DELINEERING PROFITABLE ENERGY EFFICIENCY INVESTMENTS IN INDUSTRY

Nigel Jollands, Senior Policy Manager
Energy Efficiency and Climate Change

IEA Side Event - Energy Efficient Prosperity
1 December 2015
Paris
EBRD investments - making businesses more profitable, sustainable and competitive

Ivan Stojakovic
Manager, Woodmaster

Video
Energy efficiency in the transport sector
Rail transport in Kazakhstan

CLIENT
National Company Kazakhstan Temir Zholy (KTZ) manages railway infrastructure and operates freight and passenger train services.

PROJECT
Finance for KTZ’s energy efficiency programme, including installation of energy efficient lighting; introduction of heating solutions such as solar collectors, heat pumps; and upgrade of hot water generators.

FINANCIAL STRUCTURE
EBRD loan EUR 28.6 million
of which SEI EUR 28.6 million
CTF concessional loan EUR 0.5 million

TECHNICAL ASSISTANCE
EUR 99,000 from the Shareholder Special Fund and the Netherlands for:
• Project design, management and monitoring;
• Capacity building in energy management and facilitation of ISO 50001 adoption;
• Review of ESCO mechanisms for financing energy efficiency investments

EXPECTED IMPACT
• Electricity savings: over 60,000 MWh/year
• Thermal energy savings: around 3,800 MW/year
• Emission reductions: 83,000 tCO₂/year
• Cost savings: over EUR 3.5 million/year
• Project IRR: > 15%
Energy efficiency in agribusiness
Energy efficiency for a sugar producer in Ukraine

CLIENT
Astarta, the largest sugar producer in Ukraine.

PROJECT
Funds from four EBRD loans between 2008 and 2012 were used for energy efficiency improvements, company expansion, financial support during the economic downturn and a biogas plant.

FINANCIAL STRUCTURE
EBRD loans EUR 47.2 million
of which SEI EUR 27.8 million

TECHNICAL ASSISTANCE
€80,000 for 3 energy audits to assist project preparation by identifying best available technology for:
• upgrading process heat exchangers
• upgrading filter press system
• introducing process heat recovery system

EXPECTED IMPACT
• Energy savings: 34,000 toe/year
• Emission reductions: 60,000 tCO₂/year
• The majority of energy efficiency investments had IRRs of more than 20%

Carbon Market
• EBRD facilitated a transaction in carbon credits under the Kyoto Protocol’s Joint-Implementation mechanism.
• The MRV under this JI mechanism allowed for a robust assessment of the emission reduction impact.
Industrial energy efficiency
Energy and material efficiency in glass production

CLIENT
Şişecam, one of the largest glass producers globally and a long-standing client of the Bank.

PROJECT
• **Turkish plant**: finance for various EE measures, including waste heat recovery and energy management systems.
• **Bulgaria plant**: capacity expansion and EE measures such as oxy-fuelling and waste heat recovery systems.
• **Russian plant**: construction of a greenfield plant for flat glass products in Tatarstan.

FINANCIAL STRUCTURE
EBRD loans EUR 90 million
of which SEI EUR 90 million
Total project value EUR 290 million

EXPECTED IMPACT
• Emission reductions: >400,000 tCO₂e/year
• Working towards ISO 50001 certification for Energy Management Systems
• Enhanced reporting under the Carbon Disclosure Project and the Global Reporting Initiative

TECHNICAL ASSISTANCE
In 2012 five plants were audited with more than EUR 112,000 of donor support from Italy and Spain.
Where the EBRD invests

- Promotes transition to market economies in 34 countries from central Europe to central Asia
- Since 2011, the Bank has expanded its operations to include Egypt, Morocco, Tunisia, Jordan and Cyprus
- Owned by 65 countries and two inter-governmental institutions, with a capital base of €30 billion
- In 2013 committed €8.5 billion through 392 financing operations
- Net profit of €1 billion achieved in 2013

For more information, please contact:
Dr Nigel Jollands
jollandn@ebrd.com