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CHAIRMAN'S LETTER



Dear Shareholders,

2018 was a very successful year for the Company. Positive dynamics of metal prices, together with robust operating performance, resulted in exceptionally strong financial results and shareholder returns.

Our revenue increased 28% to USD 11.7 billion, while EBITDA was up 56%, reaching USD 6.2 billion, the highest level achieved in the last seven years. Importantly, we delivered free cash flow of almost USD 5 billion, with an extraordinary revenue to free cash flow conversion ratio of over 40%. We decreased our working capital by over USD 1 billion and reduced our net leverage and this has allowed us to continue paying industry-leading dividends.

Sustainability of our financial performance would be impossible without our relentless focus on health, safety and environment. In 2018, we continued to take a systematic approach to identifying and eliminating unsafe practices in our workplaces. Lost-time injury frequency rate has dropped over 70% during the last five years and is running well below the industry average at the moment. We also achieved substantial progress in decreasing the number of accidents, although we are yet to meet our absolute target of a zero fatality rate across all assets.

We reiterate our commitment to radically decreasing our sulphur dioxide emissions in our smelting operations by more than four times in the Norilsk region by 2023, and by half in the northern Kola Peninsula by 2020. Last year we launched a large

reconstruction project for sulphur capturing at the Copper and Nadezhda Plants. We believe that our comprehensive environmental program, costing 2.5 billion dollars over the next four years, should pay off in the long term, as the majority of investors are becoming more environmentally conscious with the increasing use of ESG metrics in their investment strategies.

It has been almost six years since I became Chairman of the Board at Nornickel, during which time the company has transformed in line with new investment and business principles, and successfully converted these into concrete actions and plans. Those actions established a solid base able to withstand volatility and deliver superior returns, even against a negative macro-economic backdrop.

At the same time, the company has been able to create additional value for its shareholders outside of the current operating perimeter and started the transition to a production growth strategy. We estimate that the commodity markets will need more of our key metals in the long-term, and our proven operational model and vast resources in the ground can respond to these growing demands.

As you may know, we are considering the expansion outside of our current footprint via new projects such as South Cluster and Arctic Palladium. The Company is capable of executing large-scale projects, not only on the back of its existing asset base, but also "from scratch", as it demonstrated with the Bystrynsky copper project. We also see additional opportunities to create value through extending cooperation downstream in the value chain, especially within the battery materials sector. This cooperation should drive further improvements stemming from expected operational synergies. In addition, it should also support the strong, long-term balance for Class-1 nickel products and Nornickel's leading role in this rapidly growing market.

We are working to raise the bar through our digital transformation. Using a combination of existing technologies such as autonomous underground equipment, positioning systems and 3D mine planning, we are incorporating digital technology across our assets. Our goal for these digital applications – mine dispatching, metal accounting, better predictive maintenance planning, as well as the creation of an advanced data analytics centre – will enable our people to unlock their full potential through real-time, data-driven decisions.

The macro-economic situation in the world remains uncertain, but I believe that global megatrends support the future of the metals we produce. Our low-cost structure, focused on sustainable development and a disciplined approach to capital allocation, makes our Company a genuine forerunner in our industry and one of the best propositions for investors. At the same time, our belief in continuous improvement is more crucial than ever, in operations, of course, but as importantly, with regard to corporate social responsibility as well.

GARETH PETER PENNY
Chairman of the Board of Directors,
MMC Norilsk Nickel

Gareth Penny





PRESIDENT'S LETTER



Dear shareholders,

The Company ended 2018 having proudly achieved quite a few accomplishments. We successfully meet our commitments and would like to thank you for supporting the initiatives that help strengthen the Company's investment case and also promote better lives together with Nornickel. I would like to speak about our performance for the year and share our strategic plans, which, when implemented, will contribute to the Company's sustainable development as well as enhance shareholder value.

FINANCIAL HIGHLIGHTS

The year 2018 was marked by a favourable macro environment and a strong operating performance. The markets of almost all our core commodities except for platinum posted strong price gains, cost inflation was subdued as domestic inflation in Russia was low. Nornickel increased copper and palladium sales volumes by approximately 20% as well as realized tangible results from operating

cost savings due to the implementation of a long-term efficiency program, including digitalization projects. Nornickel also generated maiden EBITDA of almost USD 100 million from its newly commissioned Bystrinskoye copper project.

As result, in 2018, our top line surged 28% YoY to USD 11.7 bn, while EBITDA grew 56% to USD 6.2 bn reaching the highest level since 2011. With an EBITDA margin of 53% Nornickel became one of the most profitable global diversified mining companies in the 2018 reporting period.

As promised to our shareholders, we reduced net working capital by nearly USD 1.3 bn to less than USD 900 mln by the year-end. We consider this level quite sustainable in the medium-term. Capital expenditure reduced to USD 1.6 bn as a number of large capital-intensive projects such as downstream reconfiguration at the Polar Division and the construction of Bystrinsky GOK were completed in 2017.

We are pleased to report that 2018 was also a record year for free cash flow which reached almost USD 5 bn. The Company's leverage returned to mid-cycle average, with net debt/EBITDA ratio falling to 1.1x. Led by Moody's in January 2018, Nornickel was assigned "investment grade" by all three major rating agencies.

OCCUPATIONAL SAFETY AND ENVIRONMENT

Occupational health and safety as well as risk mitigation are among the Nornickel's top priorities. In 2018 we continued our strident efforts to enhance occupational health and safety at our facilities. As a result, the number of workplace injuries reduced from 60 to 32, bringing the lost time injury frequency rate (LTIFR) down from 0.44 to 0.23 which is significantly below the global industry average. Unfortunately, we could not completely avoid fatal injuries, however, their total dropped from 8 to 6. We will continue to make every effort to achieve a zero fatality rate.

Nornickel reiterated its commitment to significantly improve the environmental impact in the regions of operation. Nornickel's main focus is to drastically cut sulphur dioxide emissions at the Russian sites by 2023, by a factor of four at Norilsk and by half within the city of Nikel on the border with Norway. The completed first stage of our environmental programme has already helped reduce sulphur dioxide emissions by 11% at Polar Division and by approximately 30% on the Kola Peninsula, while emissions within Norilsk's residential area shrank by 30–35%. In September 2018, the Company announced the start of the second stage of the environmental programme and launched the upgrade of sulphur production at Copper Plant. The second stage will also centre around the construction of facilities for capturing sulphur dioxide and neutralising sulphuric acid at Nadezhda Metallurgical Plant along with the upgrade of smelting operations at Copper Plant.

SOCIAL RESPONSIBILITY

Constant improvements in the quality of life of the Company's employees and their family members is another cornerstone of our corporate strategy. Last year, we continued our programmes to provide the Nornickel's employees with housing in Russia's mild climate regions along with encouraging the World of New Opportunities public initiatives.

Our support for sports is becoming more consistent. It is not limited to the financing of occasional sports events, as Nornickel strives to develop a more comprehensive approach by investing in sports facilities, new schools, sports grounds and mass events promoting sports and healthy lifestyles. I would also like to highlight our sponsorship of the XXIX Winter Universiade in Krasnoyarsk.

STRATEGIC PRIORITIES AND INVESTMENTS

A strong performance in 2018 and a favourable macroeconomic backdrop allow us to confidently plan and commit to continued investments in sustainable development. We have started on the second stage of our ambitious environmental programme and have launched projects to upgrade infrastructure. At the end of last year, we announced our strategic goals for 2025+ to increase the production of non-ferrous metals by 15% and platinum group metals by 25%. This will be driven by greater mining volumes at the existing mines of the Talnakhskoye Deposit and the development of the Southern Cluster along with the third stage of Talnakh Concentrator expansion project. Investment decisions on these projects are expected to be made in late 2019.

In addition, as the largest global producer of high-grade nickel, we have every chance to take leadership as a supplier of materials for the fast-growing electric car battery manufacturing industry. Our capital investment over the immediate four-year period from 2019 to 2022 will be USD 10.5–11.5 bn, with USD 1.3–1.5 bn to be spent on promising growth projects, such as the Southern Cluster and capacity expansion of the Talnakh Concentrator. On a separate note, our investment programme is fully in line with the programme of Russia's strategic development, and our projects for improving the environment and digitalising the regions that host our operational footprint have already become national.

Despite the ambitious capital investment programme, we keep paying our shareholders dividends on a regular basis. We are confident that Nornickel will remain the global mining industry's leader in terms of total shareholder return and reiterate our focus on sustainable shareholder value generation by developing Nornickel's Tier I assets.

VLADIMIR POTANIN
 President,
 Chairman of the Management Board
 MMC Norilsk Nickel



STRATEGIC PRIORITIES



I believe that we are witnessing the beginning of a new stage in Nornickel's growth story rather than the end of the Company's successful value enhancement exercise. I am positive about this as our Company has its feet firmly on the ground thanks to its robust long-term financial model and strategy focused on value creation fundamentals and underpinned by the sustained competitiveness of the world's best Tier I assets.

Vladimir POTANIN
President of Nornickel

The Company's strategy is fully compliant with Russia's national priorities.

Nornickel leads the charge in Russia's metals and mining sector in terms of its environmental activity, green investments, social and charitable expenses, and contribution to the domestic investment growth. In 2019–2022, total investments in Russia will stand at around USD 11.5 bn. It also stands to note that some of the Company's initiatives are included in the Russian Government's list of national projects.



Focus on safety and environment

- Zero tolerance policy towards workplace fatalities
- 15% occupational injuries reduction each year
- Continued implementation of the comprehensive environmental programme



Focus on operating and financial efficiency

- 5–8% growth in metals output in the short term
- An increase in labour productivity of up to 15% (2020 vs 2017)
- Programme for digitisation and automation of production processes
- Keeping cash costs below the inflation rate



Rollout based on the current assets

- 15–25% growth in metals output in the long term (2025+)
- Production ramp-up at the unique Talnakh ore mining base
- Development of the Southern Cluster and expansion of cutting-edge concentration capacities at Talnakh Concentrator as promising growth projects
- Main stage of renewing the infrastructure and key production facilities



Analysis of new growth opportunities

- Assessment of Blue Sky – a unique partnership project with Russian Platinum designed to bring on stream Arctic Palladium, potentially the world's largest greenfield PGM cluster
- New products

INVESTMENTS IN 2019–2022

Framework investment programme

6.5–7.5 USD bn



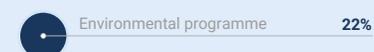
Promising growth projects

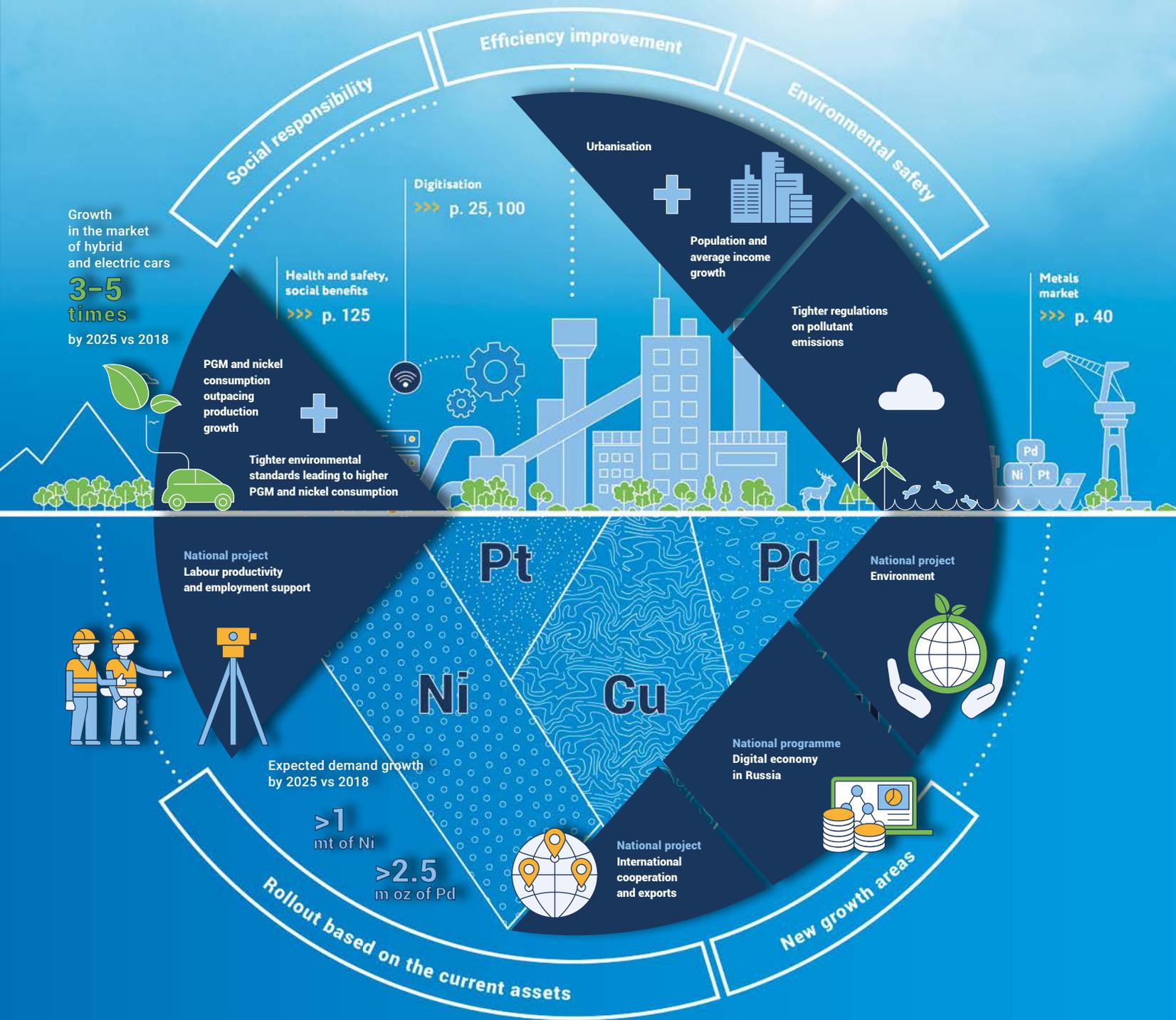
1.3–1.5 USD bn



Sulphur Project

2.5 USD bn





LONG-TERM TRENDS AS THE DRIVER BEHIND THE GROWTH

<<< Investment programme setup

More details on strategic projects >>>

**FOCUS
ON SAFETY AND
ENVIRONMENT**



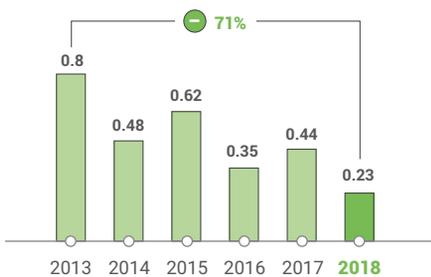
Strategic objective: development of occupational safety culture and zero tolerance policy towards workplace fatalities

LTIFR for 2013–2018 to be reduced by

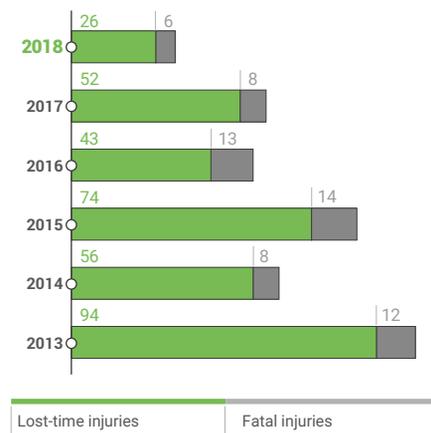
71%

SAFETY

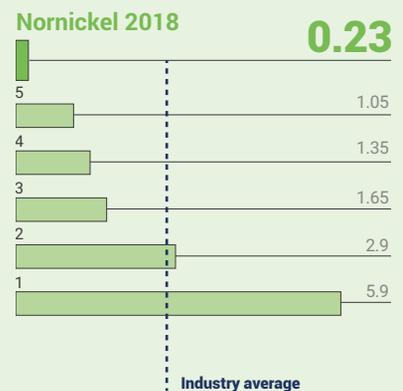
Record low LTIFR (1×10^{-6})



Reduced number of accidents (employees)



LTIFR (per 1 mln hours)



Source: Company data, Renaissance Capital Research

LTIFR remains below for the global mining industry average

- The Company reiterates its commitment to developing a strict safety culture in all its business units
- The management sees occupational health and safety as a key strategic priority and remains focused on achieving a zero workplace fatality rate
- Improvements in this area were driven by the implementation of risk mitigation standards, safety communication for employees and dedicated risk mitigation programmes

- In 2018, the number of registered fatalities and lost-time injuries decreased by 47% y-o-y
- In 2018, saw 45 internal audits of the Company's occupational health and safety management system
- 105 employees were fired for the violation of cardinal safety rules (vs 149 in 2017)

□□ The environmental national project is one of the focus areas for Nornickel. It is crucial for the Company to tackle environmental threats to successfully promote its products, improve image and encourage corporate responsibility for the quality of life in the regions of Nornickel's operations. For me, solving legacy environmental issues is of great moral and psychological significance.

Vladimir POTANIN
 President of Nornickel

Strategic objective: set-up of state-of-the-art green production facilities



Nickel Plant shut down, with the SO₂ emissions in the Norilsk residential area cut by 30–35%

Sulphur Project



Primary Targets

📍 Polar Division (Taimyr Peninsula)

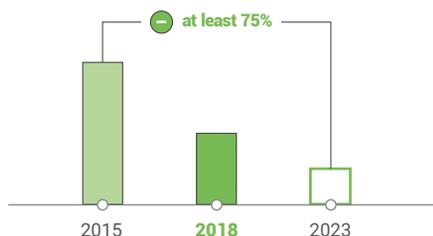
Copper Plant

- Reconstruct copper production chain, including the shutdown of conversion operations
- Expand and upgrade the existing sulphur production shop

Nadezhda Metallurgical Plant

- Launch a new continuous copper matte converting facility
- Implement a comprehensive SO₂ capture solution including production of sulphuric acid and its subsequent neutralisation with natural limestone

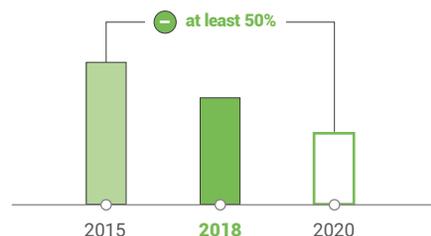
Reduction of SO₂ emissions at Polar Division (%)



📍 Kola MMC (Kola Peninsula)

Optimise the smelting capacity utilisation rates at the Metallurgical Shop (the settlement of Nickel) by separating the concentrate produced at Kola MMC

Reduction of SO₂ emissions at Kola MMC (%)



📍 GRK Bystrinskoye (Zabaykalsky Krai)

- Rolled out ongoing monitoring of the environmental and radiation conditions
- Built a modern industrial waste landfill completed with seepage water collection and treatment systems
- Equipped flue gas emission areas with cutting-edge gas purification systems



100% compliant with the Rosprirodnadzor requirements



Strategic objective: comprehensive efficiency improvement programme

The programme includes a package of interrelated initiatives covering the entire production chain

Target outcomes of the programme in the short term

Strict cost controls

Keeping cash costs below the inflation rate (cash costs do not include Bystrinsky GOK and Nkomati)

Increase in labour productivity (2020 vs 2017)

15%

Growth in metals output (2020 vs 2017)

5–8%

Transformation of the corporate culture

1

Production upgrade, introduction of new production standards and processes

2

Introduction of practices and tools for continuous improvement

3

Digital transformation of industrial and management communications

4

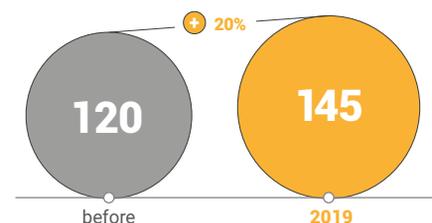
Integration of efficiency improvement KPIs into the employee incentive system

5

Production reconfiguration, implementation of innovative management approaches

Implementation of a cutting-edge chlorine leaching and nickel electrowinning technology with a 20% increase in the nickel refining capacity at Tank-House 2 and higher recovery rates

Refining capacity expansion at Tank-House 2 (kt)



Production

Mining

- Initiatives to improve labour productivity and equipment performance
- Planning of mining operations using simulation modelling systems
- Full-scale roll-out of control systems

Concentration

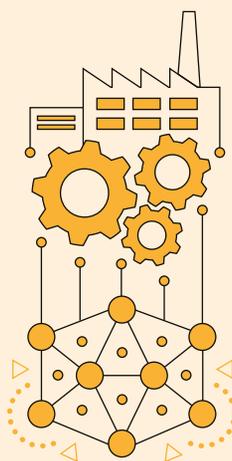
- Ensuring cost optimisation and higher recovery rates by fine-tuning the reagent mixes and modes of equipment operation
- Ore conversion ratio improvements through enhanced enrichment of pyrrhotite tailings at Talnakh Concentrator

Metallurgy

- Debottlenecking across the production chain
- Accelerated processing of additional secondary resources at Copper Plant

Digitisation

- Introduction of artificial intelligence technologies, robotisation systems, and digital twins of industrial facilities
- Putting in place a digital storage layer for all of the Company's data
- Cost optimisation and debottlenecking across the value chain



New IT platform opens up opportunities for **digitising** core operations

IT platform

Infrastructure

- 956 km long fibre optic communication line to Norilsk
- New data centres and data transfer network

Automation

- Production control
- Metal balance
- Detectors/sensors

Planning and record keeping

- SAP ERP available at all sites since 1 January 2019
- 3D-modelling of mines

Data analysis

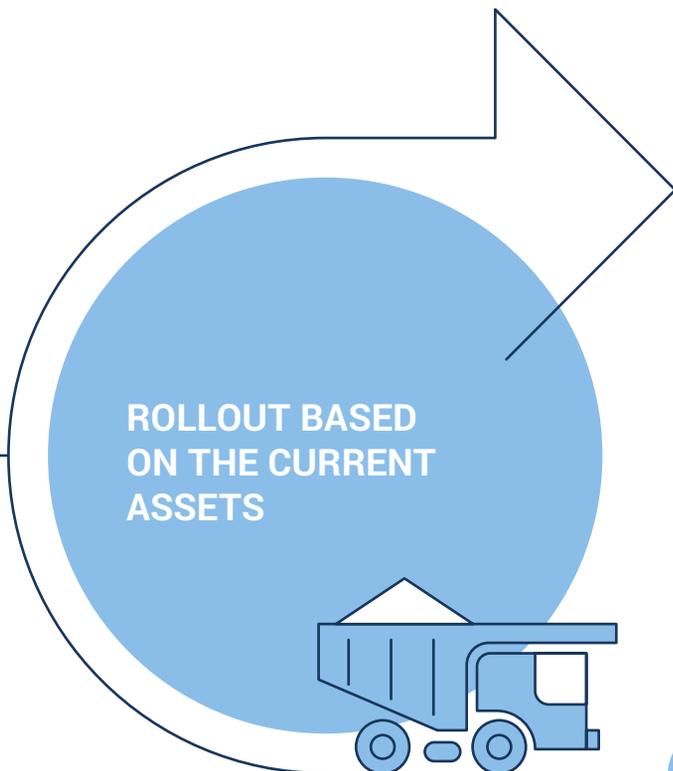
- SAP-based data analysis to improve reporting
- Repairs planning and control



The Digital Economy national project is becoming one of Nornickel's priorities.

We already have over one hundred big data initiatives in place. But we are not going to stop at that. Our ambition is to create a digital platform to disrupt the entire industry.

Vladimir POTANIN
 President of Nornickel



Strategic objective: increase metals output of the current assets by 15–25% over the next seven years.

The Company plans to unlock its potential through long-term growth based on the existing assets and underpinned by the introduction of state-of-the-art technologies, with efforts and resources invested in developing the ore mining base of the Talnakh Ore Cluster and the Southern Cluster and reaching the design capacity at Bystrinsky GOK.

In the long term, the management pins its production expansion hopes on the existing Tier 1 assets. This vision is fuelled by expectations of growth in the commodity markets, with the demand for key metals getting increasingly stronger in the long run. The Company has a robust operational model and extensive geological, technological and human resources that will allow it to successfully meet the growing market demand.

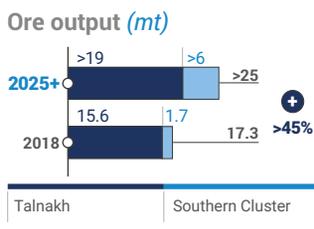
Mineral resources in the Norilsk Industrial District

Resources worth **>USD 700 bn**
Resources life at current production rate **>80 years**

Expected demand growth by 2025 vs 2018

Ni more than **1mt**
Pd over **2.5 m oz**

Growth opportunities at the existing assets



Growth in metals output (2025+ vs 2017)

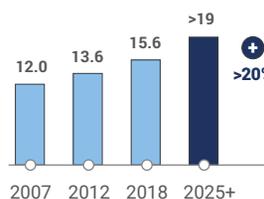
Ni +15%
Cu
Pd +25%
Pt

1

Development of the unique Talnakh ore mining base

A unique polymetallic ore mining base with more than 6000 mt of proven and probable reserves and over 1.5 bt of ore in resources.

Production at the Talnakh Cluster (mt)



In 2018–2022, investments in Talnakh mines development will total

~2.9
USD bn

Upgrade and expansion at Talnakh Concentrator (subject to the approval of investment decision)

As part of the project, the Company plans to increase the capacity at Talnakh Concentrator from 10 to 18 mtpa and introduce a new more efficient concentration technology, which will help process most of Talnakh ores at Talnakh Concentrator, benefit from economies of scale and improve metal recovery rates at the concentration facilities. Total investments will stand at about RUB 40 bn, with the project scheduled for completion in 2023.

2

Promising development projects at the Southern Cluster (subject to the approval of investment decision)

Southern Cluster is Nornickel's project to develop reserves in the northern part of the Norilsk-1 Deposit. With the project completion in 2027, total mining capacities are set to rise up to 9 mt. According to the preliminary estimates, investments in the development of the Southern Cluster will exceed RUB 70 bn in the span of 15 years. After reaching its target capacity, the project will yield over 20 tpa of additional PGM supplies, which puts it in the same league as the world's TOP-5 PGM producers.



Strategic objective: identification and creation of new growth areas for expanding the value creation chain.

The Company's management keeps looking for new growth opportunities.

Synergies with the Company's core business come as an important pre-requisite helping to maximize the competencies acquired during the rollout of large-scale projects in unique climatic conditions, optimise capacity utilisation rates at the existing assets and strengthen the Company's position in international markets as part of the approved marketing strategy.

»» This new agreement with Russian Platinum fully fits into our strategic vision, which encourages us to share risks by developing large-scale projects jointly with partners. In addition, a joint venture of this scale will give a powerful impetus to the social and economic development of the Krasnoyarsk Territory and Russia's mining industry in general.

Vladimir POTANIN
President of Nornickel

»» A strong and stable relationship with one of the largest and most tech-savvy PGM processors is an absolute priority for Nornickel.

Sergey BATEKHIN
Senior Vice President

1 Growth opportunities in the traditional segments



NORNICKEL



RUSSIAN PLATINUM

Nornickel and Russian Platinum

In 2018, Nornickel and Russian Platinum signed a framework agreement on strategic partnership to set up a joint venture for developing one of the world's largest PGM deposits located in the Norilsk Industrial District.

2 Partnership opportunities in processing and sales



NORNICKEL



We create chemistry

Nornickel and BASF

BASF will build Europe's first site to produce battery components for the European automotive market next to Norilsk Nickel Harjavalta, Nornickel's nickel and cobalt plant. The facility is expected to come on stream at the end of 2020 with the capacity to produce BASF battery components for some 300,000 electric vehicles per year. As part of the project, Nornickel will be looking closely at potential synergies enabling it to improve production efficiency and maintain the right balance in the high-grade Ni product mix.

KEY INVESTMENT PROJECTS

MINING PROJECTS



Skalisty mine forms part of Nornickel's Polar Division and produces ore from the Talnakhskiye and Oktyabrskoye deposits. In 2018, the mine extracted 2.0 mt of rich ore.

Skalisty Mine

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Increasing ore production to 2.4 mtpa by 2023 by stripping rich and cupriferous ores at the Talnakhskiye and Oktyabrskoye deposits.

Highlights

Ore reserves: **57** mt

Average metal content:

- Ni – 3.1%
- Cu – 3.6%
- PGM – 9.7 g/t¹

2018

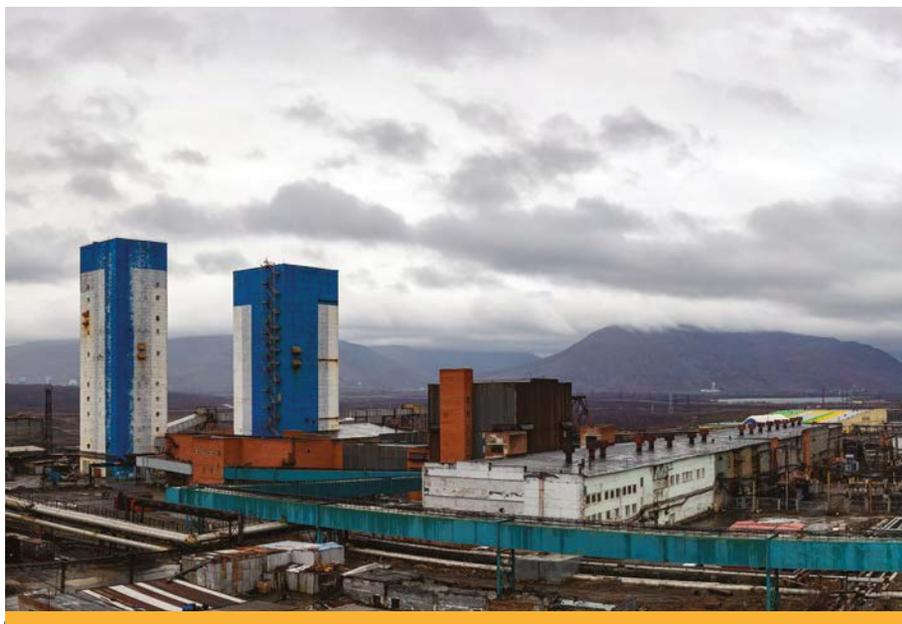
- CAPEX – RUB 13.9 bn (USD 218 mln)
- Ore production reached 2 mtpa
- Sinking of ventilation shaft–10 completed (total of 2.1 km)
- 206 m sinking of skip-cage shaft–1 (total of 1.9 km out of 2.1 km)

2019

- Completion of ventilation shaft–10 construction
- Completion of skip-cage shaft–1 sinking

2023

- Reaching design capacity



Taimyrsky Mine forms part of Nornickel's Polar Division and produces ore from the Oktyabrskoye Deposit. In 2018, the mine extracted ca. 3.8 mt of rich ore.

Taimyrsky Mine

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Increasing ore production to 4.1 mtpa by 2021 by stripping rich copper-nickel ores at the Oktyabrskoye Deposit.

Highlights

| | |
|------------------------|--|
| Ore reserves: | 139_{mt} |
| Average metal content: | Ni – 1.2% Cu – 1.9% PGM – 4.5 g/t ¹ |

2018

- CAPEX – RUB 4.6 bn (USD 71 mln)
- 6.1 km of underground workings completed and underground facilities upgraded

2019

- Production capacity commissioning: 130 kt of rich ore

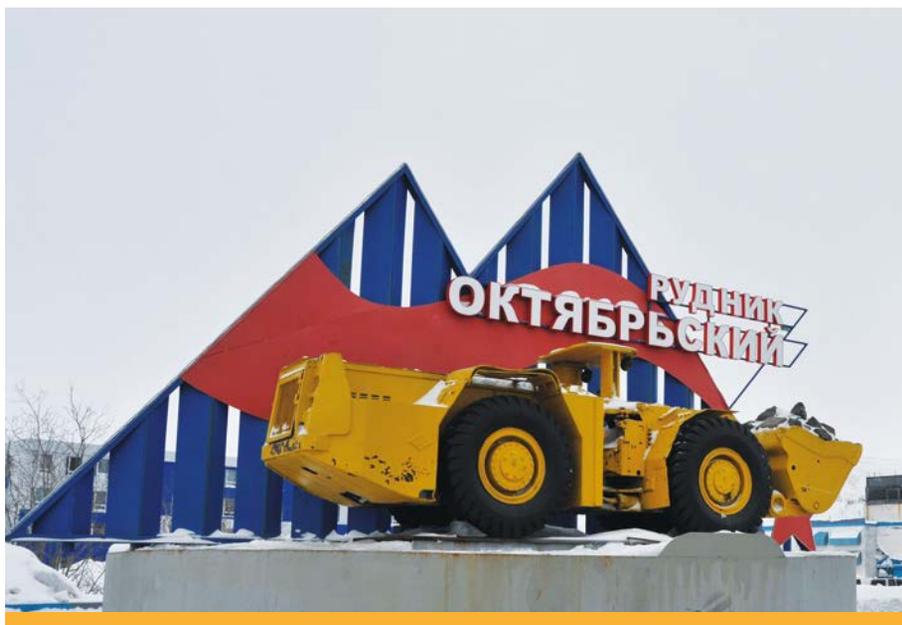
2020

- Production capacity commissioning: 720 kt of rich ore

2021

- Reaching design capacity

¹ According to JORC standards.



Oktyabrsky Mine forms part of Nornickel's Polar Division and produces ore from the Oktyabrskoye Deposit. In 2018, the mine extracted 5.2 mt of ore.

Oktyabrsky Mine

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Maintaining ore production at 5.2 mtpa until 2025 by stripping rich, disseminated and cupriferous ores at the Oktyabrskoye Deposit.

Highlights

Ore reserves: **219** mt

Average metal content: **Ni** – 0.7%
Cu – 2.1%
PGM – 5.9 g/t¹

2018

- CAPEX – RUB 2.6 bn (USD 40 mln)
- 4 km of underground workings completed
- Shared drainage of Taimyrsky and Oktyabrsky mines commissioned

2019

- Production capacity commissioning: 150 kt of rich ore and 700 kt of cupriferous disseminated ore

2020–2025

- Production capacity commissioning: 300 kt of cupriferous ore



Komsomolsky Mine forms part of Nornickel's Polar Division and produces ore from the Talnakhskoye and Oktyabrskoye deposits. In 2018, the mine extracted 3.8 mt of cupriferous ore.

Komsomolsky Mine

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Increasing ore production to 4 mtpa by 2021 by stripping rich, cupriferous and disseminated ores at the Talnakhskoye and Oktyabrskoye deposits.

Highlights

Ore reserves: **185_{mt}**

Average metal content: **Ni** – 0.6%
Cu – 2.6%
PGM – 4.8 g/t¹

2018

- CAPEX – RUB 2.8 bn (USD 44 mln)
- 4 km of underground workings completed

2019

- Production capacity commissioning: 200 kt of cupriferous ore and 226 kt of disseminated ore

2020

- Production capacity commissioning: 175 kt of rich ore

2021

- Production capacity commissioning: 225 kt of rich ore and 185 kt of disseminated ore
- Reaching design capacity

¹ According to JORC standards.

PROCESSING PROJECTS

Bystrinsky GOK (Chita Project)



GRK Bystrinskoe (Bystrinsky GOK) is Nornickel's new project for producing copper and gold (as well as iron) concentrates. This is the largest greenfield project in the Russian mining industry, covering ore mining, concentration and shipment of end products to customers. Bystrinsky GOK is the Company's 50.01% subsidiary.

Location

Gazimuro-Zavodsky District, Chita Region, Zabaykalsky Krai.

Project overview

Open-pit mining at the Bystrinskoye Deposit, building the mining and processing plant (MPP) along with all of the associated infrastructure, including a power line, a 227 km Borzya – Gazimursky Zavod rail line, and a camp.

Construction of the open-pit mine and the MPP started in 2013. In 2017, the 220 kV power line were commissioned and a camp for 1,047 people was built. Hot commissioning of the MPP started in October 2017, with the project expected to reach its design capacity by 2021.

Highlights

Ore reserves:

326 mt

Average content:

Cu – 0.7%

Fe₃O₄ (magnetite) – 23%

Au – 0.9 g/t¹

New jobs:

~**2** thousand people

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

2018

- CAPEX – RUB 10.7 bln (USD 168 mln)
- 7.9 mt of ore mined, 19.4 kt of copper concentrate, 3 t of gold concentrate and 0.4 mt of magnetite concentrate produced. EBITDA – USD 96 mln

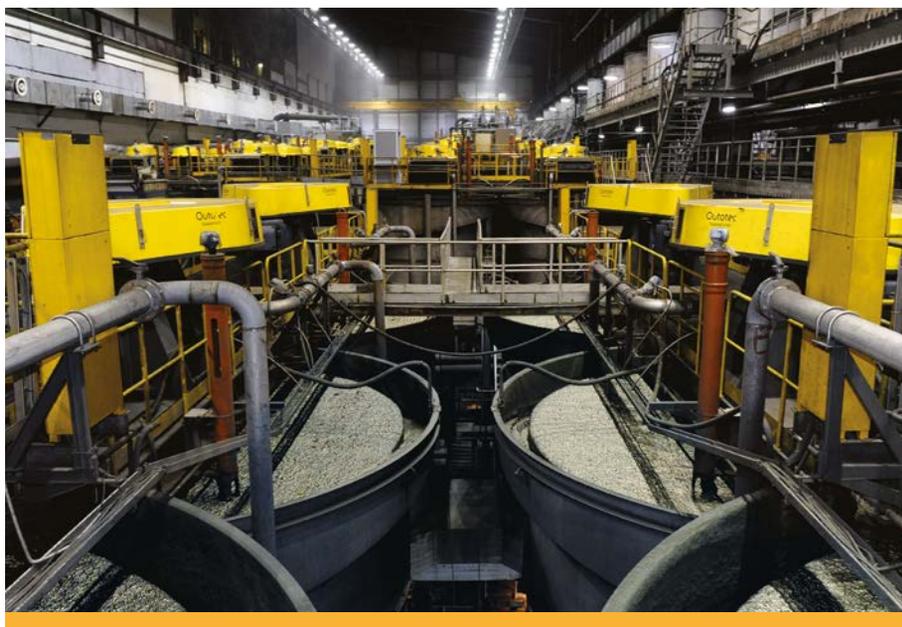
2019

- Increasing ore production to 8.0 mtpa, producing 40–46 kt of copper concentrate, 6.0–6.5 t of gold concentrate and 1.3–1.4 mt of magnetite concentrate.

2020

- The MPP's reaching design capacity with the following annual concentrate volumes:
Cu – 65–70 kt;
Au – 8.5–9.0 t;
Fe₃O₄ (Fe – 66%) – 1.9–2.1 mt

Upgrade of Talnakh Concentrator



Talnakh Concentrator is part of the Company's Polar Division. It processes rich, cupriferous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits to produce nickel-pyrrhotite and copper concentrates. In 2018, the plant processed 10.4 mt of ore, with nickel recovery in bulk concentrate reaching 83.2% (+1.5% y-o-y).

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Ramping up capacity and implementing a more efficient concentration technology.

The upgrade is rolling out in three stages. Stage 1 included reconstructing existing floatation capacities and replacing floatation cells that were beyond their useful lives in order to maintain the concentration

capacity at 7.5 mtpa (completed in 2015). Stage 2 involved the expansion of the main building, reconstruction of the reagent preparation building, and construction of two ball mills 300 cubic metres each and five vertical mills, all of which helped to boost capacity to 10.2 mtpa. This stage also included the building of the first phase of the tailings pit. The project was completed in 2018. Plans for Talnakh Concentrator-3 include capacity ramp-up and implementation of a more efficient concentration technology.

Key Stage 3 parameters

CAPEX:
RUB 40 bn (USD 0.6 bn)

Ramping up capacity:
from 10 mtpa to 18 mtpa

Building the second phase of the tailings pit

Commissioning planned for
2023

2018

- CAPEX – RUB 0.8 bn (USD 12 mln)
- Construction site inspection and preparatory work completed
- Design documentation developed

2019

- Obtain the State Expert Review Board's approval

2020–2022

- Construction and installation works, equipment delivery, pre-commissioning

Development of the South Cluster



The South Cluster is comprised of the Norilsk Concentrator (processing capacity of 9.3 mtpa), the northern part of the Norilsk-1 Deposit that is developed by Zapolyarny Mine through open-pit (Zapolyarny open pit) and underground (Zapolyarnaya mine) mining, as well as tailings pit No. 1 and Lebyazhye tailing pit. Norilsk Concentrator processes all disseminated ores from Zapolyarny Mine and cupriferous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits. In 2018, the plant processed 6.8 mt of ore, with nickel recovery in bulk concentrate reaching 71.9% (+0.2% y-o-y). Zapolyarny Mine produced 1.7 mt of disseminated ore. In 2017, Nornickel established Medvezhy Ruchey, a subsidiary that operates the assets of the Southern Cluster.

Location

Norilsk Industrial District, Krasnoyarsk Territory (Medvezhy Ruchey).

Project overview

As part of the South Cluster project, ore production will be ramped up to 9 ktpa. This will be done in two stages: first, by expanding the pit (open-pit operations), and then – through underground mining.

Highlights

| | | | |
|---|----------------------------------|------------------|--|
| Project CAPEX until 2022 | RUB 45 bn (USD 0.7 bn) | Ore reserves: | 165 mt |
| The project is expected to reach its design capacity starting | 2027 | Average content: | Ni – 0.2% Cu – 0.3% PGM – 3.9 g/t ¹ |

2018

- Feasibility study for further project development completed

2019

- Stripping works
- Completion of design documentation drafting

2021–2022

- Ore production launch

¹ According to the Medvezhy Ruchey Mine development project.

Tank-House refurbishment



Tank-House 2 produces cathode nickel as part of Kola MMC's Severonickel Plant, and together with Tank-House 1 made 147 kt of the product in 2018.

Location

Severonickel Plant, Monchegorsk, Murmansk Region (Kola MMC).

Project overview

Tank-House 2 is expected to boost capacity from 120 mtpa to 145 mtpa thanks to upgraded technology and higher recovery.

Tank-House 2 is introducing the technology of nickel electrowinning from chlorine dissolved tube furnace nickel powder, which will help achieve the highest purity of metal.

Highlights

| | |
|--|--|
| <p>Increasing Tank-House 2 capacity</p> <p>from 120 ktpa to 145 ktpa of nickel</p> | <p>Increasing nickel recovery from converter matte</p> <p>by 1%</p> |
|--|--|

2018

2019

- CAPEX – RUB 10.8 bn (USD 169 mln)
- Gradual capacity commissioning completed, progress – 82%

- Reaching the design capacity and performance targets

Construction of a concentrate shipment facility and separating section at Kola MMC



The project will involve the upgrade of Kola MMC's Concentrator and construction of a concentrate shipment facility. Located in Zapolyarny, the Concentrator produces briquetted copper-nickel concentrate. In 2018, it processed 7.9 mt of ore.

Location

Zapolyarny, Murmansk Region (Kola MMC).

Project overview

Construction of an additional floatation section at the Concentrator for separating high grade and low grade concentrate,

and a concentrate shipment facility with the capacity of 200 kt of dry concentrate. The new arrangement will see low grade concentrate shipped to third parties, while high grade concentrate will be sent for further processing at the Smelting Shop in Nickel.

Highlights

Project CAPEX:

RUB 4.9 bn (USD 85 mln)

Project completion and launch of finished concentrate production slated

for **2019**

2018

- CAPEX – RUB 1.1 bn (USD 17 mln)
- Construction of the concentrate shipment facility: Outotec has designed basic engineering and signed a contract for equipment supplies
- Thickeners dismantled and utility systems relocated, construction and installation works started on the shipment facility

2019

- Obtain the State Expert Review Board's approval
- Completion of all construction and installation works
- Launch of finished concentrate production and and plant pre-commissioning

ENVIRONMENTAL PROJECT

Sulphur Project at Polar Division



This is a large-scale environmental project designed to achieve a reduction in sulphur dioxide emissions by Nadezhda Metallurgical Plant and Copper Plant (both part of the Company's Polar Division) to the maximum permissible rates.

Highlights

Project CAPEX: up to USD **2.5** bn

Project completion is scheduled for **2022**

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview

Achieving a 75% decrease in sulphur dioxide emissions in the Norilsk Industrial District by 2023.

Nadezhda Metallurgical Plant will have new facilities for disposing of sulphur-rich gases, while Copper Plant will see an upgrade of its capacities that capture sulphur dioxide and produce elemental sulphur. In addition, some of Copper Plant's most polluting facilities that emit off-gas that is hard to capture will be shut down

due to their proximity to the residential area. Concurrently, a number of infrastructure projects will be implemented to supply the new facilities with all the necessary materials and power.

2018

- CAPEX – RUB 2.3 bn (USD 36 mln)
- Construction site preparation at Copper Plant

2019

- Finishing the preparation of engineering documents, obtaining regulatory approvals
- Launch of construction and installation operations

2020–2022

- Main phase: manufacturing and delivery of equipment, construction and installation operations, pre-commissioning