Bulgaria’s Energy Efficiency and Renewable Energy Source Fund
Considering its lack of local energy resources and high reliance on imported oil and gas, the Republic of Bulgaria has many reasons to use energy efficiently. Over the past decade, the country has improved its energy intensity, which in 2005 ranked among the highest in the European Union. Investments in energy efficiency and renewable energy have encouraged private capital and achieved important improvements in energy use. As well, Bulgaria has developed a market to support these actions.

Established by the Energy Efficiency Act of 2004, the Bulgarian Energy Efficiency Fund supported energy efficiency projects implemented by private enterprises, municipalities and households. From 2006 to 2011, the Bulgarian Energy Efficiency Fund financed more than 100 energy efficiency projects. In 2011, with the passage of an amendment to the Energy Efficiency Act, renewable energy deployment was added as a core objective and the fund was rebranded as the Energy Efficiency and Renewable Energy Source Fund (EERSF).

**PROFIT-ORIENTED FOR PUBLIC GOOD**

Although its objectives are fully endorsed by the Bulgarian government, the EERSF is an independent legal entity which operates as a public-private partnership. In support of the country’s environmental goals, the fund serves three major roles:

• Consulting firm
• Lending institution
• Credit guarantee facility

In its capacity as a consulting firm, the fund provides technical assistance to Bulgarian enterprises, municipalities, and private individuals for developing energy efficiency investment projects. As a financial institution, it makes capital available to project developers either directly through loans, or indirectly through credit guarantees that mitigate risk to commercial lenders. The fund is operated with a profit-oriented outlook to promote investments and ensure sustainable operation into the future.
EERSF loans carry an annual interest rate between 5 and 10 percent depending on the status of the borrower, which is either a municipality, or a private or corporate client. Lower interest rates are offered to municipalities due to their reduced risk of defaulting. In loans that are provided by stand-alone EERSF financing, project developers are required to make a minimum equity contribution of at least 25 percent of the project’s total cost. Where loans are provided through co-financing with a commercial institution, project developers are only required to contribute 10 percent of the project’s costs through equity. The reduced equity investment required in the co-financing option reflects the additional vetting that a loan application will undergo by the commercial partner. Loans are offered with a repayment period of up to five years.8

EERSF uses two basic types of credit guarantees: partial credit guarantees and portfolio guarantees. With a partial credit guarantee, EERSF promises to repay investors a portion of their outstanding loans if there is a default. These guarantees are offered in two varieties, each with a maximum coverage up to approximately USD 53,000. The first option covers up to 80 percent of a project’s total cost on a “pari passu” basis, which gives equal seniority and repayment rights to each investor involved in the loan. The second option covers up to 50 percent of a project’s total cost on a first-loss basis after the bank creditor. In this option, the financial institution making the loan is not reimbursed for any losses until the defaulted amount reaches 50 percent of the total loan value, at which point the partial credit guarantee covers any additional losses. For both types of partial credit guarantees, an annual fee between 0.5 and 2.0 percent of the project cost is levied in return for EERSF’s guarantor services.

Portfolio guarantees are provided for energy service companies as well as residential clients. In the former case, the fund will reimburse an energy service company for up to 5 percent of defaults that occur in its portfolio of projects, creating a buffer to reduce shocks from late payments. This allows the energy service company to acquire its own loans at a lower interest rate. For residential portfolio guarantees, the fund provides a mechanism for buildings containing multiple residential units to upgrade in a way that will share costs among the units. In these arrangements, a
project developer will implement the upgrades and each unit will make payments proportional to the benefits they receive. The EERSF will cover up to 5 percent of defaults to the project developer for failed or late payments from the portfolio of residents.⁷

Four main sources provided initial capitalization of the fund, which totaled approximately USD 15 million as grants and donations:⁸,⁹

- Global Environment Facility - USD 10 million
- Government of Austria - USD 2.1 million
- Government of Bulgaria - USD 2.1 million
- Private donors and contributors (DZI Bank, “Lukoil” AD, Brunata Bulgaria, Enemona AD)

Members of all the above entities comprise the General Donor’s Assembly, which formulates regulations concerning the operation, organization, and overall activity of the fund. General operations are administered by the Management Board, which consists of nine members—five of whom are elected by the Donor’s Assembly and the remaining four represent Bulgarian governmental agencies. Major activities of the Management Board include determining a strategy for the fund’s activities, assessing and selecting projects for finance, approving the administrative budget and expenditures, and a number of other activities related to strategic management and budgeting issues. For day-to-day operations and project implementations, the fund has tapped a tripartite consortium to act as the fund manager, which is composed of the Canadian energy efficiency consultancy firm Econoler International, the Bulgarian non-profit organization EnEffect, and the non-banking financial institution Elana Holding PLC.¹⁰

To mitigate the risk of default on its loans, the EERSF focuses on commercially viable projects that use well-proven technologies, and applicants must undergo detailed energy audits before their projects are considered for funding. The EERSF is part of a broader strategy by the government of Bulgaria to align its policies with EU directives and improve the energy intensity of the country. This strategy includes other initiatives such as minimum energy efficiency standards, additional credit lines for environmental upgrades in residential and industrial sectors, a rural development program, and a preferential tax treatment for energy efficiency and renewable energy use.¹²

**FINANCING EARN RESULTS**

In 2011, the EERSF leveraged USD 4.4 million to support 25 projects with a total value of USD 7 million.¹² The expected annual energy savings from all projects supported by the EERSF is estimated to be about 13,500 megawatt-hours per year. As of June 2012, in total the fund had issued approximately USD 23.6 million in loans to 126 projects, with total investment in these projects at approximately USD 35 million.¹³ The typical value of these loans was between USD 250,000 and USD 500,000, with an average payback period under five years.¹⁴ By March 2010, the EERSF had reached a sustainable status with annual income from project operations 33 percent higher than annual operating costs.¹⁵

The EERF’s success as a financing mechanism can be attributed to the flexibility of the financial products that it offers, which allows the fund to support projects with varying circumstances and financing needs. As a one-stop-shop for specialized technical assistance on a range of project types (thermal insulation, fuel switching, efficient heating, ventilation, and air conditioning systems, etc.), the EERSF understands the financing demands for these projects and its consulting and technical services have more influence when compared to financing schemes that
lack flexibility. While the EERSF was successful in providing much-needed finance to support energy efficiency and renewable energy projects in Bulgaria (including through portfolio guarantees to ESCOs) it still faces challenges in fulfilling its purpose. The partial credit guarantees offered by the fund have struggled to fully engage local banks to initiate energy efficiency and renewable energy lending. The local banks have been resistant to lending on the basis of expected efficiency savings, which is less familiar than asset-based lending.

As Bulgaria imports 88 percent of its natural gas (all by way of a pipeline from Russia) and 100 percent of its crude oil, improving its energy efficiency is an effective strategy to enhance the nation’s energy security, achieve its emissions reductions targets, and attract much needed private investment to the country. In 2007, the World Bank praised the EERSF as “the institution with ‘best practice’ in financing EE projects.”

REFERENCES


Note: All currency conversions from BGN and EUR to USD were calculated using the exchange rate in January 2010 (1 USD = 1.4 BGN; 1 USD=0.7 EUR).


5 Ibid.


7 Ibid.

8 Ibid.


12 Bulgarian Energy Efficiency Fund, op cit.


14 Ibid.

15 Ibid.


Figure References

Figure 1: Bulgaria EERSF “One-Stop-Shop”
Nally, Katy. Center for Clean Air Policy.