



THE CITIES OF LIGHT
 NEWSLETTER
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Martine De Regge

President of LUCI
 Deputy Mayor of Ghent

Smart city lighting

Throughout the world, cities aim at becoming “smarter”: easier to use, more comfortable to live in, more reactive to the needs and activities of citizens, and especially more sustainable environmentally, socially and economically.

Innovation, in information and communication technologies especially, plays a fundamental role in reaching these objectives and is often at the heart of smart city strategies. However, urban lighting can also play an active role in reaching such objectives, as shown by the cities of Malaga, Valladolid and Amsterdam during LUCI’s last City under Microscope event.

The use of integrated renewable energy sources or the development of intelligent lighting solutions for example, can not only help cities to reduce their energy consumption but also make them more responsive and adaptable to changing demands from citizens. Lighting can also contribute to making cities smarter by supporting economic and tourism development, with projects such as Valladolid’s “Rivers of Light”, and by enhancing a city’s heritage and architecture, by promoting its identity...

Urban lighting can therefore definitely constitute a “smart tool” for cities which they can shape, adapt and improve relatively easily – a tool that deserves to be included in the smart strategies that cities today engage in. In line with the LUCI Charter on Urban Lighting, these initiatives are a unique occasion to move forward in further integrating urban lighting in cities’ global sustainable development policies.

I look forward to pursuing this discussion initiated in Valladolid at future LUCI events, notably in Marseille and Guangzhou this year, and continuing to support LUCI member cities’ progress towards greater urban efficiency and sustainability.

➤ Marseille: a culture capital in urban renewal

Marseille, the second largest city in France, will be the host of the next LUCI City under Microscope from the 18th to the 21st of September 2013. Bruno Foucras, Head of Public Lighting in Marseille, tells us more...

■ What are the priorities of the lighting strategy in Marseille?

Our primary priority at the moment focuses on the lighting renewal policy which addresses the replacement or refurbishment of over 1500 lamps per year. Its first line of action consists of the improvement of energy efficiency through the modernisation of lighting installations and technologies. The second main line of action is the reduction of light pollution by installing lamps that effectively direct the light to where it is required. We are also currently studying the possibilities related to the implementation of a lighting tele-management system in the future.

■ What are some of the major lighting projects in Marseille at the moment?

Our main lighting projects are currently in the emblematic spaces of Marseille, many of which are undergoing urban renewal. These include the lighting for tramlines, the Old Port semi-pedestrian zone, or the Euroméditerranée waterfront district. In each of these areas, metal halide and LED sources are now combining visual comfort and energy savings, creating a new image of the city.



■ What will be the highlights of the City under Microscope?

Marseille is the 2013 European Capital of Culture, so there will be events highlighting the links between light, culture and science in the city. Participants will also have the opportunity to visit key sites such as the Notre Dame de la Garde as well as the emblematic lighting projects in the Euroméditerranée zone such as the Museum of European and Mediterranean Civilisations (MuCEM), the Villa Méditerranée and the Saint-Jean Fort.

editorial

↘ Applications open for the city.people.light award 2013

Has your city recently implemented an urban lighting project that integrates the notions of "city", "people" and "light" in a coherent lighting strategy?

Created by Philips and LUCI in 2002, the city.people.light award recognises the cities that seek to "rehumanise" their urban environment through innovative urban lighting initiatives.

The contest is open to urban lighting projects that have been completed less than two years prior to entry in the contest. The lighting must be of a permanent nature and visible to all citizens free of charge.

The three winners (the first prize being a trophy and a cheque for € 10 000) will be announced at the city.people.light award ceremony during the LUCI Annual General Meeting 2013 in Guangzhou (China) this November.

The deadline for applications is the 31st of July 2013.
More information at <http://www.luciassociation.org>



LUCI CALENDAR

SEPTEMBER 2013

• 18 - 21

LUCI City under Microscope -
Marseille (France)

OCTOBER 2013

• 17 - 19

Light in the City event -
Hasselt (Belgium)

• 30 Oct - 2 Nov

Professional Lighting Design
Convention - Copenhagen
(Denmark)

NOVEMBER 2013

• 13 - 17

LUCI Annual General Meeting -
Guangzhou (China)

• 26 - 27

ForumLED Europe 2013 – Paris
(France)

DECEMBER 2013

• 6 - 8

Lyon Light Festival Forum -
Lyon (France)

↘ Hasselt prepares for first Light in the City event

The Light in the City project, led by Jyväskylä (Finland) with the cities of Eskilstuna (Sweden), Hasselt (Belgium) and Tartu (Estonia), and funded within the framework of the Europe for Citizens programme, will be hosting its first seminar this autumn.



The seminar, taking place in Hasselt from the 17th to the 19th of October 2013, aims to raise awareness on urban lighting among the broader public and citizens of the city through workshops as well as a Guerrilla Lighting session. It will also present Hasselt's lighting master plan, which was developed in 2011.

One of the main highlights of the event will be a special "Nordic Light" session offering an up-close-and-personal look at Scandinavian light art. Other highlights include Hasselt's light festival, which will illuminate several landmarks and historical buildings in the city and support its most popular annual event, the Jenever Festival.



All LUCI members are invited!

↘ Professional Lighting Design Convention

The 4th edition of the Professional Lighting Design Convention (PLDC) will be taking place in Copenhagen (Denmark) from the 30th of October to the 2nd of November 2013.

LUCI is a partner of this biannual event, which will be built around a three-day professional conference offering approximately 70 presentations

divided into four tracks: "Lighting Application Research", "Lighting Application Case Studies", "Sustainable Lighting + Design", and "Professional Practice Issues".

It will also include renowned keynote speakers, pre-convention meetings, social events, electronic poster presentations and a gala dinner.

More information at www.pld-c.com

Join the LUCI Annual General Meeting 2013 in Guangzhou

This year the LUCI Annual General Meeting will be taking place in Guangzhou (China) from the 13th to the 17th of November 2013. LUCI members and beyond are invited to this international forum for cities on urban lighting for three days of networking, conference sessions and the not-to-be-missed city.people.light award ceremony.

The City of Guangzhou, which has been widely promoting LED applications in the city since 2010 and which is now extending their use to more rural areas, will show participants its urban lighting system which includes over 110 000 LED street lights.



The city, which launched the annual Guangzhou International Light Festival in 2011, will also address how this initiative has greatly promoted the tourism industry in the region and the application of energy-efficient LED fixtures in light installations.

And what's more, participants will have the opportunity to see the lighting of the iconic 600 metre tall Canton Tower as well as the unique lighting landscape along the Pearl River!



Make a presentation in the Open Conference sessions!

Would you like to show the world your city's latest lighting initiatives or start a discussion on a particular topic related to urban lighting?

The AGM's Open Conference sessions will give cities the opportunity to make short presentations on their lighting master plans, projects and festivals to an international audience.

Go to www.luciassociation.org to download the Open Conference registration form.

Save the date: Lyon Light Festival Forum 2013

As always during the Lyon Light Festival, LUCI members will be invited to a special programme taking place this year from the 6th to the 8th of December in Lyon (France).

The three-day programme will include conferences addressing the topics of managing security and logistics at light festivals, as well as the future of video-mapping. It will also include the second edition of the International Platform for Light Festivals, bringing together light festival organisers and light artists for one-on-one meetings.

And of course, don't miss the Auroralia award ceremony 2013, one of the main highlights of the event!

More information coming soon at www.luciassociation.org



➤ LUCI launches the Light Festival Evaluation Toolkit

The Light Festival Evaluation Toolkit, which helps cities identify and evaluate the impacts of their lighting events, is now online on the LUCI website! Cathy Johnston from Glasgow City Council, coordinator of the LUCI Culture Commission's work on this initiative, tells us more about the toolkit and how it can help cities with their lighting events.

■ Why is it becoming more important for cities to evidence the impacts of their light festivals?

In the current economic climate both public and private backers are thinking carefully about how and where they invest. The support for hosting events appears to be increasingly conditional on these events having demonstrable positive effects to the host community, to the city and to sponsors. So it is increasingly important for organisers to provide clear evidence of the positive impact light events and festivals can make to their city and the wider region.



© City of Eindhoven photo Claus Langer

■ What are some of the challenges faced by cities as they try to do this?

Light festivals vary in their formats and objectives ranging from niche one day events, through to festivals that illuminate cities' architecture, arts and culture, to large scale themed events celebrating major traditional festivals.

Whilst we all know that all of these types of events play an important role in drawing visitors to a city, which will instigate a number of positive economic and cultural impacts, it is quite difficult for cities/organisers to obtain quantitative data to support this view.

Such events can also have impacts that go beyond immediate economic benefits to more long-term positive impacts on the local community and the city image, and indicators to measure these types of impacts have yet to be established and integrated in evaluation initiatives. Many members of LUCI have battled with this challenge and were keen to share information and experience.

■ How does the toolkit work?

The toolkit has been developed to allow those who are promoting events to find the information that suits their objectives. It should be easy to navigate to the relevant information quickly, so that it is easy to structure a report.

■ What are some of the features proposed in the toolkit?

This evaluation toolkit contains some key guidance and good practice principles for evaluating four different types of impacts associated with staging light festivals and events: social, economic, environmental and cultural impacts. For each of these, it introduces different levels of assessment, based on their potential complexity and cost to measure, so that cities and light festival organisers can choose what is relevant to them.

In addition to helping cities assess and explore these four areas of impact, the toolkit also offers guidelines on estimating visitor numbers (which is an essential starting point when evaluating such events), as well as a section on data collection techniques, what to consider when developing surveys and indicators, and a case study database.

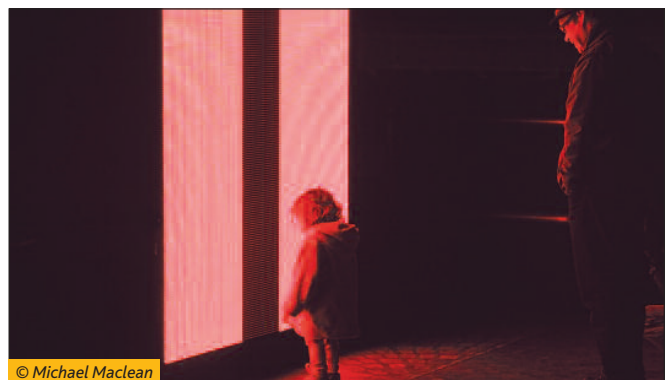
Would you like to identify and demonstrate the positive impacts of your city lighting event? Use the toolkit to learn how to:

Demonstrate that your city is worth investing in by assessing the economic impacts of your light festivals and indicating the return in investment.

Demonstrate that your event contributes positively to the city image and has been able to attract visitors to your city by identifying how to undertake a visitor survey.

Demonstrate that your event aims to be energy efficient and sustainable and develop approaches to environmental monitoring and management.

Demonstrate that it is good for the communities by monitoring and assessing event activity and the community feedback.



© Michael Maclean

The Light Festival Evaluation Toolkit is available on the LUCI website at www.luciassociation.org and can be accessed using your LUCI Members' Area password.

Contact luci@luciassociation.org for more information.

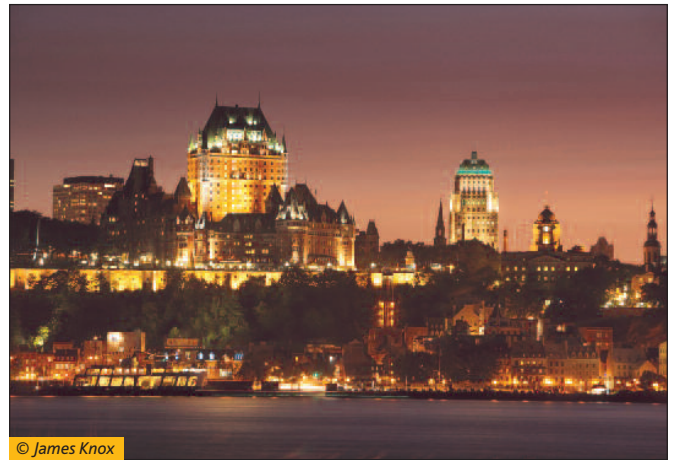
NEW MEMBERS

↘ Planning the lights of Quebec

New LUCI member, the Commission of the National Capital of Quebec (CCNQ) is a public organisation that contributes to beautification and development projects in the Quebec City area. It is also in charge of the promotion of the region, and has an advisory role to the government.

The lighting master plan, established in 1998, is a major part of the development programme of the capital city, and aims to showcase the heritage buildings and landmarks of Quebec. "A priority for us is to update this plan for the future, especially taking into account the evolution of the region and the new lighting technologies available," says Véronique Koulouris, Architecture and Lighting Design Advisor at CCNQ. "Our membership in LUCI will help the further development of the lighting plan and enrich our knowledge and expertise."

The CCNQ plans to implement two new lighting projects in 2013 – the Grand Théâtre de Québec and the Church of Saint-Augustin-de-Desmaures, a religious heritage site.



© James Knox

LOCATION: Quebec (Canada)

YEAR FOUNDED: 1995

MAIN ACTIVITY: beautification and development

NUMBER OF EMPLOYEES: 76

WEBSITE: www.capitale.gouv.qc.ca

↘ Spectacular events with Spectaculaires

Spectaculaires, a French company that deals with the conception and realisation of light shows and events is one of the latest LUCI associated members.

It specialises in creating light shows for heritage monuments with original scenographies and projection of monumental images that narrate the history and the stories of the local people. "We look forward to joining LUCI, meeting people that are as passionate about light as we are and exchanging our vision at an international level," says Benoit Quero, founder of Spectaculaires.

The company's upcoming projects include light shows for the "Renaissance" in Nancy, the "Nuit aux Invalides" in Paris, and a show in the "Palais des Papes" heritage site in Avignon (France).



© Jean-Marc Charles - Spectaculaires

LOCATION: Cossinade (France)

YEAR FOUNDED: 1987

MAIN ACTIVITY: conception and realisation of light shows

NUMBER OF EMPLOYEES: 18

WEBSITE: www.spectaculaires.fr

↘ OnLive Eventos: lighting events for Rio de Janeiro



© Clément Appéré

A Franco-Brazilian agency based in Rio de Janeiro (Brazil), OnLive Eventos specialises in the design and organisation of corporate, institutional and cultural events.

The agency organised the first light festival in Rio de Janeiro, "Luz na Cidade" in June last year which illuminated twenty buildings and public sites in the historical city centre. "While coordinating this festival, we were confronted by issues related to the relationship between the city, its heritage and its illuminations," explains Camille Espagne, Managing Director. "LUCI will help us learn more about these subjects," she adds.

The agency is busy preparing for the second edition of "Luz na Cidade" to be held later this year.

LOCATION: Rio de Janeiro (Brazil)

YEAR FOUNDED: 2012

MAIN ACTIVITY: event management

NUMBER OF EMPLOYEES: 5

WEBSITE: www.onlive-eventos.com.br

Intelligent lighting for smart cities

Through their "smart" strategies, cities across the world are increasingly seeking to provide better and more efficient infrastructures and services through the establishment of comprehensive city management systems. These systems often integrate multiple aspects such as energy management as well as public transport and mobility information, among other things. The ways in which urban lighting, in particular, can be better integrated into such strategies was the focus of a special session on intelligent lighting for smart cities at the LUCI City under Microscope in Valladolid this June.

Fernando Rubio Ballesterero, Councillor to the Presidency of Valladolid City Council, tells us more about the role of lighting in smart city strategies...

What makes a Smart City?

A Smart City should put intelligence, i.e. information and communication technologies (ICT) and the digital society at the service of efficiency as far as public infrastructure is concerned. It should use technology for a better quality of life for citizens, for better business development and for improving public services.

With our smart city initiative, which is based on a public-private partnership with more than 65 companies, we have tried to create a new model city. This is done through the implementation of projects based on technological development involving sustainable mobility, greater energy efficiency, more transparent and open government through the use of e-Government, as well as the mass deployment of new technologies in promoting tourism services, amongst other things.

How can lighting be integrated in this and why is it important?

Lighting is an essential element that must be included in the overall strategy if we are to achieve our objectives of reducing the emission of greenhouse gases by 20% by 2020 – especially since 70% of municipal energy consumption is used for street lighting. Moreover, in Valladolid, we also aim to achieve overall energy consumption incorporating at least 20% renewable energy sources (with zero carbon footprint).



© Luis Laforga

Valladolid has already shown that intelligent lighting can contribute to energy savings and reduced running costs, encourage technological innovation and social regeneration, enhance the cultural heritage of the city and support other important economic assets, such as tourism. In fact, the "Rivers of Light" route is the perfect example of integrating urban lighting into a smart city policy.

"Rivers of Light" has yielded enormous environmental benefits such as saving 44.5% in energy consumption, including 19 buildings with new lighting for a total of 35 monuments and their surroundings. For example, the new lighting of the Plaza Mayor alone has led to energy savings of about 85%.

For lighting to be better integrated in city management systems, we need to encourage the use of efficient urban lighting technologies through remote systems or metering systems. The gradual replacement of conventional lighting with more innovative technologies also needs to be considered.

What are some of the challenges related to this?

At present, given the current economic situation, it is a challenge to undertake renewal processes or new investments, but this should not prevent the inclusion of these measures in urban planning in the medium and long term.

Valladolid continues to develop actions in this field within the smart city strategy and we are studying projects that can be presented for EU-funded initiatives.



© Luis Laforga

Smart City Malaga: smart energy solutions for lighting

The coastal city of Malaga in southern Spain has been part of one of Europe's largest eco-efficient city initiatives. The Smart City Malaga project consists of a large-scale test project which aims to optimise the integration of new energy technologies into power grids.

The project incorporates systems for renewable energy generation as well as the installation of electrical energy storage systems (lithium ion batteries, iron and phosphate) that will support the generation of renewable energy to power the street lighting network.

It also includes the installation of remote management and control systems for public lighting energy consumption within this grid, as well as new LED lighting.

The city has already installed over 50 LED luminaires in various streets that are tele-managed point to point, in addition

to 9 LED luminaires fitted with micro wind turbines and 10 LED luminaires fitted with photovoltaic generators. It has also implemented remote management system segments (command centres) in 139 luminaires.

"We are very satisfied with how our city's lighting is developing within the framework of the project, enabling us to face the new challenges for intelligent energy management," says Jaime Briales Guerrero, Director of the Municipal Energy Agency of Malaga.

The Smart City Malaga project has a budget of € 31 million and involves Endesa, Enel and 9 other companies and research centres. Designed for the Malaga area of Playa de la Misericordia, the project's initiatives benefit 300 industrial users, 900 service users and 11 000 households. Its ultimate aim is to achieve energy savings approaching 20%, with a reduction of over 6 000 tons of emissions.



© City of Malaga

Genoa: illuminating its waterfront area

Genoa, capital of Liguria and the sixth largest city in Italy, is working on integrating urban lighting into its smart city policy. The Genoa Smart City initiative aims to improve the quality of life through sustainable economic development based on research, innovation and technology with integrated planning. In one of the first lighting-related projects within the framework of this initiative, the city is the co-ordinator of a European project called ILLUMINATE.

ILLUMINATE aims to explore innovative lighting solutions and their integration with intelligent control systems, specifically the various uses of solid state lighting (SSL) applications. It studies "smart" lighting in high quality urban areas, with the aim of improving both energy efficiency and lighting quality.

One of the pilot projects in ILLUMINATE, Genoa's waterfront area, the Porto Antico, will see a complete lighting refurbishment. Over 200 mercury vapour lamps will be replaced by LED lamps with intelligent control systems that enable dimming.

With this smart LED lighting pilot project, the City of Genoa aims to create a secure environment for visitors and commercial activities, reduce energy consumption and maintenance costs, and increase the area's appeal to visitors.

The project will be developed in line with the strategic plan of the City of Genoa, which aims to improve overall urban energy efficiency.



© Mirella Marrazzo - Genoa Municipality

↘ Glasgow to investigate link between urban lighting and crime

As part of its Future City Project, the Glasgow City Council (U.K.) will soon be developing a Sustainable, Social and Safe Street Lighting model that will investigate the link between urban lighting and crime.

The main focus of this initiative, which will develop a range of complementary city management measures operated from the city's lighting infrastructure, will be to assess the impact that changing lighting levels have on the incidences and perceptions of crime in the study areas.

This will be made possible through the integration of street lighting control systems and crime statistics supplied historically and in real time. Over the duration of the project, an understanding of the relationship between street lighting and crime will inform more proactive responses which will reduce crime rates still further. The project will be carried out by the City Council in partnership with the SSE, Cisco, Glasgow Community Safety Services, Glasgow Community Planning Partnership and the Strathclyde Police.



© Glasgow City Council

Glasgow's Future City Project will implement a series of demonstrator initiatives to inform and develop the overall City Management System. The city won a grant of over £ 24 million to do this as the winner of the Future Cities Demonstrator competition which is managed and funded by the U.K. government Technology Strategy Board.

↘ Gothenburg installs first adaptive LED street lighting system

The City of Gothenburg (Sweden) recently implemented its first adaptive LED street-lighting system. Installed in Gamlestaden, a street just beyond the city centre, the new system consists of 170 LED luminaires from AEC LED-in that can be dimmed using adaptive controls.



© Filip Andersson

"We have been exploring new energy-efficient alternatives to the mercury lamps that will soon have to be replaced. The result with this new solution is satisfying as the light produced is sufficient for all the different street categories," says Ingemar Johansson, Head of Street Lighting in the Urban Transport Administration of Gothenburg.

The new streetlights have led to a decrease in 24 % of energy consumption as compared to the old installation, and further energy savings are expected when the lights (which are currently on at 100% of their power) are dimmed to 70%. A project evaluation has also shown that it will be possible to further reduce the light levels and save more energy without compromising safety on the street.

Gothenburg has decided to increase its use of LEDs in street lighting in the future, and plans to install 2000 more units of this adaptive control system using both LED and metal halide lamps later this year.

↘ DEDRA: demonstrating solutions for municipalities in Rhône-Alpes

The DEDRA project, initiated by the Cluster Lumière, brings together manufacturers, research centres and technical experts in the Rhône-Alpes region of France to explore energy-efficient and comprehensive urban lighting solutions.

Small municipalities looking to reduce their energy consumption and modernise their urban lighting are faced with a multitude of solutions and products proposed by various manufacturers and stakeholders. DEDRA aims to help them identify the system and solution most suited to their specific requirements.

"Our objective is to guide municipalities as they make their choice and give them the means to implement the renovation of their lighting systems in line with the current regulations," says Philippe Badaroux, President of BH Technologies and coordinator of the Cluster Lumière's working group on urban lighting.

The project is conducting studies on five different sites in the Rhône-Alpes region within the framework of the renewal of the existing public lighting system. Its final objective is to produce a methodological guide for small municipalities on the topic.

↘ Launch of new Master's degree on urban lighting in Lyon

The National Institute of Applied Sciences (INSA) of Lyon (France) will be launching a new master's degree specialising in urban lighting in the next academic year 2013.

The course will focus on public lighting activities and will cover all fields and disciplines in the domain with its implications, actors and special approaches - from public policy, industrial design of equipment or designing lighting projects, to the phases of installation, operation and maintenance of systems and infrastructures.

"The course will also address several transversal themes that urban lighting professionals have to deal with, such as standards and regulatory constraints, energy saving and sustainable development," says Jean-Michel Deleuil, Professor at INSA and initiator of this master's degree.

The course, conceived in partnership with the Cluster Lumière, will include a sub-module by LUCI on lighting and city marketing.

More information at <http://mseclairageurbain.insa-lyon.fr>



© M. Djaoui, City of Lyon

↘ Osaka: developing its urban brand as "City of Water and Light"



© City of Osaka

The City of Osaka (Japan) recently took steps increasing its commitment to using urban lighting as part of the city marketing and image-making strategy. An interview with Ishida Fumiaki, Ex-Chair of the "City of Light" Planning and Promotion Committee in Osaka, on the new developments in Osaka's lighting policy...

■ How is Osaka building upon its "Osaka, Capital of Water and Light" initiative?

For a decade we have been implementing several lighting projects in Osaka, such as the lighting for river banks, bridges and expressways, in cooperation with public and private entities. We have also been continuously promoting illumination events in the city, such as the Hikari Renaissance Festival, which recently celebrated its 10th anniversary.

These initiatives have all contributed to the development of the landscape of Osaka, which is a distinguished international city, and one of the few to have a "water corridor" in the city

centre. We aim to continue creating more beautiful night scenes merging light and water in Osaka, and promote these initiatives to revitalise the economy and boost our urban brand.

■ What are some of the new lighting projects within this framework?

The area to the west of the Osaka City Office is surrounded by several special illuminations of road bridges, river banks and expressway pillars. We are working on obtaining agreement from all property owners to set the lighting colour to "Osaka Blue", as a symbol of Aqua Metropolis Osaka. We have begun discussions on this project and the equipment should be installed later this year.

We also recently inaugurated the new award-winning lighting of the Dojima-Ohashi bridge by Prof. Shiho Nagamachi and LEM Design. The bridge, which is lit with LEDs that change colour with the seasons or time of day, is now one of the must-see sights in the Osaka City Lighting Walk!

■ How do the new developments in temporary lighting fit into this strategy?

Illumination events such as the Hikari Renaissance Festival have rapidly increased in scope year by year. This is why the City of Osaka recently decided to hold and promote an integrated lighting initiative, entitled "Festival of Light in Osaka". This lighting event will consist of nine illumination projects combined with a walking light route for visitors in and around stores and restaurants. As we would like to have very high quality artistic light installations, a new Light Art Award Committee will also be established this year.

↘ First LED highway lighting in Belgium

The first LED highway lighting in Belgium, installed on a 6 km stretch of the "Ring" in the Brussels municipality of Anderlecht, was inaugurated this May by the Minister of Public Works and Transport of Brussels.

The objectives of the new lighting for this section of the "Ring", which has the densest traffic on what is the principal ring road around Brussels, were multiple: to improve safety for motorists in the area (especially for the curves and turns in the road), reduce power consumption and minimise luminaire maintenance.

The old lighting, consisting of 120 fixtures of low-pressure sodium vapour lamps, was replaced by neutral white LEDs while maintaining the existing lighting masts. A remote management system enables additional energy savings by dimming the lighting from 100% through to 70%, to 50% of power during the off-peak hours of the night.

"This new lighting has enabled overall energy savings of 35% compared to the old lighting installation. More importantly, it has dramatically improved visual comfort and safety for drivers, and reduced the frequency of maintenance required in an area that has extremely dense traffic," explains Martin Lefrancq, Project Manager at Brussels Mobility, the organisation in charge of the project.



© Schröder - M. Detiffe

↘ New lighting for the Place de la Concorde in Paris



© Jean-Baptiste Gurliat - City of Paris

The Place de la Concorde, one of the main squares in Paris (France) got a lighting makeover early this spring.

The old lamps of the square were replaced by the latest generation of metal halide lamps, which enable the square to preserve its ambience with warm white light.

The total energy consumption of the square lighting is now 115 500 kWh/year, as opposed to 507 000 kWh/year used in the previous installation – an impressive decrease of 77%. Efficiency and performance have been notably improved by harmonising the ignition and extinction schedules of all the lighting fixtures on the square.

"This project shows that we can reconcile environmental objectives and enhancement of heritage and public space in Paris. This new lighting for the Place de la Concorde improves the appearance of the square, and we consume less energy in a more efficient manner!" says Julien Bargeton, Deputy Mayor of Travel, Transport and Public Space in Paris.

The total budget of the project was € 362 000 and a return in investment is expected in 3 years.

The City of Paris has been implementing its Energy Performance Contract since 2011 in order to reduce the energy consumption of its 201 000 public lighting points. This contract aims to contribute to the goal of the reduction of 30% of city energy consumption by 2020.

BEST PRACTICE

➤ New lighting concept for Stavanger cathedral square

The City of Stavanger (Norway) won the second prize of the city.people.light award 2012 for this new lighting design project. Silje Kjosavik, Project Manager in the City of Stavanger tells us more...

“Using light to tell the story of the most important building in the city”

■ What was the context of the project?

The project area consists of the cathedral (the city’s most important building), Kongsgård High School (the city’s oldest and most interesting building from an urban historical point of view) and the city park (the only park in central Stavanger). This lighting project is the first step in a larger project focused on improving the lighting in central Stavanger.

■ What were the objectives of the lighting design?

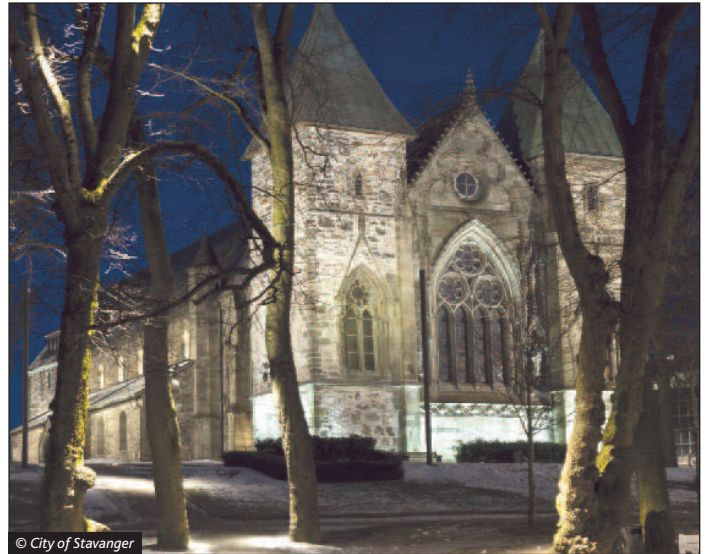
We wanted the entire area to be seen in a larger context where the lighting would reflect the purpose and meaning of the buildings, monuments and landscape characteristics. We wanted the lighting to add to the attractiveness of the area as well as make it safer to travel through. It was also important for us to choose solutions where energy use and future costs would be kept as low as possible.

■ What is the lighting design concept?

We used the value barometer design tool to describe the most important values for the city, and therefore for the lighting, which underlines the city’s history and identity. Main landmarks and paths were identified, as were the lines of vision of the city skyline.

The overall concept springs from the fact that the cathedral is the most important building in the city. The lighting reflects this by cooling the light temperature in the surrounding areas. We ensure that the lighting is focused on the vertical surfaces as one closes in on the cathedral. This enables the light to tell the story of the cathedral and the other key buildings of the city.

To ensure that light is only specified where it is needed, we incorporated three different lighting schemes. These consist of base lighting for main pathways; supplementary lighting for resting spots, niches, and crossings, etc.; and effect-lighting for landmarks which help give the city an identity at night.



IDENTITY CHIP

Implementation

Project launch date: 2009

Project inauguration date: 2011

Stakeholders

Contracting authority: City of Stavanger

Project manager: Silje Kjosavik, City of Stavanger

Construction manager: Ib Mikkelsen, City of Stavanger

Lighting design: Iben O. Winther and Vladan Paunovic, Ramboll Denmark

Electrical engineer: Ekrheim-Elconsult AS

Manufacturers: Hess, Willy Meyer, iGuzzini, Roblon, Bega, SUGG-lighting

Installation: Apply TB AS, Stavanger

Groundwork: TS Stangeland maskin AS.

Budget

Total budget: 16 million NOK

Technical

Luminaires:

- Flood lights - HIT 150/830 (cathedral)
- Accent lights - linear LED 29W/m 830 (cathedral)
- Accent lights - LED 3W/830 (window niches)
- Downlights installed in trees - HIT 70/830 and LED 12W/830
- Ground recessed wall wash - HIT 20/830
- Accent lighting around the pond, fibre optics – HIT 150/830
- Floodlights for facades - HIT 20/830

Total installed power: 15.8 kW

Find this experience and many others in the **best practice database** at www.luciassociation.org/plus



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Created in 2002 at the initiative of the City of Lyon, LUCI (Lighting Urban Community International) is an international network of cities on urban lighting. Through the organisation of international events and conferences, and its involvement in various lighting projects and research, LUCI creates spaces for exchange of knowledge and good practices in urban lighting.



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