



## Construction of a hydrometallurgical plant for the production of cathode nickel and cobalt

### Product

Annual capacity:

- Cathode nickel – 6,220 tonnes;
- Cathode cobalt – 250 tonnes;

### Project investment attractiveness :

Investments – US\$ 99,935 thousand

NPV – US\$ 53 773 thousand

IRR – 28.0%

Payback period – 5.0 years

### Project

The project provides for the construction of a hydrometallurgical plant for the production of cathode nickel and cobalt on the basis of the large Belogorskoye deposit. The company intends export up to 100% of its products, mainly to China.

### Company

The project initiator is Belogorskoye LLP, whose core activity is mining of other non-ferrous metal ores. The Initiator has license No. 326-EL dated 1 October 2019 for the exploration of solid minerals at the Belogorskoye deposit until 26 November 2025 (four blocks: M-44-91- (10v-5a-17, 18, 22, 23).

### Market

- Over the last 5 years, China has been the world's leader in nickel consumption. At the end of 2021, the volume reached 1,682 thousand tonnes, which is 59% of the world indicator. Nickel consumption in China continuously increased from 1.2 million tonnes in 2017 to 1.7 million tonnes in 2021 at a CAGR of 9.2%.
- The target market (China) is the world leader (about 50%) in stainless steel production consuming 1.2 million tonnes of nickel (2021) and production of batteries for electric vehicles, with nickel consumption of 277 thousand tonnes.
- Global cobalt consumption increased from 128 thousand tonnes in 2017 to 175 thousand tonnes in 2021, at a CAGR of 8.1%. Demand for cobalt is expected to grow further steadily due to the global transition to electric vehicles and is projected to approach 317 thousand tonnes in 2026.

### What is the project's attractiveness?

- **Subsoil use right for exploration.** The Initiator is a subsoil user with a license for the exploration of solid minerals (nickel and cobalt) at the Belogorskoye deposit No. 326-EL dated 1 October 2019.
- **Estimation of deposit reserves.** Belogorskoye is one of the richest nickel-cobalt deposits in Central Asia. The reserves were recognized in Kazakhstan's state balance sheet in 2019. The deposit has 48 thousand tonnes of approved nickel reserves in C2 category. The balance reserves and non-commercial reserves of the deposit exceed 80 thousand tonnes of nickel and 3 thousand tonnes of cobalt.
- **Geographic location.** The project has an advantageous location in terms of geographical proximity to China, the largest consumer of metals.

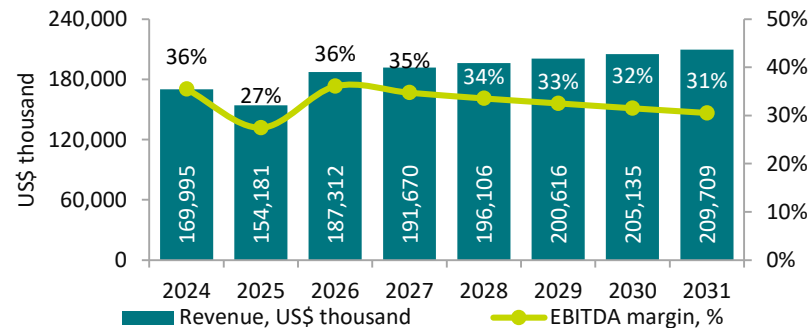
### Investment proposal

The Project requires investment of US\$ 99,935 thousand, of which:

- 70% (US\$ 69,954 thousand) – debt financing subject to collateral;
- 30% (US\$ 29,980 thousand) – investor participation.

The proposed financing structure and state support measures are indicative. The final financing structure and Project interests will be determined based on the results of negotiations with the investor.

### Project profitability



### Project location

