

'Hybrid tech will raise PLF'

The renewable energy space in India has witnessed significant changes in terms of technology and innovation over the few years.

Tulsi R Tanti, CMD, Suzlon Group in conversation with **Ateeq Shaikh**, speaks about the company's initiatives in leading the change, overall business scenario, expansion plans and new introductions.

Suzlon's share in India's wind turbine market has gone down from 50% to below 30%...

We have taken some transformational steps, aligned to our strategic vision and we have seen it pave the way for Suzlon's future growth. We have significantly reduced our debt, interest obligations and adequately capitalised our business to ramp up volumes rapidly and focus on operations and execution. We are expected to grow faster than the market; hence, market share gain is imminent. There are immense opportunities and Suzlon is in a unique position to cater to the domestic market. We have technologically advanced product portfolio, strong customer base across segments and a pan-India presence. Our new product, the S97 120-metre hybrid tower wind turbine generator (WTG) has achieved 35% plant load factor (PLF), and S111 90-metre 2.1 mw WTG has received encouraging customer response. Roughly 70% of our new order wins in FY16 are for new products. We have recently installed the prototype of our S111 120-metre lattice hybrid tower which is expected to deliver 40% PLF and will be introduced to the market in FY17. I believe technology and innovation will continue to be the catalyst for Suzlon. The

wind-solar hybrid solutions, digitisation of services, innovation in tower and blade technologies are aimed towards making unviable wind sites viable, ensuring better yield and increasing the capacity utilisation factor (CUF). We envision to add about 20-22 gw of renewable capacity by 2022.

In April, the new turbine at 120 metres was introduced. Please share details.

There are two aspects to reducing the cost of energy. First is technology that can increase energy production and second being price and material cost. We have centres in Netherlands, Germany, Denmark and Austria. Those teams are working and developing next generation of aerodynamic product, which is particularly rotor blade that can generate more energy. The second technology piece that is very important is tower height. Once we go higher, the wind velocity increases, so does the stability of the wind. Thereby, we're able to harness more energy at higher reaches. But the flip side is that if you go higher, the cost of the project also increases. Therefore, we have to find a balance to get the optimum output, for which we have

come out with a hybrid tower – a mix of lattice and tubular tower. We have introduced S111-120 tower at 120 metres of height that have given us 40% PLF. In the last 9 months, we have achieved 20-22% of PLF and in the balance months, we are confident of delivering 40% of the PLF. Due to this, the cost of energy will go down by at least 5%. If you see, coal-based power plants run at 60-

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— Tulsi R Tanti

65% of load level. So we are going closer to power plant capacity utilisation level. Our next level of technology will be wind-solar hybrid.

What has been the progress in solar-wind hybrid project?

We need to develop the infrastructure base for hybrid. The current infrastructure is based on either wind or either solar. There is a huge opportunity in wind-solar hybrid solutions given the complementary cycles of generation and

the better utilisation of the installed infrastructure. However, a dedicated policy for hybrid is still awaited and we believe it will take 1-2 years for this opportunity to translate into a commercial scale. Wind-solar hybrid has multiple benefits to offer. One does not have to duplicate costs such as land and evacuation infrastructure. Our wind-solar hybrid projects are planned in the state of Rajasthan, Gujarat and Tamil Nadu. Wind-solar hybrid will give at least 50% PLF, which is very close to power plant capacity utilisation.

Are you comfortable with the current debt-equity ratio?

We are not comfortable with the debt-equity ratio, but we are working on that to improve year-on-year performance. Debt level is very comfortable, equity is negative which we are working on by increasing our business, profitability and bringing certain cash in the system, by generating cash.

How do you plan to roll out S128, the new turbine?

This is the next generation of the product. It will help in reducing 10% of energy cost. It will be a 120-metre tower, installed sometime in early 2018. The first prototype will be installed in Gujarat and Tamil Nadu.

What about the offshore solar plant?

We are in the process of studying it to have it at the Bay of Kutch. We have done a lot of analysis for the same. Still from the project feasibility and wind resource study point of views, the assessment is under-way. We are expecting that by 2020, the first such project should be possible.

