



# OPIC in California

## With OPIC support, one California businessman's dream for a solar India becomes a reality

**India**, with its abundant entrepreneurial talent and human capital, is known throughout the world as a powerhouse of an emerging market. Less well-known is its struggle to generate the very power it needs to realize its economic goals. Forty-five percent of its population lacks electricity, and the country faces a peak load shortage of nearly 17 percent and grid losses of up to 35 percent.

Eager to meet this pressing need, India's central government has set a goal to add 78,000 megawatts of electrical capacity and provide access to electricity for 100 percent of the country's population between 2008 and 2012. And figuring prominently in the country's plan is the development of renewable energy sources. In January 2008, in order to encourage the development of solar power projects, the central government developed a 10-year tariff incentive for solar power developers, by which it will pay developers an additional tariff over the amount offered by the relevant state utility.

Inderpreet Wadhwa, CEO of Azure Power Inc. of San Ramon, California, leapt at the opportunity. A graduate of the Haas School of Business at UC Berkeley, Mr. Wadhwa established Azure Power two years ago, determined that it become a leading solar service provider in India. He responded to a tender and in April 2008 signed an agreement, one of the first of its kind in India, with the Punjab Energy Development Agency (PEDA) for a 2 MW photovoltaic solar power project in the northwestern Indian state of Punjab.

Punjab's power needs are emblematic of the country as a whole: currently it has 6,200 MW installed power generation, of which 10 percent is owned privately. But of that total, only 175 MW, or 0.28 percent, is generated by renewable sources, primarily hydro and biomass. Yet against that reality, the potential for solar power generation in the state is huge.

The solar plant will be located in the village of Ahwan in Punjab's Amritsar district, employing labor from the local community. Primary construction involves pouring a foundation upon which solar panels are mounted, and construction of a small building to house generating equipment and monitors. Modules will be placed outdoors, where



Inderpreet Wadhwa, CEO of Azure Power, based in San Ramon, CA, will use a \$6.3 million OPIC loan to construct a photovoltaic solar facility in India's Punjab State - the first such privately-owned plant in the country.

uninterrupted solar radiation will be available throughout the year. The building will exploit the solar passive concept, whereby natural ventilation, passive cooling and daylight are optimally utilized. Power from the plant will go to a substation in the community.

Azure Power has engaged another California-based company, HeliPower, to design & engineer the plant. HeliPower is a subsidiary of HeliGroup, an integrated renewable energy company, and has designed and installed several solar facilities all over US, including some of the largest in the world. Other funding for the project comes from Foundation Capital, a venture capital firm based in Menlo Park, California. Foundation Capital has committed \$150 million to clean tech projects since 2003.

The bulk of the project's funding, however, comes in the form of a \$6.3 million loan from the **Overseas Private Investment Corporation (OPIC)**, an independent U.S. government agency which facilitates American private sector investment in emerging markets such as India.

"The project represents the best of OPIC: identifying a developmental need in an emerging market and utilizing American entrepreneurial skill to address it, in a way that benefits everyone involved. And it furthers the shared goal of both OPIC and India, to develop renewable energy sources," Dr. Spinelli added. "We are extremely pleased that we could work with three California-based companies in order to tap the entrepreneurial vision of Inderpreet Wadhwa and make project a reality."

Mr. Wadhwa said, "We understand the complexities and nuances of delivering solar energy and our implementations complement existing sources of electricity. The policy impetus from the government combined with Azure's competency and expertise in this area will work to solve India's growing demand for electricity with clean technology."