INCLUSION OF SOLAR IN BUILDING BYE-LAWS

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The inextricable connection between state policies and development is well defined. Make in India is known to have made a tremendous inroads in invigorating the manufacturing sector. The FDI inflows reached record high levels and GDP growth rate touched the 7.5% mark. In the past few months, metrics to quantify results of state policies reverberated on positive notes-Ease of business ratings improved and Moody's analytics upgraded its ratings towards India. As a developing nation, a state sponsored initiative was imperative for achieving ambitious development goals and the government has responded with the same.

The government has set a target of reaching a total of 100 GW of solar power by the year 2022. Considering India crossed 12 GW this year, a 100 GW target is ambitious to say the least. However, a variety of state sponsored policies have considerably pushed private firms in achieving the targets the government set. A combination of subsidies, incentives and net-metering provisions have reduced return on investment and made it possible for people to own solar power plants at considerably cheaper rates than before. However, the most intriguing aspect of solar policy framework is its evolving nature. Policies are amended constantly to suit the growing needs of the nation.

Building Bye Laws-A kickstarter to solar

The general unawareness of the public on the advantages of solar power is viewed with quite scepticism by people within the solar industry. However, this remains a quintessential challenge for adopting solar. Targeting this, the central government has recommended its state counterpart to enact policies that mandate solar power plants on buildings in their respective states. To ensure that this doesn't entail a high financial burden on the end user, the minimum quantum of solar power to be installed is extremely low.

Four states-Uttar Pradesh, Chhattisgarh, Haryana and Chandigarh have already adopted policies in the building bye laws that mandate solar power installations. Depending upon the state and type of end user-residential, commercial or industrial, the state government wants a small portion of the user's power consumption to be generated from renewable energy. It can be seen that a mid to high range of per capital energy consumption of these four states should command a stringent policy on development of renewable energy infrastructure. Incorporating the provision for solar (even though a small capacity) in existing and future building laws is mandatory for this to happen.

Small scale to Large Scale

power plant on the rooftop will make any real benefit in reducing the carbon footprint of the building, but it will make the client aware of the benefits of the solar power. For instance, in Haryana, building bye laws stipulate a mandatory solar system of 5% of the sanctioned load of private hospitals, educational institutes covering an area greater than 500 square yards.

Going by the law, a 12.5 kWp solar power plant on building where sanctioned load is 250 kW. Obviously, this will not put a dent in the consumption pattern of the client, but if the client is contended with the operations of the plant, he/she will look for options to expand the capacity of the plant Building Bye-laws have also incorporated the provision for solar installation in residential roofs of area greater than 500 square yards. Traditionally, solar power plants have not been popular in residential premises owing to longer return on investment. However, with the provision of net metering, residential customers can now reap the benefits of exporting surplus usage to the grid whenever there is no load. Net-metering provisions integrated with government mandated solar power plant should start the prominence of decentralized solar plants in residential areas as well.

Niche to common

Though, government has given a thought about inclusion of solar system in the building bye-laws, implementation of the scheme remains a challenge. A lack of awareness by end customers about mandatory.



Mr. Karan Kochhar | Engineer-Design | Fourth Partner Energy

solar installation poses a challenge to the smooth implementation of the scheme. The government should take the opportunity of surging popularity of solar to trump up the policies it is formulating. For future constructions, stringent statutory approvals must be enacted to ensure the end user is not able to skip the requirement of solar power.

On a positive note, the government is adapting to the growing needs of Indian consumers reflected in introduction of new policies and amendment of the old ones. Incorporating a provision of solar plants in building bye-laws is one such instance. However, the challenge remains that though people are accepting solar, there seems to be a disparity in the acceptance between sectors. A state driven policy is essential to tip

the 'rigid' client to accept solar for all its benefits.

Solar in India is witnessing a surge with plants being installed everyday adding to India's installed capacity. Although, acceptance of the erstwhile 'niche' technology is slowing become commonplace, state mandated directives are essential to push India to meet the target of 100 GW of solar power.