

Russia Sustainable Energy Finance Program

Russia consumes 10 times more energy per unit of GDP than the U.K. and six times more than Canada. Inefficient use of energy is an impediment to competitiveness both of individual companies and the national economy.

Despite the tremendous potential, a lack of experience both on behalf of financial institutions and enterprises has limited investment in energy efficiency in Russia.

In order to overcome these barriers and encourage investment in energy efficiency projects, IFC designed a program combining five year credit lines to banks and leasing companies with a technical assistance program to support and catalyze those investments. Funds will be used exclusively for financing projects in the field of sustainable energy, including energy efficiency and renewables. The Program, operating in Moscow, St.Petersburg, Ekaterinburg, Rostov-on-Don and Nizhny-Novgorod, aims to disburse \$20m during its first year and a total of \$100m within its first 3 years.

The first financial institution to partner with IFC in the Program was Center-Invest Bank of Rostov-on-Don. According to Vasily Vysokov, Center-Invest Chairman: "As energy prices in Russia approach world levels, energy efficiency projects become more attractive for companies and hence interesting for banks".

In order to support Center-Invest in making energy efficiency loans, the IFC team provided training on energy efficiency finance to bank loan officers and branch managers at. To ensure seamless interaction with the client bank, the Program deployed a full-time energy efficiency finance specialist permanently based in Rostov.

The first \$4 million loan for energy efficiency was disbursed in May 2006. Already within a month, Center-Invest had loaned on all 4 million to finance six projects ranging from modernization of chocolate production equipment to installing a boiler fueled by sunflower shells. This decision was catalyzed by IFC technical assistance effort.

Participation in the Program has allowed Center-Invest Bank to develop expertise in energy efficiency lending, differentiating itself from competitors and having positive effect on the regional economy as it allows companies-end-users to tap an important reserve – reduced energy costs.

Center-Invest leadership in this area is an example for other financial institutions to follow, helping to develop a sustainable market for financing energy efficiency projects in Russia.

The Program team is also active in other regions. By actively promoting energy efficiency investment and working with partner financial institutions the Program has developed a pipeline of proposed projects in excess of \$90m.

Proposals include construction of a new refrigerator for a meat processing plant, construction of a boiler for a laundry company, replacement of a central heating system with local area infra-red heaters for a shipbuilding yard, modernization of bakery line, modernization of production equipment for a chemical plant, etc.

Two projects described below are illustrative of how projects are financed within the framework of the Program.

A new press-cutting machine for a packaging producer reduces energy use, cuts labor costs and increase productivity.

Bumaga-Yug was founded by Alexey Shadrinov, a former employee of Tetra-Pack. He began with a small park of second-hand equipment that grew to 20 printing and packaging machines.

Knowing very well the limitations and potential of every piece of equipment Mr. Shadrinov is continuously looking for ways to improve resource utilization. Expecting order growth and having analyzed the capacity of existing equipment he decided to acquire a new automated cutting press produced by Swiss manufacturer Bobst.

The new machine replaces several old ones and frees up six employees for other tasks. The machine is also significantly more energy efficient. Depending on the type of product, (e.g. boxes for detergent or packaging for pizza) the energy saving per unit of production is from 40% to 50%.

The new press also improves quality and increases flexibility in switching between types of products.

“This is a good investment: in addition to increased productivity and improved product quality we get an economic benefit from saving energy” – commented Mr. Shadrinov.

The purchase of the machine was financed by Center-Invest via a 5-year loan for US\$288,900.

IFC Program Helps Sunflower Oil Producer Turn Waste into Energy

Yuri Kovalev began his entrepreneurial career with barter deals exchanging gasoline and lubricants for agricultural produce. Today his company Opt-Trade is one of 10 largest grain traders in Russia. Opt-Trade is also involved in trade in bottled vegetable oil. Expanding this business line the Company is investing in a new plant for production of vegetable oil.

The plant is expected to generate more than 2 thousand tons of sunflower husk waste a month. Disposal of such amount of husks is a big problem: it would have cost the company \$710,000 per year to have the city utilities to dispose of the husks. Another problem arises from high cost of energy needed for production process. It would take \$390,000 in cost of gas to meet this demand in energy.

Working with IFC and Center-Invest specialists the Company has found solution to both problems: sunflower husks will fuel the boilers instead of gas. This will have double benefit: need in large quantities of gas is eliminated and problem of disposal of the husks is solved. Plans for future also include installation of a steam turbine, which would allow to generate enough electric energy to cover the Company own needs and to sell excess to neighboring businesses.

Acquisition of special boilers, fueled by husks, is financed by a loan from Center-Invest Bank. According to calculations conducted by the Company with help of IFC specialists, annual savings due to utilization of biofuel instead of gas will total more than \$1 million per year. Investments of \$1.3 million will pay back in approximately one year. The project implementation would also lead to reduction of carbon dioxide emissions of 10,600 tons annually.