

Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 47°29'36" North, 19°1'26" East, Elevation: 145 m a.s.l., 1123 Budapest, XII., Alkotás utca 44.

Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 50.0 kW (crystalline silicon)

Estimated losses due to temperature and low irradiance: 8.5% (using local ambient temperature)

Estimated loss due to angular reflectance effects: 3.4%

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

Combined PV system losses: 24.0%

Fixed system: inclination=15 deg., orientation=45 deg.				
Month	Ed	Em	Hd	Hm
Jan	46.20	1430	1.13	35.1
Feb	81.20	2270	1.98	55.3
Mar	140.00	4330	3.50	109
Apr	190.00	5690	4.93	148
May	210.00	6510	5.65	175
Jun	214.00	6410	5.84	175
Jul	218.00	6740	5.99	186
Aug	197.00	6120	5.38	167
Sep	148.00	4430	3.89	117
Oct	108.00	3350	2.76	85.6
Nov	55.40	1660	1.39	41.8
Dec	35.00	1090	0.87	26.9
Year	137.00	4170	3.62	110
Total for year		50000		1320

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)

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.

Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 47°29'24" North, 19°1'26" East, Elevation: 139 m a.s.l., 1123 Budapest XII., Csörsz utca 2.
Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 50.0 kW (crystalline silicon)
Estimated losses due to temperature and low irradiance: 8.5% (using local ambient temperature)
Estimated loss due to angular reflectance effects: 3.4%
Other losses (cables, inverter etc.): 14.0%
Combined PV system losses: 24.0%

Fixed system: inclination=15 deg., orientation=45 deg.				
Month	Ed	Em	Hd	Hm
Jan	46.00	1420	1.13	34.9
Feb	81.00	2270	1.97	55.2
Mar	140.00	4330	3.50	109
Apr	190.00	5690	4.93	148
May	210.00	6500	5.64	175
Jun	214.00	6410	5.83	175
Jul	217.00	6740	5.99	186
Aug	197.00	6110	5.38	167
Sep	148.00	4430	3.89	117
Oct	108.00	3340	2.76	85.6
Nov	55.00	1650	1.39	41.6
Dec	34.80	1080	0.86	26.8
Year	137.00	4160	3.62	110
Total for year		50000		1320

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)

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.

Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 47°29'58" North, 19°0'20" East, Elevation: 235 m a.s.l., 1125 Budapest XII., Diana utca 35.

Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 50.0 kW (crystalline silicon)

Estimated losses due to temperature and low irradiance: 8.2% (using local ambient temperature)

Estimated loss due to angular reflectance effects: 3.2%

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

Combined PV system losses: 23.5%

Fixed system: inclination=15 deg., orientation=-2 deg.				
Month	Ed	Em	Hd	Hm
Jan	51.30	1590	1.24	38.5
Feb	90.20	2530	2.18	60.9
Mar	155.00	4800	3.87	120
Apr	206.00	6180	5.34	160
May	227.00	7020	6.08	188
Jun	230.00	6900	6.25	187
Jul	233.00	7210	6.37	197
Aug	213.00	6620	5.79	180
Sep	163.00	4890	4.27	128
Oct	120.00	3720	3.05	94.4
Nov	61.30	1840	1.53	45.8
Dec	38.90	1210	0.95	29.5
Year	149.00	4540	3.92	119
Total for year		54500		1430

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)

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.



Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 47°34'53" North, 19°3'52" East, Elevation: 105 m a.s.l., 1039 Budapest III., Királyok útja 65.
 Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 30.0 kW (crystalline silicon)
 Estimated losses due to temperature and low irradiance: 8.5% (using local ambient temperature)
 Estimated loss due to angular reflectance effects: 3.3%
 Other losses (cables, inverter etc.): 14.0%
 Combined PV system losses: 23.9%

Fixed system: inclination=15 deg., orientation=6 deg.				
Month	Ed	Em	Hd	Hm
Jan	31.50	975	1.26	39.1
Feb	54.10	1510	2.18	61.0
Mar	92.80	2880	3.88	120
Apr	123.00	3700	5.35	161
May	134.00	4170	6.04	187
Jun	136.00	4070	6.19	186
Jul	137.00	4260	6.32	196
Aug	127.00	3920	5.77	179
Sep	96.90	2910	4.26	128
Oct	71.40	2210	3.04	94.1
Nov	37.40	1120	1.55	46.5
Dec	23.80	739	0.97	30.0
Year	89.00	2710	3.91	119
Total for year		32500		1430

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)

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.

