

Triggering the market uptake of energy performance contracting through street lighting refurbishment projects

Streetlight-EPC

Project duration: 1 April 2014 – 31 March 2017



Co-funded by the Intelligent Energy Europe Programme of the European Union

www.streetlight-epc.eu
Contract number: IEE/13/399/SI2.675823

July 2016



Project summary



- The project creates demand and supply for Energy Performance Contracting (EPC) projects in 9 European regions by providing regional EPC facilitation services. These services support municipalities and (potential) ESCOs.
- As a core activity, the project partners perform real-life procurement of 36 EPC street lighting refurbishment projects. This will create knowledge and trust in both LED technologies and the EPC model.
- The project team includes 9 regional agencies/organisations that provide the EPC facilitation services and 9 municipalities committed to implement EPC projects. The 9 regions cover more than 4,000 municipalities. The regions and cities are supported by the European network FEDARENE.



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Background



- Many European regions have not yet seen a significant development of EPC markets.
- Street lighting is a good "learning and testing ground" for EPC due to its lower technical and economic complexity.
- The recent market introduction of LED technology for street lighting offers high savings with comparatively short payback times.
- Due to phasing out by 2017 of 80 % of all street lamps currently in operation, municipalities are under pressure to act.



Expected impacts



- Establishing EPC markets in 9 European regions through the regional EPC facilitating services
- Implementing 36 EPC projects, triggering 49 million Euro investments, achieving annual savings of 32,100 MWh and 4.8 million Euro
- Inducing 18 SMEs in becoming ESCOs
- Contributing to EU product policies (phasing-out requirements) and the European Energy Efficiency Directive (strengthening energy services markets)



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The challenges differ...

Banks that do not understand the business model

Ownership issues

No/few (good) ESCOs

Lack of information by municipalities

- the ESCO will make too much money
- I have to fire the maintenance staff (municipal staff/local electrician)
- the ESCO will go bankrupt
- I can build new street lighting with an EPC project
- Who pays what to whom and when

Low electricity prices

**Public procurement rules
(perceived or real barriers)**



Our solutions

Cities committed to realising EPC projects

Regional energy agencies as market facilitators

Support with getting regional, national and EU funds

explaining, explaining, explaining

Case studies of realised EPC projects

Supporting SMEs in becoming ESCOs

Midterm approach

Internal helpdesk on procurement, financial, technical and contractual issues (provided by 4 experienced partners)



Quick checks, guides and FAQs



Available at www.streetlight-epc.eu in 10 languages:

- Quick-checks for a first initial assessment of the suitability of EPC for street lighting refurbishment and other lighting applications
- Guide on implementing streetlight-EPC projects
- FAQs on streetlight-EPC



Checklist

Street lighting can account for up to 20-30 % of the total electricity consumption of municipalities. The recent market introduction of LED technology for street lighting offers high energy savings with correspondingly short pay back times.

Municipalities are faced with an urgent need to address 90 % of all currently used street lighting lamps will be "switched out" by 2021, which means they will no longer be available for purchase. In most cases this will entail substantial investments, thus presenting a major problem for many municipalities.

Now Energy Performance Contracting (EPC) can be a solution: energy efficiency investments are performed and implemented by an energy service company (ESCO). The annual energy and maintenance cost savings then cover the investment and capital costs.

The EPC Streetlight EPC is funded by the Intelligent Energy Europe Programme and was launched in April 2014 with the objective of triggering the market uptake of EPC through street lighting refurbishment projects.

Within this project, standards for municipalities were prepared. These aimed at first assessment of whether streetlight refurbishment could be achieved successfully and whether EPC might be a suitable option. These standards are available in the respective languages and for the specific context of the project regions (Cyprus, Austria, North-West County, South Island/Crete, Valencia, Normandy/France, Galicia & Asturias/Spain/Portugal, South East Slovenia, National Slovenia, Slovakia, Tuscany & Emilia/Romagna). Brochure/summary documents for these standards in English.



Guide

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Within this project, guides for municipalities and ESCOs on implementing streetlight EPC projects were prepared. They are available in the respective languages and for the specific context of the project regions (Cyprus, Austria, North-West County, South Island/Crete, Valencia, Normandy/France, Galicia & Asturias/Spain/Portugal, South East Slovenia, Tuscany/Emilia, Slovakia, North & Central Spain). The document summarizes the information from the guides in English.



Results achieved by the regional facilitation services



Support to market development:

- 50 events held with over 1,470 participants
- 163 quick-checks completed
- over 380 enquiries answered and documented
- more than 255 "FAQs" (with answers) available
- 51 bi-lateral meetings held with financing bodies

Support to concrete project implementation:

- 41 street lighting projects
- 19 indoor and other lighting projects

17 projects are already implemented!



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Partners & contact



- 19 partners in Austria, Croatia, the Czech Republic, Poland, Ireland, Sweden, Slovenia, Macedonia and Spain
- 9 regional partners, 9 city partners, 1 European network (FEDARENE)
- Coordinator: OÖ Energiesparverband, Landstrasse 45, 4020 Linz
- For further information: Christiane Egger, office@esv.or.at

| Region | Regional partner | City/county partner |
|--|------------------|----------------------|
| Upper Austria/Austria | ESV | City of Wels |
| North-West Croatia | REGEA | Zagreb County |
| South Bohemia/Czech Republic | ECCB | City of Trhové Sviny |
| Pomerania/Poland | BAPE | City of Gdansk |
| Carlow & Kilkenny County/Ireland | CKEA | Kilkenny County |
| South East Sweden | ESS | City of Kalmar |
| Podravje/Slovenia | ENERGAP | City of Maribor |
| Macedonia | MACEF | City of Skopje |
| North/Central Spain (regions of Madrid, Castilla y León and Cantabria) | ESCAN | City of Santander |

