



## Sunfilm and Applied Materials Achieve Solar Industry Milestone with Certification of World's First Tandem Junction SunFab™ Line

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SANTA CLARA, Calif. & GROSSROEHRSDORF, Germany--(BUSINESS WIRE)--Apr. 20, 2009-- Sunfilm, AG and Applied Materials, Inc., today announced that the world's first tandem junction SunFab Thin Film Line installed at Sunfilm's Grossroehrsdorf facility achieved factory acceptance on April 14, 2009. Using 5.7m<sup>2</sup> substrates, the line passed final acceptance test certification, verifying that it has met specifications for producing solar photovoltaic modules with efficiencies of up to 8%, as well as yield and overall annual capacity specifications. The line is now beginning volume production.

"We are pleased to have demonstrated that tandem junction technology is scalable to large-size panels and that these higher efficiency panels can be produced at volumes that make them ideal for utility scale solar installations," said Mike Splinter, chairman and CEO of Applied Materials. "The ramp of SunFab tandem junction lines is an important business and technological achievement that brings the industry another step closer to dramatically changing the way the world generates energy."

"This is a major milestone in the ramp-up of our factory," said Wolfgang Heinze, Sunfilm's COO and Chairman of the Executive Board. "The engineering teams from Sunfilm and Applied Materials have worked together intensively to get our performance to this impressive level. We are proud to have the first tandem junction production line in the world where this certification has been reached."

"This is an outstanding accomplishment for both Sunfilm and Applied. It demonstrates technical excellence and our ability to collaborate and execute to enable our customer's success," said Dr. Randhir Thakur, senior vice president, general manager SunFab Thin Film Solar and Display Business Group. "Rapidly driving leading edge technology into manufacturing is a core capability of Applied and this milestone is another demonstration of our ability to quickly move tandem junction technology from the lab to commercial production."

Thin film tandem junction panels use about 1/50<sup>th</sup> of the amount of silicon per watt of electricity produced compared with traditional solar modules fabricated using crystalline silicon wafers. By combining tandem junction technology with ultra-large 5.7m<sup>2</sup> substrates and volume manufacturing capabilities, Sunfilm expects to meet a wide range of customer applications for full-, half- and quarter-size panels, which can substantially reduce the cost of installed solar electricity. A quarter-size 1.4m<sup>2</sup> module generates up to 115Wp, while a full-size 5.7m<sup>2</sup> panel will deliver about 450Wp.

"We are very pleased with this achievement. This success makes tandem junction thin film silicon a reality and positions Sunfilm to serve the market with an environmentally-friendly product that achieves high kilowatt hours at attractive costs," said Dr. Sven Hansen, Chief Investment Officer of Good Energies and Chairman of Sunfilm's Supervisory Board.

"This is excellent news for our existing and future customers," said Dr. Sicco W.T. Westra, Chief Business Development Officer of Sunfilm. "We can now begin delivery of our products in larger quantities. With a total annualized capacity of over 120MWp between this first production line and our second production line that we plan to start up later this year, we are in a strong position to fulfill market demand."

**Sunfilm AG** was established at the end of 2006 by Good Energies and NorSun and is located in Grossroehrsdorf, Germany. The company develops, produces and markets photovoltaic modules based on high efficiency tandem junction silicon thin film technology. These modules are up to 5.7m<sup>2</sup> in size, while half-size and quarter-size modules are available as well. [www.Sunfilmsolar.com](http://www.Sunfilmsolar.com)

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in Nanomanufacturing Technology™ solutions with a broad portfolio of innovative equipment, service and software products for the fabrication of semiconductor chips, flat panel displays, solar photovoltaic cells, flexible electronics and energy efficient glass. At Applied Materials, we apply Nanomanufacturing Technology to improve the way people live. Learn more at [www.appliedmaterials.com](http://www.appliedmaterials.com).

Photos/Multimedia Gallery Available: <http://www.businesswire.com/cgi-bin/mmg.cgi?eid=5943329&lang=en>

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