

Cobalt-nickel ores mining and processing at the Gornostayevskoye deposit

Description of the Project

This investment project provides for the creation in the East Kazakhstan region of a metallurgical complex for the processing of cobalt-nickel ores to produce nickel and cobalt

Project goals:

- creation of a metallurgical complex on the basis of an innovative renovation of an industrial enterprise, ensuring the efficient use of natural resources and improving the quality of products;
- production of high-quality products that meet international standards to enter the international market.

Production capacity:

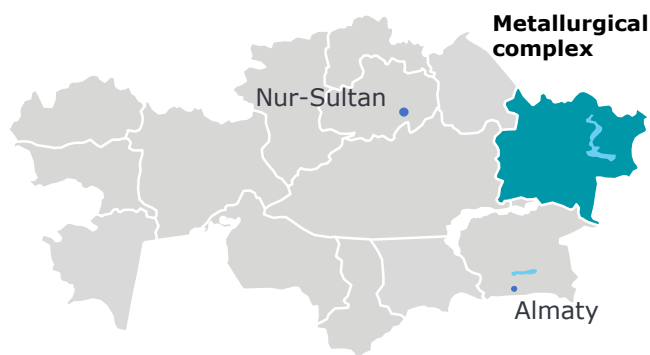
- nickel - 5,000 tonnes per year, with a subsequent increase to 10,000 tonnes per year;
- cobalt - 365 tonnes per year, with a subsequent increase to 730 tonnes per year.

Initiator: SAT & Company JSC

Key investment indicators of the Project

Indicator	Results
Investment amount, US\$ thous.	90,277
Project NPV, US\$ thous.	275,593
IRR, %	23.2%
EBITDA yield, %	39.72%
Payback period, years	6.3
Discounted payback period, years	8.1

Project location: East Kazakhstan Region, Beskaragai district



Market conditions:

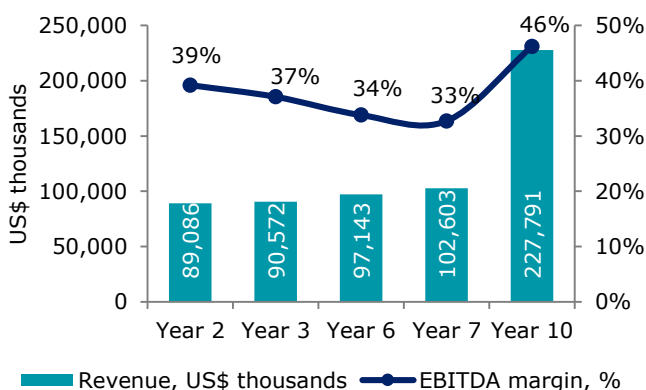
Rising prices for nickel and cobalt. Since the end of 2018, there has been a positive trend, largely related to the growth in demand for electric cars and their production, the average annual forecast growth rate of nickel prices from 2020 to 2023 is 2%.

Export potential. Reserves of Kazakhstan allow them to be exported in significant volumes to China, South Korea, Russia, Japan and Ukraine. The increase in demand for high-quality nickel is associated with ongoing raw material restructuring among steel producers in Europe. In addition, the global structural deficit in the nickel market will continue after 2020. This is due to the introduction by the Government of Indonesia of a ban on the export of nickel ore from January 2020 and the continued growth in demand for metal from manufacturers of batteries for the automotive industry.

Low competition in the domestic market.

Nickel-containing ore was not processed on an industrial scale in Kazakhstan, which makes it possible to completely replace imports and expand the country's export potential.

Project profitability



Field Reserves

Cut-off grade	Volume (thous. m ³)	Tonnage (kt)	Ni (%)	Metal Ni (kt)	Co (%)
Indicated					
1.3	67,851	88.2	0.57	503.4	0.039
Inferred					
	62,432	81.2	0.61	497.4	0.038