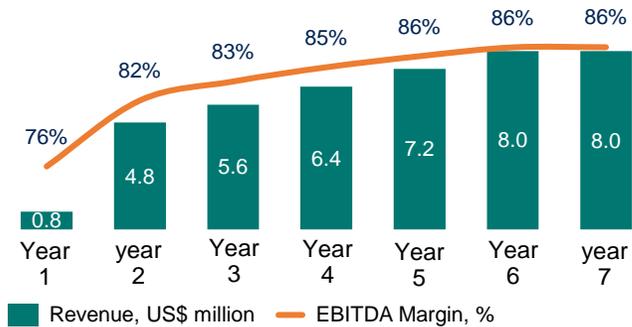


Production of carbon dioxide (CO2) from the flue gases of gas generators GPP in Zhanaozen



Project Profitability



Location



Product

Capacity (CO2)	32 thousand tons
global demand	210 million tons

Valuation Metrics

Required Investment	US\$ 17.8 million
Project NPV	US\$ 1.5 million
Project IRR (15)	18 %
Payback period	3.9 years



The Project

- The project involves the production of purified carbon dioxide from the flue gases of the gas generators of the GPPP in the city of Zhanaozen.
- The design capacity of the production will be up to 32,000 tons per year of purified CO2 of the highest grade, suitable for food needs and other purposes (welding, fire fighting, etc.).
- The project has a social, environmental, technological and economic focus. It is the first project in Kazakhstan aimed at reducing greenhouse gas emissions into the atmosphere through technology - carbon capture and use (CCU - carbon capture and utilization).



The Market

- According to the IEA, the carbon dioxide market size reached 230 million tons in 2021, with a growth rate of 6.50% in the forecast period (2023-2035).
- The largest consumer of CO2 is the fertilizer industry (about 120 million tons) is used in the production of urea, followed by the oil and gas industry, where it is consumed (70-80 million tons) for enhanced oil recovery. Other commercial uses include food and beverage production, metal fabrication, refrigeration, firefighting and greenhouse plant growth promotion (about 10 million tons).
- The largest importers of CO2 are (2021): Germany (204 thousand tons), Belgium (160 thousand tons), USA (140 thousand tons), Mexico (117 thousand tons), Great Britain (113 thousand tons), France (103 thousand tons).
- The largest exporters of CO2 are (2021): Trinidad and Tobago (12.8 million tons): USA (1.8 million tons), Hungary (120 thousand tons), Burkina Faso (113 thousand tons), Canada (107 thousand tons), Belgium (91 thousand tons).
- In Kazakhstan, according to official statistics, the volume of the carbon dioxide market in 2021 amounted to about 20 thousand tons, of which about 50% (10 thousand tons) is imported from Russia. It should be noted that experts believe that the actual potential market size is about 50-70 thousand tons, since official statistics do not fully show domestic consumption and production of carbon dioxide.



Team and the Company's financial state

- The initiator and leader of the project is Elekbaev Zhanybek Orynbasarovich - metallurgical engineer, technologist in the oil and gas industry. He has 26 years of experience in the oil and gas industry.
- The project implementation partners are OralMunaiProm LLP, which has experience in building and operating a gas piston power plant in Zhanaozen, and KNGP VORTEX GAS LLP, which has experience in building and operating an LNG plant at the Akshabulak field in the Kyzylorda region.



Investment Opportunity

- The company is looking for strategic partners and investors to implement the presented project. Detailed terms of partnership and attraction of investments will be discussed individually.