

Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 46°31'42" North, 18°10'41" East, Elevation: 148 m a.s.l.,
Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 1.0 kW (crystalline silicon)

Estimated losses due to temperature and low irradiance: 13.3% (using local ambient temperature)

Estimated loss due to angular reflectance effects: 2.8%

Other losses (cables, inverter etc.): 14.0%

Combined PV system losses: 27.5%

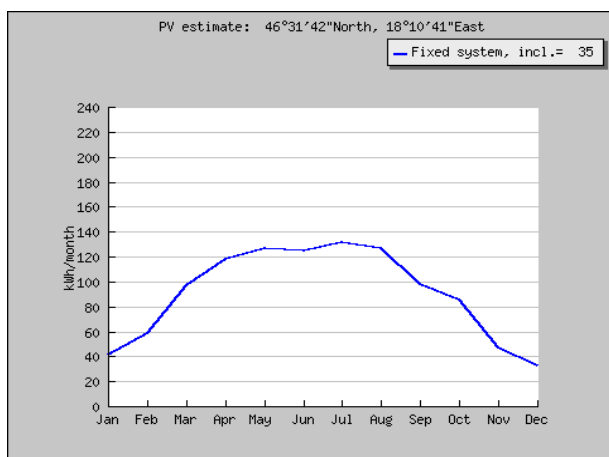
Fixed system: inclination=35 deg., orientation=-10 deg.				
Month	Ed	Em	Hd	Hm
Jan	1.32	40.9	1.66	51.4
Feb	2.08	58.3	2.64	74.0
Mar	3.14	97.4	4.20	130
Apr	3.94	118	5.46	164
May	4.07	126	5.77	179
Jun	4.15	124	5.97	179
Jul	4.24	132	6.19	192
Aug	4.07	126	5.92	184
Sep	3.27	98.1	4.58	137
Oct	2.74	85.0	3.68	114
Nov	1.58	47.4	2.03	61.0
Dec	1.06	32.8	1.32	40.9
Year	2.98	90.6	4.13	126
Total for year		1090		1510

Ed: Average daily electricity production from the given system (kWh)

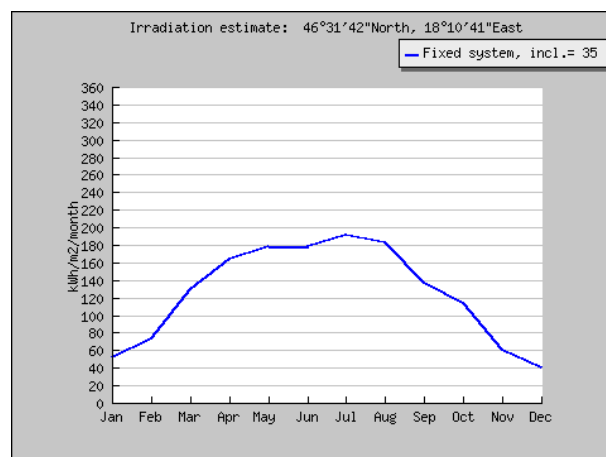
Em: Average monthly electricity production from the given system (kWh)

Hd: Average daily sum of global irradiation per square meter received by the modules of the given system (kWh/m²)

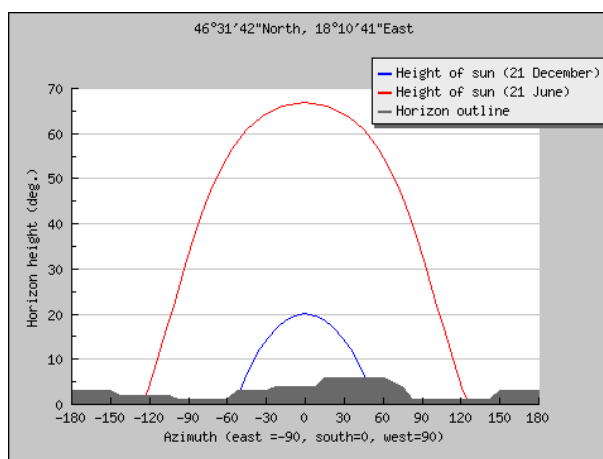
Hm: Average sum of global irradiation per square meter received by the modules of the given system (kWh/m²)



Monthly energy output from fixed-angle PV system



Monthly in-plane irradiation for fixed angle



Outline of horizon with sun path for winter and summer solstice

PVGIS (c) European Communities, 2001-2012

Reproduction is authorised, provided the source is acknowledged.

<http://re.jrc.ec.europa.eu/pvgis/>

Disclaimer:

The European Commission maintains this website to enhance public access to information about its initiatives and European Union policies in general. However the Commission accepts no responsibility or liability whatsoever with regard to the information on this site.

This information is:

- of a general nature only and is not intended to address the specific circumstances of any particular individual or entity;
- not necessarily comprehensive, complete, accurate or up to date;
- 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 files or formats that are not error-free and we cannot guarantee that our service will not be interrupted or otherwise affected by such problems. The Commission accepts no responsibility with regard to such problems incurred as a result of using this site or any linked external sites.