Press Release

International Energy Agency Photovoltaic Power System Programme (IEA PVPS) Publishes Its 23rd "Trends in Photovoltaic Applications" Report.

IEA PVPS published its 23rd "Trends in Photovoltaic Applications" report on 3 December 2018. This unique report provides official and accurate data about the photovoltaic (PV) market, industry, support policies, research activities and the integration of PV into the power sector in the 28 countries reporting to the IEA PVPS Programme, plus a reliable estimate of the other most important PV markets. In a market where the main market driver remains the Feed-in Tariffs, Asia has taken the lead in PV development.

Paris, France, 3 December 2018 – 2017 has been once again a record a year for the PV market. For the first time, 99 GW of PV power systems have been installed globally in one year, bringing the total installed capacity to over 403 GW and confirming the annually, newly installed PV capacity as number one over all other energy technologies.

Once again, a key driver of this remarkable result has been the development in China (53,1 GW of installed capacity in 2017), followed by the United States (10,7 GW, down), India (9,1 GW up), Japan (7,5 GW, stable) and, for the first time among the top five PV countries, Turkey (2,6 GW).

This picture confirms that – besides the key role that China plays – an important part of the growth comes from emerging PV markets, namely in the Asia-Pacific region. However, the main outcome from 2017 is the slower growth outside of China, with most other key markets being either stable (Japan, Europe), or declining (USA). Only India grew significantly, next to Turkey and Brazil). Nine countries installed more than 1 GW in 2017 and 27 countries reached a cumulative capacity of 1 GW and more. The concentration of close to 90% of the market in 10 countries remains a concern, as 2018 has shown with the impact of the Chinese decision on 31 May 2018, to control its market. On the electricity cost side, record PPAs have been announced at below 2 USDcents per kWh, confirming the increasing competitiveness that PV can reach under the best conditions.

With further cost reductions to be expected in the coming years, this trend is very likely to continue, bringing PV as the cheapest option for electricity generation. However, it is equally important to point out that average costs of PV electricity are somewhat higher and often still strongly depend on the regulatory framework conditions. Not all projects can deliver below 2 USDcents. In the same way, system prices remain very diverse and the low module prices seen in competitive tenders are not a reality in all segments and all countries.

Overall, the policy driven conditions globally tend to diversify, in particular for smaller systems, where self-consumption and storage options are gaining importance. While policy remains relevant, a shift to market-oriented framework conditions can be observed in many countries. As part of this trend, new business models are being introduced leading to further diversification. This can be seen as a sign of maturity, which opens new perspectives for massive PV development.

As a last number to remember, at the end of 2017, PV is estimated to provide about 2,5% of the global electricity supply and in about 30 countries, PV contributes between 1% and 10% to the electricity consumption. Looking at the past ten years, these developments remain astonishing but are still too low to efficiently fight the threat of climate change. PV now needs to be recognized as one of the few key available options for massively transitioning to a low carbon future.

Download the full report here: http://www.iea-pvps.org/index.php?id=trends

About the "Trends in Photovoltaic Applications" Report

This unique report is the 23rd edition of its kind. It has been prepared by IEA PVPS Task 1, largely on the basis of National Survey Reports provided by Task 1 participating countries. The data presented in the report are official data that were validated by national governments. To obtain electronic copies of this report or information on other IEA PVPS publications please visit the IEA PVPS website: www.iea-pvps.org .

About IEA PVPS

The IEA Photovoltaic Power Systems Programme (PVPS) is one of the technology cooperation programmes (TCP) established within the IEA and, since its establishment in 1993, the PVPS participants have been conducting a variety of joint projects in the application of photovoltaic conversion of solar energy into electricity. The 32 PVPS members are: Australia, Austria, Belgium, Canada, Chile, China, Denmark,, the European Union, Finland, France, Germany, the International Copper Alliance, Israel, Italy, Japan, Korea, Malaysia, Mexico, Morocco, Netherlands, Norway, Portugal, SEIA- Solar Energy Industry Association, SEPA-Smart Electric Power Alliance, Solar Power Europe (formerly EPIA), South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, and the United States of America.

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