COMMERCIAL AND INDUSTRIAL SOLAR MARKET IN INDIA

Key Trends, Regulatory Landscape and Demand Projections for Open Access-based and Captive Projects

- Report (PDF)
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India's C&I solar market has emerged as an important standalone business space in the recent years. Already, the C&I segment has the largest market share in rooftop solar deployment today and is also becoming increasingly active in the captive and third-party solar PPA segments.

Decline in solar power prices against significant grid power tariffs for C&I consumers have led many of these consumers to adopt solar power for meeting their power requirements through rooftop solar, captive power or open access plants.

In India, the average C&I grid tariff is above Rs 6.30 per unit, while average solar tariff in the case of rooftop solar and captive is in the range of Rs 3.34 to Rs 3.79 per unit. Thus, C&I consumers can get substantial savings through the use of solar power for meeting their power requirements.

Comprehensive solar rooftop policies, with net and gross metering regulations, exemptions on open access charges for solar power in many states and streamlined utility interconnection process have given confidence to the industry, and led to rapid deployments in the C&I solar segment.

Availability of affordable financing options and innovative funding structures has enabled easy access to finance for this sector. Haryana, Andhra Pradesh, Tamil Nadu, and Uttar Pradesh are the most suitable states for C&I solar power development.

Improved financing and growing popularity of the C&I solar segment is likely to result in an increase in scale. Though certain bottlenecks remain, mainly due to regulatory challenges and issues in approvals, the overall outlook is quite positive in for the C&I solar space owing to better cost economics. The total addressable potential of C&I solar capacity in 2024-25 across the 12 states is expected to be 279 GW.

The key objectives of this report are to analyse the growth trajectory and demand outlook, supportive policy and regulatory regime and the key emerging trends in the C&I solar segment in India. The report carries out an in-depth analysis for rooftop solar, captive solar and open access segments in India. It explains in detail the business models for these segments. It discusses the project costs, tariffs and cost economics for each of these segments and its cost-competitiveness with grid power. It highlights the recent completed and upcoming projects along with the key developments and plans of existing players in the C&I solar space. Finally, the report presents the addressable potential market for C&I solar along with the state-wise projected capacity up to 2024-25. The report also presents an in-depth analysis of the growth and tariff trends in C&I solar space, cost economics and projected capacity up to 2024-25 for 12 selected states.
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