

What Has Kept Rooftop Lagging In The 2022 40GW Target Race What Are Some Lessons To be Learnt?

A 40 GW target of installed rooftop solar (RTS) capacity by 2022 was set by the Government of India in 2015. Measures such as government subsidies and mandatory RTS installation on government buildings and public offices were taken to help RTS grow. However, India's total installed RTS capacity as of 31st March 2022 is only 6.65 GW.

A high upfront system cost, coupled with a lack of financing options, is the most significant factor for the sluggish growth of RTS in India. While several financing options are available for utility-scale solar systems, very few exist for RTS. Residential and smaller commercial and industrial customers are the most affected, as they cannot bear the high upfront cost of going solar.

Poor public awareness about RTS is another critical factor. Many potential RTS customers lack the knowledge of RTS technology, benefits, and policies, and hence are unable to make an informed decision to go solar.

The RTS subsidy process for residential consumers has also hit its growth. Usually, the subsidy for RTS is paid to installation agencies after system commissioning and subsidy approval from the concerned government departments. The subsidy approval timeline can stretch to several months, which adversely affects the installation agencies, making the residential RTS space financially unviable for many of them.

Further, the distribution companies (DISCOMs) are reluctant toward RTS, especially in the commercial & industrial (C&I) segment, as they cannot afford to lose their highest-paying customers—the C&I segment—to RTS. This too has hampered the growth of RTS.

There are abundant lessons to be learned from the RTS experience so far. Easy availability of financing options for all RTS system sizes is essential. The launch of Surya Shakti Cell in Jan 2022 by the State Bank of India, in partnership with Tata Power, for financing solar projects up to 1 MW is an excellent step. However, many more such ventures are needed. Additionally, public financial institutions should be directed to create multiple RTS loan offerings. For enhancing consumer understanding and interest in RTS, state nodal agencies, DISCOMs, and private entities need to come together to organize regular awareness campaigns.

The lesson learned from the subsidy-approval-process experience is about its simplification. A welcome step in this direction is the Ministry of New and Renewable Energy's announcement in Feb 2022 to launch a national RTS portal, which will be a one-stop solution for residential customers for system application, net-metering, subsidy processes, etc. Subsidies will be routed directly to customers' bank accounts through this portal. The move will also encourage installation agencies to execute more projects in the residential RTS space.

Finally, a greater push for residential RTS space is needed to reduce the negative impact on DISCOM finances. This would help in increasing the overall uptake of RTS without harming the financial health of DISCOMs.

Swift implementation of the lessons learned from the RTS experience can certainly accelerate its growth towards reaching the 40 GW target, and beyond.