

KEY INVESTMENT PROJECTS

MINING PROJECTS

SKALISTY MINE

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Skalisty Mine development project aims to ramp up ore production to 2.5 Mtpa by 2020, and maintain this level until 2025 through mining the rich and cuprous ore reserves of the Talnakhskoye and Oktyabrskoye deposits. In 2020–2025, the project's CAPEX will total RUB 58.3 bn (USD 0.85 bn).

Ore reserves¹

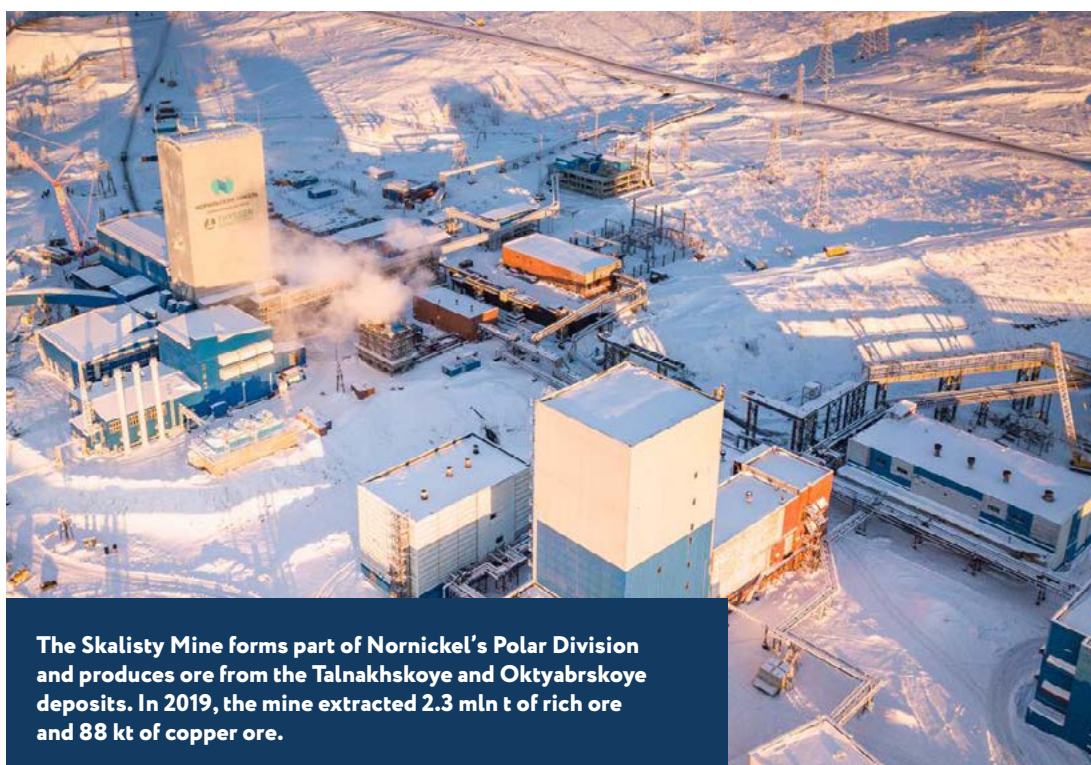
53 mln t

Average metal content

NI – 3.2 %

Cu – 3.7 %

PGMs – 10.0 g/t



The Skalisty Mine forms part of Nornickel's Polar Division and produces ore from the Talnakhskoye and Oktyabrskoye deposits. In 2019, the mine extracted 2.3 mln t of rich ore and 88 kt of copper ore.

Project timeline

'19

- CAPEX – RUB 3.7 bn (USD 58 mln)
- Refurbishment of **ventilation shaft No. 10** completed, and the main ventilation unit launched
- The sinking of skip-cage shaft No. 1 completed (**2.1 km in total**)

'20

- Commissioning of **ventilation shaft No. 10**
- Commissioning **400 ktpa** of saleable ore capacity

TAIMYRSKY MINE



Taimyrsky Mine forms part of Nornickel's Polar Division and produces ore from the Oktyabrskoye Deposit. In 2019, the mine extracted about 4.1 mln t of rich ore.

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Taimyrsky Mine development project aims to sustain ore production at 4.3 Mtpa until 2025 by tapping into the rich copper-nickel ore reserves of the Oktyabrskoye deposit. In 2020–2024, the project's CAPEX will total RUB 32.8 bn (USD 491.6 mln).

Ore reserves¹

139 mln t

Average metal content

NI – 1.2 %

Cu – 1.9 %

PGMs – 4.5 g/t

Project timeline

'19

- CAPEX – RUB 4.3 bn (USD 67 mln)
- 5.6 km of underground workings completed

'20-'24

- Commissioning 1.15 Mtpa of capacity to maintain ore production at 4.3 Mtpa

^{1/} According to JORC standards.

MINING PROJECTS

OKTYABRSKY MINE

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Oktyabrsky Mine development project aims to maintain production of depleting reserves, and gradually ramp up production to 6.0 Mtpa until 2025, through mining 38.5 mln t of the rich disseminated and cuprous ore reserves of the Oktyabrskoye deposit. In 2020–2025, the project’s CAPEX will total RUB 3.8 bn (USD 56.1 mln).

Ore reserves¹

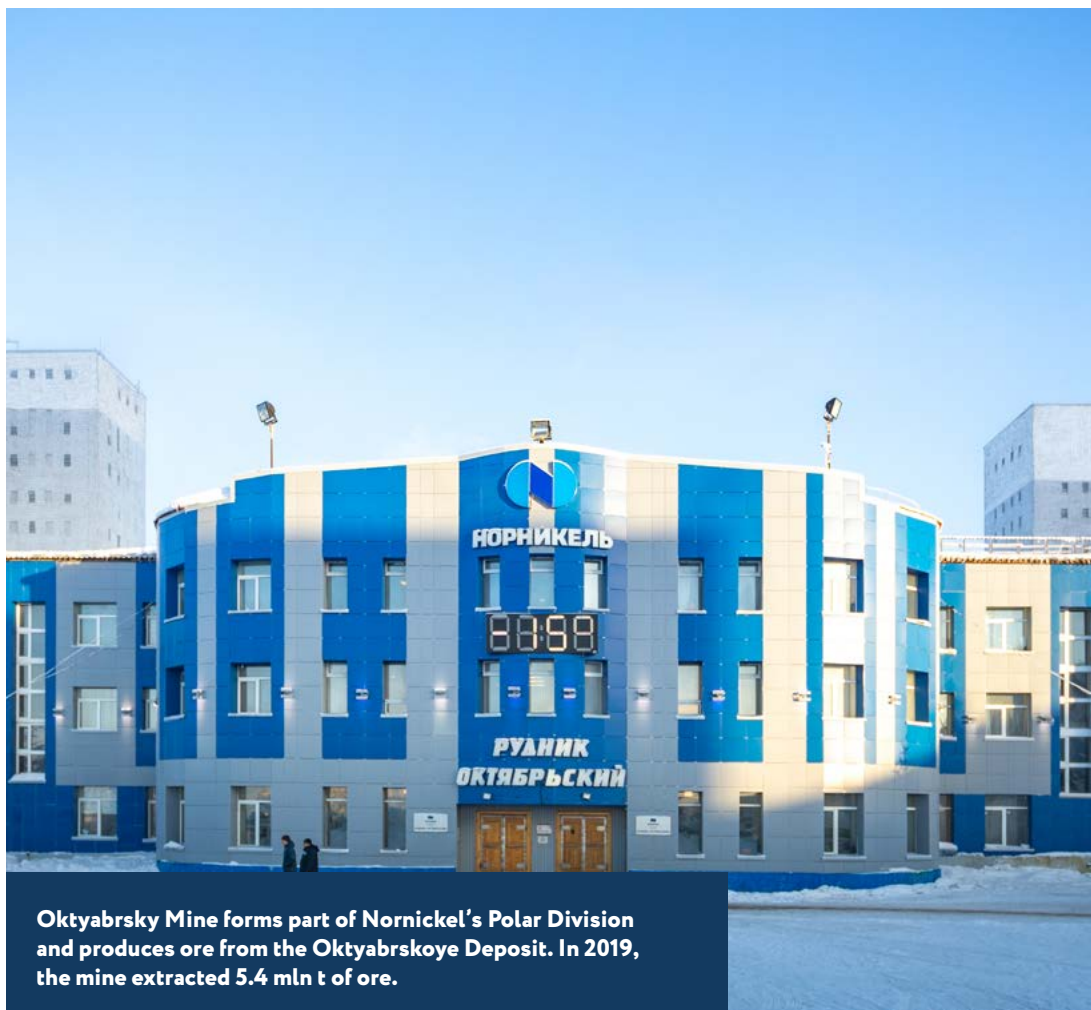
215 mln t

Average metal content

NI – 0.6 %

Cu – 2.1 %

PGMs – 5.8 g/t



Oktyabrsky Mine forms part of Nornickel’s Polar Division and produces ore from the Oktyabrskoye Deposit. In 2019, the mine extracted 5.4 mln t of ore.

Project timeline

'19

- CAPEX – RUB 1.7 bn (USD 27 mln)
- 2.6 km of underground workings completed

'20-'25

- Commissioning 300 Ktpa cuprous ore and 1.15 Mtpa ore capacity to maintain production reserves

KOMSOMOLSKY MINE



The Komsomolsky Mine forms part of Nornickel's Polar Division and produces ore from the Talnakhskoye and Oktyabrskoye deposits. In 2019, the mine extracted 4.0 mln t of ore.

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Project overview

The Komsomolsky Mine development project aims to maintain ore production at 4 Mtpa until 2023, by mining the rich, cuprous, and disseminated ore reserves of the Talnakhskoye and Oktyabrskoye deposits. In 2020–2023, the project's CAPEX will total RUB 13.7 bn (USD 204.5 mln).

Ore reserves¹

182 mln t

Average metal content

NI – 0.6 %

Cu – 1.1 %

PGMs – 4.8 g/t

Project timeline

'19

- CAPEX – RUB 3.5 bn (USD 54 mln)
- 4.5 km of underground workings completed

'20-'23

- Commissioning 1.5 Mtpa of saleable ore capacity

^{1/} According to JORC standards.

MINING PROJECTS

SOUTH CLUSTER

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The project aims to ramp up ore production to 9 Mtpa by 2027, first by expanding the pit (open-pit operations) and then through underground mining. In 2020–2027, the project's CAPEX will total RUB 63.1 bn (USD 0.9 bn).

Ore reserves¹

42 mln t

Average metal content

NI – 0.3 %

Cu – 0.4 %

PGMs – 6.0 g/t



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 (processing capacity of 9.3 Mtpa), the northern part of the Norilsk-1 deposit, developed by the Zapolyarny open-pit mine and the Zapolyarnaya mine, as well as the tailing dump No. 1 and Lebyazhye tailing dump. The Norilsk Concentrator processes all disseminated ores from the Zapolyarny Mine and cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits. In 2019, the plant processed 7.5 mln t of ore, with nickel recovery in bulk concentrate reaching 71.3%. In 2019, the Zapolyarny Mine produced 1.6 mln t of disseminated ore. In 2019, the South Cluster project's CAPEX was RUB 5.0 bn (USD 76 mln).

Project timeline

'19

- CAPEX – RUB 1.6 bn (USD 24 mln)
- Stripping completed
- Exploration conducted
- Design documentation development started

'20

- Feasibility study and detailed engineering conducted
- Completion of design documentation
- Securing of approval from the Main Department of State Expertise
- Launch of construction and installation works

'21-'22

- Construction and installation works, equipment delivery
- Launch of ore production

¹ According to JORC standards.

ARCTIC PALLADIUM

In 2018, Nornickel and Russian Platinum, a Russian private company, signed a memorandum of intent to set up a joint venture (JV) with a view to develop the Norilsk Industrial District's deposits. Contributions to the JV's authorised capital included Nornickel's licence to develop the Maslovskoye deposit and Russian Platinum's licence to develop the southern part of the Norilsk-1 deposit and the Chernogorskoye deposit.

In March 2019, Russian Platinum has notified the Company of its decision to terminate the negotiations regarding Arctic Palladium JV and to proceed with the development of the Chernogorskoye Deposit and the southern part of the Norilsk-1 Deposit on its own. This decision owes to UC RUSAL, one of Nornickel's shareholders, not issuing due corporate approvals to Nornickel to participate in the proposed joint venture.

PROCESSING PROJECTS

BYSTRINSKY GOK (CHITA PROJECT)

Location

16 km east of Gazimursky Zavod, Gazimuro-Zavodsky District, Zabaykalsky Region

Project overview

The Bystrinsky GOK construction project is made up of 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 Borzha–Gazimursky Zavod railway line; as well as a rotation camp.

Construction of the open-pit mine and the MPP started in 2013. In 2017, a 220 kV power line was commissioned and a camp for 1,047 people was built. Hot commissioning of the MPP started in October 2017. The MPP came online in December 2019. The project is expected to ramp up to design capacity by 2021.

Ore reserves¹

316 mln t

Average metal content

Cu – 0.7 %

Fe₃O₄ – 23 %

Au – 0.9 g/t

In 2020–2022, the project's CAPEX will total

RUB 16.7 bln
(USD 252.0 mln).

The project's design capacity

10 Mtpa

New jobs

~2,000 positions



Launched in 2019, GRK Bystrinskoye (Bystrinsky GOK) is Nornickel's new copper, gold and iron concentrate project. It is the largest greenfield project in the Russian mining industry, covering ore mining, concentration and shipment of end products to customers. Nornickel owns 50.01% in Bystrinsky GOK, with CIS Natural Resources Fund holding 39.32%, and the remaining 10.67% belonging to Highland Fund. In 2005–2020, the project's CAPEX will total RUB 92.5 bn (USD 1.8 bn).

Project timeline

'19

- CAPEX – RUB 6.7 bn (USD 103 mln)
- Mining of 7.5 mln t of ore and production of 43.5 kt of copper concentrate, 177 koz of gold concentrate, and 1.3 mln t of iron ore concentrate. EBITDA – USD 349 mln

'20

- The MPP is expected to reach design capacity with the following annual concentrate volumes: Cu – 55–65 kt; Au – 220–240 koz; Fe₃O₄ (Fe – 66%) – 1.5–1.7 mln t

^{1/} According to the Russian classification (A+B+C1+C2)