



NORNICKEL

PARTNERSHIPS FOR SUSTAINABLE DIGITAL DEVELOPMENT IN THE CASE OF MMC “NORILSK NICKEL”

Igor LARICHEV,
Deputy Director of Federal and
Regional Programs Department,
Nornickel



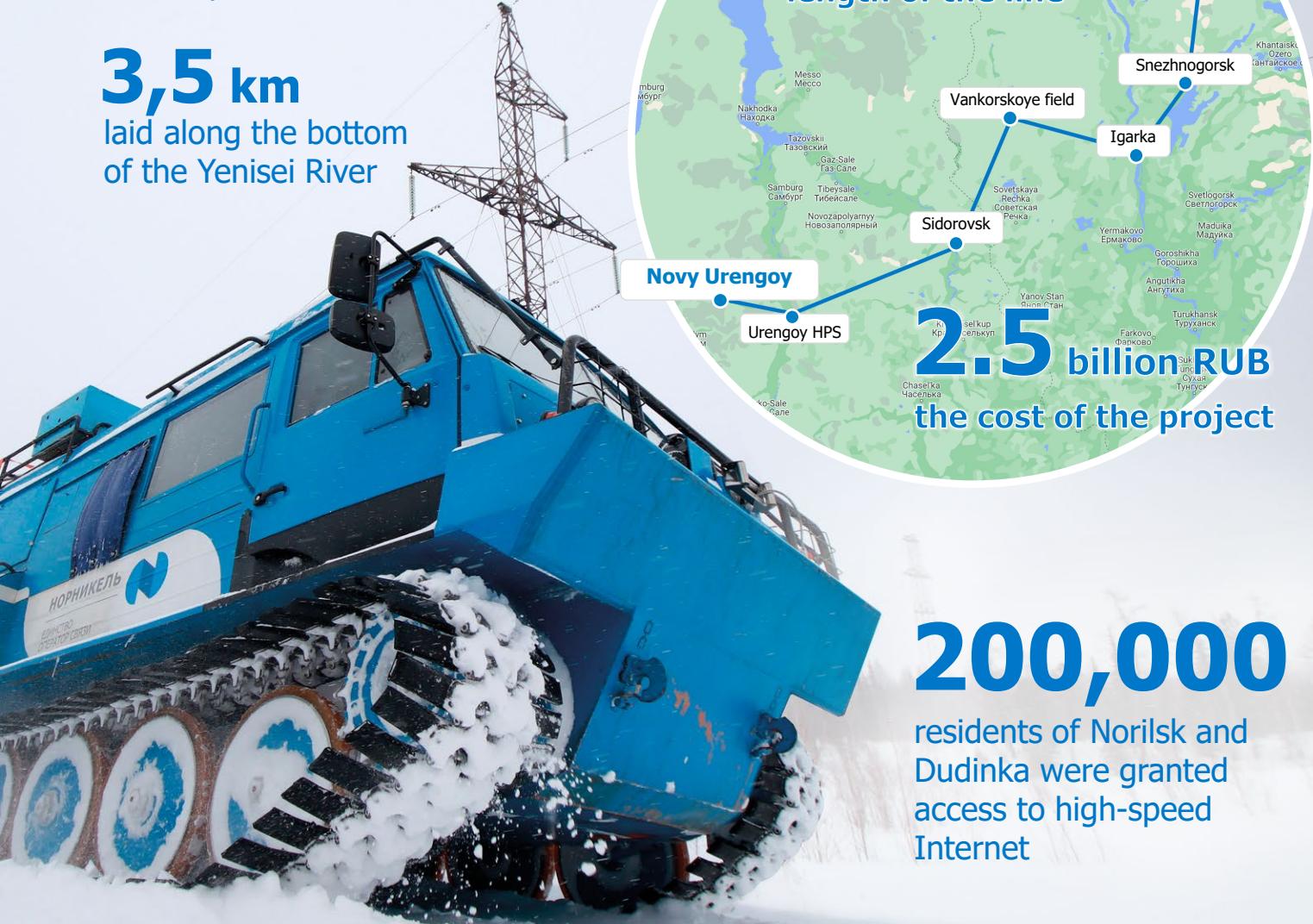
PARTNERSHIP IS A KEY ELEMENT OF NORNICKEL'S SUSTAINABLE BUSINESS MODEL.

Nornickel is actively introducing digital practices and online services to improve the efficiency of its production and management processes, develop related business areas, and improve the quality of life in the company's operating regions.

Such an ambitious goal can only be achieved through joint partnership efforts. The company has extensive experience in engaging with all stakeholders: the government, suppliers and buyers of our products, employees of our businesses, local communities and non-profit organizations.

190 km
laid on permafrost

3,5 km
laid along the bottom
of the Yenisei River



THE FIBRE OPTIC COMMUNICATION LINE

In 2017, Nornickel implemented a **unique project to lay a fibre-optic communication line**, eliminating the "digital divide" in the Arctic territory of Krasnoyarsk Territory. Nornickel laid almost 1,000 km of fibre optic cable across the tundra from Novy Urengoy to Norilsk, a practice never before seen in the world. The project was implemented entirely at the company's expense, at a cost of **2.5 billion RUB**.

180,000 residents of Norilsk and 20,000 residents of Dudinka were granted access to high-speed Internet. For the isolated Arctic territories, the Internet is a vital necessity: it is online education, telemedicine, a means of communication and management of life support and production processes.



SMART CITY

In 2019, the company initiated the **Smart City project** with a total implementation period until 2025. To date, the platform is used by residents of the northern cities of Norilsk and Monchegorsk. The Smart City portal offers online services for telemedicine and distance education, as well as news and an events poster. Services to support small and medium-sized businesses, city online voting, payment of utility bills, monitoring and control of public transport, additional education and professional development were launched in test mode.

Nornickel launched this public-private partnership project in 2019 and saw how timely it was a year later. The COVID-19 pandemic that started in 2020 showed how critical the availability of online services is for the functioning of remote northern cities and ensuring a comfortable life for the population.

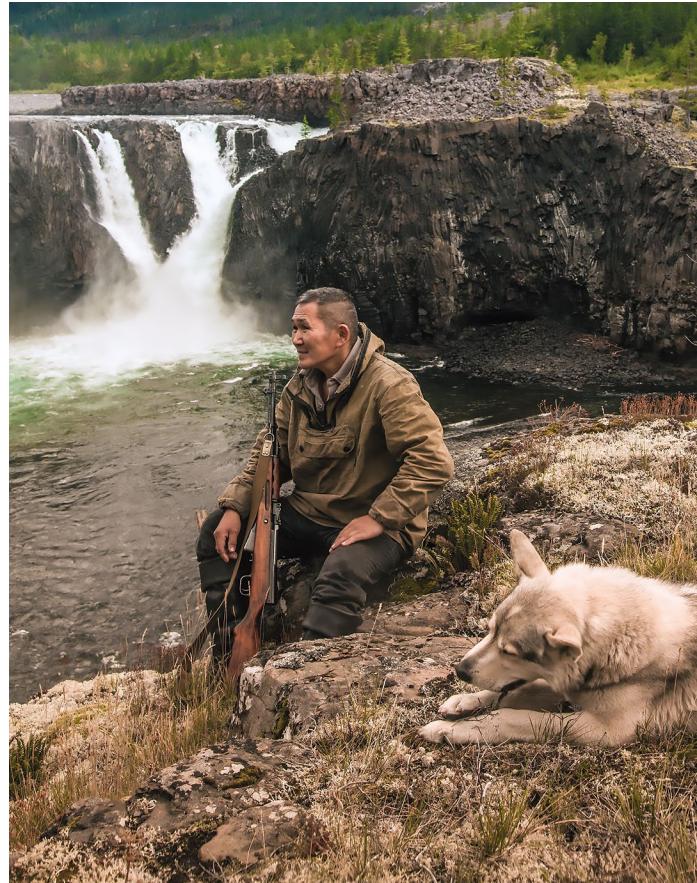


THE INDIGENOUS PEOPLES

In September 2022, Nornickel supported the development of mobile apps for offline translators from Russian into indigenous languages of the Taimyr Peninsula. Every indigenous Taimyr resident, even from the remotest corners of the tundra and far-flung fishing grounds, will be able to use the app, as working with it does not require a constant internet connection.

SINCE 2020, THE COMPANY HAS BEEN IMPLEMENTING A **FIVE-YEAR PROGRAMME TO SUPPORT INDIGENOUS PEOPLES OF TAIMYR**.

This programme is based entirely on proposals from community representatives. The programme, with a total funding of **\$26.5 million**, includes **more than 40 activities** and covers such areas as promotion of traditional economic activities, construction of housing in Taimyr villages, support for healthcare, education, culture, sports, and tourism. A Coordinating Council comprising representatives of **54 communities** was established to monitor and adjust the projects implemented at the initiative of indigenous peoples. This is half of the total number of indigenous communities registered in Taymir. This is the clearest and most visible example of a partnership aimed at achieving key sustainable development goals.





THE MEDICINE

7 medical centres in Norilsk and the Murmansk Region

The company is establishing its own network of modern medical centres as part of the Corporate Medicine programme. This programme involves opening 7 medical centres in Norilsk and the Murmansk Region.

In 2021, we opened a medical centre in Norilsk, providing more than 250 types of medical services. Medical care is available not only to the Company's employees, but also to all residents of the city.

At the same time, Nornickel is focusing on the automation of medical services and digitalisation of processes. For example, the company is now working to integrate its database with state healthcare institutions to create a unified digital patient record.



THE DIGITALISATION OF PRODUCTION

Nornickel is introducing smart manufacturing: artificial intelligence, Data Mining, VR, MR, underground drones and industrial exoskeletons.

Recently, the company launched drones with laser scanning function into commercial operation. On the surface, these drones are used to survey terrain, tailings ponds and raw material storage areas, and underground in difficult areas where personnel access is hazardous. Such technology is just beginning to be used around the world.

In addition, the Polar Division operates an automated geotechnical monitoring system. This is a high-tech project that makes it possible to predict and assess the condition of permafrost soils and the operational reliability of buildings and structures in harsh Arctic conditions.





THE DIGITAL INVESTMENT

This year, the Company is launching a unique corporate programme called "**Digital Investor**". By doing so, Nornickel expands the social support package for its employees using the latest digital solutions. All employees with one or more years of service will receive a digital financial asset, a "minetoken", free of charge, which is linked to Nornickel's share price. The more seniority, the more tokens.

"THE DIGITAL INVESTOR PROGRAMME"
WILL ENABLE EMPLOYEES TO BECOME
BENEFICIARIES OF THE BUSINESS.