

GEEP Project – White sugar production

Sugar production saves \$ 2.7M by reduced natural gas consumption

Modern boilers and new power supply will increase profitability

The enterprise is one of the largest sugar producers in the Caucasus region and the only sugar producer in Georgia. The sugar factory meets 60% of the local demand of local market and exports sugar to the other Caucasus Countries.

The project completely replaces the old steam and electricity generation on the site. New boilers supply steam at lower temperature and pressure to the process. Electricity will be taken directly from the local HV network, with a diesel engine generator backup. In addition improvements will be made to the steam condensate return circuit, and instrumentation and control systems.

This will lead to natural gas savings of almost \$2.7M per year, showing over 70% IRR on the investment, and significantly reducing the benchmarks of steam and electricity used per ton of sugar produced.



The Company

Main activities	White Sugar Production.
Region	Agara, Georgia

Project Goal and Main Investments

Project goals	<ul style="list-style-type: none"> On-site electricity generation process changed to supply from HV public network Expensive and inefficient on site production of superheated and high pressure steam eliminated Production costs reduced by natural gas savings Increased competitiveness of the final product
Main investments	<ul style="list-style-type: none"> Replacement of old oversized boilers Diversification of electricity supply sources New gen set (diesel) for full backup Improvements of condensate return circuit Introduction of instrumentation and control systems
Investment size	Approximately \$ 3.3M

Expected Results

Operational results	<ul style="list-style-type: none"> Decreased natural gas consumption of almost 8M m³ per year Specific electricity and steam consumption per ton of sugar reduced from 81 kWh and 1,7 t of steam to 65 kWh/t and 1,2 tons of steam respectively
Investment profitability	<ul style="list-style-type: none"> Annual savings of almost \$2.7M Payback period of 1.3 years Over 70% IRR on the investment

For more information on how your company can receive financing for energy efficiency projects, visit www.energocredit.ge, or call +995 32 224962.

The GEEP assignment is funded by EBRD through grant funds by: United Kingdom Sustainable Energy Initiatives Funds, Canadian International Development Agency, EBRD-Special Shareholders Fund and Early Transition Countries Funds