

Indian Renewable Energy Sector

**Moderation in solar PV cell and
module prices likely to support ramp
up in RE capacity addition in FY2024**

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MNRE has announced a bidding trajectory of 50 GW per annum over the next five years to build the project pipeline; timely implementation remains important

Moderation in the prices of solar PV cells and modules seen over the past few months, if sustained, is a positive for solar power developers and would enable a scale-up in capacity addition



- 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 & industrial (C&I) customers. However, challenges remain on the execution front, distribution utility finances and tariff viability concerns amid capital cost pressure and hardening interest rates.

- The Ministry of New & Renewable Energy (MNRE) has announced that bids for RE capacity of 50 GW per annum of solar, wind, hybrid and RTC power projects would be tendered from FY2024 to FY2028 to provide a pipeline for meeting the 500-GW non-fossil fuel capacity target by 2030. While bidding activity has picked up in the current year so far, timely implementation of the notified bidding trajectory by Central nodal agencies like SECI, NTPC, NHPC and SJVN remains important to achieve the capacity targets.

- The prices of imported mono PERC modules witnessed a moderation over the past nine months, reducing from the peak level of 27-28 cents per watt to about 23-24 cents per watt in December 2022 and further to 20 cents/watt in May-June 2023. This has been driven by improved supplies across the value chain and the decline in polysilicon prices. The cell prices also declined to 10.0-11.0 cents/watt in June 2023 from 14 cents/watt in March 2023, thereby bringing in relief for solar power developers.

- The moderation in solar PV cell and module prices and the time extension provided by the Ministry of Power for solar and hybrid projects till March 2024 are expected to improve capacity addition in the RE sector in FY2024. Also, the wind segment is expected to witness improved execution with the expected commissioning of assets bid out by SECI under Tranche VIII, IX and X. Overall, the RE capacity addition is expected to improve to ~20 GW in FY2024 from 15 GW for FY2023.

- The capacity addition in the wind segment improved to 2.3 GW in FY2023 from 1.1 GW in FY2022, supported by the wind component of hybrid projects commissioned in FY2023. However, the overall progress remains slow with only 6.1 GW commissioned as of May 2023 out of 18.7 GW tendered so far. This is owing to challenges arising from land acquisition, transmission connectivity and equipment sourcing. Nonetheless, execution has picked up over the past few months and FY2024 is likely to see improved capacity addition of over 2.5 GW.

Competitive tariffs discovered in recent tenders for RTC supply from RE projects, along with a storage component, are a positive for the sector

NEP projects annual capacity addition of over 50 GW over the next nine years, mainly led by the RE segment, along with large investments in the storage projects



▪ The competitive tariffs discovered under the recent round-the-clock (RTC)/ peak tenders is a big boost for the RE sector, given that the availability of RTC supply from RE projects enables an efficient grid integration for renewables. The focus of the RE tenders is gradually moving from standalone bids to hybrid projects along with a component of storage. Reduction in battery costs and demonstration of viability of pumped hydro projects is key for higher adoption of RTC projects.



▪ The National Electricity Plan (NEP), approved by the Government of India, projects the all-India installed power generation capacity to reach 602 GW by March 2027 and further increase to 874 GW by March 2032 from 416 GW as of March 2023, requiring annual capacity of over 50 GW over the next 9 years with majority of it being driven by the renewables. This apart, NEP projects storage capacity comprising PSP hydro of 27 GW and BESS of 47 GW, together providing 411 GWH of storage by March 2032.



▪ The imports of solar cells and modules witnessed a sharp decline of 46% in FY2023, owing to the policy changes related to BCD and ALMM. On the other hand, exports witnessed a sharp increase of 364% on a YoY basis in FY2023, supported by healthy demand from USA amid restrictions on imports from China. While the abeyance of ALMM requirement could adversely impact the order inflow for domestic OEMs in the near term, the healthy demand from export markets is likely to partially offset this impact.



▪ As per the data from PRAAPTI portal, the overdues to renewable power generating companies declined from Rs. 206.8 billion as of June 2022 to Rs. 12.0 billion as on June 19, 2023. This excludes the dues converted into instalments by these discoms. Apart from clearing the past dues through instalments, the discoms have been regular in making payments for the ongoing bills raised post June 2022 with most of them clearing the dues within 90-120 days. While this is a positive step for the IPPs, the sustainability of the timely payments is linked to the improvement in the financial profile of the discoms.



▪ In FY2023, the ratings in the solar and the wind power segments witnessed 14 upgrades and 7 downgrades. The upgrades were supported by favourable refinancing, reduction in project risk, improvement in parent credit profile and large recovery of past dues. The downgrades during this period were mainly owing to delays in receiving payments from offtakers and weakening of the credit profile of the parent.



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