



BE  MART

Together for Active and Efficient Buildings



The BE-Smart project has received funding from The European Union's
Horizon 2020 research and innovation programme under grant agreement
No 818009.



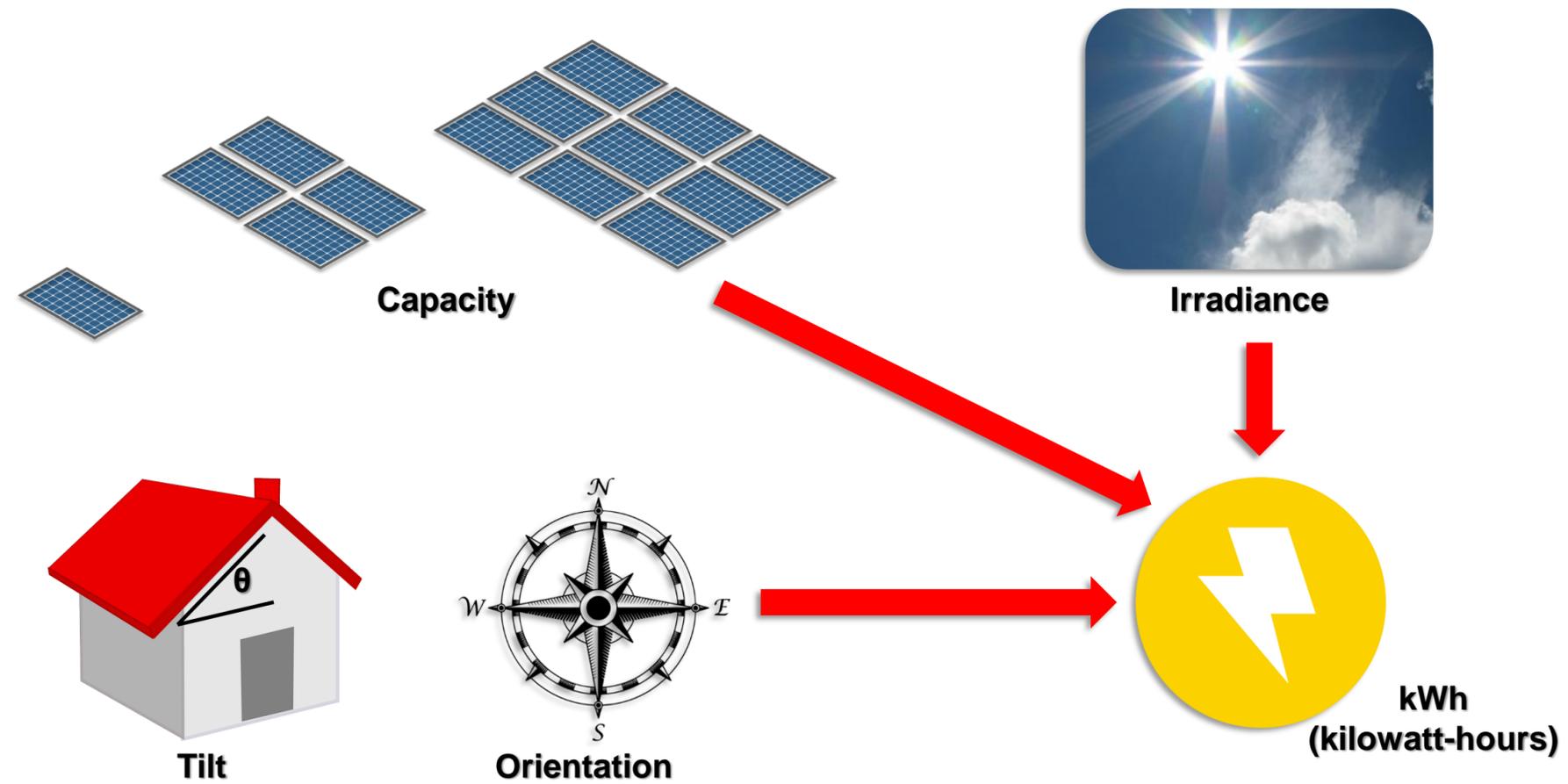
Energetic evaluation of EPOG systems

How much will my system produce?





What influences production?



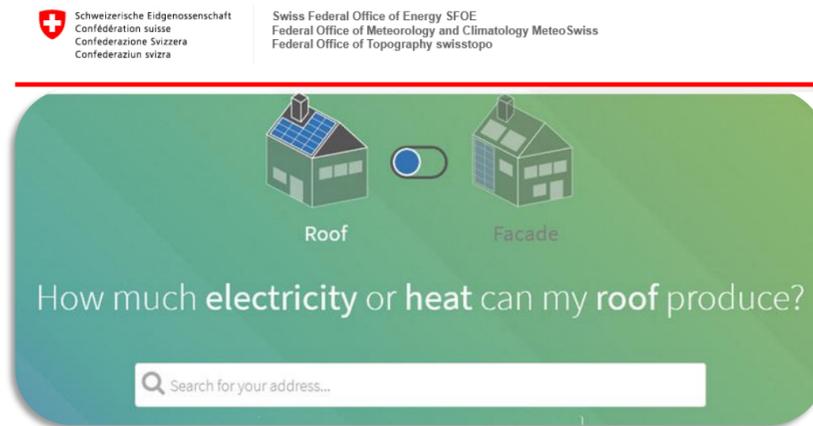


Solar potential of building surfaces





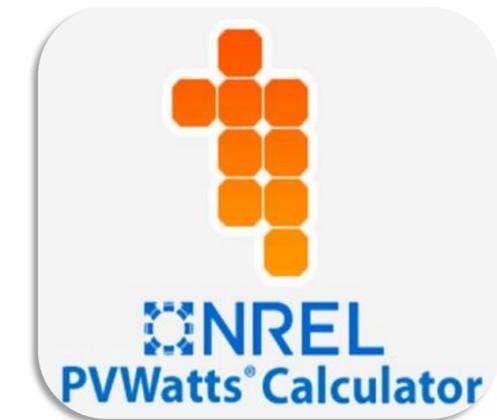
Tools to make an energetic evaluation



sonnendach.ch



re.jrc.ec.europa.eu/pvg_tools



pvwatts.nrel.gov



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Example of energetic evaluation: roof



Rue de la Maladière 71a
2000 Neuchâtel

Suitability: Very high

Either Solar electricity worth up to 58'600 Swiss francs...





Suitability: Very high

Congratulations! The suitability of your roof for the use of solar energy is as follows: **very high**. A roof's suitability is determined by its exposure to solar radiation, its orientation, pitch and exposure to shade.

Below you will find estimates of the theoretically possible yields based on the use of the entire roof surface. The figures are estimates of either solar electricity or solar heat. A smaller area may be sufficient for optimum private electricity consumption or heat demand.



Either up to **585'800 kWh** of solar electricity a year worth **58'600 Swiss francs...**

| | | |
|--|--|--|
| <p>292'900 kWh</p>  <p>Half of roof surface covered – typical use</p> | <p>439'350 kWh</p>  <p>Three quarters of roof surface covered</p> | <p>585'800 kWh</p>  <p>Roof surface fully covered – optimum use</p> |
|--|--|--|





Example of energetic evaluation: roof



Your roof surface area

0° 0° North 3'482 m²

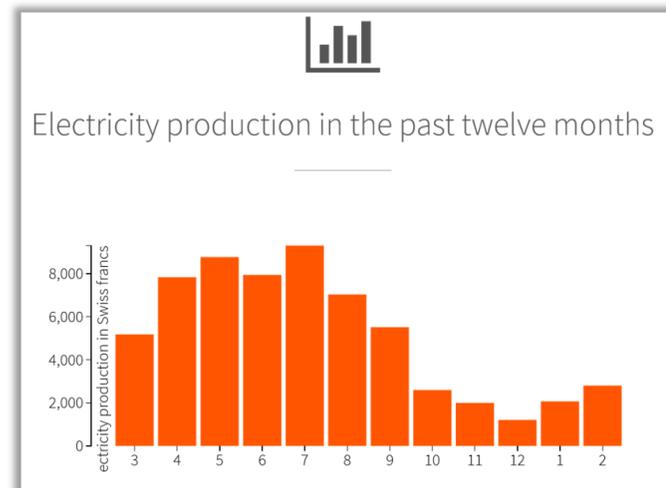
Roof pitch Orientation Surface area



Solar radiation onto your roof

1'237 kWh/m² 4'307'330 kWh

Average solar radiation per annum Total solar radiation per annum





Feed-in remuneration tariffs 

10.489999999999998 Cents/kWh

Viteos SA



Solar potential of Neuchâtel

Roofs and facades: Solar electricity only

204.92 GWh

solar electricity





Example of energetic evaluation: façade



Rue de la Maladière 71a
2000 Neuchâtel

Suitability: High

Either Solar electricity worth up to 11'500 Swiss francs...

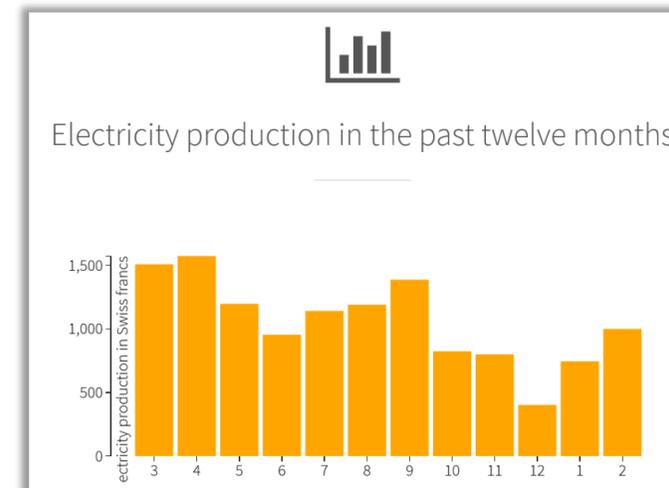
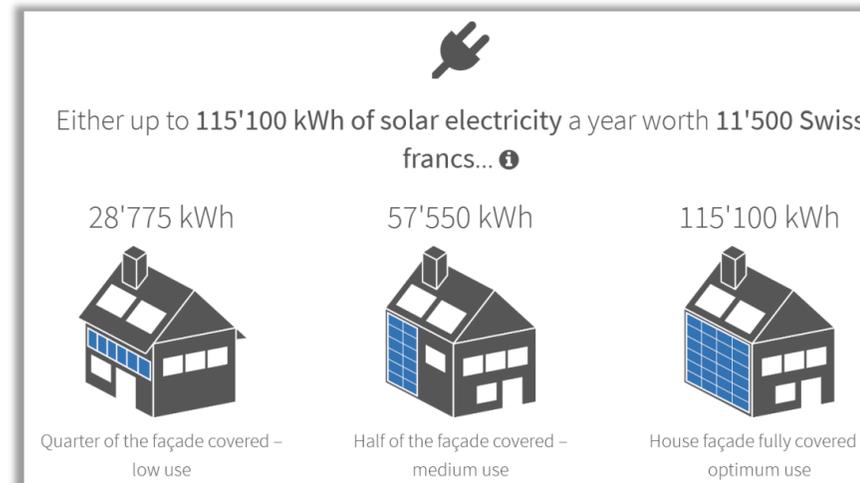
Excellent

Very high

High

Medium

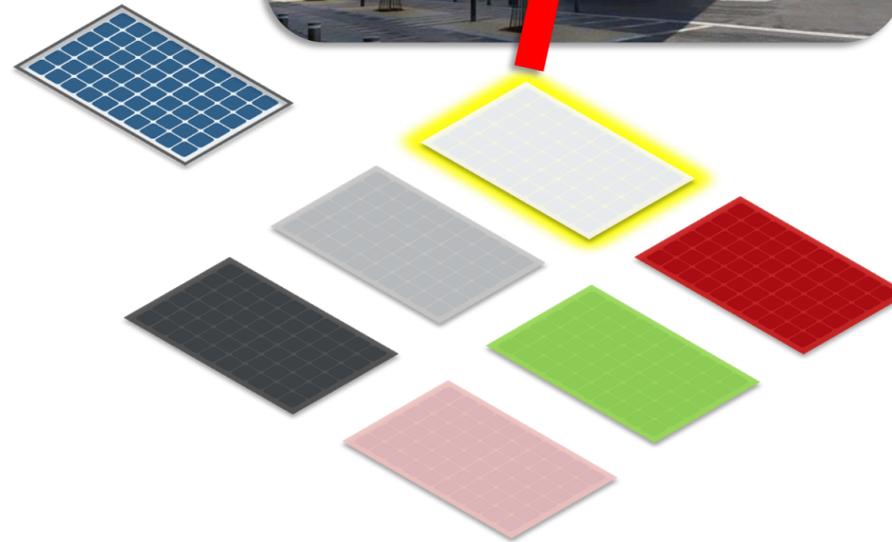
Low



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Other factors to consider





Summary



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**Thank you
for your attention.**