



EVENT DESCRIPTION

Project Partner: Carlow Kilkenny Energy Agency

Title of the event: Streetlight EPC Facilitation Contractor Workshop

Date & location: 10/12/2015 Hotel Kilkenny, Co. Kilkenny, Ireland

Organiser(s): Carlow Kilkenny Energy Agency

Number of Participants: 18

Summary

As facilitators of Streetlight EPC projects, the Carlow Kilkenny Energy Agency organised a public lighting workshop for lighting designers and maintenance contractors. The purpose of the workshop was to engage with industry experts and potential stakeholders to discuss current issues concerning public lighting EPC contracts in Ireland and other regions in Europe. The workshop was well attended with 18 attendees.

Objectives & main programme points

A working group was established by the Sustainable Energy Authority of Ireland (SEAI), Transport Infrastructure Ireland (TII) and City and County Managers Association (CCMA) to address streetlighting issues in Ireland. As a result of the progress CKEA has made with the Streetlight EPC project, CKEA were asked to participate in this working group. The working group has made significant progress in addressing national issues surrounding streetlighting. The working group has developed a national inventory that can be implemented throughout local authorities in Ireland. They have also proposed burn hour profiles that will significantly increase the payback and feasibility of LED retrofit projects on unmetered supplies in Ireland.

The issues that are unique to Ireland are compounded by the fact that we have large inventories of unmetered public lights, unlike other EU member states. Currently efforts are being made to establish an accurate national inventory of the public lighting stock in order to facilitate LED retrofits in the local authorities. Subsequently there has been a lot of interest from lighting designers, maintenance contractor and ESCOs to develop projects.

Therefore the aim of the workshop was to stimulate further interest in these potential project stakeholders by engaging them in an open discussion on the current challenges we are facing in Ireland and how to overcome them. The workshop also updated the attendees on the progress to date from the national working group and the steering



committee and gave demonstrations of both the lighting inventory and the burn hour profiles.

The workshop commenced with an introduction presentation from Paddy Phelan, Manager of CKEA this was followed by a presentation from Declan Keogh, Energy Engineer, Carlow Kilkenny Energy Agency on the work of the national working group. This was followed by a questions and answers session.

After the coffee break the attendees were split into two groups with three main discussion topics. Each group were given 20 minutes to discuss the advantages and disadvantages of each of the topics:

- Regional Maintenance Structures
- Deadsure Public Lighting Management Software
- National Public Lighting Inventory
- Proposed Burn Hour Profiles

The following is a synopsis of the feedback from each of the groups and the main points discussed by them.

Regional Maintenance Structures

Advantages

There will be a dedicated resource with a point of contact and expertise in public lighting projects. It will also allow for a regional procurement process rather than each local authority tendering and should result in cost savings. It also makes the process of implementing a regional LED lighting project more cost effective.

Disadvantages

A regional approach to public lighting may lead to a lack of buy in from individual local authorities. It will also slow down the decision making process.

Deadsure Public Lighting Management Software

Advantages

It allows for the tracking and management of the public lighting inventories of each local authority. The software has been in use in Ireland for over 10 years and has knowledge and experience in terms of the Irish context.

Disadvantages

Out of the 31 local authorities in Ireland there are only 3 authorities not using Deadsure. There is a danger that this software would become a monopoly. No other options are currently being investigated.

National Public Lighting Inventory

Advantages

Needs to be accurate for investment partners for due diligence of implementing projects.

Disadvantages

The national inventory is not stipulating to survey each individual lighting and is a ground survey only. This may lead to inaccuracy with the new inventory. Why not continue energy savings associated with streetlighting and compile inventory as project progresses.

Proposed Burn Hour Profiles

Advantages

Additional burn hour profiles are needed along with the ones submitted. It is critical to have financing partners involved in discussions on these topics.

Disadvantages

For an ESCO company the burn profiles are not accurate enough for financing, an ESCO may lose 15% because profiles are not accurate. There are potential problems where lighting needs to be upped for under lit areas.

A presentation was also given by Declan Keogh CKEA on sample EPC projects carried out in Europe. This gave the attendees a greater insight into the type of projects that are possible through the energy performance contracting model. A number of the attendees also had potential projects that would suit energy performance contracting.

The objectives of the workshop were as follows;

- Introduction to the Carlow Kilkenny Energy Agency and their role as a regional partner in Streetlight EPC
- Summary of what streetlight EPC and ESCOs are, who can engage in them and why
- Background on the progress of streetlight EPC in Ireland in relation to national public lighting inventory, unmetered burn hour profiles, issues with ESB Networks, training and Local Authority Toolkits
- Sharing experiences on various public lighting projects and giving examples of streetlight EPC and ESCO type contracts from around the country and Europe
- Industry experts input in identifying barriers in the development of streetlight EPC projects in Ireland and discussing high level solutions to address issues
- Split group discussions on key topics surrounding streetlight EPC projects in Ireland i.e. regional maintenance structures, Deadsure public lighting management software, national public lighting inventory and the proposed burn hour profiles

Conclusions & lessons learnt (based on stakeholder input)

From the discussions that took place, it was apparent that all key stakeholders were concerned about some of the aspects which make up a streetlight EPC project. One of the key points which were raised focused on financing streetlight EPC projects solely from the energy savings.

An item that was contentious on the day was the proposed national inventory for public lighting. Currently there are five local authorities in Ireland implementing the national inventory with funding from SEAI. These authorities are Galway City Council, Galway County Council, Longford County Council, Carlow County Council and Laois. The findings from these local authorities will lead to the national inventory being rolled out across Ireland.

In order to create a cost effective inventory, a detailed inventory will be carried out by visiting each lamp and recording a number of items including lamp type, wattage, height and location.

A representative from an ESCO pointed out that the energy savings alone would not be enough therefore financing a project would be difficult without a maintenance piece. One of the lighting designers gave an example of a business case they carried out for a street lighting project in which a lighting inventory played a pivotal role in the delivery of energy savings in the region of 27 % to 60 % using modern LED lighting technology.

Maintenance Contractors were adamant that the energy savings from streetlight EPC type projects were no longer an issue, rather the holdbacks from local authorities and other key stakeholder at a regional and national level.

