Information for any location can be queried by:
- browsing thematic maps
- searching with a place name or its geographical coordinates.

Contact:
Web: http://re.jrc.ec.europa.eu/pvgis/
Email: esti.services@jrc.ec.europa.eu
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Institute for Energy and Transport
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The Photovoltaic Geographical Information System (PVGIS) provides web access to:
- solar radiation and temperature data
- PV performance assessment tools

**Solar Irradiation**
Monthly and yearly averages of solar irradiation at horizontal and inclined surfaces, ambient temperature, optimum inclination of PV modules, country maps and animations.

**Average daily irradiance**
The average daily irradiance profile for a chosen month is calculated for a given module inclination and orientation. Simulation of clear-sky and average real-sky irradiances takes into account also local horizon and terrain shadowing from digital elevation model at 100-m resolution.

**Estimation of PV electricity generation**
Monthly and yearly PV electricity potential can be assessed for crystalline-silicon or other PV technologies mounted in a fixed position or on various tracking systems. Alternatively, inclination and orientation of fixed-mounted modules can be optimised.

**Estimation of off-grid PV systems**
Based on daily irradiation sums, PVGIS calculates monthly and yearly energy output as well as statistical information on system reliability and efficiency.
Climatic and geographical data for photovoltaic potential

**European subcontinent**

**Solar radiation**
- Based on satellite data, 1998-2011, grid resolution ~2.5km
- Monthly and yearly averages (irradiation/irradiance)
- Grid resolution 1 km (terrain 100 m)
- Optimum inclination of PV modules
- Horizon/terrain shadowing

**Ambient temperature**
- Interpolated data from ~800 meteorological stations
- Monthly and yearly averages, daily maximum and minimum
- Daily and daytime average profiles
- Period 1995-2006
- Grid resolution 1 km

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**Solar radiation database computed from Meteosat satellite images by CMSAF** ([www.cmsaf.eu](http://www.cmsaf.eu))
- Monthly and yearly averages
- Probability statistics
- Period 1998-2011

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Photovoltaic Solar Electricity Potential in European Countries