**Provided inputs:**

Latitude/Longitude: 47.002,28.830
Horizon: Calculated
Database used: PVGIS-SARAH2
PV technology: Crystalline silicon
PV installed: 400 kWp
System loss: 14 %

Simulation outputs

Slope angle:	20 °
Azimuth angle:	20 °
Yearly PV energy production:	469267.11 kWh
Yearly in-plane irradiation:	1495.62 kWh/m²
Year-to-year variability:	19218.67 kWh
Changes in output due to:	
Angle of incidence:	-3.08 %
Spectral effects:	1.19 %
Temperature and low irradiance:	-6.99 %
Total loss:	-21.56 %

Outline of horizon at chosen location:

- Horizon height
- - Sun height, June
- Sun height, December
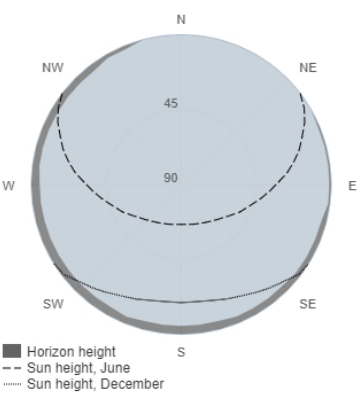
Monthly energy output from fix-angle PV system:
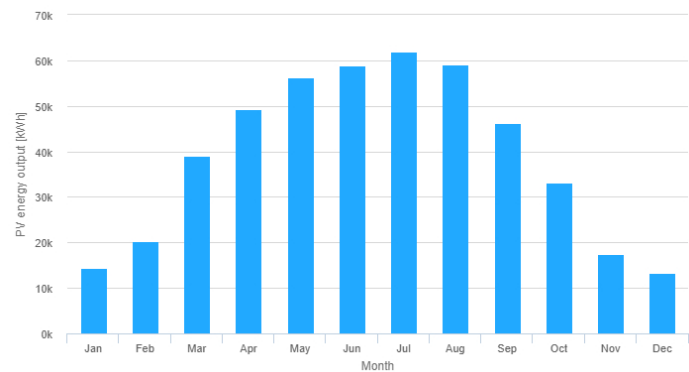
Monthly in-plane irradiation for fixed-angle:
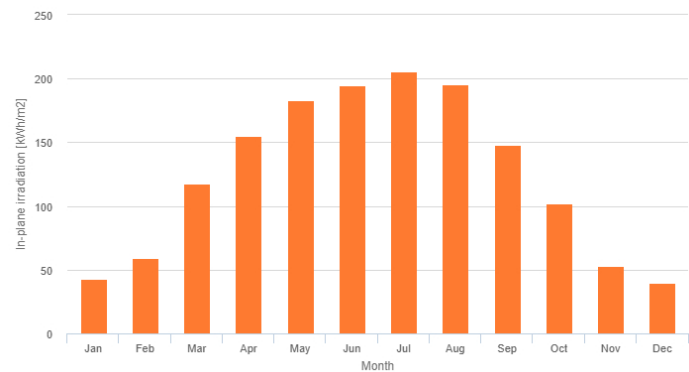
Monthly PV energy and solar irradiation

Month	E_m	H(i)_m	SD_m
January	14410.1	42.5	3596.9
February	20264.7	59.3	4579.7
March	39033.6	117.7	5679.6
April	49373.1	155.0	6028.2
May	56345.6	182.7	5658.0
June	58845.1	194.4	4279.9
July	61906.6	205.9	3063.2
August	59071.2	195.7	4118.0
September	46284.4	147.8	5228.0
October	33148.1	102.2	4577.2
November	17346.6	52.7	2297.0
December	13238.2	39.8	3967.4

E_m: Average monthly electricity production from the defined system [kWh].

H(i)_m: Average monthly sum of global irradiation per square meter received by the modules of the given system [kWh/m²].

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