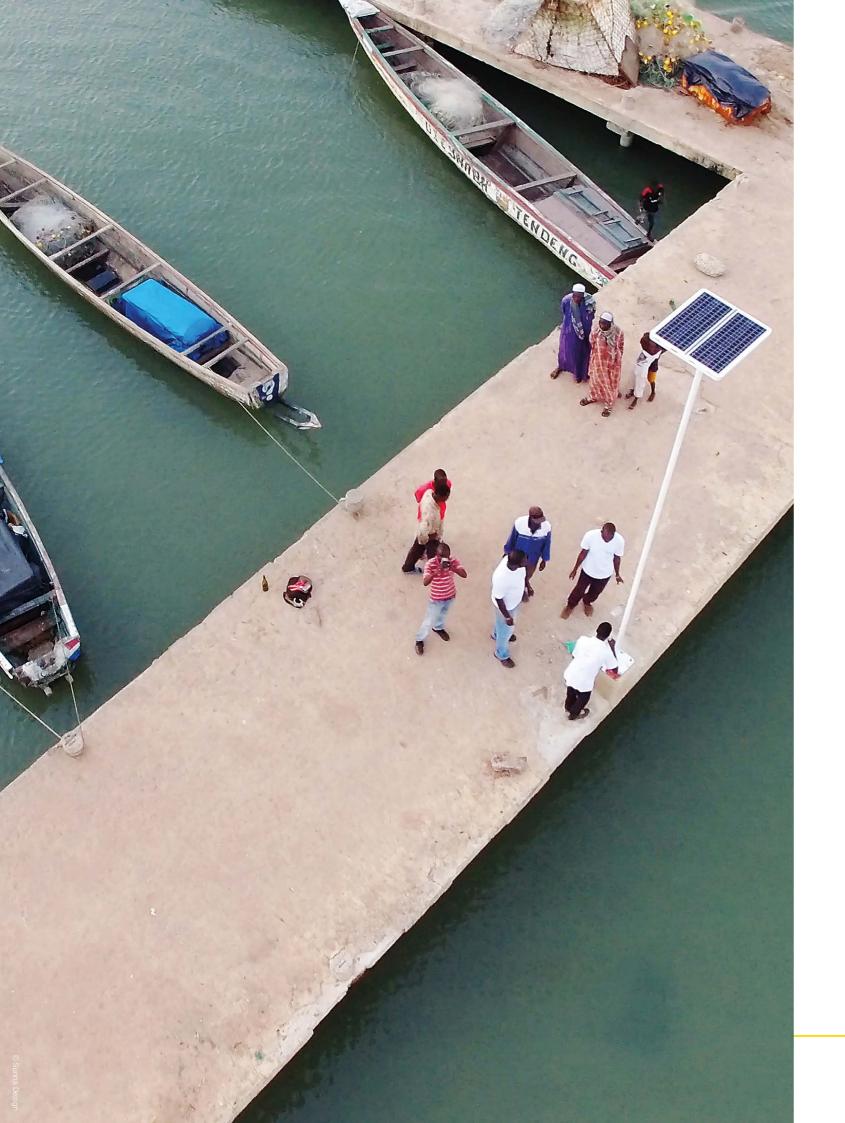


Our solar solutions: solar streetlights





Access to energy at TotalEnergies

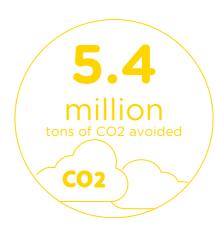
Providing reliable and affordable solar solutions

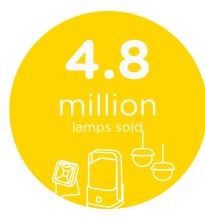
TotalEnergies is active in more than 130 countries. The company puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

Because energy is vital and drives progress, it must be available to everyone. However, this access is still a daily challenge for 733 million* people who live without access to electricity. In this context, **our teams are committed to provide energy that is ever more affordable, clean, reliable and accessible to as many people as possible.**

In 2010, TotalEnergies launched the Access to Energy program and since 2018 we provide our own range of Sunshine solar solutions., in-station or through partners.







Our objective:

25 million people impacted by 2025

For further information, visit our website accesstoenergy.totalenergies.com



The advantages of solar streetlights

versus traditional streetlights



Saving

Guaranteed savings, no energy expenses and no maintenance for 10 years!



Autonomy

A 100% solar solution, independant from the electricity grid and its overloads: no blackout.



Power

High performance levels in terms of lighting and autonomy to adapt to all projects.



Tailor-made solutions

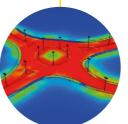


to meet your need



1 An optimal sizing of your project

Depending on location and uses, solar streetlights have different caracteristics and design. **Our preliminary studies will provide an optimal sizing of your project,** in order to propose efficient solutions: solar panel, battery and technology optimized to obtain the best possible performance.



2 Proposing a suitable product and an adapted layout plan

We **select solutions** - lighting profile, dimming, layout - most suited to the area you want to light up, **transport them up to the installation site**, so that they are integrated as naturally as possible within the environment.



3 Providing long-term support and assistance

We ensure **regular follow-up**, **even after projects** have been fully completed. Our remote monitoring tools allow us to analyze product performance and to respond when necessary to adjust certain installation features or settings.

Our offer includes

- Technical studies with an autonomy study, lighting profile, irradiance analysis and battery state of charge, photometric study and layout plan
- supply of solar streetlight(s)
- $\ensuremath{ \ensuremath{ \en$



Options

- () supply of poles
- (, solar streetlights installation
- () extended warranty



We support you on your lighting projects

Everywhere in the world, up to the most remote places, we support you to set up your project with durable and robust products range.

Interested in our solutions?

accesstoenergy@totalenergies.com

Our solar streetlights

Multiple benefits and innovative features











HIGH PERFORMANCE BATTERY & SMART STORAGE

- **smart energy management system**: to enhance the battery's life-cycle
- ✓ battery NiMH: 100% recyclable technology
- ✓ lifespan: over 10 years under permanent high temperature (40°C) or 15 years in temperate climate
- masthead battery = **no vandalism**

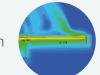
HIGH POWERED LED MODULE

- best lumen/watt ratio available on the market: up to 175 lm/W
- motion sensor available
- // lifespan: 50.000 hours or 12 years



HIGH-EFFICIENCY SOLAR PANEL

optimized thermal management: increased efficiency of the solar panel by 10% and lifespan optimization!



- self-cleaning solar panel: unique dustproof coating
- // lifespan: 25 years
- (a) invisible solar panel = **no vandalism**

DESIGNED FOR EXTREME CONDITIONS

- suitable for all climates: the widest operating temperature range on the market (temperatures from -20°C to +70°C)
- designed to last more than 10 years in extreme conditions (humidity, corrosion, wind gusts of 252 km/h)

SMART AND CONNECTED



📬 support for installation and commissioning

real time and historic performance monitoring

management of lighting profiles

? remote troubleshooting



INNOVATIVE ANTI-BLACKOUT LIGHTING PROGRAMS

equipped with patented no blackout function: to ensure continuity of service, even in adverse weather conditions.

based on the expected power use and the available battery power, our system regulates the light intensity to avoid blackouts.





iSSL range

All-in-one solar streetlights



Equipped with horizontal solar panels, the iSSL range is adapted for intertropical zone countries, where panel orientation is not required. It also features a self-cleaning and self-cooling design for high temperatures. All-in-one, it one-piece design facilitates installation and requires no wiring.



Optional

White

motion sensor

Grey brown

All the products can be installed from 3 m. to 5 m. Applications are those generally recommended for the project that are closest to the examples proposed. To have an exact estimate of the products that would be adapted to the project, it will be necessary to carry out a technical study that will take into account all the elements of the project (size,



ISSL MAXI AREA

Recommended applications Pathways Road

Technical specifications

LIGHTING

1600 to 2800 lm Luminous flux 2

Number of flux

20 W to 50 W up to 164 lm/W

SOLAR PANEL

LED efficiency

LED consumption

80 Wp Panel Lifespan 25 years

BATTERY

240 Wh Capacity Technology NiMH

Temperature -40°C to +70°C Autonomy up to 5 days



LIGHTING

Luminous flux 3200 to 5600 lm 1 Number of flux LED consumption 20 W to 50 W LED efficiency up to 164 lm/W

SOLAR PANEL

80 Wp Panel Lifespan 25 years

BATTERY

240 Wh Capacity Technology NiMH

Temperature -40°C to +70°C Autonomy up to 5 days

iSSL MAXI 4



Technical specifications

LIGHTING

6400 to 11200 lm Luminous flux LED consumption 40 W to 80 W LED efficiency up to 164 lm/W

SOLAR PANEL

Panel 160 Wp Lifespan 25 years

BATTERY

Capacity 480 Wh Technology NiMH

Temperature -40°C to +70°C Autonomy up to 5 days

UP range

All-in-two solar streetlights for temperate zone



Equipped with inclined solar panels, the UP range is particularly suitable for areas far from the equator, allowing for optimal energy collection. Performance is unrivaled thanks to intelligent battery storage.

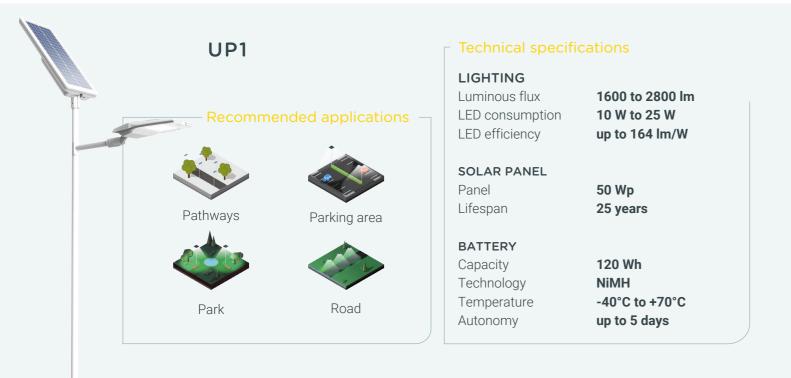




Optional

motion sensor

All the products can be installed from 3 m. to 6 m. Applications are those generally recommended for the project that are closest to the examples proposed. To have an exact estimate of the products that would be adapted to the project, it will be necessary to carry out a technical study that will take into account all the elements of the project (size, customer needs etc.)



UP2

Recommended applications Business Industrial site Residential Work site

Technical specifications

LIGHTING

Luminous flux

LED consumption

LED efficiency

3200 to 15600 lm

20 W to 50 W

up to 164 lm/W

SOLAR PANEL

Panel **80 Wp**Lifespan **25 years**

BATTERY

Capacity 240 Wh
Technology NiMH
Temperature -40°C to +70°C
Autonomy up to 5 days



Technical specifications

LIGHTING

Luminous flux
LED consumption
LED efficiency

6400 lm

40 W to 80 W

up to 164 lm/W

SOLAR PANEL

Panel 160 Wp Lifespan 25 years

BATTERY

Capacity 480 Wh
Technology NiMH
Temperature -40°C to 4

Temperature -40°C to +70°C Autonomy up to 5 days

EverGen-L range

Configurable solar streetlights for large projects



The EverGen-L range is a fully configurable solution that can precisely meet the needs for large projects, thanks to our integrated engineering support. With a wide range of panel size, battery capacity and lighting power, it can be equipped with one (mono) or two (dual) lighting module.



Optional

motion sensor

All the products can be installed from 3 m. to 12 m. Applications are those generally recommended for the project that are closest to the examples proposed. To have an exact estimate of the products that would be adapted to the project, it will be necessary to carry out a technical study that will take into account all the elements of the project (size, customer needs etc.)



Technical specifications

LIGHTING Luminous flux LED consumption LED efficiency LED efficiency LED efficiency LED efficiency LED efficiency LED efficiency LED efficiency

SOLAR PANEL

Panel 150, 260 or 320 Wp Lifespan 25 years

BATTERY

Capacity
Technology
Temperature
Autonomy

680 Wh to 2530 Wh
LiFePO4
0°C to +50°C
up to 3 days







Mozambique

USE CASES

Zone lighting

TotalEnergies EP Mozambique Area 1 Limitada teams are deploying autonomous solar street lights to provide public lighting in the Cabo Delgado region.



In northern Mozambique, after sunset, most villages are often in complete darkness. The project led by TotalEnergies EP Mozambique Area 1 Limitada aimed at lighting three villages: Maganja, Mondlane and Senga. These products are intended to provide security lighting and improve the quality of life.

In this context, 181 ISSL+ street lamps were installed. The illuminated area creates a favorable space for economic and social activities. A few months after the installation, residents are already seeing the difference: more security and sales activities that continue at night.

GG

« The population is very happy, the lights bring security, we can see the movement of people at night.»

Project Manager

« The lights allow us to keep selling late into the night! »

Local vendor

« It's like we are now in the city! »

Village resident

GG

« All the lights are working [...] Some residents are asking for more street lights because Maganja is big and some areas are not yet covered! »

Community Mobilizer

Which products for this field of application?

ISSL MAXI ROAD

Product mix

181 street lights + Motion sensor Luminous flux

3,200 to 5,600* lumens

Power consumption

20 W to 50* W

Luminous efficiency

Up to 164 lm/W

Application Type(s):











Road

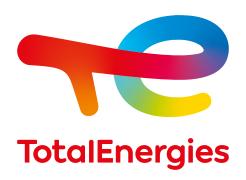












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