

Model 19

Bulgarian Energy Efficiency and Renewable Sources Fund - EERSF

Bulgaria

OWNERSHIP	PUBLIC
Program authority	Government of Bulgaria (Ministry of Economy and Energy)
Program Delivery unit	EEE Consortium "Econoler-EnEffect-Elana"
Implementation Model	N/A
Operating Services	Marketer Facilitator Assessor Financier
Projects Financed	Energy Efficiency Renewable Energy Resources
Ambition/targets	To build a sustainable market-based capacity for developing and financing EE projects on commercial terms, demonstrate financial profitability of investments in the EE sector and promote the development of a well-functioning EE market in Bulgaria.
Beneficiaries	Project developers, ESCOs, Project contractors, housing corporations, businesses, public entities e.g. municipalities, local authorities, hospitals and universities, residents
Funding Vehicle	Financial Institutions Investment Funds Project/Property owners ESCOs
Financial Instruments	Loans Equity Guarantees

Summary

The 'Energy Efficiency and Renewable Sources Fund' (EERSF), formerly known as the 'Bulgarian Energy Efficiency Fund' (BEEF), is a revolving energy efficiency fund under the form of an independent legal entity (it operates as a public private partnership) established in 2005. It got initial funding from the Global Environment Fund (GEF) through the World Bank's International Bank of Reconstruction and Development (IBRD), from the Government of Bulgaria, the Government of Austria and from the Bulgarian private sector. It aims at providing revolving project finance and

technical assistance for public (municipalities, universities, hospitals) and private sector (businesses and residential) energy efficiency projects in Bulgaria. Since 2011 the Fund also provides funding to demand-side off-grid RES production projects.

The EERSF was part of a broader strategy by the government of Bulgaria to align its policies with EU directives, to enable the necessary institutional development and to reduce the energy intensity of the country which at that time was twice the average value of the European Union and was ranking among the highest in Europe.

Though Bulgaria's low energy efficiency situation, both in terms of consumption and of production, offered huge potential for energy savings in a cost-effective way, estimated to be about 40% for the existing building stock, 30% for the district heating sector and 30% for the industry, there was an almost non-existing or very deficient energy efficiency finance market obstructing the access to commercial financing of energy efficiency investments.

This situation prompted the Bulgarian government to include in its new Energy Efficiency Act (EEA) - adopted by the Bulgarian Parliament in February 2004- the creation of the Bulgaria Energy Efficiency Fund. This dedicated energy efficiency fund had the mission to build a sustainable market-based capacity for developing and financing EE projects on commercial terms, demonstrate financial profitability of investments in the energy efficiency sector and promote the development of a well-functioning energy efficiency market.

With this Fund the Bulgarian Government had also the ambition of reducing greenhouse gas (GHG) emissions and of contributing to its intention of halving the primary energy intensity of the country by 2020 compared to 2005 levels without reliance on continuing public funding. By the end of 2013 its projects expected to have total energy savings of over 95,000 MWH/year and reduced GHG emissions by 75 KT/year.

Though the Fund does not distribute profits and is fully endorsed by the Bulgarian Government it is operated as a commercially oriented public-private finance facility and it serves three major roles: it is a lending institution, a credit guarantee facility and at the same time a technical assistance provider. It provides technical assistance to Bulgarian enterprises, municipalities and residents in developing energy efficiency and RES projects and then provides their financing or co-financing or acts as guarantor towards other financing institutions or commercial lenders.

From 2005 through 2008 EERSF received funding from its grantors and donors of almost 21,9M BGN (Bulgarian Lev) which corresponds to an approximate amount of 11,2M €. Over 70% of that amount has been granted by the Global Environment Fund (GEF). Funds were used to provide first investment capital for EERSF, to cover start-up and operating costs and energy efficiency capacity building until the Fund reached financial self-sufficiency.

The funding has been used to create a revolving fund which by the end of 2014 has contributed 45,8 BGN (23,4 M €) to 170 projects with a total value of over 67,6M BGN (34,6M €). It has gained international recognition for its innovative approach to EE financing and consulting.

How does it work?

EERSF operates as an independent legal entity though manages and allocates its financial resources to energy efficiency projects in line with the Bulgarian National Energy Strategy, the Energy Efficiency Act (EEA), the Energy from Renewable Resources Act (ERSA), current legislation and agreements with the principal donors.

- Four main sources or donors provided capitalisation to the EEFRS during the period 2004 through 2008:
 - Global Environmental Facility (World bank): 15,5M BGN or approximately 8,0M €
 - Government of Bulgaria: 3 million BGN or approximately 1,5M €
 - Government of Austria: approximately 3M BGN or 1,5M €
 - Private donors and contributors: 0,4M BGN or 0,2M €

The initial funds were used to provide investment capital for the Fund, to cover initial setup and operating expenses until the EERSF reached financial self-sufficiency and to partially cover for capacity building expenses such as project development and financial packaging.

In 2013 the Fund has been secured with a 5M € grant from the European Bank for Reconstruction and Development (EBRD) and the Bulgarian Ministry of Economy and Energy to finance further partial credit guarantees for ESCO projects in public buildings and in 2014 another 5M € have been secured from KIDSF (Kozloduy International Decommissioning Support Fund) earmarked to assist municipalities in reducing the energy footprint of public buildings.

- EEFRS' General Donor Assembly, which is represented by the main sources of financing, formulates regulations related to the operation, organisation and management of the Fund, the Fund's assets and overall activity of the Fund. It meets in principle once per two years.
- The Management Board is the managing body of the Fund. It consists of 9 members, 5 elected by the General Donor's Assembly and 4 represented by Bulgarian government agencies. It is responsible for the overall strategic management of EERSF in compliance with its established objectives and principles of operations. It approves, among other things, the Fund's financing and credit guarantee policy, the Fund's strategy, the criteria for assessment and selection of the projects, the financing of the projects and the contracts related to the credit guarantees. It also elects and releases the Executive Director (leads the Fund manager). The Management Board meets once per month.
- Fund Manager *EEE Consortium*, a Canadian-Bulgarian tri partite consortium comprised of an international EE consulting firm and two local Bulgarian businesses elected through international procurement, is the executive body of the Fund. It is responsible for the entire day-to-day operation of EERSF and for ensuring the successful implementation of the project cycles.

- EERSF supports only projects directly related to:
 - Improved energy efficiency in industrial processes
 - Rehabilitation of buildings in all sectors including industrial, commercial, municipal and residential
 - Improvements to heat sources and distribution systems
 - Rehabilitation of municipal facilities such as street lighting
 - Other energy end-use applications including energy management control systems, power factor correction measures, air compressors and fuel switching
 - demand side off –grid RES small projects and measures

- As a lender, the EERSF provides loans at interest rates of between 4,5% to 9% for up to 5 years. A minimum equity contribution of between 10 and 25% is required from project developers, depending on the proposed financing type i.e.: minimum 10% equity requirement applies to co-financing projects (EERSF and commercial bank lending), the maximum 25% equity requirement applies to projects seeking EERSF-only financing. EERSF focuses on commercially viable projects that use well-proven technologies with maximum payback periods of 5 years, and applicants must undergo detailed energy audits before their projects are considered for funding.

- EERSF provides partial credit guarantees (PCGs) which can cover either 50% (first loss basis after the bank-creditor) or 80% (*pari-passu* basis) of a project's total credit value. Individual guarantees are normally capped at 400K €. The credit guarantees provided by EERSF are recognised as first rate collateral equivalent to bank guarantees.

- The EERSF has also developed two types of portfolio guarantee products:
 - Portfolio guarantee for energy performance contracting: Designed for energy service companies (ESCOs) and derived from Energy Performance Contracting (EPC) this guarantee covers up to 5% of potential delayed payments of the covered portfolio. The guarantee could allow ESCOs to negotiate lower interest rates from commercial lenders.
 - Residential portfolio guarantees: Designed for condominium buildings or a portfolio of condominiums this guarantee covers the first 5% of losses (defaults) within the condominium building or portfolio of condominiums.

- EERSF also offers targeted technical assistance in support of ESCOs in preparing projects and programs for investment and partner financial institution promotion and delivery of energy efficiency projects with a view to stimulate deal flow and uptake of financing offered.

- EEE Consortium and the candidate beneficiaries follow a fixed credit application process including 8 steps:
 - Step 1: Project identification (results of detailed energy audit (DEA) or energy-saving measures implementation proposal)
 - Step 2: Initial project screening
 - Step 3: Completion of the Initial Project Proposal (IPP)

- Step 4: Submission of IPP and accompanying documents to Fund
- Step 5: Assistance in project design and completion of related documents
- Step 6: Project appraisal and creditworthiness assessment
- Step 7: Formal decision on approval for financing
- Step 8: Preparation and signing of the contract for financing and disbursement of funds

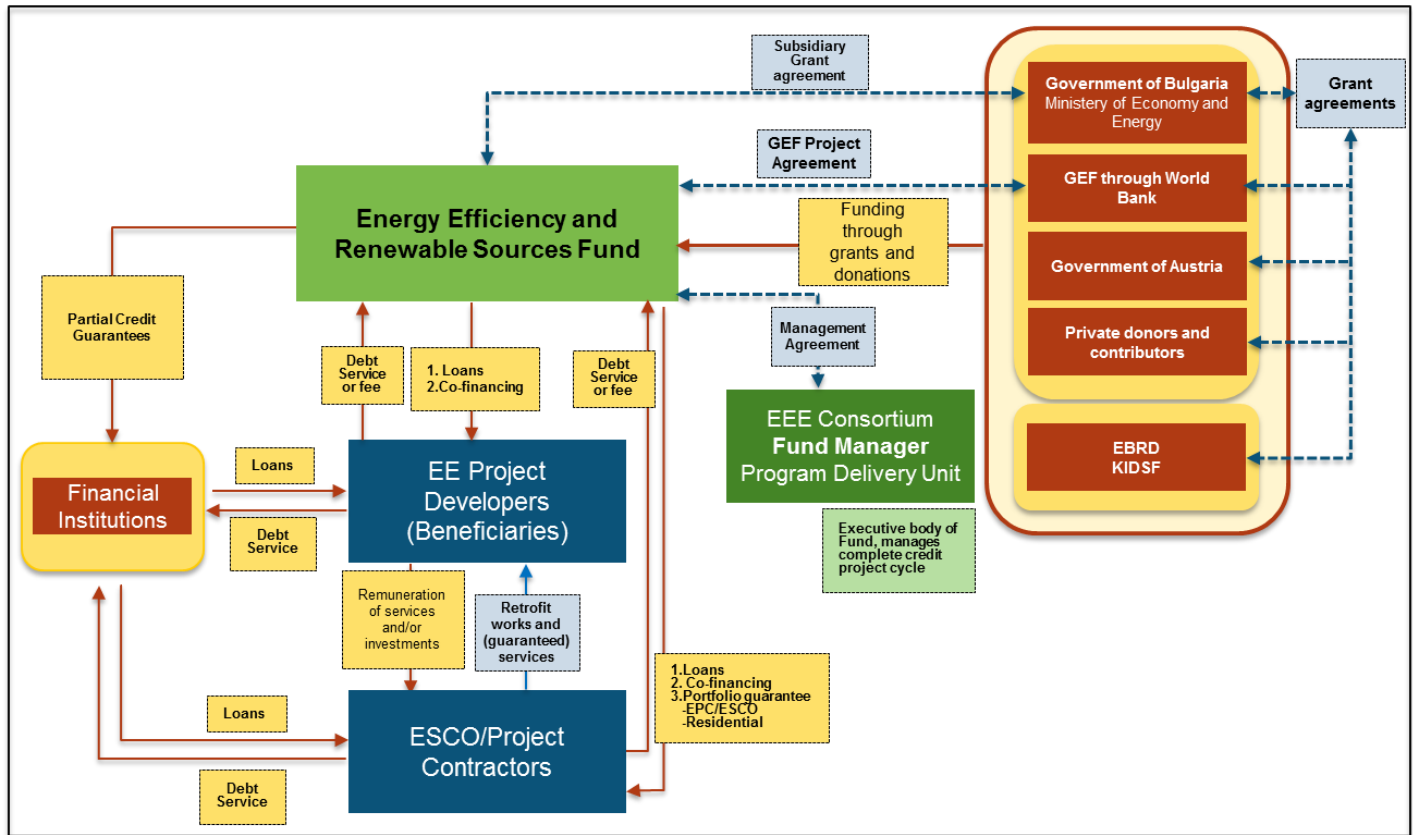
EEFRS proposes credit products at commercial-market interest rates. The fact that it does not distribute profits allows it to be very competitive and offer attractive financing conditions to project developers.

It does apply very low credit fees or not at all, it reimburses administration fees when the credit agreement is signed or when the project is disapproved by EERSF and it does not apply charges for early repayment of the loans. It also lowered its guarantee fees to 0,1% to keep its position in the guarantee market.

At the end of 2014 Municipalities account for 53% of the total loan portfolio in terms of EEFRS funding, 29% were corporates/enterprises and ESCOs and the remainder 19% included mainly universities and hospitals.

The amounts reimbursed by the beneficiaries are being used by EEFRS to fund other energy efficiency projects. Since 2011, all its funds raised through the initial capitalization have been fully invested in projects. As EEFRS is a revolving type fund it has been only relying on revenues from the repayment of the loans.

Fig 1. Operational and funding model of Energy Efficiency and Renewable Sources Fund - EERSF



The program delivery unit

EEE Consortium, in its capacity as Fund Manager of EERSF, is the programme delivery unit of the Bulgarian Government energy efficiency fund programme. It acts as marketer, facilitator, assessor and financier. It operates in accordance with the Fund's investment strategy and its approved regulations. The Fund Manager has been appointed for a period of 5 years.

Its main objective is to operate the Fund as a profit-oriented business in a way that promotes EE investments and helps a sustainable EE market to develop in Bulgaria. The Fund Manager selects, develops and applies the appropriate financing tools based on specific project requirements and overall project portfolio management considerations.

The Fund Manager is led by a full-time Executive Director, proposed by the EEE Consortium and appointed by the Management Board.

The Executive Director manages the day-to-day operations and administration and its main responsibilities and tasks include:

- Representing and serving as the executive body of the Fund.
- Work out the draft-strategy for the Fund's operation;

- selecting and developing commercially viable EE projects and building their financial structures
- developing, managing, and evaluating the product portfolio;
- managing the Fund's financial resources;
- performing the monitoring, reporting, and budgeting functions, and any other required tasks

The Fund management and staff consists of 6 people, i.e. the Executive Director, a Financial and Credit Analyst, a Technical Energy Efficiency Expert, a Technical and Business Plan Expert and 2 administrative staff.

Legal structure	Legal entity
Shareholder description	N/A
Equity	N/A
Shareholders	N/A
Program dedicated staff	Low
Program operational costs	Low

Organization and partnerships

Government of Bulgaria through the Ministry of Economy and Energy: program owner and political initiator, initial donor to the capitalisation of EEFRS.

Republic of Austria: initial donor to the capitalisation of EEFRS

Global Environment Facility - GEF: initial and principal donor to the capitalisation of EEFRS through its Implementation Agency IBRD. GEF helps developing countries and countries with economies in transition fund projects and programs that protect the global environment and promote sustainable livelihoods in local communities

Private donors and contributors: private donors of EEFRS. Since 2004 the following donors have contributed to the capitalisation Brunata Bulgaria, Lukoil Bulgaria, DZI Bank (now Eurobank Bulgaria AD), Enemona AD, EVN, Minev & Partners EOOD, Ena Optima EED.

EEE Consortium "Econoler-EnEffect-Elana": Fund Manager of Energy Efficiency Fund EEFRS and acts as the programme delivery unit. Offers the program delivery unit services: marketer, facilitator, assessor and financier.

Energy Efficiency and Renewable Sources Fund - EEFRS: The energy efficiency fund was established in 2005 by the Government of Bulgaria to provide revolving finance, guarantees and technical assistance to public (municipalities, universities, hospitals) and private sector (businesses and residential) energy efficiency projects in Bulgaria.

Kozloduy International Decommissioning Support Fund (KIDSF): Set up with EU funds to support projects related to the decommissioning of four nuclear reactors at Kozloduy power plant as well as to support projects for restructuring and upgrades in Bulgaria's energy sector.

European Bank for Reconstruction and Development (EBRD): Acts as administrator of KIDSF. EBRD fosters transition to market economies, through financial investments, business services and involvement in high-level policy dialogue, in countries from central and eastern Europe to central Asia and the southern and eastern Mediterranean.

International Bank for Reconstruction and Development: - IBRD (World Bank): Is the Implementation Agency of GEF. Provides loans and other assistance primarily to middle income countries. IBRD is the original World Bank institution. It works closely with the rest of the World Bank Group to help developing countries reduce poverty, promote economic growth, and build prosperity.

Local Financial Institutions: provide financing and co-financing to the beneficiaries, to project contractors and to the ESCOs.

Beneficiaries

Beneficiaries	Project developers, ESCOs, Project contractors, housing corporations, businesses, public entities e.g. municipalities, local authorities, hospitals and universities, residents
Type of projects	Energy Efficiency Renewable Energy Sources
Operational support	Technical Assistance to targeted beneficiaries (ESCOs)
Financial support	Technical assistance for free, very low guarantee fees, very low credit fees or not at all, reimbursement of administration fees when credit agreement is signed or when the project is rejected, no charges for early repayment of the loans.

Funding mechanism

Program delivery unit funding	PDU's (Fund Manager) start-up and capacity building has been initially supported by initial donor capitalisation and later by own resources from credits and guarantees granted.
Projects Funding	Projects are being funded by the beneficiaries' own funds or by their financial institutions, by ESCOs, by project contractors and by EERSF.
Funding Vehicle	Investment Fund Financial Institutions Project/Property owners ESCOs Project contractors
Fund size	Initially 11,2M €, as of 31/12/2014 9,0M€.
Fund type	Revolving fund
Fund sources	Global Environment Fund (GEF), the Government of Bulgaria, the

	Government of Austria, European Bank for Reconstruction and Development (EBRD), Kozloduy International Decommissioning Support Fund (KIDSF) and from the Bulgarian private sector
Financial Instruments	Loans Guarantees

Achievements

As of 31 December 2014 EERSF has funded or provided guarantees to 170 energy efficiency projects for a total amount of 45,8 BGN (23,4 M €) with a total project investment value of 67,6M BGN (34,6M €).

The 160 projects funded by the EERSF as of 31 December 2013 (compared to 170 projects by 31 December 2014) are estimated to have achieved 95,4K MWh/year energy savings and CO2 reductions of 75K tonnes/year.

As of 31 December 2014 there were 17 active ESCOs with which EERSF had collaboration agreements it has partnership agreements with 4 financial institutions and has general framework agreements for joint operation with 5 other financial institutions.

Despite significant changes in the market environment since 2005, affecting the EERSF program's design and performance, the EERSF has proven to be a successful revolving fund in the energy efficiency market. The Fund has helped develop a new EE market in Bulgaria by identifying the credit demand from municipalities, small and medium enterprises, hospitals and universities.

Project details are shown hereafter:

Type of Beneficiaries	# projects	Share in %	Projects value in million BGN	Share in %	EERSF funded in million BGN	Share in %
Municipalities	98	57,6%	36,9	54,6%	24,2	52,8%
Corporates/Enterprises	53	31,2%	18,6	27,5%	13,1	28,6%
Other (Universities, Hospitals)	19	11,2%	12,1	17,9%	8,5	18,6%
	170		67,6		45,8	

Contact details

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Factsheet

General Info

Country	Bulgaria
Model Name	Energy Efficiency and Renewable Sources Fund - EERSF
Date of creation	2005

Model Description

Ownership	Public-Private, majority Public
Program authority	Government of Bulgaria through the Ministry of Economy and Energy
Program delivery unit	EEE Consortium "Econoler-EnEffect-Elana"
Operating services	Marketer Facilitator Assessor Financier
Implementation model	N/A
Types of projects financed	Energy Efficiency Renewable Energy
Beneficiaries	Project developers, ESCOs, Project contractors, housing corporations, businesses, public entities e.g. municipalities, local authorities, hospitals and universities, residents
Geographical coverage	National (7,4M inhabitants)

Financial Mode Description

Project funding	Projects are being funded by the beneficiaries' own funds or by their financial institutions, by ESCOs, by project contractors and
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	by EERSF
Project funding vehicle	Investment Fund Financial Institutions ESCOs Project contractors Property owners Financial institutions
Financial instruments	Loans Guarantees
Repayment model	Partially based on energy savings (sometimes guaranteed savings)

Project risk Profile

Performance risk	Unknown
Recourse	Unknown
Financial risk	Investment Fund Project Owners Financial institutions ESCOs Project contractors

Model Requirements

Staff Requirements	Low About 5 FTE
Equity or funding Requirements	Moderate Less than 5 million €

Model Key indicators

Investment volume since creation	+/- 23,4M €
Size of project (or project portfolio)	20K € to +740K€
Level of average energy savings	As of 31/12/2013: 95,4K MWh/year energy savings and CO2 reductions of 75K tonnes/year

Development maturity

Development/implementation stage	Mature
Operational development maturity	Mature
Financial development maturity	Mature

Model Qualification

Level of establishment	Well established
Growth of potential	Moderate
Scalability of the model	Moderate
Replicability of the model	Moderate
Impact on public balance sheet	Moderate

Sources

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