

New Trends Propel Green Energy

Offshore wind energy, hydrogen as well as battery technologies are rapidly emerging in this fast-changing industry. All that is needed is nimble-footed response from the policymakers as well as the corporate sector



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THE ECONOMIC TIMES POWER TALKS

The Economic Times brought together top officials and corporate leaders from the clean energy sector to discuss emerging trends that will increasingly dominate India's energy consumption. The panelists agreed that new trends like hydrogen technology, offshore wind energy and battery technologies are rapidly emerging, which require nimble-footed response from policymakers and companies. Edited excerpts:

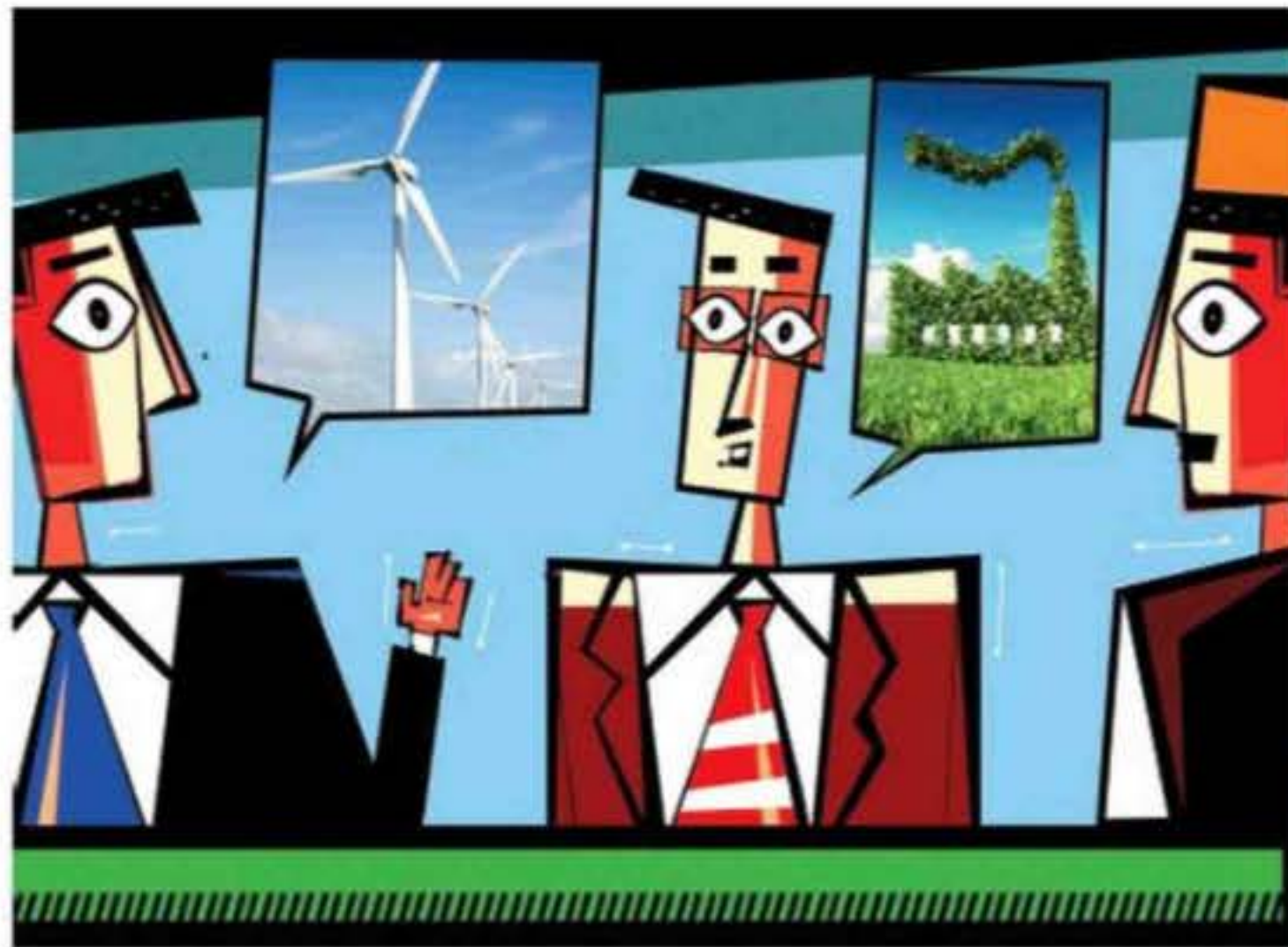
The Ministry of New and Renewable Energy (MNRE) secretary mentioned there are issues with states. What are these? Sunil Jain, CEO, Hero Future Energies: We've got 380 gigawatts of capacity and peak demand is just 188-190 gigawatts. So you're backing down some projects. Secondly, states have tasted blood of ₹2.5 (per unit) power; so with even a slight increase in tariff they don't want to buy because there is no demand also. Land is the biggest challenge, and it's a state subject. I think a new regulatory framework which is happening could solve 90% of the problems.

The government is interested in offshore wind energy. Mr Kumar, what are the prospects? Ashwani Kumar, CEO, Suzlon: Most companies have capacities for offshore wind. The issue is high cost of transmission and who is going to bear the infrastructure costs to enable those offshore turbines to be installed. We support and we are capable of doing offshore wind farms in India.



PC Maithani
Adviser, MNRE

Geographies are changing for manufacturing due to Covid. India could be considered a better place for manufacturing



ANIRBAN BORA

Deepesh Nanda
CEO, GE Gas
Power,
South Asia

An important change needed in the tendering process is to allow for natural gas as a fuel pass-through

Deepesh, should gas-fired plants be encouraged to balance the grid? Deepesh Nanda, CEO, GE Gas and Power, South Asia: Recent feedback from SECI (Solar Energy Corporation of India) says once we hit 175 gigawatt of renewable energy by 2022, we will have to curtail renewable energy by 27%. In 2030, when we have 450 gigawatts it is almost 50%. The solution is to introduce natural gas. The prices of natural gas have to be corrected to an attractive point.

Rajat, what are your views on gas? Rajat Seksaria, CEO, Acme Solar: What is more exciting is hydrogen. We're looking at blending hydrogen with natural gas. I mean green hydrogen developed using solar power. Even if we talk about blending of 5-10% in the next 3-4 years, you are creating a new category of demand for solar power. That partially takes care of the intermittent nature of solar. We are quite bullish about that. We don't believe storage solution lies in batteries. When we are talking gigawatts of solar, it will become impractical.

Dr Maithani, battery storage isn't the solution? PC Maithani, adviser, MNRE: The question is not whether gas or whether it

is storage battery or hydrogen. There is no competition. All the technologies are relevant; they are growing at a very, very fast rate. Ultimately they will make renewable energy transition more and more smooth over the period.

Companies have bid aggressively for tenders. Ashwani, what are the implications? Ashwani Kumar: Some of the wind tenders, which various corporates won, have not come through in time. There are two parts of the equation. One is tariff, which depends on cost of capital, interest rate and cost of setting up the project. Two, uncertainties linked to setting up a project. MNRE has seen the problem, it has come out with a draft wind park policy which will remove these issues.

Rajat, your company has bid quite aggressively... Rajat Seksaria: When the first time tariff hit ₹2.44, and that made all the headlines, I recollect Acme was probably not that popular among developers. Now that plant is actually running for more than a year. I wouldn't say it was a punt - it was an educated call the company took. In my view, and it would look a bit surprising coming from Acme, that particular meth-



Ashwani Kumar
CEO, Suzlon

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Sunil Jain
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Renewables is also a finance play. Adding capacity gives you valuations. That's what many players do

od of reducing tariffs has probably run its course. As an industry, the only focus for next few years is how to make this low-cost power dispatchable. The ₹2 power doesn't help us if it's not dispatchable.

Sunil Jain, do you think it's time to move out of the tender system?

Sunil Jain: Absolutely not. And it will never happen. What is happening is that renewables is not only about generating and selling energy and making returns. It's also a finance play, a valuation game. And adding capacity gives you valuations. That's what many of the players do. Lower cost makes it easier to make this energy dispatchable, because you can add storage and hydrogen to it.

Deepesh, would you want to add to this, about cost?

Deepesh Nanda: The government has amended the RE RTC. Earlier, it was only restricted to coal, now they've opened it up, which is welcome. When it comes to natural gas, they have restricted it to plants already constructed, or under construction. Our request is to open that, so that the advanced technology is put to use. The other important change needed in the tendering process is to allow for natural gas as a fuel pass-through.

What are your thoughts on balance between the cost of power and quality of power, and what is MNRE's view on gas and pass-through?

PC Maithani: Progressively, we should move towards dispatchability of power. If you see recent tenders from SECI, we are progressively hybridising it with other technology. On these options mentioned by Deepesh, discussions can certainly happen if they are relevant, but these are the suggestions that are there.

China has dominated solar equipment supply but not wind. What's different about wind Ashwani?

Ashwani Kumar: In wind, Indian companies like Suzlon and multinationals found the ecosystem for manufacturing because of the historical reasons that we'd been around for more than 20 years. They've always been very competitive. I don't see that changing. Some of our components that Suzlon manufactures are

actually used for wind projects in Europe and America. This should be encouraged as part of our Atmanirbhar policy.

Sunil Jain, will solar attain that kind of a status?

Sunil Jain: I'm not sure it will become 100% atmanirbhar. Let me compliment the government for the PLI scheme, which is definitely going to motivate people to come into domestic manufacturing. One caution for the government: If you have to be in manufacturing, we need a complete value chain manufactured in India. The moment you are dependent on imports from our neighbours on a couple of components, you're in trouble because they control that supply chain.

How optimistic are you Rajat?

Rajat Seksaria: There seems to be a lot of confusion not only with policymakers, but also with manufacturers. Whether they target the Indian markets enabled by specific policy, or the European market. Similarly, from the government, we've been trying multiple things - safeguard duty, BCD and now PLI.

Dr Maithani, how do manufacturers get the best technology?

Maithani: Geographies are changing

Rajat Seksaria
CEO, ACME
Solar

We don't believe storage solution lies in batteries. When we are talking gigawatts of solar, it will become impractical

for manufacturing due to Covid. India could be considered a better place for manufacturing. Second, to create a domestic market for manufacturing sufficient demand has been created which can give an initial traction. If there are some issues related to inputs for manufacturing, they are being looked into. If there is still a gap, the PLI scheme can cover it.

Rajat, can Indian manufacturers stay abreast of the latest technology?

Rajat Seksaria: Where we are good at, and that's something we've been doing in solar, is frugality of engineering. As a company, when we see the kind of cutting-edge resources in some of Australian, German and American universities, and see the research scene in India, we see there is a gap. It is better to tie up with countries that don't have the market size we have, and have a rollout programme.

Moderated by ET's Himangshu Watts