

## Executive Focus

### Ajay Goel

CHIEF EXECUTIVE OFFICER  
TATA POWER SOLAR

**Date of birth:**  
5 November 1968

**Education:** B Tech, IIT Delhi  
1990; MBA, University of  
Chicago 2000

**Career:** Tata Consultancy  
Services: systems analyst  
1990, went to the US  
focussing on high-tech and  
software; Sabre Holdings  
Corporation, 1996: part of  
core team for travelocity,  
an online booking site for  
American Airlines; Baine &  
Co, management consulting  
2000: focus on software  
market; McKinsey & Co  
2003: clean technology,  
especially with a solar focus;  
Brightsource Energy, 2008;  
MEMC (now SunEdison): vice-  
president, global product  
operations, 2009, focus on  
semiconductors and wafers;  
Tata Power Solar: CEO 2012



## Shining vision

When the Tata group decided to take over British Petroleum Solar's stake in the erstwhile 50:50 joint-venture Tata BP Solar after BP – which had controlled the joint venture till it pulled out to concentrate on its core oil business – exited its leadership in July 2012, they were looking for a new chief executive officer. And they found one in Ajay Goel, who joined the now wholly-owned subsidiary of Tata Power in August 2012.

"The company was in turmoil with a lack of direction, and the leadership was in a flux," says Goel, 45, a 10-year veteran in clean technology, especially solar power. "The industry itself was in turmoil globally."

Growing fast earlier, it faced supply constraints – which, unfortunately, had been tackled by everything getting ramped up and the availability of solar cells and panels doubling from 2010 to 2011 – driven mainly by China. But then the demand 'fell off a cliff' to half, thanks to the financial crisis. Most companies faced a crisis, having installed expensive capacity; so, they cut their prices. The Indian model of exporting solar modules to the US and Europe naturally came under threat.

The Bangalore-headquartered Tata Power Solar (TPS), founded in 1989, faced an 'identity crisis', too, despite being the oldest in the business: even with 1,400-plus employees, it was

too small in the Tatas' grand scheme of things. "But there were a lot of opportunities," Goel says. "With 23 years in the business, the foundation was strong. I only had to build a focussed leadership team, with people who were passionate about solar energy and making innovations in the field."

The Indian market became a 'keen' area of growth, in mindshare even if not in numbers. TPS now boasts of more than 80 MW of large-scale, 30 MW of rooftop installations and over 1,000 PV installations. "We also have community off-grid programmes in key states like Chhattisgarh, Jammu & Kashmir, Ladakh and Tamil Nadu," Goel points out.

All this has electrified hundreds of villages and touched more than 17 million lives, besides displacing over 5 million tonnes of carbon dioxide. With a combined manufacturing output of 125 MW of modules and 180 MW of cells, it also has a 'strong' distribution and sales channel, he says: of 1,000-odd dealers, sub-dealers and installers, and over 60 authorised service centres. Products it has developed for end-use customers include lanterns, home lighting systems, street lights and water pumps.

**G**oel, who graduated from IIT, Delhi in 1990, began his career as a systems analyst with Tata Consultancy Services, and went to the US – where he moved to Sabre Holdings Corporation six years later and was part of the core team for American Airlines' online booking site Travelocity. He acquired an MBA in finance and marketing from the University of Chicago and joined management consulting firm Bain & Co in 2000, with a continued focus on the software market. His work in clean technology, especially with a solar focus, began in 2003 when he joined McKinsey & Co. It continued in Brightsource Energy five years later, and the following year with MEMC (now SunEdison, the acquisition of which he led), and was vice-president, global product operations, focussing on semiconductors and wafers. He was also instrumental in scaling the SunEdison business from 40 MW to 450 MW worldwide in less than three years.

TPS is now in three businesses – manufacturing, projects and products – Goel explains. The first is capital-intensive: panels used to be the biggest cost but this has now been cut by half, he points out. Projects include those that involve EPC (engineering, procurement and construction), as well as captive power plants for businesses which want to use solar energy to hedge the rising costs of grid energy. "Every serious company is seeing resurgence," he says. "We also help in structuring and financing to make the investment affordable, through our ecosystem of finance and partners."

Products range from home lighting, solar pumps and street lights – TPS electrified 25,000 houses in Tamil Nadu during the year and is increasing this to 40,000.

The high cost of solar energy, questions of quality, distribution and service – thanks mainly to the large number of fly-by-night operators – and financing, with bankers 'laughing at loan seekers', are deterrents to the rapid adoption of solar technology, Goel says. "But it's a big market, and it's going to grow," he adds. "There are 1.4 billion people in the world with no access to grid electricity. Half of these are in Asia

*My background in software has helped in a couple of ways: I understand the cost of mistakes – they cause discomfort to millions of people, and they take years to correct*

and Africa." Installations and products also need inbuilt ruggedness and longevity to popularise them in rural areas: a lantern designed beautifully in Europe, for instance, could melt in the Indian or African sun in a couple of hours!

In the project business, TPS has built a solar power plant at Olappalayam in Tamil Nadu for the Chennai Silks group, the largest textile producer in the state. The plant, which is designed to generate 3.1 million units of electricity in its first year of operation, will save the client nearly ₹2 crore a year in energy costs. It will also get it a REC (renewable energy certificate) benefit, which helps reduce working capital needs through REC trading, which is expected to bring in an additional income of more than ₹3 crore.

The supply of this energy to Tamil Nadu Generation and Distribution

Corporation will allow it to draw an equivalent quantity of uninterrupted electricity supply for its factory. According to managing director N. K. Nandhagopal, the plant – a first for the group's energy division which already has 40 windmills to combat the power shortage which is a major issue in Tamil Nadu – is expected to generate 3.1 million units of electricity in its first year of operation.

TPS has designed lanterns with standard batteries, which the user can replace, and a retrofitted inverter. "We have lowered the entry barrier, so that our products can be mainstream and not just a fad," Goel says. "My background in software has helped in a couple of ways: I understand the cost of mistakes – they cause discomfort to millions of people, and they take years to correct."

His knowledge of software, hardware and energy also help in taking forward his aim of making 'smarter' devices, with monitoring systems. "We need to bring a different approach to the product business," he says. "My vision is to give you a solar plant on your rooftop and enable you to check its performance even when you can't go up to check on it physically." In the company, he is trying to build a culture where people connect without face-to-face interaction, and drive productivity.

Committed to enabling solar everywhere and bringing the power of the sun to people in the most efficient and cost-effective ways, Goel's focus is to accelerate the core mission of "enabling solar everywhere" in three areas: cost leadership in manufacturing, a rapid growth in solar projects and launching a slate of affordable new products for the off-grid market. He has been propagating the message of 'invest and grow' for the past year and he describes it as the driving factor in getting people to believe in themselves. As he concentrates on taking the company to the next level, he is proud that it is the best in its class in the market; he now wants to reduce the cost of solar power – which varies according to scale and works out to about ₹7 crore per megawatt – through innovation.

♦ SEKHAR SESHAN