



## Construction of a refuse recycling complex

### Product

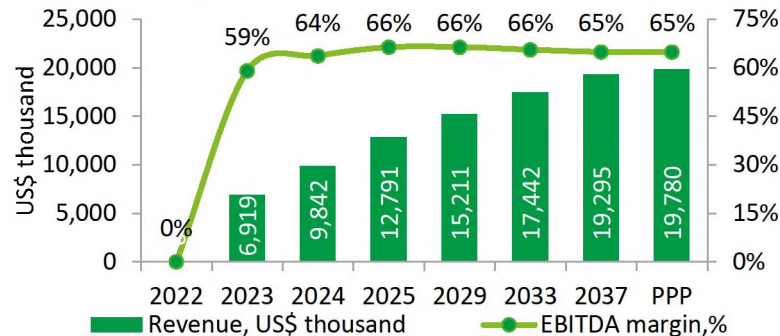
Annual capacity:

- 3,500 tonnes of technical carbon;
- 30,000 m<sup>3</sup> of foam glass granulate;
- 4,400 tonnes of greenhouse tomatoes and cucumbers.

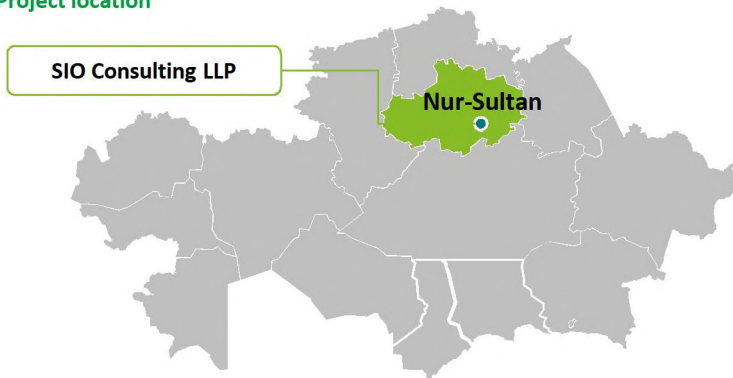
### Project investment attractiveness:

Investment – US\$ 34,000 thousand  
 NPV – US\$ 10,808 thousand  
 IRR – 19.4%  
 Payback period – 7.4 years

### Project profitability



### Project location



### Project

The aim of this investment project (the “Project”) is to build a refuse recycling production complex (“RRPC”) 15 km to the south-east of Nur-Sultan. Production is due to be commissioned in 2023 Q4, while planned production capacity should be reached in 2025. Company product will be sold domestically. The target groups for product sales are construction companies, tyre production and restoration companies; and wholesale and retail market networks.

### Company

Project initiator is SIO Consulting LLP, whose core activities are processing non-metallic waste.

### Market

- Between 2016 and 2020, Kazakhstan saw stable technical carbon import growth and, consequently, consumption, which practically doubled from 372 tonnes in 2016 to 690 tonnes in 2020, with CAGR at 16.7%. Import substitution potential is valued at 598 thousand USD.
- In 2020, the Kazakhstan construction sector was worth 11,914 million USD with CAGR for 2016-2020 of 6%. The import of foam glass granules and other foam glass materials into Kazakhstan grew nearly nine-fold from 47 tonnes in 2016 to 410 tonnes in 2020.

### What is the project’s attractiveness?

- **State support.** Under the Concept for Kazakhstan to transition to a “green” economy, waste recycling should reach 50% by 2050. For this reason, the government is providing all-round support to implement waste processing projects.
- **Stable raw materials base.** Nur-Sultan is a fast-growing city whose population produces over 350,000 tonnes of solid domestic waste per year, which is sufficient to ensure full RRPC capacity. The Nur-Sultan solid waste handling system lacks an advanced waste treatment process, meaning that 90% of combined solid domestic waste residue is buried at the city’s open waste disposal site. As at March 2020, Nur-Sultan has the only sorting station where waste accumulates at the only open waste landfill site.

### Investment proposal

The Project requires investment of 34,000 thousand USD, of which:

- 70% (23,800 thousand USD) - debt financing subject to collateral;
- from 30% (10,200 thousand USD) – Initiator 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.