Snapshot of spot market for PV modules – quarterly report Q3 2008

Continuous monitoring with pvXchange trade statistics

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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.

Introduction

A spot market always shows the up-to-date prices of solar modules, because it does not consider the long-term delivery contracts of the producers. These days, the spot market for PV modules is global, because the short-term satisfaction of local supply deficits is possible with short transportation times and relatively low logistics costs.

pvXchange provides a closed online trading platform for sellers going 'public' with a short-term offer. Other participants of the market can decide if they want to buy the goods at that price, while potential buyers may post their interest and in turn be contacted by interested sellers.

Each issue of *Photovoltaics International* will enable the tracking of spot prices of modules through statistics provided by the pvXchange trading platform.

Prices remain high due to supply bottlenecks

Module supply shortages continue to lead to increased prices. The high price situation is the result of high demand and short supply, especially for the 'most wanted' module brands, which is expected to persist until the end of the third quarter of 2008. The main driver for this shortage over the third quarter has been high demand from the Spanish market as projects rushed to complete prior to tariff cut-off dates at the end of September.

From September onwards, the first signs of a downward price trend may be expected especially for products at the lower end of the price spectrum, particularly from China. The majority of 'cheap' products on the spot market are offered by manufacturers whose products are not yet certified. It is unlikely that we will see price reductions in the highly efficient premium brands and thin-film modules.

The strongly increasing price trend noticed for less well-reputed modules from China was widely stopped in August 2008, which can be interpreted as a first hint at a slight release of the supply situation in the following month (September). It may be expected that Chinese modules will decrease in value from September onwards. After a temporary shortage in July/August, larger volumes are again available, comprising mostly less well-known brands, such as Galaxy, Luxor, E-Ging or Aide. At the same time, Chaori, Yingli and Suntech Power remain the most in-demand modules from China. However, the available supply volumes are quite limited – maximum available is 100kWp.

At the same time, on the pvXchange trading platform, there were very few offers available from European (German) suppliers in August and September, leading to high prices. The availability of high-quality modules on the spot market is still very low – there are very few brands being traded in Germany other than Solar-Fabrik, Schott Solar and Evergreen. In August, some offers were made by Solarworld and Sunways, but these were for very small volumes – mainly just up to 10kWp. Sharp UK is the only non-German European supplier present on the platform.

Among Japanese brands, Kyocera and Sharp continue to be the most important suppliers, with maximum volumes of 100kWp. As is the case with German brands, there are initial signs of a slight price decline setting in from September onwards.

OEM manufacturers such as Zytech, Powerbags and Schosser played a more important role in the spot market during August than in previous months. This higher presence also had an impact on (high) prices, since the products offered were modules bearing European warranties. It seems evident that OEM manufacturers have been earning quite well this year, an observation manifested by higher prices during July/August than were seen at the beginning of 2008.

Prices for thin-film modules are still increasing broadly, especially among economical a-Si module providers (e.g. Kaneka). There remains a very high demand for thin-film modules, especially for new products from Mitsubishi and Sharp, some of which reach prices of an average 2.60€/Wp. The available volumes are almost sold out until the end of the year. Forecasts show that prices for modules of this type will not fall considerably before the beginning of next year. With the possible exception of First Solar, there are as yet no signs that there will be offers available in the range 2.20 – 2.30€/Wp.

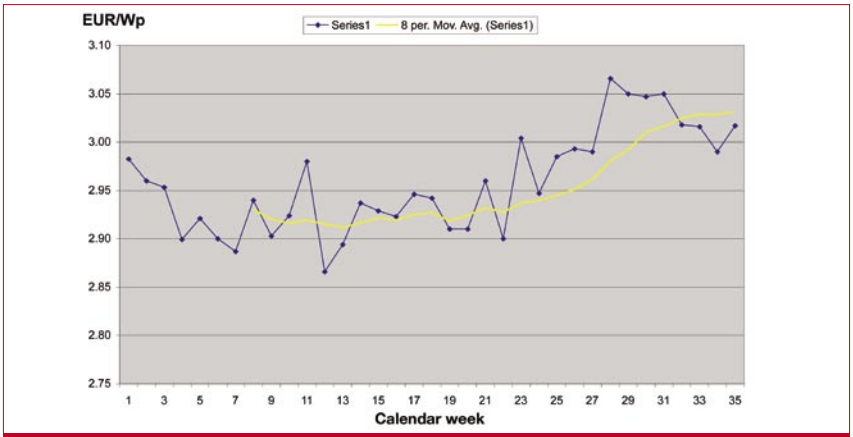

Figure 1. Development of market prices for modules produced by Chinese manufacturers from March – August 2008 (in €/Wp).

First Solar has consolidated its dominant position in the market. Their modules have been reaching new price peaks at the spot market, which in the German context does not enable profitable PV investment terms. It is remarkable to note how much trust lies in this still very new technology.

Leading module manufacturers in the trade period

This section provides an analysis of market shares of the leading module manufacturers, thereby determining those module types that are most popular in today's industry.

Market shares by country of origin

China

Chinese manufacturers like Suntech, Yingli, Chaori and Trina Solar are still gaining ground. Product certification is always a pre-requisite, but new brands like ET Solar, Wuxi Guofei, Solarfun and Jetion are currently gaining traction in the market. Profit pressures in the German PV market and supply shortages make it relatively easy for these new suppliers to place their products. The spot market tracks reductions in products offered by more well-known brands as they lock in longer-term supply contracts. Relatively less-known brands and module types are have been gaining in business since June.

The high return on PV investments in the Spanish boom market in 2008 has enabled very high prices for traditionally cheaper modules from China as supply was stifled and deadlines were imposed. However, a clear distinction must be made between the established Chinese manufacturers with an extended sales structure in Europe on the one hand, and the many newcomers that jumped into the booming PV market only recently. Three groups of Chinese suppliers can be distinguished:

- Manufacturers with an established sales network in Europe and long-term experience in the market achieve the highest price levels up to 3.15€/Wp;
- Manufacturers without well-known brands and international sales structures sell their modules directly from Chinese factories at around 3€/Wp;
- OEM suppliers with European label and warranty terms, that sell modules of the Chinese manufacturers of the second group, reach prices in the middle of the aforementioned prices range of 3-3.15€/Wp.

Japan and USA

Strongly branded modules from Japan, i.e. Sharp and Sanyo, traded at slightly higher volumes than in May or June, while Kyocera and Kaneka showed a lower transaction volume on pvXchange. First Solar has again strengthened its position as the No. 1 product; other US products do not appear on such a large scale.

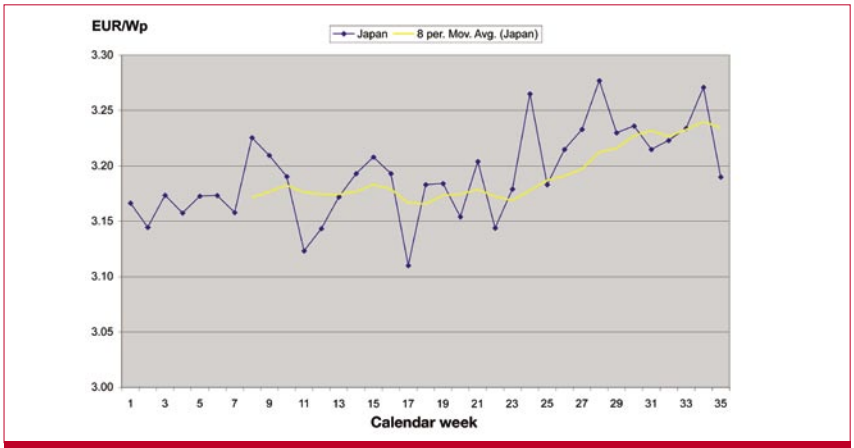

Figure 2. Development of market prices for modules produced by Japanese manufacturers from March – August 2008 (in €/Wp).

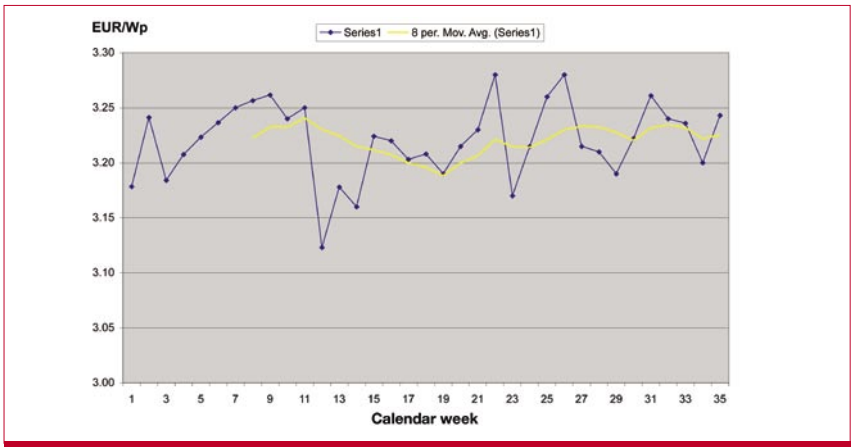

Figure 3. Development of market prices for modules produced by German manufacturers from March – August 2008 (in €/Wp).

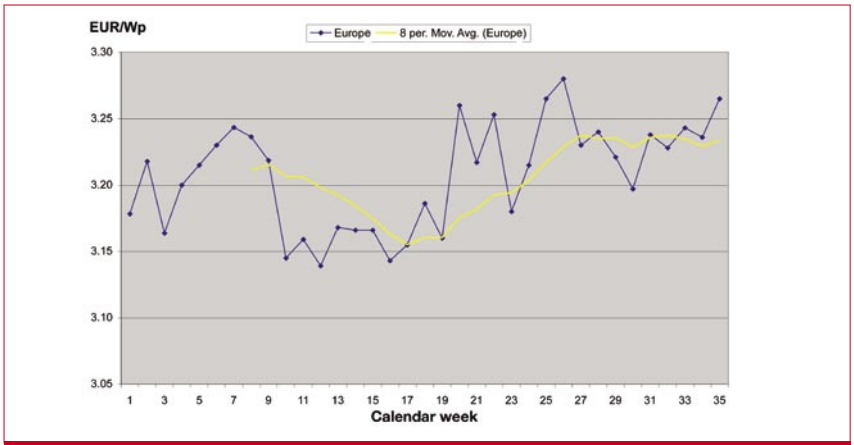

Figure 4. Development of market prices for modules produced by European manufacturers from March – August 2008 (in €/Wp).

Europe

German manufacturers are seldom traded via pvXchange, except for the modules produced by Solar-Fabrik and Schott Solar.

The spot market is less influenced by German manufacturers, as these companies tend to assign large-scale projects to their long-existing customers rather than manufacturers in the Far East. For this reason, German modules often do not even appear on the free market (Solon would be an excellent example).

Optimistic, yet uncertain outlook for 2009

Across the PV industry, there hangs a tentative optimism that in the course of next year the imminent supply shortages on the global silicon market may finally be overcome. Although there are no perfectly reliable figures both for the supply and the demand side available, it seems likely that the massive increase of production capacities will lead to a better coverage of demand than in recent years. The expected

ease of current supply bottlenecks will be leveraged not only by c-Si product innovations (reducing the need for silicon) but also by the increasing use of cheaper metallurgical-grade silicon for crystalline modules and a further growth in the production of thin-film technologies. However, despite these developments, short-term silicon supply shortages may still be possible, thereby holding the potential to affect spot market prices.

Many players also hope for a sudden boost of demand in important emerging markets such as Italy or the USA. Currently, it remains unclear whether the demand in these two regions will fully compensate for the sagging demand in the Spanish market. The expectations from German installation companies for 2009 remain rather pessimistic. It is assumed that the price decrease demanded by the feed-in tariff reduction can only be met by sourcing cheaper Asian products. It is not expected that brand goods will reduce in price due to short-term competitive offers. Local producers continue to state that their future pricing structure is unclear, while some installation companies will prefer to take a decline in output rather than carry the risk of using unknown Asian products.

The price peak for PV modules should finally have been reached in August 2008. A reverse trend will be triggered by a cool-down of the currently hectic demand in the Spanish market, in the wake of the announcement of the new feed-in-tariff law. Since many PV investors in Germany have accounted for this decline, a slump in spot market prices is not yet expected until the beginning of 2009.

Information on the data basis – procurement statistics by pvXchange

The current report applies to the six-month period from March to August 2008. Analysed trade volume so far during the entire period has seen more than 60MWp PV modules sold in 757 transactions on the pvXchange trading platform, which are covered by this volume analysis. This figure does not correspond to the entire transaction volume on the platform, but represents the revenues actually realised by the end of the month.

A complete analysis of the transaction volume is only possible after a certain period of time. Usually, it is undertaken for the year after completion of the first quarter of the following year. Given the current growth trend, we forecast that total trading volume realized on the platform will exceed 100MWp in 2008. Of this, roughly 65MWp will be allotted within the German and Spanish markets. Current issues regarding transactions between Spanish clients and German/international suppliers exist mainly in both parties frequently failing to honour signed contracts. As the current Spanish Real Decreto nears conclusion, it is not uncommon for multiple orders to be placed by various vendors. Many vendors (distributors and manufacturers) are left with undelivered orders, a level of supply and demand unreliability that has caused the market to take large swings between available stock and demanded stock. These irregularities are relieved by the intensive brokerage of pvXchange.

About the Authors

With the idea of an independent procuration of photovoltaic products, pvXchange has gained the market-leading position in the business customer segment. The customer base of pvXchange currently includes more than 2,400 companies from the solar industry. pvXchange offers also a wide range of customized consulting and market research services. This market report is a quarterly synopsis of a monthly updated analysis, made in co-operation by pvXchange and eclareon. The monthly report is available; for details contact the authors.

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