

ENERGY ASSETS

The Company boasts its own energy resource base comprised of four hydrocarbon fields.

Nornickel's key production facilities are located in the Arctic Circle, operating in sub-zero temperatures for about eight months of the year. It is therefore critical for the Group to supply energy not only to its production enterprises but also to infrastructure facilities and communities in its regions of operation.

Norilskgazprom produces gas and gas condensate from the Pelyatkinskoye, Yuzhno-Soleninskoye and Severo-Soleninskoye gas condensate fields, as well as the Messoyahskoye gas field.

- Start of production: 1969
- Gas reserves: 253.2 bcm
- Gas condensate reserves: 4,697 kt

Norilsktransgaz transports natural gas and gas condensate from fields to consumers. The length of its gas and condensate pipelines totals 1,639 km. The pipelines were commissioned from 1969.

Taimyr Fuel Company is a strategic supplier of light and heavy oil products to the Far North, performing important commercial and social functions as well as exporting gas condensate to European consumers. The company's operations span vast areas of Russia, including the Norilsk Industrial District, the cities of Krasnoyarsk and Dudinka, and the Murmansk and Chita

2,927 Mcm
natural gas production¹

102 kt
gas condensate production

47%
electricity generated from renewable sources in Group

Production volume¹

Product	2019	2020	2021
Natural gas (Mcm)	2,804	2,728	2,927
Gas condensate (kt)	92	98	102

IN 2021, GROUP'S MAIN FUEL AND ENERGY ASSETS IN THE NORILSK INDUSTRIAL DISTRICT WERE SPUN OFF AS THE ENERGY DIVISION AS PART OF THE GROUP'S MANAGEMENT SYSTEM OPTIMISATION EFFORT.



¹ Gas condensate production figures include production losses (carryover with separation gas).



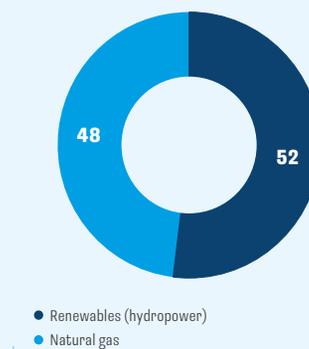
Regions. Taimyr Fuel Company supplies petroleum products to mining, exploration, and transport companies and municipal enterprises. Its key consumers are the Norilsk Nickel Group enterprises.

About 85 kt of AI-92 and AI-95 petrol, diesel and jet fuel as well as almost 2 kt of various oils were delivered to the port of Dudinka between June and October 2021.

This year, regular deliveries of petroleum products to Taimyr will continue during the winter season as well, for the first time ever. Taimyr Fuel Company transitioned to year-round delivery last year, as Norinickel launched a comprehensive programme to upgrade its tank farm facilities.

NTEK is an electricity and heat generation, transmission and distribution company. Energy is generated from both renewable (hydropower) and non-renewable (natural gas) sources. NTEK supplies electricity, heat, and water to Norilsk households as well as all industrial and commercial consumers in the Norilsk Industrial District. The local electricity grid is operationally and geographically isolated from the national grid (the Unified Energy System of Russia), which means stricter reliability requirements. NTEK operates five generating facilities: three thermal power plants with a total installed capacity of 1,115 MW and two hydropower plants with a total installed capacity of 1,111 MW. The total installed capacity of all plants is 2,226 MW.

NTEC's power generation mix in the Norilsk Industrial District in 2021
(%)





THE COMPANY'S KEY PROJECTS TO IMPROVE EQUIPMENT RELIABILITY AND ENERGY EFFICIENCY AND TO BOOST OUTPUT INCLUDE:

- replacement of seven hydropower units at the Ust-Khantayskaya HPP (the last hydroelectric unit was replaced in 2021, the project is completed)
- replacement of generating units at CHPP-2 and CHPP-3 in Norilsk
- upgrade of emergency diesel fuel tanks at Norilsk CHPP-1, CHPP-2, CHPP-3, Dudinka boiler house, Ust-Khantayskaya HPP, and Kureyskaya HPP
- upgrade of electric power networks
- upgrade of heat and water pipelines
- construction of a new water withdrawal facilities on the Norilskaya River
- upgrade of the Norilsk heat and water lines
- construction of stormwater and industrial wastewater treatment facilities
- upgrade of trunk and distribution gas pipeline systems;
- upgrade and development of utility infrastructure in Tukhard
- construction of five new gas wells at the Pelyatkinskoye gas condensate field
- comprehensive upgrade of the Norilsk, Dudinka, and Kayerkan tank farms.

Ust-Khantayskaya and Kureyskaya HPPs are Nornickel's two renewable electricity generation facilities. In 2021, the share of renewables in total electricity generation stood at 47% for the Group and 52% for the Norilsk Industrial District.

Nornickel's investment programme includes a number of large-scale priority projects to boost the share of renewables such as hydropower, capture fuel and energy savings, and improve the reliability of energy and gas supplies.



Business overview

