ICRA

DATA CENTRES (DC)

India’s Edge DC capacity is projected to triple to 200-210 MW by CY2027

JULY 2025

Agenda

1 Overview of Edge Data Centres

2 Demand Drivers for Growth of Edge DCs

3 Industry Outlook and ICRA Ratings

Highlights

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Edge data centres (edge DC) are compact, localised data centres strategically placed closer to end-users or devices. These centres significantly reduce latency and enable faster data processing, making them critical for latency-sensitive applications such as IoT, 5G, and smart city initiatives.

ICRA projects the edge DCcapacity as a % of total Indian DC capacity to increase to 8% in CY2027 from 5% in CY2024.

The global edge DC market is witnessing rapid expansion, driven by the proliferation of emerging technologies. As of CY2024, the global edge DC capacity stands at approximately 5 GW, with the US contributing 44%. Edge DCs represent 10% of the total global DC capacity (~50 MW), highlighting their growing importance in decentralised computing. India, while a relatively new entrant in this space, is poised for significant growth over the next three years. ICRA projects India's edge DC capacity to reach 200–210 MW by CY2027 from a modest 60–70 MW in CY2024, marking a 3x increase.

New age applications like Generative AI, Augmented Reality (AR) /Virtual Reality (VR), Internet of Things (IoT) and 5G are expected to grow at a rapid pace in the near to medium term, driving the demand for edge DCs. These services require faster, efficient and real-time data processing for which low latency^ and high speed are critical. This is where edge DCs are gaining prominence, which are better equipped to handle these requirements compared to traditional DCs.

Edge DCs differ from traditional DCs in multiple parameters like size, location, scale, time taken to construct, capex cost per MW, distance from end user, etc. In the Indian context, traditional data DCs and edge DCs are complementary pillars of digital infrastructure. With the expanding cloud ecosystem of India, traditional DCs will keep fuelling mass-scale computing, AI, and cloud workloads, and edge DCs will facilitate real-time processing and localised services. Traditional and edge DCs are expected to operate in hub and spoke model for better efficiencies.

ICRA's outlook on data centres is Stable. Revenues in FY2026 are estimated to expand by 18-20% YoY for ICRA's sample* (which account for 75-80% of overall industry revenues and operational capacities in India) and the operating margins are expected to remain healthy in the range of 40-41%. The overall debt levels are projected to be higher by 13-15% in FY2026 to fund the ongoing capex. However, with the anticipated increase in operating profits, the debt protection metrics are likely to remain comfortable.

*^the delay between a user action and the corresponding system response;*sample includes NTT GDC India, STT GDC India, CtrlS Datacentres, Sify Infinit Spaces and Nxtra Data Limited*

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Thank You!