IEA/SHC Task 46
Solar Resource Assessment and Forecasting

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Operating Agent for Task 46

Task 46/Task 14 Workshop at PVSEC

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ISES International Solar Energy Society

SHC SOLAR HEATING & COOLING PROGRAMME INTERNATIONAL ENERGY AGENCY

Task 46 Objective

Provide the solar energy industry, the electricity sector, governments, and renewable energy organizations and institutions with means to understand "bankability" of data sets provided by public and private sector.

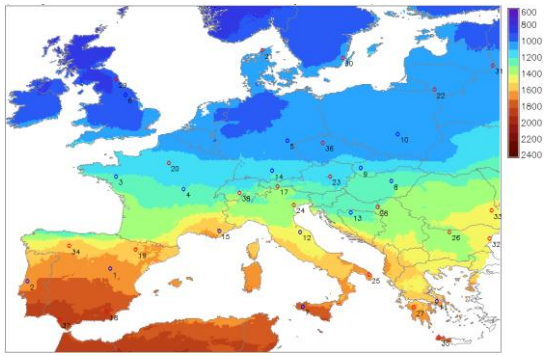
IEA/SHC Task 46: Solar Resource Assessment and Forecasting

- Supports planning, siting, sizing, and operations of ALL solar technologies
- Successor to Task 36
- 15 Countries, 76 Participants and Observers
- July 2011 – June 2016

Country	Organizations
Australia	CSIRO, BoM, Uni-South Australia
Austria	ASIC, BlueSkyWetteranlysen
Canada	Green Power Labs
Denmark	DMI/DTU
France	Mines ParisTech, ARMINES, Uni-Reúnion, Laboratoire PIMENT
Germany	DLR, Uni-Oldenburg, Uni-Ulm, SunTrace, CSPServices, Black Photon,
Norway	Uni-Agder
Singapore	SERIS
Slovakia	GeoModel
Spain	CIEMAT, CENER, Uni-Navarra, Uni-Jaén, irSOLaV, S2M
Switzerland	Uni-Geneva, Meteotest
United States	NREL, NASA-LaRC, SUNY/Albany, UCSD, Uni-Oregon, Irradiance, Augustyn & Co.

IEA/SHC Task 46: Four Major Themes

- Applications for High Penetrations of Solar Technologies
- Standardization and Integration Procedures for Data Bankability
- Solar Irradiance Forecasting
- Advanced Resource Modeling



A. Applications for High Penetrations of Solar Technologies
(SUNY/Albany)

- Short-Term Variability (Uni-Agder)
- Integration of Solar with Other RE Technologies (CENER)
- Spatial and Temporal Balancing Studies of the Solar and Wind Resource (Uni-Jaén)

B. Standardization and Integration Procedures for Data Bankability (DLR)

- Measurement Best Practices (DLR)
- Gap-Filling, QC, Flagging, Data Formatting (Mines ParisTech)
- Merging Ground and Modeled Data Sources (CIEMAT)
- Uncertainty of Model-Derived Solar Radiation Data (SunTrace)
- Evaluation of Meteorological Products: Focus on TMYs, Time Series (GeoModel s.r.a.)

C. Solar Irradiance Forecasting
(Uni-Oldenburg)

- Short-Term Forecasting: Up to 7 Days Ahead (Uni-Oldenburg and SUNY/Albany)
- Integration of Solar Forecasts into Operations (IrSOLaV)

D. Advanced Resource Modeling
(Mines ParisTech)

- Improvements to Existing Solar Radiation Retrieval Methods (GeoModel s.r.a.)
- Long-Term Analysis of Solar Resource Trends and Variability (NASA/LaRC, Meteotest)

Thank You!!

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Task 46 OA

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http://iea-shc.org/Task46