Solar Solutions



Manoj Kumar UPADHYAY Founder & Chairman **ACME CLEANTECH SOLUTIONS**

With a planned investment of up to \$7 billion, local company ACME intends to position itself as a major actor in India's renewable energy story. Founder and Chairman, Manoj Upadhyay spoke to EYE ON about the state of the solar market and the additional reforms needed to fast track the development of solar projects across India.

What additional reforms can further boost the scaling up of India's solar projects?

The most important thing required to scale up India's solar generation capacity is to simplify and update India's land acquisition law. Documentation needs updating, especially when it comes to land ownership so that people know who to buy land from. In addition, poor and marginalised segments of the population are unable to sell or lease their land under current local regulations. Leasing permissions should be allowed to everyone so that even the poorest are able to lease their marginal and barren land and get a sustainable income. In fact, the government is already working towards this.

The government should look at creating a new framework in commercial banking to handle smaller solar projects. While commercial banks typically support large scale solar projects of \$1-\$5 billion (Rs. 6,821 crore-34,105 crore), whose commissioning can take up to two years, we do not have a framework for smaller projects of around \$15-20 million (Rs. 102.3 crore- 136.4 crore), whose commissioning usually require a maximum of eight months. Developers who work on several small projects at the same time, from 5MW to 50MW, need separate permits for each project. Because of these time consuming processes the funding gets delayed.

How can the development of storage technologies best be encouraged?

A National Storage Mission would help attract and channel stakeholders' interest and investment while spreading knowledge about the potential of the storage industry in India.

ACME initially started looking at storage and energy management for the telecommunications industry, replacing diesel generators, and then expanding to commercial, industrial and residential units. In 2015, the company introduced a 10-year lifespan EcoGrid Energy

Storage System (ESS) for power back up services aimed at residential, commercial and industrial users. We are now developing storage systems in India that are able to cater to the needs of cities and towns. We strongly believe that developing innovative and reliable energy storage is essential if India is to reach 100GW of solar power by 2022.

Following our 10-year lifespan EcoGrid Energy Storage System (ESS) introduced in 2015, we are developing storage systems able to cater to the needs of entire cities and towns.

What is ACME's renewable energy strategy moving forward?

ACME is one of India's leading renewable energy companies, especially when it comes to solar power generation. As of October 2016, we have an operational capacity of 494MW and 1.060GW of power projects under various stages of construction and implementation in different parts of the country. Today, ACME is recognised as the leading solar power developer in India and is rapidly expanding its global footprint. We have been able to add nearly 1,100 MW of new solar projects through bidding in various tenders since April 2015. The company wants to make a green approach profitable and will grow based on the recognition that inculcating a green environment relies on providing cost-effective solutions. In a cost-sensitive market like India, offering cheaper and greener alternatives is the only way to change people's behavior.

By the Numbers:

Installed solar capacity (October 2016): $\textcolor{red}{\mathbf{494MW}}$

Targeted solar capacity by 2019: **7.5GW**

Solar capacities under-construction and implementation (October 2016): 1,060MW

Planned investment to achieve targets: **\$7 billion**