

Performance of grid-connected PV

PVGIS-5 estimates of solar electricity generation:

Provided inputs:

Latitude/Longitude: 42.709, 2.920
Horizon: Calculated
Database used: PVGIS-SARAH
PV technology: Crystalline silicon

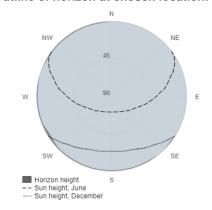
PV installed: 3 kWp System loss: 2 %

Simulation outputs

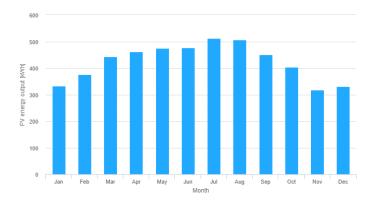
Slope angle: 39 (opt) °
Azimuth angle: -2 (opt) °
Yearly PV energy production: 5090 kWh
Yearly in-plane irradiation: 1890 kWh/m²
Year to year variability: 311.00 %
Changes in output due to:

Angle of incidence: -2.6 %
Spectral effects: 1.1 %
Temperature and low irradiance: -7 %
Total loss: -10.2 %

Outline of horizon at chosen location:



Monthly energy output from fix-angle PV system:



Monthly in-plane irradiation for fixed-angle:



Monthly PV energy and solar irradiation

Month	Em	Hm	SDm
January	332	115	71.7
February	375	131	74.6
March	443	159	59.4
April	461	171	51.5
May	474	179	38.3
June	477	185	40.5
July	513	202	25.5
August	507	198	25.6
September	450	171	35.3
October	404	148	45.6
November	318	113	62.1
December	331	114	32.2

Em: Average monthly electricity production from the given system [kWh].

Hm: Average monthly sum of global irradiation per square meter received by the modules of the given system [kWh/m^2].

SDm: Standard deviation of the monthly electricity production due to year-to-year variation [kWh].

The European Commission maintains this website to enhance public access to information about its initiatives and European Union policies in general. Our goal is to keep this information timely and accurate. It errors are brought or attention, we we try to correct them.

This information is: i) of a general nature only and is not intended to address the specific circumstances of any particular individual or entity; ii) not necessarily comprehensive, complete, accurate or up to date, iii) sometimes hinked to external sites over which the Commission services have no control and for which the Commission assumes no responsibility; iv) not professional or legal advice if (you need specific advice, you should always consult a suitably qualified professional). Some data or information on this site may have been created or structured in lifes or formats that are not error-free and we responsibility; with regard to such problems incurred as a result of using this site or any linked external sites.

PVGIS ©European Union, 2001-2017.

Reproduction is authorised, provided the source is acknowledged, save where otherwise stated.