



# Energy Efficiency Financing in Bulgaria

**Dimitar Doukov**

BgEEF/EnEffect, Bulgaria



## **Critical financial barriers have been eliminated**

- Restrictions on municipal long term debt
- Lack of bank/fund credits for project financing
- Short term nature of financing provided
- Search of big projects from the banks
- Monopolies in financing



## Existing barriers

- Poor capacity to develop bankable projects
- Underdeveloped energy efficiency consultancy market
- Underdeveloped ESCO market
- Poor experience in partnership in project financing
- borrowing capacity limited to 25% of the municipal budget income



## Current financing environment in Bulgaria

Various financing instruments in use:

- Bank loans
- Municipal bonds
- leasing of EE equipment
- ESCOs
- Kyoto flexible mechanisms
- Special purpose EE funds in Bulgaria



## Municipal bonds in the City of Varna

### Objectives:

- To obtain a relatively big volume low cost financing for EE project through municipal bonds
- EE retrofit and modernization of the street lighting and the municipal infrastructure development
- Amount of the project - 3 million EUR
- Simple payback of the project - 2 years 9 months



## Municipal bonds in the City of Varna (2)

### Preparation

- The municipal bonds emissions require expensive preparatory work
- Analysis and forecasting of the municipality's financial resources
- Launching a procedure for obtaining credit rating by the international credit agency (Moody's, S&P, Fitch, etc.)
- Defining the bond emission parameters and elaboration of Investment Memorandum



## **Municipal bonds in the City of Varna (3)**

### Achievements

- The municipality collected relatively high volume of financing
- The interest paid by the municipality was at the rate of 9%, while the banks offered 12-14%
- The emission was issued as general obligation bond emission (preferred by the investors)
- Repayment of the emission was performed in 3 equal portions in 3 successive years, mostly as revenue bond emission through the savings
- Bond emissions were issued in 6 Bulgarian cities



## International Fund “Kozloduy” (KIDSF)

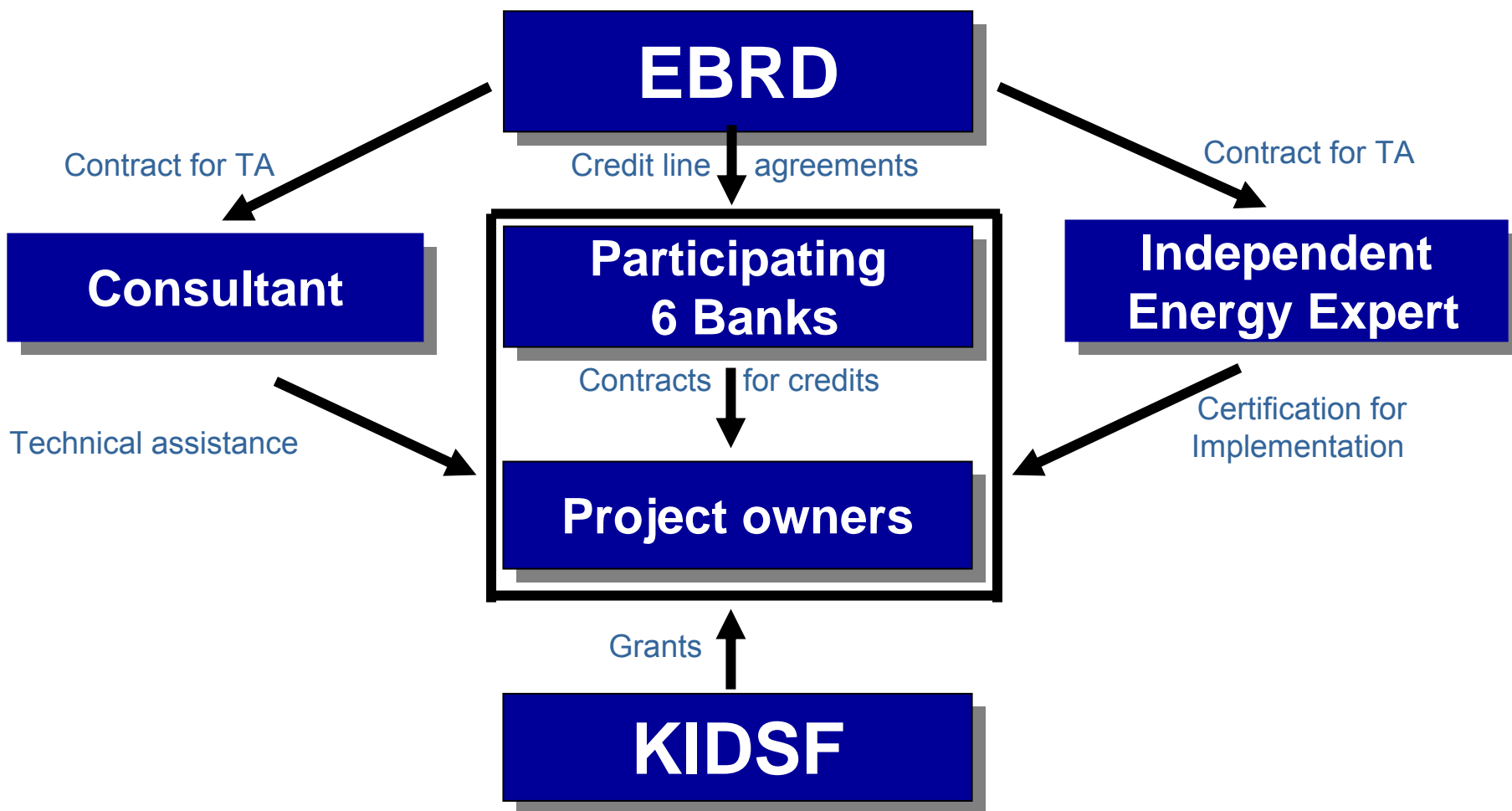
**KIDSF/ EBRD** is established by agreement with the EU to soften the consequences of decommissioning of the Kozloduy NPP reactors

- Finance EE projects and RES projects of companies (incl. municipal companies/utilities)
- 6 servicing commercial banks
- Market based interest rate
- Loans usually up to € 2 million
- Subsidies to the client:
  - 7.5% for energy efficiency projects
  - 20% for RES projects

Volume: € 100 000 000



# KIDSF Structure



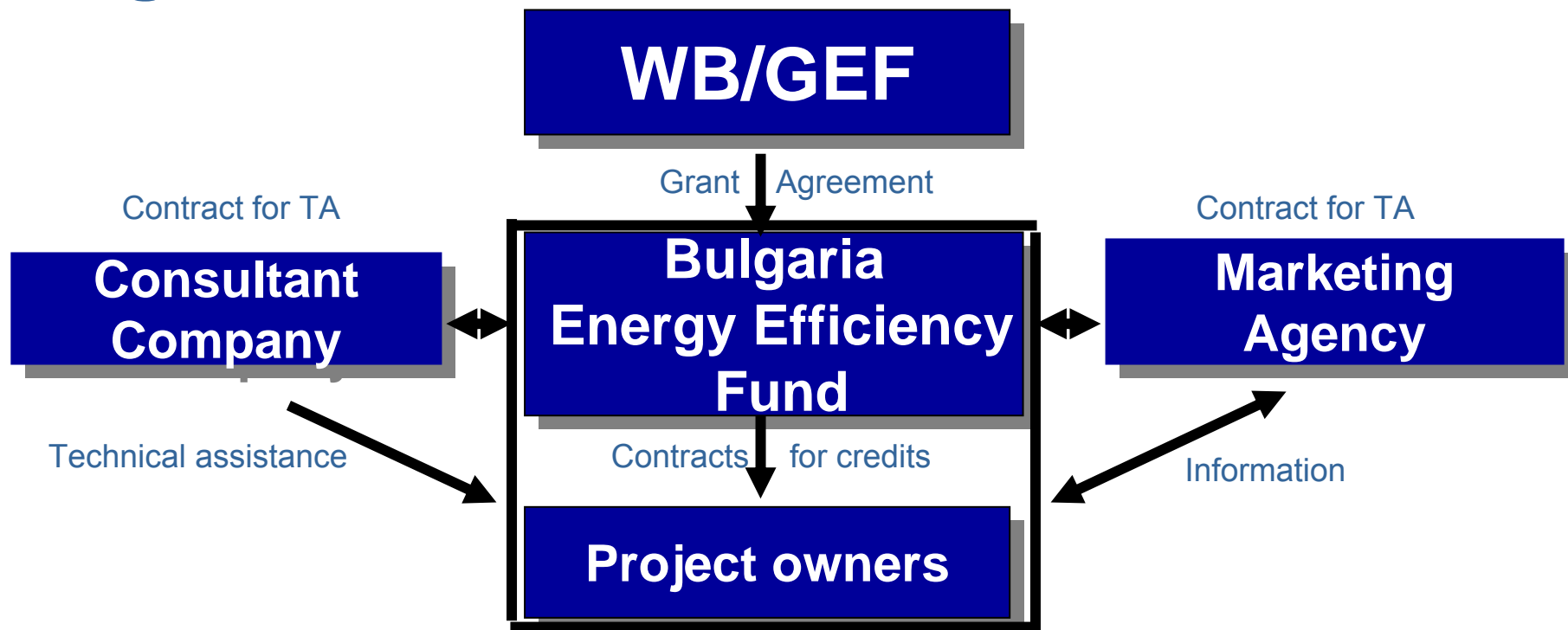


# Bulgaria Energy Efficiency Fund (BgEEF)

- Established by the Energy Efficiency Act, 2004
- Main sponsors:
  - GEF / World Bank – 10 million USD
  - Bulgarian Government - € 1.5 million
  - Austrian Government - € 1.5 million
- Clients: energy efficiency investment projects of companies, municipalities and physical persons;
- Based on market competitive conditions
- Financial products: loans, partial credit guarantees, technical assistance for project development



## BgEEF Structure





## BgEEF - Eligibility criteria:

Volume of the project € 15 000 – € 1 500 000;

- The contribution of the project developer has to be:
  - at least 10% in case of co-financing schedule /BgEEF + Commercial bank/
  - 25% in case of one-source financing /BgEEF only/;
- Pay-back – up to 5 years;
- At least 50% of the project's economic benefits must come from measurable energy savings;
- The project must introduce proven energy saving technology;



## Track record of BgEEF:

One year of operations (since January 2006).

- Approved projects for BGN 5 million (€ 2,5 million)
- Approved number of projects – 20, of which 14 municipal
- Expected number of projects by the end of 2006 – to 25.
- Expected amount of approved projects by the end of 2006  
BGN 7.5 to 8 million (€ 3.75 to 4 million)
- The vast majority of projects is in municipal buildings – hospitals, schools, kindergartens, etc. Financed one university.



## Credit Line of European Investment Bank

Oriented to finance energy efficiency and municipal infrastructure development projects (including health, education, social housing)

- € 20 million from **EIB** to Raifeisen bank
- € 30 million from **EIB** to DSK Bank
- **EIB** finances usually up to 50% of the project cost
- Project size: € 40 000 - € 5 000 000
- Grants: 2,5 – 5% over project cost from PHARE
- Duration of the credit 4 – 12 years



## Needs vs. available financing for EE in Bulgaria

- Needs calculated to several billions of EUR
- Available financing:
  - Fund EBRD / Kozlodui – € 100 million
  - BgEE Fund (GEF/WB) – € 12 - 25 million
  - EIB credit line € 50 million + € 50 million contribution of the local banks

Total: € 225 million available

**Acute long-term shortage of financial resources for EE investments still exists**



## **Contacts:**

“Kuzman Shapkarev” str. № 4

Sofia 1000, Bulgaria

tel: +359 (2) 81 000 80

e-mail: [info@bgeef.com](mailto:info@bgeef.com)

Web: [www.bgeef.com](http://www.bgeef.com)