

India's solar stagnation waiting for some Modi magic

India | Policy uncertainty and a damaging trade dispute have undermined India's ability to realize its vast solar potential. But with a new prime minister now settling in, the worm could be about to turn for the country's beleaguered solar industry, writes Raj Prabhu



India needs power. The World Bank has estimated that 300 million people in India – more than a quarter of the country – live without access to power, and those who do have power face acute power shortages. In July 2012, more than 600 million people were affected by one of the largest blackouts in the country's history due to insufficient power generation.

India has long struggled to meet its power generation needs through conventional means, and solar energy shows tremendous promise as one of the most attainable sources of power in India. Solar energy's flexibility and increasing affordability make it a unique solution to India's

growing appetite for power and the sector itself represents a great future for economy, industry, jobs and environment.

The solar sector in India was almost non-existent before 2010, and in spite of encouraging growth levels by 2012 the market has stagnated at around 1GW in annual installations since that time. Uncertainty surrounding the potential imposition of an anti-dumping duty froze project development activity earlier this year – just 500MW has been installed to date in 2014 – with many developers and manufacturers concerned about unworkable project economics. Along with choking project development, the proposed anti-dumping

Although solar development in India has stalled, fresh policy momentum is expected from the new Modi government.

Source: Tata Power Solar.

duties threatened to increase solar power prices, making the resulting product – clean, renewable energy – unaffordable for most consumers.

India's former United Progressive Alliance government committed to, but was unable to meet, its 'power for all' target, which aimed to provide electricity to all Indian households by 2012, due to an industry riddled with fragmentation and underinvestment. Positive change has arrived in the form of the new National Democratic Alliance administration, which recently announced ambitious plans to use solar power to bring 'round the clock' electricity to every home in the country by 2022. The new government has shown its support for existing initiatives that will reduce the country's dependence on fossil fuels, including the Jawaharlal Nehru National Solar Mission (JNNSM) policy, and its goal to install 20GW by 2022.

The new prime minister, Narendra Modi, has a strong track record as chief minister of Gujarat, where he spent 13 years working to modernise energy infrastructure and introduced India's first incentives for large-scale solar power, leaving the state with a 17% renewables share.

Following the election of Modi, the response from the solar industry has been positive. Many anticipate decisive action from the new administration that will bring about an end to the unpredictability that has dogged the industry and restore order to the energy sector.

Disaster averted

The Indian government let the 22 August deadline lapse on the proposed imposition of anti-dumping duties on cells and modules manufactured in China, Taiwan, Malaysia and the United States, indicating that there will be no anti-dumping tariffs placed on components imported from these nations. India's solar industry is collectively breathing a sigh of relief that a poten-

tial disaster has been averted and projects that were stalled can now re-start. However, the drama surrounding the anti-dumping case, which was entirely avoidable, brought project development in the country to a standstill with developers essentially stopping the procurement process due to uncertainty surrounding the case.

The optics were less than ideal – the industry and commerce ministry, lobbied by manufacturers, pushed for duties, while the renewable energy ministry opposed them, giving the perception that the government and solar industry are out of touch with the daily suffering of the citizens and businesses dealing with regular power shortages. Although this affected the short-term outlook on installation growth, the end result was good and the new NDA administration was able to take decisive action, making a pragmatic, 'big picture' decision that will remove uncertainty and help put the solar industry back on track for sustainable, long-term growth.

According to Mercom sources, to make up for anti-dumping case, the government has assured domestic manufacturers a guaranteed market by providing 'adequate offtake' through government programmes, which will employ domestic content requirements.

A draft policy guideline for JNNSM Phase II, Batch 2 projects was recently announced, which continues the status quo with policies developed under the former government. However, the new administration has assured us there will be a revised draft in the coming months, which will have the stamp of approval of the solar-friendly NDA administration.

If the upcoming policy is laid out with long-term visibility and a focus on healthy yearly installation growth, which appears to be the direction it will take, it could effectively shift the Indian solar market into the next gear. Most of our sources have indicated that the new power minister is extremely engaged and wants to 'go big' on solar. Some important changes the upcoming revised policy may include are outlined in the box, below.

What stakeholders are saying

We regularly speak with key industry stakeholders – developers, manufacturers and investors – and in our discussions this quarter we heard divergent views on the current state of the market. Developers are optimistic at the prospect of a new policy that is more robust in terms of installation targets, and provides a more sustainable

India solar policy wishlist

- An overhaul of the pricing mechanism, away from CERC tariff base, to a more market-based tariff mechanism
- An increase in the size of the batches from a current 1,500MW
- State-specific auctions where NTPC Vidyut Vyapar Nigam (NVVN) will handle the bidding process for states, while states with an NVVN payment guarantee will purchase power, provide land and infrastructure. Through our discussions we learned that Andhra Pradesh may be the first state to take on this programme with 1,000MW, while other states are showing interest
- The Ministry of New and Renewable Energy (MNRE) also just released a draft policy document which targets 20 solar parks of 500MW or more by providing support of INR2,000,000/MW (~US\$33,333/MW) and an NVVN payment guarantee for states that provide land and infrastructure. Andhra Pradesh, Telangana, Madhya Pradesh, Gujarat and Karnataka could be first in line as it is believed they have already identified land for solar parks

tariff structure. They are relieved by the anti-dumping decision and welcome a new level of certainty in the market.

A number of the manufacturers we spoke to were positive about the increase in exports. Module manufacturers indicated that cell availability is low, with high prices and onerous payment terms, and lamented

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that profits are elusive if they buy cells domestically. Instead of protectionist measures, some manufacturers indicated that removal of duties on imports of raw materials like glass, copper interconnect, encapsulant film and backsheets, along with a 5.5% value added tax in Karnataka state and 5% central sales tax in other states, can cut their overall cost of production by about 8.1% and compete with imported modules. Manufacturers were optimistic that the new administration will bring about much-needed change as they see government officers working with a renewed sense of responsibility indicative of the new administration's priorities.

Investors were also more positive, with many confirming that they are increasingly comfortable investing in India's solar

market. Banks, on the other hand, continue to express concerns about state policies due to both low tariffs and the more important concern of off-taker risk. Several states are behind in payments and continue to maintain poor credit ratings. Some investors mentioned that they are lending to projects with tariffs above INR6 (~US\$0.1) as long as developers are experienced and off-takers are credible, without evacuation issues.

Investors spoke about risks they were encountering, including land acquisition issues, aggressive bidding, developers bidding for state projects and then dropping them for higher tariff projects (such as the JNNSM projects), and lack of RPO enforcement. All investors we spoke with viewed anti-dumping and domestic content requirement unfavourably, as they will significantly affect project IRRs, making most projects unviable. They had a positive view of the new energy minister whom they see as knowledgeable and hands-on. When asked about financing commercial rooftop projects, investors indicated they would look to provide financing on these projects as long as they were bundled into portfolios of 8MW and larger.

Good prospects for progress

Election year, along with the uncertainty surrounding the anti-dumping case, slowed installations this year, and as a result, 2014 was another missed opportunity for growth in the industry. We recently lowered our installations forecast from 1GW to approximately 900MW, citing these factors.

Following the significant developments in India's political sphere, decision-making and policy development now looks to be moving in a solar-friendly direction. The challenge for Prime Minister Modi will be to implement his vision while conveying the gravity of his administration's intentions and holding individual states accountable for their commitments to renewable energy targets. Strong leadership and careful collaboration between central and state governments and solar industry leaders will be key to circumventing political sensitivities and stimulating true, sustainable, long-term growth in solar power in India. ▶

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