

Investing in alternatives

Can India replicate its cell phone revolution in tapping solar power?



Ghosh: 'India's lack of energy infrastructure can give it an edge'

The scenario is stark, says Probir Ghosh. India can either continue with 'Business as Usual' (BAU) and keep using the perceived cheap fossil fuels till they are exhausted, or achieve global leadership through innovative, breakthrough sustainable energy initiatives (SEI). And we can do it, says Ghosh, who is president and CEO of the US-based non-profit organisation invVEST – which stands for 'invest in energy that's sustainable through virtual collaborative teams'.

On a visit to India to try and put together a group of key members from the government and industry on the lines of the German Advisory Council for Global Change which has made Germany one of the world's most advanced geographies in renewable energy, Ghosh points out that history has repeatedly shown that breakthrough transitions occur only with out-of-the-box thinking. "Conventional thinking says India's lack of energy infrastructure poses a gigantic problem. However, this itself may give the country an edge to break away from the mould and create a new path to clean, economical and self-reliant energy," he says. "After all, India did just that with the cell phone revolution." Can what was achieved in cell phones be done in photovoltaic cells, too? But the stakes are exponentially higher and more

urgent in energy transition: "Our very next generation's future depends on it!" he adds.

Ghosh, who met new and renewable energy minister Farooq Abdullah and other government functionaries in New Delhi and made a presentation at the IIT-Kharagpur, also made presentations to public and private sector companies in the field, like Indian Oil Corporation (IOC), ONGC and Bharat Forge Ltd (BFL). "We need to form a think tank to create policies that will drive down costs and, consequently, prices of solar energy," he says. "Government support and commitment are essential to provide incentives for industry to get into the field. And there's a clear roadmap showing how solar efficiency will go up dramatically – and drive down the costs."

Brain power available

The brains and ideas are available, Ghosh and his colleagues – Rajan Kapur and Subir Das, who have 'significant expertise' in solar and biomass/bioenergy respectively – have found. They are, however, dispersed across a multitude of institutions like the various IITs, the Bangalore-based Indian Institute of Science and others; and there is neither any coordination nor initiative to commercialise them. "We must create centres of excellence

(CoEs) to coordinate these efforts," says Ghosh. "In fossil fuel-based energy, for example, IOC R&D has done significant work – they have technology that can be marketed outside India."

One point the invVEST team is clear about is that whatever energy source is selected for development, it must be something in which the country is self-reliant. "We don't care if it's oil or gas or whatever – so long as it is available locally and you have control over it," Ghosh explains. "Like if everyone in India switches to driving electric cars 10 or 20 years down the line, but the batteries come from only China or Korea, that's a problem. We hope to advise public and private institutions in India on which technology is appropriate here."

Most of what invVEST is presenting is a compilation of information that is available on many public platforms. But BFL chairman and managing director B.N. Kalyani – to whom Ghosh made an hour-long presentation – feels that using these facts and figures to create an India-specific scenario is useful. "It is a good framework for anybody," he says. "And there is no doubt that sustainability is itself a huge business opportunity – the only imponderables are what new regulatory processes will come, and whether real innovative breakthroughs happen." The group already has an energy vertical; it is active in wind energy and getting into thermal power generation. "We are looking at other areas of sustainability too," Kalyani adds.

"The invVEST vision gives a suitable teaching for making great development for global energy consumers with respect to renewable energies and sustainability," says energy consultant Jaideep Malaviya. "They have done an exhaustive analysis of the energy scenario in India and the path ahead. Since energy growth in the future will be coming from emerging economies it would be prudent if they can open CoEs in India covering the geographical regions that will make human resources available for operational implementation of renewable energy technologies."

♦ SEKHAR SESHAN