

Photo: Solar Solutions

The Exasun black glass-glass back contact PV module, which is produced in the Netherlands, presented at the Solar Solutions trade show.

Strong and stable

Dutch PV opportunities: The Netherlands has been a latecomer to the renewable energy table. Still known as a gas-land, the Netherlands is among the bottom three worst performing countries of Europe when it comes to clean energy. But the country has found the way up and is creating the conditions for a stable and upward trend.

The advantage of deferral has given the Netherlands, a latecomer to the renewable energy table, the edge in being able to learn from other countries' past mistakes. Along with the urgent need to invest in clean energy in order to meet EU demands, the Netherlands is creating a stable market for the coming years.

The Dutch solar market has been growing at a steady pace for the last five years. It is foreseen that the market will remain stable and grow until at least the end of 2023. The net metering system will be in place until 2020 as guaranteed by the Dutch minister of Economic Affairs. An intense debate has been going on in order to maintain the current net metering sys-

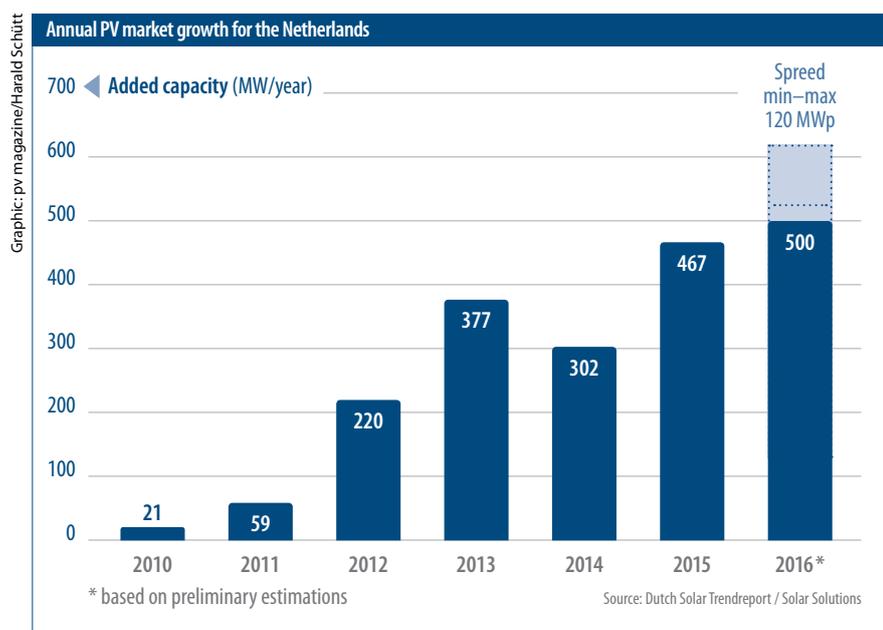
tem after 2020. Branche organizations who represent installers, home owners, housing corporations, consumers, farmers, and many more all want to maintain the current system. They believe this is necessary since the Netherlands is still way off target with its renewable energy goals. The net metering system is successful and easy to understand to end users and they fear that any change to a system or even a debate for fear of uncertainty will slow growth of a market that is still fragile and has just awoken.

The Dutch parliament passed a resolution in December 2016, which stated that net metering will continue until the end of 2023. Also the Chairperson of the

national Agreement on Energy for Sustainable Growth, former minister Ed Nijpels, has said that changing the net metering system after 2020 should not be on the table for debate. His argument is that every kilowatt hour is needed to meet EU targets. The Dutch minister of economic affairs (whose party also passed the resolution to continue net metering until the end of 2023) will make his final decision this spring (possibly after the upcoming elections in March).

Installed capacity

On January 25 the annual Dutch Solar Trend Report was presented during the leading Dutch conference on solar energy,



the Solar Business Day. The Dutch market had a total of 2 GW installed at the end of 2016 (about 1.5% of total Dutch annual electricity consumption).

The annual Dutch solar market is divided up into about 50% to 60% residential as of 2016, and the rest consists of commercial projects like the rooftops of agricultural companies, industry, and business parks, and open field projects. The market share of commercial projects is growing. For these commercial projects subsidies are available (called SDE+). And since the EU 2020 and 2023 targets are still far away, the Dutch government is investing ever larger sums in renewables. For 2017 alone there are €12 billion available for large commercial sustainable energy projects and for PV projects larger than 15 kW. At the beginning of 2017 the largest commercial solar park in the Netherlands (30 MW) was opened, which is a clear sign that the Netherlands has found its way up on the clean energy ladder.

Trends in the Dutch market

The Dutch market chain consists of companies active as (process) equipment manufacturers, end-product manufacturers, wholesalers, installers and system-integrators, and non-technical services. Overall, 2,100 companies are active in the Netherlands, employing around 9,000 full-time workers and creating a total turnover of €2.5 billion.

There is a general consensus about the future growth of the Dutch solar market. There is already talk about reaching

1 GW of annual newly installed capacity in either 2017 or 2018. If net metering stays intact until the end of 2023, this will slow the development of the storage market. Still, many solar professionals remain strongly positive about the energy storage market and expect growth. Many companies will take storage products into their portfolio over the upcoming two years. From the Dutch Solar Trend Report we know that the largest demand for knowledge in the Dutch market is for subsidies and government policy, and on the other side information about energy storage possibilities.

This 'hot' storage market will grow into two markets: First is the utility-scale market. The business case for utility purposes is in ramping of wind farms and coal and gas-powered plants, as well as frequency regulation for the transmission systems operator and off-grid systems like on islands and coastal applications. The business case for residential storage applications can be found first in self-consumption, second in lowering capacity tariff in the fuse box, third in backup systems (e.g. alarm-systems),

and finally in over voltage protection and wanting to be truly energy independent. Many battery companies have already become active in the Dutch market in order to build a network of suppliers and installers and getting to know this market.

MIP and Dutch customs

Another defining aspect of the Dutch market is the import of PV panels through the harbor of Rotterdam (the largest harbor in Europe). In the Netherlands 3 GW (11.2 million PV panels) was imported, with a total value of €1.5 billion. The most striking trend in these imports is the fact that in January 2016, 63% of imported PV panels originated from China. Eleven months later the share of PV panels coming from China was down to 6%! This change is caused by the European Minimum Import Price regulation. Worldwide, panel prices have been declining and the MIP remained at €0.56/W until the end of 2016. Most production has been moved to Vietnam with also Malaysia and Singapore on the rise as countries of production.

Growing Belgian market

For many years, the Belgian market outpaced the Netherlands. Unfortunately due to government policy the Belgian market came to a screeching halt in 2013. The result, as seen in many European countries due to start-stop policy of governments, has been a painful loss of work and many bankruptcies. Recently, the solar market has gained traction in Belgium, although at a slow pace. With Belgium slowly getting on its feet, several Dutch companies are moving into Belgium, mainly in the Flanders region. And with only one solar trade fair in the Benelux region remaining, namely Solar Solutions, many Belgian installers, housing corporations and large companies oriented on solar energy come to Solar Solutions close to Amsterdam. ♦ Rolf Heynen



ABOUT THE AUTHOR

Rolf Heynen is the Director of Solar Solutions international trade fair (upcoming March 22 & 23, the Solar Business Day conference and author of the annual Dutch Solar Trend Report. His company is also active in LED lighting, energy storage, district heating, consulting, and market research. Heynen holds degrees in both electrical engineering and political science.