

Snapshot of spot market for PV modules – quarterly report Q2 2008

Continuous monitoring with pvXchange trade statistics

pvXchange, Berlin, Germany

This article first appeared in *Photovoltaics International* journal's first edition in August 2008.

Fab & Facilities

Materials

Cell Processing

Thin Film

PV Modules

Power Generation

Market Watch

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 off-set surplus, while buyers are able to access attractive offers on surplus stocks and supplement existing supply arrangements as a last resort.

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.

Executive summary

Module supply shortages are leading to increased prices. This growth trend, noticed during the first quarter of the year, has been enforced further in recent months. The trend affects all product groups including Chinese manufacturers, and is the result of high demand and short supply, which is expected to continue until the end of Q3 2008.

The continuous and even increasing scarcity of modules creates general market instability. Price trends and availability are being dominated by the Spanish power generation market, with project developers buying the available world supply for Spanish solar parks, essentially rendering the desired 5% tariff reduction in Germany impossible. German project developers that do not capitalise on long-

term supply agreements are incapable of covering their materials needs via the spot market in a profitable way.

A lightening of the current situation is not expected before the fourth quarter of 2008. The market will remain uncertain, in a large part due to the possible developments in the Italian and U.S. markets, as it remains unclear whether the demand in these two regions will compensate for the sagging demand in the Spanish market.

There is an exception to this gloomy outlook. Building in the thin-film sector still yields profits, where there remain high hopes for the performance of the German market. Due to the general shortage, the demand for thin-film modules – especially from market leader First Solar – has increased to such an extent that the spot market prices of 2007 have been topped.

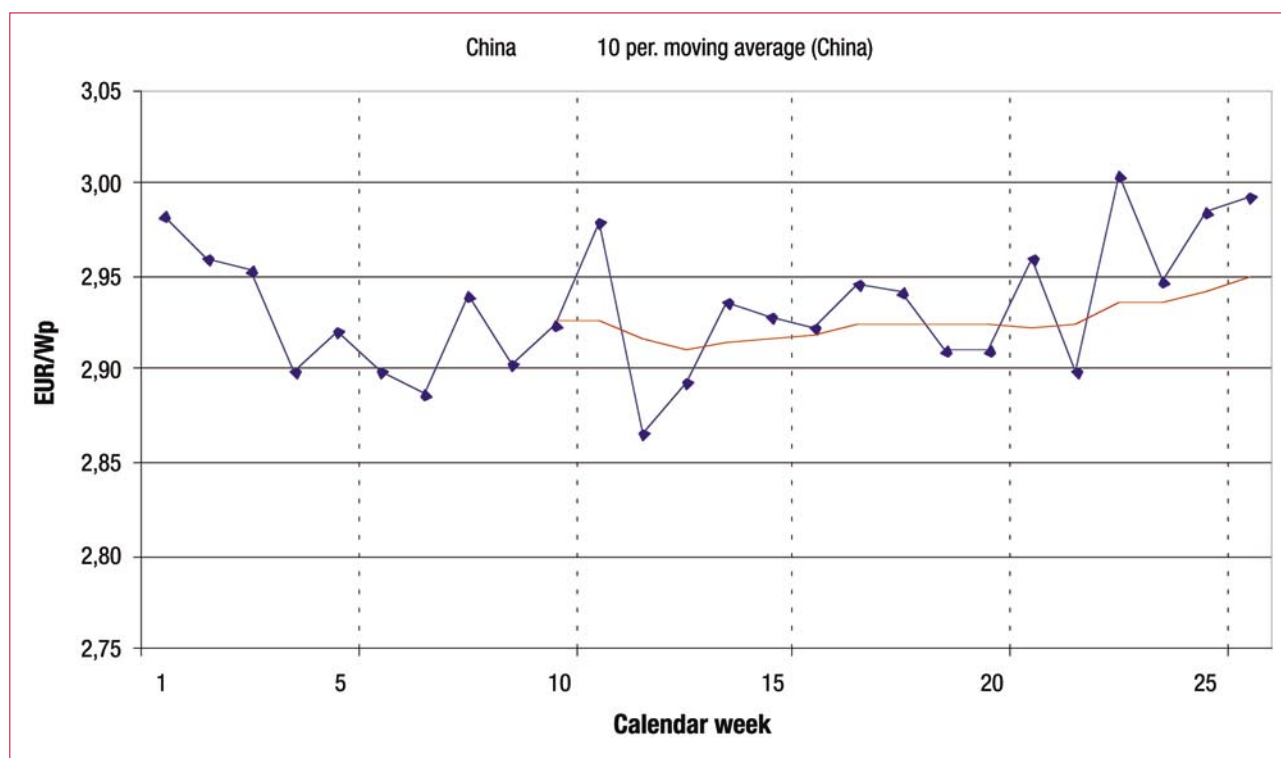


Figure 1. Development of market prices for crystalline modules produced by Chinese manufacturers in the first half of 2008 (in €/Wp).

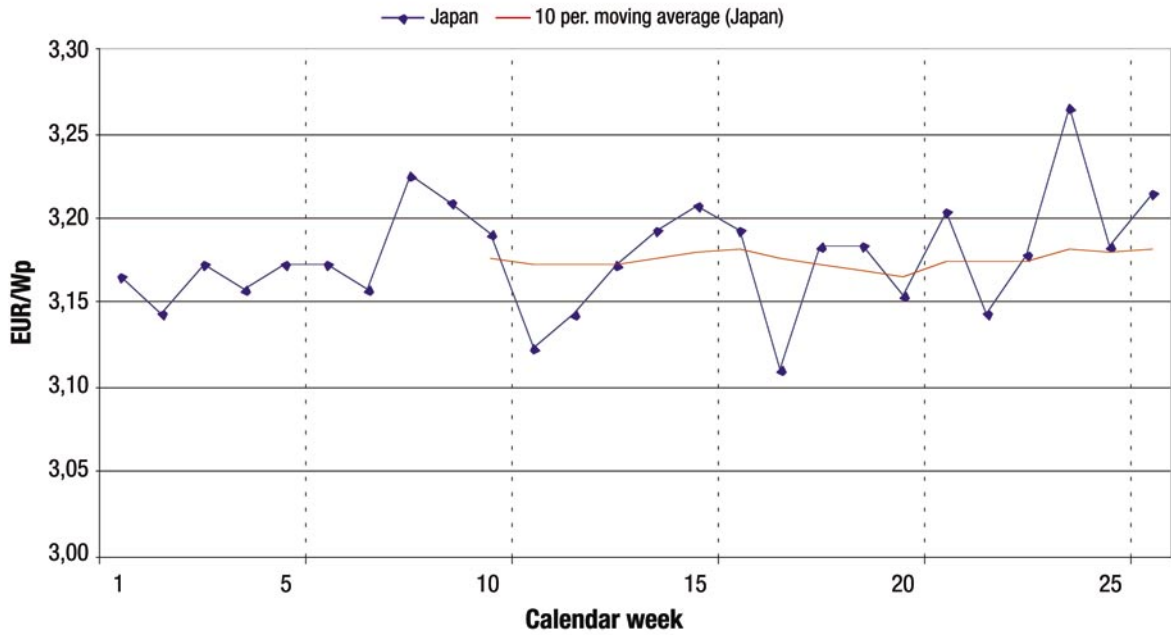


Figure 2. Development of market prices for crystalline modules produced by Japanese manufacturers in the first half of 2008 (in €/Wp).

As a result, a paradox emerges. Due to the increasing price pressure caused by the policy framework in Germany on the one hand, and the high demand for PV modules from Spain in particular on the other hand, the highest price increases happen in the most profitable business sector of highly efficient thin-film modules.

pvXchange market trader trends

Manufacturers from all regions of the industry trade on pvXchange. Trends for

the first half of 2008 suggest the following:

Chinese manufacturers like SuntechPower, Yingli, Chaori and Trina Solar are still gaining ground. A product certification is always a pre-requisite, but new brands like ET Solar, Wuxi, Guofei, Solarfun and Jetion are definitely progressing. The profitability pressure in the German PV market and supply shortages make it easy for these new suppliers to place their products. The spot market offers less- to well-known

brands, while relatively unknown brands and module types were a lot more predominant in June in particular.

With the exception of Sharp and Sanyo, Japanese manufacturers such as Kyocera and Kaneka are showing slightly less of a transaction volume on pvXchange. First Solar has again strengthened its position as No. 1 product; other U.S. products do not appear in the larger manufacturing scale.

As always, German manufacturers are seldom traded via pvXchange,

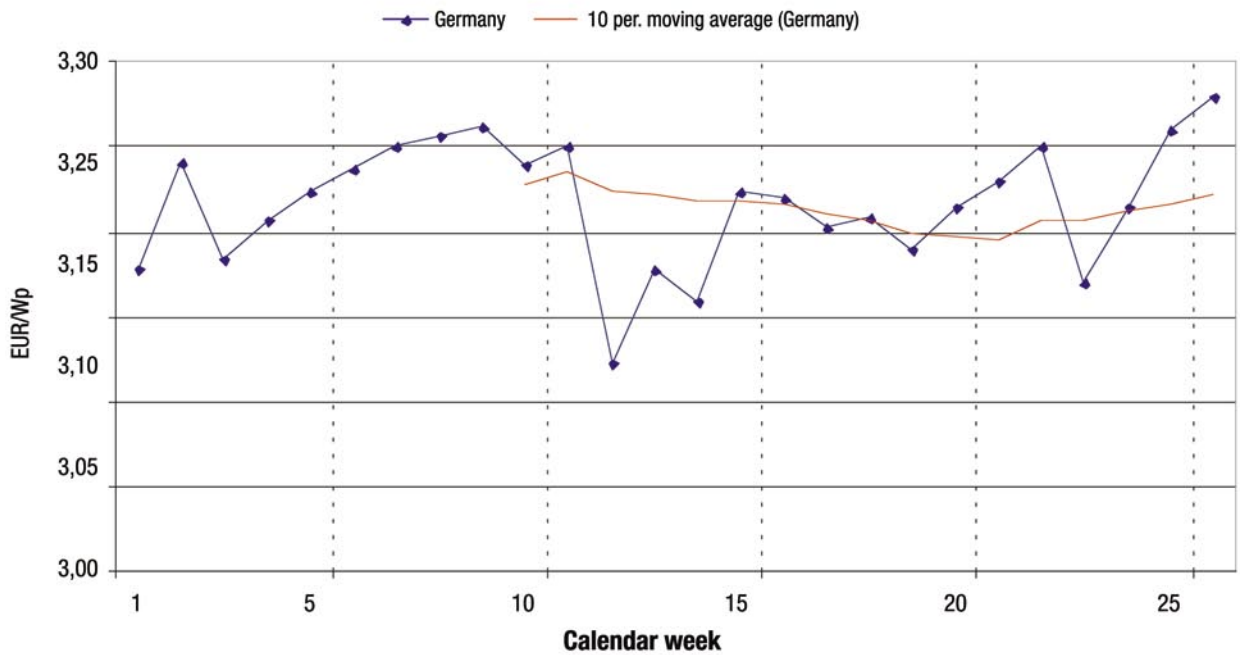


Figure 3. Development of market prices for crystalline modules produced by German manufacturers in the first half of 2008 (in €/Wp).

except for the modules produced by Solar-Fabrik and Schott Solar. The spot market is influenced not only by German manufacturers; these companies tend to assign large-scale projects to their long-existing customers rather than to 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).

Data analysis: January - June 2008

In this section we provide information on the data basis underlying the analyses presented in the Figures. All results are based on an analysis of procurement statistics selected from the pvXchange.de trade platform. In the six-month period from January to June 2008, more than 31MWp of PV modules were sold on the pvXchange trading platform and are included in this volume analysis. This figure does not correspond to the entire transaction volume on the platform, but to the revenues actually realised by the end of each month.

A complete analysis of the transaction volume is only possible after a certain period of time. The year's analysis is usually undertaken after completion of the first quarter of the following year. Given the current growth trend, we forecast that total trading volume realised on the platform will exceed 100MWp in 2008.

Price development by country of origin

This section will present the price development in different selected countries or regions of origins from June 2008 onwards. The module supply shortage trend that has already been noted has led to a broad increase in prices, a trend that has been strengthened in June 2008.

It can be expected that this high price level for crystalline modules cannot be maintained in the German market. The drop-off in volume of crystalline modules could be attributed to the high growth rate of thin-film module volumes and the possibility of recession in the German market.

The Spanish market will need to be watched closely as the expected cool-down of the Spanish PV market will lead to a price decrease later in the year.

The global market is currently dominated by the policy frameworks of the two major sales markets of Germany and Spain. In Germany, low profitability expectations are combined with a high investment security due to very reliable framework conditions. Currently, the spot market prices are mainly determined by the Spanish market, but this should change as soon the conditions of feed-in tariff systems deteriorate. This situation has an impact on the contracts closed by manufacturers for the coming year.

At the moment, a certain hesitance towards long-term supply and price agreements can currently be noticed.

*The module spot prices report is brought to you in conjunction with **pvXchange** and will form a regular feature in **Photovoltaics International**.*

About the Authors: pvXchange

With the idea of an independent procurement of photovoltaic products, pvXchange has gained the market-leading position in the business customer segment. The customer base of pvXchange currently includes more than 2,000 companies from the solar industry. pvXchange is a proven online trading place, where suppliers and prospective buyers meet directly and face-to-face. pvXchange offers no goods in itself, but rather provides a professional mediation between the participants of a trade.

Enquiries

pvXchange GmbH
Stresemannstr. 33
D-10963 Berlin
Germany

Contact: Kai Malkwitz
Tel: +49 (0) 3044 048111
Fax: +49 (0) 3044 048112
Email: info@pvxchange.de
Website: www.pvxchange.de

PV
Modules

Dow Jones **Alternative Energy Innovations 2008**

OCTOBER 21-22, 2008 | SOFITEL SAN FRANCISCO BAY | REDWOOD CITY, CA

KEYNOTES INCLUDE:



Kaj den Daas,
Chairman,
Philips Lighting, North
America



Jim Davis,
President,
Chevron Energy Solutions



Peter Marks,
Chairman, President & CEO,
Robert Bosch LLC



Michael Peevey,
President,
California Public Utilities
Commission

Highlights of Alternative Energy Innovations 2008:

- **The Complete Technology Forecast**
- **International Markets Coverage**
- **Analyst Views of Key Trends**
- **The Exit Outlook for 2009**
- **60+ CEO Presentations**
- **Insights to Landing Late Stage Funding**

REGISTER EARLY & SAVE | 866.291.1800 | <http://alternativeenergy.dowjones.com/>

THE WALL STREET JOURNAL

BONUS! Attendees receive a complimentary ticket to the 2008 Wall Street Journal Technology Innovation Awards on Oct. 21

