Welcome! Streetlight-EPC Project Meeting

OÖ Energiesparverband christiane.egger@esv.or.at <u>www.esv-en.at</u>



OÖENERGIESPARVERBAND

www.streetlight-epc.eu

Project Meeting Streetlight-EPC Agenda 9 September

09.00 Welcome and Introduction

- Welcome, general overview of the project
- Progress by partner

WP3, WP4, WP5 (ESV)

- Update on deliverables

WP3+5 Candidate and real-life projects (ESV)

- 13.30 Lunch
- 15.30 WP3 Provision of advice services (ENERGAP)

WP1 Project management and reporting (ESV)

- 18.30 End of meeting day
- 20.00 Dinner





Project Meeting Streetlight-EPC Agenda 10 September

- 08.45 Get together
- 09.00 WP4 Financing EPC projects (REGEA) Results from reports, upcoming activities

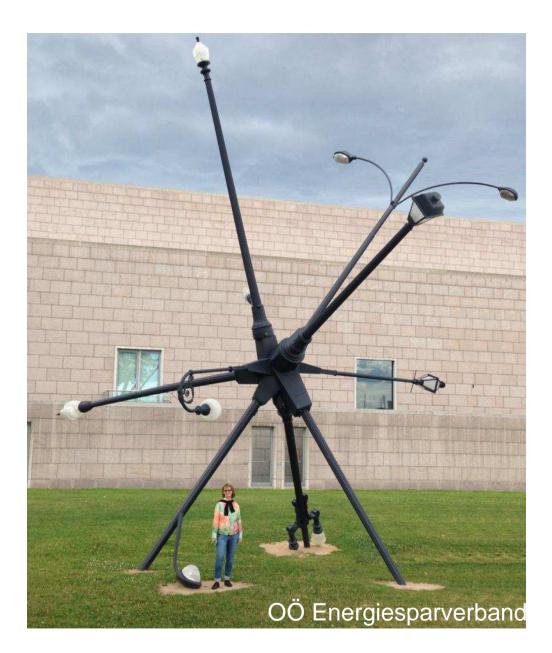
WP6: Applying the knowledge to other EPC applications (ESCAN) Approach, adapted quick-checks, how to proceed

WP7 European dissemination & networking (ESV, FEDARENE) Update, upcoming activities, next steps

Outlook of the coming months (ESV)

13.30 End of the meeting and small lunch









www.streetlight-epc.eu

Main outputs & expected results

- 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 (1 in each partner city and 3 in other municipalities in the partner regions)
- Inducing 18 SMEs in becoming ESCOs
- Contributing to EU product policies (phasing-out requirements) and the European Energy Efficiency Directive (strengthening energy services markets)

Project duration: 01 April 2014 – 31 March 2017





Project overview

WP	Name	Main activities	Time	WP L.
WP1	Project Management	- Reporting & 6 project meetings	04/14-03/17	ESV
WP2	Setting up EPC facilitation services	- Completed	04/14-12/14	ESV
WP3	Regional EPC facilitation services	 3 regional meetings/events completing 7 quick-checks/region advisory services internal helpdesk Sustaining the facilitation service 	01/15-03/17	ENERGAP
WP4	Financing EPC projects	Regional/national funding sourcesEuropean funding sources	10/14-03/17	REGEA
WP5	Supporting real-life procurement processes	 Selecting + preparing procurement Implementing projects in cities 2 meetings of regional working group City working visits 	01/15-03/17	ESS
WP6	Other EPC applications	 other lighting EPC applications (quick-check, project implementation) systematic implementation of EPC 	01/15-03/17	ESCAN
WP7	European dissemination & networking	 Links to other European intiatives Project website & publication European events (2 webinar, 3 meetings EU networks, ESCO roundtable, int. conference 	04/14-03/17	ESV

Time-table

WP	2014	2015	2016	2017
WP1: Project Management				
WP2: Setting up ECP facilitation				
WP3: Regional EPC facilitation		Main actions		
WP4: Financing EPC projects		Main actions	Main actions	
WP5: Supporting procurement			Main actions	
WP6: Other EPC applications			Main actions	
WP7: European dissemination			Main actions	





Partner Presentations Activities since January 2015 & Lessons learnt





www.streetlight-epc.eu

ESV & City of Wels Important activities in the last 6 months

- City of Wels:
 - preparatory work for the candidate project "Underpass Neustadt"
 - EPC contract developed and signed
- Events
 - Training "LED streetlighting", 29.01.2015, 17 participants
 - Conference "Energie-Contracting", 25.06.2015, 126 participants
 - Site visit "LED für Betriebe", 22.01.2015, 21 participants
- Ongoing advisory services on streetlight EPC, also in connection with the regional EPC funding programme
- Support to the project "Light pollution" of the regional government to set up a light map and cadastre:
 - detailed aerial photos of the central area of the region
 - photos linked to geographic information system
 - analysis of light pollution and energy efficiency of identified
 - available at http://www.land-oberoesterreich.gv.at/159660.htm









ESV & City of Wels Lessons learnt

- New ESCOs need a lot of support
- Pull from demand side can be an important trigger

(municipalities/businesses want EPC and put pressure on the local electrician)

- New applications which we did not think of before turned out to be feasible (petrol station)
- Indoor lighting starts to take develop
- "Smart combination" of dedicated financial support and advice service pays off (small, but well designed financial support programme is very helpful)





Zagreb County & REGEA



Activities



WP 3

- Performed 38 quick checks (target number 7)
- Formated 3 S-EPC working groups (designers / ESCO / finance&legal) (additional activity)

9 meetings with local authority and S-EPC working groups (target number – 3)
 WP 4

- Finalized EIB ELENA application (contract signing in Septembar 2015)
 WP 5
- Developed Methodology for detail energy audit (additional activity)
- Performed 4 energy audits (target number 3)

WP 6

Supported the implementation of EPC for indoor lighting of 3 schools (start of reconstruction - December 2015) (target number – 2)



Zagreb County & REGEA



Lession learnt



- Proper city street lighting inventory (usually outdated/incorrect) is key precondition for succesfull EPC
- Legal barriers exists but solvable Public Private Partnership (PPP)
- Contract key element risk assigments (EUROSTAT)



www.streetlight-epc.eu

Streetlight -EPC

Energy Centre České Budějovice + city of Trhové Sviny (Czech Republic)

Main activities passed within the period of: January – August 2014

- We put together a direct mail campaign (almost 600 addresses), to see what the interest is among the villages in participation at a seminar "Streetlighting and EPC".
- According to the response we wanted to determine the venue and dates of the seminars.
- Unfortunately, the response was almost zero. Only one small village expressed an interest.
- We only lost time.
- We had to change tactics. We have specified the date and venue (3 big cities in South Bohemia, September 2015) and we directly invite individual representatives at the meeting.
- We continue the personal interviews with the representatives of the cities and municipalities.
- We also continue in personal education (conference on the theme "The combination of grants from the EU and EPC methods for financing the projects on the reduction of energy consumption").
- Citi partner is preparing data for streetlight electricity audit and.....





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

Energy Centre České Budějovice + city of Trhové Sviny (Czech Republic)

Main lessons learnt within the period of: January – August 2014

- Almost zero response on our direct mail campaign.
- The experience of the ESCO or /and other EPC facilitators in the Czech Republic: Usage of the EPC method for public lighting has a worse position compare with another measures for reduction of energy consumption (for example changing the heating system - new boiler) – especially in terms of payback period.
- We had a media case in the Czech Republic: several municipalities were deceived by the company which offered the EPC-like method. It did harm to the prestige of the EPC.
- The novelization of Act 406/2000 (about energy management) entered into force. This novella brings the terms ESCO, database of ESCO and energy services contract (EPC) into the Czech legislation environment. It prepares a better position for EPC in Czech Republic.





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

Important activities BAPE/Gdansk

- replacing of about 20% of lighting luminaires co-financed by the National Fund for Environmental Protection and Water Management under the program of modernization of street lighting SOWA has just been completed
- 2. articles on the modernization: <u>www.gdansk.pl/nasze-</u> <u>miasto,512,36422.html</u>, <u>http://wiadomosci.onet.pl/trojmiasto</u>, <u>http://korki.trojmiasto.pl/Coraz-wiecej-swiatla-LED-owego-na-ulicach-Gdanska-n91679.html</u>
- 3. contact with LED Academy (e-magazine and paper version on LED technology) established and co-operation is ongoing (<u>www.akademialed.pl</u>)

 two articles on ESCO and streetlight modernization developed
- 4. two meetings in January 2015 (Tczew and Kwidzyn) carried out
- promotion of the Project during the seminars in Serock (22.05.2015) and Szczyrk (10.06.2015); seminar on ESCO for Gdynia Municipality (24.08.2015)





www.gdansk.pl

Lessons learnt

- Complicated ownership structure of the street lighting (municipalities/energy utilities) is a significant barrier for modernization
- 2. There is financial support within ROPs in Poland supporting modernization of the street lighting what also causes low interest in ESCOs
- 3. Still legal barriers slow down the process of ESCO implementation
- 4. Mostly large energy companies like TAURON, ENERGA etc play a role of ESCO
- 5. Due to legal regulations on public procurements it is not possible to implement LCA methodology as criteria.







CKEA & KCC Last 6 Months

- SEAI Energy Show Streetlight Conference March 2015
- Local Authority Streetlight Forum May 2015
 - Presentation by Joe Daly to National Streetlight Conference in May 2015 – "Compiling an Inventory with no External Resources"
- Simon Walton appointed newly as a member of LUTS (Land Use & Transportation) Committee of the CCMA (City & County Managers Association)
 - National topics including Streetlighting & Energy Efficiencies
- Paddy Phelan facilitator for the SEAI (Sustainable Energy Authority of Ireland) Community of Practice for Public Lighting in Ireland. Also member of a special working group on public lighting with the National Roads Authority.
- Joint Meeting with Carlow & Kilkenny local authorities (R418 Project)
- Applied to SEAI for technical assistance for ESCO/EPC feasibility studies
- Streetlight LED Site Visits Kilkenny City (SEAI)



Lessons Learnt

- General awareness by electrical contractors on EPC/ESCO projects. Shift away from traditional contracts.
- Appetite for funding projects
- SEAI energy grants did not support Streetlighting retrofit projects this year.
 - Technical assistance is available but not capital funding.
 - Major emphasis now on other funding sources
- National issues surrounding dimming profiles National consultation on dimming profiles.
- ESB Networks issues



Kalmar Municipality

- 11 -12 March Participating in Street lighting Fair in Stockholm (Seminaries and workshop)
- 17 March Participating in seminaries and workshop Kalmar.
- 22-23 April Maribor city visit
- 27 April Participating in Streetlighting education light, luminaries and control
- 6-7 May Kalmar city visit
- Quick check lists done on 5 potential projects.
- The pilot project for the EPC project will be selected after the Quick check's LCC is done.

ESS

- 17 March Seminaries and workshop in Kalmar.
 - Roundtable How to procure an EPC project participants contracting authorities
 - Roundtable EPC Obstacles and opportunities for possible ESCOS participants possible ESCOS, University
- Exchange of experiences with the Kalmar County Councils and Kalmar Municipality about ongoing ECP project for building refurbishment
- 27 April Education Streetlight Oskarshamn light, luminaries and control
 - The lightning designer Johan Röklander from WSP
- Inventory of the status of our three counties regarding future street lighting projects, information about Streetlight EPC project and



Lessons learnt for Kalmar Municipality:

- That we should do a small pilot project in the municipality before doing an EPC project for the whole of the municipality.
- Gain the knowledge of the technology in the municipality, make sure to know what you want and how you want the streetlights to be changed to. Make sure to do your researched and not rush into decisions.
- We need put in more resources on engineering for technical issues for the tendering.
- In our case we also need to add in infra-structure changes. Old infra-structure together with how to do the street light in general shall be redesigned in combine with budget.

Lesson learnt ESS

- It is rare that there is a "Lighting Officer" in the municipality someone that has the whole responsibility for lighting in the municipality this leads to lack of strategic planning and resources.
- The suppliers which for more suppliers dialogues since a lot tenders is of pure guesswork.
- The suppliers and consultants wants the municipalities to really define and decide what they want and what they don't want and when, where and why do they want to control/regulate there light or a specific luminaire and to what costs.



Maribor Streetlight – EPC activities in 2015



- Meetings (city administration and Mayor's representative) to discuss legal issues and the possibility to prepare technical documentation for EPC for the whole city;
- In the meantime an ESCO sent a letter of interest (May 2015) to offer EPC street lighting for the whole city, answer needed till the end of September;
- Mayor's office decided to prepare the documentation for public procurement for EPC technical documentation;
- Because of lack of financial sources for technical documentation and lack of experiences in legal issues the decision was taken to work on a pilot area for EPC streetlight project;
- Meeting with the concessionaire for street lighting was held in September 2015 to discuss the pilot area and investment;
- Maribor hosted Kalmar for city working visit.
- Activities in other Municipalities: Radlje ob Dravi, Poljčane and Lovrenc na Pohorju – preparationion of technical documentations
- Regional workshop for municipalities and ESCOs in April 2015, technical site-visit for Municipality of Maribor
- Consultations with banks.







Streetlight – EPC

lessons learnt in 2015

- Street light EPC is not just a technical issue but has also other important aspects architectural, cultural heritage, nature preservation, citizens feelings about new lighting; so before starting technical and financial calculation other aspects should be discussed within the city administration, decision-makers and citizens.
- Different municipalities took different approaches in EPC in SL: some offered just energy savings technical measures, others included also maintain works (impact on financial calculation).
- Municipalities need technical help with EPC because it is not only legal procedure but also saving calculations which depend on many circumstances.
- LED lights offer many advantages especially when they are coupled with good ICT supported regulation system. The LED technologies are developing very fast and there is no problem to have very specific light design with LED. They have very long life and small maintaining costs.















Important Activities

- Quick checks have been send to all 80 municipalities by e-mail;
- First conference "Streetlight LED possibilities, finances and investments", was held on 28.04.2015 in City Council Hall, 71 participants and media coverage;
- Several municipalities were contacted by phone, mail or personally;
- ✤ Six quick-checks were prepared and analyzed.











Main lessons learnt in the last 6 months

- Municipalities are aware that there is big potential for energy savings with streetlight refurbishment projects;
- Low level of investments in streetlight refurbishment projects;
- Lack of studies and energy audits for street lighting, in general;
- Lack of sufficient trained staff in the municipalities, who would care for the operation and maintenance of street lighting;
- There are few companies that are wiling to invest in EPC Streetlight projects.

Streetlight-EPC

SPAIN- important activities in the last 6 months

WP1-Management	Organize project Meeting in Santander in September 2015
WP2 – Setting-up Facilitators	 National quick check, simple data sheets, step-by-step guidance and regional FAQs issued <u>www.streetlight-epc.es</u>, the Facilitator Platform, updated. Includes project info, Map, best practices, etc.
WP3- Facilitators Services operation	 2nd dedicated meeting: workshop on "Streetlight and EPC contracts" for small municipalities and ESCOs (1st + 2nd meetings = <u>over 100 participants</u>) Completion of 7 quick-checks and data sheets with info from Municipalities Advisory service to municipalities and ESCOs (15) // Internal Helpdesk: 2 enquiries answered Energy audit/streetlight manag. of Santander city (SustainableCities, UIMP Seminar, Sant.)
WP4 – Financing EPCs	 Regional and national funding sources information issued (Spanish and English) Bilateral meetings with 5 funding organizations issued (English)
WP5 – Supporting real projects	 Selecting and preparing streetlight-EPC: "Rough Analysis" of 7 projects City Working Visits: Organizing working visit (shadowing) in Spain/Santander, 7-8th Sept 2015. Attendance to Kalmar city Working visit (6-7th May 2015).
WP6- Applying to other EPC applications	Not started
WP7- European Dissemin and networking	Not started
0.40/00/2015	

Streetlight-EPC

SPAIN- main lessons learnt in the last 6 months

ESCO and EPC market still at slow speed in Spain

Many actors interested in taking part in this market, including ESCOs (business), Municipalities (save money and time), suppliers, etc. Projects take much time to be developed (since the first analysis for a renovation to the final installation) and this increases failure risk. Reason1: serveral voices in the Municipality with different opinions. Reason2: internal Municipal procedures take time

Financing organizations, particularly private, are considering energy efficiency and EPCs as a profitable business Most of the contracts started only 1 to 4 years ago, so the real experience and learnings are limited Each project is different and threre is need of expertise to evaluate the viability, as "bad practices" lead to economic looses and mistrust

FEDARENE activities since the last meeting

Webinar 1 fixed: Spain focus (2nd largest CoM signatories group) on <u>26th November a.m.</u> 7 people registered so far

Webinar 2: EU wide focus [English language] 53% of CoM signatory cities < 5000 inhabs, 35% at 5-50,000 inhabs) Aim for beginning of 2017?

Newly approved EU projects – to be added to the WP7 Strategy: <u>Horizon 2020</u> EnPC-INTRANS (AE3R, Fedarene member, is a partner) EPC PLUS (ESCAN SA is a partner) Trust-EPC-South CITYnvest

FEDARENE website: project page updated + banner added on homepage **Twitter**: Tweet directly by ManagEnergy and H2020 EE accounts



Update on deliverables - WP 3 + 4 + 5

	Events held (WP3 + 5)	Descrip- tions received	Completed checklists	Enquiries in list	Report funding sources	Report bi- lateral meetings	City wor- king visit report
Upper Austria	3	3	8	25	yes	yes	-
NW- Croatia	3-5	3 (+2)	38	39	yes	yes	-
South Bohemia	(3 planned)	0	7	15	yes	yes	-
Pomerania	2	1 (+1)	5	14	yes	yes	-
CarlKil. C.	6	(6)	2	15	yes	Update to come	-
SE- Sweden	(2-3)	0	8	5	yes	yes	yes
Podravje	2	2	6	26	yes	yes	yes
Macedonia	1	1	5	21	yes	yes	-
N./C. Spain	2	2	7	(15)	yes	yes	to come



www.streetlight-epc.eu



WP3 + 5 Candidate Projects

- key outcome of our project: a minimum of 3 implemented streetlight-EPC projects in each region!
- > this will be the focus of our activities in the next year!

Process in 3 stages:

- in WP3, we offer advice services including the completion of check-lists with potential projects
- in WP5.1, projects that are most likely to be realised (at least 7 per region) become "candidate projects". These candidate projects are supported more in detail.
- in WP5.2, the actual implementation of these projects is supported ("implemented projects").
- For each of these candidate/implemented projects, a project data sheet will be set up by the regional partners





Candidate Projects





www.streetlight-epc.eu

Upper Austria: Project "Underpass Neustadt", Wels

Before renovation:

- 40 luminaires, 48 Watt each
- annual electricity costs: 3,700 Euro
- annual maintenance costs (per light point): 2,000 Euro
- operating hours: 24 h/day, 8760 h/a

After renovation:

- 40 LED luminaires, 28 Watt each
- annual electricity costs: 1,962 Euro
- annual maintenance costs (per light point): 500 Euro
- investment: 19,000 Euro
- payback time: 5.5 years

Savings

- electricity savings: 53 % / a
- total savings (electricity and maintenance): 66 % / a
- CO₂ emission savings: 3,215 t/a
- cost savings (after end of EPC contract), excl. maintenance costs: 3,238 €/a





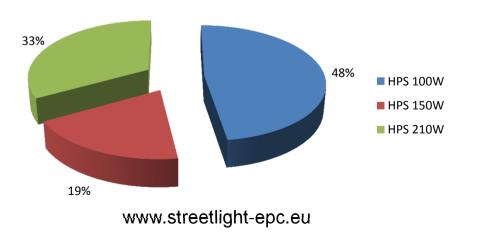
Zagreb County & REGEA



Candidate project- Zapresic



Scope: Two cabinets (metering boxes), 15 streets, 157 luminaires EI. power: 29.33 kW EI. consumption 121,787 kWh / year Maintenance costs: 158.092 € for 3 700 luminaires (unable to alocate costs for scope of pilot project)





Zagreb County & REGEA



Candidate project- Zapresic

Reconstruction profitable only on 7 of 15 streets

84% reduction of el. power (LED luminaires) Energy savings: 48,568 kWh / 4,792 € Investition: 48,508 € Simple payback period 10.12 years +improved lighting standard +prevented lighting pollution









www.streetlight-epc.eu





Most promising candidate projects

- 1. Modernization of street lighting in Gdańsk:
 - a. 3,932 sodium lamps were replaced with LEDs
 - b. total cost: 1.75 mln euro
 - c. energy to be saved: 1,136 874 kWh
 - d. planned CO2 to be saved: 1,014 Mg/y
- 1. Modernization of street lighting in Gdańsk (under construction)
 - a. 25 sodium lamps are being replaced with LEDs (end of the constru September 2015)
 - b. total cost: 35 thousand euro
 - c. exchange of 70 W luminaries for 53 W
 - d. energy to be saved: 3,500 kWh
 - e. planned CO2 to be saved: 7 Mg/y





www.gdansk.pl

Regional Project

- M9 Motorway built in 2009/2010
- Declassified road network between Carlow & Kilkenny (N9 & N10) now the R448
- Joint meeting facilitated by CKEA between Carlow County Council and Kilkenny County Council
 - Number of luminaires;
 - Lamp technology;
 - Installed capacity;
 - Current annual electricity;
 - Maintenance costs;
 - Planned



Most promising project:

Pedestrian and cycle path in Lindsdal, Kalmar

• Present situation:

Number of luminaires: 648 Lamp technology: High Pressure Sodium lamps, 50 W Installed capacity: 32.4 kW Current annual electricity and maintenance cost: 34,292 Euro/year (324,000 kr/år)

• Planned situation:

Number of luminaires: 648 Lamp technology: LED, 30 W Installed capacity: 19.4 kW Planned investment costs: 171,458 Euro (1,620,000:- 2,500x648) Planned annual electricity and maintenance cost: 17,196 Euro/year (162,480 kr/år)



Municipality of Radlje ob Dravi

- Number of luminaires: 639
- Number of luminaires needed replacement: 486
- Length of lit roads in the municipality: 26 km
- Lamps technology: high pressure sodium lamps and high pressure mercury lamps,
- Total energy consumption for public lighting: 428,000 kWh/year,
- Annual energy costs: 78,687.00 EUR,
- The total annual cost for maintenance: 10,714.00 EUR
- Total installed power: 73.8 kW
- Share of luminaires fitted with a central control system: 3.6% (23 luminaires)

REFURBISHMENT:

- Planned installed capacity: 40 kW
- Planned investment costs: 285,000,00 EUR
- Planned electricity costs: 31,000 EUR
- Planned maintenance costs: 2,500 EUR
- Simple ROI: 5.5 years
- Architect involved
- One by one light checked for regulation,...





Streetlight-EPC

SPAIN- most promising streetlight renovation *Municipality of Santander streetlight*

CURRENT SITUATION

- 22,700 luminaries
- 95% HPS
- Installed capacity: 4,540 kW
- Average 200 W/luminary (incl. auxiliaries)
- Current electricity costs: 2.5M€
- Current maintenance costs: 1 M€

FORESEEN SITUATION

- 22,700 luminaries
- 100% LED
- Installed capacity : aprox. 1,900 kW
- Average < 85 W/luminary
- Energy savings: > 65 %
- Energy savings in €: >1.6 M€
- Investment 15 M€
- EPC 15 years project



WP3 + 5 Candidate Projects

Working Groups

Discuss candidate projects (those likely/sure to be realised):

- Main technical and economic parameters that make this project (likely) to be) feasible
- How is the decision making process under way and which were/are the decisive points?





Project Data Sheets (Part 1): Minimum Technical Content

	before	after (planned)
Area (type of street)		
Age of street lighting system		
Year of the last comprehensive refurbishment		
Total installed electric capacity (nominal capacity) [kW]		
Total number of lamps		
Lighting points (luminaires): number/condition good-bad/height of poles		
Main lamp types 1+2: type/total number/capacity per lamp [W]		
Annual electricity consumption [kWh/a]		
Annual electricity costs (estimation) [Euro/a]		
Annual maintenance costs [Euro/a]		
Operation time [from-to] or total operational hours		
Periods of dimming or switch-off during night		
Total savings (estimation) per year electricity costs/electricity consumption/maintenance costs Pay-back-time		





Project Data Sheets (Part 2): main (support) activities & project steps

- the main activities in the preparation and implementation process &
- how this was supported by the facilitation service (regional & local partners)
- objective: proof of work & basis for internal and external learning process

Possible steps:

- Project preparation (e.g. selection process, data collection process)
- Audit/"rough analysis" (estimation of measures with costs and savings)
- Tendering and selection of the ESCO (development of documents, organisation of the process, technical quality criteria, other criteria for selecting the ESCO)
- Contract preparation
- Project implementation and monitoring

Support provided could include:

- information and support with technical, legal and financial issues
- help in accessing public funding programmes
- guidance in identifying and selecting ESCOs
- help in the internal decision making processes within the municipality
- etc.

Remember to document the use of the tools from this and other IEE projects!



OÖENERGIESPARVERBAND

WP 5

	Deliverable name	Results	Language(s)	Date
D5.1	Establishing and updating project data sheets for "candidate projects" (min. 7/region)	Paper (el.)	EU version + all	May16
D5.2	Updated project data sheets for "implemented projects" (min. 3/region)	Paper (el.)	EU version + all	Jan17
D5.3	Reports of the meeting of the regional streetlight-EPC working group	Reports (el.)	English	March17
D5.4	Reports on city working visits	Reports (el.)	English	Sept15
D5.5	Summary report on "Practically implementing streetlight-EPC projects"	Report (el.)	English	March17



WP 3: Regional EPC facilitation services Jan15-March17

- practical support to the establishment of EPC markets in each region
- proactively inform, activate and support municipalities and ESCOs (respectively SMEs interested in becoming ESCOs)

Partner(s)	Tasks of this partner organisation	Task
ENERGAP	Overall responsibility for this WP	
Regional partners	Organisation of 3 meetings	3.1
Regional partners	Completing 5 quick-checks	3.2
City/county partners	Completing 2 quick-checks	3.2
Regional partners	Providing advisory services (min. 30 enquiries/region)	3.3
ESV, REGEA, ENERGAP, ESCAN	Proving internal helpdesk for other partners (min. 30 enquiries)	3.4
Regional partners	Entering dialogue with key actors for sustaining the facilitation services	3.5
ENERGAP	Summary report on EPC facilitation	3.5





WP 3

	Deliverable name	Results	Language(s)	Date
D3.1	Reports on 3 regional meetings	Reports	English	Aug16
D3.2	Completed check-lists (7 per region)	Paper	all	June15
D3.3	Regional advice (30/region)	Paper	English	Jan17
D3.4	Internal enquiries (30 in total)	Paper	English	Jan17
D3.5	Summary report EPC facilitation	Report	English	March17



WP3 - Advisory Service

Most frequent and difficult questions encountered in the advice provision service

- 1. What is EPC and why should we, as a municipality, do it? (REGEA)
- 2. Should we as a municipality be concerned about the long-term relationship (more than 10 years of the EPC contract) with the ESCO? (ECCB)
- 3. What is the process for an EPC? (CKEA)
- 4. How can you guarantee/calculate minimum maintenance for LED? (CKEA)
- 5. How to calculate and guarantee savings on maintenance costs compared to relatively easy to calculate savings costs? (ESV)
- 6. Will the ESCO install LED luminaires for us? (REGEA)
- 7. How should we plan the city budget for EPC? (REGEA)



- 8. How much will the initial rough analysis cost? (ECCB)
- 9. Which refurbishment measures can be financed from the savings and which can not? (ESV)
- 10. How to finance the repairing of poles and main cables, which is mostly required? (ECCB)
- 11. How can my local authority participate in energy saving projects? (CKEA)
- 12. When will we see the streetlight changed in our area? (CKEA)
- 13. Are there examples of good lighting systems in our region? (ESS)
- 14. How much can we save when we change technologies? (ESS)
- 15. What is the cost / how much do we save with a control system? (ESS)
- 16. How will the municipality monitor savings? (ENERGAP)
- 17. How to calculate and justify the economic benefits? (ESCAN)



- 18. How do we assure the ESCO is not earning too much money? (ENERGAP)
- 19. How to deal with EPC if there is already an agreement for the maintenance of the street lighting? (ENERGAP)
- 20. What kind of service do you provide so I can benefit? (ESCAN)
- 21. What is the difference between LaaS ('Lighting as a Service', Light as a Service) and EPC? (ESS)
- 22. How to avoid glare? (ESS)
- 23. What is the best technical solution for our streetlight system? (ESCAN)
- 24. How to stipulate the lifetime of a LED (the diode and all related technique)? (ESS)
- 25. How shall we describe what we want? How should we write in order to get these features (light colour, power consumption, form and appearance, etc.)? (ESS)
- 26. How to convince the energy utility (the owner of the infrastructure) to modernise street lighting? (BAPE)



27. Does EPC count as public debt for a local authority? (REGEA)

28. How to solve VAT problem (ESCO)? (REGEA)

- 29. How will an ESCO project be financed and why can we not just invest our own resources? What is the best solution in our case: EPC or own implementation? (ESV, CKEA)
- 30. How to combine EU funds (or national non-refundable grands) with EPC model? (REGEA)
- 31. How do we decide between a small (but sure) subsidy given by state government (but enough just for a part of a system) and a comprehensive/complex (but not sure and more complicated) solution of EPC? (ECCB)

32. Why ESCO? Why not PPP? (MACEF)

33. How can the economic risk for the municipality be reduced for the case that the guaranteed savings are not achieved? Is a bank guarantee a good option? Or can this be incorporated in the regular payments from the municipality to the ESCO? (ESV)



35. Why LED, when there are so many other possibilities? (MACEF)

36. Should I use LED for all streetlight or a mix of lamps? (ESCAN)

37. Which lamp best fits in my situation? (ESS)

- 38. How will LED be installed on network poles with current restrictions in place? (CKEA)
- 39. Can we believe the technical information regarding life span of the luminaries? (MACEF)







- Interim report, financial statement, general reporting topics
- Feedback Progress Report, EASME Ex-Post Findings Document
- General management issues
- Meetings
- Deadlines



Interim Report

- Covers project activities between 1 April 2014 and 30 September 2015
- Includes:
 - 1. Completion of all due deliverables (urgent!)
 - 2. Update of regional website
 - 3. Activity report (template for partner input)
 - 4. Table "Hours spent" (update table from progress report actual and planned hours for this period!)
 - 5. Financial statements (new)
 - 6. Event description (all events held in 2015)
- Regional partners support city partners in reporting process, especially regarding financial reporting



Interim Technical Implementation Report

Activity report

- 1 report from the respective regional and city partners together
- use template
- only include activities in 2015 (not yet reported in Progress Report)
- please be short and send text amounts as indicated

Main points to be covered:

- Achieved results of the period
- Identified problems and corrective actions taken in the period
- Main lessons learnt so far
- Progress on deliverables and work packages Please write 1-2 sentences on your approach of the tasks (how the task was carried out)
- Work plan for the next period (October 2015 June 2016)
- Planned meetings





Financial Statement

- covers 01 April 2014 30 September 2015
- prepared by each partner
- Cost Categories:
 - Staff Costs
 - Travel & Subsistence (only for your own staff!)
 - Other costs: publications; seminars, conferences, other events incl. travel costs for speakers
 - Subcontracting
 - -> EC financial guidelines
- Actual costs in the accounting system! (not costs from the CPF)
- Time sheets: daily records of hours spent (don't send them, just keep them)
- no VAT (unless the beneficiary can show that he is unable to recover it)
- budget transfer between cost categories: to be done after the report)



Financial Statements – exchange rate

For participants of non-EURO countries there are two options to choose, i.e. any conversion of actual costs into euro shall either be made:

- at the monthly accounting rate established by the Commission and published on its website applicable on the day when the cost was incurred
 or
- at the monthly accounting rate established by the Commission and published on its website applicable on the first working day of the month following the period covered by the financial statement concerned.

Website:

http://ec.europa.eu/budget/inforeuro/index.cfm?fuseaction=home&Language=en



Interim Technical Implementation Report

Deadlines:

- by eMail:
 - all due deliverables by 18 September
 - Input report at the latest by 25 September
 - Regional websites updated at the latest by 25 September
 - Interim Financial Statement by e-mail, including scanned copies of the 3 biggest invoices in "subcontracting" and "other costs" by 5 October
 - the table "Hours spent" by 5 October
- by postal mail by 12 October:
 - signed Interim Financial Statements by postal mail (3 originals)
 - include copies of invoices for the 3 biggest in "subcontracting" and "other costs". No supporting documents needed for staff costs, travel, revenues and own funding
 - all **printed material** (publications, programmes for events etc.) not already reported in the progress report **by postal mail (3 copies each)**.





EASME Feed-back Progress Report (1) Received on 20 March

- It is well written, giving a good overview of the activities undertaken during the first 9 months of the project and the foreseen schedule of activities for the next reporting period.
- The project seems to be well on track, the progress report shows a good progress of the project activities.
- Moreover, taking into account the indications provided by you, the achievement of the specific project objectives appears realistic.
- In light of this, the progress report can be approved.

The following has to be provided with the interim report:

- The local language versions of deliverable D2.1 (Short analysis reports including lists of stakeholders) which have not been submitted (Croatian, Macedonian, Spanish)
- An <u>update</u> on initiatives commenced and activities implemented in connection with <u>deliverable D7.1</u> (Strategy on how to optimise the links to other initiatives)



EASME Feed-back Progress Report (2) Received on 20 March

- The use of the Intelligent Energy Europe <u>logo/disclaimer</u> and the project name is essential when communicating about the project.
- The project website as well as the linked <u>"sub-sites" by the regional EPC</u> <u>facilitators need to be regularly updated display all public (locally relevant)</u> <u>deliverables</u> and include the logo and disclaimer.
- Moreover, the <u>websites should be reviewed regarding general appeal, usability</u> and common design taking into account the relevant target groups and should include links to relevant other European initiatives and programmes.
- Overall, the working hours reported appear to be in line with the work performed. However, in relation to the planning some hour <u>over-/underspending</u> <u>can be noticed for partners</u>, which should be carefully monitored
- <u>Only costs can be claimed</u> which have actually been incurred <u>during the project</u> <u>duration</u> in line with the project outline and included in the estimated budget annexed to the grant agreement.



EASME Document Frequent Mistakes (Ex-post audit findings)

• Main cross cutting errors:

- lack of supporting documents
- wrong exchange rate used, ineligible VAT included

• Main errors related to personnel costs:

- Time charged to the project but not supported by timesheets
- Timesheets prepared on the basis of the budgeted time instead of actual time
- Lack of reconciliation between yearly salary costs and payslips
- Hourly rates overstated or understated
- Main errors related to travel & subsistence:
 - Use of per diem not supported by any internal policy or usual practice
- Main errors related to other costs:
 - Costs which were not necessary for the implementation of the project
 - Dinner costs exceeded the predetermined thresholds
 - Revenues related to the project not declared



Logo & Disclaimer

NO LOGO - NO MONEY!

Logo: <u>http://ec.europa.eu/energy/intelligent/managing-projects/day-to-day-management/communicating-your-results/index_en.htm</u>



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



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

Disclaimer (in your own language - some are available)

The sole responsibility for the content of this [webpage, publication etc.] lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.



OČENERGIESPARVERBAND

Photo/image copyrights

ALWAYS make sur you have <u>user rights</u> to ALL photos and images!!

to prevent complicated (and expensive) legal issues! (even the smallest image can cause serious problems)

No:

- Photos/images/graphs from Internet. Simply naming the source is **not** sufficient. It is better to avoid them all together.

OK :

- Photos taken yourself or by a colleague, or that you have purchased from a photographer or online (for all uses!).
- If they come from a third party (e.g. a company), get written consent.





Project website

- Function of the website:
 - presenting & disseminating project results to "international audience"
 - project management tool for EASME and for ESV
 - all deliverables are placed there by ESV when completed
 ->send FINAL version of deliverables to ESV (word, excel, NOT pdf)
 - please check it regularly
- Regional partners: your own facilitators website:
 - must be regularely updated
 - include all your public deliverable, information on upcoming/past events
 - link to other relevant programmes and initiatives
 - please check it regularly!

• Internal area:

- go to "The Project", click in the link-box on "workspace"
- username: LED-EPC, password: LED-EPC123





Meetings & Reports

Deliverables		
Project meetings	6 Meetings	 ✓ 1 in Linz (KO Meeting) ✓ 1 in Maribor ✓ 1 in Santander - 1 in Zagreb - 2 in Brussels
Project reports	4 reports	 Technical Progress Report (01/15) Interim Technical Implementation Report & Interim Financial Statement (10/15) Technical Progress Report (07/16) Final Technical Implementation Report & Final Financial Statement (05/17) Result-orientated report (05/17)
Project website	website	www.streetlight-epc.eu





Payment scheme (Article I.5)

- 1st pre-financing: 30% of EU contribution
 - Paid within max 30 days of official receipt of signed agreement and all mandates
- 2nd pre-financing: 60% of EU contribution minus the amount of the first pre-financing
 - Conditional on approval of Interim Reports <u>and</u> consumption of 1st prefinancing
 - The Agency has 90 days to approve the reports and pay the 2nd pre-financing
- Pre-financing means that <u>the funds are still deemed to be property</u> of the European Commission, and shall need to be justified by costs incurred during the action.



Milestones (1)

April 14

WP1 Kick-off meeting

June 14

- WP7 Strategy other initiatives
- WP8 Updated IEE-Performance Ind.

July 14

WP2 Analysis reports, list of stakeholders

September 14

- WP2 Report internal working session
- WP7 Project website

December 14

- WP1 Project meeting
- WP2 EPC facilitation services online
- WP2 Internal FAQs
- WP2 EPC facilitation guideline
- WP2 Advanced LED EPC-models
- WP2 Report on LED EPC-models
- WP2 EPC quick-checks
- WP2 Step-by-step guidance doc.
- WP2 Regional FAQs

January 15

WP1 1st technical progress report

March 15

WP4 Report funding sources

June 15

- WP3 Completed check-lists
- WP4 Reports on bi-lateral meetings

July 15

WP1 Project meeting

September 15

WP5 Reports on city working visits

October 15

WP1 Interim technical implementation report & financial statement

December 15

WP6 Adapted quick-checks

January 16

WP1 Project meeting

March 16

WP7 European ESCO round-table





Milestones (2)

Ma 16

- WP5 Project data sheets "candidates"
- WP7 Project publication

June 16

WP6 Documentation quick-checks

July 16

- WP1 2nd technical progress report
- WP1 Project meeting

August 16

WP3 3 regional meetings

January 17

- WP1 Project meeting
- WP3 Regional advice
- WP3 Internal enquiries
- WP4 Documentation of advice
- WP4 Project with European funding
- WP5 Data sheets "implemented projects"
- WP6 Project data sheets
- WP6 Strategy document
- WP7 2 webinars for CoM cities



March 17

- WP1 Final technical implementation report & financial statement & result-orientated report
- WP3 Summary report EPC facilitation
- WP4 European platform
- WP4 Summary report financing
- WP5 Meeting regional working group
- WP5 "Practically implementing projects"
- WP7 3 Meetings with European networks
- WP7 Dialogue with twin/sister cities
- WP7 International conference
- WP7 Policy recommendations



WP 4: Financing EPC projects Oct14-March17

- tackle the access to capital for the ESCOs
- main target groups: regional and national banks and funding institutions, structural funds
- guidance towards European funding options, including efforts to bundle smaller projects into larger one, making them eligible for European funding.

Partner(s)	Tasks of this partner organisation	Task
REGEA	Overall responsibility for this WP	
Regional partners	Overview of regional/national funding situation	4.1
Regional partners	Organisation of bi-lateral meetings	4.1
REGEA	Collection of information on European funding and presenting Presentation of results at second project meeting Support and advice to larger projects	4.2
Regional partners	Support to triggering and accompanying a project with European funding	4.2
REGEA, ESV, ENERGAP, ESCAN	Analysing the establishment of a "European LED-EPC platform"	4.2
REGEA	Report on a European streetlight-EPC platform	4.2.3
REGEA	Summary report on streetlight EPC financing	4.3



WP 4

	Deliverable name	Results	Language(s)	Date
D4.1.1	Reports on regional/national funding sources	Reports	all	March15
D4.1.2	Reports on bi-lateral meetings with regional/national funding institutions	Reports	English	June15
D4.2.1	Documentation of advice provided	Paper	English	Jan17
D4.2.2	Documentation of project with European funding	Paper	English	Jan17
D4.2.3	Report on a European streetlight-EPC platform	Report	English	March17
D4.3	Summary report on streetlight-EPC financing	Report	English	March17



WP4 Financing EPC projects

Deliverables of work package 4



Task 4.1 Regional and national funding sources D 4.1.1 Report on regional/national funding sources

Report highlights:

- Insurance schemes for ESCO
 - In the most regions specific insurance for ESCO don`t exists
 - Both "directions" of insurance should be reviewed

• ESCO->client (bank guarantee, insurance company...) SPAIN (ESCAN): The insurance Co pays annually the difference between savings actually achieved and savings projected and also covers the whole value of the equipment and machinery installed by the company during the same period

• Client->ESCO (payment guarantees) What is procedure for goverment payment guarantees?

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

Task 4.1 Regional and national funding sources D 4.1.1 Report on regional/national funding sources

Report highlights:

- Specific bottlenecks in public lighting projects
 - "Project financing" as financing model for EPC isn't recognised
 - Difficult access to capital and insurance/guarantee for ESCOs
 - Lack of legal framework (public procurement rules, EUROSTAT - public debt, VAT)
 - Existing data about lighting system is unreliable
 - Ownership issues (unclear, combined ownership el.distributor/city)



www.streetlight-epc.eu

WP4 Financing EPC projects

Task 4.2 European funding sources

D 4.2.1 Documentation of advice provided

D 4.2.2. Documentation of a project with European funding

Project Newlight

- Zagreb County, Krapina Zagorje County and REGEA bundled 64 smaller projects (cities and municipalities) into the large one
- Negotiation with EIB ELENA finalised, contract signing by the end of September 2015
- Documentation will be prepared after the whole process is done (by the end of 2015)

D 4.2.3 Report on a European streetlight-EPC platform

Task 4.3 Summary report "Funding Streetlight-EPC projects"

DEADLINE - end of 2016 / beginning of 2017



WP 6: Applying the knowledge to other EPC application Jan15-March17

- extend market development process to other lighting applications and more complex EPC applications
- establish internal structures to automatically included EPC in future investment decision making processes (city partners)

Partner(s)	Tasks of this partner organisation	Task
ESCAN	Overall responsibility for this WP	
ESV	Adapting quick-check to indoor lighting	6.1.1
Regional partners	Adapting the quick-check to regional situation, supporting city partners in this WP	6.1.1
City/county partners	Completing 2 adapted quick-checks	6.1.2
Regional partners	Completing 1 adapted quick-check	
City/county partners	Implementing 1 project	6.1.3
Regional partners	Supporting city partners, project data sheets	6.1.3
ESCAN	Developing template for strategy document	6.1.3
City/county partners	Strategy document on systematic implementation of EPC	6.1.3



WP 6

	Deliverable name	Results	Language(s)	Date
D6.1.1	Adapted quick-checks (internal lighting)	Paper (el.)	EU version + all	Dec15
D6.1.2	Documentation of completed quick-checks	Paper (el.)	all	June16
D6.1.3	Establishing and updating the project data sheets (min. 2 region)	Paper (el.)	all	Jan17
D6.1.4	Strategy document on systematic implementation of EPC	Paper (el.)	all	Jan17



WP 6: Other EPC applications

- Task will extend EPC market development from street lighting refurbishment to other lighting applications
- ESV develops adapted "quick-checks" for indoor and other outdoor lighting applications (public buildings and installations, facade, monument lighting)
- City partners and other cities in the partner regions will carry out 3 quick-checks per region in total).
- For each city, the most suitable application options will be chosen. For minimum 2 projects, concrete steps towards implementing these projects will be taken and documented in project data sheets
- in each region, the implementation of at least 1 other EPC application will be supported
- based on a template prepared by ESCAN, each city partner will develop a short strategy document in which the process of implementing a systematic approach to EPC for all relevant future investments is outlined, also relating to establishing control systems to keep track of energy costs. The paper will be developed based on an internal discussion process within each city. The cities are committed to adopting this approach as a standard procedure.



OOENERGIESPARVERBAND

www.streetlight-epc.eu

Upper Austria: Schenker in Hörsching (Logistics warehouse)

Indoor LED-lighting with light management system, combined with hydraulic optimisation of the building technology and pump exchange

Before renovation

- 872 lamps, 2x58 Watt each
- annual electricity costs: 95,700 Euro
- operating hours: 15-23 h/day

After renovation:

- 591 new LED lamps: 60 Watt each
- annual energy savings: 331,000 kWh electric and 29,200 kWh heat
- annual cost savings: 41,700 Euro
- Investment: 340,000 Euro (before subsidies) -> 250.000 Euro for lighting
- Contract duration: 9 years







Upper Austria: Tennis hall in Ried

Refurbishment of all luminaires and lamps and addition of a light management system

Before renovation:

- 480 lights, 58 Watt each
- annual electricity costs: 7,200 Euro
- annual maintenance costs: 1,300 Euro
- operating hours: 1,900 h/year

After renovation:



- 96 new T16 fluorescent lamps with 288 lights: 80 Watt each (special luminaires needed - tennis balls!, no cost-effective LED solution available yet)
- annual electricity savings: 34,700 kWh
- annual electricity cost savings: 4,300 Euro
- Investment: 60,100 Euro (before subsidies)
- Contract duration: 7 years





Upper Austria: Gas station in Neuzeug

Retrofitting all lights to LED technology with light management technology (gas station indoor/outdoor + car wash); 17.9 kW

Before renovation

- annual electricity costs: 30,000 Euro (231,100 kWh/a)
- operating hours: up to 24 h/day

After renovation:

- 133 new LED light points, various models and outputs; 5.6 kW
- annual electricity savings: 58,400 kWh
- annual maintenance cost savings: 1,900 Euro
- annual electricity cost savings: 7,600 Euro
- Investment: 62,400 Euro
- Contract duration: 10 years







DRAFT OK & KO criteria for outdoor parking & halls (sport/logistic/production halls): what is different to streetlighting?

		YES	NO
all	Lighting installation is older than 10 years		
streetlight	Length of lighted installation to be renovated is more than <u>1 km</u>		
parking	More than 20 lighting points to be renovated		
halls	Total installed capacity of the lighting system to be renovated is more than <u>10 kW</u>		
all	The average total electricity price is above 0.12 Euro/kWh		
all	The average annual maintenance costs are above <u>15 Euro</u> per lighting point		
streetlight halls	Operational time is above 3600 hours per day (more than 10 hours/day)		
all	No light reduction during night (dimming, switching off)		
halls	There is no/little daylight		
all	Investment costs present a problem for the company/the municipality		17





Data sheet for parking & halls – what is different?

Streetlight

- Municipality
- Age
- Year of last comprehensive refurbishment
- Condition of poles
- Lenght of lighted roads [km]
- Number of light points
- Most frequent lamp types
- Total installed electric capacity [kW]
- Annual electricty consumption [kWh/a]
- Total annual electricty costs [Euro/kWh]
- Annual maintenance costs [Euro]
- Typical streetlighting operational time/hours
- Periods of dimming/switch-off during night

Parking (in addition):

- what kind of outdoor lighting
- how is the surroundings lighed?
- lighted area [m²]
- any problems with present system?
- special requirements?

Halls (in addition):

- what area is lighted/which work performed there?
- hight of luminaires
- use of daylight possible?
- what type of ballasts are used?





WP 7: European dissemination and networking April14-March17

- increase project impact through promotion activities beyond the project regions
- ensure effective links to other important European initiatives

Partner(s)	Tasks of this partner organisation	Task
ESV	Overall responsibility for this WP	
FEDARENE	Developing a strategy on how to optimise the links to other initiatives	7.1
ESV	Project website	7.2.1
ESV, input all partners	Project publication	7.2.2
FEDARENE	2 webinars on streetlight-EPC for CoM cities	7.3.1
ESV	European ESCO roundtable	7.3.2
ESV & FEDARENE in co- operation with ENERGAP, ESS, ESCAN	meetings with 3 European networks	7.3.3
City/county partners	Dialogue with twin/sister cities	7.3.4
ESV	International Conference	7.3.5
ESV with inputs from all partners	Policy recommendations	7.4





WP 7

	Deliverable name	Results	Language	Date
D7.1	Strategy on how to optimise the links to other initiatives	Paper	English	June14
D7.2.1	Attractive project website	Website	English	Sept14
D7.2.2	Project publication	Printed (8 pages)	English	May16
D7.3.1	Report on 2 webinars for CoM cities	Report	English	Jan17
D7.3.2	Report on European ESCO roundtable	Report	English	March16
D7.3.3	Report on 3 meetings with EU-networks	Report	English	March17
D7.3.4	Report on dialogue with sister cities	Report	English	March17
D7.3.5	Report on the International Conference	Report	English	March17
D7.4	Policy recommendations	Report	English	March17



Main aspects for the update of the WP7.1 report **FEDARENE**

CoM: 2 articles published in homepage news section (20th February 2015, 29th July 2015)

- Article published in CoM Facebook page 25th February 2015 ("1,068 people reached")
- ES webinar published in Agenda section
- Benchmark of Excellence added
- submit articles for e-newsletters (pending), proposals for interviews with Streetlight-EPC decision-makers, policy recommendations developed at the end of the project

ManagEnergy (prolonged to December 2015)

- News article published online on 24th February 2015 (guide, checklist, FAQs)
- ES webinar published in Agenda
- Directors Meeting June 2014: presentation by Christiane ; 13th October 2015: presentation by an agency partner? (how supports municipalities by bundling investments)
- Publish articles in ManagEnergy e-newsletters

GreenLight Programme (website, Awards) ; **European Performance Contracting Campaign - EPCC** (closed): Roundtable ; **European Technical Assistance Facilities and European funding initiatives ; Cooperation with European networks**

Related IEE / INTERREG projects

News article + link to Streetlight-EPC added on EESI2020 project website Article will be featured in the EESI2020 October newsletter

Co-funded by the Intelligent Energy Europe Programme of the European Union www.streetlight-epc.eu

WP 7: ESCO Roundtable (1)

Objective and format

- A half-day workshop in Brussels by invitation only
- participants: actors from the European level, ~5 successful (smaller) ESCOs, Streetlight EPC project experts as market facilitators plus some of the project partners (in total about 25)
- discuss the experiences of successful ESCOs, of ESCO facilitators and financing organisation on how to scale-up ESCO markets
- focus on how to create critical mass on regional level and how to increase the participation of smaller, non-multi-national companies in the ESCO market
- ESCOs and the ESCO facilitators present their business models and the market development approach in existing and emerging EPC markets.
- directly after the roundtable, a meeting between financing organisation is planned that have approached the Streetlight-EPC with the interest to provide finance tp EPC projects to discuss wether a bundling of specific smaller projects is feasible and which requirements would need to be fulfilled
- possible dates: 16/17 November or 15/16 December or January



WP 7: ESCO Roundtable (2)

Topics of discussion:

- target audience, topics of discussion
- our main messages from the regional and local levels
- which partner can bring an ESCO that:
 - is able to speak English at an acceptable level for such a meeting
 - has implemented at least 2 (?) successful EPC projects
 - should be well-known to city/regional partner so ppt can be jointly developed
 - ideally, not (only) the "usual" multi-national companies (such as Schneider, Axima these are usually well presented in EU meetings)
 - if paying the ticket is a problem for the ESCO, the respective regional partner needs to be willing to cover their travel costs (from their "other costs" budget)
- meeting with financing organisation
 - does that make sense?
 - whom to invite (so far on my list): Deutsche Bank, Susi Partners, Investor Confidence, EIB, EBRD)?
 - what to discuss? which format?



WP 7: Planning of national cooperation and dissemination

Region	Dissemination channel
Upper Austria	 promotion in ESV's regional energy newsletter promotion at ESV's regular events for Upper Austrian municipalities website of ESV where a section is dedicated to EPC
Austria	 regular meetings of the Austrian regional energy agencies newsletter of the Austrian lighting technology association LTG
NW-Croatia	 HDR (Croatian Lighting Association) Energy Days organised one for each county by REGEA Newsletter Zupanijska kronika (Zagreb County) <u>www.zagrebacka-zupanija.hr/zupanijska_kronika</u>
Croatia	 HGK (Croatian Chamber of Economy) through website of the Ministry of Regional for EU projects Energetika marketing (a company that organises an annual lighting)
South Bohemia	 newsletter of the South Bohemian Association of Cities/Municipalities the seminars organised by ECCB the website of the South Bohemian Regional Authority
Czech Republic	 newsletter of the association of the Czech Healthy Cities newsletter of the Czech Association of Towns and Municipalities
Pomerania/Poland	 the websites <u>www.LEDnews.pl</u> and <u>www.oswietleniewpolsce.pl</u> Quarterly "LED lighting" events: Smart metropolis in Gdansk 2014, the National Congress of the Regions, the National Conference on Illumination (Warsaw University of Technology) and the Light Fair in Warsaw
Carlow Kilkenny	 County Chambers Newsletter – Chambers of Commerce CKEA newsletter Enviro Solutions network





WP 7: Planning of national cooperation and dissemination

Region	Dissemination channel
Ireland	 AIEA (Association of Energy Agencies) SEAI Energy Link (National online forum for the public sector) Chambers Ireland Newsletter
SE-Sweden	 the digital newsletter E-kicken the event EnergiTing Sydost (annual regional conference) through the networks: Klimatkommissioner, Energirådgivarna Sydost, "Energy group", the Kalmar kommuns upphandlingscenter
Sweden	 the national network Sveriges offentliga inköpare Miljöstyrningsrådets nätverk, a national network for green procurement Energikontoren Sverige, the national network of energy agencies
Podravje	 the council of all mayors in the region of Podravje Štajerska Chamber of Commerce Regional EU sustainable energy week events
Slovenia	 Association of Slovene Municipalities Association of Slovene energy agencies annual international spring fair for construction, energy, municipal services and trade
Macedonia	 ZELS, the municipal energy efficiency network InfoMACEF- e-newsletter through Economic Chambers on national and regional level
North/ Central Spain	 project dissemination within the "Smart City" initiative through the CoM initiative through the energy agencies in the regions
Spain	 the National Federation of Municipalities in Spain cooperation with ANILED, the National LED association cooperation with ANESE, national ESCO association
	OÖENERGIESPARVERBAND



WP 7: Other WP7 Tasks

- European Conference
 - held in the context of the WSED16
 - "Energy Efficiency Services Conference"
 - 25 February (afternoon) & 26 February morning (plenary session with a wider focus on EE services, dedicated sessionon EPC and streetlighting
 - what should we cover?
- Project publication: ready for Wels conference? but not many implemented projects (?)
- Meeting with EU networks: first held with EU ESCO (June 15), more to follow
- dialogue with sister cities
- other ideas for European cooperation?

