NO. 2 STRATEGIC REPORT

CHAIRMAN'S LETTER

“

The year 2020 has been a difficult year for the global economy as well as for Nornickel. We have learned our lessons from it, and are determined to retain our top place in the global mining industry, whilst focusing on sustainable growth.

Gareth Peter Penny

Chairman of the Board of Directors,
MMC Norilsk Nickel

Gareth Penny

Fellow Shareholders

As the Chairman of the Board, we would like to highlight that we are specifically focused, for obvious reasons, on ESG issues. The incident at one of our fuel farms in the middle of last year, made a huge impact on our risk assessment system and organisational structure, as we needed to take every step possible to identify root causes of the diesel spill and to promote changes within the Company to ensure that such accidents do not occur again.

At Board level we established an entirely independent Environmental Task Team to review the clean-up operations and a wider range of other environmental matters. The team meets on a regular basis to help management identify the drawbacks in our current corporate culture and internal procedures in order to make the necessary changes in the Company's leadership and to move from a compliance-based to a risk-based organisation.

The conclusion we made during this work is helping us to develop an holistic ESG programme that includes such matters as climate change, water stewardship, support of local communities and indigenous people. What is important is that we are now setting specific targets for this programme with committed budgets.

In order to make the ESG priorities an essential part of the Company's everyday life, we will embed industrial safety and environmental objectives into the management KPI's, starting from 2021.

Our total investment programme through 2030 is estimated at more than USD 27 billion. A significant part of this amount will be used to improve safety and reliability of operations, as well as our environmental footprint. Our Company is investing more than USD 5.5 billion in its environmental program, of which USD 3.6 billion will go into the desulphurisation of the Polar division.

Over USD 4 billion will be invested in the modernisation of the Company's infrastructure aimed at total renewal of over 60% of all energy assets in the next five years. This investment will allow us to progress in three main dimensions: safety, energy efficiency and the reduction of carbon emission. Nornickel is already positioned in the lowest quartile of the carbon intensity curve and is committed to maintain this leadership among metals and mining businesses in the future.

As we look into the future, we clearly see that our metal basket is uniquely geared towards a carbon-neutral world, and the positive impact that we can make is extremely important. Thus, large investments will go into growth projects. As a result, we are going to almost double ore output in the Norilsk region and increase metal production by roughly 30% by 2030.

From myself as the Chairman, through the entire Board and the senior management, everyone is focused on the sustainable development of the Company and we are absolutely determined to get it right. We look forward to delivering on our ambitious plans and to assure a continuity in value creation for our shareholders.

PRESIDENT'S LETTER

"The concerted work of our seventy-thousand-strong team successfully brought us through all the hardships to achieve robust operational and financial performance for the year.

Vladimir Potanin
President,
Chairman of the Management Board
MMC Norilsk Nickel

Dear shareholders

In 2020, we faced a number of unprecedented challenges, and to overcome them, we needed the utmost effort of all our employees

COVID-19 response

The COVID-19 pandemic did not only lead to an unprecedented global economic downturn and, consequently, a significant drop in demand for our products, but it also put a huge strain on our operating model, our employees, their families and all local communities within Nornickel's footprint.

To protect our employees and ensure business continuity, special task forces were set up that supported the uninterrupted operation of our production, transport and sales assets.

In addition, we provided all-encompassing support to local authorities, healthcare authorities, SMEs and vulnerable groups, providing a much-needed lifeline to our local communities at the height of the pandemic.

Our total 2020 COVID response spending was USD 157 million, and this year we will certainly continue to support our people and local communities until we get to the other side of the pandemic.

A strategic focus on sustainability

In the end of May 2020, we experienced a major environmental incident related to the leak of diesel fuel in the Norilsk Industrial District. The Company immediately launched a comprehensive cleanup operation, with its main phase completed by the end of 2020. We are currently looking into the most effective approaches to restore the damaged ecosystem in close cooperation with all stakeholders. With our support, the Russian Academy of Sciences organised the Great Norilsk Expedition, whose primary goal is to find effective solutions for restoring the area after the incident, as well as to develop recommendations for minimising the overall impact of industry on the Arctic environment. We plan to use the expedition's findings in our programme to restore the damaged environment.

The Company has drawn an important lesson from this incident and dramatically reviewed its approach to environmental risk management. We have decided to combine isolated environmental initiatives into a comprehensive, group-wide environmental strategy, covering improvements to air quality, water stewardship, biodiversity restoration, climate change, tailings management and the remediation of historically polluted areas. Most importantly, we have also set specific targets and earmarked a budget for each of these areas. We plan to invest around USD 5.5 billion over the next ten years to implement this strategy, which is a record-high amount for the Russian mining and metals industry.

I would also like to emphasise that in December 2020 we discontinued smelting operations in Nikel in the Kola Peninsula, as part of a comprehensive environmental programme to achieve zero emissions in the Russia–Norway border area. Along with other initiatives, this will enable an 85% reduction of sulphur dioxide emissions in the Murmansk Region by the end of 2021.

CONTINUED

PRESIDENT'S LETTER

Financial highlights

We delivered strong financial results in 2020. Our revenue increased 15% to USD 15.5 billion, driven by higher prices of palladium and rhodium, and the ramp up of the Bystrinsky project. EBITDA was down 3% to USD 7.7 billion, primarily due to a large environmental provision related to the damage caused by the fuel spill, COVID-related expenses and the temporary build-up of metal inventories.

Capital expenditures increased by 33% year-on-year to USD 1.8 billion, driven by the Talnakh ore cluster, the development of the South Cluster project, more widespread energy infrastructure overhauls, investments in industrial safety, as well as the start of the active construction phase of the Sulphur Programme.

Free cash flow increased 36% to USD 6.6 billion, an all-time high for the Company.

Our net debt decreased more than 30%, with the net debt/EBITDA ratio falling to 0.6x. We maintained a sharp focus on refinancing our debt portfolio, which enabled us to significantly reduce the average cost of debt servicing by changing in conditions increasing the limit under the USD 4.150 billion syndicated loan, and by issuing USD 500 million in Eurobonds on terms that are extremely attractive for the Company. The Company's stable financial position is confirmed by investment-grade ratings from the Big Three credit rating agencies.

Transition to the active phase of the investment cycle

To implement our growth strategy and new environmental projects, our team has updated the Company's long-term CAPEX plan. Total investments for the next 10 years are scheduled to exceed USD 27 billion. In addition to our comprehensive environmental programme, investing in the development of our mining capacities will become a key element of our strategy. For example, we plan to increase ore production in the Norilsk Industrial District from the current 17–18 mtpa to 30–32 mtpa by developing the South Cluster and Talnakh mines. Ramping up ore output will require an expansion of processing capacities and, therefore, we have also started investing in the development of the Talnakh Concentrator, as well as in the construction of a third furnace at Nadezhda Metallurgical Plant and a new copper refining facility at Kola MMC. Over the next five years, CAPEX in fuel and energy assets, including health and safety initiatives, will amount to more than USD 4 billion, which should allow for an upgrade of over 60% of all Nornickel's energy infrastructure by 2030.

In order to efficiently execute on its ambitious strategy for upgrading and increasing the reliability of its assets, Nornickel has transitioned to a division-based governance structure, whereby production assets

gain greater investment flexibility, without compromising the strategic and expert functions of the corporate centre.
In addition, the Company is developing additional infrastructure for contractors and expanding the pool of construction companies that can operate in the region to address the shortage of contractors.

Social responsibility

In line with our strategic priority for sustainability, we significantly stepped up social spending in 2020.

Apart from helping to control the spread of COVID-19 among our employees and local communities, we have implemented a number of equally important social initiatives, which I would like to discuss separately.

Upon discontinuing the smelting operations in Nikel, we provided a comprehensive outplacement programme for the shop's personnel, making it easy for employees to transfer to other operations of the Company, as well as setting up a retraining programme and a pension plan. In addition, in partnership with the authorities of the Murmansk Region, the Company has committed to attracting new businesses and social entrepreneurs to the area, as part of its development after the shop's shutdown.

Last September, we signed an agreement with organisations representing the interests of the indigenous peoples of the North to implement a RUB 2 billion comprehensive plan to support the development of these communities. The programme will run until 2024 and includes support for traditional activities, protection of the indigenous habitat, as well as financing of housing, healthcare, infrastructure, tourism and socio-cultural projects. The list of projects was drafted up with the direct input of local communities, which should provide a framework for effective cooperation between indigenous peoples, local authorities and industrial companies on the development of the region.

In early 2021, Nornickel signed a quadripartite agreement on the social and economic development of Norilsk, which envisages the renovation of housing, the upgrade and overhaul of local utilities and engineering infrastructure, the creation of a comfortable and safe urban environment and the relocation of Norilsk and Dudinka residents to other regions with a milder climate.

In conclusion, I would like to thank all colleagues, contractors and customers who helped us overcome the challenges of 2020. I am confident that together we will deliver on all our long-term goals.

STRATEGY 2030 PRIORITIES

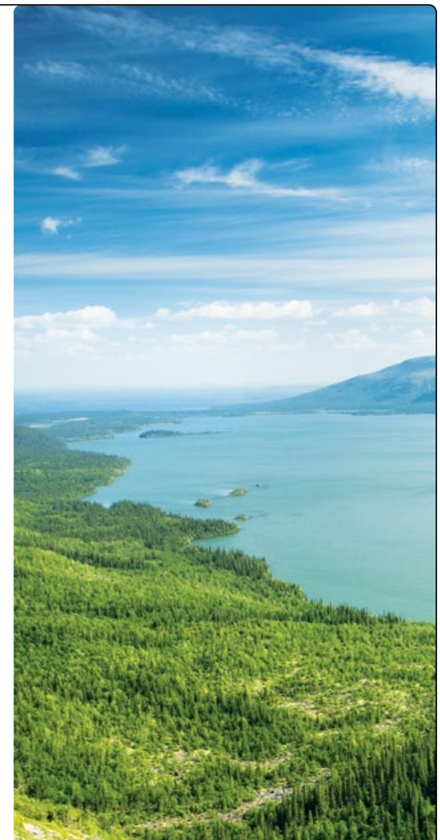
Investment over the last five years totalled over RUB 500 bn while the Company's investment programme is expected to more than double over the next five years.

> Our goal is to transform into an environmentally advanced business that offers sought-after jobs and premium investment opportunities. The upgrade of smelting operations in Monchegorsk will reduce emissions sevenfold in 2021 from a 2015 baseline. Along with the programme in Norilsk, which will require us to spend huge amounts running into hundreds of billions of roubles, we will cut emissions by 90% in the Norilsk region as well. As a result, we will be able to position ourselves as a business that goes beyond offering products for the green economy such as palladium and platinum used in catalysts to reduce emissions from vehicles as well as nickel, cobalt and other products that are used to manufacture batteries for the transition to hybrid and electric vehicles.

Vladimir Potanin
President of the Company

SAFETY AND ENVIRONMENT

- **Zero tolerance for fatalities, annual reduction in work-related injuries by 15%**
- **Long-term climate-based physical risk reduction programme:**
  - Implementing an action plan to improve industrial safety, including additional investment of RUB 100 bn in upgrading the energy infrastructure of the Taimyr Peninsula
  - Deploying an integrated system for monitoring permafrost behavior
- **Sulphur Programme 2.0 (ongoing). Targets:**
  - Reduce sulphur dioxide emissions in Norilsk tenfold by 2025
  - Achieve zero emissions in the Russia–Norway border area by discontinuing local smelting operations (completed in 2020)
  - Reduce emissions at Kola MMC sevenfold in 2021
- **The Holistic Environmental Strategy to expand the environmental agenda and set new targets for greenhouse gas emissions, water, soil, tailings, waste and biodiversity:**
  - Maintain absolute greenhouse gas emissions (Scope 1 and 2) from production enterprises not higher than 10 mln t of CO_2 equivalent
  - Maintain GHG emissions (Scope 1 and 2) per tonne of Ni equivalent in the bottom quartile on the global GHG intensity curve for the mining and metals industry



INCREASE ORE AND METALS OUTPUT

- **Boost ore production in the Norilsk Industrial District by ~1.8 times by 2030**
- **Boost metals output by 20–30% for nickel and copper and by 40–50% for PGMs by 2030**

UPGRADE AND EXPAND DOWNSTREAM AND ENERGY ASSETS

- **Expansion of Talnakh Concentrator (3rd Phase of Talnakh Concentrator Upgrade) to ramp up ore throughput from 10 Mtpa to 18 Mtpa**
- **New Norilsk Concentrator**
- **Expansion of Nadezhda Metallurgical Plant (3rd furnace at the smelting shop)**
- **A new cutting-edge copper refining facility at Kola MMC**
- **Upgrade of Tankhouse 2 (project completed in 2020)**
- **Energy infrastructure upgrades**

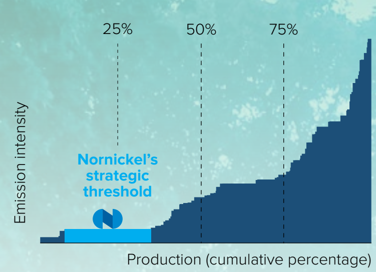
NEW STRATEGIC CONCEPT

MORE GREEN METALS FOR A GREENER FUTURE

STRATEGIC AMBITIONS OF THE INVESTMENT PROGRAMME[1]

Climate change

EMISSION INTENSITY CURVE FOR NICKEL, T OF CO_2 EQUIVALENT/T OF NI EQUIVALENT



Source: Wood Mackenzie, Nornickel's estimates

Sulphur Programme 2.0

Reducing emissions by 45% by 2023 and 90% by 2025

[1] Guidance confirmed with the projected investment growth expected to be offset by the rouble depreciation.

» For more details, see p. 38

ORE PRODUCTION IN THE NORILSK INDUSTRIAL DISTRICT (MTPA)[2]

30–32	2030+
24–26	2025
17	2017

Growth
up to 1.8x

Increase in mining

The resource base potential has been confirmed, with production growth targets for 2030 moderately increased to 20–30% for non-ferrous metals and 40–50% for PGMs[4]

STRATEGIC AMBITIONS FOR 2030+ METAL PRODUCTION[3]

Ni kt
Growth **+20–30%**

250–270	Strategic ambition 2030
210	2017

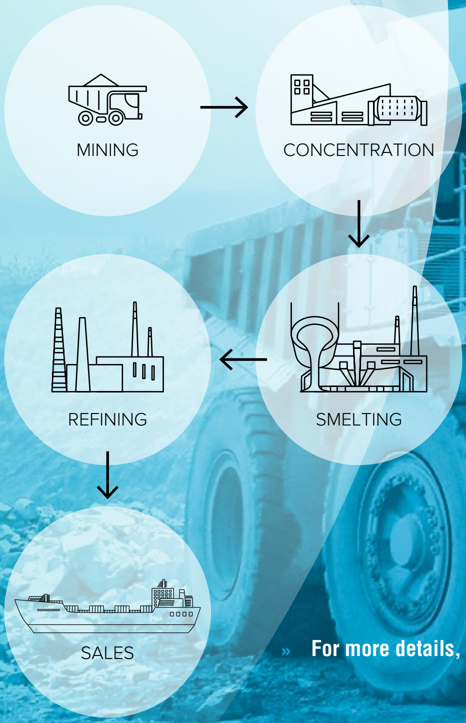
Cu kt
Growth **+20–30%**

490–530	Strategic ambition 2030
kt	2017

Pt+Pd t
Growth **+40–50%**

150–160	Strategic ambition 2030
105	2017

Upgrade of downstream assets



» For more details, see p. 35

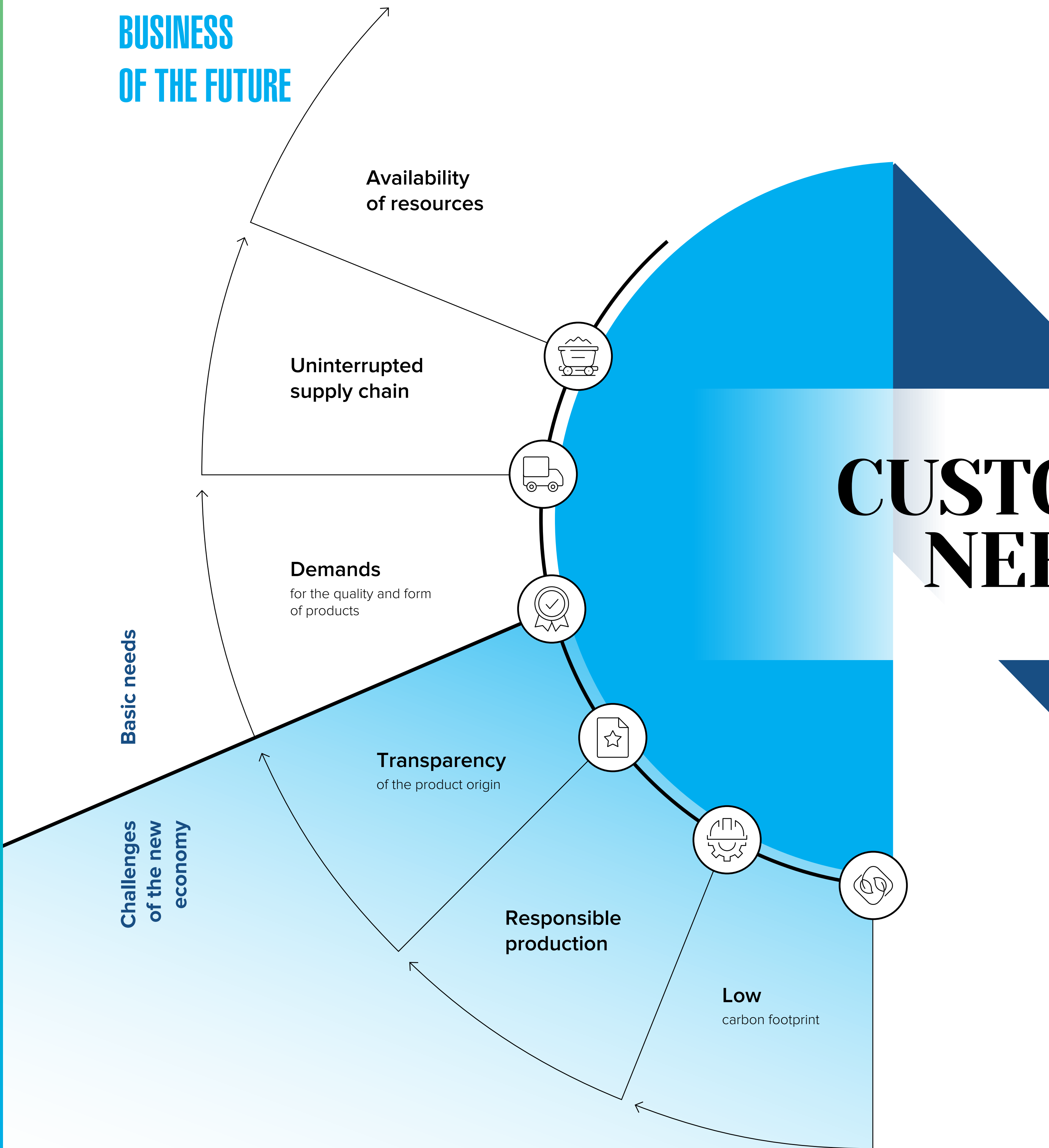
[2] Norilsk Industrial District.

[3] Metals produced from our own feedstock (including metals in semi-products for sale), excluding production at the Bystrinsky project and Nkomati.

[4] From a 2017 baseline.

CUSTOMER FOCUS

THE COMMODITY BUSINESS OF THE FUTURE



CREATING VALUE FOR CUSTOMERS AND BUILDING LONG-TERM COMPETITIVE ADVANTAGES

Meeting basic needs

High growth rates
of green economy metals output (+ 20–30% for nickel and copper, and + 40–50% for PGMs)

Exceptionally reliable and proven supply chain

High-quality product portfolio and its further diversification

Aspiration to maintain leadership in the future

ESG
is a key priority of the investment programme and organisation

First quartile
on the GHG emission intensity curve

Source: Wood Mackenzie, Nornickel's estimates

Digitisation
of metal sales

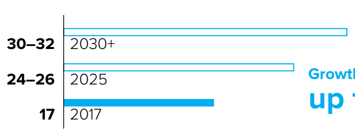
OMER
EDS

BUILDING A ROBUST CONFIGURATION OF DOWNSTREAM ASSETS

2030 TARGETS

THE RESOURCE BASE POTENTIAL AND PRODUCTION GROWTH TARGETS HAVE BEEN CONFIRMED

ORE PRODUCTION IN THE NORILSK INDUSTRIAL DISTRICT (MTPA)



Growth
up to **1.8x**

PRODUCTION (MTPA OF NI EQUIVALENT)

Growth
+30–40%

PREREQUISITES FOR PRODUCTION GROWTH

- Effective use of existing production sites
- A balanced production chain for each process phase
- Deployment of complementary technologies
- Fit with the Holistic Environmental Strategy
- Alignment with the programme for energy infrastructure upgrade and development

Nornickel's progress on SDGs in 2020

3 GOOD HEALTH AND WELL-BEING

13 thousand employees and their family members benefitted from the health improvement programme

72.8 thousand employees insured as part of the VHI programme

8 DECENT WORK AND ECONOMIC GROWTH

USD 1,827 average monthly salary of employees[1]

94% employee covered by collective bargaining agreements

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

~USD 100 mln spent on digital projects

~USD 2 mln spent on R&D and pre-feasibility studies

11 SUSTAINABLE CITIES AND COMMUNITIES

USD 219 mln spent on energy infrastructure

10-year plan for the development of Norilsk

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

86% of water reused and recycled

99% of waste is hazard class 5 (non-hazardous)

13 CLIMATE ACTION

3% reduction in GHG emissions (Scope 1 and 2) to 9.7 mln t[2]

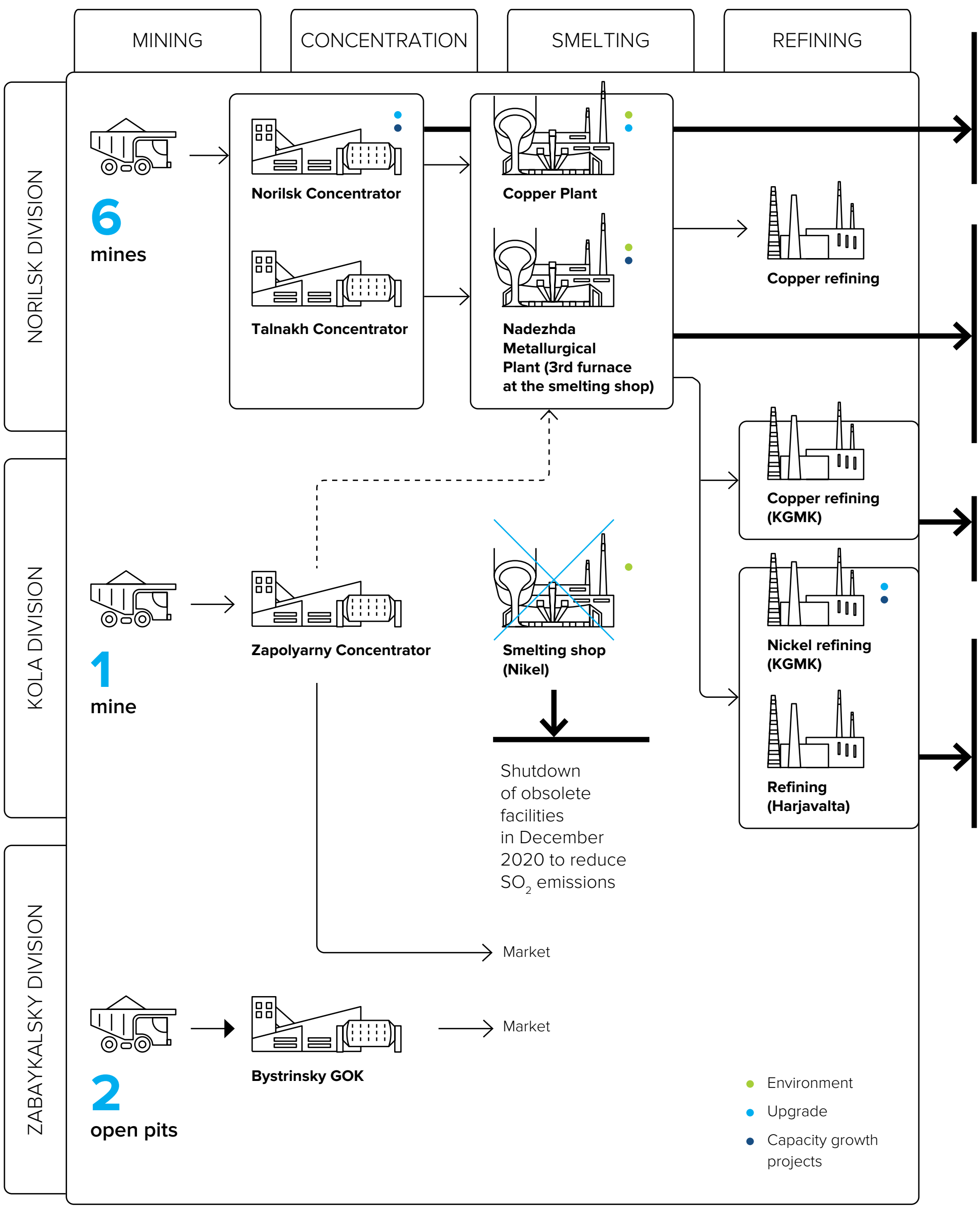
46% – the share of renewables in electricity consumption

[1] 2.5 times higher than the average wage in the Russian market.

[2] Nornickel embraces GHG minimisation.

ROADMAP FOR DEVELOPING DOWNSTREAM ASSETS

BALANCED AND GREEN VALUE CHAIN



The new Norilsk Concentrator (under development)
The upgrade of Talnakh Concentrator is underway (ramp-up from 10 Mtpa to 18 Mtpa by 2023–2024)

Sulphur Programme 2.0 at Copper Plant and Nadezhda Metallurgical Plant (ongoing)
Expansion of Nadezhda Metallurgical Plant (3rd production line: + 850 ktpa of concentrate) – investment decision expected in 2021

Advanced 150 ktpa copper refining – investment decision expected in 2021

Completion of Tankhouse 2 upgrade

A long-term configuration solution to increase performance and streamline the product range – under development

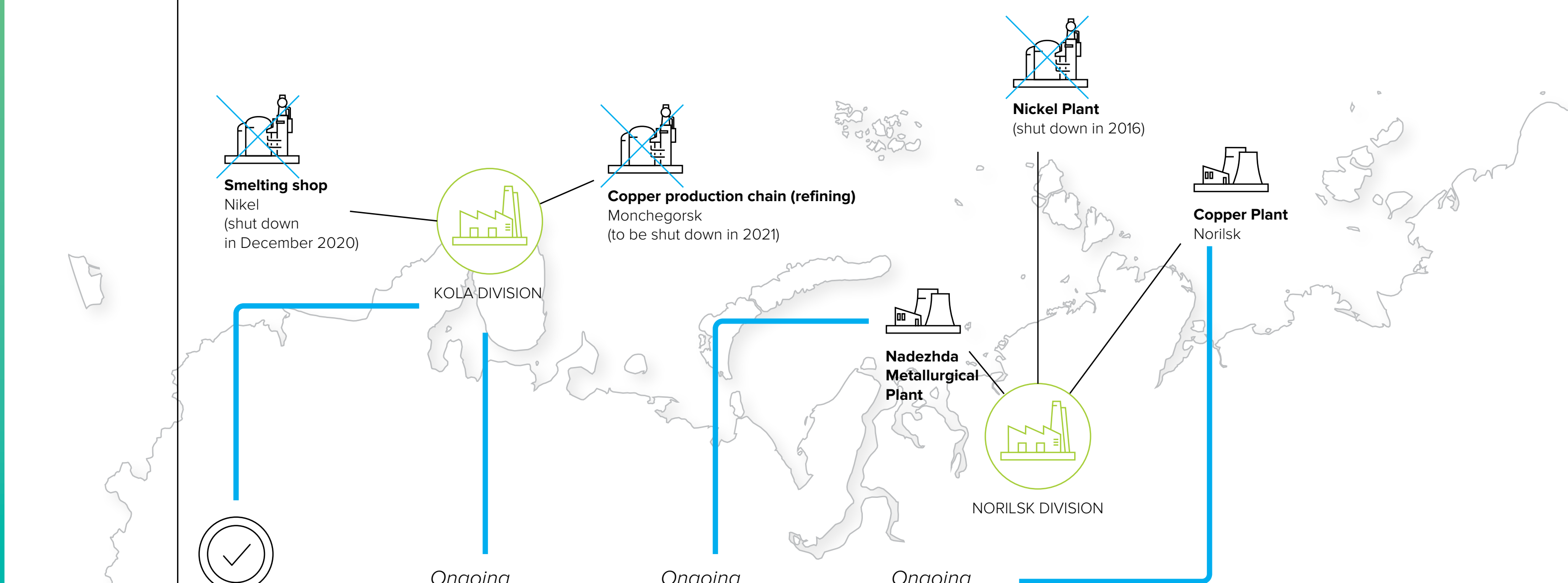
COMPREHENSIVE ENVIRONMENTAL PROGRAMME

CLIMATE CHANGE	AIR	WATER RESOURCES
TARGETS		
MINIMISE CLIMATE CHANGE IMPACT (REDUCE CO_2 EMISSION INTENSITY) AND MITIGATE PHYSICAL RISKS RELATED TO CLIMATE CHANGE	IMPROVE AIR QUALITY (REDUCE SO_2 EMISSIONS) IN THE AREAS OF OPERATION (NORILSK INDUSTRIAL DISTRICT AND KOLA PENINSULA)	MAINTAIN RECYCLED WATER RATIO AND REDUCE POLLUTION, CONTINUE PROVIDING CLEAR WATER TO LOCAL COMMUNITIES
Next steps: *Implement initiatives to ensure energy efficiency, reduce CO_2 emissions and mitigate physical risks*	**Next steps:** *Execute on Sulphur Programme 2.0 and other air emission reduction projects*	**Next steps:** *Build and run new treatment facilities, adopt new technical solutions, remediate pollution from environmental accidents in line with recommendations resulting from the Great Norilsk Expedition*
CAPITAL EXPENDITURES		
To be updated in 2021	USD 3.6 bn	USD 1.1 bn

TAILINGS AND WASTE	LAND	BIODIVERSITY
TARGETS		
MAINTAIN SAFE OPERATION OF TAILINGS FACILITIES AND MINIMISE ENVIRONMENTAL IMPACT OF MINERAL AND NON-MINERAL WASTE	RESTORE DISTURBED LANDS AND UPDATE MINE AND PLANT SHUTDOWN PLANS	BIODIVERSITY SUPPORT PROGRAMME
Next steps: *Build a mass balance model for waste management and prepare for the self-assessment under the Global Tailings Standard*	**Next steps:** *Update shutdown plans across all units, implement the Great Norilsk Expedition's recommendations on soil restoration, collect waste and remediate land in the Norilsk Region*	**Next steps:** *Restore biodiversity disturbed by recent environmental incidents, expand the monitoring programme incorporating the Great Norilsk Expedition's recommendations*
CAPITAL EXPENDITURES		
USD 0.6 bn	USD 0.3 bn	To be updated in 2021

SULPHUR PROGRAMME 2.0

ROAD MAP



2020

Streamline smelting operations in Nikel to reduce SO_2 emissions in the Russia–Norway border area

2x+

reduction in SO_2 emissions by 71% in Nikel and Zapolyarny[1]

2021

Complete the shutdown of smelting operations in Nikel and copper refining operations in the Kola Peninsula

7x

reduction in SO_2 emissions by 85%[1] at the Kola Division

2023

Launch Sulphur Programme 2.0 anchor initiative for the recovery of furnace gases at Nadezhda Metallurgical Plant

~2x

reduction in SO_2 emissions by 45%[1] at the Norilsk Division

2025

Launch Sulphur Programme 2.0 Copper Plant initiative for the recovery of furnace and converter gases

10x

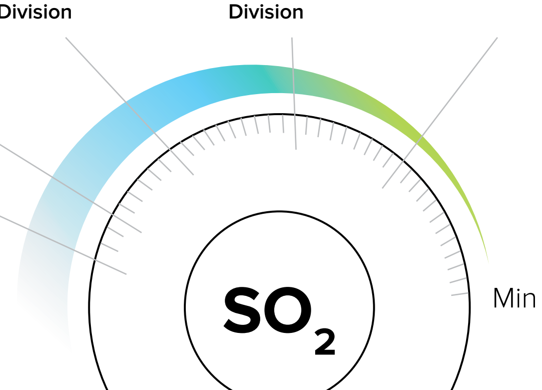
reduction in SO_2 emissions by 90%[1] at the Norilsk Division

STRATEGIC ASPIRATION 2030+

Recover sulphur-poor gases (including converter gases) at Nadezhda Metallurgical Plant

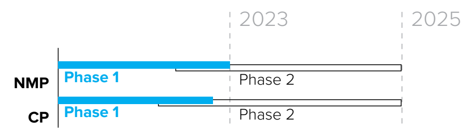
20x+

reduction in SO_2 emissions by over 95%[1] at the Norilsk Division



[1] From a 2015 baseline.

CONSTRUCTION STATUS



Nadezhda Metallurgical Plant

A flagship project for the recovery of furnace gases and construction of sulphuric acid neutralisation facilities, including related infrastructure:

- **~85%** of contracts already signed
- The project provides for the recovery of gases following the expansion of the smelting operations (3rd production line)
- Install piles and steel structures, and construct a gypsum storage facility – ongoing
- Manufacture core equipment

Copper Plant

Project to recover over 99%–99.5% of SO_2 (in line with global best practices), construction of a continuous converting complex. Preparation and update of design solutions:

- **Phase 1:** Launching the retrofit of the gas cleaning unit

~45% of contracts already signed

- **Phase 2:** Basic engineering/development of design documents – ongoing. Construction is expected to start in the second half of 2021

Investment[2]

~USD 3.6 bn

[2] Including construction of additional neutralisation facilities and related infrastructure for the 3rd furnace at Nadezhda Metallurgical Plant.

CLIMATE CHANGE STRATEGY

TARGETS TO 2030

Maintain the current level in absolute terms

Maintain absolute greenhouse gas emissions (Scope 1 + 2) from production enterprises below 10 mln t of CO_2 equivalent

Maintain the current level in relative terms

Maintain GHG emissions (Scope 1 + 2) per tonne of Ni equivalent in the bottom quartile of the global GHG intensity curve for the mining and metals industry

Source: [UPD]

CLIMATE RISK ASSESSMENT AND MANAGEMENT

Transition risks

IEA's Sustainable Development Scenario outlines a neutral/positive net effect for Nornickel metals

Physical risks

Adoption of a programme to assess physical risks related to climate change and large site monitoring

KEY INITIATIVES UNDER THE CLIMATE CHANGE STRATEGY

Reducing physical risks

Boosting energy efficiency

Reducing CO_2 emissions

KEY STEPS IN 2021 AND BEYOND

Developing and deploying a system for monitoring the foundations of industrial and municipal facilities within the permafrost area of Norilsk (including through satellites and geographic information systems)

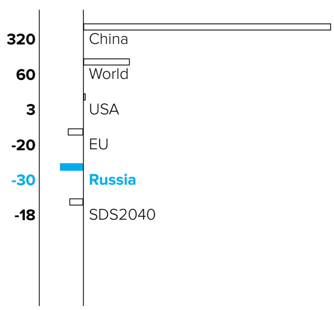
Delivering the strategy across divisions and assets:

- Developing key initiatives to mitigate physical risks, boost energy efficiency and reduce CO_2 emissions
- Drafting CAPEX plans and project implementation schedules

Aligning climate change disclosure with TCFD requirements

RUSSIA'S PROGRESS **TOWARDS THE GOALS OF THE PARIS AGREEMENT**

RUSSIA MAKES PROGRESS TOWARDS THE GOALS OF IEA'S SUSTAINABLE DEVELOPMENT SCENARIO TO 2040, CHANGE IN CO_2 EMISSIONS SINCE 1990, %



SINCE 2010, NORNICKEL HAS SUBSTANTIALLY REDUCED ITS CO_2 EMISSIONS (SCOPE 1 + 2), MLN T

– 70%

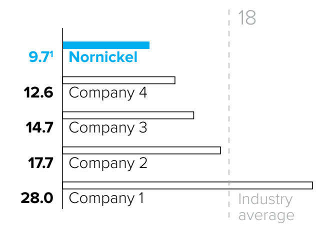
AIM STATED IN THE PARIS AGREEMENT

Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels

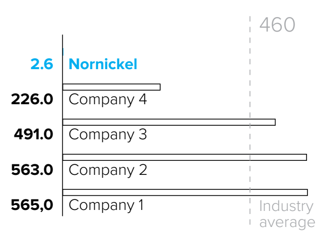
Source: *Company estimates, IEA, World Energy Outlook 2020, https://ourworldindata.org/co2-emissions#co2-emissions-by-region*

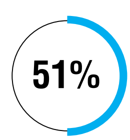
NORNICKEL AHEAD OF ITS **GLOBAL PEERS**

SCOPE 1 + 2 GREENHOUSE GAS EMISSIONS (CO_2 EQUIVALENT)

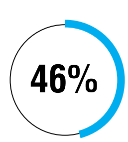


SCOPE 3 GREENHOUSE GAS EMISSIONS (CO_2 EQUIVALENT)[1]





AVERAGE SHARE OF LOW-CARBON ENERGY SOURCES IN ENERGY CONSUMPTION IN THE NORILSK REGION IN 2018–2020



AVERAGE SHARE OF LOW-CARBON ENERGY SOURCES IN THE GROUP'S ENERGY CONSUMPTION IN 2018–2020

Source: *official company data, with the peer group including leading diversified mining companies (BHP, Vale, AngloAmerican, Freeport and RioTinto)*

ENTERPRISES TO CURB ABSOLUTE GREENHOUSE GAS EMISSIONS

KEEP ABSOLUTE GREENHOUSE GAS EMISSIONS (SCOPE 1 + 2) FROM PRODUCTION ENTERPRISES BELOW 10 MLN T OF CO_2 EQUIVALENT, MLN T OF CO_2 EQUIVALENT

- Production emissions[1]
- Emissions from infrastructure facilities and households

2030 AMBITION

MAINTAIN PRODUCTION EMISSIONS OF CO_2 **NOT HIGHER THAN**

10 MLN T

OF CO_2 EQUIVALENT OF GREENHOUSE GAS EMISSIONS (SCOPE 1 + 2) …

… factoring in long-term production growth targets and the launch of Sulphur Programme 2.0[2]

Source: *Company estimates*

[1] Our greenhouse gas emissions were measured in line with the GHG Protocol, which includes emissions from transportation of products from the Company's production units to the customer, as well as from the primary processing of products by the customer.

[2] 2019 estimates in line with the GHG Protocol Corporate Accounting and Reporting Standard. Nornickel's GHG emissions include emissions from supplying electricity to Norilsk through NTEK, along with potential CO_2 emissions from Sulphur Programme 2.0.

KEY INVESTMENT PROJECTS

Upstream facilities

Investment projects to develop mines in the Norilsk Industrial District will ramp up their output from 24 mln t to 26 mln t of ore by 2025.

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

SKALISTY MINE

Rich and cuprous ores from the Talnakhskoye deposit.

2020

Mining

2.5 mln t of ore

Investments

RUB 8 bn

(USD 109 mln)

2021–2025

Maintaining ore production at levels of

up to 2.5 mln t

Investments

RUB 49 bn

(USD 0.7 bn)

KOMSOMOLSKY MINE

Rich, cuprous and disseminated ores from the Talnakhskoye and Oktyabrskoye deposits.

2020

Mining

4.3 mln t of ore

Investments

RUB 3.8 bn

(USD 51 mln)

2021–2023

Maintaining ore production at levels of

up to 4.2 mln t

Investments

RUB 9.7 bn

(USD 0.1 bn)

MAYAK MINE [1]

Rich and disseminated ores from the Talnakhskoye deposit.

2020

Mining

0.8 mln t of ore

Investments

RUB 0.6 bn

(USD 8 mln)

2021–2023

Maintaining ore production at levels of

up to 1.0 mln t

Investments

RUB 20.3 bn

(USD 0.3 bn)

TAIMYRSKY MINE

Rich ores from the Oktyabrskoye deposit.

2020

Mining

4.24 mln t of ore

Investments

RUB 7.1 bn

(USD 97 mln)

2021–2023

Maintaining ore production at levels of

up to 4.25 mln t

Investments

RUB 21.0 bn

(USD 0.3 bn)

[1] Excluding the comprehensive development of Mayak Mine.

OKTYABRSKY MINE

Rich, cuprous and disseminated ores from the Oktyabrskoye deposit.

2020

Mining

5.3 mln t of ore

Investments

RUB **1.1** bn

(USD 16 mln)

2021–2023

Maintaining ore production at levels of

up to **5.0** mln t

Investments

RUB **27.0** bn

(USD 0.4 bn)

SOUTH CLUSTER

In 2017, Nornickel established Medvezhy Ruchey, a wholly-owned subsidiary that operates the assets of the South Cluster. The South Cluster comprises the Norilsk Concentrator (9.3 Mtpa), an open-pit and an underground mine at Zapolyarny Mine, and tailing dumps No. 1 and Lebyazhye.

The Norilsk Concentrator processes all disseminated ores from Zapolyarny Mine and cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits. In 2020, the plant processed 7.6 mln t of ore.

Ore production is planned to be ramped up to 9.0 mln t by 2027 (750–850 koz of platinum group metals, 13 kt of nickel, 20 kt of copper).

2020

Mining

1.7 mln t of ore

Investments

RUB **8.3** bn

(USD 114 mln)

Processing projects

BYSTRINSKY GOK

Nornickel owns 50.01% in Bystrinsky GOK, with CIS Natural Resources Fund holding 39.32% and the remaining 10.67% belonging to Highland Fund.

LOCATION

Gazimuro-Zavodsky District, Zabaykalsky Region

GRK Bystrinskoye (Bystrinsky GOK) is Nornickel's greenfield project, which includes an open-pit mine at the Bystrinskoye deposit; a mining and processing plant (MPP) with all associated infrastructure, including a power line and the 227 km Borzya–Gazimursky Zavod railway line (Nornickel owns 25%, the government -75%), as well as a rotation camp.

Project overview

Bystrinsky GOK came online in 2019, ramping up to design capacity in 2020. Its EBITDA in 2020 was USD 717 million (up 100% vs 2019).

Balance (economic) ore reserves at year-end – 301 mln t, average metal content: Cu – 0.7%, Fe in magnetite concentrate – 22.4%, Au – 0.84 g/t[1]. Reserves life: 31 years.

2020

Mining

9.8 mln t of ore[2]

(Cu in concentrate – 63 kt, Au in concentrate – 241 koz, Fe in concentrate – 2.0 mln t)

Investments

RUB **7.2** bn

(USD 98 mln)

2021

Mining

10 mln t of ore[2]

(Cu in concentrate – 65–70 kt, Au in concentrate – 230–240 koz, iron ore concentrate –1.8–2.0 mln t)

2022

Mining

10 mln t of ore[2]

(Cu in concentrate – 68–73 kt, Au in concentrate – 234.5–255 koz, Fe in concentrate – 2.0–2.3 mln t)

Investments (2021–2022)

RUB **9.3** bn

(USD 150 mln)

[1] According to the Russian classification (A + B + C1 + C2).

[2] Throughput

TALNAKH CONCENTRATOR

The Talnakh Concentrator (Polar Division) processes rich, cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits to produce nickel-pyrrhotite and copper concentrates. In 2020, the plant processed 10.9 mln t of ore, with nickel recovery in bulk flotation concentrate reaching 87.9% (+ 2.0% y-o-y).

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The upgrade has been rolled out in three phases. Phase 1 was completed in 2015 and included the retrofit of existing floatation capacity and the replacement of flotation cells that were beyond their useful lives, in order to maintain the concentration capacity at 7.5 Mtpa. Phase 2 was completed in 2018 and involved the expansion of the main building, revamping of the reagent preparation building and construction of new ball mills and vertical mills, as well as the 1st Stage of the tailing dump, all of which helped to boost capacity to 10 Mtpa.

Plans for the 3rd Phase of the Talnakh Concentrator Upgrade include a capacity ramp-up to 18 Mtpa and construction of the tailing dump's 2nd Stage. The new concentration technology will increase recovery by 4–7% for all key metals. The project's completion is slated for 2023, reaching design capacity by 2024. In 2020, the project's CAPEX totalled RUB 2.8 billion (USD 38 million).

NICKEL TANKHOUSE UPGRADE

Project overview

Tankhouse 2 is part of Kola MMC, which produces nickel cathodes using the technology of nickel electrowinning from chlorine dissolved tube furnace nickel powder. The upgrade project provided for harnessing a more effective and cleaner nickel refining technology to increase its output of nickel cathodes to 145 ktpa. In Q1 2020, Nornickel commissioned all series of electrowinning cells. In Q2, Kola MMC's Chemical-and-Metallurgical Shop launched an alternative technology to process chlorine-leaching residues at the tankhouse, increasing the throughput and reducing work-in-progress in producing precious metals from chlorine-leaching residues at Kola MMC and the Polar Division. The new technology will also help achieve the highest purity of metal and reduce air emissions. In 2020, the upgrade was completed, with investments for the period totalling RUB 1.4 billion (USD 18.6 million).

LOCATION

Monchegorsk, Murmansk Region

Environmental projects

SULPHUR PROGRAMME 2.0 (POLAR DIVISION)

Project overview

The Sulphur Programme 2.0 is a major environmental project aimed at gradual reduction of sulphur dioxide emissions in the Norilsk Industrial District by 45% in 2023 and by 90% in 2025 (2015: baseline). In 2020, investment in the project totalled RUB 11.3 billion (USD 154 million) and will reach close to USD 3.6 billion for 2019–2025.

The project is implemented in phases at the Company's two core metallurgical plants in the Norilsk Industrial District – Nadezhda Metallurgical Plant and Copper Plant as follows:

- Phase 1: Recovery of sulphur-rich gases into sulphuric acid at Nadezhda Metallurgical Plant and construction of acid neutralisation facilities (including gypsum storage and related infrastructure), – to be completed by 2023
- Phase 2: Recovery of sulphur dioxide from rich off-gases at sulphuric facilities at Copper Plant, discontinuing of converter operations with sulphur-poor gases and expansion of neutralisation infrastructure (for sulphuric acid from the Cu stream) – to be completed by 2025

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

COMPREHENSIVE ENVIRONMENTAL PROJECT AT KOLA MMC

Project overview

The environmental project at Kola MMC provides for the complete shutdown of smelting operations in Nickel, upgrade of the beneficiation plant in Zapolyarny, construction of a loading point to ship concentrate to consumers and discontinuing copper production in Monchegorsk with the obsolete copper anode electrolysis technology replaced with more advanced electrowinning.

In late 2020, Nornickel shut down its smelting shop in Nickel town. The shop's annual throughput was 900 kt of charge. The project helped reduce sulphur dioxide emissions by 71% in Nickel and Zapolyarny and by 58% in 2020 (from a 2015 baseline) in the Russia–Norway border area.

When shutting down the shop, employees who wished to stay with the Company were offered jobs in other units, while those who decided to try their hand at entrepreneurship were provided with favourable starting conditions. Of the 660 employees of the smelting shop, 72% chose to continue working at the Company. The Company will spend some RUB 912 million (USD 12.8 million) on outplacement programmes for the smelting shop's employees in 2020–2022.

During 2021, the shop's building will be prepared for mothballing: it will be cleaned, while materials containing non-ferrous metals will be collected and sent for recycling. The industrial site may be preserved if an option is found for transforming it by installing green industries and creating new jobs.

With the shutdown of the smelting shop, our production chain was modified, with a preliminary upgrade of the flotation shop conducted at Zapolyarny Concentrator to produce high-grade and low-grade saleable concentrate. The construction of the first 250 kt loading point for low-grade concentrate has been completed. The second loading point, for high-grade concentrate, while still under construction, is in pilot operation. The copper refining shop in Monchegorsk was closed in March 2021.

Project investments between 2021 and 2025 will total RUB 3.5 billion (USD 49 million), in 2020 - RUB 1.2 billion (USD 16 million).

LOCATION

Nickel, Monchegorsk, Zapolyarny, Murmansk Region

Energy projects

ENERGY INFRASTRUCTURE UPGRADES

In the Norilsk Industrial District Nornickel operates its own energy assets, which comprise four natural gas fields, three thermal power plants (CHPP-1, CHPP-2 and CHPP-3), two hydropower plants (Ust-Khantayskaya HPP and Kureyskaya HPP), gas pipelines and power lines. Electricity for the needs of Norilsk Division's production facilities, as well as local municipalities and social institutions is generated using renewables (hydropower) and gaseous hydrocarbons (natural gas).

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

Project overview

Investment in energy infrastructure aims to replace outdated and obsolete HPP turbines and CHPP units and retrofit key elements of the gas transmission system. These initiatives will markedly extend the service life of our key infrastructure facilities, enhance the reliability of our energy and gas supply, increase the amount of renewable energy generated and enable the creation of an energy saving ecosystem. Investments in energy assets between 2021 and 2025 will exceed USD 4 billion, including USD 1.3 billion to be spent on a comprehensive program to reduce physical risks, which comprises projects to revamp key infrastructure facilities (fuel storage, electricity supply, gas supply) and on a program of industrial safety improvement. In 2020, investments in energy infrastructure totalled RUB 16 billion (USD 219 million).

STAINLESS SUPERIORITY

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Despite all the lockdown difficulties, in 2020, Nornickel retained leadership and all the capabilities to support future successful operation.

Introduction

LIDERSHIP IN COMMODITY MARKETS

According to Russia's Ministry of Economic Development, non-ferrous metals production in the Russian metals industry returned to pre-crisis levels over the last three years. With the nation's abundant raw materials and leading positions in many global markets, Russian industry players are optimistic about their future amid projections of a 3% to 5% annual growth in metals demand until 2030 contained in Russian and global economic growth forecasts.

Despite all the lockdown difficulties, in 2020, Nornickel retained leadership and all the capabilities to support future successful operation.

However, the coronavirus pandemic has impacted on all industries of the economy, with disruptions to operations, issues with exports and raw material deliveries, a marked drop in stainless crude steel output globally, and declining production of vehicles due to the pandemic - all playing a role.

Nickel

No. 1 globally in high-grade nickel production

In 2019, the nickel market was in deficit but moved into surplus in 2020 driven by a significant growth in nickel pig iron production in Indonesia.

In 2020, the consumption of primary nickel, which is used in stainless steel and batteries, remained almost flat. The growth in stainless crude steel output in China, where the industry was supported by a government stimulus package, and Indonesia, where new production capacity came online, was offset by a two-digit production slump in India (30%), the USA and Japan (18%), Taiwan (14%), and Europe (10%).

A steady trend towards road transport electrification continued supporting nickel usage in lithium-ion batteries. In 2020, global sales of electric vehicles (plug-in HEVs and battery electric vehicles) grew by 37%, with the production of electric vehicles (EV) growing at a CAGR of over 40% since 2016. This led to a 13% growth in nickel consumption by the EV industry in 2020.

Total nickel consumption in other industries slipped 14% due to falling consumer demand amid the COVID-19 pandemic and related restrictions.

Price-wise, nickel declined to USD 11,000/t in Q1 2020 due to the COVID-19 pandemic and falling consumer demand amid suspended production, but as the COVID-19 situation improved nickel surged to USD 15,550/t in early September, supported by a weaker US dollar and the Tesla CEO's call for higher sustainable nickel production. After a brief fall to USD 14,500/t due to a resurgence in coronavirus cases, nickel prices continued trending upwards, reaching USD 17,500/t on the back of higher output of stainless crude steel in China and concerns around ore supply from the Philippines following the suspension of production by a leading ore producer due to COVID-19. At the year end, the price settled at USD 16,500/t.

Copper

No. 11 globally in copper mine production

China is the largest copper consumer in the global market, and the nation's rapid economic recovery following a period of coronavirus restrictions provided a strong support to demand for copper, leading to record low copper exchange inventories by year end. In Europe, where Nornickel sells the bulk of its copper cathodes, consumption slipped 5.7%, while in Russia, consumption grew by 2%. Global refined copper consumption declined 1% in 2020.

Global copper mine production declined marginally in 2020, but a drawdown from the accumulated semi-product inventories boosted refined copper output by 2%.

Despite the negative impact of the COVID-19 pandemic, copper prices grew from the Q1 lows of about USD 4,600/t to USD 7,964/t at the end of December 2020, supported by the following factors:

- Quick economic recovery starting in Q2 2020 and led primarily by China
- Implementation of government stimulus packages in major economies (USA, European Union, China, etc.)
- The US dollar falling against its benchmark currency basket
- Soft monetary policy of central banks
- Growing investor optimism amid expectations of faster road transport electrification and growth in renewables (driven by the government stimulus focus on green technology across the EU and plans announced by the new US administration)
- A new policy of copper scrap recategorisation in China, resulting in temporary scrap shortages on the Chinese market
- Strikes at Las Bambas mine in Peru and El Teniente mine in Chile
- Record low exchange inventories of copper.

Platinum group metals (PGMs)

No. 1 globally in refined palladium production, No. 3 in platinum production, No. 4 in rhodium production

The automotive industry is the predominant consumer of palladium, platinum, and rhodium. Early in 2020, car manufacturers and dealerships had to suspend operations due to the pandemic. On the other hand, tighter environmental regulations in key economies led to higher PGM loadings per vehicle, which has partially offset the downward trend.

The supply of PGMs, particularly platinum and rhodium, was also impacted by operational issues at Anglo American Platinum's pyrometallurgical facilities, which significantly reduced refined PGM output in 2020.

On the palladium market, consumption has been outpacing production since 2010, with the deficit covered by inventories.

Prices were highly volatile throughout 2020: an upward trend that emerged in 2019 continued into 2020, followed by a sharp slump amid the pandemic and then a new surge on the back of the market recovery. The average annual price of palladium grew 43% y-o-y in 2020.

In 2020, enough platinum was produced to meet the needs of existing consumers; however, strong investment demand during the year pushed the platinum supply and demand balance into deficit.

The average annual price of platinum grew 2% y-o-y.

Platinum consumption by the jewellery industry (the second-largest platinum consumer after the automotive industry) continued declining due to lower demand for luxury items amid the pandemic and growing competition from gold jewellery.

The rhodium market remained undersupplied in 2020, with production declines outpacing demand fall in the automotive and other industries.

This led to high volatility in rhodium prices, which hit all-time highs twice during the year: USD 13,800/oz in March and USD 17,000/oz in December. The average annual price stood at USD 11,231, up 188% y-o-y.