



# ESOLi newsletter

Interested in adaptive outdoor lighting? Get support from ESOLi!

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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. Some of these are already available on the project website and other ones will come soon. Keep an eye on [www.esoli.org](http://www.esoli.org)!

## ESOLi training seminars on adaptive street lighting

The ESOLi project is about to complete its 3<sup>rd</sup> year of activities and now it's time for advanced training seminars targeting lighting professionals. The seminars are being organized all over Europe, in national languages, providing modules about:-

- Challenges in outdoor lighting,
- Solutions to meet challenges,
- Guidelines for intelligent street lighting project implementation
- Presentations of case studies.

Most of the seminars will comprise of an on-site study visit during which a working intelligent street lighting (ISL) installation will be shown to the participants.

To find out information about your national training seminar please check the ESOLi website or contact your national ESOLi contact point. [www.esoli.org](http://www.esoli.org)

## Case study: Intelligent street lighting in the City of Gothenburg (Sweden)

The Municipality of Gothenburg started the first test project of intelligent street lighting (ISL) in 2006 involving 378 new luminaries and after the first success they widened the project progressively. Today Gothenburg has more than 2500 luminaries in ISL controlled by different control systems such as power line, radio frequency and all types of lamps such as High pressure sodium, Metal halogen and LED.

One of the purposes which pushed the City of Gothenburg to develop ISL was that they firmly believe in the smart city of the future. The Municipality also involves the citizens in the project by asking their feedback on how they feel about changing the



way of lighting during nights. Street lighting in parks or in a residential area mean totally different requirements.

Social lighting is another important task today in cities and Gothenburg works constantly maintaining safety and security in problematic areas. ISL helps to use different types of lighting to ensure security and prevent problems in such areas. This is, in fact, one of the key priorities of local politicians in Gothenburg: keep secure and safe. Eliminate further risk in already problematic areas.



The most commonly used system in Gothenburg is power line but in the latest residential area development project they chose radio frequency. This technology has been used in the main square in the city, Götaplatsen, where most of cultural ceremonies and of changing light in a rational and efficient way.

Based on their 6 years experience the City of Gothenburg registered the major energy savings from the combination of LED and a control system. As they explain, LED alone is not enough: although it reduces *energy* costs, to keep track of the *maintenance* costs a control system is also needed. Today it is important to be well informed about how you can be more efficient since the economical demands are always present for

each municipality.

Gothenburg is gradually changing to LED but the rendering of colors is not yet optimized especially the white light. LED will change a lot, but even so, the technology still needs to be perfected. Therefore is it important not to transform too fast on a large scale.

The Municipality carried out a review of ISL installations with the aim of following up the achieved results in terms of technology and savings, including also an educational interview with different market actors. The interviews gave an input about what to change and what to invest in regarding necessary information to reach a larger market.



Technical data show that the energy savings in Gothenburg have been between 53-60% depending on the kind of area of installation.

For further details about this success story you can read the full report on [www.esoli.org](http://www.esoli.org).

(Photos by Filip Andersson, Creativelights)

### Slovenia marching towards sustainability

On October 25th and 26th an International Lighting Conference was organized by the Slovene Lighting Society. The conference was a real success: more than 120 experts from Slovenia and the neighboring countries attended.

One of the issues was the presentation of the latest achievements and projects of intelligent public lighting within ESOLi.



Recently in Slovenia much investment has been made in refurbishment of old public lighting systems, several projects are on-going, partly with the aim of energy saving and also in order to reduce light pollution.

Since the project start the number of installed luminaires with adaptive control system increased by 300%. Thanks to the ESOLi activities, most of municipalities nowadays are thinking about some kind of adaptive or intelligent lighting.

(Photos by Andrej Hocevar, Javna razsvetljava d.d.)



### Pilot project from Vinci (Italy)

A small town in Tuscany, Vinci, has recently developed a pilot project in the field of public lighting in order to reduce energy consumption and to save on energy.

The Municipality chose an interesting solution which allows remarkable savings **with low investment costs, without changing poles, lamps or luminaries: changing only the ballast technology**. On 35 lighting points smart **digital ballast** has been installed with ad-hoc remote controlling software, obtaining this way 35 **IP Client Server points** connected over power line.

Each pole became "smart" and the system regulates luminous flux and allows dynamic real time point-to-point or cluster dimming and verification of the functioning of each single light point controlled by the software. The control center provides graphical representation of several types of information related to consumption, costs, maintenance programme and necessities for each light point. With this technology the expected life span of lamps is doubled, while the duration of this ballast is three times that of a traditional ballast.

In Vinci the system was installed on the existing public light plants using high pressure sodium lamps, with minimum investment costs. For data transmission the same power line is used.

During the pilot project period the Municipality of Vinci experienced overall savings of 35,7% on energy consumption absolutely (without dimming).

The Municipality is evaluating further development of public services exploiting the system, since the technology allows the integration of further modules such as traffic control, air quality control, temperature control, area video control, emergency services, etc., paving the way towards the smart city of the future.



(Photo by M. Ragnolini, EDP Solutions)

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 Gothenburg (Sweden), 6 February 2013

ESOLi will organize a Swedish training seminar for lighting experts in Gothenburg. The training day will include also a workshop and an on-site study tour by bus which will demonstrate in real life how adaptive control systems work in Gothenburg. For further information please contact Lena Siewert [lena.siewert@kreativtljus.se](mailto:lena.siewert@kreativtljus.se).

#### Intelligent Energy Europe: call 2013 open!

The Intelligent Energy Europe programme launched the last call for proposals of the period 2007-2013. The call will be presented in detail during the European Info Day in Brussels on 23 January 2013. To find out more: <http://ec.europa.eu/energy/intelligent/>.

#### EuropeAid funds for energy efficiency

The EuropeAid Cooperation Office has allocated €20.8 million for cooperation projects in the fields of science, technology and innovation between EU and "ACP" countries, which includes the African, Caribbean and Pacific countries. The thematic priorities are: access to energy / *energy efficiency* and agriculture / food security. The call is open to legal entities established in one of the ACP countries, the EU Member States, candidate countries and EFTA-EEA countries (Iceland, Norway, Liechtenstein). The partnership must include at least three organizations established in at least two different ACP countries. The grant is equal to 85% of the eligible costs for an amount ranging from € 300.000 to € 1 million. Project proposals can be submitted until 7 February 2013. [http://ec.europa.eu/europeaid/index\\_fr.htm](http://ec.europa.eu/europeaid/index_fr.htm)

**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. To learn more: <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 that week hundreds of events organized in all parts of Europe will show, promote, discuss and celebrate renewable energy and energy efficiency. The detailed programme will be available on <http://www.eusew.eu/>. Dates and procedures for organising an Energy Day in 2013 will also be provided shortly. Meanwhile, we are very pleased to announce the opening of the Sustainable Energy Europe Awards and the ManagEnergy Local Energy Action Award. [Find out more on the Awards Competition page.](#)

**LightingEurope – the voice of EU lighting industry**

On 5 December 2012, leading industry representatives in Brussels launched LightingEurope, the voice of the lighting industry in Europe. This new association represents all-sized European lighting companies, including SME's active in consumer and/or professional lighting as well as national lighting associations. LightingEurope will replace in future both the European Lamp Companies Federation (ELC) and the Federation of National Manufacturers Associations for Luminaires and Electrotechnical Components for Luminaires in the European Union (CELMA). LightingEurope unifies the strengths of the industry to meet the challenges and opportunities created by the current unprecedented change in lighting technology and production caused by the introduction of LED Lighting. The association will serve as the main platform for development and communication of industry positions while shaping the future of lighting in Europe and globally. LightingEurope is committed to innovation, sustainability, quality and leadership in lighting and contributes to shape policy and establish industry standards and guidelines. It is also dedicated to promoting efficient lighting practices for the benefit of the global environment, human comfort, and the health and safety of consumers. [www.lightingeurope.org](http://www.lightingeurope.org)

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

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**Partners:** European Lamp Companies Federation aisbl, Belgium  
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  
Javna Razsvetljava d.d., Slovenia  
SECE - Spanish Society of Electric Constructions, Spain

**Website:** [www.esoli.org](http://www.esoli.org)

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