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Snapshot of spot market for PV modules – quarterly report Q3 2010

pvXchange, Berlin, Germany

ABSTRACT

Solar enterprises will each be faced with the occasional surplus or lack of solar modules in their lifetimes. In these instances, it is useful to adjust these stock levels at short notice, thus creating a spot market. Spot markets serve the short-term trade of different products, where the seller is able to permanently or temporarily offset surplus, while buyers are able to access attractive offers on surplus stocks and supplement existing supply arrangements as a last resort.

Those eagerly anticipating rising or falling prices will be disappointed on reviewing the figures for the third quarter in comparison with the two previous quarters. In Q2 we saw the descending prices of Japanese modules on the spot market. For the same period, Chinese module prices shot up, while the European module prices stood still. At the end of Q2, we were told by many producers that new sales records were reached. But what effect did the actions of July 1st have, the date when Europe's biggest market, Germany, cut percentages in the FiT? The price for PV modules has effectively frozen, with only European manufacturers seeing small weekly decreases in their module revenues.

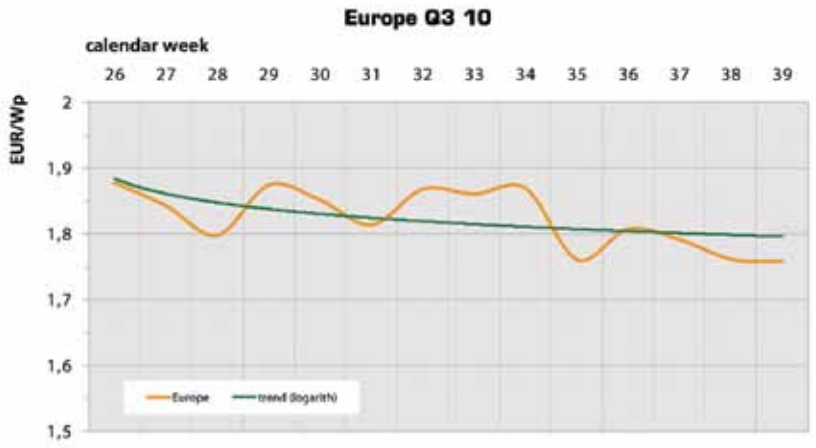

Figure 1. Development of module prices for modules produced by European manufacturers from July to beginning of October 2010.

> "Most players in the business expected demand for solar panels in Europe's biggest market to go down in July."

International demand is still high, as can been seen by the amount of deals traded on pvXchange in Q3. Another 50MW will go from one hand to another hand in these three months. The reason behind this jump is that most players in the business expected demand for solar panels in Europe's biggest market to go down in July. Many companies set their focus on multinational project portfolios for the second half. In addition to Italy, France and the Czech Republic are proving to be the most attractive photovoltaic markets in Europe. In July, therefore, a significantly larger portion of the items traded on the spot market was sold in Italy and later in the Czech Republic.

August saw the introduction of new European brands in Germany, which has led to a drop in the average price of European solar modules. Crystalline modules from Europe that had been available for €2.03/Wp in January were now costing an average of about €1.85/Wp. Chinese prices reached €1.63/Wp in the last weeks of September. The prices earned by European manufacturers are approaching those of the top producers in China. These manufacturers are responsible for the relatively high average module prices, as strong demand persists for branded modules from China.

After losing nearly €0.10/Wp in Q2, Japanese products showed a significant improvement in performance at the end of the summer owing to a slight increase in prices implemented by the Japanese manufacturers. The rise in the Yen and the steady growth of the domestic PV market

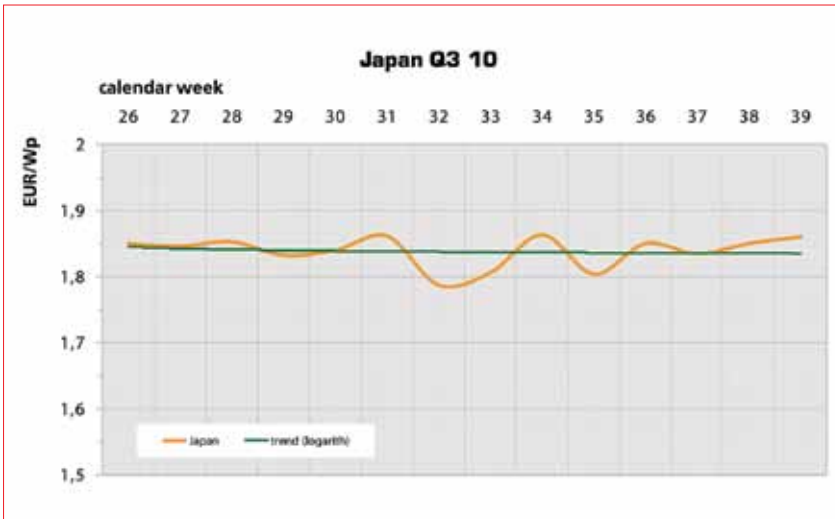

Figure 2. Development of module prices for modules produced by Japanese manufacturers from July to beginning of October 2010.

since the third quarter of 2009 have led to increasing interest and purchases of Japanese-made modules from Chinese and Taiwanese solar cells.

"With the massive demand for wafers for global cell production, the scope for price reductions this year is very limited."

However, there is another reason why module prices are not decreasing at the moment. Wafer and polycrystalline silicon suppliers announced new price increases in September – a result of the huge demand on the commodity market – from US$3.80 to US$4. Furthermore, with the massive demand for wafers for global cell production, the scope for price reductions this year is very limited.

"Crystalline modules still account for at least 80% of global cell production."

Nevertheless, the latest market forecast is more optimistic than ever before. Analysts expect growth of 100% in 2010 (between 14-16GW, depending on the source), and predict that 80% of these new plants will be situated in Europe. China, which could very well take over in the next few years, has been predicted by MS Research to be the global PV market leader by 2014. Installation of plants with a total capacity of 300MW was planned in 2010. Market research firm iSuppli's recent estimate showed that some 580MW of solar power capacity will be built by the end of this year in China. In addition, two incentive programs will ensure that in the next three years, plants with a total of 3GW will be connected to the grid, while further solar incentives are also said to be on the way.

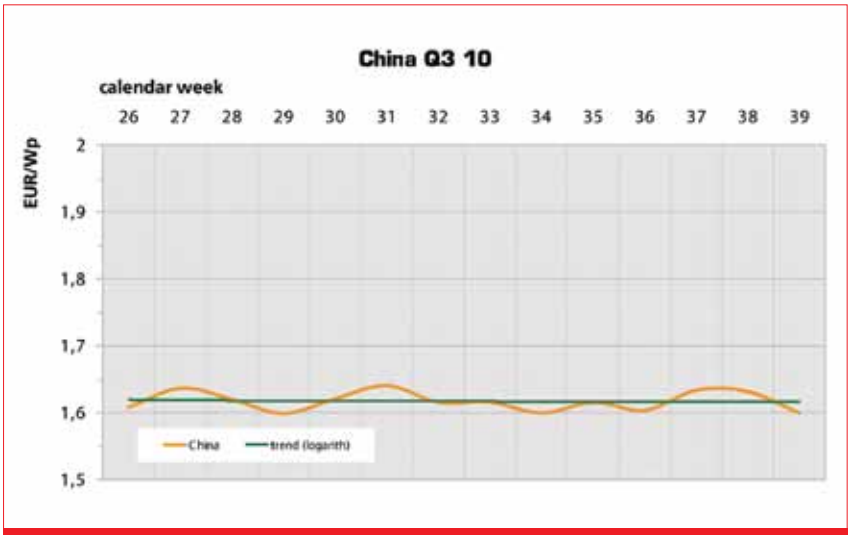

Figure 3. Development of module prices for modules produced by Chinese manufacturers from July to beginning of October 2010.

These price changes are particularly interesting from an analyst's perspective studying the shares of traded technologies produced for the market. Crystalline modules still account for at least 80% of global cell production, followed by First Solar's CdTe modules which, even taking into account the loss of some revenue compared to 2009, are still strong on the spot market. Microcrystalline and amorphous silicon followed at a considerable distance. For these thin-film technologies, the price difference now rests at an impressive €0.40/Wp with similar output efficiencies. Still significantly behind, but exhibiting great potential, are CIS thin-film modules. Those large companies employing this technology type are investing great effort in development, and look set to offer very competitive prices. Despite the further development and growth of the industry, crystalline PV technologies will dominate the market. The thin-film portion will account for approximately 15%, notwithstanding a significant increase in efficiency being achieved at a reasonable cost.

About the Authors

Founded in Berlin in 2004, **pvXchange GmbH** has established itself as the global market leader in the procurement of photovoltaic products for business customers. In 2010, the company will broker solar modules with an output of around 180MW and inverters of around 100MW (AC). With its international network and complementary services, pvXchange is constantly developing its position in the renewable energy market, a market which continues to grow on a global scale. Based in Europe, pvXchange also has a presence in Asia and the USA.

Enquiries

pvXchange GmbH
Obentrautstr. 57
D-10963
Berlin
Germany
Tel: +49 (0) 30 236 31 36 0
Fax: +49 (0) 30 236 31 36 23
Email: info@pvxchange.de
Web: www.pvxchange.com