

Sulphur Project 2.0

ENVIRONMENTAL ROADMAP

KOLA DIVISION

SMELTING SHOP

⊗ Shut down in December 2020

METALLURGICAL SHOP

⊗ Shut down in March 2021

Nikel
Monchegorsk

DECEMBER 2020

Smelting shop in Nikel shut down

- Complete elimination of cross-border emissions

MARCH 2021:

Copper refining line in Monchegorsk shut down

- Significant air quality improvement in Monchegorsk
- 90% reduction in sulphur dioxide emissions from Kola MMC in 2021 (vs 2015)
- Construction of a new copper refining line based on modern environmentally-friendly technology
- Production flows redirected to the Norilsk Division, with an option of partial sales to third parties

2021 In progress 2023 In progress 2025 Strategic aspiration 2030+

Shutdown of an obsolete copper refining line on the Kola Peninsula

Metallurgical shop shut down on 20 March 2021.

Launch of the Sulphur Project 2.0 at Nadezhda Plant to recover furnace gases

Launch of the Sulphur Project 2.0 at Copper Plant to recover furnace and converter gases

Recovery of low-sulphur gases (including converter gases) at Nadezhda Plant

Reduction in total SO₂ emissions at the Kola and Norilsk Divisions¹

¹ From a 2015 baseline.

-90%

10x

-45%

2x

-90%

10x

-95%

20x+

NORILSK

DIVISION

NADEZHDA
METALLURGICAL
PLANT

COPPER PLANT

Norilsk

NICKEL PLANT

✘ Shut down in 2016

**COMPREHENSIVE
SOLUTION
TO A LEGACY
PROBLEM OF
SULPHUR DIOXIDE
EMISSIONS**

NADEZHDA METALLURGICAL PLANT:

FLAGSHIP PROJECT

Construction of furnace gas recovery facilities, a sulphuric acid neutralisation line and associated infrastructure:

- All key contracts signed
- Piling, steel works and gypsum storage dam raising are in progress
- The project provides for gas recovery following an expansion of the smelting shop's capacity (construction of the 3rd furnace)

COPPER PLANT

The project aims to recover 99%–99.5% of SO₂ (in line with global best practice) and implies the construction of a continuous converting complex and an acid neutralisation line:

- Phase 1: gas cleaning unit retrofit – in progress
- Phase 2: basic engineering / design completed
- FID taken in June 2021, construction to commence in 2022

Investment

**USD
4.1–4.3
bn**