



Sustainable cities

A simple switch in urban lighting

asimpleswitch.com

PHILIPS

sense and simplicity



“I helped my city save costs and the environment. By simply refurbishing the Guillotière’s bridge in Lyon with Philips CitySoul luminaires including CosmoPolis lamps and gear, we saved more than 50% energy and reduced the CO₂ emissions.”

Mr. Bouchet (City of Lyon, France)





Boulevard, Breskens, the Netherlands

Lighting a greener urban future

The landscape of the lighting industry is changing fast. The energy-efficiency imperative, legislative pressures such as Kyoto and the world of possibilities opened up by the LED revolution are all having a positive influence on our lighting choices. We're spreading the word under our theme of Sustainable Cities. It's our way of helping urban authorities to reduce energy consumption so they can lower CO₂ emissions and improve the quality of life in their towns and cities.



Quality of life - the challenge of unparalleled urbanization

A century ago less than 10% of the world's population lived in cities. By the start of the 21st century that figure had risen to over 50%, and by 2050 it will be over 75%. Faced with this unparalleled expansion, city authorities worldwide recognise the need to re-humanise the urban environment by tackling crime, promoting tourism and fostering local identity and pride.

Over the past decade, Philips has been engaged in a process called city.people.light to explore how light can enrich and simplify our experience of the urban setting. One of the focus areas of city.people.light is sustainability.

Sustainability - simple changes, major impact

Philips Lighting has a long-standing commitment to providing lighting solutions that improve our lives and are environmentally sound. It's one of the cornerstones of our sustainability policy, whereby we strive to balance our social, economic and environmental responsibilities.

In this brochure you'll discover how our outdoor lighting solutions can help you create sustainable cities through:

- Architectural lighting for urban spaces
- Advantages of White Light in the different application areas in an urban environment
- Energy-efficient solution proof points in various application areas
- Existing LED solutions for multiple dedicated application areas



Opportunities in legislative initiatives

The EuP Directive 2005/32/EC I (Eco-Design Requirements for Energy using Products) defines requirements for the environmentally-sustainable design of energy using products. It is a framework of guidelines with which requirements can be defined in implementation measures for many product groups.



Two of these relate to lighting. Inefficient products used for household lighting and lighting in the tertiary sector (street, office and industrial lighting) will be phased out of the market. This means that it will no longer be permitted to sell products which fail to meet these requirements in EU countries. They will lose their CE certification.

Philips is prepared for the change-over and offers a complete range of alternatives. For conventional light bulbs in the form of modern energy-saving halogen and LED lamps. For fluorescent lamps, high-pressure discharge lamps and conventional ballasts there are also energy-saving alternatives. We offer environmentally-conscious economical lighting solutions with our efficient lamps, high-efficiency lights and intelligent lighting controls.

Timetable for discontinuation of inefficient high-pressure discharge lamps

From April each year	2010	2012	2015	2017
Sodium vapour lamps	Permitted	Discontinuation of inefficient sodium vapour lamps		
Sodium vapour replacement lamps	Permitted	Discontinuation of all sodium vapour replacement lamps		
Mercury vapour lamps	Permitted	Discontinuation of all mercury vapour lamps		
Metal halide vapour lamps		Discontinuation of inefficient metal halide vapour lamps		
		Permitted	Discontinuation of all inefficient lamps	
Permitted	Note: all wattages are indicative only. The deciding factor is the light output (lumen)			
Discontinuation	Lamps may no longer be offered for sale. All existing stocks may be used up			



Solutions for upcoming legislative needs

This period of financial and energy challenges is the time to look for new approaches. Mercury vapour lamps are on the way out and will lose their CE-certification from 2015. Cities and boroughs need to think ahead and introduce new lighting solutions into their future lighting projects. Modern lighting concepts will enhance the whole cityscape and the results will benefit residents and guests alike.

Philips has a wide range of low-maintenance, high-quality products that are at the leading edge of outdoor lighting. What follows is only a selection, for more lighting products go to www.philips.com/lighting

Uplamping alternative (for pure lamp replacement)

Mercury vapour lamp



save up to
20%

MASTER SON-H



Mercury
vapour lamp

80W

→ 68W

125W

→ 110W

250W

→ 220W

400W

→ 350W

Renovation alternatives

Post top luminaire



save up to
70%

CitySpirit / CitySpirit LED



Mercury
vapour lamp

50/80W

→ LED 25W

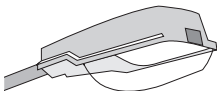
125W

→ CPO-TW 45W

2x 50/80W

→ CPO-TW 45/60W

Standard solution



save up to
80%

Koffer² / Mini Koffer²



Mercury
vapour lamp

50/80W

→ LED 31W

125W

→ CPO-TW 45W

2x 50/80W

→ CPO-TW 45/60W

2x 125W

→ CPO-TW 60W

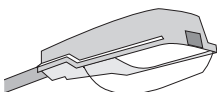
250W

→ CPO-TW 60/90W

400W

→ CPO-TW 90/140W

Standard solution



save up to
80%

Iridium / Mini Iridium



Mercury
vapour lamp

50/80W

→ LED 31W

125W

→ CPO-TW 45W

2x 50/80W

→ CPO-TW 45/60W

2x 125W

→ CPO-TW 60W

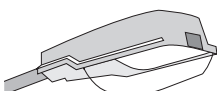
250W

→ CPO-TW 60/90W

400W

→ CPO-TW 90/140W

Standard solution



save up to
80%

Modena / Mini Modena



Mercury
vapour lamp

50/80W

→ LED 31W

125W

→ CPO-TW 45W

2x 50/80W

→ CPO-TW 45/60W

2x 125W

→ CPO-TW 60W

250W

→ CPO-TW 60/90W

400W

→ CPO-TW 90/140W

Cities overview

\\ 01 . Architectural lighting

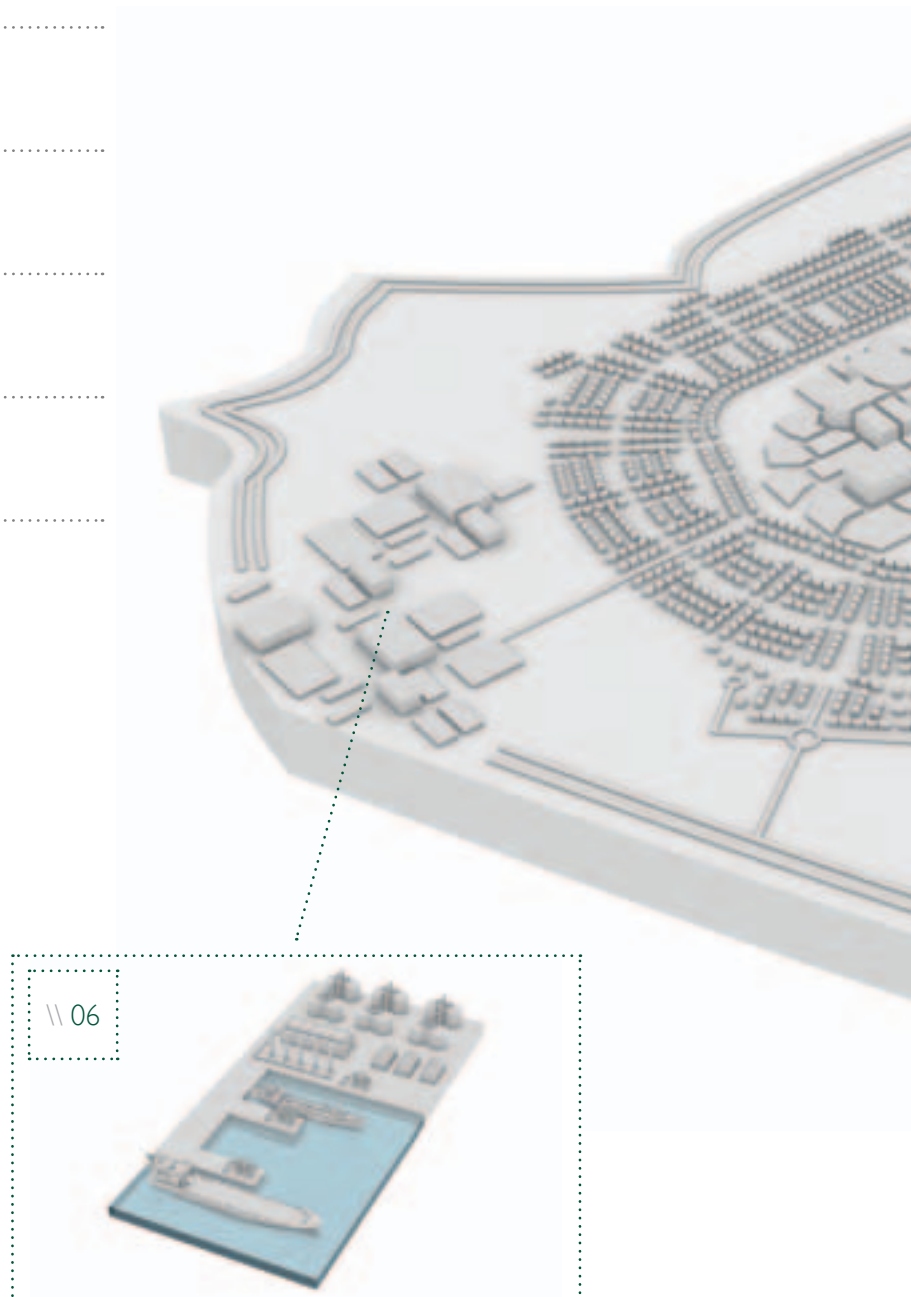
\\ 02 . City centres

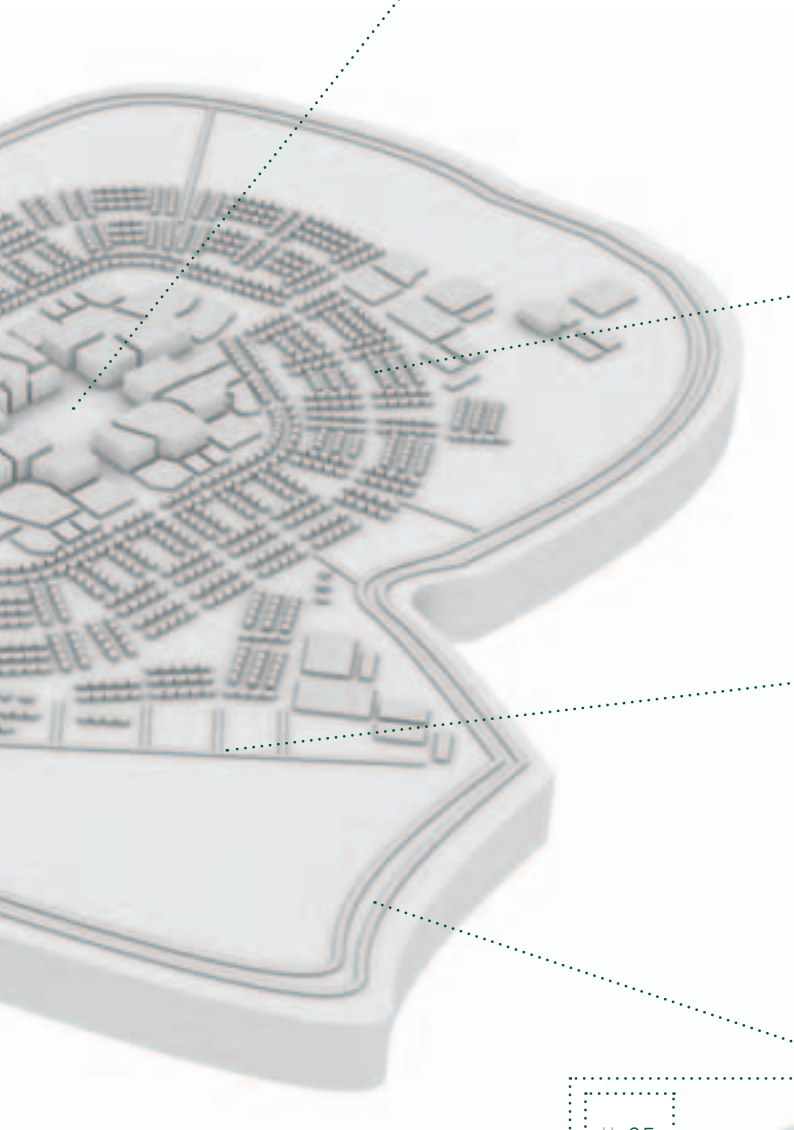
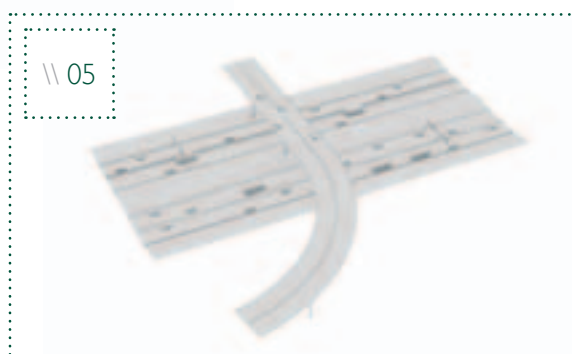
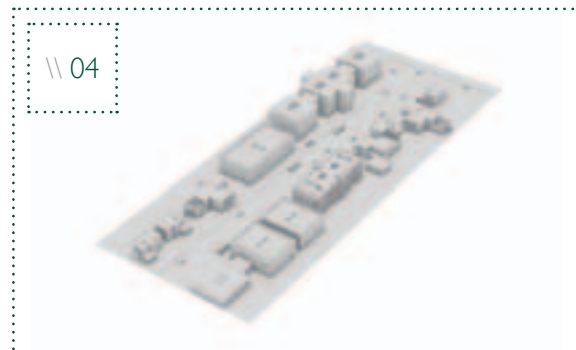
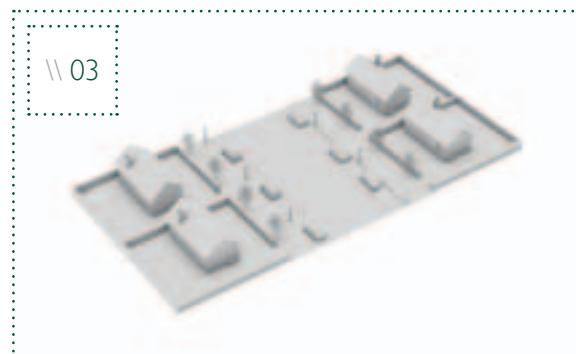
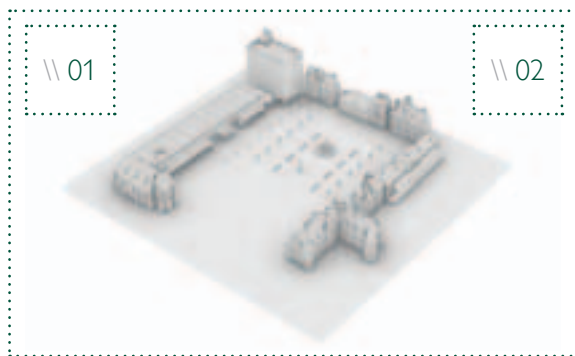
\\ 03 . Residential areas

\\ 04 . Minor road lighting

\\ 05 . Major road lighting

\\ 06 . Transport & areas





\\01 . Architectural light

Recognising landmarks is an important step in developing a comprehensive approach to urban environments. Lighting a building, monument or architectural feature contributes to the identity of a place. It also creates a marker for orientation. Whether you're working on a single building or an entire master plan, Philips Lighting has state-of-the-art technologies and solutions, backed up by more than a century of lighting application expertise. www.philips.com/urbanlighting

County Hall, London, United Kingdom



\\ 01 . LEDLine²

- Create a seamless curtain of light to enhance architecture
- Wide range of colours and white light



\\ 02 . ColorReach Powercore / eW Reach Powercore

- Illuminate architectural structures over up to 240m
- An exact beam with no light spillage by user-interchangeable lenses
- Ease of installation and zero maintenance



\\ 03 . eWBlast Powercore / ColorBlast Powercore

- Energy efficient compared to standard solutions
- High-intensity white and colour-changing light
- Ease of installation and zero maintenance

ing



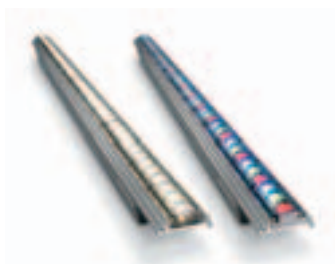
A vibrant future

Cities, towns and villages should be warm, inviting places that people enjoy living in and visiting. Urban development and regeneration programmes are increasingly focused on re-humanising our environments. Lighting has a vital role to play in this regard, creating an appealing, inclusive ambiance.

Lighting Masterplan - Turning creative ideas into reality

Light gives you the opportunity to create space, manage moods and improve quality of life. An opportunity that is as broad as your imagination. Creating the idea solution will depend on numerous factors, from the materials being illuminated to the most appropriate lamp technology, the aesthetics of the setting and any environmental constraints.

That's why Philips has dedicated application and product development specialists. Working together with our customers they produce tailor-made lighting solutions that enable architects and lighting designers to turn their creative ideas into reality.



\\ 04 . ColorGraze Powercore / eW Graze Powercore

- Focussed light bundle for application-tailored light output
- Wall-washing effects with white and colour-changing light
- Ease of installation and zero maintenance

\\ Reference project

Client

Stiftung "Lebendige Stadt" on behalf of
Federal Republic of Germany

Project

Illumination of Reichstag

Location

Berlin, Germany

Light sources / Luminaires

LEDLine², DecoScene and Mini DecoFlood
with MASTERColour CDM-Tm 20/35W

More info

www.philips.com/urbanlighting





Reichstag, Berlin, Germany

The new lighting concept for Berlin's most important historic landmark, the Reichstag, shows this iconic building in a new light. The installation is characterised by a low energy consumption, resulting in average energy cost just over one euro per hour. Although the number of light points increased times eight, the existing lighting installation generates an energy saving up to 80% and saves 23,100 kilograms of CO₂ per year.

	LEDLine ² , Mini Decoflood, DecoScene
Total number of light points	400
Burn time per year (h)	4,000
Total energy saving per year (kW)	55,000
Total energy cost savings per year (€)*	5,500
Total CO₂ savings per year (kg)**	23,100

* =0.10 EUR/kWh / ** =0.420kg/kWh



save
.....
80%

\\02 . City centres

Lighting plays a central role in how people feel about their city, town or village. That's why the illumination of streets and pedestrian areas has evolved from simple functional lighting into a more demanding and creative discipline. Not only is light required in which people can drive, cycle and walk safely, it must be pleasing and inviting too. It should promote communication and well-being, encourage night-time socialising and complement the cities night life. But luminaires also have an important architectural role. During the day they become an integral part of the street scene. Our range of architectural street luminaires are designed with this in mind, giving you a winning blend of performance and style. www.philips.com/urbanlighting

Place Aristide Briand, Valence, France (Pierre Nègre, l'Atelier Lumière)

save up to
80%



\\ 01 . LumiMotion

- Maximising energy savings by interactive dimming solution
- Minimising waste of light without compromising on safety
- Preserves the night by providing light only when and where needed



\\ 02 . UrbanScene

- All a city needs, a total solution for streets and areas
- Create an open urban environment
- Energy saving with highly efficient lamps, gear and LED



\\ 03 . Metronomis

- Create an atmosphere with a perfectly coordinated system
- Dedicated masts and brackets match the style of the luminaires
- Energy saving with highly efficient lamps and electronic gear



Energy-efficient lighting in city centres

Many of our citypeople.light workshops focus on energy management, ways to 'recycle' energy and different types of energy sources. Intelligent lighting solutions already offer possibilities to improve the light quality in city centres, for example by reducing light spill and preserving the night.

Aesthetic enhancement

White light brings out the best in buildings, streets and features of the urban nightscape it is also ideal for functional lighting in streets and communal areas. Its natural ambience is preferred by many to the traditional yellow glow of sodium, making white light the undisputed choice for making our cities more livable and enjoyable.

LED solutions for city centers

The use of a dedicated LED solution shows that municipalities take an active approach in preserving the environment and maintain safety on streets and roads. The LED systems offer a functional, cost-driven, dedicated lighting solution, without compromising on safety norms and regulations, that is at the same time fully manageable, upgradable and future-proof.

Complete solutions

These days, cities want solutions that are not just made up of light-points, but actually contribute to the identity of the city. For our key ranges, we have designed several collections of masts and brackets to provide an elegant solution for every style.



\ 04 . Optiflood

- Environment-friendly asymmetrical floodlighting systems
- Accurately controlled light distribution with no spill light
- Compact shape & pleasing design



\ 05 . MASTER CDM Elite MW

- Most efficient white light in medium wattages
- Long lifetime
- Best colour rendering



\\ Reference project

Client

City of Eindhoven

Project

Multifunctional centre Eindhoven

Location

Meerrijk, Eindhoven, The Netherlands

Light sources / Luminaires

UrbanScene luminaires with MASTERColour
CDM-T 35W

More info

www.philips.com/urbanlighting

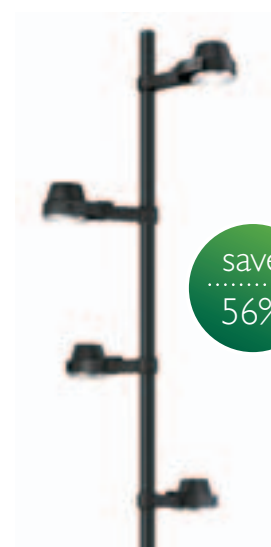


Meerrijk, Eindhoven The Netherlands

The lighting installation at the Multifunctional centre Meerrijk in Eindhoven gives a good example about a complete solution that fits perfectly into the urban environment. The project contains UrbanScene luminaires incl. masts and brackets as complete solution in different heights and sizes, enabling the customer to adapt lighting to suit different ambiances through the course of the day. This results in an urban environment that is designed and built to meet peoples needs and requirements more effectively.

	HPL 80W	UrbanScene with CDM-T 35W
# of light points	20	20
Wattage (W)	80	35
Burning hours / year	4,000	4,000
Energy cost savings (€)		360
CO ₂ emissions per year (kg)**	2,688	1,176
Energy costs per year (€)*	640	280
CO₂ savings (kg)		1,512

* =0.10 EUR/kWh / ** =0.420kg/kWh



\\03 . Residential areas

For many years residential lighting was purely functional. Although safety, security and orientation are still essential requirements, there is now a drive to improve residents quality of life, creating a pleasing identity for these parts of the city that are often overlooked. www.philips.com/urbanlighting

Magdeburg, Germany

save up to
50%



\\ 01 . CitySpirit Street

- Distinguished and modern design for a dynamic ambience
- Excellent lighting performance
- Wide choice for elegant solutions in every situation

save up to
80%



\\ 02 . Mini Iridium LED /
Mini MileWide LED

- Most advanced green innovation and best possible TCO
- Future proof LED technology for highly energy-efficient lighting
- Less maintenance cost and long lifetime

save up to
70%



\\ 03 . CitySpirit LED

- Smooth indirect lighting for urban and residential areas
- Driver-controlled constant light output, also dimmable
- Future-proof, upgradable LED technology for highly energy-efficient lighting



Energy-efficient lighting for residential areas

Already now there is a huge saving potential in residential lighting, for example by replacing old lighting installations that use HPL lamps with the energy-efficient CosmoPolis systems. By switching to the even more efficient LED technology or using additional dimming solutions the energy savings can be further enhanced up to 80%.

White light for secure residential areas

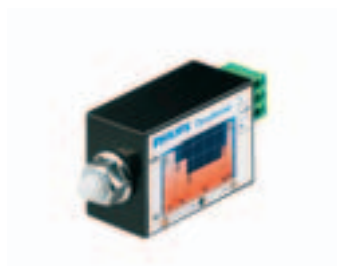
White light is crucial in helping people feel safer when being outdoors at night. Through superior colour rendering and a higher perceived brightness, it becomes easier to distinguish objects, colours, shapes and people. In particular, facial recognition is easier, even from a distance, which goes a long way towards removing anxiety.

When you go home, LED lighting could already be there

With the actually happening LED revolution a wide range of new possibilities for residential areas is opening up. Energy savings up to 80% are possible and Philips offers you a full range of future proof LED solutions with upgradable light engines. Constant light output (CLO) enables you to secure a constant light level over lifetime. Meaning no more worries about light uniformity, when you changed one of the light engines in an installation.

Night preservation and reduced light spill

By using dimming and highly efficient optics you do not only reduce the amount of energy used to light the residential space but also the night is preserved and the lighting spill is minimised by distributing the light only when and where it's needed.



\\ 04 . Dynadimmer

- Ease of installation in existing lighting
- Provides additional energy savings by dimming
- 5 dimming levels and time periods for optimal scheduling



\\ 05 . Mini Iridium / Mini Koffer² / Mini Modena

- Most advanced green innovation with best possible TCO
- Additional energy savings with dimming or telemanagement
- Built for CosmoPolis system & upgradable for LED



\\ 06 . UrbanLine

- Energy-efficient light
- Uniform, visually comfortable white light with minimal light spill
- Flexible and complete system for multiple lighting applications



\\ Reference project

Client

City of Tilburg

Project

Jan van Tinbergenlaan

Location

Berkel Enschoot, The Netherlands

Light sources / Luminaires

CitySpirit LED

More info

www.philips.com/urbanlighting



J. van Tinbergenlaan, Tilburg, The Netherlands

Simply by renovating the old PL lamp installation in the residential area of Jan van Tinbergenlaan in Tilburg with the new CitySpirit LED luminaires, including a dimming system, an immediate energy saving of 48% was realised. With the long lifetime and low maintenance, the city of Tilburg chose for a future-proof, upgradable and sustainable solution.

	PL lamps 36W	CitySpirit LED 25W with Dimming
# of light points	100	100
Wattage (W)	36	25
Energy consumption per year (kWh)	14,400	7,500
Energy cost per year (€)*	1,440	750
CO ₂ emissions per year (kg)**	6,028	3,150
Total energy cost savings (€)*		690
CO₂ savings (kg)		2,898

* =0.10 EUR/kWh / ** =0.420kg/kWh



\\04 . Minor roads

All Philips luminaires are optimised in terms of wattage, to provide precisely the right level of light, in the right place, at the right time. Compact and aesthetically pleasing, they also reflect the increasing importance being attached to the daytime appearance of light-points.

www.philips.com/roadlighting



Grays, United Kingdom

save up to
.....
50%



\\ 01 . Cosmopolis & LumiStep

- Maximised energy efficiency on dedicated gear
- Less energy consumption by automatical dimming
- Reduced maintenance costs due to the long-life Xtreme gear



\\ 02 . MASTER CityWhite

- Reduced energy consumption by dimming option
- Upgrade for existing HPL installations with gear exchange
- Comfortable warm colour impression

save up to
.....
80%



\\ 03 . CitySoul / CitySoul LED

- Compact urban luminaire enhancing the identity of the city
- Highly versatile range with a wide choice of masts and brackets
- LED technology for highly energy-efficient lighting



Energy-efficient road lighting

With the highly energy-efficient CosmoPolis system you are able to generate savings up to 50% in road lighting and dimming systems such as LumiStep make it even more efficient with savings even up to 80%!

Accident prevention by use of white light

White light is making the streets safer for drivers and pedestrians. Improved visibility is a major contributor to road safety. Tests show that drivers detect roadside movement faster and from a greater distance with white light. Crucially, this gives them more time to stop if a child, adult, cyclist or animal is about to cross their path.

The converse is also true; pedestrians are more likely to see oncoming traffic and react accordingly. By making our roads safer, white light has the potential to prevent serious injury or even fatalities.

The technological LED revolutions is coming!

With the introduction of CitySoul LED this technological breakthrough is also entering the functional outdoor lighting for minor roads in a city. Energy-efficiency and controllable and manageable white light are combined in these solutions.

Light only when it's needed

By using dimming systems like LumiStep there is no more wasting of light during night hours when there is less traffic and therefore less light needed. Ease of installation and pre-set dimming schemes make it even easier to save energy!

save up to
.....
80%



\\ 04 . Mini Iridium, Mini Modena, Mini Koffer²

- Most advanced green innovation with best possible TCO
- Additional energy savings by dimming or telemanagement
- Built for CosmoPolis system & upgradable for LED



\\ Reference project

Client

City of Lyon

Project

Guillotière bridge

Location

Lyon, France

Light sources / Luminaires

MASTER CosmoWhite CPO-TW140W,
20x CitySoul suspended CSP431 luminaires,
Cosmo-R 140 optic

More info

www.philips.com/roadlighting



Guillotière bridge, Lyon, France

By simply refurbishing the Pont de la Guillotière bridge with Philips CitySoul luminaires including CosmoPolis lamps and gear, the city of Lyon has reduced energy consumption on the bridge by almost 50%, thus helping to lower CO₂ emissions.

What changed?

The city of Lyon replaced 22 luminaires in the Pont de la Guillotière. The old ones were basic open luminaires with a very simple optic and HPL 250W lamps. Lyon opted for a completely new installation

	HPL 250W	CosmoPolis CPO 140W
Wattage incl. ballast (W)	299	155
Number of light points	20	20
Service lifetime (hours)	4,400	4,400
Energy costs per year (€)*	2,631.20	1,364.00
CO ₂ emissions per year (kg)**	11,051	5,729
Total energy cost savings (€)*		1,267.20
CO₂ savings (kg)**		5,322

* =0.10 EUR/kWh / ** =0.420kg/kWh

save
.....
50%

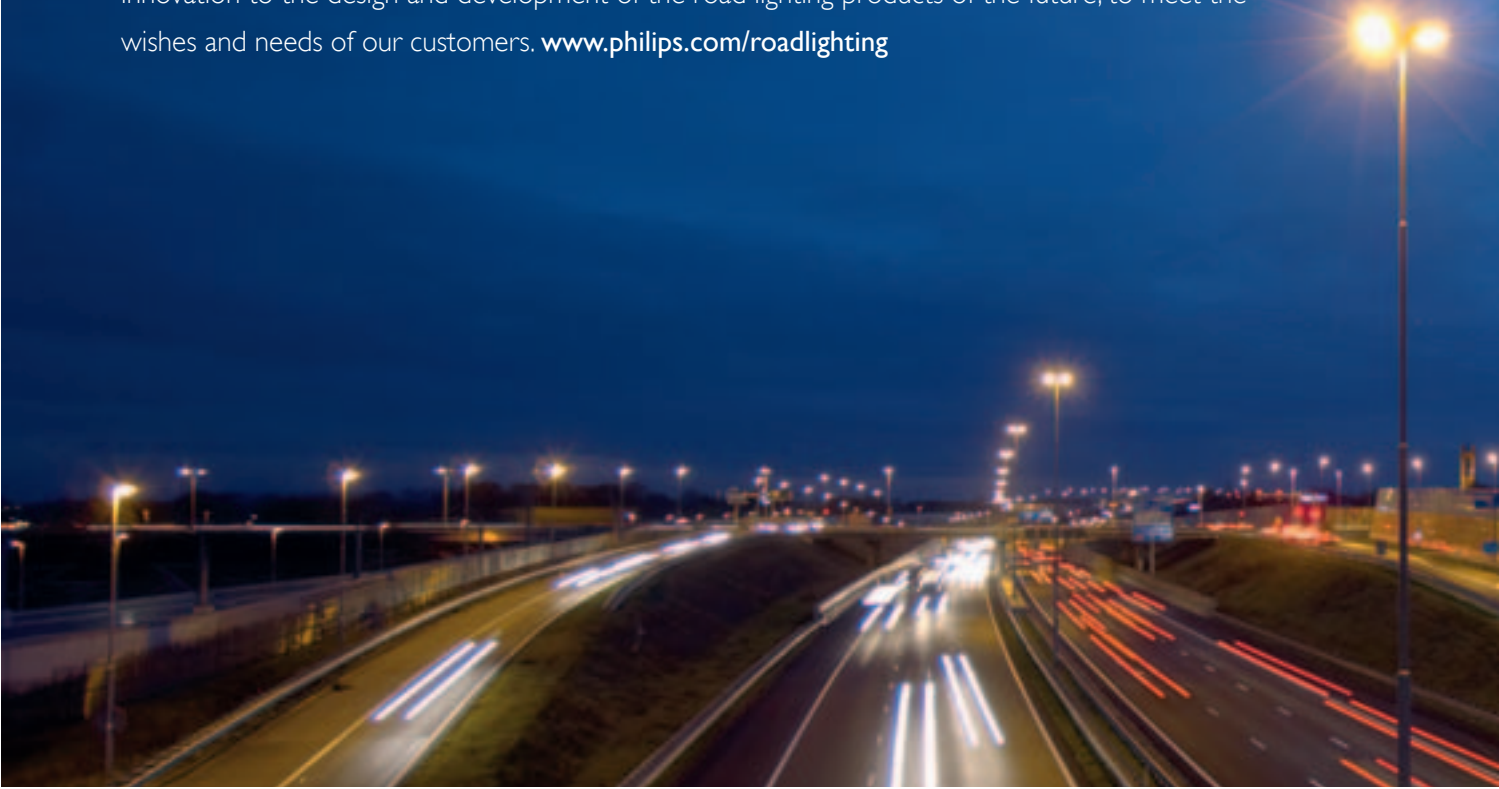


save
.....
50%



\\05 . Major roads

With more than one hundred years of experience and expertise in the field of road lighting, we're in an ideal position to analyse market trends and create appropriate solutions. We apply technological innovation to the design and development of the road lighting products of the future, to meet the wishes and needs of our customers. www.philips.com/roadlighting



A67, the Netherlands



\\ 01 . Koffer²

- Integrates perfect into urban environment as complete solution
- Highly efficient CosmoPolis system for low costs of ownership



\\ 02 . Iridium

- Built for CosmoPolis system with low costs of ownership
- Easy to install and maintain and fully recyclable
- Highly flexible luminaire to cover all kind of applications



\\ 03 . Modena

- Additional energy savings with dimming, or telemanagement system
- Excellent lighting performance
- Ease of installation and maintenance



Energy-efficiency

In the past, one of the main justifications for using high pressure sodium lighting was energy-efficiency. However, ongoing improvements in performance mean the latest white light sources are now more energy efficient than their sodium counterparts. White light is therefore the 'green switch' solution for outdoor installations. It allows you to realise significant savings in a number of ways, such as specifying a greater distance, using low-traffic dimming according to traffic volume and in line with regulations or enabling you with VPO (Virtual Power Output) to correct over-dimensioning effects, for example by adjusting 250W lamps to make them virtual 180W.

White light

Because white light is experienced as being brighter than yellow light at low light levels, it becomes feasible to actually reduce light output while still giving people what they expect. The savings associated with this are enormous. This advantage has already been recognised in British lighting standards. In the UK, the level of illumination required by law on subsidiary roads and paths may be reduced by as much as 30% when the light source used has a colour rendering of 60 or more, which is the case with white light (but not with high-pressure sodium).

save up to
50%



\\ 04 . Cosmopolis

- Attractive white light for safety and ambience
- Highest energy savings and lowest cost of ownership compared with today's light sources
- Optimal lamp service lifetime

save up to
50%



\\ 05 . Starsense telemanagement

- Saves energy by managing individual light points to be dimmed or switched on or off
- Minimising light pollution and increasing safety

A nighttime photograph of a multi-lane highway curving into the distance. The road is illuminated by a series of tall, modern streetlights that cast a warm, yellow glow. The sky is a deep blue, and the surrounding landscape is dark with some trees visible in the background. The overall scene is a reference project for Philips road lighting.

\\ Reference project

Client

Rijkswaterstaat (RWS) NL

Project

A7 + A2 highway

Location

Purmerend and St. Joost, the Netherlands

Light sources / Luminaires

SON-T 150W installed with Starsense
Telemanagement in combination with
Iridium luminaires

More info

www.philips.com/roadlighting

A7 Highway, Purmerend, The Netherlands

The city of St. Joost was looking for the most efficient way to invest in more than 1,200 light points. In close cooperation with Philips, Starsense was chosen as telemanagement system for lighting control due to its maximised efficiency. The lighting is dimmed to 70% during low-traffic hours compared with a standard installation without dimming and with electro-magnetic ballast.

	SON-T 150W without Starsense and with EM	SON-T 150W with Starsense
Energy consumption for 1 light point (W)	186	153
× 4400h a year (= European average) (kWh)	818	531
× 2555h a year (70% dimming level) (kWh)	-	67
× 50h a year (30% dimming level) (kWh)	-	117
Energy consumption for 1200 light points (kWh)	98,208.00	63,819.30
Energy savings per year for the installation (kWh)		343,886
Total energy cost savings per year (€)*		34,388.60
CO₂ savings** (tons)		144.43

* =0.10 EUR/kWh / ** =0.420kg/kWh



save
50%

\\06 . Transport & areas



Container Terminal, Felixstowe, United Kingdom



For safety and efficiency

The 24-hour economy has led to a significant increase in human activity around the clock. Whether it's a production centre, airport, container terminal or industrial site, the activity is non-stop as people carry out tasks throughout the night.

Lighting can increase the efficiency of these 24/7 locations. It also makes them safer and more secure for those working on site. When selecting area lighting the efficiency of the system in terms of long burning hours will be a key consideration. But limiting light spill will also be important, especially when the surrounding environment is residential.

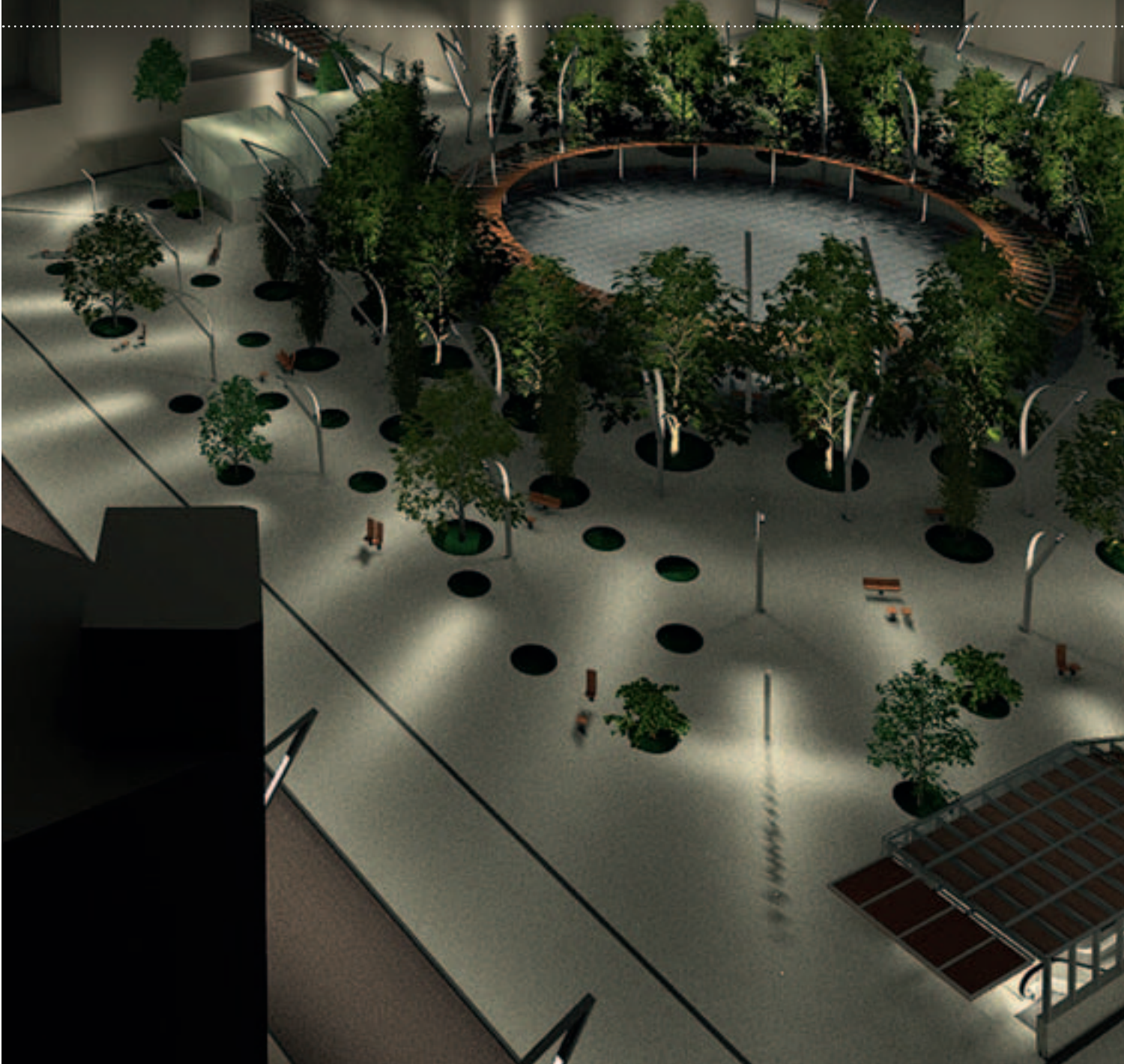
At Philips, our aim is to optimise area floodlighting by adapting it to specific customer needs. We can define the right level of lighting, uniformity, comfort and colour quality for each situation. And by optimising the cost of ownership, end users and society in general can benefit from the resulting energy savings. What's more, our innovative optical systems reduce light pollution thanks to sharp cut-off beam characteristics, features that are integrated in an impressive range of floodlights.

White light for a safer and working environments

To improve the working environment Philips offer with the MASTERColour CDM Elite MW system an unrivalled level of light quality and performance. The lamps sparkling white light creates a more natural ambience. In addition, the high efficiency of the lamp and driver together means reduced energy use and a lower cost of ownership. Together with OptiFlood luminaires this system is the ideal solution for floodlighting. In combination with Iridium luminaires also area lighting like storage or parking places are achievable with lower costs and reduced energy consumption.

There are many more options and possibilities available. Please ask your local Philips representative for further information or visit www.philips.com/lighting.

\\07. Customised solutions



Bilbao, Spain, JAAM, architecture partnership

ions

Turning creative ideas into reality

Like concrete, steel, glass and wood, light is an architectural material. Its angle, intensity and colour characteristics enhance and define how we perceive our spaces. A myriad of different techniques, equipment and technologies are available to achieve your desired look. However, the best results are achieved when you can work as part of a team to ensure the whole solution is well considered.

That's why Philips has a dedicated application and product development team. Specialists who can work with you to co-create lighting solutions and turn possibilities into realities.

RenderTool visualisation service

Not everyone has the vision of a lighting designer and many find a visual representation of the end result helpful when choosing a solution. Thanks to our RenderTool service we can now superimpose images of luminaires and masts onto a snapshot of your location. Helping to reassure customers every step of the way.



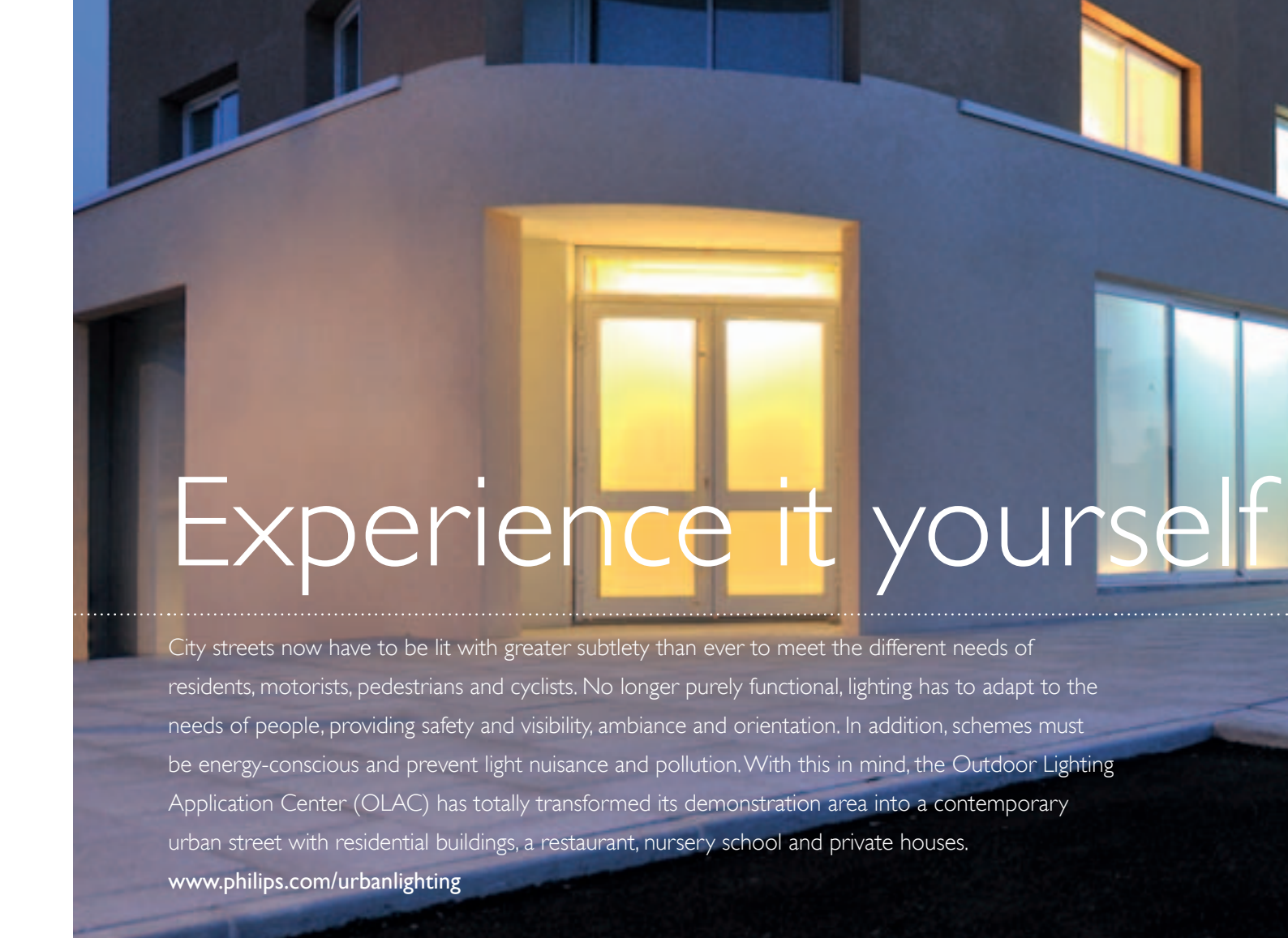
1. Creative idea



2. Visualisation via 3D renderings/
animations



3. Bringing visions to life



Experience it yourself

City streets now have to be lit with greater subtlety than ever to meet the different needs of residents, motorists, pedestrians and cyclists. No longer purely functional, lighting has to adapt to the needs of people, providing safety and visibility, ambiance and orientation. In addition, schemes must be energy-conscious and prevent light nuisance and pollution. With this in mind, the Outdoor Lighting Application Center (OLAC) has totally transformed its demonstration area into a contemporary urban street with residential buildings, a restaurant, nursery school and private houses.

www.philips.com/urbanlighting

OLAC Miribel, France

Experience it yourself

The new area illustrates the increasing densification of urban areas. It also shows how lighting can be improved with modern technology and still take into account the demands that people and urban authorities make on residential environments. The OLAC demonstrates that lighting can be improved in terms of energy consumption and beam control, as well as atmosphere and safety.

OLAC provides a unique opportunity to see the latest trends in urban lighting in a customized, modern environment. Professionals can assess lighting plans in terms of sustainability, creativity, and, most importantly, the needs of the people who live in and make use of residential areas. Would you like to see state-of-the-art urban lighting solutions in a real life setting? Ask your local Philips representative about a visit to OLAC



city.people.light

Our city.people.light project pushes creative and intellectual boundaries, producing more innovative and relevant lighting solutions that enrich urban settings. To achieve this, we enrich our own thinking through extensive dialog. We share ideas and network with partners such as the Professional Lighting Designers Association (PLDA). We have also established an annual city.people.light award in conjunction with LUCI (Lighting Urban Community International) Association.



“Sustainable cities need sustainable lighting that saves money and the environment. Let’s talk and see how your city can benefit from this new generation of lighting solutions, making the switch today.”

Find out more at: www.philips.com/roadlighting





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