

New Energy Symposium

BUSINESS CASE: PRISM SOLAR TECHNOLOGIES, INC.

Name of Company: Prism Solar Technologies, Inc.

Technology on which company is based: Holographic Planar Concentrator Technology.

Business and Business Model

- 1 Inception: When was your company created?**
- 2 Value Proposition: What is the company's key value proposition (e.g. low cost producer, highest reliability)?**
- 3 Current Structure: What is the current structure and ownership?**
- 4 General Description: The description of your business. Describe how your business makes money and how will it assure great & long term profits for the future.**

Prism Solar Technologies, Inc., founded in 2005, manufactures unique concentrator photovoltaic (PV) modules incorporating Prism's proprietary holographic film. Our Holographic Planar Concentrator (HPC) module uses volume holograms to collect, spectrally select, and focus sunlight onto solar cells for power and specialty applications. Prism's technology dramatically reduces module manufacturing cost while increasing output and kw/h production.

Prism will manufacture modules containing its film for domestic markets and sell film to module manufacturers internationally within joint venture and licensing agreements. Because our technology works with any PV technology, we can leverage the manufacturing capacity of the entire PV industry. With our low manufacturing costs, we expect to achieve unsubsidized grid parity by 2012. We are developing key marketing, technology partnerships and agreements to support our target markets.

Product

- 1 Product:**
- 2 Function and Benefit: Define and quantify key benefits to customers (cost/technical/etc)**
- 3 Development Stage: Where is the product in its evolution (e.g. fully tested prototype; in initial production and markets; etc.).**

Our HPC modules re-direct sunlight from holographic elements onto PV cells on either side of the hologram, thus increasing the cell's output. Sunlight enters the top of the module, passes through glass and hits the hologram. The hologram spectrally selects sunlight and directs optimum wavelengths by total internal reflection to the PV cell. Holographic elements replace up to 72% of the expensive silicon cells of traditional modules and produce significantly more kWh. Angled holograms "passively" track the sun, and substantially increase electricity production including in diffuse and low light conditions. We use bifacial cells to maximize output.

Prism's technology has been field-tested for more than five years and tested by several national laboratories. We recently purchased a 93,000 sq. foot facility in Highland, NY and will begin manufacturing modules later this year.

Competitive Position

- 1 Competitors: Who is your competition?**
- 2 Edge over competition: What makes you better than other firms out there?**
- 3 Sustainability: Is this competitive position sustainable?**
- 4 IP Protection: How will you protect your proprietary information?**

Prism competes with the major module manufactures, but because of our versatile technology (it can be used with any PV technology, including thin-film, ribbon, cZ, multicrystalline silicon, bi-facial, or even

organic and dye-sensitized cells), we can partner with these companies as well. Prism's technology shares characteristics with both concentrator and thin film PV offerings. Our technology has the cost advantages of a thin-film product, with the stability of crystalline product. While it is a concentrator, the HPC technology spectrally selects light and does not require tracking or special cooling. Like thin films, we achieve lower manufacturing costs and the ability to expand offerings in a polysilicon constrained environment. Competitors' tracking systems require a significant higher cost (\$0.50-\$0.75/Wp) and ongoing maintenance compared to our "passive" tracking. We achieve dramatic cost reductions because the capital expenditures (CAPEX) for one gigawatt of HPC annual film production capacity is less than 1/10th the CAPEX of one gigawatt of traditional annual module production.

Our technology is protected by patents and significant trade secrets developed over 8 years with more than \$12M in investment. We have an exceptional team with a history of starting and operating successful PV businesses. Richard Lewandowski is Prism's President and Chief Executive Officer with over 25 years experience in the PV industry, including founding SunWize, a highly successful system integrator and distributor, and founding solar industry associations in Illinois and NY. Prism's Chief Technology Officer, Glenn Rosenberg, invented Prism's technology and oversees our R&D facility in Tucson, AZ. Prism's Board of Directors has substantial experience in start-up ventures, R&D and the solar industry.

Markets

- 1 Target Market: What markets and market segments are you going after? How big is this market and how can you sustainably capture it?**
- 2 Barriers to Entry: What are the key market barriers that will lend to your success?**

In 2008, \$37 billion worth of PV was installed, raising the total installed PV to 5.95GW (according to Solarbuzz). Initially we are focusing on commercial and utility markets. Because our technology can work with any PV technology, we have the potential ultimately to be included in every PV technology. Key market barriers are the price of silicon and high manufacturing CAPEX. Because of the low CAPEX for our film production we can capture a large portion of the market. We believe we can produce modules at a cost of \$1.92/Wp within 6 months, which we can reduce to \$1.04/Wp within 24 months, compared to a traditional module cost of \$3.31/Wp (in both cases assuming purchase of cells at \$3.00/Wp). We expect our modules to reach unsubsidized grid parity by 2012.

Customers

Customers are the key to strong profits. Who are the specific customers that you are pursuing or will pursue? Do you have any letters of intent to purchase?

Prism's initial customers include system integrators, installers, and distributors for commercial, residential and utility-scale sectors for our HPC modules, and single-crystalline PV module manufacturers for our holographic film. We are negotiating with partners and have begun entering into letters of intent.

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