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Indian Renewable Energy Sector

Large project pipeline and impending expiry of ISTS waiver to propel capacity addition in FY2025

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Agenda

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Highlights - I

Large project pipeline, scale up in tendering activity and impending expiry of waiver on ISTS charges in June 2025 is expected to scale up the capacity addition in FY2025

Continued downtrend in the prices of solar PV cells and modules remains a positive for solar power developers

- **ICRA's outlook for the renewable energy (RE) sector remains Stable**, led by strong policy support from the Government of India, superior tariff competitiveness and sustainability initiatives by large commercial and industrial (C&I) customers. However, challenges remain on the execution front, distribution utility finances and exposure to module prices, supply chain concerns on equipment availability and interest rate hardening.

- **The tendering activity has picked up in the current year** with 19 GW RE capacity bid out so far in 9M FY2024, which is higher than the capacity bid out over the last three fiscals. Also, the tendering pipeline remains strong with 16 GW under bidding by the central nodal agencies as of December 2023. Moreover, there is a greater focus on tenders for firm supply, i.e., round the clock (RTC) supply. Considering the oversizing required for these projects, the capacity set up under the RTC tenders would be 3-4 times the auctioned capacity.

- **The RE capacity addition is likely to scale up to 25 GW in FY2025 from the estimated 20 GW in FY2024**, supported by the large project pipeline of close to 80 GW as per the latest status report from Central Electricity Authority (CEA), improved tendering pipeline and the impending expiry of waiver on inter-state transmission system (ISTS) charges in June 2025. The 18-month window available before the applicability of ISTS charges is expected to see heightened activity from the developers to complete the projects awarded.

- **The prices of the mono PERC modules have witnessed a significant decline over the past 15 months**, reaching an all time low of 12-13 cents/watt in December 2023 from the high of 27-28 cents/watt seen in Q4 FY2022. Also, the cell prices have declined to 5-6 cents/watt in December 2023 from the peak of 16-17 cents/watt in December 2022. This has been driven by improved supplies across the value chain, moderation in demand from Europe and restriction on Chinese imports by the United States.

- **The moderation in solar photovoltaic (PV) cell and module prices remain a positive** for the developers, especially for projects bid out over the past two years, which are yet to be commissioned. Based on prevailing imported module and cell prices, the viability of projects using imported modules remains relatively better than sourcing modules from domestic OEMs using imported cells. This is possible considering the relaxation available from Approved List of Models & Manufacturers (ALMM) till March 31, 2024.

Highlights - II

RPO trajectory notified by MoP under the Energy Conservation Act with addition of a distributed solar component, which strengthens the legislative backing for the RPO norms

Module imports went by 155% in 7M FY2024 given the relaxation of ALMM and moderation in module prices; this is a lead indicator for scale-up in capacity addition in FY2024.

- **The sector witnessed a capacity addition of 7.5 GW in the first eight months of FY2024**, lower than the 9.6 GW added during the corresponding period of the previous year. The first half of FY2023 saw a higher RE capacity addition than the second half of the year as developers imported modules before March 31, 2022, in view of the imposition of customs duty on solar PV modules from April 1, 2022. While the scale-up in capacity addition in FY2024 YTD is slow, it is likely to improve with the last quarter expected to witness a large capacity addition led by the sharp decline in solar PV cell and module prices.
- **The Ministry of Power (MoP) vide its order dated October 20, 2023, notified the renewable purchase obligation (RPO) trajectory** for the period from FY2025 to FY2030 under the Energy Conservation Act 2001, strengthening the legislative backing for the norms. While the overall RPO trajectory remains in line with the RPO targets notified by the MoP in July 2022, the composition of the RPO has been revised with addition of distributed RE component and reduction in components for wind specific and hydro specific RPO.
- **The imports of solar cells and modules increased by 155% in 7M FY2024** in view of abeyance of the ALMM order and expected scale-up in capacity addition amid the decline in solar PV module prices. On the other hand, the growth in module exports from India continued with YoY growth of 364% in FY2023, which further went by 382% in the first seven months of FY2024 over 7M FY2023 led by demand from the United States.
- **ICRA expects the solar PV module manufacturing capacity in India to increase to over 60 GW by 2025 from the current level of ~40 GW,** with improved backward integration into cell and wafer manufacturing. This is led by the strong policy support and growing demand from domestic solar power installations. The policy support for domestic solar manufacturers is through three major measures: [a] imposition of basic customs duty (BCD) on imported cells and modules from April 2022, [b] notification of ALMM comprising only domestic manufacturers, and [c] PLI scheme for manufacturing high-efficiency PV modules.
- **There has been a significant improvement in payment discipline by state distribution utilities (discoms)**, following the implementation of late payment surcharge (LPS) rules in June 2022. While the past dues are being cleared through funding support from Power Finance Corporation Limited (PFC) and REC Limited (REC), the payment of ongoing bills remains timely with most state discoms clearing the bills within 75 days.

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Thank You!