

Photo: IBC Solar

IBC Solar installed this 237 kWp rooftop array at a hospital in Lodz in late 2014, making it the largest rooftop installation in the country.

Small steps to solar progress

Poland: The country's revised Renewable Energy Sources Act has taken a slow, considered approach to future clean energy generation, but will soon launch an auction system that could prove attractive to solar PV developers, writes Piotr Mrowiec of law firm Rödl and Partner.

After its adoption by the Polish parliament in February, the Renewable Energy Sources Act (RES Act) came into effect on 4 May 2015. The legislative work on the act took three years – a scandalously long period of time – and had several spectacular twists and turns, involving fundamental changes in the assumptions on the rules of support for renewable energy production in Poland, before it was officially adopted.

Now, investors are divided in their investment strategies. Some of them are in a rush to have their investment projects ready by the end of the transition period (that is, by the end of 2015) so as to remain covered by the present quota

system. Others, such as investors in PV energy who know that they have little to no chance of accomplishing their projects due to insufficient support under the present system, are awaiting the first auctions. The auction system introduced by the RES Act will become effective in Poland from 1 January 2016.

Long path to new support model

The first version of the RES bill was originally put forward on 23 December 2011. Right up until November 2013, its subsequent versions assumed that renewable energy producers would continue to be supported by means of green certificates, but the rules of the support mechanism

were to be modified so that not all producers were to receive one certificate for each MWh of energy. Instead, the number of certificates to be granted was made dependent on the type of energy production technology.

Cheaper technologies, such as onshore wind energy, were to receive 0.9 certificates for each MWh. Considerably less support was envisaged for energy production by so-called biomass co-firing technology – at just 0.3 certificate for each MWh. More expensive technologies, such as offshore wind farms, biogas power plants or solar PV installations were to enjoy more support. For solar technology, as many as 2.75 certificates



Photo: Pawel/Flickr

Under the first version of the RES bill, Poland's green certificates were weighted depending on the type of renewable energy technology used.

were planned for each MWh of green energy produced by PV systems.

November 2013 saw a complete change when the Ministry of the Economy presented an entirely new support model – the auction system. The Polish government made no secret of the fact that it had no interest in making the support dependent on technology in such a way that more expensive technologies would receive greater support than cheaper ones so as to ensure similar profitability to all green energy producers. The legislation stated that it wanted to keep the financing at the minimum level required to meet the target of a 19% share of renewable energy in the energy mix, which was the promise Poland had made to the EU.

Rules of the auction system

The support model, which has been termed the auction system in the RES Act, will go live on 1 January 2016. All renewable energy investment projects that do not begin energy production before the end of 2015 will be excluded from the system of green certificates, which will be gradually phased out anyway, and will only be allowed to participate in the so-called “electricity auctions” to be held for all renewable energy tech-

nologies once a year. At the same time, the RES Act allows for additional auctions in case there are not enough bidders for the entire energy volume planned to be sold during the first auction.

Traded at the auction will be electricity that a bidder can produce and sell during a period of 15 years. Bidders will be allowed to place one irrevocable bid in an electronic auction system.

Of course, they will have no information about other bids. This system is therefore more like a tendering procedure than a typical Dutch auction. The key information to be presented in the bid includes, among other things: 1) the volume in MWh of electricity the bidder undertakes to produce during the period of 15 years, and 2) the price for 1 MWh of the electricity offered.

In order to avoid excessive support for individual technologies, the Ministry of the Economy will set, by way of regulation and no later than 60 days before the date of the auction, the so-called reference prices for each technology. The reference price is the maximum price for electricity offered at the auction. Any investor or developer that exceeds this price is automatically disqualified from the auction. The reference prices will be

different for wind energy (separate even for onshore and offshore), biogas and PV. They will also depend on the installation's output – prices for energy from installations with a nominal output of up to 1 MW will differ from prices for energy from larger installations.

This is because there will be separate auctions for installations with an output of up to 1 MW and for those with a larger output. It is a very significant fact because otherwise smaller solar PV installations would have virtually no chance to compete with large wind farms. Of key

i AT A GLANCE

- Poland's new Renewable Energy Sources Act offers a chance for solar PV developers under the soon-to-be introduced auction system.
- Alongside the auction, a green certificate quota program is also currently in place, with solar PV grouped with other 'expensive' clean technologies.
- Smaller renewable energy installations below 1 MWh will have one-quarter of the energy volume to be auctioned ringfenced, which will benefit some solar producers.
- The government is expected to set a purchase price of around \$129 per MWh of clean energy produced by these small installations.

Photo: Greenpeace Polska/Flickr



A recent demonstration by Greenpeace Polska urged the government to provide more backing to renewables - a call that appears to have been heeded in the form of the new RES Act.

importance is the provision of the RES Act that guarantees that at least one quarter of the energy volume to be auctioned will be offered at auctions for smaller installations.

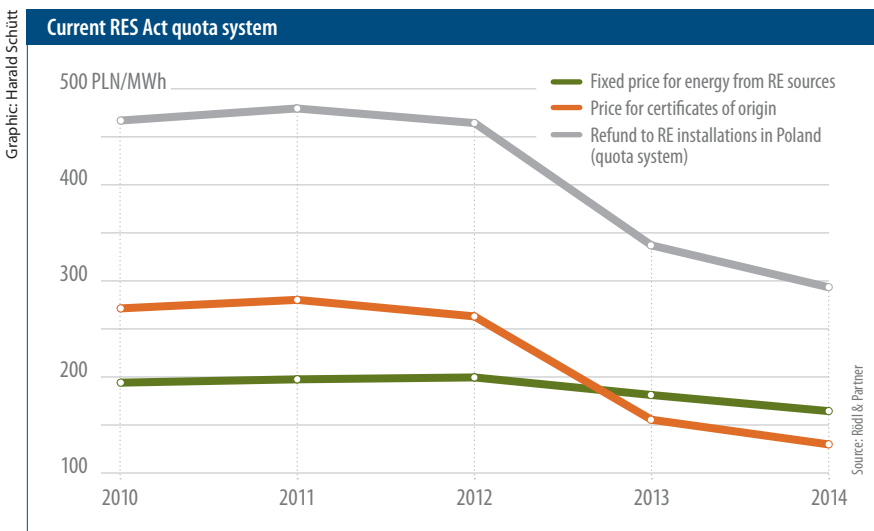
To ensure that auction winners indeed begin with their energy production, the Polish legislator has set an extremely high entry criteria for prospective auction participants. To qualify for the auction, an installation project must have a

valid construction permit, and an agreement on connection to the power grid must be concluded or conditions of connection to the power grid must be issued for that project. Additionally, each participant must pay a security deposit of PLN 30.00 (US\$8.23) for each kW of the installation's output before joining the auction. The deposit will be returned to energy producers who were unsuccessful with their auction bid within 14 days of

the auction closing date, and to those who won the auction within 60 days of the date from when their renewable energy installation generates electricity for the first time. The RES Act also sets the time frame for the winners to start energy production – in the case of PV installations, this is within 24 months of the auction closing date.

First auctions scheduled for 2016

According to Article 210 of the RES Act, the date of the first auctions will be announced no later than 90 days after the date on which the provisions introducing the new auction system enter into force, that is, after 1 January 2016. This means that the dates of the auctions should become known by the end of March 2016. The auctions must be held no later than 30 days from their announcement. Thus, the first Polish electricity auctions are expected to take place in the first quarter of 2016. The Ministry of the Economy will set the reference prices for each technology no later than 60 days before the auction, i.e. by the end of February 2016. Crucial for the auction participants will of course be the decision on the electric-



ity volume to be traded. The larger the volume, the greater the chance to win the auction, even at a price close to the reference price. The RES Act stipulates that the Council of Ministers will determine by 31 October every year the maximum electricity volume to be auctioned by owners of installations with an output of more than 1 MW in the next calendar year. This figure will include the quota of energy produced in installations with an output of less than 4,000 MWh/MW/year, that is, installations producing electricity from volatile energy sources, such as renewables like wind or solar power. The Minister of the Economy will issue similar regulations regarding installations with an output of up to 1 MW by 30 November every year. The regulations on the first auction in 2016 will have to be issued by the end of May 2015 and June 2015, respectively.

Regulation drafts presented

The Ministry of the Economy has already presented the drafts of both regulations. The regulations provide that in 2016 the total bidding volume for installations with a nominal output of over 1 MW will be 50,449,950 MWh, of which 30,907,350 MWh are to be purchased from producers of renewable energy from volatile energy sources.

The value of the energy to be auctioned amounts to PLN 18,201,331,716 (\$5 billion). The quotient of the energy value and the energy volume is the price that the state is willing to pay for 1 MWh of green energy produced in large installations. This price is approximately PLN 360.00 (\$99).

As for small installations, the Minister of the Economy has set the total bidding volume at 12,612,488 MWh and its total value at PLN 5,927,933,456 (\$1.62 billion). Thus, we may assume that the state intends to support small installations by purchasing their green energy for PLN 470 (\$129) per 1 MWh.

Obviously, the final prices will depend on the reference prices, the energy volume and the type of installations taking part in the auctions.

The auction system is not an ideal solution for more expensive technologies, such as PV. However, it should be pointed out that a large portion of electricity is to be purchased at auctions held for installations with an output of up to 1 MW, which are to receive fairly decent support, taking into account the low prices applicable under the current quota system (see chart on p. 128). In this segment, PV installations can quite successfully compete with both biogas installations and expensive hydropower plants, which unfold their potential when operating at higher capacities. Therefore, it seems that PV projects stand a good chance to develop and survive under the auction system. **S**

Piotr Mrowiec

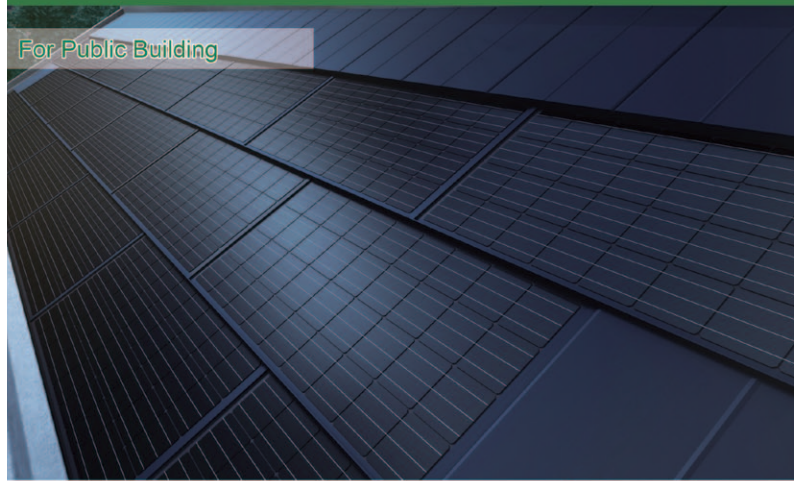
Photo: SCA



SCA's plant in the Polish city of Olawa is powered entirely by green energy.

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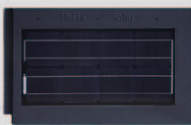
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