]



- **Phase 1 (2013-2020): Fitting to size:** headcount reduced on the back of phasing out of obsolete facilities and exit from non-core operations
- **Phase 2 (2021+): Ecological growth strategy:** Expansion of mining (South Cluster, Talnakh) and processing operations (Talnhakh concentrator), increased capital repairs, new environmental projects (clean-up of legacy pollution in Norilsk, Sulphur-program 2.0 in Norilsk), IT, transportation & energy infrastructure, etc.

Maintaining Competitive Salary: An Average 20% Upward Revision in 2022



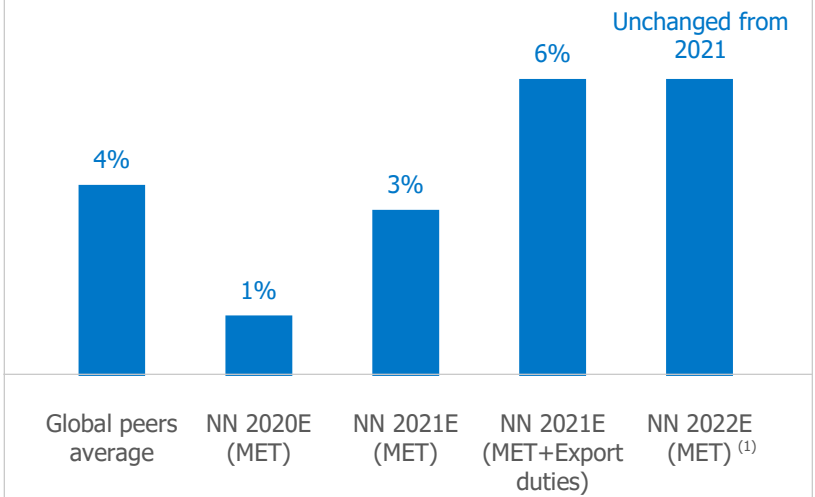
Strong demand for qualified mining & metallurgical labour:

- Retention of the current personnel
- Strong competition from other metals&mining majors in Russia and increasing competition from oil&gas majors entering Taymir Peninsula and neighboring regions
- New collective bargaining agreement signed: salaries revision for Norilsk and Kola divisions above CPI in 2022

Source: Company data

Impact from the Changes in Taxation in 2021 and 2022

Expected Impact of Changes in Taxation on Nornickel's MET Payments as % of Annual Revenue



Changes in taxation in 2021:

- 3.5x increase in Mineral Extraction Tax (MET) effective from 1 January 2021
- Introduction of temporary (5M long) export duties of 15% of realized price on Ni and Cu effective from 1 August 2021

Announced changes in taxation in 2022:

- Temporary export duties to be cancelled
- Norilsk Division: MET will be calculated as 6 % × mined ore x metal grades of Ni, Cu, Pd, Pt group metals, Co and Au x metal prices x metal recovery (85% (2)), but not less than RUB 730 per ton × 3,5
- Kola and Chita Divisions: MET will be calculated as 8% of cash cost of ore mined x 3.5 (no change from 2021)
- According to the management estimates, subject to commodity prices net impact of changes in taxation in 2022E (new MET) vs 2021E (MET+export duties) is net neutral

Potential changes in taxation beyond 2023:

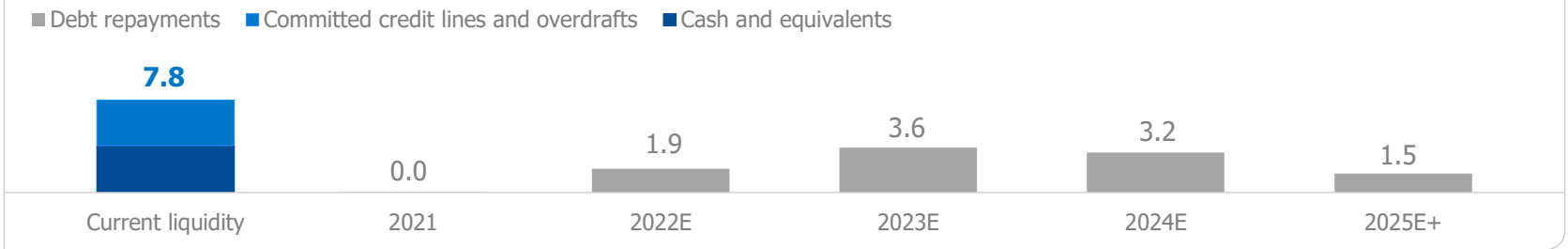
- Proposal to introduce progressive corporate income tax depending on the level of dividends vs capex has been deferred by the government for further consultations

Source: Company data, Goldman Sachs Research. Peer group includes global diversified mining companies (BHP, Rio Tinto, Vale, Glencore, Anglo American) Royalties and revenues estimated on the basis of 2020 annual reports
Note: 1. For illustration purposes assuming 2021E commodity prices; 2. Subject for the methodology to be approved by the Government

Effective Management of Debt and Liquidity

Available Liquidity Covers Debt Repayments Over the Next Almost 3 Years (1)

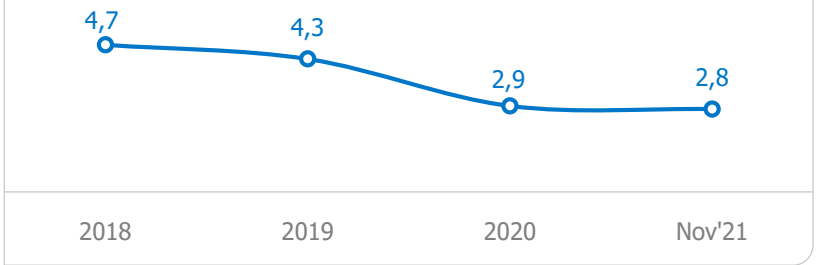
[USD bn]



Average Cost of Debt (2)

%

at the end of the period

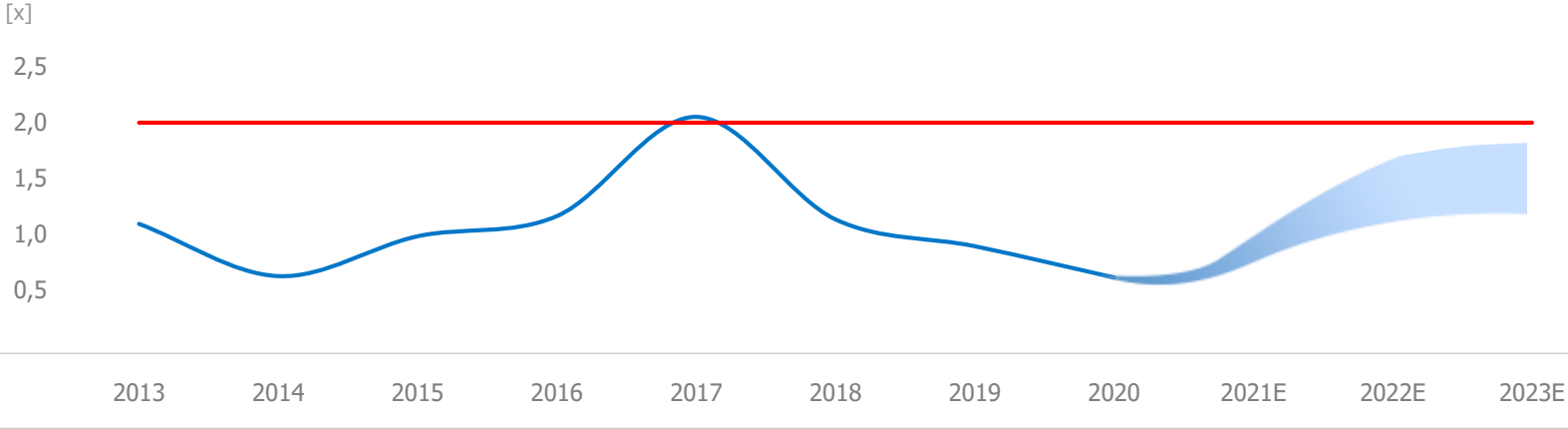


- Recent refinancing exercises: new 5-year USD500mln Eurobond with a coupon rate of 2.80% and the lowest ever spread to benchmark in the history of Nornickel's public offerings placed in October
- Average cost of debt portfolio reduced to 2.8% due to prudent balance of funding instruments and in spite of recent rise in USD rates
- Refinancing activities for 2022 maturities are ongoing
- FX debt position naturally hedged with FX revenues

Notes: 1. Debt includes liabilities under lease agreements. RUB liabilities with currency swap applied disclosed as USD liabilities at the rate of swap trade 2. The metric presented is based on all-in effective interest rate including all cost components of debt instruments (without lease liabilities) as at the end of the relevant period (debt instruments denominated in currencies other than the US dollar are swapped for US dollar funding positions)

Focus on Maintaining Sustainable Financial Model (FCF)

Sensitivity of Net Debt/EBITDA Projections to FCF-Based Dividend Payouts: Management's Priority – to Maintain Investment Grade Credit Ratings



- Current dividend formula (60% of EBITDA if ND/EBITDA <1.8x) ceases to apply from 2022 financial year onwards
- For illustration purposes: leverage projections are based on the management's proposal to major shareholders to pay linked to FCF dividends
- A new dividend formula could be negotiated by major shareholders and could vary from the management's proposal

Source: Company data
Note: 1. Forecast data Net Debt/EBITDA subject to prices, FX, taxation and other macro-factors

NORNICKEL

Gareth Penny

Independent Director
Chairman of the Board of Directors

NORNICKEL

Attachments

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 [1] 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_2 emissions at Kola Division: 85% reduction in 2021 on track, cross-border pollution has been ceased
- SO_2 emissions at Norilsk Division: construction of Sulphur Programme at Nadezhda smelter (ETC 2023) and Copper plant (ETC 2025) on track

Climate Change

- New 2028 CO_2 carbon intensity target announced: 16% cut
- Reduction of CO_2 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

Source: Company data. Note: 1. Equivalent to USD0.6 bn over 10 years

Selected Environmental and Climate Change Targets (1)

Total Environmental CAPEX USD6 bn 2020-2030

Climate change

- Maintain absolute Scope 1 and 2 GHG emissions from operations below 10 mt by 2028
- Reduce CO_2 intensity of nickel equivalent production by 16% by 2028

Biodiversity

Reduce a negative impact on biodiversity, including forest conservation near production sites

Air

Reduce SO_2 emissions of the Kola Division by 85% in 2021, Norilsk Division – by 90% in 2025 from 2015 level

Land

Rehabilitation of 117 ha/year of disturbed land and land clean-up in towns and cities and near production sites

Water

- Reduce the volume of pollutants discharged by 25% from 2019 and achieve the permissible discharge standards of 159 kt by 2031
- Maintain fresh water intake (except for underground mine water) for production below 120 mln m^3
- Keep the level of water recycling and reuse above 80%

Tailings storage facilities and waste

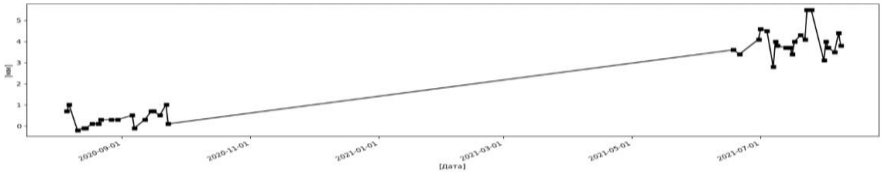
- Dispose of 100% of waste from new projects to environmentally safe facilities, provided with best-in-class technology, starting in 2025
- Dispose (collect and recycle) of 100% of accumulated waste by 2030
- Increase/maintain the share of mineral waste utilization above 30%
- Increase/maintain the share of non-mineral waste utilization (except the gypsum waste)

Note: 1. Targets set for 2030 unless noted otherwise. Source: Company data
For more details please read: https://www.nornickel.com/upload/iblock/88b/Norilsk_Nickel_Environmental_Strategy_2021_en.pdf

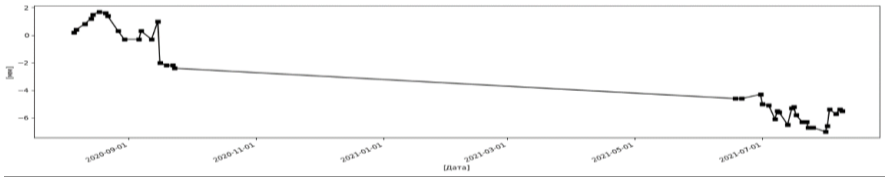
Physical Risks: Satellite Monitoring of Norilsk Area –the First Evidence

Satellite Radar Monitoring of Vertical Displacements of the Earth's Surface and Infrastructure Facilities

- Displacements speed: -3.9942 mm/pa, displacement in 2020 -0.1mm, in 2021 -0.2 mm

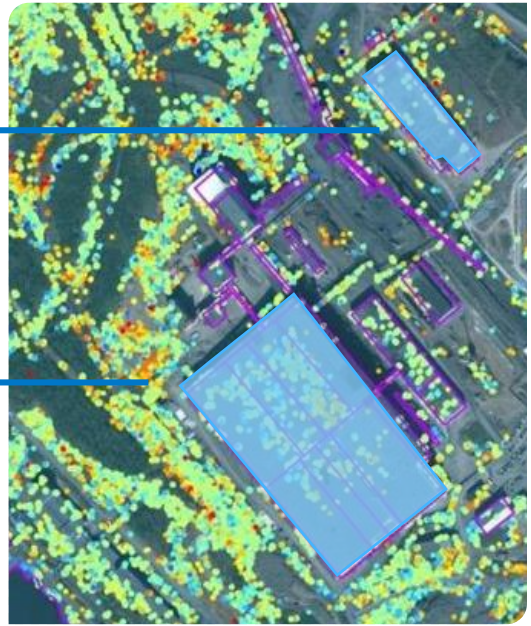


- Displacements speed: -6.5852 mm/pa, displacement in 2020 -2.4mm, in 2021 -0.9 mm



In general, most of the site area, including infrastructure facilities, covered by satellite monitoring since 2020 has proven to be stable with the values of the displacements recorded over 2020-2021 being fairly minimal and within the error margins

Map of Vertical (W-E) Displacements (Norilsk region)

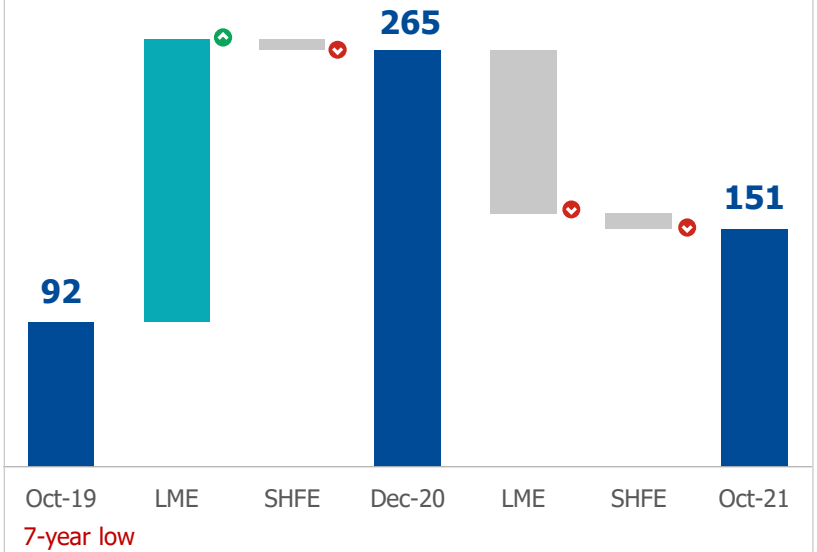


Source: Company data

Nickel Exchange Stocks Decreased in 2021 YTD as the Market Slipped into Deficit

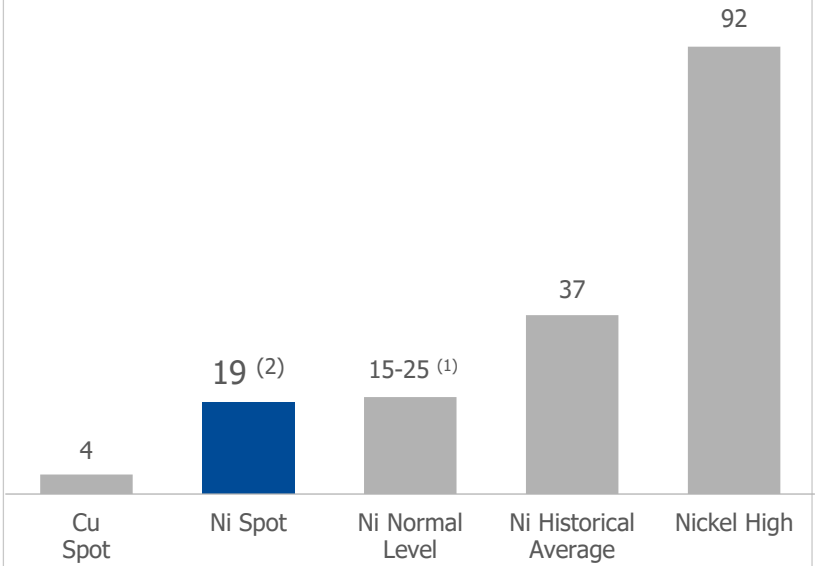
Exchange Inventories Declined Due to Increasing Demand and Market Deficit

[kt Ni]



Nickel Exchange Inventories Currently Stay at Normal Level

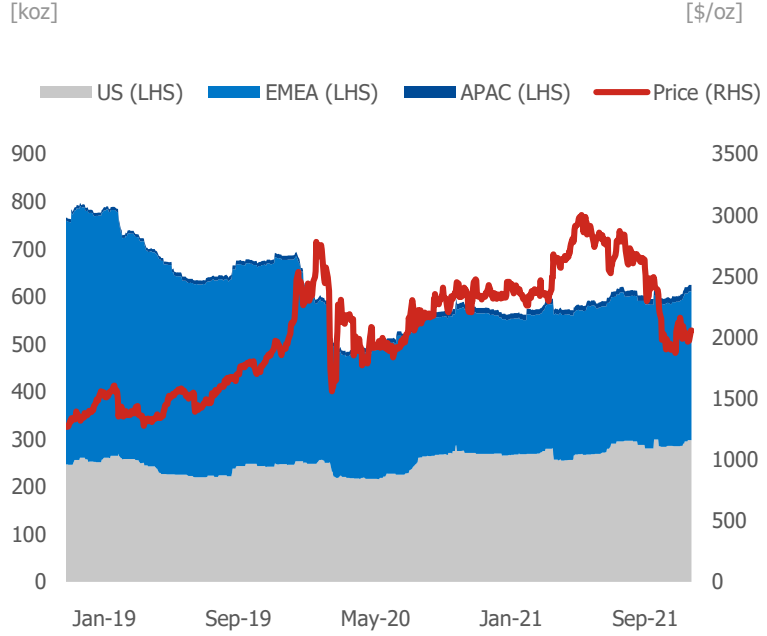
[Days of consumption]



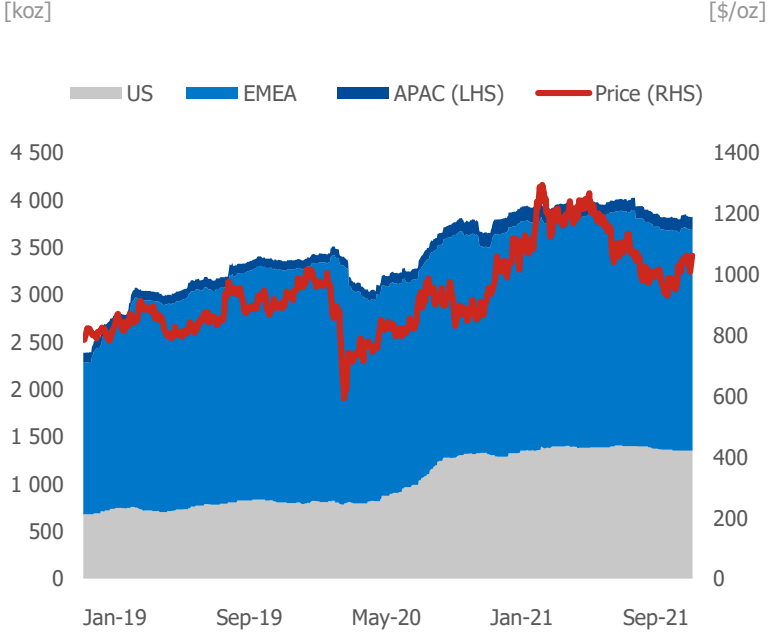
Sources: LME, SHFE, SMM, Company estimates.
Notes: 1. According to markets participants, customers, 2. As of October 29, 2021

Investment Demand (1% of Global Pd and 8% of Pt Demand) – PGM ETF Holdings Shows Mixed Results in 2021YTD

Palladium ETF Holdings increased by 34 koz in 2021 YTD vs 124 koz decrease in 2020



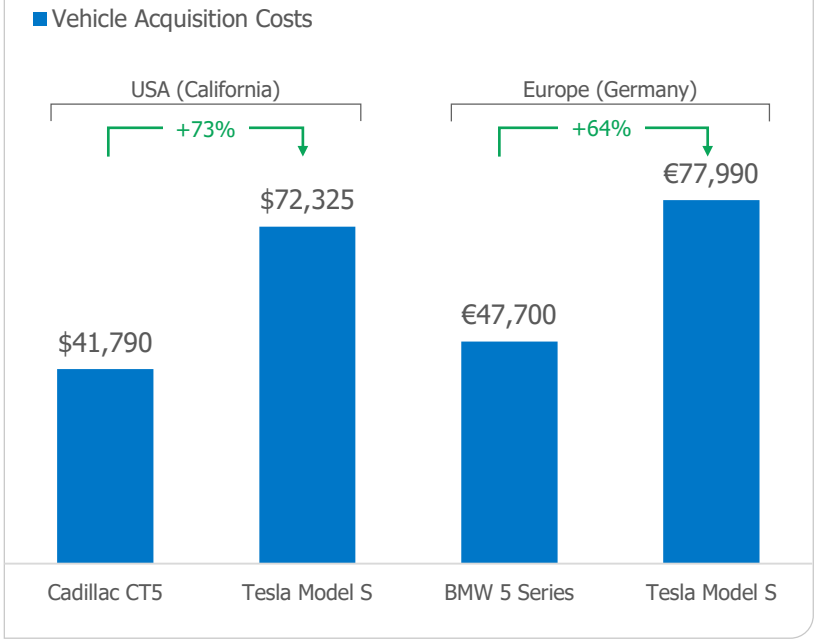
Platinum ETF Holdings decreased by 64 koz in 2021 YTD vs 500 koz increase in 2020



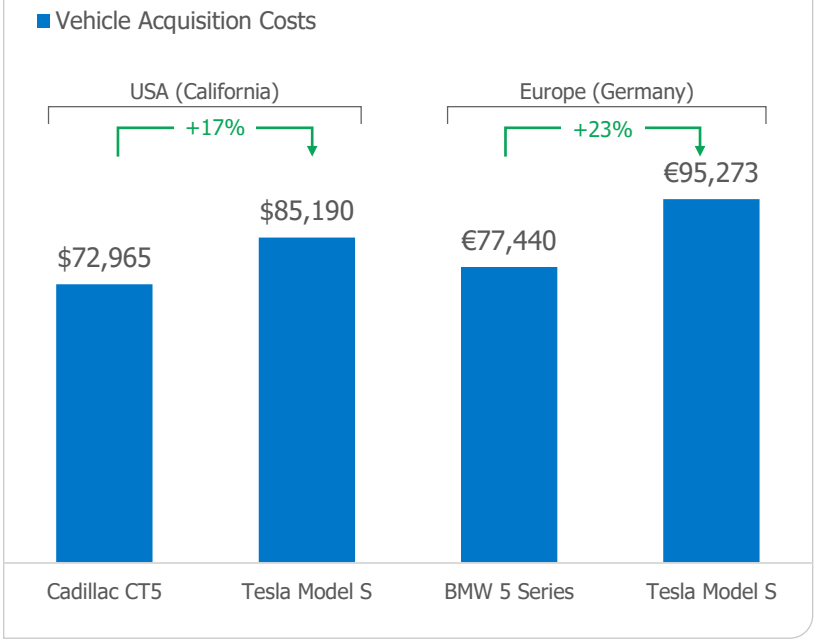
Source: UBS

Cars with ICE Outperform EV's Both in Terms of the Purchase Price and the Full Life Cycle Costs, So Far…(?)

Comparison of Car Purchase Price with ICE and EV in the USA and Europe

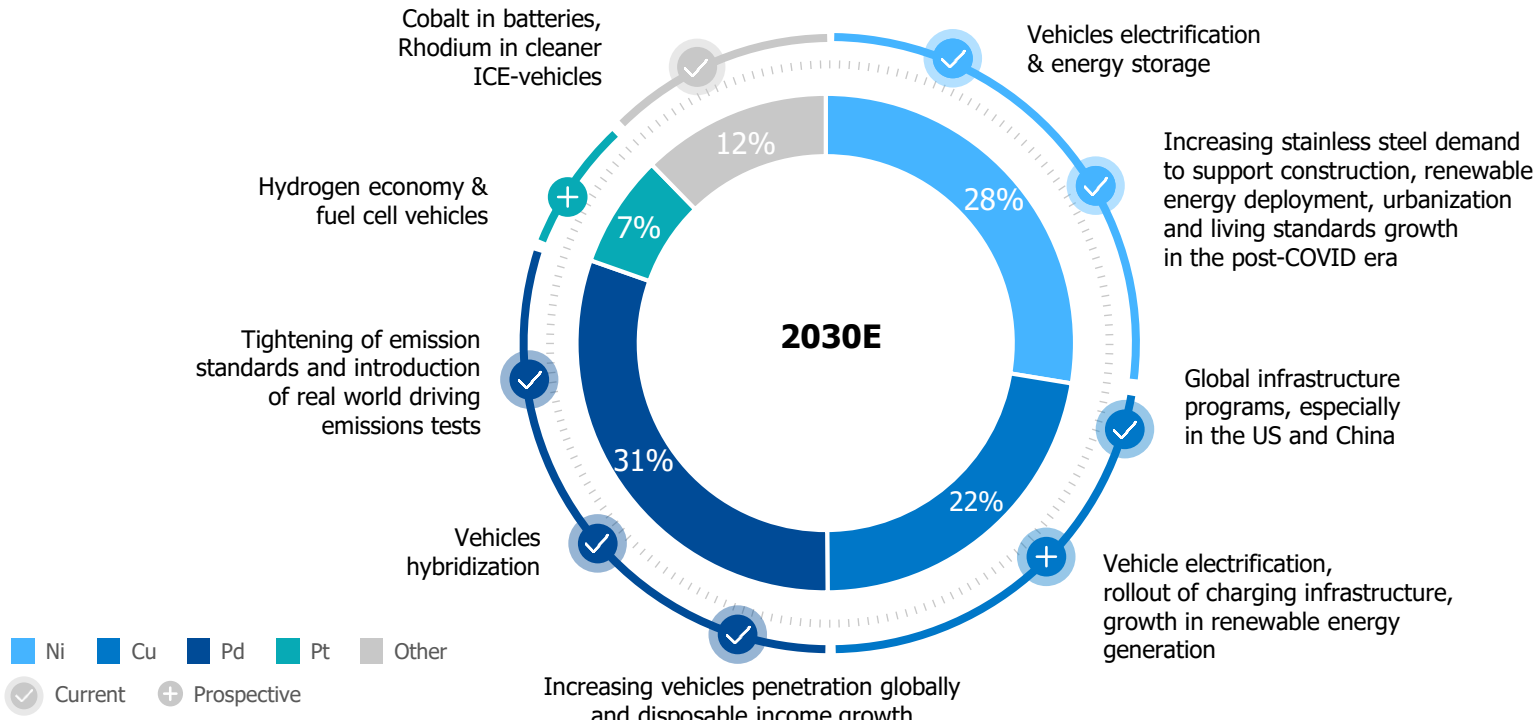


Comparison of Total Cost for the Entire Life Cycle of Car with ICE and EV in the USA and Europe



Source: Nickel institute
Notice: Car purchase price - for Tesla Model S, including tax benefits / subsidies and charging station installation; Total Life Cycle Cost - 10 Years Life, Vehicle Cost Amortization, Fuel Cost / Charging Cost, Mileage - 55km / day or 20,000 km / year (Europe) and 40 miles / day or 12,000 miles / year (US)

Global Long-term Consumption Trends: Revenue Opportunity for Nornickel's Metals Basket



Note: 1. Metals produced from own feedstock (including metals in saleable semi-products), excluding production of Bystrinsky project and Nkomati.
2. Revenue estimate is based on production forecast from Nornickel Strategy Day Presentation Nov 2021, LT consensus price forecast and CPI projections by the US Congressional Budget Office

Global Decarbonisation – Risk Assessment for Nornickel's Metals

	Gasoline	Diesel	Hybrid incl. PHEV	BEV	FCEV
CAGR (1)	+1%	0%	+28%	+38%	+41%
Market Share (2)	57%	11%	20%	12%	<1%
Ni	Stainless Steel & Parts		+Batteries		-
	2-4 kg	2-4 kg	5–15 kg	30–110 kg	2–3 kg
Cu	Wires & Parts		+Electric Motor, Generator Winding, Charging Infrastructure		
	20-25 kg	20-25 kg	50-60 kg	75-85 kg (3)	70-75 kg
PGM	Catalysts			-	Fuel Cell
	2-5 g	3-6 g	4-10 g	-	25-35 g
Pt:Pd ratio	1:4	8:1	1:4	-	-
Metal value per vehicle, $ (4)	$390-920	$330-590	$740-1,470	Up to $3,000	Up to $2,000

Source: Company estimates, LMC Automotive, Bloomberg;
Note: 1. CAGR for 2020-2025E, 2. Expected market share in 2025 based on production;
3. Excluding additional infrastructure demand of 1-8 kg per charger; 4. Metal values calculated at spot prices as of October 13, 2021

2021E EBITDA Sensitivity to a 10% Change in Metal Prices and RUB/USD Exchange Rate

	10% Change from	Change in EBITDA, $ mln
Exchange rate	RUB/USD 73.65	453
Palladium price	$2,341/Oz	625
Nickel price	$17,917/t	352
Copper price	$9,000/t	335

Source: Company data

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Thank you for your attention!