TCP on Photovoltaic Power Systems (PVPS TCP)

Established in 1993, the PVPS TCP supports international collaborative efforts to enhance the role of photovoltaic solar energy (PV) as a cornerstone in the transition to sustainable energy systems. The PVPS TCP seeks to serve as a global reference for policy and industry decision makers; to act as an impartial and reliable source of information on trends, markets and costs; and to provide meaningful guidelines and recommended practices for state-of-the-art PV applications.

Main areas of work

- o Strategic PV analysis and outreach
- o PV sustainability
- o Performance, operation and reliability of PV systems
- o Solar PV in a future 100% renewables-based power system
- Enabling framework for the acceleration of building-integrated photovoltaics (BIPV)
- o Solar resource for high penetration and large-scale applications
- o PV and transport
- o Off-grid and edge-of-grid photovoltaic systems

Key activities and accomplishments (2017-2018)

- Recommended Practises for Wind and PV Integration Studies
- Net metering and PV self-consumption in emerging countries
- Compilation and Analysis of User Needs for BIPV and its Functions
- TRENDS in Photovoltaic Applications (23rd edition)
- Human Health Risk Assessment Methods for PV Part 1: Fire Risks
- National Survey Reports of PV Power Applications 2017
- Photovoltaic Module Energy Yield Measurements: Existing Approaches and Best Practice
- Snapshot of Global PV Markets 2018

New priorities and projects (2019 - 2020)



Photovoltaic system installed at Incheon Airport Terminal 2, Incheon, Korea (Photo courtesy of Korea National University of Transportation)

- Increased focus on the role of PV in future energy systems, PV interaction with other technologies (e.g. storage, grids and heat pumps) and integration of PV into buildings and the mobility sector
- PV and transport
- Off-grid and edge-of-grid photovoltaic systems

Multilateral collaborations

- The PVPS TCP collaborates intensively with the IEA Secretariat as well as with numerous other TCPs in the building, electricity, transport and renewable energy sectors.
- Other collaborations include:
 - International Renewable Energy Agency (IRENA)
 - International Electrotechnical Commission
 - International Solar Energy Society

- International Solar Alliance
- Global Solar Council
- SOLARUNITED



- SolarPower Europe
 Solar Energy Industries Association (SEIA)
- Solar Electric Power Alliance (SEPA)
 International Copper Association Copper Alliance

Why should your organisation become a member of the PVPS TCP?

The PVPS TCP serves as a global reference on PV for policy and industry decision makers. Members have access to a truly global network of expertise and experts as well as the latest technical, economic and framework related information in selected areas of interest. Moreover, a member can propose new items to be investigated. A further benefit of participation is the personal network that can be built beyond the collaborative work and the joint analysis.

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The PVPS TCP is organised under the auspices of the International Energy Agency (IEA) but is functionally and legally autonomous. Views, findings and publications of the PVPS TCP do not necessarily represent the views or policies of the IEA Secretariat or its individual member countries.