

Silevo solar cell makers reveal product with best-ever claims

October 13 2011, by Nancy Owano



(PhysOrg.com) -- Silevo, the Fremont, California, photovoltaic solar module manufacturers, yesterday stepped forward to talk all about their technology for the first time and to say that it offers the best performance-to-cost ratio for solar modules in the industry, thanks to their groundbreaking new design.

That technology represents a rethink in conventional solar cell design, and transforms it into a powerhouse that can yield more energy. Using the company's proprietary Triex technology, the result is what is being called a hybrid module because it is an artful combination of three materials: crystalline silicon N-type substrates, thin-film passivation layers, and a tunneling oxide layer

These materials enable the Triex module to deliver high efficiency,

competitive module costs and an optimal energy harvest, the company said.

"Until now, the solar industry has not had a module that optimizes both performance and cost at a ratio that creates optimal levelized cost of electricity (LCOE)," said Dr. Zheng Xu, founder and CEO.

The company is being praised for rethinking conventional [solar cells](#), at a time when costs and performance need to be more closely aligned. While the technological details are complex, the aggressive wish list at Silevo is easy enough to understand and accept—implement low-cost operations to produce a unique technology in order to advance a PV market into a self-sustaining future.

One of the Silevo cost-preserving feats is its design of cells that make use of copper rather than silver, as silver pastes have been reported to be the second-highest-priced material in a module after silicon itself.

Silevo is taking an aggressive growth path in bringing its technology forward, with plans to maintain its research facility in Fremont and to build a manufacturing plant in Hangzhou, China.

Silevo recently closed \$33 million in financing from investors, and the money is being used to build the facility in China, as well as to drive further research at its California site.

Silevo says it is currently producing modules in pilot production, manufacturing Triex cells that demonstrate between 20% and 21% conversion efficiency on full-size substrates. Customer qualification samples have begun shipping. In the first half of 2012, high-volume commercial production will begin.

Silevo's announcement is conveniently timed, since, in just days, the

Solar Power International 2011 is to open its doors, from October 17 through October 20, in Dallas. That event is where professionals get to network and, as the event site suggests, to generate "powerful new ideas" and business for the solar industry.

More information: <http://silevosolar.com/> , [press release](#)

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Citation: Silevo solar cell makers reveal product with best-ever claims (2011, October 13)
retrieved 25 April 2024 from <https://phys.org/news/2011-10-silevo-solar-cell-makers-reveal.html>

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