

## RENEWABLE FOCUS

### Surging Growth



# HIGHER WIND POTENTIAL

Though Solar energy is taking lead in the renewable energy segment with the introduction of JNNSM, wind energy continues to attract investments in various states. Though the country had a history of developing wind energy for last two decades, lack of infrastructure binds the developer to stick on with smaller capacity turbines.

Renjini Liza Yarghese

**The potential of Indian wind segment is assessed as 50000 Mw. With the newer technologies, do you see the potential going higher?**

The wind potential in India was assessed based on measurements at 25-50 m. hub height. The introduction of new turbines with higher hub-heights which are suitable for operating in lower wind regimes is expected to result in higher capture of wind resource. It is our understanding that C-WET - based on meso scale modeling at 80 m. hub height - has estimated the wind potential of more than 100,000 MW.

**Wind energy is part of the country's energy basket for last 2 decades. Does the country have a reliable data bank to support a developer in the country?**

Over a period of last two decades, C-WET and the private developers have carried extensive wind monitoring programs. Apart from this, other Govt. agencies like IMD and CSIR have also installed a sizeable number of wind masts across the country. If all the ground monitored data coupled with meso scale modeling data is synchronized, we can have a reliable data bank to support the new wind developments.

**Which state, according to you, sees a faster movement in developing wind energy?**

Wind developments in the country are primarily focused in 6-7 States, owing to wind potential and regu-



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latory and policy framework prevailing in that state. Tamil Nadu took lead in the initial stages followed by Maharashtra, Karnataka, Gujarat and Rajasthan respectively. Wind development in Andhra Pradesh is also picking up. Considering the huge untapped potential, Andhra Pradesh can become a new destination for new wind installations.

**India is far away from installing higher capacity turbines. Explain?**

MW scale turbines were introduced in India in mid of last decade and at present, there are a number of suppliers offering 2 MW and plus turbines, which is a standard size across the world. Higher capacity turbines of 3-6 MW are mainly installed at offshore locations, and we are yet to have a policy program for offshore installations. In addition to that, higher capacity turbines also require supporting infrastructure in the form of construction and transportation equipment, roads, etc which are currently not available in India.

**What kind of a market you see in India for refurbishment in wind segment?**

(replacing the old turbines)

Old wind farms using WTC size of below 500 kW are good candidates for re-powering. In near future, we can expect sizeable growth in this segment. □