

Sharp extends position in thin-film technology market

Solar pioneer Sharp will be presenting its state-of-art photovoltaic solutions at this year's European Photovoltaic Solar Energy Conference and Exhibition (24. EU PVSEC) in Hamburg, Germany. One highlight of the fair: Sharp's new thin-film modules which see the company further extending its line-up and reinforcing its leading position in the thin-film market.

Hamburg, 21st September 2009. On the five days of the conference and the four days of the trade fair, the 24th EU PVSEC, which opens its doors on 21st September in Hamburg, Germany, offers talks and product presentations on new products and technical developments in photovoltaics. Besides state-of-art crystalline modules, Sharp will also be exhibiting its latest thin-film products at booth 90 in hall B6.

"Our 29 years of research and development history have made us the pioneers in thin-film technology", says so Peter Thiele, Executive Vice President Sharp Energy Solution Europe (SESE). "Sharp is one of the world's leading manufacturers of thin-film cells and has made major contributions towards establishing this technology alongside wafer-based cells on today's market. In just three years, Sharp has extended the production capacity for thin-film modules from 15 megawatts to 160 megawatts. Thanks to continuous expansion of our product portfolio, we now offer planners and fitters an even larger choice of high quality photovoltaic products at attractive prices", Peter Thiele continues.

At the EU PVSEC, Sharp is exhibiting the state-of-art, second micro-amorphous generation thin-film module for the first time ever: the 1.42 m² NA-F135(G5) offers an efficiency boost from 9 to 9.5 percent. And Sharp is looking to achieve a stabilised module efficiency of 10 percent for thin-film modules as early as next year. Sharp is also extending its portfolio in the small-format thin-film product field: the 1165 x 970 mm black-framed modules offer efficiency gains of up to 8.8 percent and output of up to 100 watts. They support system voltages of up to 1000 volts and can be wired in even more flexible layouts. Thanks to its extended product portfolio, Sharp offers plant planners and installers even more flexibility with respect to their choice of modules, and it offers the right module for any installation scenario.

Efficient production processes, lower material requirements and high yields even in less than optimum installation situations are just some of the factors that contribute to the success of thin-film technology, which is already shaping the photovoltaic market to a great extend and demonstrating enormous potential: the market share of currently around 10 percent is expected to grow to 40 percent in just four years. As early as 2006, Sharp was the first vendor to launch micro-amorphous, thin-film cells with a tandem structure, and Sharp has continually improved module characteristics such as efficiency and output ever since.

In 2010, Sharp will be launching the first gigawatt solar cell factory in Sakai, Japan, where it will produce both 10th generation LCD panels and thin-film cells with an expected initial capacity of 480 megawatts. The company can leverage synergies in the manufacturing process: the coating method for PV thin-film cells is similar to the production method for LCD panels. Sakai will also be the most ecologically advanced industrial complex in the world. It will have the biggest solar plant in the world with a total capacity of 28 megawatts, comprising an 18 megawatt roof installation and an additional 10 megawatt free-standing plant on the Sakai campus. Sakai will be lit by more than 100,000 LED lamps, thus saving 17,750 tonnes of CO2 emissions per year. This makes the factory the largest LED installation in the world.

Sharp can look back on half a century of experience in photovoltaics: Since 1959, the company has driven the solar technology industry like no other with innovative products and technologies. With its mono and polycrystalline modules, thin-film modules, and light concentrators, Sharp has more photovoltaic technologies in its portfolio than any other manufacturer.

Sharp Environmental

With its global environment strategy, Sharp has made environmental protection an integral part of its corporate culture. What we call the Sharp Super Green Strategy covers the production of energy-saving and energy-generating products in ecologically advanced plants, along with responsible recycling. One of the company's main aims on the road to becoming an "environmentally advanced company" is to significantly reduce both direct and indirect CO² emissions in our operations and products. Throughout the world, Sharp has defined environmental standards that apply to all our plants and products, and these are being continuously revised and dynamically improved. You can find more information about Sharp's environmental activities on http://www.sharp.eu/sharp/apps/eu/green_site/green_site.html

Reprint free, copy requested.

For more information, please visit www.sharp.eu