

FRAUNHOFER INSTITUTE FOR INDUSTRIAL MATHEMATICS ITWM







1 PV-forecast for solar energy plants

2 Worldwide PVCAST locations

ENERGY YIELD FORECASTS

High quality energy yield forecasts for individual PV power plants

- Hourly resolution
- Up to 7 days
- Available worldwide

No plant specification needed

- Autonomous machine learning
- Includes local temporary influences like shadows and soiling

Fraunhofer-Institut für Techno- und Wirtschaftsmathematik ITWM

Fraunhofer-Platz 1 67663 Kaiserslautern Germany

Contact

Phone +49 631 31600-1341 greenbyit@itwm.fraunhofer.de

www.pvcast.de www.itwm.fraunhofer.de

Accessible via

- Web front end
- RESTful web service API (JSON, XML, CSV)
- Email report





- 1 PV-forecast for individual homes
- 2 Plant site of Fraunhofer Institute for Industrial Mathematics ITWM

With only two steps you can reach your individual energy yield forcasts for photovoltaic plants:

1st Step: Define your photovoltaic plant

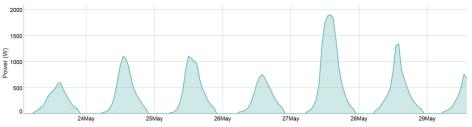
Registering your PV plants with PVCAST is simple and painless. Either manually via the website **www.pvcast**.de by placing a marker on the map, or automate the registration via our RESTful API.

2nd Step: Submit historical PV generation measurements

Upload your historical PV generation data. From these, an intelligent algorithm indentifies the characteristics of your plant. After only two days, you will receive your first energy yield forecast. For optimum forecast quality, you should submit 21 days worth of data. Solar module and inverter characteristics, module alignment, shadowing, etc. will be taken into account automatically.

Done! Query energy yield forecasts

On the PVCAST website the energy yield forecast is presented to you as follows:



This exemplary yield forecast has been generated for a rather complicated plant: it is installed on a carport roof at an oblique angle with multiple sources of shadowing.

In addition to the website you can also query the forecasts via our RESTful API in order to integrate PVCAST into your application. Currently, we provide JSON, XML and CSV as the most common data formats.