



# IEA PVPS Task 16

## Solar resource for high penetration and large scale applications

ISES Webinar,  
May 31<sup>st</sup> 2018

PVPS

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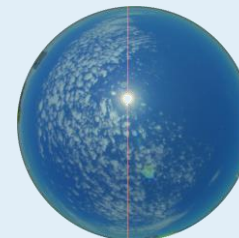
## 1. Resources



## 2. Bankability



## 3. Forecasts



## 4. Dissemination





# Background

- International Energy Agency (IEA) Technology Collaboration Programmes (TCP) used as backing organization
- Three solar programmes involved:
  - Solar Heating and Cooling (SHC)
  - SolarPACES (solar chemistry and concentrating solar power)
  - PV power systems (PVPS)
- Duration: 2017-2020





# Why a IEA Solar Task?

- Solar resources are the fuel of PV
- Uncertainty in solar belt still high
- **Big PV** and **high penetration** need high quality of meteorological information
  - Finer spatial and temporal resolution of data





# Added values

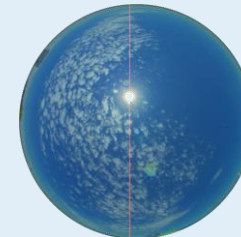
- Independent benchmarks
  - never trust non independent validations
- State of the art descriptions and standardization
- Lower uncertainties lead to lower costs of implementation and to more PV
- Scientific exchange
  - Faster and more detailed as on conferences



# Work organization

- **resource assessment methodologies**
  - Work on models & measurements
- **bankable products**
  - Benchmark and describe products (user point of view)
- **solar forecasting techniques**
  - Evaluation of forecasts methods
- **Dissemination**

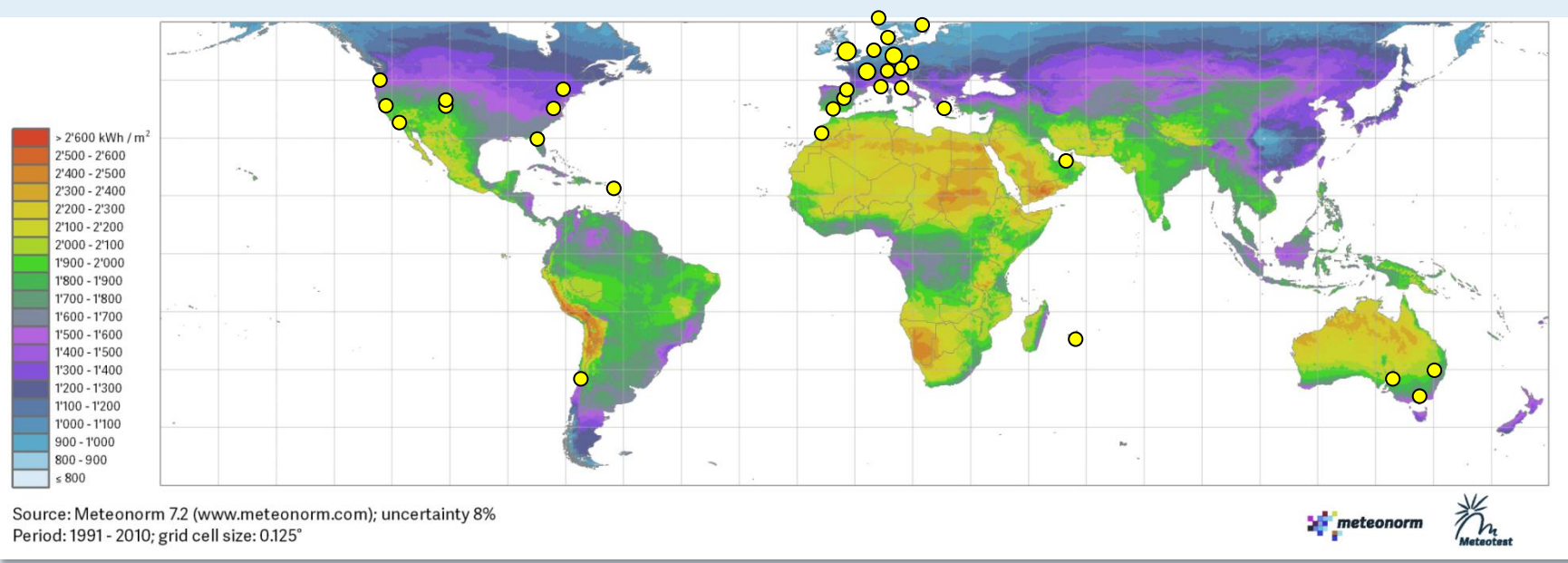
PVPS





# Network

14 IEA PVPS members  
 2 IEA SHC members  
 7 IEA SolarPACES m.



Global horizontal irradiance. Source: [www.meteonorm.com](http://www.meteonorm.com) Verion 7.2

PVPS







# 54 institutions

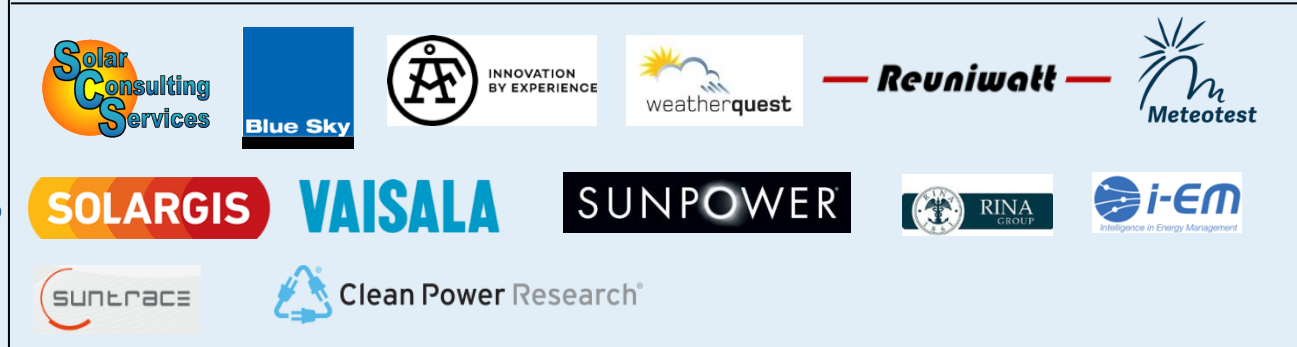
Science  
(labs and universities)



Met Services  
Utilities



Data providers







# Workshop about solar forecast requirements for grid applications

- ICM Munich, Intersolar Europe, June 21<sup>st</sup>, 14-16h
- Intro: Richard Perez, SUNY, USA
- Forecast Providers
  - Skip Dise, Clean Power Research, USA
  - Elke Lorenz, Fraunhofer ISE, Germany
- Utility/TSO Industry
  - Michael Osmann, Energinet, Denmark
  - Eamonn Lannoye, EPRI, USA
- Discussion

**Solar forecast requirements & value for grid applications**

Operational solar power forecasts are increasingly important to grid operators. This workshop brings together forecast providers and users from Europe and the USA to discuss the requirements and value of solar prediction services to grid management operations. Geographical specificity (from single plants to balancing areas), time horizons (from minutes to days ahead), accuracy/uncertainty, and versatility of services will be among the topics discussed. Four technical presentations will lead to a guided Q&A session engaging the audience.

[www.iea-pvps.org](http://www.iea-pvps.org)

<p><b>Presenters</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• R. Perez, SUNY, USA</li> <li>• Forecast Providers</li> <li>• Skip Dise, Clean Power Research, USA</li> <li>• Elke Lorenz, Fraunhofer ISE, Germany</li> <li>• Utility/TSO Industry</li> <li>• Michael Osmann, Energinet, Denmark</li> <li>• Eamonn Lannoye, EPRI, USA</li> </ul>	<p><b>Venue</b></p> <ul style="list-style-type: none"> <li>• ICM Munich, Germany (Intersolar Europe 2018)</li> <li>• Thursday, June 21, 2018</li> <li>• Room 22a, 2:00pm-4:00pm</li> <li>• Contact: Jan Remund (<a href="mailto:jan.remund@meteoest.ch">jan.remund@meteoest.ch</a>)</li> <li>• Operating Agent: IEA PVPS Task 16</li> </ul>	<p>IEA PVPS Task 16 is a collaborative task with IEA SolarPACES and IEA SHC.</p>
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Register by e-mail till June 14th 2018: [jan.remund@meteoest.ch](mailto:jan.remund@meteoest.ch)

