

# Solar calculator report

Report generated on 2026-10-31 by EuroEnergy.live

## The result

# 8.5 years to pay for itself

estimated saving per year

1,639 EUR

estimated cost, turnkey

10,833 EUR – 18,589 EUR

## What do you want to install?

What do you want to install?

Panels and a battery

Where will the panels go?

Pitched roof

Where will the system be installed?

Northern and Western

Consumption you entered

3,120 kWh

How much roof can you use?

80 m<sup>2</sup>

Which way does the roof face?

I don't know

## Recommended system

Rating

8.6 kWp

Panels

19

Battery

7.5 kWh

Produces per year

6,253 kWh

Used on site

41%

Area needed

37 m<sup>2</sup>

Energy sent to the grid

3,602 kWh

Energy bought from the grid

587 kWh

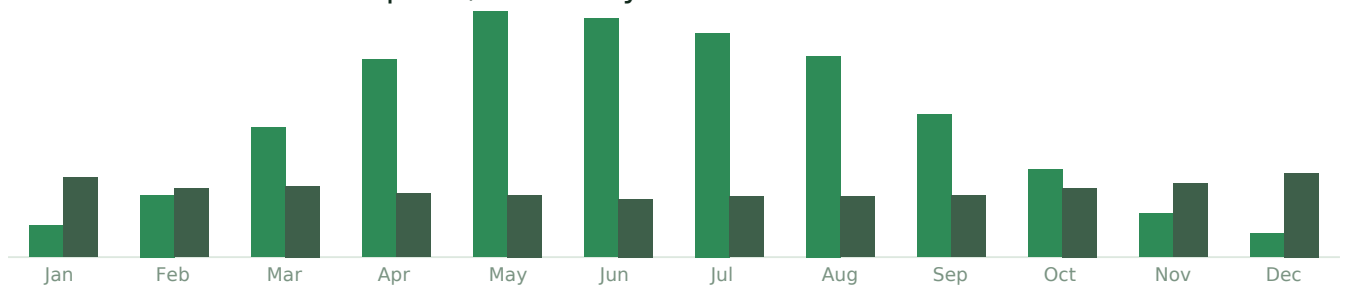
## Where the energy produced goes



- Used on site: 1,477 kWh (24%)
- Stored in the battery: 1,173 kWh (19%)
- Sent to the grid: 3,602 kWh (58%)

The rating is limited by your annual consumption.

## Production and consumption, month by month



Production · Consumption

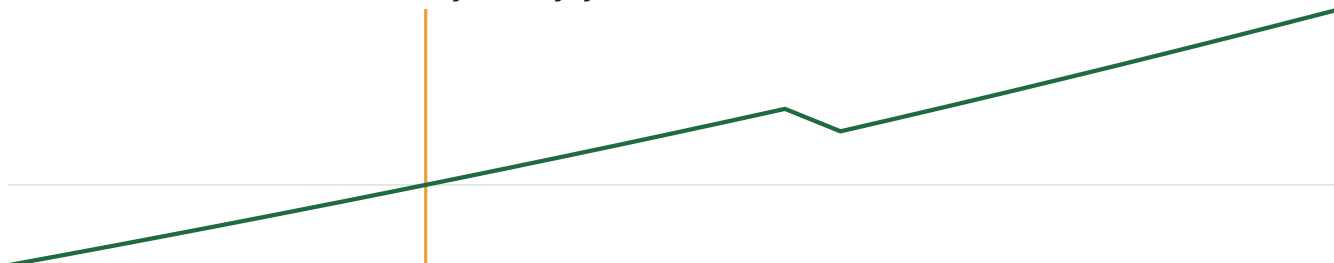
## What the battery adds, against a system without one

| Indicator | Without a battery | With a battery |
|-----------|-------------------|----------------|
| Cost      | 9,883 EUR         | 14,711 EUR     |

|                      |            |            |
|----------------------|------------|------------|
| Saving per year      | 1,493 EUR  | 1,639 EUR  |
| Used at home         | 24%        | 41%        |
| Energy from the grid | 1,643 kWh  | 587 kWh    |
| Saving over 25 years | 35,192 EUR | 28,575 EUR |

The battery does not pay for itself on these figures. It can still be useful: it gives you evening autonomy, it keeps the lights on during an outage if it has the right equipment, and it shelters you from a price rise or a change in the compensation rules.

## Balance of the investment, year by year



It starts at minus the cost of the system and climbs with each year's saving. Crossing zero is the moment it pays for itself.

## Assumptions used

Below are the values used in the calculation and the source of each one, so the result can be checked.

| Assumption                                                                                      | Value                                                      | Source                                         |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|
| Coordinates used                                                                                | 53.80, -8.60 — Northern and Western Europe                 | PVGIS PVGIS-SARAH3 · 2026-09-13                |
| Specific yield of the location                                                                  | 817 kWh/kWp                                                | PVGIS PVGIS-SARAH3 · 2026-09-13                |
| Orientation used                                                                                | 90°                                                        | PVGIS PVGIS-SARAH3                             |
| Tilt used                                                                                       | 30°                                                        | PVGIS PVGIS-SARAH3                             |
| Temperature, spectral and incidence-angle losses                                                | 9.7%                                                       | PVGIS PVGIS-SARAH3 · 2026-09-13                |
| Price of energy on the bill                                                                     | 0.387 EUR/kWh                                              | Eurostat nrg_pc_204, 2026-S1                   |
| Price of energy sent to the grid                                                                | 0.203 EUR/kWh — I don't know                               | Eurostat nrg_pc_204, 2026-S1                   |
| Consumption you entered                                                                         | 3,120 kWh per year                                         | entered by you                                 |
| System efficiency                                                                               | 89.5%                                                      | EuroEnergy.live estimate                       |
| System losses: 10.5% (module 2.5% · cabling 1.5% · soiling 2.0% · mismatch 1.5% · shading 3.0%) |                                                            | EuroEnergy.live estimate                       |
| Reference panel                                                                                 | 450 Wp · 2.0 m²                                            | EuroEnergy.live estimate                       |
| Annual panel degradation                                                                        | 0.5%/an                                                    | EuroEnergy.live estimate                       |
| Lifetime                                                                                        | 25 years                                                   | EuroEnergy.live estimate                       |
| Assumed energy price growth                                                                     | 2.0%/an                                                    | EuroEnergy.live estimate                       |
| Annual maintenance                                                                              | 0.5%                                                       | EuroEnergy.live estimate                       |
| Evening and night consumption                                                                   | 47.6%                                                      | EuroEnergy.live estimate                       |
| Shape of the consumption day                                                                    | peak at 19:00                                              | EuroEnergy.live estimate                       |
| Mounting type                                                                                   | Pitched roof                                               | entered by you                                 |
| Usable area                                                                                     | 90.0% · 4.3 m²/kWp                                         | EuroEnergy.live estimate                       |
| Battery round-trip efficiency                                                                   | 90.0%                                                      | EuroEnergy.live estimate                       |
| Usable battery capacity                                                                         | 6.8 kWh (90.0%)                                            | EuroEnergy.live estimate                       |
| VAT                                                                                             | EuroEnergy.live — inter-European de referință, neverificat | 21.0%                                          |
| estimated cost, turnkey                                                                         | EuroEnergy.live 10,883 EUR                                 | 10,589 EUR Referință, neverificat · unverified |

This is an estimate, not a quote. The real price depends on the installer, the roof and the month of installation.

[https://euroenergy.live/solar-calculator?t=pb&c=IE&m=pitched\\_roof&q=260&a=80&o=unknown&i=unknown](https://euroenergy.live/solar-calculator?t=pb&c=IE&m=pitched_roof&q=260&a=80&o=unknown&i=unknown)