

Sustainer LED Luminaires for Smart Cities

It begins with light



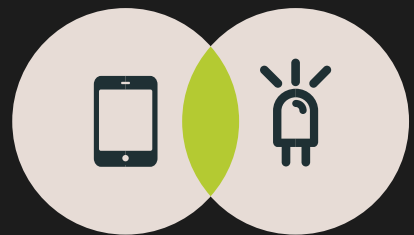
Sustainer 

Sustainer

An innovative company with experience

Sustainer is an innovative Dutch company that develops, manufactures and supplies intelligent public lighting and smart-city solutions to local authorities, businesses and other clients across Europe. Our company originates from a former Philips luminaire factory.

Sustainer LED luminaires are designed with the future in mind. We understand what you need to create a smart city, and we offer solutions that will last for years. Treating each lamppost as a central hub, and the area around it as the defining criteria, we can help you to create a sustainable, safe and healthy society.



A new generation of LED luminaires

Sustainer is introducing a new generation of advanced, high-quality LED lighting and luminaires. Developed from our vision of the future, their modular concept and open architecture make them ready now for whatever developments tomorrow will bring. By using LED-technology, sensors and smart software, the energy consumption of Sustainer luminaires is minimized, whilst CO₂ emissions are also reduced.

It begins with light

We believe that the public lighting network provides the perfect starting point for the smart city. Lighting can already do much more than just chase away the dark, and soon it will form the heart of the central, smart-city, hub.

In a fast-changing world, it's vital to choose future-proof solutions. Our smart, energy efficient lighting luminaires can be controlled remotely and come ready equipped with a unique cassette system that makes it both simple to swap hardware in and out – as well as to add new sensors and capabilities to meet future needs and opportunities. Our technology is also based on an open standard, which makes it easy to connect to any back-office system.



The Sustainer **concept**

Our mission is to transform the public lighting network into a sustainable, future-proof and smart infrastructure.



Our **modular cassette** system makes it possible to use the public lighting infrastructure as locations for **sensors** and communication.

We believe in fully **open** technology to enable the city of the future:

- Open hardware (24V / 230V)
- Open API
- Open standards

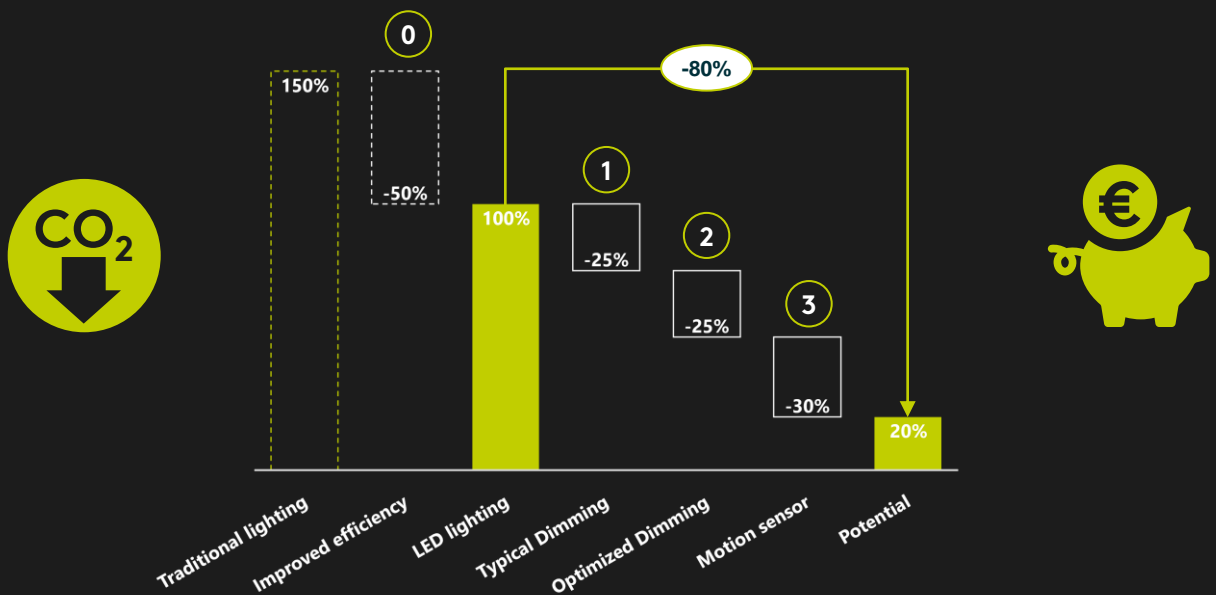


The cassette, including electronics, makes **maintenance** and **installation** very easy:

- No tooling required
- Quick cassette replacements
- Automatic error reporting and configuration

Energy Savings Sustainer

With our innovative technological solutions you will obtain maximum energy savings in your public lighting network



- 0 Typical savings of LED vs Traditional lighting is ~33% (80 lm/w vs 120 lm/w). Because LED is the new standard, Sustainer sees this as the reference baseline.
- 1 Using a typical dimming scheme (100-70-50-70-100), 25% energy savings can be realized on a yearly basis.
- 2 By optimizing the dimming scheme based on actual traffic data per street / region, another 25% reduction can be achieved, whilst maintaining safety and comfort levels.
- 3 For rural areas and bicycle lanes, Sustainer offers optional Motion Sensors which can save up to 80%.



Conclusion: with our innovative technological solutions you can realize additional energy savings of 80% over current LED technology

Use Cases

Sustainer clients

Client Case 1:
Municipality of Hillegom, Lisse, Teylingen
The Netherlands (2021-2022)



	Anne	Alexia	Total
 #Luminaires	3.168	3.333	6.501
 Average power			20W

Energy savings¹



53%

Energy savings¹



437 MWh/yr

CO₂ reduction²



284 tonnes/yr




Cost reduction³



€79k/yr

Client Case 2:
Municipality of Hengelo
The Netherlands (2019-2022)



	Anne	Alexia	Total
 #Luminaires	3.712	506	4.218
 #Motion sensors	1.899	58	1.957
 Average power			14W

Energy savings¹



70%

Energy savings¹



320 MWh/yr

CO₂ reduction²



208 tonnes/yr

Cost reduction³



€58k/yr

¹Energy savings compared to conventional SOX lighting, based on 4,200 burning hrs per year per luminaire.

²CO₂ reduction assuming Dutch grey energy.

³Assuming €0,18 per kWh.

Circularity and inclusiveness are key at Sustainer



Maximizing reuse of raw materials such as aluminum



Modular design, completely circular

Completely reusable cassettes



Less packaging

100% recyclable cardboard and paper

No plastic/foil



Local production, SMD and assembly

Use of local workshops

Future proof
smart lighting, no worries



Sustainable
lower CO₂ emissions



Economic
efficient management and maintenance



Dutch Design

Sustainer luminaires stand out for their clever design. All our luminaires include an array of basic sensors that make it possible to measure position, movement, ambient light and power consumption. This integration of smart functions into the luminaire makes installation, control and maintenance much more efficient and effective. Each luminaire, for example, can be configured remotely to the requirements of the surrounding area, like reducing light pollution and/or light hindrance. Problems and outages are also detected and reported instantly.

All Sustainer luminaires are manufactured in our own factory in the Netherlands. This enables us to guarantee top quality that meets both conformity mark requirements and the specific wishes of our customers. And as well as functional, public lighting can be beautiful, too. By integrating various functions, Sustainer luminaires help combat clutter in open spaces.



The Sustainer assembly line in the shared factory in Emmen, The Netherlands.

Sustainable

It's in our DNA to contribute to the move to a sustainable society. Our team brings together a mix of experience and expertise in various fields, including public lighting, Internet of Things and the production of high-value technology products. Our luminaires feature a unique design, while the use of energy efficient LEDs guarantees a long service life.

Partner up

Sustainer aims to be an international leader in intelligent lighting and smart-city solutions. From the beginning we have had operations in the Netherlands and Germany and currently Sustainer is also active in the Netherlands Antilles, Belgium, the United Kingdom, Portugal, Spain, Morocco, the Czech Republic, Turkey, China and Colombia and we plan to enter other markets soon. Our philosophy is to form part of a wider ecosystem in which we work and co-create with strong partners, sharing open technology standards. We are always on the lookout for, and are open to working with, external partners with whom we can develop new products, services and business models.

1961
Opening factory Industria

2016
Sustainer founded

2017
Manufacturing started

2017
Launch of Anne and Alexia

2018
Launch of motion sensor

2019
Launch of Sniffer

2020
Launch of Observer

2020
Launch of Listener

2021
250+ municipalities as customer

2021
Launch of Aspira

Ready for the future today



Standard functionalities



GPS



Mesh RF



Temp IN



Power Meter



Accelerometer

Optional functionalities*



Humidity



Camera



Counter



Sound



NB-IoT



CO₂



Wifi



Ethernet



2G/3G/4G



Temp OUT



Fiber



Gas



Movement



AMB Light

**Optional functionalities are custom developed with our clients.*

Sustainer luminaires

Smart light, no worries

Back-office connectivity

Sustainer luminaires are exceptionally easy to control and manage via any back-office system for public lighting. Use an API to hook it up to your platform for immediate and optimum control.

Luminaire features

- Energy-saving LED technology reduces CO₂ emissions.
- Dimmable.
- Constant light output (CLO) throughout full life of the LEDs (100,000 hours).
- Cassette system supports addition of further sensors in the future.

Luminaire management and maintenance

Thanks to the open architecture, the luminaires can be connected to all back-office systems, using an API. This in turn supports remote monitoring and control that enables you to:

- Configure each luminaire remotely after installation.
- Change configurations remotely.
- Map and monitor your installed base using GPS positioning.
- Monitor the performance of each luminaire remotely.
- Measure the actual energy use of each luminaire.
- Receive errors and defects on luminaire level.

Applications

- Urban areas: city centres, squares, parks and car parks.
- Roads: main roads, roundabouts and cycle paths.
- Residential areas: streets, shopping areas, cycle- and footpaths, playgrounds and car parks.
- Large sites: industrial parks, ports, airports and stations.

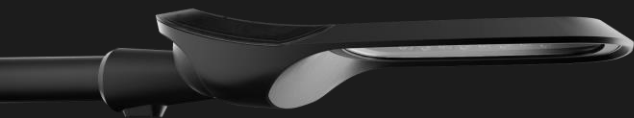
Quality marks

Our luminaires are CE, ENEC, RoHS and DEKRA LED Performance certified. Also, tests show that our luminaires do not cause any blue light hazard.



Anne

- LED technology
- Ambient light functionality
- GPS-based position mapping
- Custom sensor options (future proof)
- Dimmable: 4 independent segments
- Flexible light programming
- Remote configuration and control
- Open platform



Alexia

- LED technology
- Ambient light functionality
- GPS-based position mapping
- Custom sensor options (future proof)
- Flexible light programming
- Remote configuration and control
- Open platform

Aspira

- LED technology
- Comfort LED covers
- GPS-based position mapping
- Custom sensor options (future proof)
- Flexible light programming
- Remote configuration and control
- Open platform



Contact

info@sustainer.com

+31 (0)85 047 11 75

sustainer.com

Emmen

Kapitein Grantstraat 9

7821 AP Emmen (NL)

Breda

Emmastraat 2A

4811 AG Breda (NL)

Grefrath

Weststraße 12

47929 Grefrath (DE)