

Energocredit Project – Energy Savings Funds Upgrade of Old Equipment in Mine

The applicant is a mining company, which is a major exporter and leading contributor to Georgia’s balance of payments. It was looking to explore the potential to finance an upgrade of equipment - some of which dates back to the 1970s - through energy savings. The Energocredit engineers carried out a detailed audit of the requested facilities and recommended the following measures:

1. Replacing the existing dumpers with five new models. The new dumpers would cost USD 1.850,000, but would reduce diesel consumption by 31% and maintenance costs by 44% to yield an annual saving of USD 420,000 and pay back in 4.4 years.
2. Improving and modifying the stone crushing process. Currently stones are broken down to 25mm before being crushed to powder. By introducing an additional -4th- crushing stage the stones could be reduced to 10-12 mm before being pulverised. The fourth stage crushers would cost USD 2 million, but would reduce energy consumed by 18-20% and maintenance costs by a further 18%. Costs would be reduced by USD 700,000 and pay back in just 2.9 years.
3. Replacing the old, Soviet-style, oversized pumps. The four new pumps would cost USD 250,000, but would reduce energy consumption by 44% or 1,160 MWh/year. At present rates that would save USD 54,520 per annum and pay back in 4.5 years.



The Company

Main activities	Copper and gold mining
Region	Georgia

Project Goal and Main Investments

Project goals	<ul style="list-style-type: none"> ▪ Reducing fuel use ▪ Reducing operations and maintenance costs
Main investments	<ul style="list-style-type: none"> ▪ Replacing dumpers ▪ Replacing old, oversized pumps ▪ Adding a fourth stage machine to the stone crushing process
Investment size	USD 4.1 M

Expected Results

Operational results	<ul style="list-style-type: none"> ▪ Lower electrical energy consumption ▪ Reduced O&M costs
Investment profitability	<ul style="list-style-type: none"> ▪ Annual energy savings of around 420,000 USD ▪ Annual savings from lower maintenance 671,000 USD ▪ Payback period of 3.2 years ▪ Over 29% IRR

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

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