



## **Strategy document on the systematic implementation of EPC in partner cities/counties**

### **1. Introduction**

In the context of the Streetlight-EPC project, city/county partners aimed to establish internal structures that ensure EPC is routinely included in future decision making processes for investment decisions in public buildings or other public infrastructure.

Based on a template, each city/county developed a short strategy document outlining the process of implementing a systematic approach to EPC for all relevant future investments, also relating to establishing control systems to keep track of energy costs. The paper was developed based on an internal discussion process within each city/county.

The following report summarised the approach taken in each partner city/county.

### **2. City of Wels**

#### **2.2 Energy strategy of the City of Wels**

In Wels, the city-owned company "Elektrizitätswerke Wels" (today: eww) has been around for about 100 years. The eww has significantly expanded the scope of tasks in recent years.

The energy contracting field and offering ESCO services has become a successful business sector for the eww. As a result, the eww company "Wels Strom GmbH" was founded in 2012.

Wels Strom plans and implements energy saving measures and takes over the costs and risks of the investment. In return, the customer benefits in full or in part of the saved energy and operating costs during the agreed contractual period. At the end of the contract, the installation becomes the property of the customer, which then benefits from the entire savings.

#### **2.1 Services from the signing of the contract to the handover of the installation:**

- The client and ESCO agree upon and sign a contract with guaranteed results: the savings that will be achieved are guaranteed to the client in the contract.



- The contract is valid for a fixed period (usually between 7-15 years), during which the investments are refinanced by the guaranteed savings.
- The ESCO is responsible for the implementation and management of the energy efficiency measures.
- Building analysis, design and implementation of measures in the areas of heating, control, building physics, ventilation, air conditioning (HVAC) and lighting as well as energy controlling.
- The investments are refinanced from the operating cost savings achieved. Operating costs include the costs of energy and maintenance (maintenance, inspection and repair).
- With the Contractor, the contractor has a responsible contact person for the entire duration of the project.
- If the savings are reduced, the contractor's fee will be reduced accordingly.
- The Contractor offers the client assistance with regard to possible subsidies.
- The measures can, but need not, be pre-financed by the Contractor.

Welsstrom is established as a successful contractor in Upper Austria and also handles the contracting projects of the city of Wels. A showcase project of recent years is the conversion of the street lighting of the city of Wels to LEDs within the framework of a contracting project.

Within the framework of the Streetlight-EPC project the eww implemented a lighting project (refurbishment lighting system of an underpass) using ECP.

The experience of the implementation of an EPC project within an EU project was very helpful for the city of Wels. Apart from the financing by means of contracting, the city is particularly interested in the topic of performance and this is to be paid particular attention in the future.

This type of implementation of contracting in larger cities can also serve as a model for other cities. Many cities have their own companies, which were originally responsible for electricity and gas supply. In the course of the liberalised energy market, it is also interesting for these companies to find new areas of responsibility and business models. Contracting would be ideally suited for this, as the example of Wels shows.

After the successful implementation of contracting projects in one's own sphere of influence (the own city administration), the business model can then be successfully applied to other customers. This creates a new business area. On the other hand, the existing know-how of an energy supplier - especially in the field of street lighting - can be best used and transferred to other fields of application.

And, last but not least, successful contracting projects can ease the public budget and benefit the city as the owner of the successes of the contractors.

### 3. Zagreb County

The Energy Efficiency Action Plan is a strategic document in which the energy efficiency policy for the next three years period is defined. In accordance with the action plan, an annual implementation document is adopted (Annual Energy Efficiency Plan). National Energy Efficiency Law defines the content of the mentioned documents where propositions of financing schemes for the implementation of energy efficiency measures is one of the obligatory chapters. Zagreb County, with support of the regional EPC facilitation service, included EPC and PPP as financing schemes to be considered. The Energy Efficiency Action Plan was approved by the Centre for Monitoring Business Activities in the Energy Sector and Investments (National coordination body for energy efficiency) in January 2017 and adopted on 23 February 2017 at the 20th Zagreb County assembly.

#### 3.1 Zagreb County Energy Efficiency Action Plan 2017-2019

The Energy Efficiency Plan defines the measures and activities to increase energy efficiency in the building, traffic and public lighting sectors in Zagreb County for a period of three years (from 2017 to 2019) in accordance with the national Energy Efficiency Law (Narodne novine, NN 127/14). It identifies a total of 12 measures with a time frame, target group and life expectancy period. In addition to a brief description of the measure and its objective, each measure is characterised by its expected effect on the reduction of CO<sub>2</sub> emissions as well as energy savings. The document is published on the official Zagreb County webpage – link: <https://www.zagrebacka-zupanija.hr/dokumenti/?kategorija=strategije-i-planovi> (9. Akcijski plan energetske učinkovitosti Zagrebačke županije za razdoblje 2017.-2019. godine).

The main long-term vision for increasing energy efficiency in Zagreb County is to encourage energy efficiency renovation of the building stock, including the reconstruction of biomass boilers and indoor lighting, which require significant financial resources. The planned main source of financing is provided by the European structural and investment funds as well as new innovative forms of financing such as energy performance contracting (EPC) or heat provision contracts.

### 4. City of Trhové Sviny

The attached document was submitted to the Council of the city of Trhové Sviny with the following commentary:

*The town of Trhové Sviny is a partner of the project "the use of EPC method in the reconstruction of public lighting" this project in chapter WP6 "The experience of using EPC for the public lighting on the funding of other energy-saving measures" expected from partner towns: each partner city will process/discuss the document in which you describe the process of evaluating options to apply the method of the EPC in the financing of all*



*investment measures to reduce the energy intensity of systems and infrastructures (generating savings). This document should go through a process of internal discussion, it should be taken note of by the authority of the town and be available in the internal form of the responsible staff (head of the investment trade unions), to consider the possibility of continuously use the diction of EPC method with appropriate intentions. I.E.,*

The City Council at its meeting decided as follows (Extract from the minutes of the meetings of the City Council):

*The City Council takes note of the possibility to take advantage of the EPC method on projects to improve energy efficiency and the heads of the department are advised to assess the possibility of using the EPC method on such projects.*

## **5. City of Gdansk**

This strategy document was elaborated with the help of material prepared by Streetlight-EPC partner ESCAN. It will be forwarded as an informative guideline to the Plenipotentiary of the Mayor of Gdansk for EU Projects, who is also a Director of the Development Programs Department. This department manages the whole portfolio of Gdańsk's investment projects.

As a part of the portfolio of investment projects, there are also activities related to the modernisation of both street lighting and indoor lighting in public buildings in the city of Gdansk - such as schools and kindergartens. The document developed within the framework of the Streetlight-EPC project will be a recommendation for introducing EPC projects in Gdansk. Up to now, such activities have not yet been implemented, due to the fact that streetlight refurbishment investments were carried out with the help of EU and national funds. Another important obstacle to the implementation of EPC projects in Gdansk and other big Polish cities is the fact that nearly half of the street lamps belong to the ENERGA company - a private energy supplier.

## **6. Carlow Kilkenny County**

In Ireland, there are some local authorities with very little resources to dedicate to street lighting. In the larger municipalities, there is a dedicated street lighting team, however it is usually a shared service or in some cases the lighting maintenance contractors will manage the street lighting. Each municipality operates their own public lighting infrastructure. However, some have used regional approaches to tender the maintenance in order to gain better value for money. The lack of a national policy in relation to lighting presents barriers that needed to be overcome. The National Lighting Policy is being developed with a view to creating a policy that can be adapted by each local authority if they require it. The support and policy changes at national level will be key to the development of energy performance



contracts for the roll out of street lighting EPC projects in Ireland. CKEA as members of the National Working Group are supporting the development of this policy document.

Kilkenny County Council (KCC) have developed new procurement procedures which came into effective from 1st January 2017. The objective of the Kilkenny County Council Procurement Procedures document is to ensure that the local authority obtains optimum value for money while complying with EU Procurement Directives, Irish Regulations and Central Government Departmental Circulars/Guidelines. KCC must be cost effective and efficient in the use of resources while upholding the highest standards of probity and integrity. Within the Procurement Procedures KCC have a chapter dedicated to Green Public Procurement. The Green Public Procurement chapter outlines the statutory obligations and processes to follow when carrying out energy efficiency projects. A specific section outlines the Streetlight EPC project, the pilot project for 2017 and the potential energy saving model through EPC to be used for other street light retrofit projects into the future.

## **7. City of Kalmar**

### **7.1 General procurement process**

Kalmar Municipality has two way of carrying out procurements within the organisation.

- 1) Procurements handled by the purchasing department
- 2) Procurements handled by civil servant in other departments depending on what kind of product or service that are being procured.

Regardless of which of the department that intends to conduct a procurement, the following rules and regulations must be followed:

- 1) The Swedish Public Procurement Act (2016:1145– LOU), which is largely based on EU Directive concerning public procurement.
- 2) The procurement policy
- 3) Code of conduct
- 4) Policies and steering document eg.
  - a. Energy- and climate strategy
  - b. Land use strategy and zoning documents
  - c. Etc

### **7.2 Streetlight EPC's impact on Kalmar's work processes**

Since the start of the Streetlight EPC project several of the civil servants from the municipality have been taken part of study visit, training, working group meeting and partner



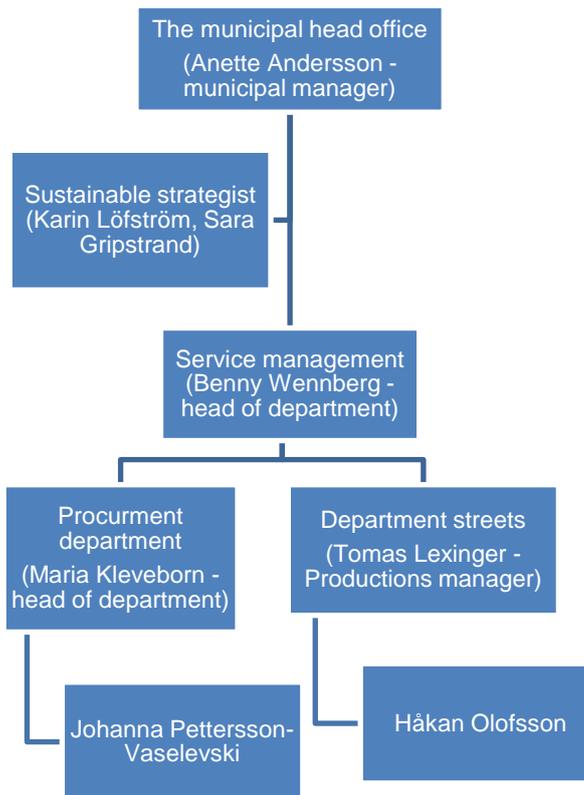
meeting. Through these activities, they have got information about EPC, LED and what to think about when to procure this.

The departments and civil servants that mainly have been involved in the project (several more have attended on one or more events/meetings) are:

<b>The Procurement department</b>	responsible for large Streetlight EPC projects procurements	Maria Kleveborn	Head of the department, responsible for the procurement policy
		Johanna Pettersson-Vaselevski	Procurer
<b>The Service department</b>	responsible for operation and maintenance and smaller procurements for refurbishments	Tomas Lexinger	head of the department
		Håkan Olofsson	streetlight engineer
<b>Landscape</b>	responsible for streetlight design responsible for the lighting form and design	Emma Andersson	one of the landscape architects responsible for streetlight design
<b>Sustainability strategists</b>	Responsible for the strategic energy and climate work in the municipality	Sara Gripstrand	responsible for the draft of the new procurement policy
		Karin Löfström	Responsible for energy- and climate plan



### 7.3 Structure of the organisation



### 7.4 Process strategy document

Kalmar municipality and the Energy Agency for Southeast Sweden has together identified and discussed which document needs to be adjusted to:

- reach the goals for energy efficiency within in the organisation (with a special focus on the impact from Streetlights)
- always evaluate the possibility to use EPC or other energy services (in different ways demand guaranteed energy savings)

The discussion resulted in a strategy document according "Tillvägagångssätt för att utveckla EPC projekt I". The strategy document identified that the main document that needs to be developed first is the procurement policy "2015 (rev) Upphandlingspolicy". A suggestion from the regional facilitation service was developed based on the findings from the Streetlight-EPC project ("Policy för hållbara upphandlingar & inköp") and sent to the staff members who are in charge of developing the new policy

Benny Wennberg, the head of the Service Department and ultimately responsible for the procurement policy, has delegated to Sara Gripstrand and Maria Kleveborn the assignment of developing a new policy. The work was started in spring 2017 and will be finalised during autumn 2017.



In this new document, it will, according to Mrs Kleveborn and Mr Wennberg, be proposed to the politicians to decide that EPC as well as LCC shall be evaluated for energy efficiency related projects.

## **8. Municipality of Maribor**

The municipality of Maribor has founded a working group for public private partnership that is appointed by the mayor. In the framework of the Streetlight-EPC project, from September to November 2016, the working group discussed possibilities for the implementation of energy performance contracting (EPC) in energy related fields other than lighting (energy refurbishment of public buildings: schools, kindergartens, other public buildings, public electric buses, etc.). There is a lack of investment resources at the municipal level and energy consumption in public buildings is not managed efficiently. Therefore, energy performance contracting could be a good solution.

On the 17<sup>th</sup> of November 2016, the Maribor's working group for public private partnership of the adopted the following decision:

*When preparing investment projects for the municipality of Maribor that are linked to energy refurbishment and energy savings, the possibility for Energy Performance Contracting must be checked and discussed within the working group for public private partnership. If the decision is positive for the feasibility of using an EPC scheme, documentation for the investment using EPC will be prepared and presented to the City Council. Afterwards, public procurement for EPC will be prepared and published in accordance with national rules and procedures.*

## **9. City of Skopje**

The Republic of Macedonia's legal framework doesn't recognise ESCO companies and hinders the implementation of EPC contracts. For this reason, the Council of the City of Skopje cannot adopt this document. Instead, it will be distributed internally within the city's administration, to the Association of the Units of Local Self-government of Macedonia (ZELS) and to all the other local governments (i.e. municipalities). It will also be published online and promoted as an output of the Streetlight-EPC project in order to reach a wider audience of experts, interested companies and other parties including the citizens.

Within the life of the Streetlight-EPC project, public awareness about EPC and ESCO companies has been increased. It has also identified that there needs to be a change of legal framework in order to make EPC possible. In order to achieve this, it is necessary to influence the national authorities, especially the Energy Agency Republic of Macedonia. The good practices obtained through the Streetlight-EPC project have been shared with the mayor, city councillors, other colleagues in the city administration as well as with the other



municipalities. Information about EPC was promoted through the organisation of six events and especially by developing and translating and/or adapting documents like the "EPC facilitation guideline" (EESI2020), Streetlight-EPC quick-checks and Step-by-step guidance document.

## 10 City of Santander

The Municipality of Santander developed its first EPC project covering the overall streetlight of the city, almost 23,000 LED luminaries with an advanced control system. This included a step-by-step process of informing, advising and involving the decision-makers that took part in the EPC contracting.

For this project, getting the support of the mayor was a fundamental first step, since he is in charge of transmitting the importance of EPC to the rest of the municipal staff and of requesting the effort and collaboration of different municipal areas involved in EPC projects. This includes different levels (officials, heads of service, directors, politicians).

In addition, it was very important to inform the different hierarchical levels of the city council, highlighting the most relevant aspects of an EPC project and the implications it may have. The information was presented as clearly as possible to facilitate their understanding, thus facilitating each of the steps required for the award of the contract.

As the knowledge and consideration to use of EPC had already been adopted in the city through the development of the large street lighting refurbishment project, the strategy document (see annex) was shared individually with the key stakeholders involved in this EPC project. As a result of the city's involvement in the Streetlight-EPC project, the city selected EPC for the overall streetlight LED renovation project. The use of EPC for public buildings, which would be the next step, was not considered viable at the moment.

The use of EPC in streetlight was announced by the mayor in the UIMP event, jointly with the approval of the EPC streetlight project in Santander, on 19 July 2016:

<http://santander.es/ayuntamiento/electr-se-hara-cargo-del-nuevo-contrato-alumbrado-instalara-sensores-presencia-regular-iluminacion>.

