UPDATE ON REEP'S CONTRIBUTION TO PUBLIC SECTOR ENERGY EFFICIENCY IN THE WESTERN BALKANS

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Update on REEP's public energy efficiency projects



- 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 public authorities procuring EE projects

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

Financing

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



Energy Community

Market development: scaling up and replication in other sectors



Energy efficiency and ESCO projects more widely accepted

Cities and other consultants are starting to use EBRD REEP contract and procurement templates for preparing their own projects.

In Serbia by now 9/38 of all PPPs are street lighting energy efficiency projects (status September 2016).

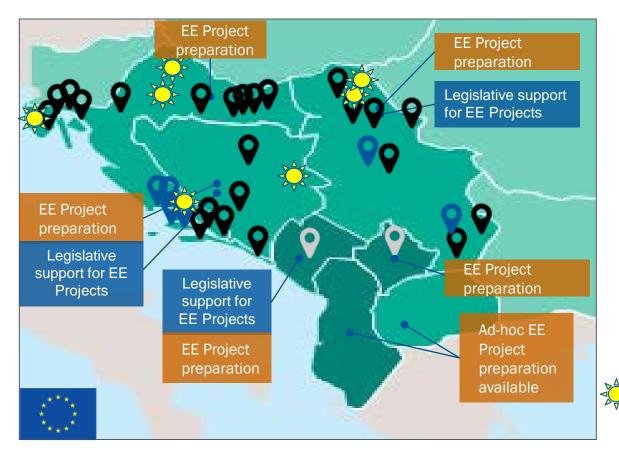
State authorities are interested in cooperating and using the approach (e.g. Croatia CEI, APN).

Replication in other sectors is starting.

Public building owners and district heating utilities are starting to use ESCO/PPP approach for making their assets more energy efficient.

EBRD support in project preparation: public sector energy efficiency opportunities





Policy dialogue

Legislative support for EE Projects

TC assignments

Energy efficiency (EE) Project preparation

In Western Balkans:

- •4 street lighting projects implemented
- 2 street lighting projects to be implemented in 2016
- •7 tender under preparation for tendering in Q4/2016
- 14 tenders under preparation, including street lighting Belgrade and Novi Sad
- 8 municipalities indicated interest in projects

Tenders published, contracted or implemented: REEP policy or technical support

ESCO tenders under preparation using REEP resources Public authorities indicated interest in project Feasibility/

scoping studies prepared by REEP

Serbia – ESCO Market development



Street Lighting Projects

- Increasing interest from municipalities and companies
- ¹/₄ of all PPP Projects in Serbia street lighting modernization
- Two municipalities using REEP contract template implemented tenders and implementation to be completed in Q4/2016
- Larger municipalities interested, including Belgrade and Novi Sad
- Cooperation with the Ministry, Standing Conference of Towns and Municipalities and ESCOs for streamlining more projects
- Cooperation with Ministry of Mining and Energy, PPP Commission and City of Belgrade on further improving the legislative framework

Other sectors

- Interest in energy efficiency improvements in public building
- Several municipalities planning Energy Supply Contracting (ESC) PPP projects
- Ministry of Mining and Energy approached EBDR REEP for support for development of one more by-law defining model contract for ESC

Croatia – ESCO Market development



Street Lighting Projects

- Street lighting is mainstreamed, REEP contracts and procurement documentation being used by other actors too.
- Agencies and municipalities interested and larger cities interested.
- Several projects with REEP support implemented, several on-going.

Other sectors

- Interest in ESCO energy efficiency improvements in public building starting
- Energy Supply Contracting (ESC) projects starting

EBRD supporting ESCO Project preparation Public Lighting in Novigrad, Croatia





Implemented measures

- Lighting design
- Demounting 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 street lights	1,684
Total energy consumption (street lighting)	762,244 kWh
Energy savings	57%

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

Results - Public Lighting in Novigrad



Modernisation:

57 % energy savings with highly efficient LED luminaires <u>CO2 emission</u>:

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 <u>Short contract duration</u>:

Because of high energy savings and the long nominal lifetime a contract duration of 98 months (8.2 years) was possible



Bosnia and Herzegovina – ESCO Market development



Energy supply Contracting (ESC)

- District heating ESC tender launched. However delays during tendering.
- Other municipalities interested.
- Political and legal environment could be more enabling.

EnPC building project

- Prepared and tender could have been launched earlier this year
- Political and legal environment could be more enabling.



Mainstreaming scaling EE/ESCO street lighting

Major cities are interested and there will be larger projects tendered in Q1/2017.

Replicate the approach in additional municipalities.

Replication in other sectors

Public owners have contacted EBRD to prepare ESCO/PPP based projects for

- building owners and
- district heating utility

Replication in other countries

- Montenegro based on findings of scoping studies
- Kosovo several stakeholders indicated interest in street lighting projects





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