



IEA PVPS

Global co-operation towards sustainable deployment of photovoltaic power systems

Peter Ahm, Denmark

IEA PVPS Executive Committee

PVPS





IEA PVPS

- 29 members: 24 countries, EC, EPIA, SEPA, SEIA, Copper Alliance
- Activities are carried out collaboratively on a country basis along a number of **technical** and **non-technical** subjects
- Currently, 7 Tasks are active
- PVPS mobilizes about 140 experts and 4 MUSD/year





The PVPS Objectives

- PV Technology development
- Competitive PV markets
- An environmentally and economically sustainable PV industry
- Policy recommendations and strategies
- Impartial and reliable information



Present IEA PVPS Tasks

- Task 1 – Strategic PV Analysis and Outreach
- Task 8 - Very large scale PV power generation systems
- Task 9 - Deployment of PV technologies: co-operation with emerging markets
- Task 12 - PV environmental, health & safety activities
- Task 13 - PV performance, quality and reliability
- Task 14 - High-penetration of PV systems in electricity grids
- Task 15 - Accelerating BIPV

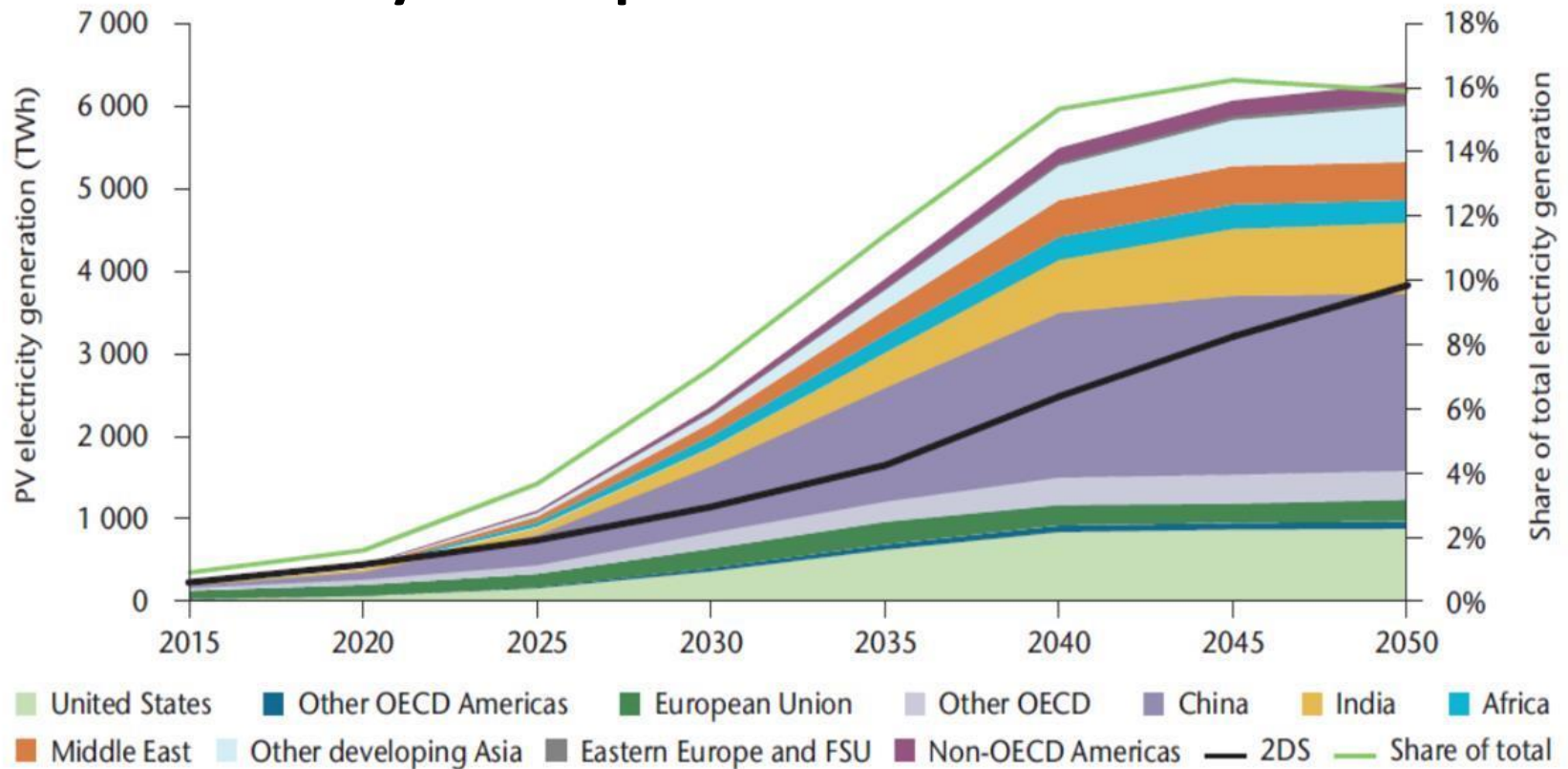


IEA PVPS focus reflects the PV technology context

- The societal and political scene in member countries change fast
- Energy technologies and markets changes fast and changes maybe accelerating
- PV's – technology and economics – change very fast
- PVPS tries to be in the frontline of these changes



New vision: PV grows faster and beyond previous scenario





A few visionary statements

- Mrs. Hillary Clinton mid 2015: RE to power all US homes in 10 years – 500 million PV modules inside 4 years, up 700% from 2015.
- China PV Road Map: 2.000 – 3.000 GW of PV by 2050.
- Deutsche Bank: PV will reach grid parity in 80 % of the global power market by 2017.

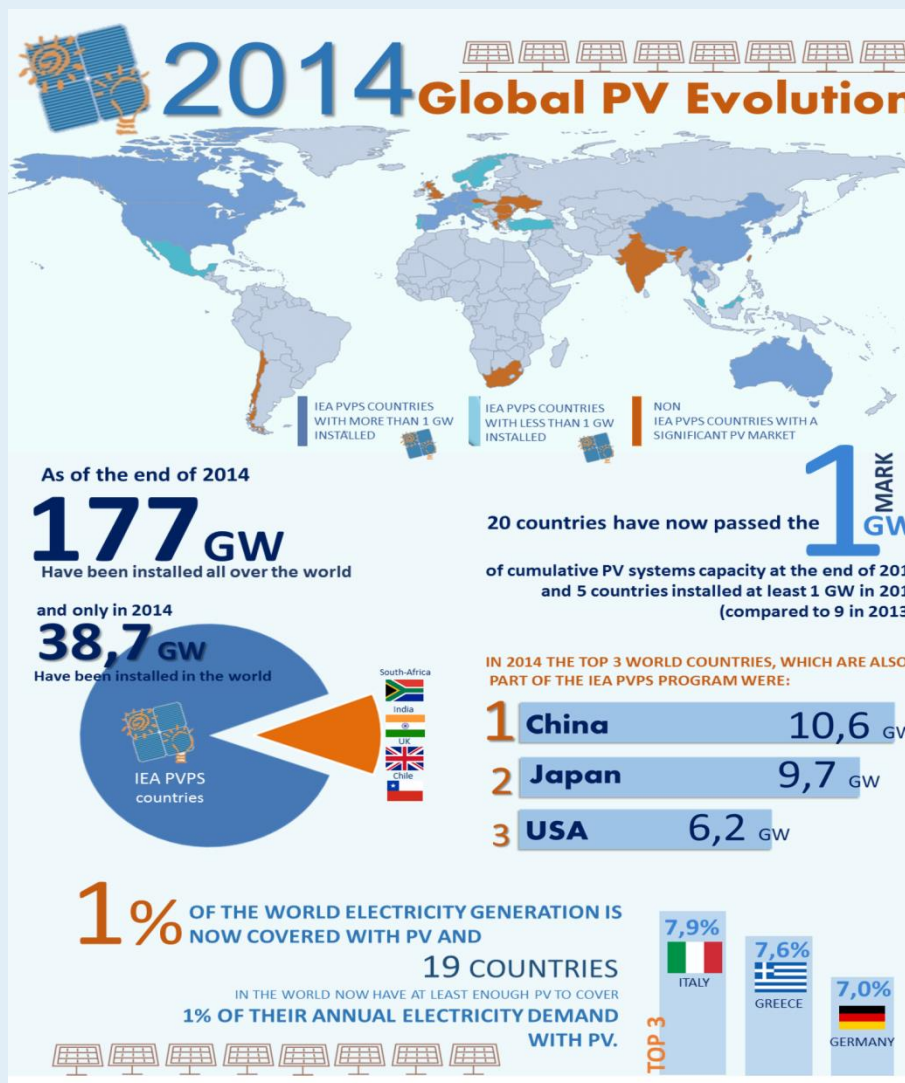


PV and Utilities

- From a baby needing support PV is now growing up
- PV expected to be a major global power technology
- Utilities – today responsible for power – are crucial actors
- The role of utilities is very different from region to region: liberalized markets to monopolies



PV Market Development





Recent Key Numbers for Utility Scale PV

- RSA, Juwi: 558 kW (track.) @ \$c 7,46/kWh
- Dubai, ACWA Power: 200 MW @ \$c 5,98/kWh
- USA, First Solar: 100 MW (TF) @ \$c 3,84/kWh

- **Why this trend? Not only falling cost of PV**
- Optimized EPC
- Reduced soft cost
- Cheaper financing



To days workshop aims at:

- Introducing IEA PVPS to APAC utilities, regulators and authorities as a reliable resource on PV information
- De-mystifying PV for utilities
- Create a dialogue between PVPS and APAC utilities on issues where needed
- Encourage APAC countries interested in PV to join the IEA PVPS



Workshop targets

- Present a global overview of PV
- But more important:
- Address the issues APAC utilities, regulators and authorities encounter when facing PV's
- Hopefully establish a more long term dialogue to help solving same issues

Thank you for your attention
and wishing you all a
rewarding workshop

- <http://www.iea-pvps.org>
- <http://www.iea.org>



Peter Ahm, PA Energy Ltd. Denmark

PVPS Executive Committee

ahm@paenergy.dk