New optimism

"Global PV Markets" conference at the Intersolar Europe: while PV is booming worldwide, experts warn of new hurdles in Germany.

Photo: Solar Promotion GmbH

While Europe is only slowly recovering, new photovoltaics markets are opening up globally. SolarPower Europe, which used to be very cautious with its forecasts, is now expecting a newly installed capacity of 97 GW globally for the year 2020.

For many years the market forecasts of the European Photovoltaic Industry Association (EPIA, now SolarPower Europe) were very conservative. Not any more, however: "This year we are more optimistic than in the past," says Oliver Schäfer, President of SolarPower Europe, at the "Global PV Markets" conference held on the day before the Intersolar Europe exhibition in Munich, Germany. Last year the association had still only forecast a newly installed global PV capacity of 67 GW for 2019 in its medium scenario; now it is 84 GW. For 2020 the medium scenario now arrives at 97 GW, a figure comparable with the forecasts of the market researchers IHS and GTM Research, which expect approx. 95 GW.

France will take over from Great Britain

Schäfer stresses his optimism for the birthplace of the worldwide solar boom: "Europe will come back for sure. It will significantly grow," explains the head of the association. Gaëtan Masson, Director of the Brussels-based Becquerel Institute and co-author of the market scenarios by SolarPower Europe, was somewhat more cautious: "We will see the market growing again slowly, with the chance of accelerating at the end of the decade."

There is no lack of reasons to be sceptical. While it is true that Great Britain will still top the European PV market in 2016, and the estimations of 1.7 to 1.9 GW of newly installed capacity made by Saif Islam from EuPD Research are probably too low, given that the first quarter saw 1.55 GW installed before the cutbacks in support for ground-mounted systems, the outlook for the British PV market from 2017 onwards looks on the bleak side.

Although the former leader Germany is scoring points with high growth rates in battery storage, new adversity is also looming for photovoltaics here. "Currently the main business model is to avoid surcharges and grid-fees. We will have changes of these tariffs and fees," warns Patrick Graichen, Executive Director of the think tank Agora Energiewende. "German politics still does not believe in high solar penetration," he says. The call for phasing out coal-fired power plants, which came several times at the conference, is hardly being listened to by politicians.

In France there are grounds for cautious optimism, however, after the government announced an investment plan for renewable energy spanning several years (Programmation Pluriannuelle de l'Investissement). It envisages a cumulative installed power of between 18.2 and 20.2 GW of photovoltaics by 2023, which equates to an annual addition of 1.5 GW – assuming that a few bureaucratic hurdles can be overcome. "The new target would establish France as one of the major markets in Europe," says Sven Rösner, Deputy Managing Director of the Franco-German Office for Renewable Energies.

New impulses from Mexico

The drivers of worldwide PV growth obviously lie elsewhere. For the USA, GTM Research expects a record expansion of 14.5 GW in 2016, almost a doubling over 2015. The massive leap is due to those projects which were planned in the expectation that the solar investment tax credit would be lowered from 30 % to 10 % as of 2017. Although the U.S . Congress actually extended the tax credit to the end of 2019 and put off the reduction to 10 % to 2023 via a smooth transition, GTM still expects an initial reduction from this temporary boom in 2017, to then be followed by further market gains.

In Central and South America, new impulses for growth are coming especially from Mexico. After the long-awaited deregulation of the energy markets was passed at the end of 2015, the first state-held auction for electricity from renewable sources brought in a record result for photovoltaics; solar power plants with a total capacity of almost 2 GW got the go-ahead. The good thing about this: the bidders were able to put in their bids in US$/MWh, making them immune to volatility of the Mexican peso. In the private sector, potential industrial customers are still shying away from long-term power purchase agreements with solar farm operators, however, because they first wish to see the way prices develop on the market, reports Joscha Rosenbusch, Principal Advisor at the German Institute for International Cooperation (GIZ) in Mexico.

There was hardly any news at the conference on the two largest PV markets in South America, namely Chile and Brasil. Guillermo Soto Olea, Head of the Public Solar Roofs Program at the Chilean Energy Ministry, only made the broad statement: "The utility-scale PV market is very attractive and will remain like that." Soto Olea does see a large potential in Chile for PV systems for self-supply, but the market is still immature due to insufficient information and inadequate financial conditions.

In Brazil, solar power plants with a total capacity of 3 GW have already won the bidding at auctions, but there are problems with the weakening exchange rate of the real and the local content requirements for PV components, confesses Camila Ramos, Managing Director of the São Paulo-based advisory firm Clean Energy Latin America. The potential, also for distributed PV in Brazil, is still "great", however.

Pakistan and Iran are awakening

The real heavyweights of the global PV market are currently China and Japan; in 2015 over 50 % of new installations were down to the two countries, according to figures from the Becquerel Institute. In China, there are signs that the strong growth is slowing down, however. Unofficially, there has been a government target of 150 GW of cumulative PV capacity by the end of 2020, but Frank Haugwitz, owner of the consultancy Asia Europe Clean Energy (Solar) Advisory in Beijing, has heard that this is to be reduced to 110 GW, mainly due to massive overcapacities on the grid from new coal-fired power stations. The figure is merely a guidance, though, says Haugwitz; he assumes 126 to 136 GW in his scenarios. This equates to an annual expansion of between 16.6 and 18.6 GW.

In Japan, the PV market is even going to shrink. After 10.8 GW last year, Izumi Kaizuka, analyst at RTS Corporation, expects a volume of 8 to 10 GW in 2016, between 6 and 7 GW in 2017 and only 3 to 4 GW in 2020. The government wants to accelerate cost reduction through tendering, which has not advanced as expected, says Kaizuka. Details are as yet unclear, however.

New growth may come from the emerging markets in Asia. Pakistan, for example, has appeared on the PV map thanks to a couple of large projects and has installed 450 MW so far. The demand in the country is huge; Nauman Khan, Vice Chairman of the Pakistan Solar Association, puts the power shortfall last year at 7.7 GW. Since the end of 2015, a net metering policy has also been in place, but there are still problems with sub-standard products and poor design, says Khan.

The PV market in Iran is still really young, and has become interesting for foreign investors through the lifting of international sanctions in January 2016. The country wants to install up to 1 GW by 2020 and is offering a feed-in tariff over 20 years, which will be adjusted for inflation and exchange rate fluctuations. Reza Shaybani, Chairman of the British Photovoltaic Association and Iranian-born, does still see problems with financing PV systems through banks, but is optimistic overall: "In the Middle East, they talk a lot, but do very little. In Iran, they make cautious announcements, but work a lot."

Johannes Bernreuter

Further information:

Agora Energiewende: www.agora-energiewende.de/en
Asia Europe Clean Energy (Solar) Advisory: www.aecea.com.de
Becquerel Institute: http://becquerelinstitute.org
British Photovoltaic Association: http://bpva.org.uk
Clean Energy Latin America: www.celaexperts.com/#!home/cevq
Franco-German Office: http://enr-ee.com/fr/accueil.html
EuPD Research: www.eupd-research.com
GIZ: www.giz.de/en/worldwide/306.html
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