



Sustainable Energy Technologies Completes Sunergy Gen II Proto-Typing and Testing

Q3 product launch on schedule to take advantage of fundamental structural changes in PV world

Highlights:

- Only inverter to offer advantages of “parallel” architecture in PV industry standard form factor
- Unique modular design philosophy will drive lowest cost/watt in the industry
- On track to deliver products in Q3 for growing European order book
- Continued decline in PV module prices will drive growth in PV installations by 32GW – 35GW between now and 2012
- Estimated value of inverters for commercial and residential applications could be US\$6.9 to US\$7.5 billion over next four years
- Thin film PV could represent 50% of total installations by 2012

Calgary, Alberta – March 24, 2009 – Sustainable Energy Technologies Ltd (TSX V:“STG”) (“Sustainable Energy” or the “Company”) announced today that it has successfully completed production proto-typing and internal CE certification testing for its second generation (“Gen II”) Sunergy™ inverter on schedule; and that it has submitted two product platforms to the Canadian Standards Agency (“CSA”) for North American UL 1741 certification.

The Gen II product platforms are based on the same patented core technologies, electronic circuits and software control algorithms that have been tested and proven in the field over the past two years. The new platform introduces a unique modular design philosophy that enables very high volume manufacturing of a single power electronics module to support multiple product applications and power ratings, ranging from 2.5kW to 20kW.

“This is a proven manufacturing model used throughout the electronics industry, and made possible by Sustainable Energy’s low voltage technology. The model allows us to deliver what I believe will be the lowest manufactured cost per watt in the industry,” said Greg Nelson, Executive Vice President and COO of Sustainable Energy. “We are on track with CSA, and on track with two contract manufacturers to begin deliveries early in Q3 to a growing list of customers for the Gen II product line, beginning with our Spanish partner, Salicru S.A.,” added Nelson.

“We are focusing the first Gen II product platforms on thin film PV applications, because we believe that thin film PV has cost and performance advantages which will enable it to very quickly take a large share of the cost and IRR driven commercial rooftop market,” stated Michael Carten, President & CEO of Sustainable Energy. “We are already seeing this in the European market, as the entry of lower cost thin film PV is driving down module prices in all market segments. Increasingly, we see distributors

and system integrators moving away from conventional crystalline modules to thin film PV to lower system capital cost and increase investment yields.”

“The Gen II platform will be the only inverter offering the PV marketplace the performance metrics of the “parallel” system architecture in a standard industry form factor, and with the cost/watt and conversion efficiencies that the industry needs to continue its drive for grid parity.” With our products ready to go this summer, and contract manufacturing relationships in place to ramp production, we are well positioned to take advantage of profound and fundamental structural changes that are taking place in the industry,” concluded Carten.

Current demand forecasts for PV installations estimate that cumulative PV installations could grow from an estimated base at the end of 2008 of about 12 GW to between 43GW and 47GW by the end of 2012 (See: *Thin Film PV 2.0 Market Outlook Through 2012*, September 2008 and *2009 Global PV Demand Analysis and Forecast, Anatomy of a Shakeout II* March 18, 2009). Of this total, it is estimated that commercial PV installations will represent 66%, residential installations will represent 18% and utility scale projects will represent 16% of total installations. Assuming an average factory gate price for inverters of US\$0.25/watt (from an average price of approximately US\$0.40/watt in 2007) total inverters sales over the four year period would represent between US\$5.3 billion and US\$5.9 billion to the commercial market and US\$1.4 and US\$1.6 billion to the residential segment.

According to Prometheus the cost advantage of thin film PV will drive market penetration to 50% or better.

Value of “Parallel” Architecture for Thin Film PV

Thin film PV technologies have a lower manufactured cost per rated watt than conventional crystalline technologies and typically produce more power (10% - 15%) per rated watt (which is measured at 25°C) than crystalline modules in temperatures above 25°C. They have, therefore, the ability to deliver a lower cost per kilowatt hour and a higher internal rate of return than crystalline modules.

The main disadvantage of thin film PV is that it requires more square meters to deliver the same power as crystalline modules. On rooftops this can be a disadvantage since there is a greater potential to come into contact with normal building obstructions (e.g. HVAC systems, chimneys, telecommunications towers etc.) and there is greater potential for shading of the additional modules needed to produce the same power as the crystalline modules.

With a series architecture, if the sunlight impacting any one of the modules is reduced (e.g. from partial shading of the panel by normal building congestion or simply dirt or debris) the power output of all the modules will be reduced, resulting in a disproportionate reduction in total system output. The impact of shading is compounded by the length of the module strings needed for the conventional “series” architecture.

With the “parallel” system architecture, each module operates at its optimum power and a change in sunlight affecting the output of one module will have no effect on the other modules. In addition, with a parallel architecture there is no requirement for a minimum number of modules per string and one can add or subtract modules one at a time to optimize the coverage of the available space.

The “parallel” architecture enables system designers to easily add more modules and to accept some partial shading of the modules without disproportionately affecting system performance. The combination overcomes the problem of space; to deliver more power than a conventional crystalline module and to deliver much higher internal rates of return for the same capital investment.

The advantages of the “parallel” architecture for thin film PV will be greatest in those markets where cost and investment returns are the major drivers in choosing between competing alternatives. These

will typically be those markets where there are no incentives for solar PV or where the incentives are performance oriented.

About Sustainable Energy: Based in Calgary, Canada, Sustainable (www.sustainableenergy.com) designs, manufactures and distributes power inverters for grid-connected solar PV systems. Advanced power inverters are a critical enabler of all modern solar PV power systems converting the direct current ("DC") power output of the solar PV modules into the high quality alternating current ("AC") power required by the power grid. Advanced power inverters also optimize the performance of the solar PV modules and maintain the integrity and safety of the interconnection with the power grid.

Sustainable has developed and patented an inverter platform that is the first to enable a high efficiency "parallel" architecture for grid-connected solar PV systems in a standard industry form factor. A parallel architecture eliminates the need for complex string calculations and enables much higher penetration of the available rooftop area, thereby expanding the range of sites where solar PV is economic.

Sustainable's inverter technologies are a breakthrough in inverter design and the subject of 9 patents issued by the US Patent Office with further patents pending.

Forward Looking Information

The reader is advised that some of the information herein may constitute forward-looking statements within the meaning assigned by National Instruments 51-102 and other relevant securities legislation. In particular, we include: statements concerning the growth in solar PV installations to different market segments over the next four years, the estimated value of inverter sales into this market, the manufactured cost of our inverters and the value of our technology to the industry. Forward-looking information is not a guarantee of future performance and involves a number of risks and uncertainties. Many factors could cause the Company's actual results, performance or achievements, or future events or developments, to differ materially from those expressed or implied by the forward-looking information. Readers are cautioned not to place undue reliance on forward-looking information, which speaks only as of the date hereof. The Company does not undertake any obligation to release publicly any revisions to forward-looking information contained herein to reflect events or circumstances that occur after the date hereof or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

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