

PV Insider Interview: Abe Tarapani—Implementing International Standards into the Indian PV Market for the Sustainability of the Industry

PV Insider recently spoke with Abe Tarapani, Vice President of Global Strategy, Business Development & Operations, about Astonfield's leading position in the Indian photovoltaic market. During the interview, Abe revealed how to combine the global best practices for PV with local expertise in order to secure a premier position in the project development arena, furthering the sustainability of the industry in India. The interview was held before the PV Project Development Summit India 2012, scheduled for 30-31 July.

From PV Insider:

“Astonfield is a leading provider of renewable energy. With solar plants operating across India, the company is committed to addressing the challenges of sustainable development in emerging markets, partnering closely with local governments to shape renewable energy markets and drive economic growth.

Q1: Could you start with a brief overview of the achievements for Astonfield during Phase I of the National Solar Mission and state policies in India?

Astonfield has commissioned two grid connected solar PV plants to-date with a third expected to come online by mid-year, with a total capacity of approximately 20MW across three states. Importantly, the operational plants are far outperforming their expected levels. This is a testament to Astonfield's rigorous plant design process as well as the world-class technology partners selected for its plants. We were one of the first companies in the sector to secure limited recourse project finance from top domestic banks, and our banking partners have been extremely pleased with the performance of the plants as well. In anticipation of the great growth opportunity that India presents, we have also scaled our team with a heavy focus on engineering and construction oversight, O&M and corporate finance.

Q2: As you are responsible for the global strategy, technical partnerships and market development efforts in Astonfield, what is the company's strategy and objectives in India for Phase II of the National Solar Mission?

We are looking at the market holistically to target project opportunities where we can deliver a world class technology solution that meets the requirements to secure financing and allows for a commercially viable return. The market opportunity in India includes the National Solar Mission, which is expected to scale to 3GW or more in Phase II, but also State policies and projects where the demand is driven by the Renewable Purchase Obligations adopted by almost all of the State Regulators (SERCs).

Q3: What is the importance of building strategic partnerships with technology and engineering leaders from around the world and, as an Indian developer; what is the best possible way to give these PV world leaders the confidence to partner with local companies?

We had the benefit as an early mover in the market to begin working with technology partners on smaller scale projects (2-10MW in size) before we scaled the partnerships to projects of 25MW and larger capacity, which is where our portfolio is naturally gravitating in 2012-13. We also invested to build a world class in-house team focused on engineering and project implementation – their charter is to work collaboratively with EPC and O&M partners to combine the best experience from more mature solar markets in Europe with the extensive experience our team has in the power sector in India.

Q4: What is the most effective way to adapt international standards locally for optimum efficiency and productivity of a PV utility scale project in India?

We believe that international standards for solar PV plants are just as relevant in India. Certain design adaptations can occur to optimize pricing without impacting these standards – for example we don't need to

design our plants to withstand heavy loads from snowfall as is required in parts of Europe. In addition, our EPC partners have been tweaking the inverter configuration to work optimally within the grid conditions in India, which in certain ways differ from the grid conditions in Europe. Also, our implementation approach may rely more heavily on manpower at site rather than on heavy degrees of mechanization. However, an outside observer would notice very little difference in the basic engineering, component selection and implementation of our projects relative to other international markets. Furthermore, the above expectation performance of our plants demonstrates the value in adhering to top global standards.

Q5: What are the main three aspects to be cautiously evaluated while creating a PV business model in order to avoid mistakes, delays and ultimately loss of money during the execution stage?

In our opinion, much of the performance efficiency and cost optimization in a solar plant originates from the land acquisition process. Astonfield has developed a rigorous process which prioritizes the size and shape of the land, the location relative to solar irradiance “hot spots”, proximity to the grid, quality of the soil, etc. We’ve learned a tremendous amount over the past five years regarding optimizing the land acquisition process and consider this a core capability of our company. Two different site options that from the naked eye look very similar can result in a surprisingly large variance in project returns.

Q6: In hindsight and considering the trajectory of Astonfield within the Indian PV landscape, what do you expect to be the biggest challenge that the company will face in the coming years?

We are a deep believer that the faster the industry can reduce the cost of delivering solar solutions, the larger the market can grow. However, this cost reduction should not come at the sacrifice of the quality of the technology, the 25-year performance of the plant, or the capital efficiency of the project. Our business model is focused on the long-term ownership and operation of our solar plants which we believe aligns our interests closely with those of our customers.

This subject will be analyzed in much more detail by Astonfield and 40+ Indian and international developers leading the global PV market, at the forthcoming **PV Project Development Summit India 2012 (30-31 July, New Delhi).**”