



ESOLi newsletter

Interested in adaptive outdoor lighting? Get support from ESOLi!

N° 6
Spring 2013

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ESOLi is supported by the “Intelligent Energy - Europe” program of the European Union, with the aim of promoting energy efficient solutions for street lighting Europe-wide and increasing the number of intelligent light point installations. **ESOLi offers information and support to municipalities** on specific public lighting issues and intends to support them by developing a series of practical tools. www.esoli.org

ESOLi – successful project conclusion

After three years of project work promoting intelligent solutions for public lighting the ESOLi partners met in Bruxelles last 10-11 April for the final consortium meeting, host by the local project partner Lighting Europe (former ELC).

The achievements of the project were discussed in presence of the EU Project Officer, and several examples of new lighting installations – realised thanks to ESOLi – were presented.

The 16 project partners coming from 14 European countries also discussed future actions and cooperation to bring further development to the public lighting market.

ESOLi developed interesting supporting material and tools for municipalities, lighting professionals and other organisations involved in public lighting which are available for download on the project website.

www.esoli.org



Case study: Smart Efficient Light Control in Crossmolina (Ireland)



ESOLi partner SELC recently undertook a small project in the town of Crossmolina in County Mayo, Ireland.

Crossmolina is a small town with approx. 1,000 inhabitants with 300 public street lights installed.

The old street lighting consisted of a mix of SOX and SON lamps with a wattage range of 70W to 400W.

The photo at the left side indicates Crossmolina equipped with its old lighting system.

With the use of SELC's new radio frequency monitoring solution as well as modern electronic ballasts used in new lanterns, the town was able to achieve instant

average energy savings in the region of 45%, as well as having the added feature of monitored street lights.

All of the light points were completely replaced with new modern control gear. The highest energy saving percentage was 76% when old 250W lamps were replaced with 150W electronic ballasts which are now also being dimmed.

This was achievable by changing old lighting type and fixtures with new modern solutions. While energy saving is key, local residents have commented how much the quality of light has improved and how much safer they feel with the new lighting scheme in place. The photo on the right hand shows how Crossmolina has changes after the installation of the SELC system. For more information about the SELC system you can visit <http://www.selclighting.com/>.



Belgium: The GEPPADI pilot project

GEPPADI (Sustainable and Intelligent Outdoor Lighting Management of Industrial Zones and Activity Thoroughfares), is a new management and control system for outdoor lighting that adapts light to traffic.

Deriving from the collaboration between researchers, companies and public authorities, this system is currently being tested in the economic activity zone of **Grâce-Hollogne**, a commune of Wallonia and promises substantial energy savings, as well as increased comfort and security.



At the time when significant savings must be realised to decrease the energy bill of municipalities, it is smart to design outdoor lighting installations that light streets at the right time, at the right place, in the right direction and with the right intensity. In one word: intelligent installations. This is precisely what GEPPADI proposes. This new system, applied for 55 light points, is based on the principle of automatic lighting.

Each luminaire is equipped with movement and presence sensors as well as «intelligence» that allows it to recognise the type of user (motorised vehicle, cyclist, jogger, pedestrian), to anticipate their needs and to manage the coordinated lighting between close/neighbouring luminaires.

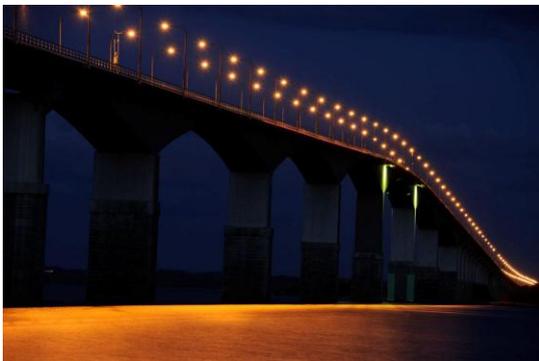
The exceptional response dynamics of the specific LEDs go almost instantaneously from minimal to maximal lighting and allow for “dimming” so as to automatically adapt the surroundings to the ambient luminosity conditions. To be beunderlined that the system is autonomous in this, so it only requires modules placed on the luminaires; no centralised controller is necessary. The system is connected to the internet, which gives easy access to functioning data. Ultimately, the project managers speak about a reduction of 80% of the energy consumption compared to the current situation.

The used luminaire is made of magnesium through the technique called “tixo molding” (magnesium low pressure injection), which allows for a 40 percent reduction of carbon emissions during production of the luminaire; thus, further respecting the environment.

The new system is environmental friendly because it allows a decrease in carbon of 70%, a reduction in CO₂ emissions by 90%, a 60000 h lifespan, and an assembly time around five minutes. Moreover, the project underlines that it will be up to 85% savings in energy consumption. In particular, the hourly consumption of an user it will be about ten times lower respect to traditional system. In case of success the project will be extend to all Wallonie region, in which there are about 320000 streetlights. The figures will be validated and refined thanks to the test location (started in February 2013) of two streets in the industrial zones and activity parks of Grâce-Hollogne. These tests streets are part of the roll-out project for which Wallonia and participating enterprises have provided a budget of nearly one and half million euro.



Adaptive control system on the Öland Bridge (Sweden)



The Öland bridge is a 6 km long road bridge connecting the island of Öland to the mainland of Sweden.

In 2007, the Swedish Transport Administration initiated the work to replace the lighting fixtures on the Öland Bridge, and works are planned to be finished in June 2013. The aim of the project is to reduce the energy cost and the cost of bridge inspections. The old system consists of 412 fixtures equipped with 100W high pressure sodium lamps which all are going to be replaced with LED-fixtures. An adaptive control system will also be installed capable of controlling each fixture individually to four light levels. The

control system is unique in its kind as the light levels are controlled and adjusted to the current traffic conditions (amount of traffic, weather, visibility, friction, etc). What light level to be applied is determined by control signals sent to the control system from the client's existing monitoring system. The lighting system is always monitored and on special occasions (accidents etc.) it can be operated from the traffic control center.

The investment in the new LED-fixtures and the control system is expected to lead to a significant reduction of energy consumption from the previous 168 000kWh/year to 68 000kWh/year.



The ESOLi Best Practice Catalogue is already available for download on the project website. Have a look at what others did and how much they've been saving!

Lighting and energy efficiency news

In this section of the ESOLi newsletter you can find a selection of news about upcoming interesting events, open funding possibilities and other hints to get involved.

ESOLi training seminar in Italy: 16 April 2013

Next 16th April 2013 an Italian ESOLi training seminar will take place in Mantova, organised by Gruppo Impresa. Experts will present interesting information about energy saving solutions for outdoor lighting. For registration and further information please contact: kubanyi@gruppoimpresa.it .

Belgian ESOLi training seminar: 18 April 2013

The next ESOLi training workshop in Belgium will be organized on 18th April 2013 in the capital, at Diamant Building, Blvd A. Reyers 80, 1030, Brussels. For further information and inscription please contact marc.guiraud@lightingeurope.org.

EUSEW 2013

The European Union Sustainable Energy Week (EUSEW) will take place in Brussels from 24 to 28 June. During those days hundreds of events organized in all parts of Europe will illustrate, promote, discuss and celebrate renewable energy and energy efficiency. The detailed programme will be available on <http://www.eusew.eu/>.

SRVO annual seminar in Kácov

The spring meeting of the Czech Association for Development of Street Lighting will be held on 16-17 May 2013. More info: <http://www.srvo.cz/news/jarni-seminar-srvo-2013/>

Intelligent Energy Europe: reminder!

Last weeks left for the presentation of project proposals before the deadline of the last call launched by the Intelligent Energy Europe program. The deadline is fixed for 8 May 2013, except for the Build Up Skills Initiative for which projects can be submitted until 28 November 2013.

<http://ec.europa.eu/energy/intelligent/>.

EuropeAid funds for energy facilities

€55 millions are at stake at the EuropeAid Cooperation Office for EU-Africa cooperation projects regarding the improvement and better access to sustainable energy services in underdeveloped rural areas, with particular attention to renewable sources and energy efficiency. Projects must involve at least one African ACP partner. The deadline for submitting application forms is fixed at 3 June 2013. For further details go to http://ec.europa.eu/europeaid/index_fr.htm.

Environment LIFE+ Programme

LIFE+, the European financial instrument for the environment made available an overall amount of € 278 million for projects related to Nature and Biodiversity, Environmental Policy & Governance, and Information and Communication. The EU co-financing rate is up to 75% of the total eligible costs. Proposals can be submitted until 25 June 2013. To learn more: <http://ec.europa.eu/environment/life/>

Euroluce 2013, 09-14 April 2013 Milan, Italy

The next one-week-long rendezvous of the lighting industry in Italy will be in Milan in the framework of Euroluce. Further details on <http://www.cosmit.it/en/euroluce>.

EUSEW 2013

From 24 to 28 June 2013, the EU Sustainable Energy Week (EUSEW) will take place across Europe. During this week hundreds of events organized in all parts of Europe will show, promote, discuss and celebrate renewable energy and energy efficiency. The detailed programme is available on <http://www.eusew.eu/>. Information and procedures for organising an Energy Day are also provided.

Smart Lighting 2013, 14-15 May, Frankfurt

The event on intelligent lightening will take place this year in Frankfurt, Germany. Several speakers will give information about new lighting opportunities and how they will change the market. To learn more: <http://www.smartlighting.org/>

LumiVille 2013, 28-30 May, Lyon, Eurexpo

LumiVille is a reference event for public, exterior and intelligent lighting. It will take place in Lyon, France. The event will be also dedicated to the innovative solution for smart management and sustainable public lightening. Find out more on <http://www.capurba.com/lumiville/en/>

ForumLED Europe 2013, November 26-27, Paris

The 5th edition of ForumLED will be held at the "Grande Halle de la Villette" in Paris, France. The event will highlight the latest news on LED technology, innovative solutions and future applications. For more information: <http://www.forumled.com/led/>

PLDC 2013, 30 October – 2 November, Copenhagen

PLDC means Professional Lighting Design Convention. The event will take place in Copenhagen, Denmark. It will group worldwide designers, lighting architects, researchers, universities, industry and clients focused on knowledge transfer and international opportunities. Learn more: <http://www.pld-c.com/about-pldc/>

Get involved! Don't hesitate to contact the ESOLi partners!

Coordinator:	Sabine Piller - Berliner Energieagentur GmbH (BEA) Germany		
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	Black Sea Regional Energy Centre, Bulgaria		
	ELTODO EG, Czech Republic		
	SEVEN, Strediisko pro efektivni vyuzivani energie, o.p.s., Czech Republic		
	SITO Oy, Finland		
	City of Göteborg, Traffic and Public Transport Authority, Sweden		
	Selc Ireland Ltd, Ireland		
	Gruppo Impresa Finance s.r.l., Italy		
	Ekodoma, Latvia		
	Luminext BV, Netherlands		
	Agency for Road and Transport, City of Oslo, Norway		
	Krajowa Agencja Poszanowania Energii S.A., Poland		
	Building and Civil Engineering Institute ZRMK, Slovenia		
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	SECE - Spanish Society of Electric Constructions, Spain		
Website:	www.esoli.org	Duration:	20/04/2010 - 19/04/2013
Budget:	EUR 2 112 996 (EU grant: 75%)	Contract n°:	IEE/09/927/SI2.558319

