



THE CITIES OF LIGHT
 NEWSLETTER
#15
 NOVEMBER 2011



Councillor
ALLAN STEWART
 Deputy Lord Provost of Glasgow
 President of LUCI Association

SUPPORTING CITIES' URBAN LIGHTING STRATEGIES

Over the past few years the LUCI Commissions have been working on various projects, studies and research that aim to help cities find answers to the issues in urban lighting that confront them. Following their renewal at the AGM in Gwangju (Korea) in 2009, these Commissions will be presenting their first outputs this autumn.

The Urban Strategies Commission led by the City of Liège presented its publication, "The Social Dimensions of Light", during the last CUM in Liège. Through the use of exemplary projects it shows how cities can illuminate social housing estates, how local communities can be involved in lighting projects, and how urban lighting can contribute to major urban renovations.

As a highlight of the AGM in Gothenburg, the Culture Commission from Glasgow will also be presenting the outcome of more than two years of work with a study on the "Economic and Cultural Benefits of Light Festivals".

Finally, three other Commission projects are also currently in progress: the work initiated by the City of Leipzig in developing an evaluation tool for the signatory cities of the LUCI Charter on Urban Lighting, the collection of sustainable urban lighting best practices led by the City of Eindhoven in the framework of the EU PLUS project, and the development of a methodological guide on "Tourism and Lighting" led by the City of Chartres.

I am very pleased to see that through these projects, the Commissions are pushing the LUCI network a step further. By bringing together and building on the existing knowledge and expertise that can be found within our network, they reinforce the informal exchanges that have existed within LUCI for years. They also build LUCI's capacity as a centre of resources for its members - as well as for other cities and lighting professionals worldwide. In this way, the Commission reports and activities can also offer city planners tools that can help them justify new projects, innovations or events in the domain of lighting.

These new dynamics within LUCI offer greater content and depth to our events and we look forward all the more to the LUCI Annual General Meeting in Gothenburg to discuss these Commission projects, and continue supporting cities in their urban lighting policies.

➤ The LUCI AGM 2011 in Gothenburg opens new perspectives

The City of Gothenburg will be the host of the LUCI Annual General Meeting 2011 from the 16th to the 19th of November. Ingemar Johansson, Head of the Street Lighting, Road and Trucks Department in the City of Gothenburg tells us more about the upcoming event...

■ What will be unique about this year's AGM?

The AGM in Gothenburg will be LUCI's first visit to Scandinavia, so we look forward to showing everyone the specificities of our region. Such as, for example, the Blue Hour, the light at dusk which gives the environment a special touch and glow. The meeting in Gothenburg will also inspire participants with Swedish architecture, design and food, as well as informative presentations by lighting designers, planners and researchers from Lund University and Gothenburg University.

■ What are the specificities of Gothenburg's lighting strategy?

Our lighting strategy is to work more and more with intelligent street lighting (ISL) and we have installed 2 500 luminaires with ISL so far. We aim to include more information and services for other partners in the municipality by incorporating data on internet, weather, etc., in addition to data on lighting, so as to offer the public an intelligent city in different ways. The strategy also involves working with a design tool to create a lighting master plan for Gothenburg. The next few years will be a period of change and expansion for the city and the lighting strategy reflects that.



■ Tell us more about the Gothenburg Christmas lighting initiative.

The Christmas lighting concept is a business concept which turns on special Christmas lights in the city centre from the end of November to the end of the year. This project started nine years ago and has had a strong positive impact on the number of tourists visiting the city during this period. Gothenburg & Co., the company that is in charge of this project, works in close collaboration with the municipality, hotels and other business partners in the city. In fact, this is not only a lighting event - there are also a lot of related commercial activities that are vital to promoting the City of Gothenburg abroad.

editorial

➤ Discover Eindhoven's "Living Lab" at the next City under Microscope



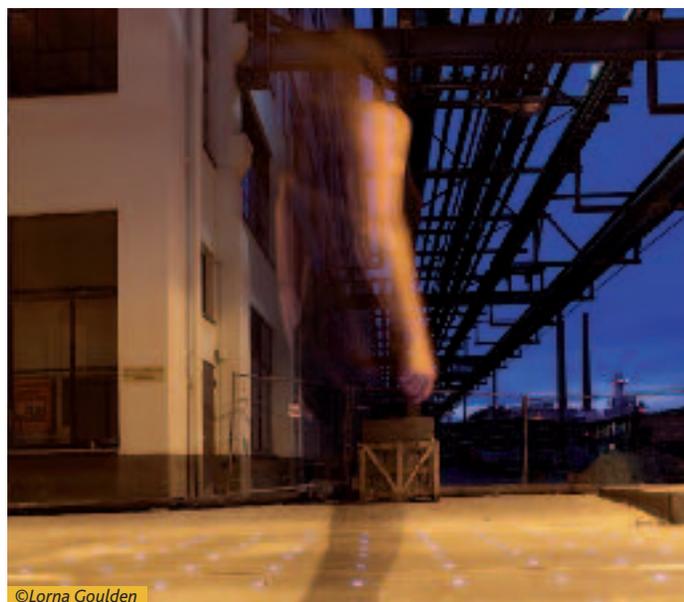
THE WORLD'S SMARTEST



The first City under Microscope (CUM) of 2012 will take place in Eindhoven (The Netherlands) from the 15th to the 16th of March 2012. The CUM will take participants on a journey whose outcome is yet to be determined - that of Eindhoven, the "Living Lab".

As a "Living Lab", the City of Eindhoven, together with scientists, developers, manufacturers and users, seeks new solutions to resolve social problems and improve the quality of life. In the field of public lighting, this involves finding more efficient systems which, in addition to optimizing energy consumption, offer more interactivity, (social) safety and comfort.

Indeed, the Brainport Eindhoven region, which is also engaged in a number of EU projects amongst which PLUS, has been elected the brightest region of the world as a result of its "Triple Helix" collaboration between universities, industry and government. The city is "rethinking the future", and LUCI members, together with the PLUS partner cities, are invited to dive into the CUM in Eindhoven!



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LUCI CALENDAR

NOVEMBER 2011

• 16 - 19

LUCI Annual General Meeting - Gothenburg (Sweden)

DECEMBER 2011

• 7 - 8

ForumLED Europe - Lyon (France)

• 8 - 11

Lyon Light Festival - Lyon (France)

• 9

"Rencontres de la Lumière" conference - Lyon (France)

MARCH 2012

• 15 - 16

LUCI City under Microscope - Eindhoven (The Netherlands)

APRIL 2012

• 15 - 20

Light+Building trade fair - Frankfurt (Germany)

JUNE 2012

• 5 - 7

LumiVille / Inlight Expo trade fair - Lyon (France)

• 9 - 12

Guangzhou International Lighting Exhibition - Guangzhou (China)

SEPTEMBER 2012

• 20 - 21

LUCI City under Microscope - Jyväskylä (Finland)

NOVEMBER 2012

LUCI Annual General Meeting - Medellin (Colombia)

➤ LUCI programme for the Lyon Light Festival 2011!

LUCI members are invited to participate in the LUCI programme for the Lyon Light Festival 2011 (8th to 11th December 2011). You will find a brief look at the highlights below:

LUCI PROGRAMME:

7 - 8 December: ForumLED Europe

8 December, evening: Auroralia Award ceremony

9 December: "Rencontres de la Lumière" conference

10 December, morning: meeting with the Lyon Light Festival 2011 lighting designers and organisation team

■ ForumLED Europe



Now in its third year, ForumLED Europe, an international congress and exhibition focusing on LED innovations, will bring together the key players and leading companies in the LED sector. LUCI will be co-organizing a conference on Wednesday 7th December 2011 (2pm to 4pm) on "How to use LED in public lighting, and for which results", featuring presentations from representatives of the cities of Leipzig and Los Angeles as well as from AIDI and ARUP.

Free entrance for LUCI member cities. Registrations on www.forumled.com

■ The Auroralia Award ceremony 2011

The Auroralia competition, initiated by Schröder with the support of LUCI, rewards cities that have implemented high quality exterior lighting projects that minimise the impact on the environment in the most noticeable,

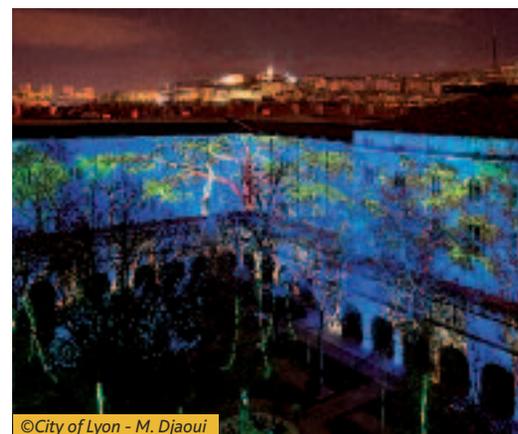
exemplary and original way. The winners of this year's edition will be announced at the award ceremony on the 8th of December!

More information at www.auroralia.org

■ The "Rencontres de la Lumière" conference

This year, the annual "Rencontres de la Lumière" conference, organized by LUCI in collaboration with the City of Lyon, will be held on the 9th of December. The conference theme will be "Lighting and bringing the city to life with the inhabitants" on permanent and temporary lighting initiatives that have involved the local population, featuring projects from Catania, Gothenburg, Glasgow, Lyon, Brussels and Mulhouse.

Programme and registrations at www.luciassociation.org



©City of Lyon - M. Djaoui

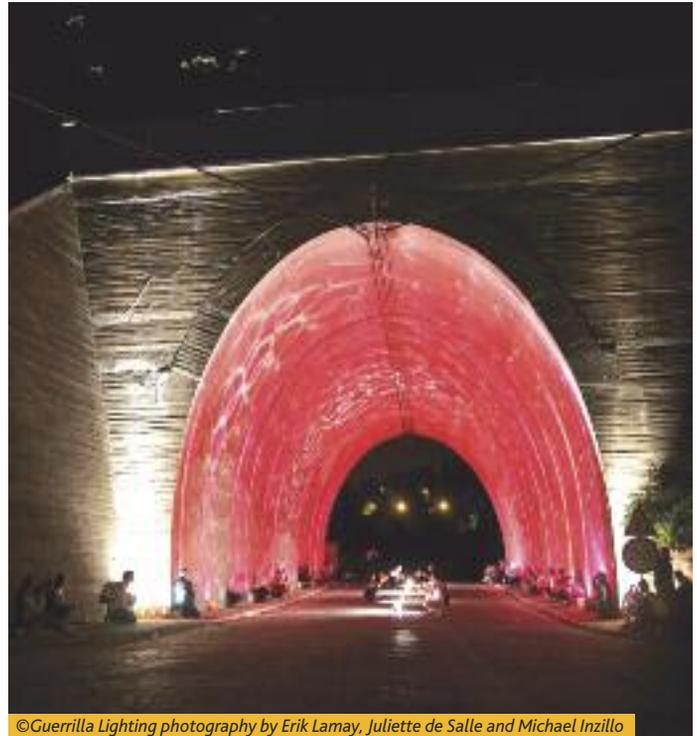
↘ CUM Liège participants discover the social aspects of light

Over 90 participants came together at the LUCI CUM in Liège to explore the concept of "social lighting", which has been the focus of the City of Liège's Urban Strategies Commission over the past few years.

Besides presentations on the City of Liège's lighting master plan and its maintenance, the major highlight of the CUM was the release of the new LUCI publication "The Social Dimensions of Light". Speakers from Bangkok, Ghent, Le Havre, Rotterdam and Rio were invited to present social lighting experiences from their respective cities in a conference on the topic.

The CUM also included the finale of the first ever workshop on social lighting, organized by the Social Light Movement, in which workshop participants presented their lighting concepts for the Sclessin district of Liège.

In a LUCI first, CUM participants were also treated to an evening of "Guerrilla Lighting" with a first-hand experience of the transformative power of light in neglected areas of cities, as they temporarily illuminated four sites in Sclessin using high-power torches, coloured filters and LEDs - undoubtedly one of the highpoints of the event!



©Guerrilla Lighting photography by Erik Lamay, Juliette de Salle and Michael Inzillo

↘ LUCI Commissions offer new tools for cities

One of the highlights of the AGM 2011 in Gothenburg will be the presentation of the outputs of some of the LUCI Commissions.

■ Culture Commission - evaluation of the impacts of light festivals

The LUCI Culture Commission led by the City of Glasgow has, for the past year, been conducting a study on the economic and cultural benefits of light festivals in collaboration with Cambridge Policy Consultants (CPC). Through contacts with 26 cities hosting more than 30 light events, the CPC team has collected a wealth of information on how cities measure and demonstrate the success of their events. The final report of this research will be presented at the Culture Commission meeting at the AGM this November.

■ Charter Commission - taking the LUCI Charter on Urban Lighting a step further

The Charter Commission, led by the City of Leipzig, has been working with Professor Alexander Schmidt from the University of Duisburg Essen on determining appropriate indicators for a periodic evaluation of the lighting strategies of signatory cities of the LUCI Charter on Urban Lighting. It will be presenting and discussing these indicators, developed as part of a public lighting survey, during the AGM in Gothenburg.

■ The Sustainable Lighting Commission - PLUS is more

The chair of this Commission, the City of Eindhoven, is the lead partner of the EU project PLUS on sustainable lighting, which is

financed by the INTERREG IVC programme. Eindhoven will present this project and its unique "Deep Dive" methodology, accompanied by PLUS partner cities as they present their own Deep Dive events and the sustainable lighting best practices identified.

■ Commission on Tourism and Lighting

The most recent Commission, launched last May, is the LUCI Commission on Tourism and Lighting. Chaired by the City of Chartres, it will involve LUCI member cities in the realization of a publication in partnership with Atout France, the national promotional agency linked to the French Ministry of Tourism. The initiative aims to identify the key factors that determine how a lighting strategy can contribute to the touristic development of a destination, and the resulting publication will be a methodological guide for cities, with testimonies and case studies from all over the world.

Get your copy of the final report on benefits of light festivals!

The Culture Commission's final report, which features case studies from the cities of Chartres, Durham, Eindhoven, Glasgow, Gothenburg, Jerusalem, Lyon, Medellin, Montreal and Osaka, will be available on the LUCI website at the end of November. A free copy will be sent to LUCI members on demand.

Contact luci@luciasociation.org for more information

NEW MEMBERS

↘ Perth - creating a safe and vibrant nightlife

The lighting strategy of the City of Perth, Australia's fourth most populous city, provides a coordinated plan guiding public and private urban development initiatives on creating a safe, vibrant city nightscape to draw residents and visitors alike.

The city is currently upgrading one of its main boulevards, St Georges Terrace, to create a high quality pedestrian environment and test LED lighting in a major street. "We are particularly interested in developing a suite of unified poles and components in the city centre to minimize clutter and create new economic opportunities," states Michael Murphy, the Principal Urban Designer at the City of Perth. Dedicated pedestrian lighting has thus been introduced on multi-functional poles which include vehicle, pedestrian and building lighting, signage, traffic lights, CCTV cameras, banners, festival lighting, mobile phone transceivers and Wi-Fi networks.

This is just one of a series of initiatives that will continue to improve the quality of life in Perth, already ranked as the eighth most livable city in the world by the Economist!



©City of Perth - Mike Ellis

↘ Milan - showcasing its lighting and design



©City Of Milan

Milan is the second largest city in Italy with a population of approximately 1.3 million, while its urban area as a whole is one of the largest in Europe.

The city, widely considered as the world's fashion and design capital, is also known for its annual "Light Exhibition Design" festival, in which light installations combining contemporary art and design transform its urban spaces. Currently in the process of planning the 2011 edition of the festival, Milan has decided to extend the light art installations beyond the city centre to its other nine districts.

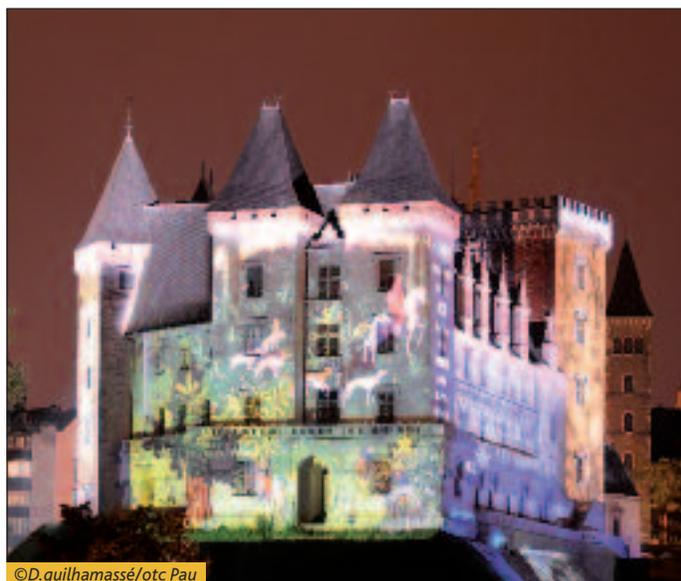
The municipality is also working on planning a permanent lighting project on the illumination of six heritage monuments as well as a temporary Christmas lighting scheme. It is also active in lighting design education – its Politecnico di Milano is currently offering a unique course on LED lighting design in collaboration with AIDI (Italian Lighting Association).

↘ New lighting for Pau's historical landmark

The City of Pau, located on the edge of the French Pyrenees, is famous for its Chateau de Pau, the birthplace of King Henry IV. Indeed, the city.people.light award-winning illumination of the Chateau forms an integral part of Pau's lighting master plan which aims to redevelop and modernize the city's urban lighting.

Sustainable development is a key imperative for the city, which has engaged to sign the LUCI Charter. "Through LUCI we hope to gain international visibility and share lighting experiences with other cities, especially in reference to the LUCI Charter on Urban Lighting," declares Jean Bidegaray, Head of Public Lighting in Pau.

The new illumination of the Chateau de Pau consists of highlighting its architecture using energy efficient techniques that reduce the power consumption by 36.6%, as well as the creation of a temporary light show in the Chateau during summer evenings. The show, entitled "The moon with teeth", evokes the history of the castle, and has already drawn over 50 000 visitors!



©D.guilhamassé/otc Pau

Artichoke - bringing a little magic to cities



©Matthew Andrews

Artichoke, a London-based event management agency, is known for producing ambitious events that invade public spaces such as the LUMIERE light festival in Durham. LUMIERE 2011, held this November, will present artworks by over 30 different artists and local community groups.

"Artichoke enjoys collaborating with other artistic organizations and believes that the impact of such relationships can only have a positive effect on us, the artists we commission and, of course, on the cities in which we work," explains Director Nikki Web. As a result, the agency has instigated "Lux Scientia", a collaboration between LUMIERE and two other international light festivals in the cities of Torun in Poland and Tallinn in Estonia, seeking to create new ways of thinking and foster new relationships between the three countries.

ARTICHOKE

LOCATION: London, United Kingdom
 YEAR FOUNDED: 2005
 MAIN ACTIVITY: event management
 NUMBER OF EMPLOYEES: 10

Dansk Lys - bringing Danish lighting to the forefront

The Danish Lighting Innovation Network, focusing on light and lighting, is a recently established network with financial support from the Danish Agency for Science, Technology and Innovation. It aims to contribute to promoting an innovative usage of light in Denmark in connection with quality, design, usability and sustainability. It also seeks to support the Danish lighting industry's progress in the global lighting market.

"Urban lighting design will be an important sector in the future development of more energy efficient lighting solutions," says Flemming Madsen, Manager of International Affairs at Dansk Lys. *"LUCI brings together the forerunners of urban lighting and thus it is an important forum for the Danish Lighting Innovation Network to be part of."*



DANISH LIGHTING INNOVATION NETWORK (DANSK LYS)

LOCATION: Stenløse, Denmark
 YEAR FOUNDED: 2010
 MAIN ACTIVITY: matchmaking between public and private sectors, internationalization and market development.
 NUMBER OF EMPLOYEES: 3

Cluster Lumière - spotlight on Rhône-Alpes

The Cluster Lumière was initiated by the Chamber of Commerce and Industry of Lyon in order to unite and develop the lighting savoir-faire of the Rhône-Alpes region of France. With over 120 members comprising manufacturers, laboratories, installers and lighting designers, the Cluster aims to mobilize the regional lighting industry to meet current challenges and support the development of local businesses.

"By joining LUCI as associated member, we have now formalized our long-standing relationship", declares Patrick Clert-Girard, the General Delegate. *"It will be a unique opportunity to deepen the knowledge and business relationships in urban lighting."*



CLUSTER LUMIÈRE

LOCATION: Lyon, France
 YEAR FOUNDED: 2008
 MAIN ACTIVITY: network association
 NUMBER OF EMPLOYEES: 4

Les Eclaireurs - lighting up urban spaces

Les Eclaireurs, a lighting design agency in Lyon, specializes in the illumination of public spaces and public parks. *"We aim at creating new concepts in lighting design and light art. Supported by an international network, we hope to contribute to new lighting trends, providing an innovative look to every kind of lighting project,"* explains Lucas Goy, Lighting Designer and Project Director at Les Eclaireurs.

Some of the agency's major projects include the Square de Barcelone in Lyon, the Thermes O'balia at Balaruc les Bains, which won the Lumiville 2010 architectural heritage lighting award, and the illumination of the Seine riverbanks in Rouen.



©Lucas Goy

LES ECLAIREURS

LOCATION: Lyon, France
 YEAR FOUNDED: 2008
 MAIN ACTIVITY: lighting design
 NUMBER OF EMPLOYEES: 4

↘ Jelenia Góra announces new edition of the Karkonoski Festiwal Światła



The fourth edition of the light festival in Jelenia Góra (Poland), the Karkonoski Festiwal Światła, will be taking place from the 13th to the 15th of January 2012. The festival, organized by the LBL group, will light up the city with video mapping, laser shows and other artistic presentations. It will also include the "Academy of Light" conference on the lighting of public spaces for Polish and German municipalities, architects and designers, as well as the "Master of Light" lighting design competition.

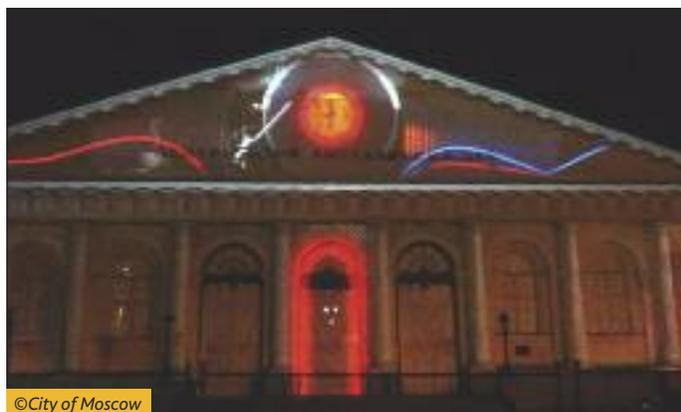
In order to further internationalize the 2012 edition, the organizers intend to expand the festival to include installations by students from Germany, France, and the Netherlands. The festival, which has been much appreciated by tourists and residents alike, is one of the region's key events, and the City of Jelenia Góra invites LUCI members to pay them a visit!

↘ First edition of the Moscow light festival

The City of Moscow held its first festival of light from the 20th to the 23rd of October 2011. The festival, organized by the City of Moscow with the Mayor Sergey Sobjanin at the head of the organizing committee, featured light art and light installations by artists world-wide.

Over 15 buildings including the Kremlin and Red Square, the Bolshoi Theatre and Moscow University were illuminated with special floodlighting, strobe and laser effects.

The festival also included a competition for young lighting designers on the 22nd of October. The grand prize in the "Laboratory of Light" competition went to Anastasiya Komarova and Nikolay Filatov for their "Bowling Centre" installation, while the winners of the video art competition were Alexey Shustov, Alexander Us, Sila Sveta, Vlady and group KASTA for "Singing Manezh".



↘ LightLinks inauguration: new illumination for Hisham's Palace in Jericho



On the 12th of May 2011, the cities of Lyon and Jericho along with Thorn and LUCI, inaugurated the new illumination of Hisham's Palace in Jericho, one of the major historical monuments in the region, and the home of the famous "Tree of Life" mosaic.

"The City of Jericho is delighted with the results of this initiative. The collaboration between both cities was a great success and the people are thrilled with the



new illumination of Hisham's Palace," declared the Mayor of Jericho Mr Hassan Saleh Hussein.

Hisham's Palace has been illuminated as part of the first LightLinks project which brought Lyon and Jericho together to develop a lighting scheme for the site aiming at increasing tourism and positively impacting the local community.

LightLinks II Glasgow-Amathole update

Launched in 2010, LightLinks II between Glasgow (UK) and Amathole (South Africa) aims to illuminate the Amathole City Hall, the Art Centre in Mndantsane and potentially, the Steve Biko Bridge. John Toffolo, Technical Project Manager, Glasgow City Council gives us the latest on the project:

"It is anticipated that the next task force mission will take place later this year. A number of Thorn Lighting products are currently being shipped to South Africa to enable testing of the equipment at the various locations. A series of workshops will also take place around the lighting design process to enable a transfer of skills and knowledge during this visit."

New LightLinks III

The third LightLinks project is planned for 2013. Cities are invited to send in their projects before the 30th of June 2012, and the winner will be announced at the LUCI Annual General Meeting in Medellin (Colombia) in November 2012, with work on the winning project planned for 2013.

↘ The Social Dimensions of Light

Cities are increasingly venturing beyond the functional applications of urban lighting to harness its potential as a catalyst for social change. Whether this concerns recreating social cohesion in the most disadvantaged areas, regenerating urban wastelands, integrating the peripheral areas of the city, or redefining the city's usages at night-time, it indeed seems that light can effectively contribute to achieving such objectives. All this and more comes within social lighting, a concept recently explored in the new LUCI publication "The Social Dimensions of Light".

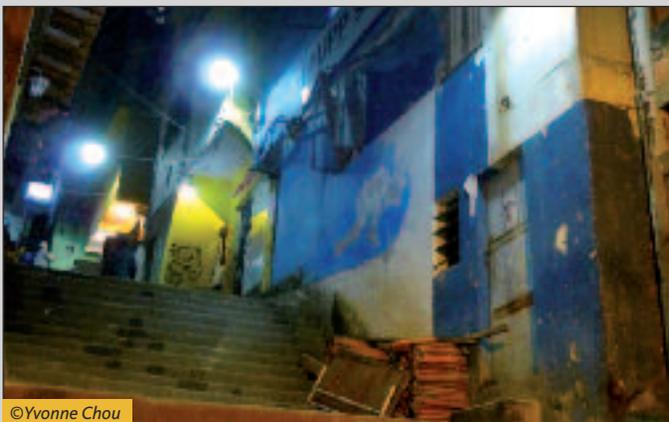


What does the concept of social lighting really imply? Jacques Teller, Director of LEMA (Architectural Methodological Research Laboratory) at the University of Liège gives us his opinion on the topic...

What do you understand by the term social lighting?

By definition, doesn't all urban lighting have a social dimension? Lighting the city, even functionally, always involves extending its use to the night-time, transforming its nocturnal image for citizens, organizing public spaces, etc. Lighting can indeed be social in many aspects - first of all, it is a quick and very effective way of changing the image of so-called disadvantaged areas. It can also play a role in recognizing the religious, political and social diversity of the contemporary city and in supporting one-off events in the city. Lighting can also address the issues of safety and vandalism as well as inhabitants' other requirements in terms of the comfort and quality of their environment.

↘ Lighting the Santa Marta Favela in Rio de Janeiro



©Yvonne Chou

The case of the Santa Marta Favela in Rio de Janeiro is one of the experiences illustrated in the new LUCI publication "The Social Dimensions of Light". Rio, which is marked by a strong dichotomy between its formal and informal areas, implemented a lighting project as a development tool to promote social cohesion. It consisted of removing existing outdated lighting poles in the alleys of the favela and installing new lighting equipment on the facades of the houses. This new project not only increased the possibilities of using the public space at night, but more importantly, integrated Santa Marta into the formal city and thus the formal economy.

How can it act as a catalyst for social change in disadvantaged areas?

Lighting, unlike conventional methods of long term urban renewal, allows the image of a place to be significantly altered without having to resort to investments that are costly both in terms of time and budget. Public lighting can then be considered as a sort of stimulus for disadvantaged areas, a tool which would simply precede, initiate and pave the way for more substantial transformations.

How can lighting contribute to greater social inclusion?

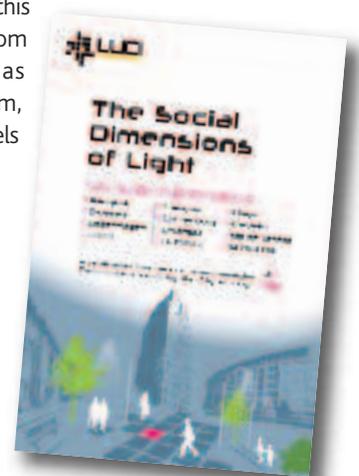
An urban lighting strategy sensitive to the multiplicity of values that co-exist in the city, participates in a more general trend of recognizing urban minorities. Moreover, approaches such as these are usually preceded by public participation. Furthermore, implementing creative public lighting in "informal" or "marginalized" areas, also probably involves reformulating local problems in a non-conventional way. Even more importantly, it is a way of recognizing the vitality of these areas, in contrast to the stigmatizing approaches that have sometimes been developed in these types of environments.

↘ New LUCI publication

LUCI is pleased to announce the release of its second publication, "The Social Dimensions of Light", which took place at the CUM in Liège this September. The publication, realized in collaboration with the University of Liège (LEMA), is a product of the LUCI Urban Strategies Commission chaired by the City of Liège.

"The Social Dimensions of Light" aims to define the concept of social lighting and draws attention to concrete experiences and exemplary practices in this domain with case studies from 12 cities world-wide such as Medellin, Bangkok, Rotterdam, Copenhagen, Gwangju, Brussels and Le Havre, among others.

Email luci@luciasociation.org
to get your copy.
English - French bilingual
230 pages
Price: 26 €
Free for LUCI members



LUCI will be building on this theme of social lighting at its "Rencontres de la Lumière" conference focusing on "Lighting and bringing the city to life with the inhabitants" on the 9th of December during the Lyon Light Festival 2011 (Ref. page 2).

PLUS (Public Lighting Strategies for Sustainable Urban Spaces), financed by the EU's INTERREG IVC programme, capitalises on existing urban lighting best practices on energy efficiency in European cities. It aims to offer a set of recommendations leading to the improvement of cities' lighting strategies and action plans.

PLUS partners

- Lead Partner: Eindhoven (The Netherlands)
- Bassano del Grappa (Italy)
- Birmingham (UK)
- Burgos (Spain)
- Iasi (Romania)
- Leipzig (Germany)
- Lyon (France)
- Nice Côte d'Azur (France)
- Patras (Greece)
- Sofia (Bulgaria)
- Tallinn (Estonia)
- LUCI (Lighting Urban Community International)

Programme: INTERREG IV C
 Total budget: 1 689 508,00 Euros
 Duration: October 2010
 to December 2012



NEWS FROM PLUS

➤ PLUS marks its first year in action

Half of the project period has passed and PLUS has made significant progress. The cities of Lyon, Nice, Patras, Iasi, Bassano and Birmingham (making over half of the project partners) have hosted their Deep Dives, leading to the adoption and adaptation of the Deep Dive methodology and process - next year's upcoming Deep Dives will undoubtedly show some changes to reflect this.

The project has also successfully organized its first briefing in Brussels, which presented PLUS and its best



➤ Tallinn to host next PLUS Deep Dive

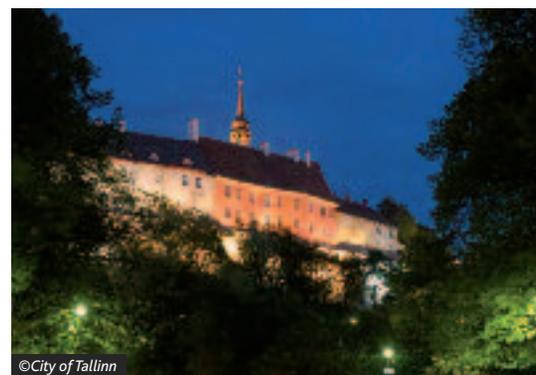
PLUS partners are invited to attend the Tallinn Deep Dive on the 12th and 13th of December 2011 where they will have the opportunity to discover the Estonian capital's lighting success stories and explore possibilities for the further development of its lighting strategy.

The City of Tallinn will demonstrate its lighting experiments such as its new LED luminaires for pedestrian crossings and its intelligent street lighting control system. The city will also present the experiences and knowledge gathered as a result of its LED-test street project, where over 30 different LED luminaires are presented. And what does Tallinn hope to accomplish with the Deep Dive? *"We hope to collect valuable suggestions from all the partners thereby helping us*



©PLUS

practices, along with some new perspectives on the project. To mark one year in action, PLUS will be presented at the LUCI AGM 2011 in Gothenburg in the framework of the City of Eindhoven's presidency of the LUCI Sustainable Lighting Commission. All in all, a busy and enlightening year for PLUS partners!



©City of Tallinn

develop our city lighting plan and begin a new energy saving plan," explains Tarmo Sulg, Deputy Head of the Tallinn Municipal Engineering Services Department.

➤ PLUS holds its first Brussels Briefing



©PLUS

The partner cities of the PLUS project briefed key European decision makers and representatives of civil society on the progress being made in European sustainable lighting initiatives on the 28th of September 2011 in Brussels. Over 40 participants were present at the event.

The Deputy Mayor of Sofia, Mr. Lyubomir Hristov, provided an insight into the ways in which the City of

Sofia is adapting and using their lighting to make the city safer, provide more sustainable cycling routes, extend opening hours for businesses and increase recreational opportunities.

The City of Leipzig, represented by Mr. Siegfried Schlegel, Leipzig City Councillor, presented the "Intelligent City Lighting" project which seeks to reduce the city's carbon footprint by installing modern LED lighting in the city centre.

This conference, the project's first Brussels Briefing, also featured presentations by sustainability experts, Elke den Ouden, Professor at Eindhoven University of Technology, and Dr Dorothea Seebode, a specialist on sustainable innovation.

Go to www.luciasociation.org/plus to see the presentations

↘ Lyon consults stakeholders in 2nd Regional Forum

The City of Lyon held its 2nd Regional Forum on the 20th of October 2011, presenting the results of its Deep Dive to selected partners including the cities of Grenoble, Besançon, Montpellier and Dijon, as well as major manufacturers and service providers from the region.

This second regional forum, which was preceded by field visits to demonstrate key projects, aimed at obtaining regional stakeholder involvement in identifying the strengths and weaknesses

of Lyon's lighting strategy. The participants debated the objectives of the city's lighting strategy and their relevance today, the results of the implementation of this strategy and whether they met expectations.

This feedback, along with that of the PLUS experts, will serve as input for the next step of the PLUS process, Lyon's SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis.

↘ PLUS partners discover the lights of Iasi

The City of Iasi, Romania's second largest city with over 350 000 inhabitants, hosted its PLUS Deep Dive on the 6th and 7th of October 2011.

Iasi, which has been working with two contractors, Luxten and Flash for the management of its public lighting since 2005, currently has over 17 337 luminaires on 15 959 lighting poles. One of the city's main objectives is the optimization of energy consumption related to the public lighting. It has made significant progress regarding this, having already replaced all its mercury lamps. While the lamp sources for street and pedestrian lighting are now predominantly high pressure sodium, the sources for architectural lighting are mostly metal halides and LEDs.

Both contractors have put in place environmental policies as well as procurement and management systems that take into account the environmental impact of lighting. A reduction in energy consumption has also been achieved by using LEDs, renewing the city's electrical networks, replacing conventional ballasts with electronic ballasts, and implementing a tele-metering system.

Iasi is currently executing new lighting projects with the objective of opening up public spaces and creating a new identity for the city. It aims to increase its cultural dynamism and reinforce its tourism economy



with new lighting attractions and better quality decorative lighting in tourist destinations, such as the 40 Martyrs Church, Church St. Teodori, St. Nicholas Church, and Eminescu's Copou Park. The city also aims to extend improved public lighting beyond the city centre to the entire urban metropolitan region as a whole.

↘ New look for Monte Grappa Street in Bassano del Grappa



The City of Bassano del Grappa, which hosted its Deep Dive on the 27th and 28th of October 2011, presented its project on the renovation of the Monte Grappa Street. The city administration has been renovating the street for vehicular and pedestrian use through the overhaul of its public lighting.

Following a series of area-tests, simulations and light level analyses, Bassano decided to implement a new lighting system with luminaires consisting of 36 LEDs with a nominal power of 46 W (total 58 W) on 6 feet high poles. The system is also equipped with an electronic power-pack that enables dimming, thus ensuring that there will be maximum light intensity in the first and last hours of operation and reducing energy consumption in the middle of the night when a lower level of lighting is required.

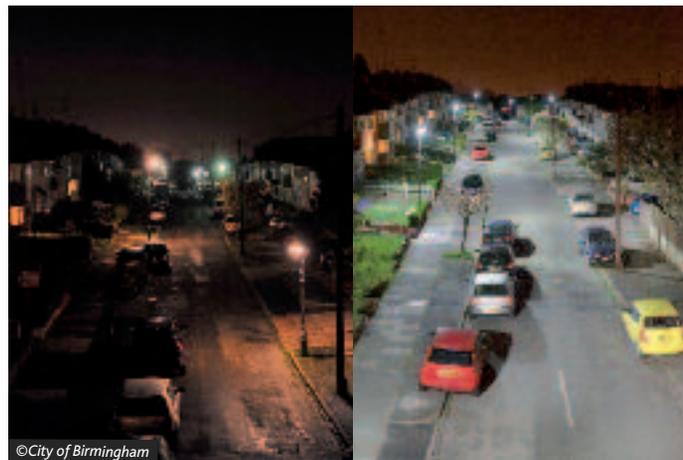
Furthermore, visual comfort is assured with glare-free lighting and comfortable colour temperatures of 4000 K. The new lighting solution will result in sufficiently high levels of lighting with good uniformity on the roads as well as the sidewalks, and overall energy savings of around 30%.

▶ Birmingham implements ambitious LED street lighting system

The City of Birmingham, which is currently implementing a large-scale LED street lighting system, one of the first of its kind, had much to show visiting PLUS experts during its Deep Dive on the 7th and 8th of November 2011.

The Birmingham City Council, in collaboration with public services provider, Amey, with which it has signed a 25 year contract for the maintenance and management of the public lighting, will be replacing over 40 000 traditional luminaire lamps with remote monitored LEDs over the course of the next few years. A PLANet remote monitoring system is being used to control the performance of every new street light and will soon extend to monitoring all of the city's existing street lights. Within four years, this system will allow dimming of each of the city's 90 000 street lighting points. As the system enables technicians to set the power delivered to individual lighting positions by increments of a single watt, rather than tens of watts, it will be possible to use the minimum possible energy while maintaining the necessary lighting standards.

The new lighting solution is expected to cut carbon emissions by approximately 50% and the city anticipates significant savings as a result of the reduction in power consumed as well as the reduction in maintenance.



©City of Birmingham



▶ EU call for collaborative R&D proposals on OLAE

The European Competition for Collaborative R&D Funding organised an Information Day on organic & large area electronics (OLAE) on the 27th of October 2011 in Brussels. OLAE + is a transnational call for collaborative research and development proposals under the European Commission's ERA-NET Plus scheme with an estimated budget of €18 million. The aim is to seek proposals to develop and stimulate technology and business relationships within the European OLAE community, building the supply chain and removing barriers to industrialisation.

Open to participants from Austria, Catalonia, Flanders, Germany, Israel, Poland, Sweden and the UK, the call is organised as a competition for funding and will be implemented jointly by the national funding bodies who expect to fund a mixture of small and large bi- or multi-national projects, with total costs typically in the range of €0.5m to €3m. The competition opened on October 24th 2011 and the first proposal deadline is January 31st 2012 (13:00 CET).

For further details go to www.olaeplus.eu

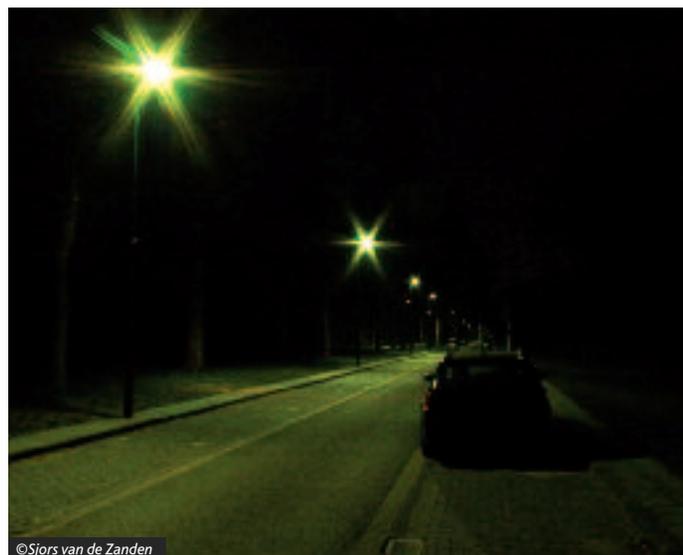
▶ Eindhoven's Velddoornweg literally goes "green" in new pilot project

In search of a lighting solution that ensures safety, comfort and a pleasant experience for the users of Velddoornweg (a rural road connecting Eindhoven with surrounding villages) and yet minimizes energy consumption, light pollution and disturbance to the natural fauna, the City of Eindhoven has decided to install dynamic green LED lighting as part of a pilot project. 38 luminaires along the 1 km long road light up only when necessary through a dynamic system. The LEDs are equipped with a wireless radiofrequency system through which each LED can be controlled separately.

and offers companies and researchers the chance to test and refine their products and ideas.

And why green LEDs? *"The lighting along the Velddoornweg is green - not because it fits the rural surroundings - but because, as proven by scientific research, the human eye sees best when green light is used in combination with a low light level"* explains project leader Sjors van de Zanden.

The system was delivered in the beginning of September and the city is currently experimenting with the technique and the different levels of light intensity. Being a "Living Lab", the City of Eindhoven chooses not to implement fully developed products



©Sjors van de Zanden

▾ The “Rivers of Light” - lighting design as a touristic and cultural attraction in Valladolid (Spain)

The City of Valladolid has developed the “Rivers of Light” route which offers a new and innovative way of enjoying the cultural pleasures of Valladolid at night time. Rafael Gallego (áureolighting) and Lara Elbaz, the lighting designers involved, tell us more about this pioneering project...

“Beauty and sustainability”

■ What is the concept behind the “Rivers of Light” route?

The concept of this project revolves around the symbolic re-integration of the River Esgueva, which was re-routed in order to allow the city to grow. This virtual river is transformed into a River of Light which runs through the city, guiding people through its streets in a surprising and interactive way. It reveals the city’s rich heritage and present splendours, showing step by step, tributary by tributary, its history, architecture and cultural heritage. The Rivers of Light route interconnects different parts of the centre of Valladolid using light. The objective is to provide users (citizens of Valladolid and tourists) with symbolism and visual comfort as they walk through the city. The route thus combines energy saving and design in the creation of a unique tourist route which highlights the city’s architectural richness.

■ Tell us more about the lighting design of the project.

While the buildings and monuments have been lit according to their individual characteristics, the lighting of these targeted areas has also had the effect of ordering and harmonising the surroundings: colour temperature of the light sources have been unified and the lighting levels have been reduced in order to increase the degrees of shadow, making the night lit passages more visually effective. This has been done using the latest technology and low consumption LEDs. In total, the project has resulted in energy savings of 44.5% including 15 new buildings that were not previously lit. Light pollution is avoided and optimum energy efficiency has been achieved in all of the monuments by incorporating lighting control programmes, which allow lights to come on when it starts getting dark and turn off again at midnight. In addition, visual comfort has been prioritised, using antiglare devices when necessary. Finally, visual integration of the luminaires is assured as they disappear in the daylight.

■ How are colour codes used?

The walk makes use of a colour lighting code, which communicates different messages visually. First of all, a green-blue light is used throughout the walk to visually mark the route. Since rivers are alive and continuously changing, different lighting elements housing this ‘river-green’ light, easily recognisable by visitors, take on the role of a visual tour guide, accompanying visitors in the discovery of Valladolid. Secondly, the walk uses liturgical colours which are transferred to the interior of the church towers, communicating the sacramental message to the outside. Finally, to allow for municipal cultural spaces to be easily recognised along the walk, the purple light colour of the City of Valladolid is used to indicate each of these buildings.



IDENTITY CHIP

Location: Valladolid (Spain)

Stakeholders

Contracting authority: Municipality of Valladolid

Manufacturers: Philips and Indal

Lighting design: Rafael Gallego (áureolighting) and Lara Elbaz

Installation: Elpa

Maintenance: Elpa

Technical details

Number of luminaires: 2 031

Lamps: 866 LED luminaires with different number of lamps
1 115 metal halide lamps, 50 fluorescent lamps.

Power: 112 421 W

Energy consumption: 84 091 kWh annually

Costs

Total project budget: 1 402 507.16 €

Functioning cost: 12 613.65 € (84 091 kWh x 0.15 €)

Implementation

Project start date: March 2009

Duration: 20 months

Inauguration: November 2010

ADVANTAGES:

- 44.5% energy savings
- led to a significant increase in the number of overnight visitors to the city
- the route is flexible and open to the introduction of new buildings and environments according to the needs of the city

DISADVANTAGES:

- complex installation due to the huge range of sites through the whole city centre
- the project includes 30 buildings owned by different proprietors that all had to approve the installations



©City of Gimhae



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.



LUCI Association
13 Rue du Griffon
69001 LYON, France
Telephone: 00 33 4 27 11 85 37
Fax: 00 33 4 27 11 85 36
luci@luciassociation.org
www.luciassociation.org

The cities of light newsletter is published by LUCI Association, 13 Rue du Griffon, 69001 Lyon, France • Director of Publication: Councillor Allan Stewart • Editorial Manager: Alexandre Colombani • Writing: Nikita Junagade • Editorial coordination: Nikita Junagade, Raphaëlle Leclerc • Design template: Jean Vasseur Communication - Lyon 69 France • Cover photo: ©Goteborg & Co, Photo Dick Gillberg

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