



**First Solar.**

July 26, 2011

## **First Solar Sets World Record for CdTe Solar PV Efficiency**

### **17.3 Percent Efficiency Confirmed by NREL**

TEMPE, Ariz.--(BUSINESS WIRE)-- First Solar, Inc. (Nasdaq: FSLR) today announced it set a new world record for cadmium-telluride (CdTe) photovoltaic (PV) solar cell efficiency, reaching 17.3 percent with a test cell constructed using commercial-scale manufacturing equipment and materials. The test cell's performance, confirmed by the U.S. Department of Energy's National Renewable Energy Lab (NREL), far surpassed the previous record of 16.7 percent set in 2001.



First Solar's research and development group studies a PV test cell constructed using commercial-scale manufacturing equipment and materials. (Photo: Business Wire)

"This is a significant milestone that demonstrates the ongoing potential of our advanced thin-film technology," said Dave Eaglesham, Chief Technology Officer at First Solar. "This leap forward in R&D supports our efficiency roadmap for our production modules and will recalibrate industry expectations for the long-term efficiency potential of CdTe technology."

"This achievement is a direct result of our industry-leading investment in research and development and our commitment to continuous improvement," said Rob Gillette, CEO of First Solar. "First Solar's innovation in both module technology and balance of systems engineering continues to drive us closer to grid parity."

The average efficiency of First Solar modules produced in the first quarter of 2011 was 11.7 percent, up from 11.1 percent a year earlier, and the company has recorded full-module efficiencies over 13.5 percent, with a 13.4 percent module confirmed by NREL. First Solar's module efficiency roadmap sets a goal for production-module efficiencies of 13.5-14.5 percent by the end of 2014.

First Solar utilizes a continuous manufacturing process which transforms a sheet of glass into a complete solar module in less than 2.5 hours, which contributes to the company's industry-leading energy payback time and the low carbon footprint of systems using First Solar PV modules. First Solar also implemented the industry's first comprehensive, prefunded solar module collection and recycling program. Anyone wishing to dispose of First Solar modules can request collection at any time, at no additional cost, and First Solar will pick up the modules and recycle up to 90% (by mass) of the material for use in new products, including new solar modules and new glass products.

### **About First Solar, Inc.**

First Solar manufactures solar modules with an advanced semiconductor technology, and is a premier provider of comprehensive photovoltaic (PV) system solutions. The company is delivering an economically viable alternative to fossil-fuel generation today. From raw material sourcing through end-of-life collection and recycling, First Solar is focused on creating value-driven renewable energy solutions that protect and enhance the environment. For more information about First Solar, please visit [www.firstsolar.com](http://www.firstsolar.com).

### **For First Solar Investors**

This release contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934. The forward-looking statements in this release do not constitute guarantees of future performance. Those statements involve a number of factors that could cause actual results to differ materially, including risks associated with the company's business involving the company's products, their development and distribution, economic and competitive factors and the company's key strategic relationships and other risks detailed in the company's filings with the Securities and Exchange Commission. First Solar assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

Photos/Multimedia Gallery Available: <http://www.businesswire.com/cgi-bin/mmg.cgi?eid=6806276&lang=en>

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Source: First Solar, Inc.

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