

The background is a night-time city skyline reflected in water. The Signify logo, a green circle with a white 'S' inside, is positioned at the top center. The word 'Signify' is written in a green, sans-serif font to the right of the logo. Several glowing green lines and small diamond shapes are overlaid on the image, creating a sense of motion and technology.

Signify

# Shedding some Light on Lighting

Harry Verhaar, VP Global Public & Government Affairs, Signify  
Urban Transitions Mission, GCoM's, 6 July 2023



Climate crisis



Energy crisis



Economic crisis

72%

Global green house gases emissions by Cities

1.4 GtCO<sub>2</sub>

Potential emissions reduction by the Cities member of Covenant of Mayors

50%

Of all installed lighting is still conventional technology

85%


European population living in Cities by 2050

90%

Climate adaptation measures are implemented by local and regional authorities

65 B€

Can be saved in EU27 when switching all old lighting to connected LED



Accelerating the Energy Transition:

A large-scale switch to LED and connected LED is a very **cost-effective, impactful** and **immediate** course of action for tackling the multitude of crises facing your city.

# Switching to LED is an energy-saving opportunity we can't afford to miss



Cities account for about **75% of global energy consumption** — 40% of that is lighting related.



An LED lighting installation frees up your electricity grid by **reducing energy consumption by more than 50%**

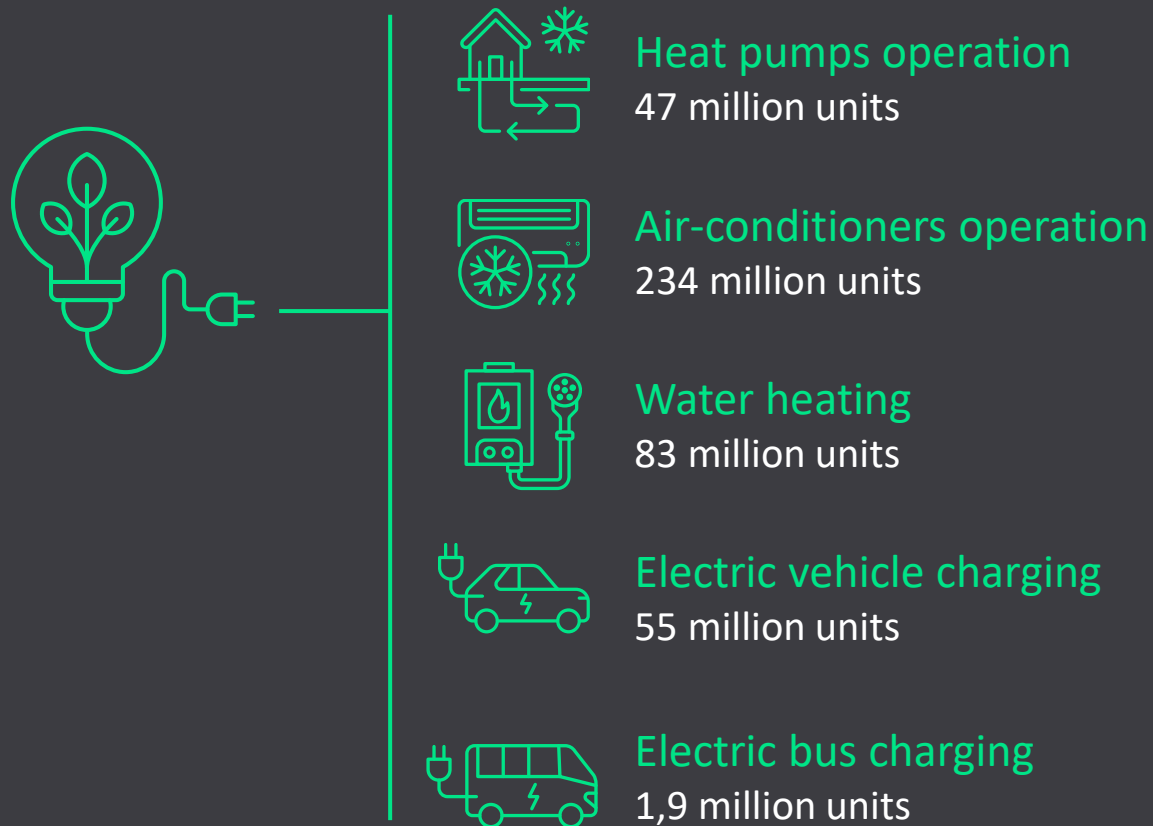


By installing **managed and connected** LED lighting, your energy-saving potential jumps from 50% to **80%**.

# Free-up electricity

Switching all the light points in EU27 countries to LED, could make electricity available to power other devices and support the electrification process.

By switching to LED, electricity could power:



Data presented here is a simulation within the framework of the Green Switch conventional light point conversion model, which is a program run by Signify to help its customers accelerate the switch to energy-efficient lighting products, systems and services. All figures and data presented here are illustrative and based on forecasts and assumptions. The diagram represents a selection of electric device consumption. Data refers to EU27 countries. Thousands separator is . – Decimal separator is ,

# Green Switch local savings

## City

## Small city

## Village



### Public Lighting

79,9 GWh | €26,8mln



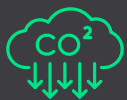
### Public buildings

140 GWh | €47,0mln



### Roads and Streets

56 GWh | €18,7mln



### Carbon reduction

51.250t CO<sub>2</sub>



### Public Lighting

13 GWh | €4,4mln



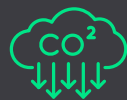
### Public buildings

23 GWh | €7,5mln



### Roads and Streets

9 GWh | €3,0mln



### Carbon reduction

8.300t CO<sub>2</sub>



### Public Lighting

2,8 GWh | €0,9mln



### Public buildings

4,5 GWh | €1,5mln



### Roads and Streets

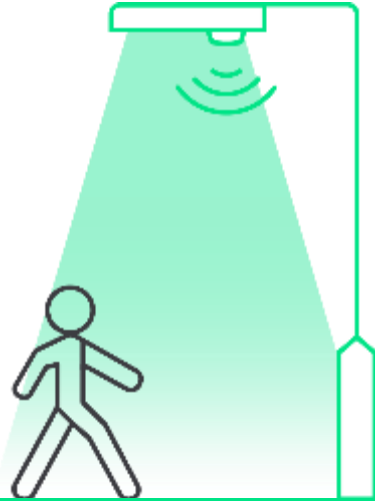
1,9 GWh | €0,6mln



### Carbon reduction

1.700t CO<sub>2</sub>

## Further benefits of connected LED lighting



### Presence detection

Keep citizens safe by automatically lighting up streets, parks and plazas when people or vehicles approach



### Remote management

Enhance your operations by taking full control of your lighting, anytime, anywhere via your tablet or smartphone



### Streamlined maintenance

Instant fault notifications allow you to stay on top of maintenance and keep roads and streets lit safely

Turning off the lights is not the solution you might think it is

Light is one of life's essentials — turning the lights off completely would have a devastating impact on **safety, well-being, and motivation.**



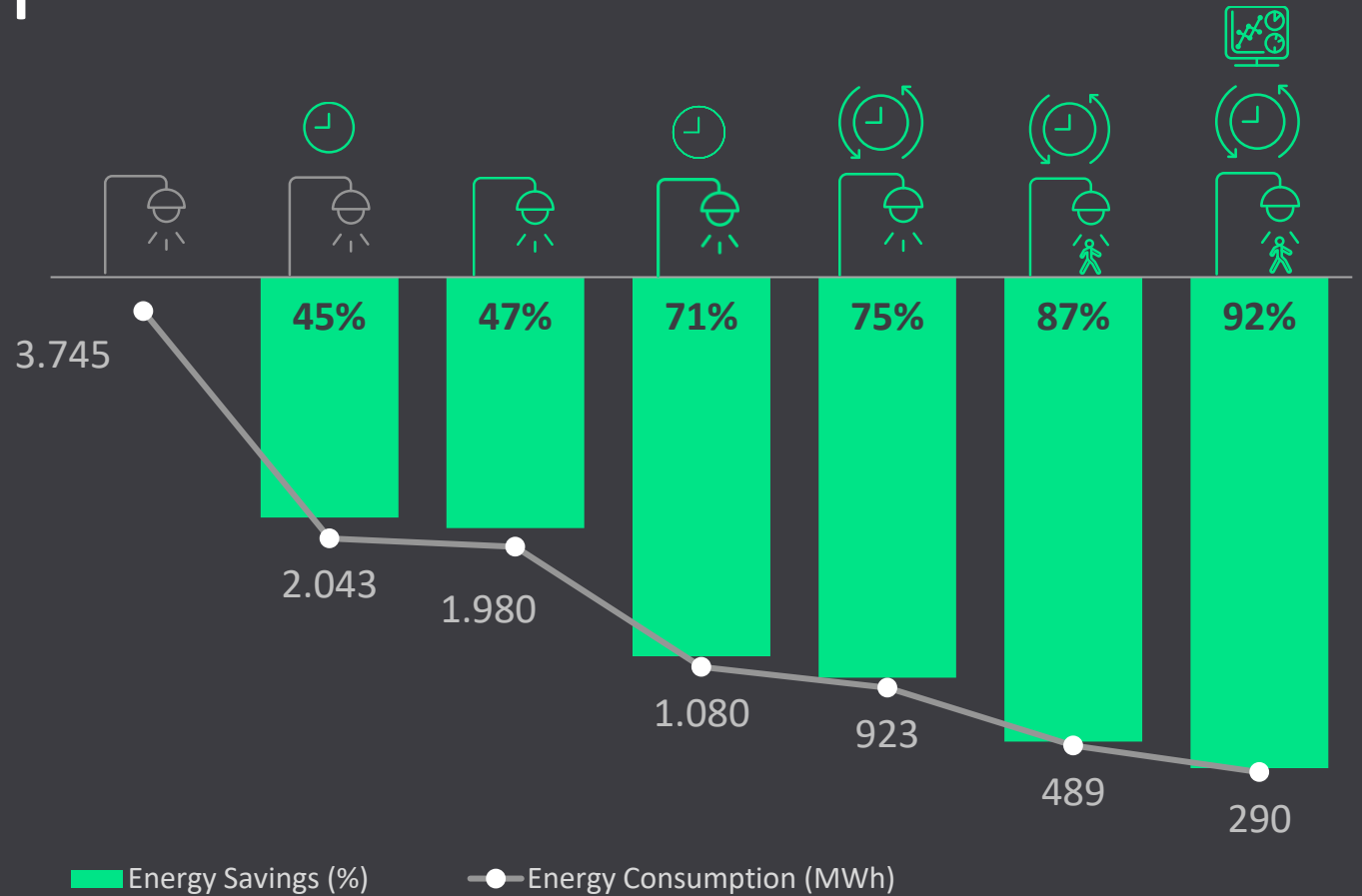
# Be smart, keep lights on and save more

A 100,000 people City can annually save:

- €0.6 million just by switching to LED
- €1.0 million by LED dimming with controls
- €1.1 million by LED with presence detection
- €1.2 million by LED with presence detection & tele management.

Keep citizens **safe & secure** at nighttime.

## Dark is never the best solution.



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- Conventional lighting
- LED lighting
- Tele-management
- Presence detection
- Switch-off lights for a few hours during nighttime
- Dimming lighting

## Why you need to act now

The window to avoid the most catastrophic effects of climate change is closing.

Challenging circumstances call for great leadership and urgent action.

And right now, the EU Green Deal funding is available to help you achieve your energy saving goals — but it won't be there forever.

**Be bold.**  
**Make the switch.**

The savings generated from your LED connected lighting installation have the potential to offset your costs.

Don't ask yourself  
"Can I afford to switch to LED?"

**Ask yourself if you can afford not to.**

## Why trust Signify?

In order to ensure your LED lighting project is completed successfully, you need a partner who has **been there** and **done that**.

Signify has been the **world leader** in conventional, LED and connected lighting for **125 years**.



The first lighting company to be 100% carbon neutral



3 billion LEDs installed worldwide



More than 100 million connected light points



7.5 billion Euro sales in 2022



## A city at the cutting edge of public lighting Ribeira Municipal Corporation, Spain

### The vision

Ribeira's Municipal Corporation had two main aims: to improve energy efficiency, and to create well-lit spaces where citizens would feel safe. To achieve these goals, the town's existing public lighting needed a transformation.

### The solution

**Interact City software** was installed on 6,500 LED luminaires, allowing Ribeira council to control and manage their new connected lighting system. By drastically reducing energy consumption, city authorities were able to invest funds into other areas of their smart city project. Higher quality light emitted by the LEDs also made Ribeira feel like a safer place to be at night.



Plug in and play system allowed data to be collected and utilized instantly



Energy savings of around 70%



8,600 light points replaced with LED, with 6,500 controlled by Interact City software

“The investment in Interact City was spurred on by the technological capabilities of the system. It's an innovative tool with a lot of potential to integrate new services. It's also scalable and can help a city become smart.”

Alejandro García Sendón,  
Technical and Energy Services Coordinator of  
Ferrovial Servicios for the North of Spain





## Lighting a coastal town all year round Municipality of Sabugal, Portugal

### The vision

With an influx of tourists in the summer, and many people returning for the holidays in December, Sabugal's fluctuating population put a lot of strain on existing infrastructure. The municipality wanted a lighting system that would work efficiently all year round.

### The solution

More than 10,000 **Philips Luma luminaires** were installed across the town, lighting even the most secluded and dark areas. With **Interact City software**, the council can control individual light points, schedule maintenance and track performance remotely and securely – with updates and alerts sent to a central dashboard.



High-quality, controllable light  
24 hours a day, all year round



Energy savings of  
around 75% and reduced  
carbon footprint



Lighting can be altered  
according to the daily needs  
of citizens

“We have been able to employ a technology solution in a rural environment. Interact City enables us to light up the most remote parts of Sabugal.”

Miguel Mattos,  
Project Director, I-Sete





## Data-based insights deliver results Municipality of Siegburg, Germany

### The vision

As Siegburg has grown, street lighting has become an increasingly important feature of the town's public space. Prior to 2014, Siegburg had a mixed public lighting infrastructure with many different pole, bracket, lamp and luminaire types. Many of these light points were obsolete and did not meet high-efficiency energy requirements. Siegburg wanted to modernize its lighting system and simplify its relationship with the city's utility provider.

### The solution

System managers can use **Interact City** lighting management software to create type catalogs, which make it simple to select resources and assign them to individual light points. Because all operation-relevant processes are simplified and highly transparent, **Interact City** has made the working relationship between the city and the utility provider less complex and more productive.



4,200 connected  
street lights



Annual energy costs  
and CO<sub>2</sub> emissions  
reduced by up to 50%



Improved relationship with utility  
company owing to increased data  
insights

“Working with Interact City  
has made life much  
more flexible because management  
processes are simplified and shown  
transparently.”

Jorg Hartung, Executive Director  
of Street Lighting





## Boosting energy-efficiency and safety Leipsoi Island, Greece

### The vision

The municipality of Leipsoi wanted to install lighting that would protect the island's environment, while enhancing safety in places that were insufficiently illuminated before. Parts of island have limited or no electricity access, so they needed a solution that could rely on other energy sources.

### The solution

**Philips SunStay** combines the solar panel, luminaire, charge controller and battery in one housing, thus making for an elegant luminaire that is compact and easy to install and maintain. The built-in Passive Infrared (PIR) motion sensor enhances safety by increasing the light level automatically when people or cars are approaching. When no motion is detected, the light level decreases to 30%, reducing energy consumption and increasing battery backup.



28 Philips SunStay solar luminaires installed



Citizens feel safer at night



24-hour battery life

“We are very satisfied about the installed solar luminaires by Signify. As we have many hours of sunshine throughout the year this is a very effective and functional solution for those areas on our island that are not connected to the power grid.”

Fotis Mangos  
Mayor of the Municipality of Leipsoi



A modern building at night with a paved walkway and trees, illuminated by green LED lights. The scene is dark, with the building's lights and the green LED lights providing the primary illumination. The green LED lights are arranged in a line along the walkway, creating a strong visual impact. The building's facade is dark, with some windows lit up. The trees are silhouetted against the dark sky, and the paved walkway is made of dark tiles.

Switching to energy-efficient LED lighting is a great chance at making a significant impact against climate change.

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