

Public sector energy efficiency

Can we initiate more projects?

Vienna, June 2016



European Bank
for Reconstruction and Development

Example of EBRD support of energy efficiency in street lighting and other public facilities: South Eastern Europe

- Programmed and managed by the EBRD
- Supported by the Energy Community
- Funded by the EU Western Balkans Investment Framework and the Western Balkans Joint Fund



Activity area

Policy dialogue support

To create effective legislations for public sector energy efficiency (EE)

- EE works & services procurement by preparing procurement law, contract templates and guidelines
- Transposition of ESCO elements of EU Directives 2006/32/EC and 2012/27/EU
- General policy dialogue

Technical assistance

To help local public authorities with procuring EE projects

- Identification of EE Projects
- Support municipalities in tender preparation and procurement

Financing

- Credit line through commercial banks (WeBSEFF)
EUR 152m financed through 18 partner banks
- Direct financing (WeBSDFF)
EUR 100m



Steps towards implementing a public sector energy efficiency project



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1. Screening and identification of potential projects
2. Municipality is informed about potential project
3. Follow up to estimate the potential, determine
4. Getting political commitment of the municipal ownership over the potential project
5. Technical proposal and feasibility accepted by
6. Finalised technical proposal submitted to and
7. Municipal assembly approval of project
8. Finalising tender document and contract
9. Tender publication by municipality
10. Contracting between municipality and contractor
11. Implementation by contractor

Taking stock:

Step 2: number of municipalities informed 72

SRB 28; BiH: 4; HR: 17; MNE: 23

Step 4: number of Lol 29

Step 8: number of tenders prepared 14
HR 7, SRB 5, BiH 2

Step 9: number of tenders published 4
HR 3 + 3 to be published in June; BiH 1

Step 11: number of projects with completed efficiency investments 3

Break down of investment volume:

Capex <EUR 1 m

18 projects

Capex EUR 1-5 m

4 projects

Capex EUR 5-10 m

3 projects

Capex >EUR 10m

1 project

Public Lighting in Novigrad – implemented project



Implemented measures

- Lighting design
- Dismantling of old luminaires (High pressure Sodium / Metal halide/ Mercury)
- Installation of new LED luminaires
- Project documentation verified
- Technical inspection and Energy certification

Economic data

Total number of light points	1,684
Total energy consumption (street lighting)	762,244 kWh
Light points modernised	954 (57%)

Energy cost savings	33,062	EUR/year
Maintenance savings	19,080	EUR/year
EnPC contract period	98	months
Total ESCO fee offered by the most preferred bidder	460,526	EUR

Results - Public Lighting in Novigrad

Modernisation:

57 % of Novigrad's street lighting system was modernised with highly efficient LED luminaires

CO₂ emission:

New street lights achieve energy saving of 297,262 kWh/year and a reduction in CO₂ emissions of 112 tCO₂/year

Cost savings:

Annual energy costs reduced from EUR 58,160 to EUR 25,098

Installed Capacity:

the installed capacity decreased from 126 kW to 54 kW

Maintenance costs savings:

Maintenance costs could be substantially saved because exchange cycles could be extended significantly

Short contract duration:

Because of high energy savings and the long nominal lifetime a contract duration of 98 months (8,2 years) was possible



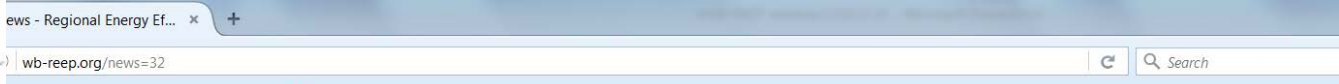
PPP biomass district heating project in Sokolac, BiH – tender published

- **PROJECT:** District heating system powered by biomass with cogeneration (CHP), in the municipality of Sokolac, BiH
- **SCOPE OF THE PROJECT:** Reconstruction and expansion of district heating network, installation of cogeneration biomass plant and peak boiler
- **PLANNED POWER PLANT:** 1 MWeI and 4,1 MWth, peak boiler 4 MW;
- **FUEL NEEDS:** 16.120 t/a of wood chips for cogeneration and 4.048 t/a of wood chips for the peak boilers;
- **EXISTING/PLANNED HEATED AREA:** 26,302 m² / 131,592 m²;
- **ESTIMATED AMOUNT OF INVESTMENT:** 15,2 million KM;
- **MODEL OF FINANCING:** Public - Private Partnership (PPP);
- **LEVEL OF DEVELOPMENT:** Feasibility study with PPP comparator.

PPP biomass district heating project in Sokolac, BiH



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News

Sokolac, Bosnia and Herzegovina: district heating system to be powered by biomass with cogeneration

26 Feb 2016



On Friday 26 February 2016 the European Bank for Reconstruction and Development (EBRD) hosted a workshop about the project "District heating system powered by biomass with combined heat and power (CHP or cogeneration), in the municipality of Sokolac". The project comprises the installation, management and maintenance of a cogeneration plant powered by biomass in the Sokolac Municipality. It also includes the extension, reconstruction, management and maintenance of the local district heating system. The project will use a public-private partnership (PPP) structure.



The workshop was held at the hotel Termag on Jahorina, some 30 km from Sarajevo. It introduced the project to more than 80 stakeholders including officials,

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CASE STUDIES

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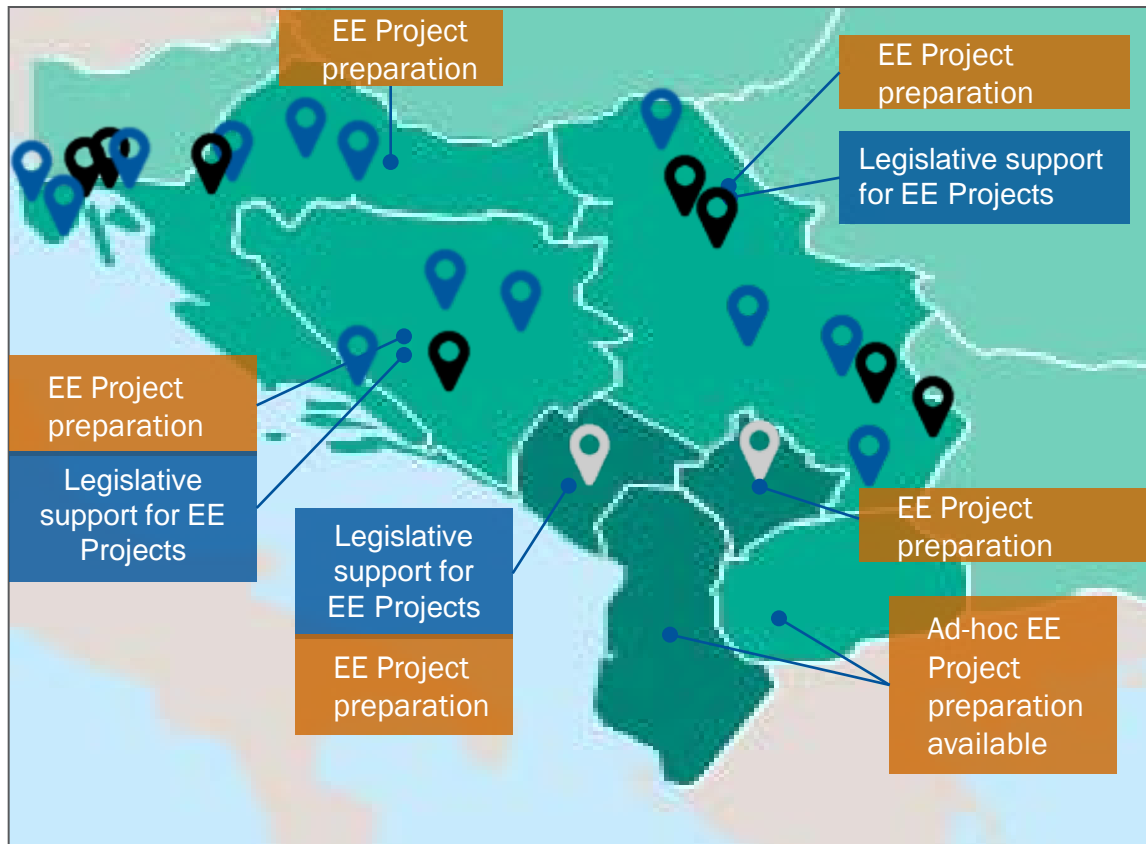
Every potential Private Partner needs to fulfil below stated conditions and to submit relevant proof regarding:

ЗА РЕА
прошире
гом Систем
талирањеи

РТНЕР
НОГ ПАРТНЕРА,

на Соколац
начка 13

Window 1: support for preparing energy efficiency projects



TC project preparation for ESCO projects:

- 3 street lighting projects implemented
- 1 tender ongoing
- 2 to be published in June
- 8 are ready to be tendered
- more tenders under preparation, including street lighting PPP Belgrade
- more municipalities indicated interest in projects

Policy dialogue

Legislative support for EE Projects

TC assignments

Energy efficiency (EE) Project preparation



Street lighting tenders prepared by REEP



ESCO tenders under preparation by REEP



Feasibility/scoping studies prepared by REEP

So the question is, can we initiate more energy efficiency projects?

Questions for discussion:

- a) Are there sufficient economic, political or other incentives for local authorities to prepare energy efficiency projects?*
- b) How could the central government provide more top level political support? Is it worthwhile for e.g. mayors to initiate energy efficiency projects?*
- c) REEP is identifying, scoping and preparing tenders for energy efficiency investments at local level. What else could be done in order to increase the number of initiated and tendered projects?*

Contacts



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