MINERAL BASE

RESERVES AND RESOURCES[1]

The continued expansion of the resource base secures the Company's **long-term development**

Nornickel boasts a unique mineral resource base of Tier 1 assets on Russia's Taimyr and Kola Peninsulas, as well as in the Zabaykalsky Kray. The continued expansion of the resource base secures the Company's long-term development.

Ni	Cu	PGM
15.3 mt	23.5 mt	8.2 kt (263 moz)

Ni	Cu	PGM
6.9 mt	12.1 mt	3.8 kt (123 moz)

[1] *Data regarding the mineral resources and ore reserves were classified based on the analysis and ongoing alignment according to the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code) of the Russian divisions' ore and metal balance reserves (Russian classification, Form No. 5-gr). The calculations comply with the JORC Code and the terminology recommended by the Russian Code for Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves (NAEN Code), based on the rules and regulations developed by Micon International Co Limited during regular audits of the Group's field reserves in Russia.*
Reserves and resources shown include wholly owned overseas assets, net of deposits in the Trans-Baikal Territory.
The six platinum group metals (PGMs) are platinum, palladium, rhodium, ruthenium, osmium, and iridium.

>>> *For more details on the reserves and resources, please see* **p. 276–277**

Geography of metals mining by Nornickel

1	Kola Peninsula	Ni / Cu / Au / Pt / Pd / Rh / Ru / Os / Ur / Co
2	Taimyr Peninsula	Ni / Cu / Au / Pt / Pd / Rh / Ru / Os / Ur / Co
3	Zabaykalsky Kray	Cu / Au / Ag / Fe
4	South Africa	Ni
5	Australia	Ni / Cu / Co / Rh / Ru / Os / Ur / Pt / Pd

EXISTING OPERATIONS

Nornickel has a strong potential to maintain a high level of ore reserves given the significant mineral resources available within the existing mining operations. The depleted rich and cuprous ore reserves at the existing mines are mainly replaced through inferred resources on the flanks of the deposits in use. The Company plans to ramp up its mining operations by tapping into new rich ore deposits and focusing on the gradual and active development of disseminated and cupriferous ore horizons.

>80 years

of reserves-to-production ratio at the current production level

Talnakh Ore Cluster

Geography and profile

The Talnakh cluster is located in the Norilsk Industrial District, on the right bank of the Norilskaya River. It includes the Oktyabrskoye and Talnakhskoye copper-nickel fields, the largest of their kind, which are located on the north-western margin of the Siberian Craton. In the early 1960s, multiple ore bodies of copper, cupriferous and disseminated ores were discovered in these fields. Nornickel is still mining non-ferrous and noble metals from the outstanding amounts of highest-quality reserves of the Talnakh Ore Cluster.

Geological exploration

The Company undertakes geological exploration at the Talnakh Ore Cluster fields in order to increase the reserves of rich and cupriferous ores through operational exploration and follow-up exploration of deep horizons and flanks.

In 2018, as part of the Follow-Up Exploration at the Oktyabrskoye Field project, Nornickel performed geological exploration from surface, with a number of wells having opened up rich ores outside the boundaries of the approved reserves, which means an increase in the quantity of reserves of the rich ore deposits Severnaya 3 lens and Severnaya 4 rich ore deposits. There was no quantification of the increase done in 2018, the works under the project are ongoing.

Depletion of balance metal reserves in 2018

13.2 mt of ore

Ni — 243.1 mt
Cu — 420.0 mt
PGM — 0.1 mt (3.9 moz)

Additional balance reserves in 2018

3.6 mt of ore

Ni — 51.3 mt
Cu — 67.9 mt
PGM — 0.03 mt (1.0 moz)

Average metal content:
Ni — 1.4%
Cu — 1.9%
PGM — 8.8 g/t

Balance reserves

2,001.4 mt of ore

Ni — 15.2 mt
Cu — 29.5 mt
PGM — 9.8 kt

Proven and probable reserves

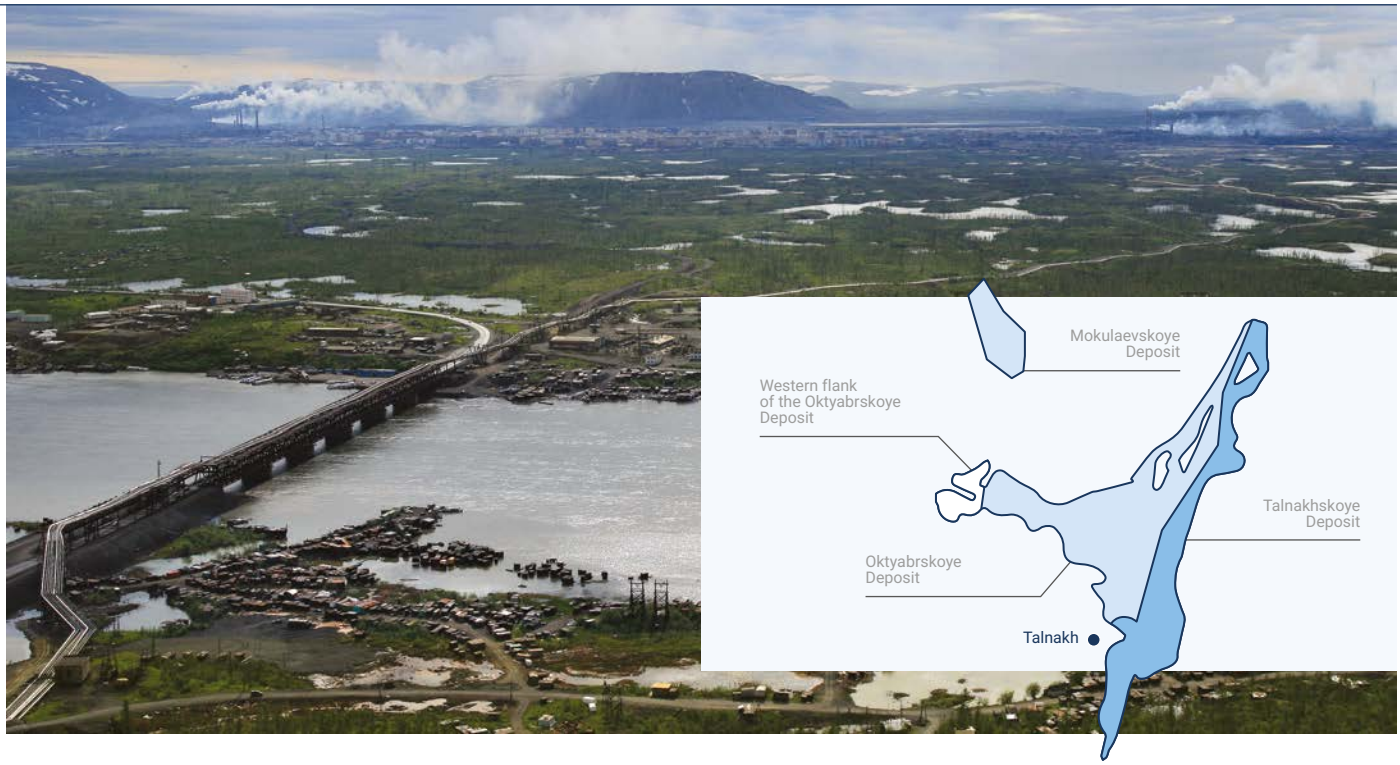
640.2 mt of ore

Ni — 6.2 mt
Cu — 11.7 mt
PGM — 3.6 kt (114.5 moz)

Measured and indicated resources

1,561.6 mt of ore

Ni — 11.5 mt
Cu — 21.9 mt
PGM — 7.4 kt (236.7 moz)



Norilsk Ore Cluster

Geography and profile

The Norilsk Ore Cluster is located in the Norilsk Industrial District. In the Norilsk Ore Cluster, Nornickel has been developing sulphide disseminated ores in the southern part of the Norilsk-1 Field since the 1930s. Nornickel's geological exploration led to an increase in the field's reserves to 150 mt of ore, which will support open-pit and underground mining to 2050 year.

In order to finance the South Cluster project also by attracting investments, Nornickel established Medvezhy Ruchey, a wholly-owned subsidiary that holds the development licence and inherited part of Polar Division's assets. Medvezhy Ruchey LLC includes Medvezhy Ruchey open pit (open-pit mining), Zapolyarny mine (underground mining), tailings pit No. 1, Lebyazhye tailings pit, and Norilsk Concentrator. No geological exploration was carried out in 2018.

Depletion of balance metal reserves in 2018

1.6 mt of ore

Ni — 5.9 kt
Cu — 8.6 kt
PGM — 0.01 kt (0.4 moz)

Additional balance reserves in 2018

0.7 mt of ore

Ni — 2.6 kt
Cu — 4.6 kt
PGM — 0.004 kt (0.1 moz)

Average metal content:

Ni — 0.4%
Cu — 0.6%
PGM — 5.5 g/t

Balance reserves

148.1 mt of ore

Ni — 0.4 mt
Cu — 0.6 mt
PGM — 0.8 kt

Proven and probable reserves

43.4 mt of ore

Ni — 0.1 mt
Cu — 0.2 mt
PGM — 0.3 kt (8.5 moz)

Measured and indicated resources

147.0 mt of ore

Ni — 0.4 mt
Cu — 0.6 mt
PGM — 0.8 kt (25.6 moz)

Kola MMC Deposit

Geography and profile

Kola MMC's fields are located on a 25-kilometre strip between the towns of Nickel and Zapolyarny in the western part of the Murmansk Region, and they are grouped into two ore clusters: Western (Kotselvaara-Kammikivi and Semiletka fields) and Eastern (Zhdanovskoye, Zapolyarnoye, Bystrinskoye, Tundrovoye, Sputnik, and Verkhneye fields). The development of the fields in the Western and Eastern clusters has been in progress since the 1930s and 1960s, respectively.

Depletion of balance metal reserves in 2018

7.2 mt of ore

Ni – 46.9 kt
Cu – 20.7 kt

Additional balance reserves in 2018[1]

8.3 mt of ore

Ni – 44.6 kt
Cu – 20.1 kt

Average metal content.[2]
Ni – 0.5%
Cu – 0.2%

1 *Increase thanks to moving reserves from the unallocated reserve fund (correction of a technical error).*
2 *Average metal grade in ore reserves transferred from the unallocated fund.*

Balance reserves

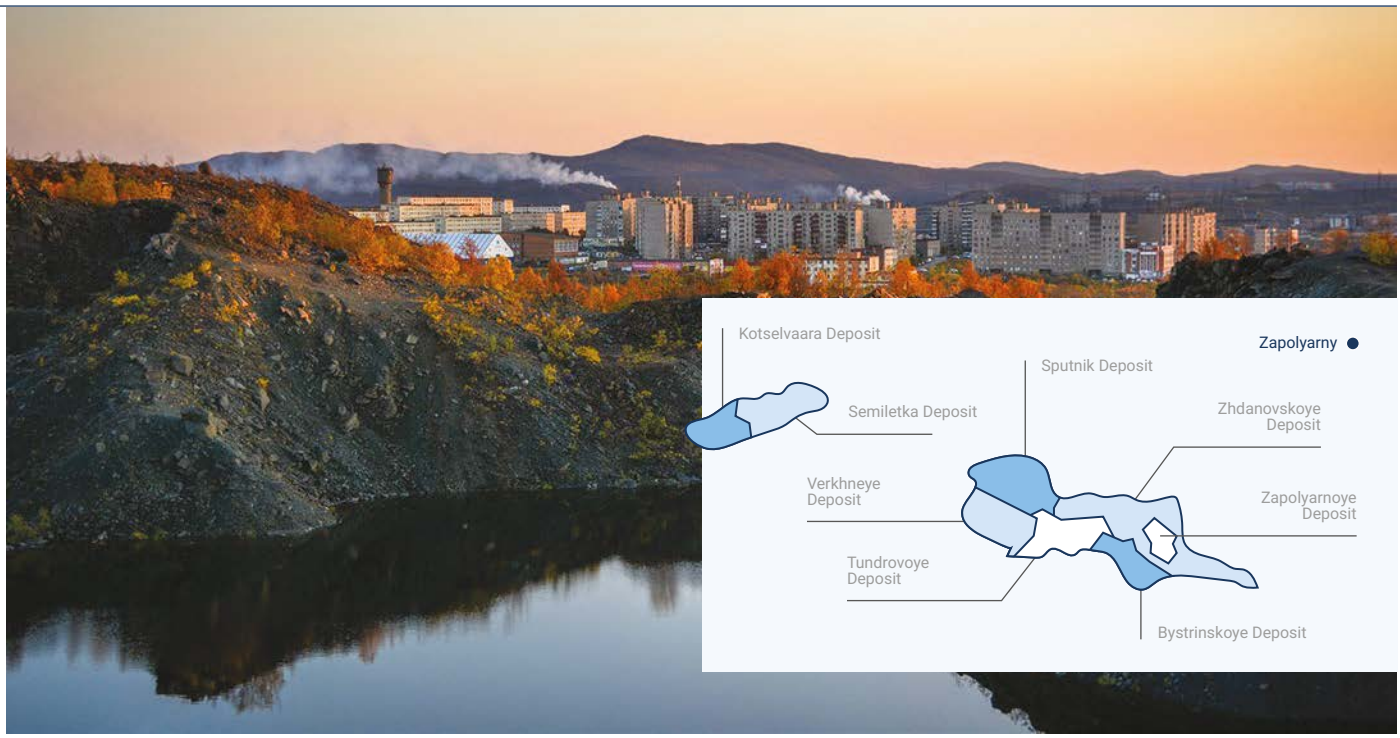
471.5 mt of ore
Ni – 3.2 mt
Cu – 1.5 mt

Proven and probable reserves

100.9 mt of ore
Ni – 0.6 mt
Cu – 0.3 mt

Measured and indicated resources

327.3 mt of ore
Ni – 2.3 mt
Cu – 1.1 mt



Bystrinskoye Deposit

Geography and profile

The Bystrinskoye Field is located in the Zabaykalsky Kray, 16 km east of Gazimursky Zavod. GRK Bystrinskoye develops deposits of gold-iron-copper ores at the Bystrinskoye Field.

Geological exploration

No geological exploration to increase the volume of reserves was carried out on the field in 2018. As the existing open in the Bystrinsky GOK area pits need overburden dump sites, geological exploration works were carried out to verify that the prospective locations were barren.

Balance reserves

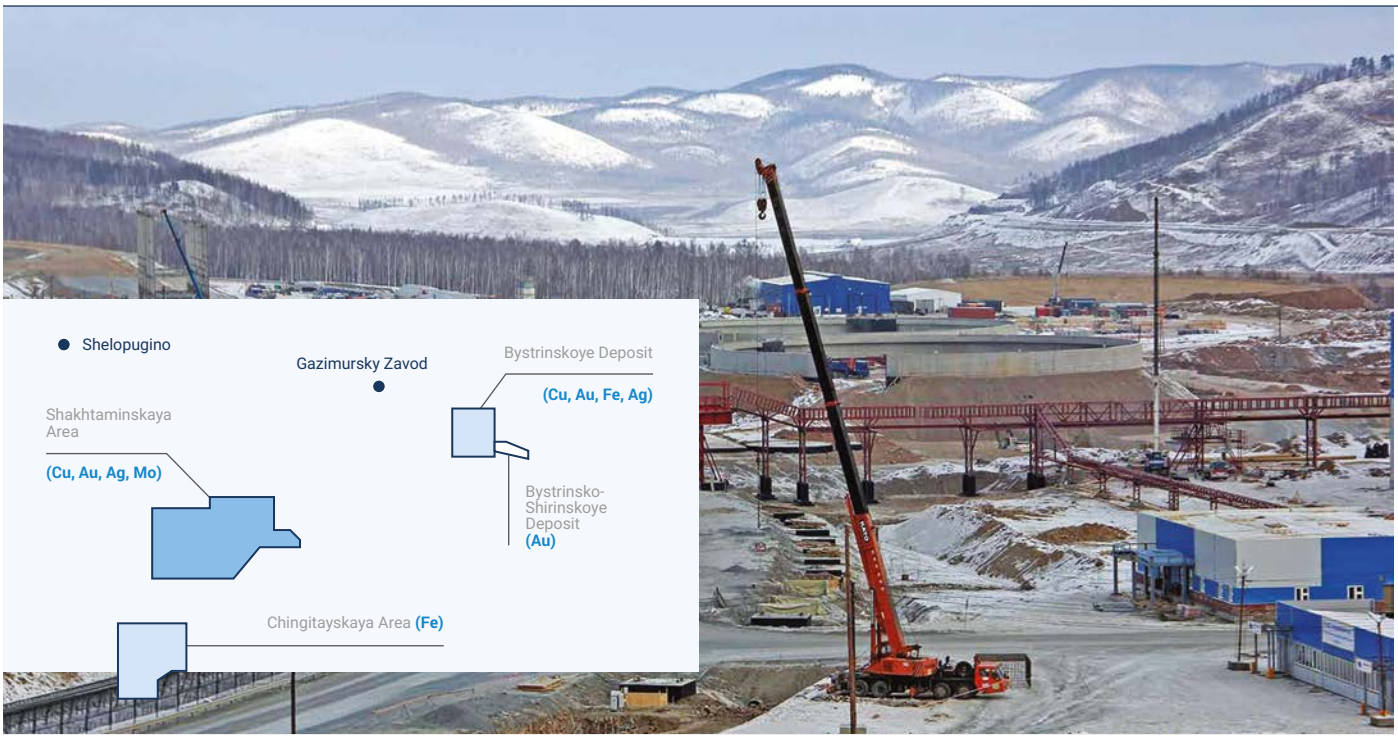
325.9 mt of ore

Cu — 2.24 mt
Au — 282.0 t (9.0 moz)
Ag — 1,218.0 t (39.1 moz)
Fe — 72 mt

Depletion of balance reserves in 2018

7.1 mt of ore

Cu — 33.7 kt
Au — 8.0 t (258 koz)
Ag — 21.5 t (691 koz)
Fe — 868.4 kt



Nkomati

Geography and profile

The Nkomati disseminated copper-nickel sulphide ore deposit is located in South Africa and constitutes part of the Bushveld Complex. Nkomati is comprised of several ore bodies, with the key ones forming a single sulphide ore body (rich nickel ore), and the Main Mineral Zone (MMZ). The field also contains a Peridotite Chromite Mineralisation Zone (PCMZ) with a lower metal grade vs MMZ.

Proven and probable reserves

84.45 mt of ore

Ni — 261.0 kt
Cu — 100.9 kt
Co — 16.8 kt
PGM — 75.0 t (2.4 moz)

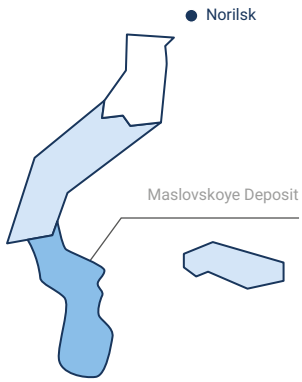
Measured and indicated resources

172.2 mt of ore

Ni — 602.7 kt
Cu — 241.1 kt
Co — 34.4 kt
PGM — 165.3 t (5.3 moz)

Development projects

MASLOVSKOYE FIELD



Geography and profile

Maslovskoye Field is located in the Norilsk Industrial District, 12 km south of the Norilsk-1 Field.

The licence to explore and mine platinum-copper-nickel sulphide ores at the Maslovskoye Field was obtained by the Company in 2015. The Field boasts some of the largest reserves in the world.

In early 2018, Nornickel and Russian Platinum signed a memorandum of intent to set up a joint venture for further development of disseminated ore deposits in the Norilsk Industrial District. The memorandum provides for the parity of JV partners, with Nornickel and Russian Platinum set to hold a 50% interest each. The partners' contributions to the authorised capital of the JV will come in the form of a licence to develop the Maslovskoye Field held by Nornickel and a licence to develop the southern part of the Norilsk-1 Field and the Chernogorskoye Field held by Russian Platinum. The total reserves of these fields recorded on the government books break down as follows: 3.7 kt of PGM, 1.9 mt of nickel, and 2.7 mt of copper.

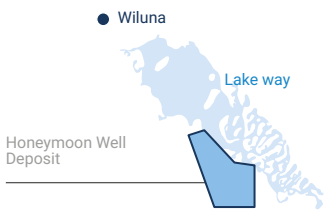
Balance reserves

The feasibility study of permanent exploratory standards and the mineral reserves estimation report for the Maslovskoye Field were approved by the State Committee on Mineral Reserves (GKZ). Re-approved reserves are documented in the protocol No. 5561 dated 12 October 2018.

B + C_1 + C_2 mineral reserves

Item	Ore	Metal content in ore
Ore, total	206.8 mt	–
PGM	1.5 kt (48.9 moz)	7.4 g/t
Palladium	1.0 kt (33.1 moz)	5.0 g/t
Platinum	0.4 kt (13.0 moz)	2.0 g/t
Nickel	0.7 mt	0.3%
Copper	1.1 mt	0.5%
Cobalt	26.3 kt	0.01%
Gold	39.4 t (1.3 moz)	0.2 g/t

HONEYMOON WELL DEVELOPMENT PROJECT



Honeymoon Well is located in Australia. The Group holds a development licence for the Honeymoon Well Project, which includes fields hosting disseminated nickel sulphide ores (Hannibals, Harrier, Corella and Harakka) and deposits of solid and vein ores (Wedgetail Field).

The total measured and indicated mineral resources of the Honeymoon Well Project are estimated at 173 mt of ore with an average nickel content of 0.68%.

In 2017, the Company suspended its right to develop the Wedgetail Field for five years, until 7 October 2021.