



"Current market size of renewable energy in India is 16 GW"

Owing to its location, India has a great potential for renewable energy, especially solar. The geographic advantage is coupled with a shift in policy and emergence of the technologies which make India especially well suited to lead the region in renewable energy development. **Aparna Doshi, COO, Astonfield Renewable Resources**, in a tête-a-tête with **Projects Info** discusses about the growth of renewable energy market in India

Energy forms a crucial part of infrastructure of any country. What is the current scenario of non-renewable energy in India?

Non-renewable energy consists of conventional fossil fuels such as coal, oil and gas, which currently dominate over three-fourths of the Indian energy mix. However, this dynamic is rapidly changing. Power demand in India is growing at a tremendous rate. In the coming 5 years, per capita consumption is expected to jump from 580 kWh to 1000 kWh, driving total peak power shortage above 25 GW from the current 15 GW (12.6 per cent shortage). India's non-renewable energy sources are not able to meet current demand. India imports over 65 per cent of its current petroleum and coal requirements, a number which is only anticipated to increase as domestic coal reserves are exhausted.

Astonfield has a project portfolio of 1,000 MW. Please give a break up of these projects and elaborate on projects specific to India.

We have a steady stream of

allocations being secured on a continual basis. Our focus now is to get megawatts pumping into the grid. To that end we have finalised technical partnerships with some of the world's leading technology providers, such as Areva Renewable and Belectric.

- The first project to be commissioned will be a 5 MW solar PV plant, Osayan 1, in Rajasthan in early 2011
- Following this project, we will be commissioning a 11.5 MW solar PV plant in Gujarat, a 10 MW solar PV plant in Karnataka and a 5 MW solar PV plant in West Bengal
- In addition, we have a 10 MW biomass project in late stage of development in West Bengal. This is the first project being developed under our 100 MW partnership with Areva Renewable.

What is the current market size of renewable energy market in India? What is your future outlook for this market?

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Aparna Doshi, COO
Astonfield Renewable Resources

16 GW out of a total of nearly 150 GW. This total is comprised primarily of biomass, small hydro and wind projects. The 'President of India energy review' forecasts total power demand will exceed 640 GW by 2030. Renewable energy will be a critical component to this energy mix. As domestic coal resources continue to dwindle and natural gas is consumed by the agriculture industry, India will simply have no choice but to pursue renewables on a grand scale to support future growth. Fortunately, policies such

as the National Solar Mission (NSM) provide the foundation for such growth. The NSM targets 20,000 MW of installed solar generating capacity by 2022 and provides short term targets, budget allocations and favourable feed in tariffs to ensure this goal is met.

What are the latest technologies emerging in the Indian renewable energy market?

Owing to its location, India has a great potential for renewable energy, especially solar. The geographic advantage is coupled with a shift in policy and emergence of new technologies which make India especially well suited to lead the region in renewable energy development.

Please elaborate on the technical feasibility and economic viability issues surrounding different renewable energy sources in general and solar energy in particular.

Global solar panel pricing has declined 40 per cent over the past 36 months and is continuing downward with advances in efficiency and expansion

in manufacturing capacity. However, it is still a challenge to deploy economically viable solar projects in the highly cost sensitive Indian environment. To this end, we have partnered with a select handful of global solar technology leaders to indigenise their solutions to the Indian market and drive costs down to viable levels.

Please elaborate on the government incentives on promoting the renewable energy sector in India and other parts in South Asia.

The Government of India has shown strong leadership in renewable energy development with the announcement of the Jawaharlal Nehru National Solar Mission. The NSM will have a major impact on how quickly and effectively the solar industry will take off in India. Under the mission an attractive solar tariff is fixed for both PV and CSP for 25 years. In addition, state governments have crafted and implemented complementary solar programs, allowing for more rapid ramp up of the industry across India.