



Suniva Produces Record Screen Printed Solar Cells with 20%+ Efficiencies

Patented Low-Cost Process Key to Efficiency Innovation

Atlanta, Ga. – September 16, 2008 – Suniva Inc., a manufacturer of high value crystalline silicon solar cells, today announced that its R&D team has developed several silicon solar cells in its lab with over 20% conversion efficiencies using a patented combination of simple cell designs and screen printing technologies. These high efficiency milestones have been verified by the National Renewable Energy Laboratory (NREL), the U.S. Department of Energy's premier laboratory for renewable energy and energy efficiency research and development. The efficiency achievement closely follows Suniva's two recent customer agreements with Germany's Solon AG and India's Titan Energy Systems Ltd, together worth approximately USD\$1 billion.

"This demonstrates that Suniva's advanced technologies in diffusion, surface passivation and contacts can increase conversion efficiency while reducing processing time and maintaining low cell cost." said Dr. Ajeet Rohatgi, Suniva's founder and CTO. "Our R&D team already has a solid roadmap in place to further increase our efficiencies. We are excited about Suniva's continued momentum on the path to make solar electricity cost-competitive with conventional grid electricity."

The conversion efficiency of a solar cell refers to the percentage of sunlight converted by the cell into electricity, a metric critical to bringing down the cost of solar generated power. Suniva's current ARTisun™ cell technology has produced a verified efficiency of 18.5% in the lab.

Applying Suniva's patented technology to reduce the number of steps in the production process and generate a series of cells with efficiencies over 20%, Suniva's solar cells represent a world record for screen printed cells and incorporate advanced design features that boost power output from the cell. For example, Suniva can create a higher sheet resistance emitter as well as enhanced surface passivation dielectrics in a single high temperature step. Suniva produces narrower screen-printed contacts on the front of the cell and a high-quality surface reflector on the back. These components, combined with improved texturing methodologies, allow Suniva to trap light and achieve high efficiencies while keeping costs low.

"Our focus is to work diligently to move this exciting technology from lab sized cells to the production line and commercialize these cells as soon as it is both possible and practical," added John Baumstark, CEO of Suniva.

In an additional R&D effort, the company has three new patents pending, which relate to the structural design, process of fabrication, module integration and the efficient use of low-cost heterojunction solar cells. Suniva now owns or has exclusive license to 32 patents and patent applications worldwide.



About Suniva

Based in Atlanta, Suniva develops, manufactures and markets high-value crystalline silicon photovoltaic (PV) cells for clean solar power generation. The company has an exclusive license to critical patents and patent-pending intellectual property developed by founder and CTO Dr. Ajeet Rohatgi at the Georgia Institute of Technology's University Center of Excellence in Photovoltaics, the nation's premier silicon PV research center. In addition, the company's deep process know-how and unique approach to manufacturing delivers leading solar cell performance while dramatically cutting the cost of PV-generated electricity. For additional information, please visit <http://www.suniva.com>