

Snapshot of spot market for PV modules – quarterly report Q4 2009

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This paper first appeared in the seventh print edition of *Photovoltaics International* journal.

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Source: www.pvXchange.com

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

As expected, a slight reduction in prices has characterized the last months of 2009. In comparison, early 2009 saw prices for photovoltaic modules in the spot market fall by 20-40%. As seen in Fig. 1, Chinese manufacturers of crystalline panels lowered their prices by an average of 45% during 2009. European and Chinese producers have had to cope with a sales price reduction of 35%. Although CdTe module prices fell by only 20%, the top sellers for 2009 on the pvXchange spot market were First Solar panels. Second in demand were high-performance polycrystalline products; Yingli, Suntech and Canadian Solar came out on top as the absolute favourites, followed by a wide range of very reasonably priced products from other manufacturers. Also performing well sales-wise were the microcrystalline modules from Sharp, Mitsubishi and Schott Solar. SunPower's high-performance monocrystalline modules could enjoy as many new customers in Europe. In contrast, European manufacturers were only minimally involved – with the exception of German market products and Norwegian manufacturer REC – despite very good conditions. This year has responded well to what was requested by the market with popular modules from well-known suppliers.

Crazy autumn

In September, module prices almost stabilized. Then, in October, they began rising for the first time in 2009. But the most tangible change was the first ever hike in inverter prices caused by a severe bottleneck. Since the beginning of autumn, the demand for all PV components surpassed the expectations of many manufacturers and wholesalers, many of whom were no longer able to keep up with the spate of new orders. A number of products are completely sold out for the rest of 2009. In particular, there is a shortage of high-performance modules from well-known manufacturers and products based on microcrystalline

Module Type	Average price, December 2009 EUR/W	Change since January 2009
Crystalline silicon from European suppliers	2.05	-35,7%
Crystalline silicon from Chinese suppliers	1.62	-45,1%
Crystalline silicon from Japanese suppliers	2.05	-35,1%
Thin-film CdS/CdTe	1.68	-20,0%
Thin-film silicon (a-Si or microcrystalline)	1.46	-33,9%

Note: all prices net 1) This only shows the price for PV modules. 2) The prices are not end-consumer prices. 3) Prices represent the average offer prices on the international spot market.

Figure 1. pvXchange module price barometer for December 2009 showing % change since January 2009.

silicon and cadmium telluride, a sector that saw the most drastic price increases. It is likely that a number of projects have not been completed on schedule by the end of the year due to a lack of inverters.

Pressure on solar contractors and project developers increased everywhere

as compensation rates dropped not only in Germany, but also in other European countries in January 2010. Some manufacturers are attempting in vain to counteract this trend by offering a 10% price reduction on current list prices for deliveries ordered in 2010.

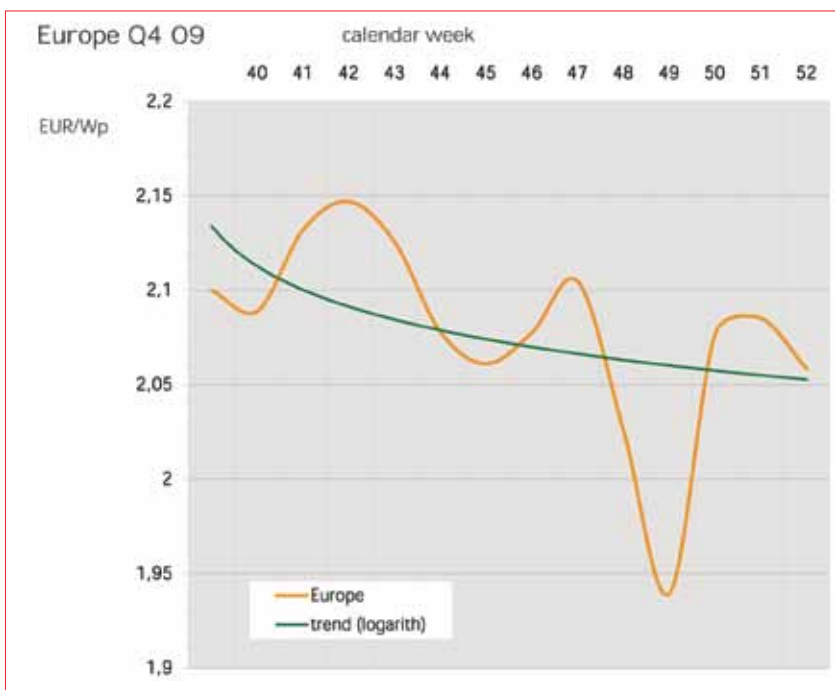


Figure 2. Development of module prices for modules produced by European manufacturers from October to (end of) December 2009.

All's well that ends well?

2009 ended with a newly installed total capacity of between 5.5 and 6.5GW, of which about 3GW was installed in Germany. Overall, it was a difficult year that saw a massive fall in prices of solar modules due to the growing production capacities, the financial crisis and the collapse of the Spanish market.

Last year's winners (from a stock performance perspective) were the large solar suppliers. The stock prices of Roth & Rau, centrotherm photovoltaics and Solar SMA were very impressive, clocking a high export share of up to 90%. These companies' expertise and technology leadership has helped in achieving such a strong growth rate.

The start of the 2010 spot market is showing a small price reduction compared to December 2009. Price development in the short term will mainly depend on decisions of the German government and developments in the new markets of China, India and the U.S.

However, the opinions of solar module manufacturers on the industry's outlook for 2010 are different. Ambitious heavyweights like Samsung and LG Electronics will begin the year with mass solar cell production. Hyundai is focused precisely on the completion of the photovoltaic value chain. Sharp is in the process of jointly building a thin-film solar module factory with the electricity producer Enel Green Power (EGP) and the semiconductor manufacturer ST Microelectronics. Companies with a good market position and strong sales capabilities will be the winners in 2010.

“2010 will bring huge overcapacity throughout the whole value chain, while the mass production will bring further price reductions of solar systems during the year.”

In any case, 2010 will bring huge overcapacity throughout the whole value chain, while the mass production will bring further price reductions of solar systems during the year. Only quick movers and heavyweights will survive the strong competition. Newcomers will have to quickly prove that their products can be competitive on the market or face the consequences.

About the Authors

Founded in Berlin in 2004, **pvXchange GmbH** has established itself as

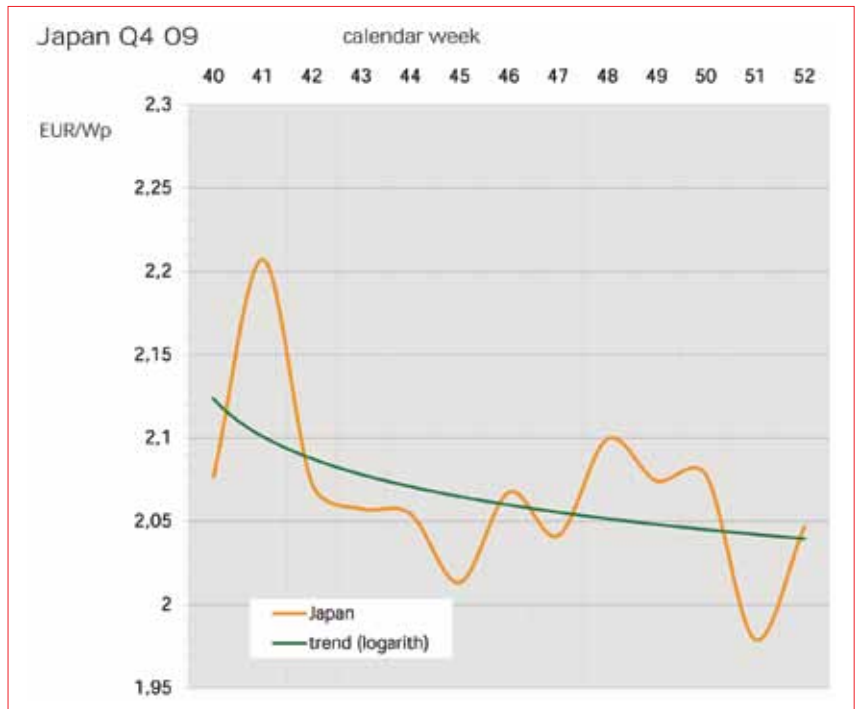


Figure 3. Development of module prices for modules produced by Japanese manufacturers from October to (end of) December 2009.

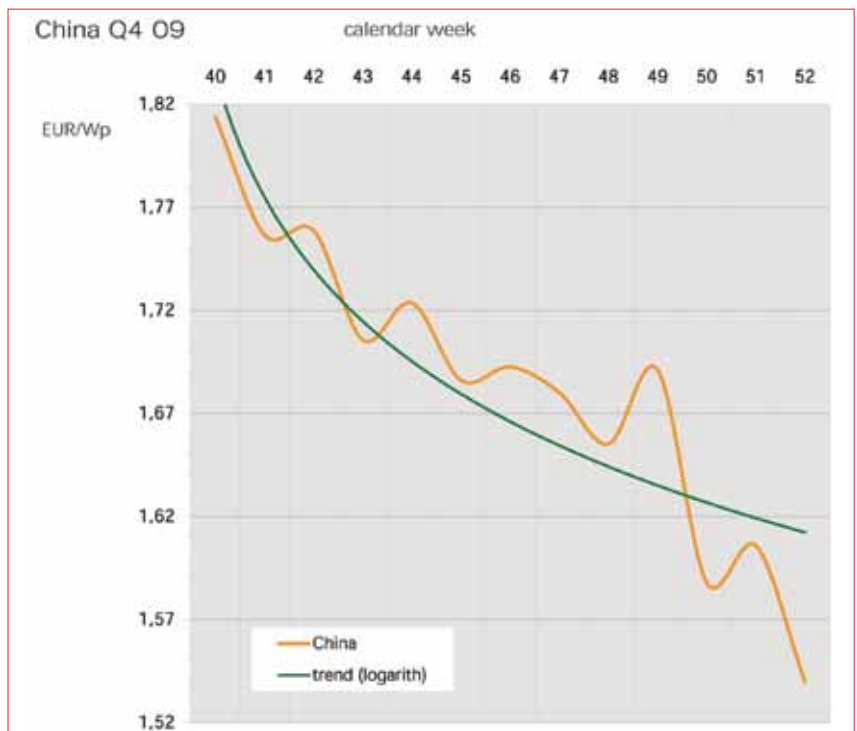


Figure 4. Development of module prices for modules produced by Chinese manufacturers from October to (end of) December 2009.

the global market leader in the procurement of photovoltaic products for business customers. In 2009, the company procured solar modules with an output of around 75MW. 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.

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