

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

# Streetlight-EPC

Project duration: 1 April 2014 – 31 March 2017



# Project summary

- The project created demand and supply for Energy Performance Contracting (EPC) projects in 9 European regions by providing regional EPC facilitation services. These services supported municipalities and (potential) ESCOs.
- As a core activity, the project partners performed real-life procurement of EPC street lighting refurbishment projects. This created knowledge and trust in both LED technologies and the EPC model.
- The project team included 9 regional agencies/organisations that provided the EPC facilitation services and 9 municipalities committed to implement EPC projects and the European network FEDARENE.



# Background

- So far, in most European regions, energy performance contracting (EPC) has not been able to develop significantly.
- Street lighting is a good "learning and testing ground" for EPC due to its lower technical and economic complexity.
- The market introduction of LED technology for street lighting offers high savings with comparatively short payback times.
- Due to phasing out by 2017 80 % of all street lamps currently in operation, municipalities are under pressure to act.



# Achieved impacts

- **Establishing EPC markets** in 9 European regions through regional EPC facilitating services
- **Implementing EPC projects:** 63 projects realised or in a very advanced stage of preparation (47 with EPC) resulting in an investment of 29 million Euro and annual savings of 28,000 MWh as well as 3.5 million Euro in electricity and maintenance costs.
- **Inducing SMEs in becoming ESCOs:** 12 new ESCOs have implemented projects, 8 more companies have started offering EPC services
- **Contributing to EU product policies** (phasing-out requirements) and the European Energy Efficiency Directive (strengthening energy services markets)



# 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)**



# Streetlight-EPC 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**

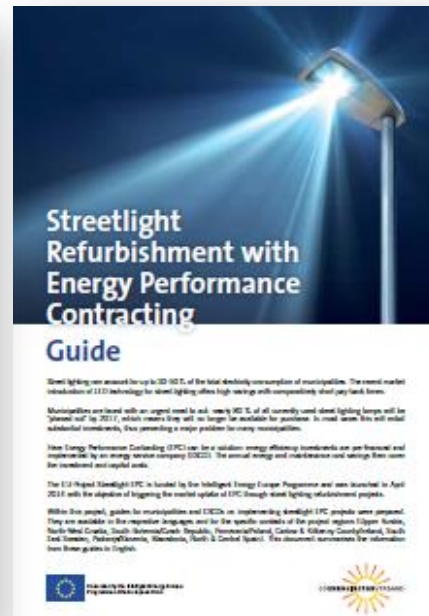
**Midterm approach**

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



# Tools: Quick-checks, guides and FAQs

- Available at [www.streetlight-epc.eu](http://www.streetlight-epc.eu) in 10 languages:
- **Quick-checks** for a first initial assessment of the suitability of EPC for street/indoor lighting refurbishment
- **Guide** on implementing streetlight-EPC projects
- **FAQs** on streetlight-EPC
- Examples of implemented projects



# Results achieved by the regional facilitation services



## Identifying and reaching out to potential projects in 9 regions:

- 63 regional events held with over 2,000 participants
- 183 "quick-checks" completed
- over 500 enquiries answered and documented
- more than 255 FAQs available
- 51 bilateral meetings held with financing bodies



## Supporting specific project development and implementation:

- 99 promising projects supported  
(69 street lighting, 30 indoor lighting /other building-related energy efficiency measures)





# Facilitation works: 60+ implemented projects!



Market facilitation can be an effective instrument to start regional EPC markets

- **47 projects implemented using a variety of EPC models**
- **16 more projects** implemented with other financing or operational models
- 20+ more projects in the pipeline
- 12 new ESCOs signed contracts, 8 more are offering ESCO services



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[www.streetlight-epc.eu](http://www.streetlight-epc.eu)



# Lessons learned

- **EPC can take many forms** (depending on the legal, economic and social contexts of each region and project), **core aspects for EPC** include:
  - contractually guaranteed savings & financial consequences
  - other aspects can vary greatly
- **It is all about trust & knowledge:**
  - high interest, low knowledge, "explain, explain, explain"
  - work very closely with individual municipalities and ESCOs
- **Quality is king!**
  - good project preparation is crucial
  - fewer, but convincing projects, are better in early market phases
  - the EPC process supports solutions with higher-level technical quality
  - involving citizens creates an understanding that projects are not only about saving money or energy but also about their security and quality.



# 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](mailto:office@esv.or.at)

Region	Regional partner	City/county partner
Upper 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

