

WHAT ARE THE CURRENT CHALLENGES & FUTURE OUTLOOK ABOUT LENDING TO ROOFTOP SOLAR PROJECTS?



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India has set an ambitious target of 40 GW of clean energy generation through rooftop photovoltaic (RTPV) installations to be achieved by 2021-22. RTPV uptake, however, has been sluggish with only ~6.1 GW installed so far. Of this, more than 75% capacity comes from commercial and industrial consumers and

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the rest from residential and public sector rooftops.

The lack of financial access is a major challenge hindering RTPV uptake nationwide. To address this, the RBI introduced loan options for rooftop solar under the priority sector lending (PSL) norms. However, the initiative failed to create much impact because of high interest rates charged by banks, as they perceived RTPV to be a high-risk asset. Further, because the residential sector comprises multiple small RTPV installations, banks tend to be reluctant in financing such projects to avoid multiple transactional costs, loan recovery issues, and asset monitoring hassles.

There are other factors responsible for the slow uptake of RTPV. Most distribution companies (DISCOMs) are averse to widespread RTPV adoption as it can potentially hurt their

revenue. The end consumers do not have adequate information about several pertinent points—technical aspects of RTPV installation, possible income generation, etc.

Initially, high-paying commercial and industrial sectors were expected to play a major role in meeting the country's RTPV target. In fact, most dedicated lending lines at lower interest rates (World Bank–State Bank of India, Asian Development Bank–Punjab National Bank, etc.) focused on these sectors. However, recent recommendations by the Ministry of Power (MoP) restrict net metering (billing system that rewards RTPV owners for adding electricity to the grid) to smaller RTPV systems (≤ 10 kW), effectively discouraging commercial consumers from adopting RTPV.

Further, most states are now discouraging the Renewable Energy Service Company (RESCO) model—another initiative for encouraging RTPV installations—for commercial and industrial consumers.

To increase RTPV adoption in the country, the aforementioned challenges need to be addressed at both consumer and policy levels. To start with, appropriate scientific analyses should be conducted to assess the suitability of

residential rooftops for RTPV installation. DISCOMs can aggregate multiple kW-level demands into an agglomerated MW-level one. Further, banks should encourage prospective homeowners and real estate developers to adopt RTPV by integrating RTPV loans with home loans. DISCOMs too need to come up with, or at least seek, innovative financial strategies and policy frameworks, especially for commercial and industrial consumers. RESCOs looking at the roof top lease model with gross-metering should have access to lines of credit and lower interest rates.

Compared to net-metering, this model is less profitable for developers. Hence, large volumes in GWs are required to stimulate this segment. Multilateral and bilateral financial institutions can enable investments at this scale.

In conclusion, to meet the ambitious 2021–22 RTPV target of 40 GW and increase capital flow into the RTPV market, India's financial system requires considerable change. A structured approach along with sound technical and policy analyses can go a long way in making RTPV financing more accessible for all consumer categories.