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

STREETLIGHT-EPC

Most European regions have not yet seen a significant development of energy performance contracting (EPC). Apart from legal barriers, this is due to the lack of understanding of EPC, the absence of experienced ESCOs and organisations facilitating the EPC market development. Street lighting is a good "learning and testing ground" for EPC due to its lower technical and economic complexity (compared to building-related EPC). Furthermore, the recent market introduction of LED technology for street lighting offers high energy and cost savings with comparatively short payback times. The project "STREETLIGHT-EPC" creates demand and supply for EPC projects in 9 regions by providing regional EPC facilitation services. These services deliver information and specific support to municipalities and (potential) ESCOs. The project partners aim to implement 36 EPC street lighting projects in the project’s lifetime. This will help create knowledge and trust in both LED technologies and the EPC model. Since the project start, 31 regional events were held, more than 210 enquiries were answered and 51 meetings were held with banks and financing organisations. The project partners have identified and supported 27 street lighting and 10 indoor lighting projects so far of which 7 are already implemented. The project team includes 9 regional agencies/organisations, which are providing the EPC facilitation services, 9 municipalities and a European network.

Results

- Establishing EPC markets in 9 European regions through regional EPC facilitating services:
  - 31 events with over 1,070 participants were held
  - 103 quick-checks were completed
  - more than 210 enquiries (advises) were answered and documented
  - more than 240 "FAQs" (with answers) are available on the partner websites
  - 51 bi-lateral meetings were held with banks and financing organisations

- Implementing 36 EPC projects, triggering 49 million Euro investments
  So far, project partners have succeeded in identifying and supporting 27 street lighting and 10 indoor lighting projects of which 7 are already implemented.

- Inducing 18 SMEs to become ESCOs
  All regional facilitation services are actively supporting SMEs in becoming ESCOs. So far, one company that had not been providing this service has successfully signed a contract.

- Contributing to EU policies
Product policies (phasing-out requirements) and the European Energy Efficiency Directive (strengthening energy services markets)
The project partners work actively towards improving the framework conditions for EPC in their respective countries to allow the instrument to fully play its role in achieving energy efficiency targets. This includes proactive communication of project findings on regional, national and European levels. Due to Streetlight-EPC activities, several partners were invited to be member in relevant national committees.

Lesson learned

- **Good technical project preparation is key**
The right approach in project preparation is key for the success of the project: It is crucial to have a meaningful and accurate inventory of the existing street lighting system as well as a good-quality, well-standardised audit to determine reliable numbers on saving potentials. The partners and the advised cities realised that they had underestimated the resources needed for technical and engineering aspects.

- **EPC: high interest, low knowledge**
The high number and the quality of participants at the project events as well as the active use of the facilitation service showed that many stakeholders are very interested in the instrument. However, wide-ranging knowledge gaps on technical and economic aspects exist. Also there are many prejudices that need to be proactively overcome by a trusted information source. Otherwise, they will continue to block decisions in favour of EPC.

- **LED: offers choice, but require knowing your needs**
LED solutions are showing to be proven technologies that are suitable for very small and very large projects and permit high energy savings at high lighting comfort. However, due to their wide-ranging possibilities and the fact that street lighting directly affects citizens and the local business community, it is important to understand the needs and priorities in each municipality to determine the optimal solution for different locations.

Partners and coordinator

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.Ö Energiesparverband</td>
<td>Austria</td>
</tr>
<tr>
<td>Zagrebacka Zupanija</td>
<td>Croatia</td>
</tr>
<tr>
<td>Energy Agency for Southeast Sweden</td>
<td>Sweden</td>
</tr>
<tr>
<td>ESCAN, S.A.</td>
<td>Spain</td>
</tr>
<tr>
<td>Energy Centre České Budějovice</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Energy Agency of Podravje</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Municipality of Maribor</td>
<td>Slovenia</td>
</tr>
<tr>
<td>European federation of agencies and regions for energy and environment</td>
<td>Belgium</td>
</tr>
<tr>
<td>Baltic Energy Conservation Agency</td>
<td>Poland</td>
</tr>
<tr>
<td>Regionalna energetska agencija sjeverozapadne Hrvatske</td>
<td>Croatia</td>
</tr>
<tr>
<td>City of Skopje</td>
<td>Macedonia</td>
</tr>
</tbody>
</table>
**Contact**

O.Ö Energiesparverband  
Austria

**Contact point**

Name: Ms Christiane Egger  
E-mail: christiane.egger@esv.or.at  
Tel: +43-732-7720-14382

**Budget**

Overall budget: 1.437.399,00 € (EU contribution: 75,00 %)

**In brief**

Sector: Energy Services  
Duration: 01/04/2014 to 31/03/2017  
Contract number: IEE-13-399  
Website: http://www.streetlight-epc.eu/

**Tags:**

- Energy Service Company (ESCO)  
- financing  
- LED  
- lighting  
- performance  
- private public partnership (PPPs)  
- procurement
Related projects

- [EESI 2020][20] "European Energy Service Initiative towards the EU 2020 energy saving...
- [TRANSPARENSE][21] "Increasing Transparency of Energy Services Markets"
- [CERTuS][22] Cost Efficient Options and Financing Mechanisms for nearly Zero Energy...


Links