

Performance of grid-connected PV

PVGIS-5 estimates of solar electricity generation:

Provided inputs:

Latitude/Longitude: 44.539, 6.091
Horizon: Calculated
Database used: PVGIS-CMSAF
PV technology: Crystalline silicon

PV installed: 3 kWp System loss: 10 %

Simulation outputs

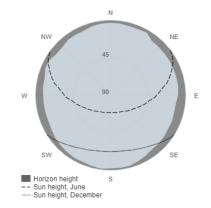
Changes in output due to:

Slope angle: 45 °
Azimuth angle: 0 °
Yearly PV energy production: 4500 kWh
Yearly in-plane irradiation: 1880 kWh/m²
Year to year variability: 150.00 %

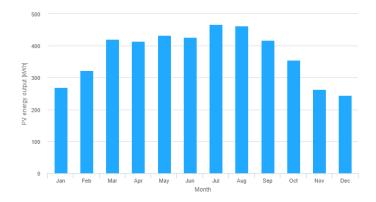
Angle of incidence: -2.5 %
Spectral effects: 0.8 %
Temperature and low irradiance: -10 %

Total loss: -20.4 %

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	270	105	20.9
February	322	127	66.6
March	421	172	38.8
April	414	174	37.5
May	433	184	22.4
June	427	186	17.4
July	468	207	26.8
August	462	205	21.4
September	417	179	22.7
October	355	147	34.1
November	264	104	43
December	245	94.2	36.4

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. If errors are brought to our attention, 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 linked 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) our need specific advice, you should always consult a suitably qualified professional). Some data or information on this site may have been ceasted or structured in lifes or formats that are not error-free and we responsability 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

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