



MINING PROJECTS

Skalistaya mine

 Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Increasing ore production from 1.8 mtpa to 2.2 mtpa in 2018 and to 2.4 mtpa by 2024 by stripping and extracting rich cupriferous ore reserves of the Talnakhskiye and Oktyabrskoye Fields.

Highlights

Ore reserves	65.9 mt
2017 CAPEX of ca.	RUB 13 bn (USD 216 mln)
2018–2024 CAPEX of ca.	RUB 65 bn (USD 1.1 bn)

Average metal content



PROJECT SCHEDULE

- **2017**
 - Production ramp-up to 1.75 mt
 - 152 m sinking of ventilation shaft–10 (total of 1.9 km out of 2.1 km)
 - 322 m sinking of skip-cage shaft–1 (total of 1.7 km out of 2.1 km)
 - Drifting of 4,519 m
- **2018**
 - 500 kt capacity commissioning
 - Completion of ventilation shaft
- **2019**
 - Completion of skip-cage shaft–1 construction
- **2020**
 - Completion of infrastructure construction
- **2024**
 - Production ramp-up to 2.4 mt

Taimyrsky mine

 Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Increasing ore production from 3.6 mtpa to 3.8 mtpa by 2020 by stripping rich copper-nickel ores at the Oktyabrskoye Field.

Highlights

Ore reserves of	63.0 mt
2017 CAPEX of ca.	RUB 5.4 bn (ca. USD 93 mln)
2018–2023 CAPEX of over	RUB 22 bn (ca. USD 371 mln)

Average metal content



PROJECT SCHEDULE

- **2016**
 - 300 kt capacity commissioning
- **2017**
 - 1.8 km of underground workings completed and 100 kt of new capacity completed
- **2018**
 - Capacity commissioning (500 kt of rich ore)
 - Upgrading the hoist system at skip shaft No. 3
- **2019**
 - Capacity commissioning (200 kt of rich ore)
- **2020**
 - Capacity ramp-up to 3.8 mt
- **2021**
 - Capacity commissioning (400 kt of rich ore)

Oktyabrsky mine

 Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Increasing ore production to 5.2 mtpa by 2023 by stripping high-grade, disseminated and cupriferous ores at the Oktyabrskoye Field.

Highlights

Ore reserves of	96 mt
2017 CAPEX of ca.	RUB 4 bn ca. USD 69 mln
2018–2025 CAPEX of ca.	RUB 6.0 bn (ca. USD 95 mln)

Average metal content



Komsomolsky mine¹

 Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Increasing ore production to 3.8–4.0 mtpa before 2020.

¹ excluding Skalistaya mine.

Highlights

Ore reserves of	22.9 mt
2017 CAPEX of ca.	RUB 1.2 bn (ca. USD 18 mln)
2018–2022 CAPEX of over	RUB 14 bn (ca. USD 234 mln)

Average metal content



PROJECT SCHEDULE

- **2017**
 - 7 km of underground workings completed,
 - Capacity ramped up by 250 kt of disseminated ore and 100 kt of rich ore
- **2019**
 - Capacity commissioning (150 kt of rich ore and 700 kt of cupriferous disseminated ore)
- **2020–2025**
 - Capacity commissioning (300 kt of cupriferous ore)

PROJECT SCHEDULE

- **2017**
 - Power supply system completed at the southern ventilation shaft
 - Ca. 3 km of underground workings completed
 - 100 kt of rich ore capacity commissioned
- **2018**
 - Completion of the western backfilling shaft reconstruction
 - capacity commissioning (200 kt of cupriferous ore)
- **2019**
 - Capacity commissioning (175 kt of rich ore)
- **2020**
 - Capacity commissioning (225 kt of rich ore and 200 kt of disseminated ore)