

**PHILIPS**

Solar lighting

# Solar's time to shine





# Why **solar**?

The European Green Deal is the world's most comprehensive climate action initiative.

It aims to reconcile the economy and the way we consume resources with the planet, making sure that nobody is left behind.

The **Green Deal** calls for a number of measures, including linking renewables to the grid, promoting connected technologies, and boosting the energy efficiency of electrical products and devices.

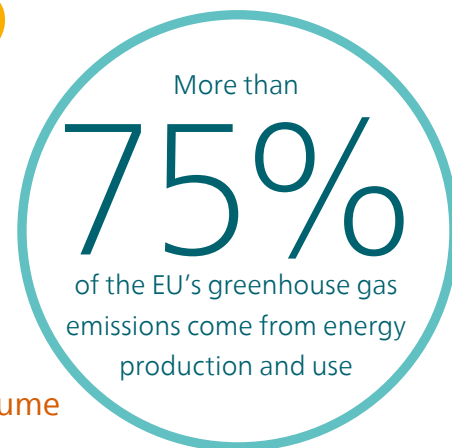
## "Europe's man on the moon moment"

"Green Deal"- they say,  
"Green Switch" - we respond

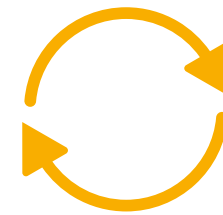
Infrastructure projects such as connected street lighting retrofits create **19 local jobs for every €1 million spent** benefitting the environment, the economy, and building the digital platforms needed to ensure a green future.

Lighting is the quickest path to a **greener, smarter and more prosperous Europe.**

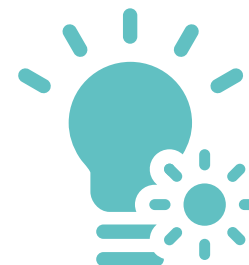
Read more about it [here](#).



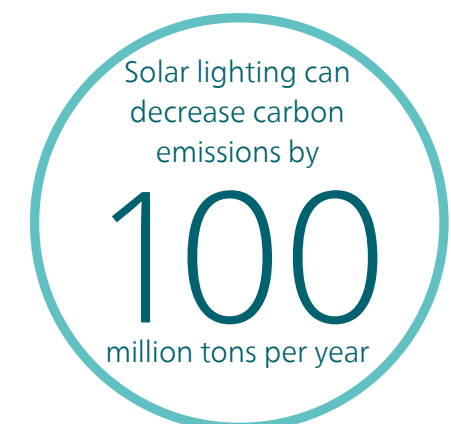
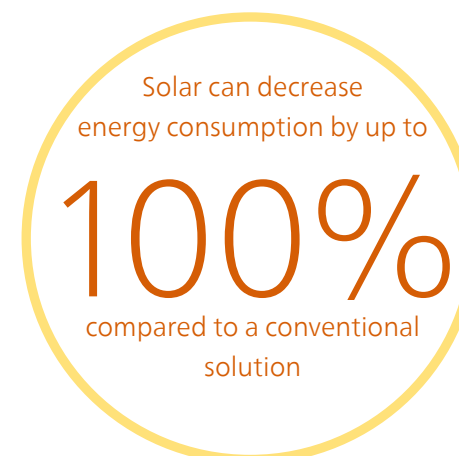
Solar energy is **free** and **available** everywhere on the planet. It reduces not only the consumption of energy, but also the transportation of it, leading to savings of **50 to 100%**



Solar lighting is a **reliable solution** not only for new installations, but also for **renovation of current installations**



Solar energy can be used **instead of or complementary to, grid electricity** every night of the year



# Why **Signify**?

**Number 1**  
in conventional lighting, LED  
and connected lighting

**€7 billion**  
sales in 2022

**2.5 million**  
Connected  
street lights in  
**58 countries**  
and more than  
**2,250 projects**

**100%**  
**carbon**  
**neutral**  
global operations

Read more about it [here](#).





# Why **solar with Signify?**



Signify advocates the wide adoption of solar and hybrid solar powered street lighting as it paves the way to

**lower carbon emissions and reduces the need**

for extra power stations, while accelerating the scale of renewables.



There is a possibility for a built-in passive infrared (PIR) motion sensor. When no motion is detected the light level

**decreases to 30%,**

reducing energy consumption and increasing battery backup.



Solar lighting offers high-quality and reliable lighting with a design that

**fits into any environment with minimal requirements in terms of investment and maintenance**

We offer expert follow-up on every project.

Read more about it [here](#).

## Myth

There is not enough solar light in my country for 365 nights.

## Myth

Solar LED lighting is not reliable, nor durable.

## Myth

Solar lighting is not suitable for every area all year long. I'm afraid of a blackout.

## Myth

Because of the batteries and solar panels used, solar energy is not that green.

## Fact

Hybrid-solar technology uses **clean solar-powered electricity** when there is sunlight, and **the mains grid** when there is not. Whereas in off-grid systems it can be achieved thanks to **right sizing** and **dimming** of the solar system.

## Fact

Thanks to advanced technology, it's possible for:  
up to **100,000 hours** lifetime for LED lights;  
Up to **25 years** lifetime for PV panel;  
Minimum of **10 years** lifetime for Li-ion and Fer-Pho batteries.

## Fact

Efficient photo voltaics, energy storage, LED lighting and IoT technology allow solar applications **anywhere, anytime**. You shouldn't be afraid of a blackout thanks to battery technology improvements and charge controllers.

## Fact

Our batteries are **super easy to recycle**. Newer battery technologies are more **environmentally friendly** when compared with older ones. However it is recommended to follow safe disposal norms.



# How solar lighting works



The **combo charge controller** switches the lights and charging on and off. Thanks to the controller, we avoid both overcharging and undercharging.

The **solar panel** also known as a solar photovoltaic cell absorbs the sunlight during the day and transforms it into electrical energy that gets stored in the battery.

The **pole** offers security and stability, making the system safe for the surrounding area. As it meets the EN40 norm, it can be installed in every geographical location.

The **rechargeable battery** is a type of electrical battery or accumulator. It stores the energy received from the sun during the day for when it gets dark. It can vary in size depending on the climate conditions of the current city.



# Off-grid and hybrid systems



The **LED luminaire** offers hassle-free installation and maintenance, high lighting output compared to conventional luminaires, long shelf life, portability and a two year warranty. Last but not least, it's pollution-free.

When it gets **dark**, the lights turn on, automatically consuming the energy gathered during the day and keeping the city bright and safe all night long. Reusing energy allows you to achieve energy savings of up to 100%.

**Hybrid charging unit +SPD box**

The **hybrid option** offers the possibility of connecting the solar lights to the mains grid system. As a result, in case it runs out of battery, it can be powered by the grid. This option helps countries with less sunshine use solar as well.

The **off-grid option** uses only the rechargeable battery which makes it fully sustainable and highly efficient in terms of energy costs. This option also gives opportunity for off-the-grid communities to live in a safer and better environment with 24/7 access to light.



# From the beginning to the end of the project, we're here for you!

Become our customer.

Step  
**1**

## Contact our team

[here.](#)

Step  
**2**

## Discuss the project details

including expectations, requirements,  
and possibilities.

Step  
**3**

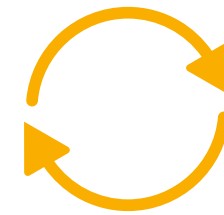
## Design the project

This is a crucial part of the process to make  
sure that our customer is making the most of  
our products, systems, services and tools with  
the help of Signify experts and always aligned  
with European Regulations and Standards.

Step  
**4**

## Execute the project

We're always on hand to make sure  
installation is being done properly.



Solar technology can help more people  
access cheap, portable, and clean power to

**alleviate poverty and  
increase quality of life.**

But it can also enable developed countries – and those who  
are the largest consumers of fossil fuels – to

**transition to sustainable  
alternatives.**



Solar streetlighting is fully **future-proof**

and is no longer being attributed only to places where  
existing infrastructure lacks. Instead it is being seen as an

**important part of the  
global energy mix.**

The alternative is becoming  
**the new norm.**





# Application and use





# Philips range of solar lighting solutions



## <5K lumens

- Pathways
- Rural areas
- Parks



## 5K-8K lumens

- Parks
- Plazas
- Cycle tracks



## 8K-15K lumens

- Office campuses
- Suburban roads
- Inner city roads

# Solar boosting **energy efficiency and safety** on Greek island

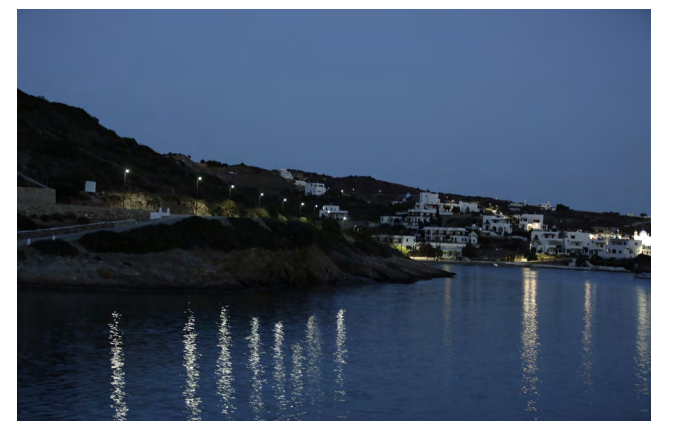


We are very satisfied about the installed solar luminaires by Signify. As we have many hours of sunshine throughout the year this is a very effective and functional solution for those areas on our island that are not connected to the power grid. Additionally, the lights have such an aesthetic design that they seamlessly blend in with our island's natural landscape."

**Fotis Mangos**

Mayor of the Municipality of Leipsoi

Read more about it [here](#).





# Seville steps up citizen's safety **with Signify's solar streetlights**

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Seville is a city committed to the fight against climate change and a model of a sustainable city that meets the objectives of the strategic plan Sevilla 2030 and the UN Sustainable Development Goals. All the municipal electricity supply is converted into 100% renewable energy. That is why it is so important that one of the green areas in the city is where we will develop an innovative business project to find solutions that improve citizens public spaces usage and, at the same time, contribute to the reduction of emissions and sustainability."

**Juan Espadas,**  
Mayor of the City of Seville

Read more about it [here](#).

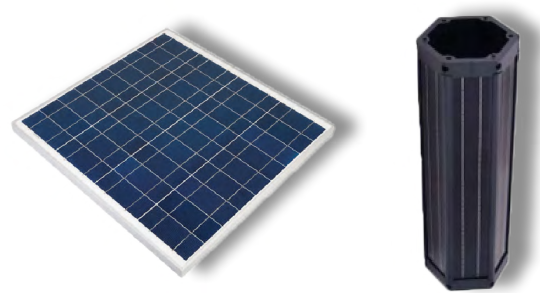


## Philips **outdoor luminaires**

Click on each image to find yourselves in our E-catalogue.



# Solar subsystems



## Cables and connectors

- Waterproof IP67 connectors
- Plug and play, easy installation
- Error-proof to avoid the mistake of onsite installation
- Different length of cables are available for various applications

Click on each image to find yourselves in our E-catalogue.







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