



Indian Renewable Energy Sector

Tariff competitiveness, clean energy adoption to spark 100 GW RE capacity in C&I segment by 2030

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Sustainability commitments and tariff competitiveness remain the key drivers for RE growth in the C&I segment.

Assuming 20% of C&I demand is met through renewable energy by 2030, India will require ~100 GW of RE capacity.



- **The demand outlook for renewable energy (RE) capacity in the commercial & industrial (C&I) segment remains highly favourable**, underpinned by competitive tariffs, large sustainability commitments and supportive Government policies on moving towards net zero by 2070. Leading C&I entities, primarily from sectors like steel, aluminium, cement, IT and data centres, have committed to clean energy targets for minimising fossil fuel reliance and accelerating their decarbonisation goals.



- **With the C&I segment comprising ~45-50% of India's electricity demand, achieving 20% RE penetration over the next five years would necessitate ~100 GW of RE capacity** implying a CAGR of ~30%. This marks a substantial scale-up from the current estimated open access capacity of 25-30 GW. In recent years, large RE platforms with a portfolio of more than 1.0 GW, focused on the C&I market, have emerged in the sector.



- **Industrial tariffs charged by discoms range between Rs. 6-8/unit across states for FY2026. In comparison, RE developers can offer 24-40% savings under the captive mode** considering RE tariff of Rs. 3.5/unit. This cost advantage has been a key driver of RE capacity growth in the C&I segment. However, the recent reduction in energy charges and rise in fixed charges by Karnataka distribution utilities (discoms), if replicated across states, could dampen the competitiveness of open access RE and pose a headwind for future growth.



- **The segment faces regulatory risks from delays in granting open access approvals, resistance against open access in certain states and inconsistency in open access regulations across states.** While the Green Open Access Rules notified in June 2022 aimed to streamline processes, uneven state implementation and the recent Karnataka High Court ruling striking down key provisions have created regulatory ambiguity. Additionally, Rajasthan's revised land registration rules are likely to raise project cost impacting viability to an extent. Consequently, cohesive policy enforcement remains crucial for sustained growth in the C&I segment.



- **ICRA's rated RE independent power producers (IPPs) in the C&I segment largely comprise investment-grade group captive projects**, supported by long-term offtake agreements with creditworthy C&I off takers, demonstrated generation track record and promoters' strength. Over the years, rating upgrades have outpaced the downgrades, driven by timely execution of under-construction projects, satisfactory generation performance and favourable debt refinancing. Downgrades have been mainly due to weak generation performance and rise in leverage level.



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