

Construction of a chemical complex for the production of sodium cyanide

Project overview:

This investment project provides for the construction of a complex for the production of sodium cyanide up to 30 thousand tonnes per year.

Commercial products:

Sodium cyanide

Raw materials:

Ammonia, methane, caustic soda and air

Technology:

Direct production method (more efficient method without the need for sulfuric acid, phosphoric acid, energy and water).

Initiator:

ScandGreen Energy

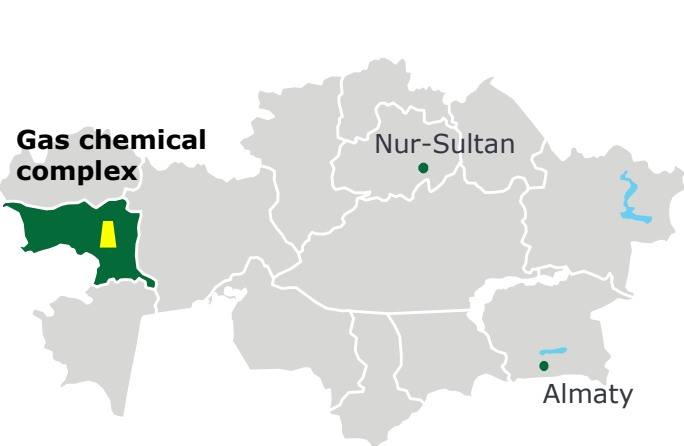
Project location: SEZ "NIPT", Atyrau Oblast

Consumer markets: domestic market, CIS countries, China

Key investment indicators

Indicator	Results
Investment, US\$ thousands	73,878
Project NPV, US\$ thousands	93,075
IRR, %	30.3%
EBITDA returns, %	44-54%
Payback period, amount of years from the start of production	5.1
Discounted payback period, amount of years from the start of production	6.4

Project location: SEZ "NIPT", Atyrau Oblast



Market assumptions:

Growing demand

According to the Statistics Committee of the Republic of Kazakhstan, over the past ten years, gold production in Kazakhstan has increased by almost 70%. Accordingly, manufacturers' demand for sodium cyanide has increased.

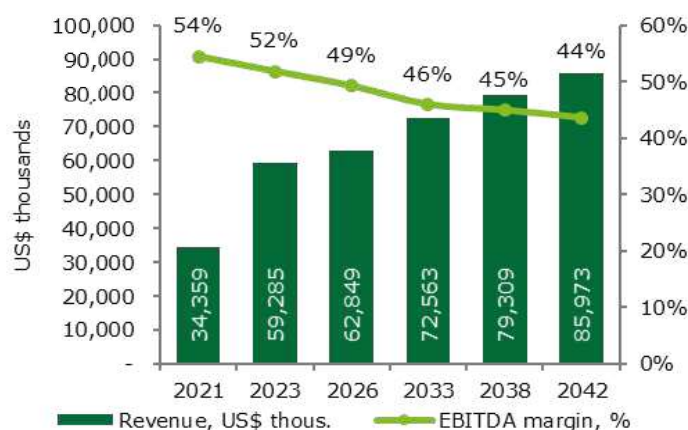
Import substitution

In 2018, imports of sodium cyanide to the republic amounted to 24,456 US\$ thousands (14 thousand tons). The growth in imports was due to an increase in gold mining and production in the country. The expected growth dynamics in the gold mining industry of the country necessitates the expansion of domestic production of sodium cyanide.

Export potential

In 2014-2018 the average annual growth rate of world gold production was equal to 2%. At the same time, the neighboring countries, such as China and Russia, are the largest producing countries of the precious metal, which account for about 15% and 8% of world production, respectively.

Project profitability



Technological flows of the Project

direct production method

