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JULY 2026

03 Industry Drivers

09 Industry Challenges

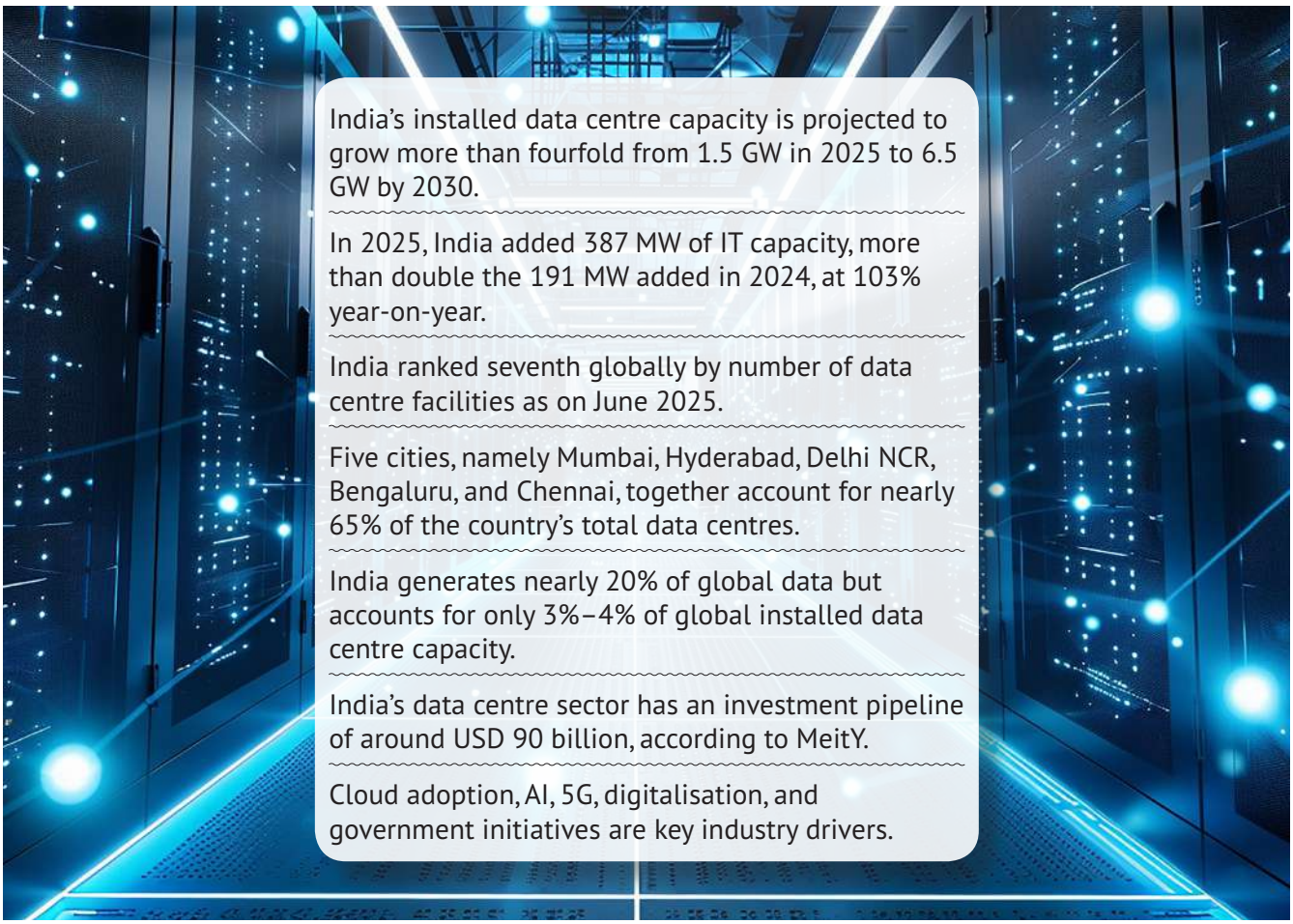
11 Key Initiatives by Major Players

Rubix Industry Insights

DATA CENTRES

India's data centre sector is experiencing rapid growth as digital technologies, policy reforms, foreign investments, AI, cloud services, and data consumption reshape digital infrastructure demand.

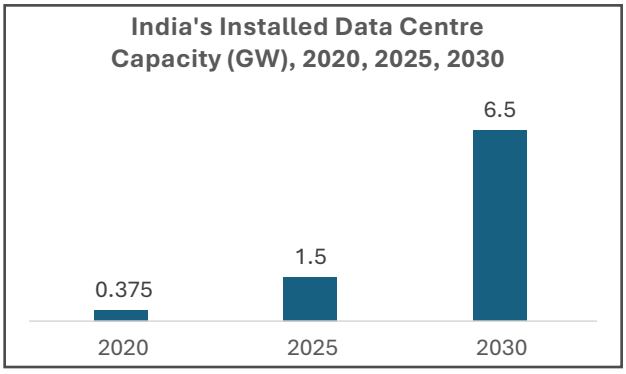
Executive Summary



- India's installed data centre capacity is projected to grow more than fourfold from 1.5 GW in 2025 to 6.5 GW by 2030.
- In 2025, India added 387 MW of IT capacity, more than double the 191 MW added in 2024, at 103% year-on-year.
- India ranked seventh globally by number of data centre facilities as on June 2025.
- Five cities, namely Mumbai, Hyderabad, Delhi NCR, Bengaluru, and Chennai, together account for nearly 65% of the country's total data centres.
- India generates nearly 20% of global data but accounts for only 3%–4% of global installed data centre capacity.
- India's data centre sector has an investment pipeline of around USD 90 billion, according to MeitY.
- Cloud adoption, AI, 5G, digitalisation, and government initiatives are key industry drivers.

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Overview of the Indian Data Centre Industry



Source: Ministry of Science & Technology

India's data centre industry is undergoing a phase of rapid expansion, driven by rising digital consumption, accelerating cloud adoption, Artificial Intelligence (AI) workloads, and increasing data localisation requirements. The country's installed data centre capacity has grown from approximately 375 MW (0.375 GW) in 2020 to around 1.5 GW by 2025. It is projected to reach 6.5 GW by 2030, more than a fourfold increase over 2025 levels[1]. Other industry estimates suggest even stronger growth, with installed capacity projected to reach between 8 and 13 GW by 2031[2].

At the higher end, the Institute for Energy Economics and Financial Analysis (IEEFA) projects that India's data centre capacity could reach approximately 9 GW by 2030[3]. Capacity additions have also accelerated significantly. In 2025, India added 387 MW of IT capacity, more than double the 191 MW added in 2024, a 103% year-on-year increase[4]. This reflects strong investment momentum and reinforces India's position as one of the fastest-growing data centre markets in the Asia-Pacific region.

The Indian data centre market is dominated by third-party colocation operators. Demand growth is increasingly driven by global hyperscale cloud providers such as Amazon Web Services (AWS), Google Cloud, and Microsoft Azure. Continued enterprise digital transformation, rapid AI adoption, and evolving data localisation requirements are further strengthening the demand for colocation infrastructure. Sustained growth in cloud computing, AI, 5G, digital payments, e-commerce, OTT platforms, and enterprise digitalisation, supported by favourable government policies and continued domestic and foreign investments, is expected to position India as a strategic hub for digital infrastructure in the Asia-Pacific region.

Data Centre Type	Ownership / Business Model	Primary Users	Key Characteristics	Examples
Enterprise	Owned and operated by an enterprise or government organisation	Large enterprises, banks, telecom companies, government agencies	Built exclusively for an organisation's internal IT requirements; infrastructure is not shared with third parties	State Bank of India, Reliance Industries, NIC Government Data Centres
Colocation (Retail and Wholesale)	Owned and operated by specialist data centre providers	SMEs, enterprises, telecom operators, cloud providers, hyperscalers	Customers lease racks, cages, suites, or entire data halls, while the operator manages power, cooling, security, and connectivity	CtrlS Datacenters, ST Telemedia Global Data Centres (STT GDC India), Yotta Data Services, NTT DATA, Nxtra by Airtel, Sify Technologies
Hyperscale	Owned by hyperscale cloud providers or developed by colocation operators for hyperscale tenants	Cloud service providers, AI developers, large enterprises	Large-scale facilities designed to support cloud computing, AI, big data, and High-performance Computing (HPC). In India, many hyperscale deployments are hosted within wholesale colocation facilities	Amazon Web Services (AWS), Microsoft Azure, Google Cloud, Oracle Cloud Infrastructure
AI and Edge	Owned by hyperscalers, telecom operators, cloud providers, or colocation operators	AI developers, enterprises, 5G networks, IoT, Content Delivery Networks (CDNs)	AI data centres are optimised for GPU-intensive AI training and inference, while edge data centres are smaller facilities located closer to end users to reduce latency and support real-time applications	Yotta Shakti Cloud, Nxtra by Airtel, Bharti Airtel, Reliance Jio

[1] *Ministry of Science & Technology, May 2026*
[2] *Economic Times, June 2026*
[3] *Institute for Energy Economics and Financial Analysis (IEEFA), June 2025*
[4] *DD India, January 2026*

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Regional Segmentation

According to the Institute for Energy Economics and Financial Analysis, as of June 2025, India ranked seventh globally by the number of facilities[5]. India's 271 operational data centres are concentrated across five major hubs, Mumbai (46), Hyderabad (28), Delhi NCR (38), Bengaluru (31), and Chennai (33), which together account for nearly 65% of the country's total data centres[6]. Such clustering is a defining characteristic of the global data centre industry, as operators typically gravitate towards locations that offer strong digital infrastructure, dense enterprise demand, reliable power supply, and robust connectivity ecosystems. Collectively, these five cities offer the combination of international connectivity, dense fibre infrastructure, reliable power availability, supportive policy frameworks, and concentrated enterprise demand that underpins India's data centre ecosystem.

City	Strategic Advantages	Examples of Major Data Centre Operators/Campuses
Mumbai	India's largest data centre hub (~49% of operational capacity); over 14 international submarine cable landings; extensive fibre connectivity; established business districts; government-designated data centre zones; strong concentration of BFSI, media, and technology companies	Yotta Data Services (NM1 & NM2, Panvel), ST Telemedia Global Data Centres (STT GDC India), Equinix
Hyderabad	Abundant land availability; competitive power costs; proactive state government policies; strong presence of global technology companies, hyperscalers, and Global Capability Centres (GCCs)	Microsoft, AdaniConneX, CtrlS
Delhi NCR	Large enterprise market; strong demand from government, BFSI, telecom, and cloud providers; strategic location serving northern India; mature fibre network	ST Telemedia Global Data Centres (STT GDC India); NTT Global Data Centers; Web Werks (Iron Mountain)
Bengaluru	India's technology and innovation hub; high concentration of IT services, software firms, startups, and cloud users; strong demand for low-latency digital infrastructure and colocation services	ST Telemedia Global Data Centres (STT GDC India); NTT Global Data Centers
Chennai	Strategic coastal location with five international submarine cable landing stations; strong global connectivity; relatively lower natural disaster risk; competitive operating costs; growing hyperscale demand	AdaniConneX; Yotta Data Services; ST Telemedia Global Data Centres (STT GDC India)

Note: Selected examples of city-wise data centres have been mentioned for representation purposes.

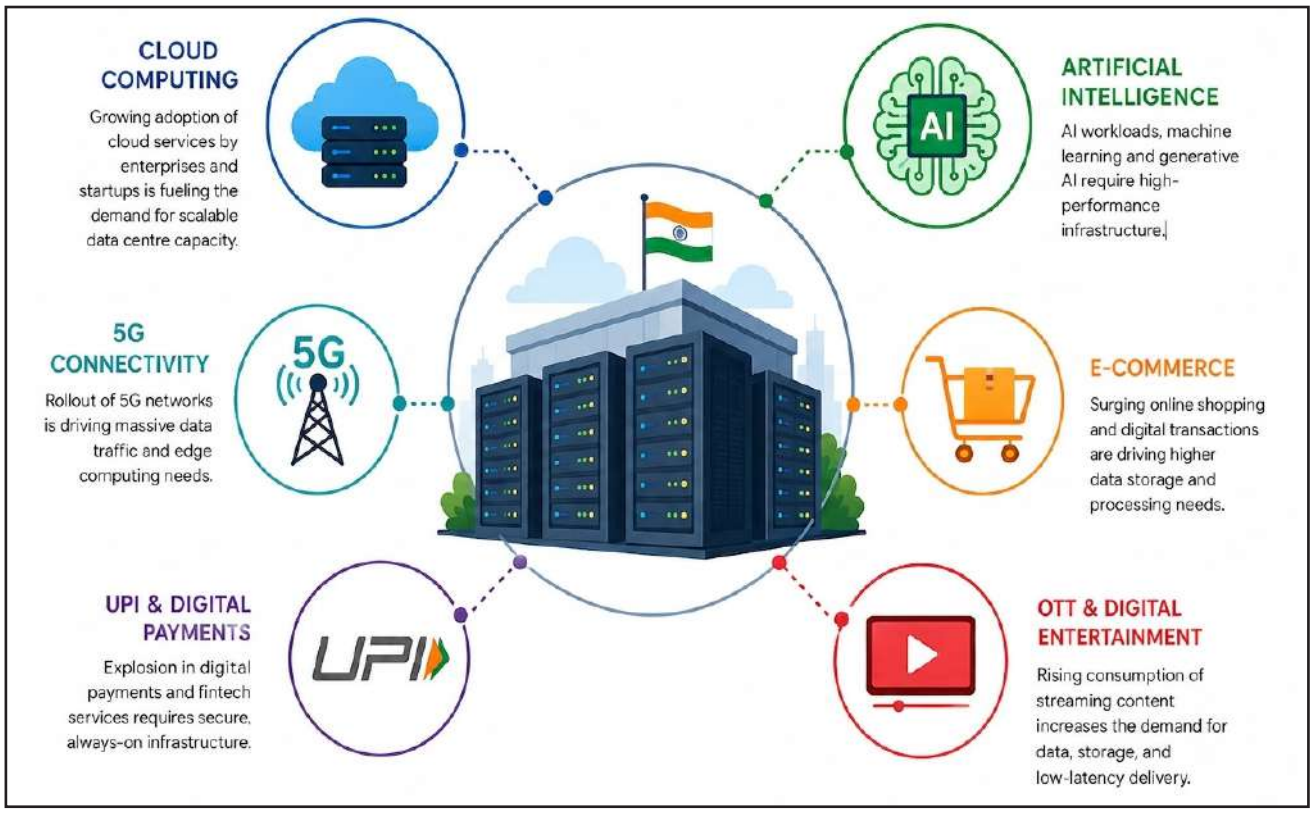
Industry Drivers

Major Drivers	Impact		
	1–2 years	3–5 years	6–10 years
Technology advancement as core driver of the industry			
• Cloud adoption is accelerating the demand for data centre infrastructure	Very High	Very High	Very High
• Artificial intelligence is driving the next generation of AI-ready data centres	Very High	Very High	Very High
• Digital technologies are boosting India's next wave of data centre growth (5G, e-commerce, UPI, OTT)	Very High	Very High	Very High
Cost competitiveness positions India as a preferred data centre destination	Very High	Very High	Very High
Data centre growth extends beyond metro hubs	Very High	Very High	Very High
Robust investment scenario expected to drive the growth	Very High	Very High	Very High
Government initiatives to strengthen the data centre ecosystem	Very High	Very High	Very High
India's expanding renewable energy ecosystem is enhancing its data centre competitiveness	Very High	Very High	High
GCC expansion drives data centre demand	Very High	High	High
Hyperscalers and colocation providers are jointly powering India's data centre expansion	Very High	High	High

Note: Selected examples of city-wise data centres have been mentioned for representation purposes.

[5] *Institute for Energy Economics & Financial Analysis (IEEFA), June 2026*
[6] *Council on Energy, Environment and Water (CEEW), February 2026*

Technology Advancement as Core Driver of the Industry



- **Cloud Adoption is Accelerating the Demand for Data Centre Infrastructure**

  Cloud computing continues to be a key demand driver for India's data centre sector. As enterprises and government organisations increasingly migrate workloads to public and hybrid cloud environments, cloud service providers are expanding data centre infrastructure to meet the growing demand for computing, storage, networking, and AI services. Gartner forecasts India's public cloud spending to increase by 28.1% year-on-year to USD 17.5 billion in 2026, with Infrastructure-as-a-Service (IaaS), which is the backbone of cloud and AI workloads, expected to grow by 40%. According to Fortune Business Insights, India's cloud computing market is projected to expand from USD 17.2 billion in 2025 to USD 68.7 billion by 2032, with some other industry reports estimating an even larger market size. Reflecting this trend, Cushman & Wakefield's Global Data Center Market Comparison 2026 identifies hyperscale cloud expansion and AI adoption as the principal drivers of India's 3.1 GW data centre development pipeline (under construction and planned). Global cloud providers, including Amazon Web Services (AWS), Microsoft Azure, Google Cloud, and Oracle Cloud, continue to invest heavily in expanding cloud regions and AI-ready data centre infrastructure across India.

- **Artificial Intelligence is Driving the Next Generation of AI-Ready Data Centres**[7]

  The rapid adoption of AI is accelerating demand for high-performance, Graphics Processing Unit (GPU) intensive data centre infrastructure across India. India ranks 3rd in Stanford University's Global AI Vibrancy Ranking 2025 and is classified among the first group of AI-ready nations, demonstrating systematic progress across the five foundational layers of AI: applications, models, chips, infrastructure, and energy. According to the Stanford AI Index, India's AI skill penetration is 2.5 times the global average, while the NASSCOM AI Adoption Index reports that 87% of Indian enterprises are actively using AI solutions. The Competition Commission of India (CCI) notes that India's AI market expanded from USD 2.97 billion in 2020 to USD 7.63 billion in 2024 and is projected to reach USD 131.31 billion by 2032, growing at a 43% CAGR between 2024 and 2032. This rapid growth in AI adoption is significantly increasing the demand for AI-ready data centres with high-density computing, advanced cooling systems, and large-scale GPU infrastructure, prompting continued investments by hyperscalers and data centre operators.

- **Digital technologies are driving India's next wave of data centre growth**

  Beyond cloud computing and artificial intelligence (AI),

[7] *Press Information Bureau of India, February 2026*

several digital technologies are accelerating demand for data centres in India. The continued expansion of India's digital economy is further driving demand for data centre infrastructure.

- **5G adoption:** The rapid rollout of 5G is expected to significantly increase data traffic, with the June 2025 edition of the Ericsson Mobility Report estimating that India's 5G subscriptions will rise from 290 million in 2024 to 980 million by 2030, accounting for nearly 75% of all mobile subscriptions. Mobile data consumption is also projected to increase from an already industry-leading 32 GB per smartphone per month in 2024 to 62 GB by 2030, reflecting the growing use of data-intensive applications.

- **E-commerce growth:** India's e-commerce market, valued at USD 125 billion in 2024, is projected to grow to USD 345 billion by 2030 (18.4% CAGR) due to increasing internet penetration.

- **UPI growth:** The Unified Payments Interface (UPI), which completed 10 years of operations in April 2026, has emerged as one of the largest real-time digital payment systems in the world. In FY2025–26, UPI recorded a record transaction value of INR 314 trillion, representing an increase of more than 4,000 times since its inception. Annual transaction volumes also surged from just 2 crore transactions in FY2016–17 to over 24,162 crore transactions in FY2025–26, an increase of more than 12,000 times, showing the rapid digitalisation of financial transactions and the growing demand for secure, scalable data centre infrastructure.

- **OTT growth:** The digital video and OTT streaming market is projected to more than double in size from USD 4.31 billion in 2024 to USD 9.17 billion by 2030.

Together, these trends are generating unprecedented volumes of digital data that require greater computing power, storage capacity, and low-latency connectivity, reinforcing long-term demand for data centre infrastructure across the country.

Cost Competitiveness Positions India as a Preferred Data Centre Destination

India has emerged as a preferred destination for Hyperscalers and global cloud providers, such as Amazon Web Services (AWS), Microsoft, Google, Oracle, Meta, Equinix, NTT DATA, and Digital Realty, owing to its strong structural cost advantages, expanding digital ecosystem, and supportive policy environment. India's construction costs are estimated to be approximately 30%–40% lower than those of China and the US, providing a significant cost advantage for large-scale data centre development[8].

In addition, data centre construction costs in India are estimated at around USD 6–7 million per MW, substantially lower than those in mature Asia-Pacific markets such as Singapore and Japan[9]. Lower land acquisition costs, competitive electricity tariffs, an expanding renewable energy ecosystem, and government incentives further strengthen India's value proposition. Together, these factors enable hyperscalers and global cloud providers to deploy large-scale, cost-efficient capacity, while supporting long-term expansion across both established metropolitan hubs and emerging regional markets.

Data Centre Growth Extends Beyond Metro Hubs

While India's data centre industry remains concentrated in major metropolitan hubs, development is increasingly expanding into Tier-2 and emerging locations as states pursue a more balanced digital infrastructure growth. Rather than concentrating capacity in one or two cities, state governments are introducing policies to attract investments across multiple regions by offering land, power, infrastructure, and regulatory incentives. This shift is being supported by industry trends, with experts highlighting that edge computing, AI workloads, 5G deployment, and rising digital adoption are driving the demand for geographically distributed infrastructure. Secondary cities are expected to complement established hyperscale hubs by offering lower land costs, greater power availability, and proximity to new enterprise clusters.

Policy initiatives are reinforcing this momentum. Maharashtra has removed the earlier restriction limiting integrated green data centre parks to Mumbai and Navi Mumbai, allowing up to 20 parks across the state and positioning cities such as Nagpur as potential AI data centre hubs, while Gujarat announced in June 2026 that it is preparing a dedicated Data Centre Policy targeting 2 GW of capacity by 2030[10].

Investment activity is already reflecting this trend. In 2025, RackBank inaugurated an INR 10 billion, 80 MW AI data centre park in Raipur, Chhattisgarh, while Sify Infinit Spaces' data centre in Lucknow became operational[11]. Visakhapatnam is emerging as a major AI infrastructure destination. As per the Adani Group, Google, AdaniConneX, and Nxtra/Airtel are developing a gigawatt-scale AI and data centre hub under a USD 15 billion investment programme in the city. Reliance Industries, in partnership with Meta, is developing a 168 MW data centre in Jamnagar, Gujarat, with scope for further expansion, and real estate firm Anant Raj has announced plans to invest INR 250 billion in data centres and cloud services in Haryana[12]. These developments indicate that India's next phase of data centre growth will increasingly be distributed across emerging regional markets alongside its established metropolitan hubs.

[8] *Care Ratings, March 2026*
[9] *India Brand Equity Foundation (IBEF), April 2026*
[10] *Times of India, June 2026*
[11] *Times of India, May 2025; The New Indian Express, April 2026*
[12] *Reliance Industries Media Release, June 2026; Reuters, June 2026*

Robust Investment Scenario Expected to Drive the Growth

There has been a sharp increase in investment activity in India's data centre sector, although estimates vary depending on whether they refer to capital already deployed, investment commitments, or announced projects. According to a Vestian report cited by the India Brand Equity Foundation (IBEF), the sector attracted USD 13–15 billion in investments between 2020 and 2024, rapidly expanding India's data centre capacity in recent years[13]. Similar estimates have been reported by other industry sources. For instance, Colliers estimates that the sector has attracted approximately USD 14.7 billion in investments since the beginning of 2020, driven by rising demand for cloud services, AI workloads, and digital infrastructure[14].

While historical investment has been relatively modest, there are indications of a robust pipeline of future investments. According to CBRE, India secured nearly USD 94 billion in **investment commitments** between 2019 and the first nine months of 2025, reflecting strong confidence from both domestic and global investors[15]. According to MeitY, investment proposals amounting to USD 90 billion have been announced for the sector, with nearly USD 70 billion now under construction. This shows the scale of the sector's development pipeline[16].

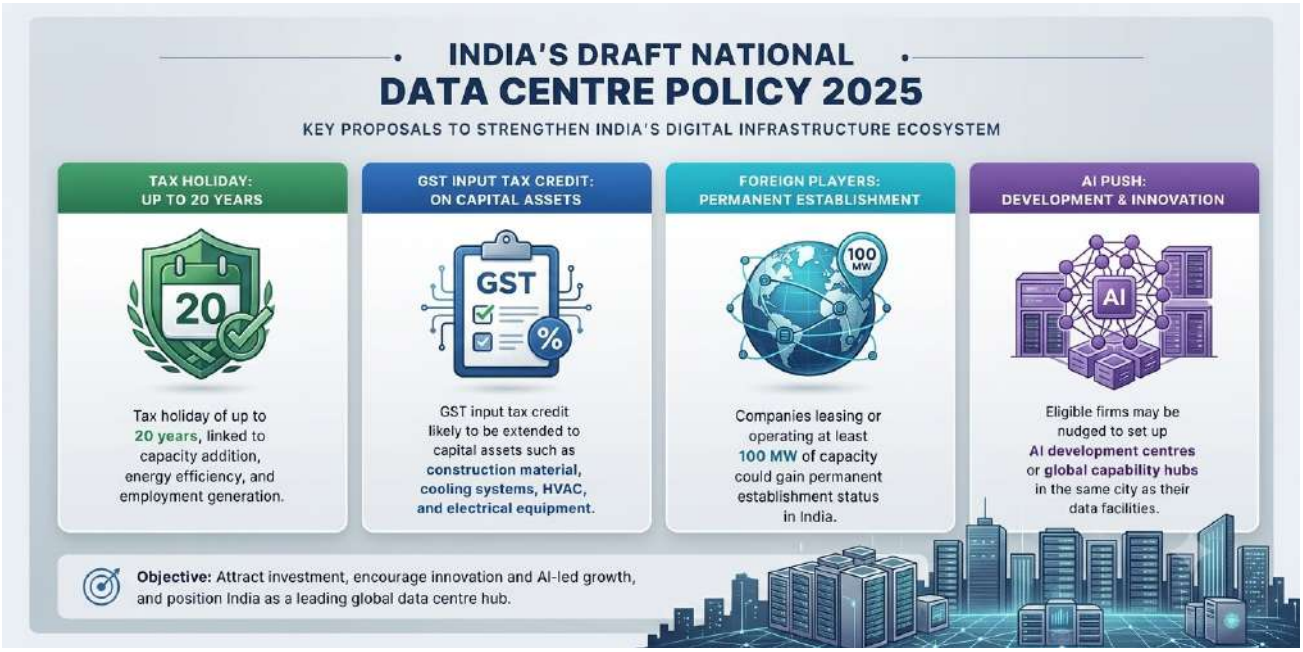
A significant share of this pipeline is being driven by hyperscale cloud providers, alongside growing AI workloads, enterprise digital transformation, and supportive government policies. In particular, Amazon Web Services (USD 35 billion), Microsoft (USD 17.5 billion), and Google (USD 15 billion) have together announced plans to invest approximately USD 67.5 billion in India, reinforcing the country's emergence as a strategic digital infrastructure hub[17].

The Government of India has also projected that AI-driven digital infrastructure development could catalyse up to USD 200 billion in investments over the coming years[18]. Announced at the India AI Impact Summit in February 2026 by the Minister for Electronics and Information Technology, this projection reflects the expected expansion of the broader AI infrastructure ecosystem, including AI-ready data centres, cloud infrastructure, high-performance computing (GPU clusters), networking infrastructure, semiconductors, and related digital infrastructure. As data centres provide the foundational infrastructure required to support AI applications and cloud services, they are expected to account for a significant share of these investments, making India a leading destination for AI-enabled digital infrastructure development.

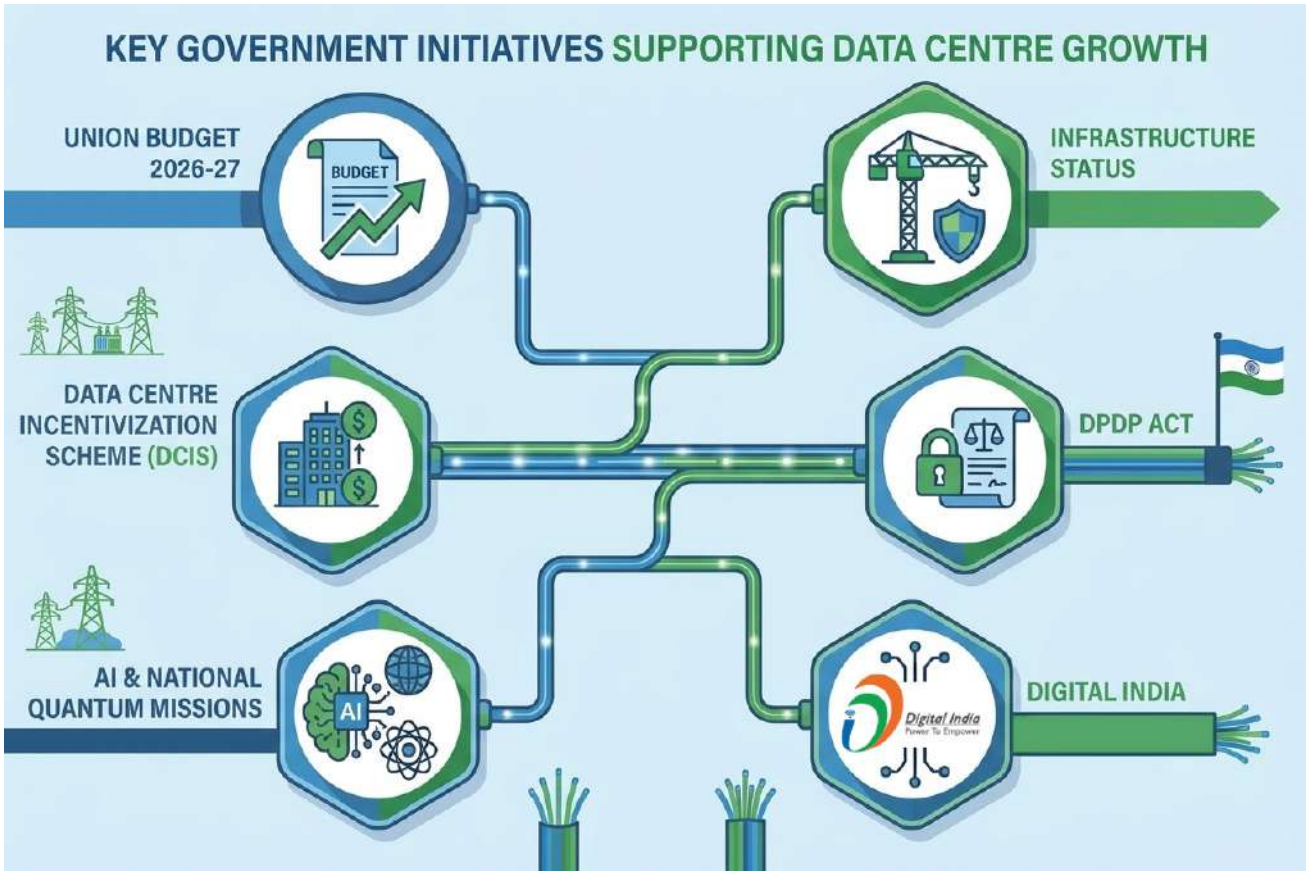
Thus, available estimates indicate that India's data centre industry is entering a significantly larger investment cycle. Compared to the USD 13–15 billion invested between 2020 and 2024, the current investment pipeline of around USD 90 billion is approximately six times larger.

Government Initiatives to Strengthen the Data Centre Ecosystem

In August 2025, the Ministry of Electronics and Information Technology (MeitY) revived the proposed National Data Centre Policy through industry consultations aimed at establishing a comprehensive national framework for the sector. Although the policy is yet to be formally notified, it shows the Government's intent to position India as a globally competitive destination for data centre investments.



[13] *India Brand Equity Foundation (IBEF), April 2026*
[14] *Colliers, May 2025*
[15] *CBRE, November 2025*
[16] *ET Telecom, February 2026*
[17] *Financial Express, May 2026*
[18] *DD News, February 2026*



Union Budget 2026-27 Initiatives[19]

- A tax holiday until 2047 for eligible foreign cloud service providers using India-based data centres to serve global operations,
- A structured eligibility framework requiring notified entities to utilise data centre infrastructure located in India, while domestic services must be delivered through an Indian reseller
- Domestic transactions to continue to be governed by existing tax provisions, with a proposed 15% safe harbour margin for related data centre entities

Infrastructure Status[20]

In October 2022, the Government of India accorded infrastructure status to data centres with an IT load of 5 MW or more. The move enables eligible data centre projects to access long-term institutional financing at competitive interest rates, attract greater domestic and foreign investment, and benefit from improved availability of infrastructure financing, thereby supporting the sector's long-term growth.

Digital Personal Data Protection Act, 2023 (DPDP Act)[21]

By establishing a robust framework for digital personal data protection, the Act enhances regulatory certainty and supports investment in India's digital infrastructure ecosystem. Although it does not mandate blanket data localisation, it is expected to encourage continued expansion of cloud services and data centre capacity to meet evolving data governance and compliance requirements.

Digital India Programme[22]

The programme has significantly expanded India's digital economy by promoting digital public infrastructure and accelerating the adoption of digital services. Initiatives such as the JAM Trinity (Jan Dhan, Aadhaar, and Mobile connectivity), UPI, DigiLocker, and other Digital Public Infrastructure (DPI) platforms have driven rapid growth in digital transactions and data generation. India now accounts for nearly 49% of global real-time digital payment transactions, while the digital economy contributes an estimated 12%–14% of GDP. This surge in digital activity has substantially increased the demand for secure, scalable cloud infrastructure and data centres to support storage, processing, and real-time analytics.

[19] *Press Information Bureau of India, February 2026*
[20] *Economic Times, October 2022*
[21] *Ministry of Electronics and Information Technology, August 2023*
[22] *Press Information Bureau of India, June 2026*

IndiaAI Mission and National Quantum Mission[23]

The IndiaAI Mission, launched in March 2024 with a budget outlay of INR 103.7 billion over five years, is expected to accelerate the demand for AI-ready data centres by promoting AI innovation, high-performance computing, and cloud infrastructure. Similarly, the National Quantum Mission (NQM), approved in April 2023 with an outlay of INR 60 billion through 2030-31, aims to build India's quantum research and innovation ecosystem, increasing the demand for advanced computing infrastructure. Together, these initiatives are expected to strengthen India's digital infrastructure ecosystem and support long-term investment in high-capacity, AI- and High-Performance Computing (HPC) enabled data centres.

Data Centre Incentivization Scheme[24]

The Data Centre Policy 2020 proposed the formulation of the Data Centre Incentivization Scheme (DCIS) to promote the development of data centres and data centre parks across India.

Renewable Energy and Green Open Access Rules, 2022[25]

The rules improve access to renewable energy for high electricity-consuming sectors, including data centres, reducing dependence on conventional power sources and supporting cost-efficient, sustainable operations.

India's Expanding Renewable Energy Ecosystem is Enhancing its Data Centre Competitiveness

India's rapid expansion of renewable energy capacity is strengthening the long-term competitiveness of its data centre industry by providing access to reliable, cost-effective, and sustainable power for one of the world's most electricity-intensive sectors. The Green Open Access Rules, 2022, have enabled data centre operators to procure renewable electricity directly through open-access and captive arrangements, improving access to clean energy while reducing operating costs. According to Mercom India, India added 7.8 GW of open-access solar capacity in 2025, taking cumulative open-access solar capacity beyond 30 GW. Further reinforcing its attractiveness as a digital infrastructure destination, India ranked third globally in renewable energy installed capacity as of December 2025, according to the International Renewable Energy Agency (IRENA).

As renewable energy availability continues to improve, leading data centre operators are increasingly integrating clean power into their operations. For instance, Yotta Data Services' NM1 data centre near Mumbai already sources around 50% of its electricity from renewable energy (as of June 2025) and aims to increase this share to 70%–80% in the coming years, while CtrlS has set a goal of achieving 100% renewable power by 2030[26]. Other major operators, including AdaniConneX, CtrlS Datacenters, Sify Technologies, Nxtra by Airtel, and global hyperscalers, such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud, are also expanding their use of renewable energy through Power Purchase Agreements (PPAs), captive renewable projects, and green power procurement, reflecting the industry's broader shift towards low-carbon, sustainable data centre operations.

GCC Expansion Drives Data Centre Demand

India has become a leading hub for Global Capability Centres (GCCs), with major clusters in Mumbai, Chennai, Hyderabad, and the National Capital Region (NCR). Many of them are also among the country's largest data centre hubs. This is because of the demand for local digital infrastructure, as multinational corporations require low-latency, secure, and scalable computing capacity to support enterprise applications, cloud services, and AI workloads. India now hosts 2,117 active GCCs and accounts for 45% of the global GCC talent base, while over 49% of newly established GCCs are AI-first from inception. These AI-focused centres require significantly higher computing densities, 20–50 kW per rack, compared to the historical 5–8 kW per rack, driving the demand for purpose-built, liquid-cooled, AI-ready data centres[27]. As global enterprises continue to expand AI, cloud, and digital engineering operations through their Indian GCCs, India's leading GCC cities are expected to witness sustained growth in data centre capacity.

Hyperscalers and Colocation Providers are Jointly Powering India's Data Centre Expansion

A key trend in India's data centre industry is that most new investments are being driven by hyperscale cloud companies such as Amazon Web Services (AWS), Microsoft, and Google, but much of the new capacity will still be developed by colocation providers. Industry estimates suggest that more than 95% of the additional data centre capacity expected over the next five years will come from leased facilities, both retail and wholesale colocation, while the remaining capacity will comprise dedicated facilities

[23] *Press Information Bureau of India, October 2025; Ministry of Science and Technology*
[24] *Ministry of Electronics & Information Technology*
[25] *Ministry of Power, May 2023*
[26] *Institute for Energy Economics and Financial Analysis (IEEFA), June 2025; Business Standard, August 2024*
[27] *Economic Times, June 2026*

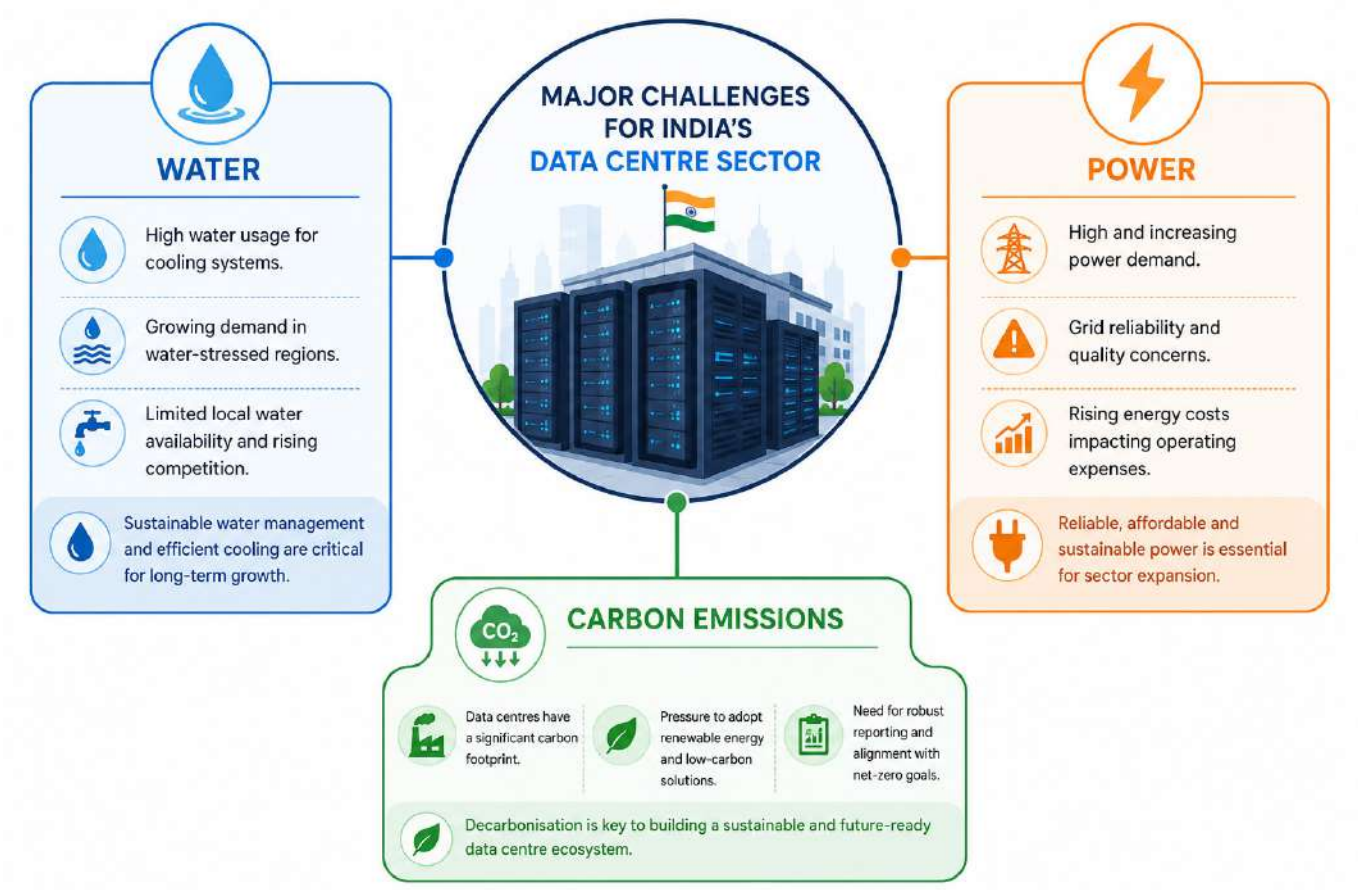
built by hyperscalers, primarily for AI infrastructure[28].

In simple terms, specialist data centre operators, such as Yotta Data Services, ST Telemedia Global Data Centres (STT GDC) India, CtrlS Datacenters, NTT DATA, and Nxtra by Airtel, build and operate the physical data centre facilities, providing power, cooling, security, and connectivity. Hyperscalers such as AWS, Microsoft, and Google then deploy their cloud infrastructure, including servers, storage, and networking equipment, to deliver cloud and AI services to customers. A recent example is the collaboration between AWS and Yotta Data Services for the National Informatics Centre's MeghRaj 2.0 initiative, where Yotta provides the data centre infrastructure while AWS delivers its cloud platform through AWS Outposts[29].

Such partnerships enable hyperscalers to expand more quickly without building every facility themselves, while specialist operators continue to develop and manage the underlying infrastructure. At the same time, hyperscalers are also investing in selected dedicated AI-ready campuses, where they require greater control over high-performance computing, making this partnership model a key driver of India's data centre expansion.

Challenges

Key Challenges	Impact		
	1–2 years	3–5 years	6–10 years
Balancing digital expansion with water sustainability	Very High	Very High	Very High
Reliable electricity supply critical for sustainable data centre expansion	Very High	Very High	Very High
Decarbonising India's data centres for sustainable growth	Very High	Very High	Very High



[28] *S&P Global*
[29] *Amazon Press Center, February 2026*

Balancing Digital Expansion with Water Sustainability

Water availability is emerging as a major sustainability challenge for India's data centre industry, as rapid capacity expansion coincides with increasing water stress. India's hot climate makes cooling critical for data centres, particularly AI-focused facilities that generate high heat loads. Data centres require substantial volumes of water for cooling, especially in facilities using evaporative cooling systems. These are well suited to India's hot climate, but can lose up to 80% of the water through evaporation[30]. While liquid cooling technologies inside servers often operate as closed-loop systems with limited water use, facilities relying on cooling towers can consume significant quantities of freshwater.

India's installed data centre capacity has nearly quadrupled since 2020 to around 1.5 GW (in 2025) and is projected to reach approximately 6.5 GW by 2030, significantly increasing cooling requirements. India's data centres are estimated to consume around 150 billion litres of water annually, with demand projected to increase to nearly 359 billion litres by 2030 as capacity expands and AI-driven workloads grow[31]. The challenge is amplified by the fact that more than half of India's data centres are located in water-stressed regions[32]. The broader global trend is that around 43% of data centres are operating in areas of high water stress[33].

As the sector expands, India may benefit from introducing dedicated standards for water-use efficiency, reporting, and water reuse, drawing on international best practices. For example, the revised EU Energy Efficiency Directive (2023) mandates energy and water reporting for data centres above 500 kW and requires waste heat recovery for facilities above 1 MW, while China's Green Data Centre Standards prescribe limits on water-to-energy ratios for cooling systems[34].

The growing water footprint of AI and data centres is also evident globally. A peer-reviewed study published in Communications of the ACM estimates that generating a 100-word email using ChatGPT consumes approximately 519 mL of water, illustrating the hidden water demands of AI services[35]. Google's water consumption reached approximately 8.1 billion gallons in 2024, of which around 95% was used by its data centres, which was an 8% year-on-year increase. Microsoft reported water consumption of approximately 1.7 billion gallons in 2022, up 34% year-on-year, while Meta consumed around 813 million gallons globally in 2023[36].

In response to rising water demand, the industry is increasingly adopting water-efficient cooling solutions, such as direct-to-chip liquid cooling, immersion cooling, adiabatic cooling, closed-loop cooling systems, and the use of recycled or treated wastewater to reduce freshwater consumption while supporting future AI-driven growth. In short, India's data centre boom must be matched by water-smart policies.

Reliable Electricity Supply is Critical for Sustainable Data Centre Expansion

Power availability is emerging as a significant challenge for India's rapidly expanding data centre industry, with AI-driven computing significantly increasing electricity demand. AI-enabled data centres powered by GPUs consume substantially more electricity than traditional CPU-based facilities, while many older Indian data centres require costly upgrades to cooling systems and power infrastructure to support these high-density workloads. India's peak power demand reached a record 270 GW in May 2026 and is projected by the Central Electricity Authority to increase to 366 GW by 2031–32, putting additional pressure on the national grid[37]. According to the International Energy Agency (IEA), India's overall electricity demand is expected to grow by an average of 6.4% annually till 2030, emphasising the need to expand generation and transmission infrastructure because electricity-intensive sectors, including data centres, will continue to grow[38].

The Ministry of Power estimates that the electricity requirement of India's data centres will increase from around 1 GW currently to 13.56 GW by 2031–32, driven by the rapid expansion of AI and digital infrastructure[39]. S&P Global Commodity Insights expects India's data centres to become the second-largest consumers of electricity in the Asia-Pacific data centre market within the next two years, surpassing Japan and Australia[40]. Data centres currently account for around 0.5% of India's total electricity consumption, with their share projected to rise to around 3% by 2030[41]. Ensuring reliable power supply, timely grid connectivity, transmission upgrades, energy-efficient infrastructure, and greater integration of renewable energy will, therefore, be critical to support the sector's sustainable long-term growth while reducing the dependence on fossil fuel-based electricity.

Decarbonising India's Data Centres for Sustainable Growth

Carbon emissions are emerging as a key ESG challenge for India's data centre industry as rapid AI-driven capacity expansion increases electricity consumption in a power system that continues to rely heavily on fossil fuels. According to the Ministry of Power, electricity demand

30 *Times of India, June 2026*
31-32 *Economic Times, June 2026*
33 *Council on Energy, Environment and Water (CEEW), February 2026 and S&P Global 2025*
34 *Council on Energy, Environment and Water (CEEW), February 2026*
35-36 *Times of India, June 2026*
37 *The Hindu, May 2026*
38 *International Energy Agency, 2026*
39 *Rajya Sabha, Unstarred Question No. 4151*
40 *S&P Global*
41 *Economic Times, June 2026*

from data centres is projected to increase from around 1 GW currently to 13.56 GW by 2031–32, which could indirectly increase emissions (Scope 2) unless additional demand is met through renewable energy[42]. The IEA estimates that data centres and data transmission networks account for around 1% of global energy-related greenhouse gas emissions, highlighting the growing climate impact of digital infrastructure[43]. In response, leading Indian operators are accelerating decarbonisation initiatives. AdaniConneX has committed to achieving net-zero operational emissions by 2030 and aims to power its data centres with 100% renewable energy by 2030, while CtrlS Datacenters is pursuing net-zero by 2040, backed by investments in renewable energy, energy-efficient infrastructure, and advanced cooling technologies. These initiatives demonstrate that expanding renewable energy procurement, improving energy efficiency, and reducing carbon intensity will be critical to ensure the sustainable growth of India's data centre sector. As digital infrastructure continues to expand, decarbonising data centre operations will play an important role in helping India achieve its net-zero emissions target by 2070.

Key Initiatives by Major Players

Data Centre Entity	Parent Company	Brief Description
AdaniConneX Pvt. Ltd.	Adani Group (JV with EdgeConneX)	**USD 100 billion Capex:** In February 2026, Adani Group announced plans to invest USD 100 billion by 2035 to develop renewable energy-powered, hyperscale AI-ready data centres, expanding AdaniConneX's existing 2 GW portfolio and pipeline to a total planned capacity of 5 GW through projects with Google in Visakhapatnam and Microsoft across Hyderabad, Pune, and Noida. **Partnering with Uber:** In May 2026, Uber announced plans to establish its first India data centre in partnership with the Adani Group.
Amazon Web Services (AWS)	Amazon.com, Inc.	**Investment/capacity expansion:** In June 2026, Amazon announced an additional USD 13 billion investment through its cloud computing subsidiary AWS in India till 2030 to expand AI and cloud infrastructure, including data centre capacity in Mumbai and Hyderabad. The planned outlay builds on the USD 35 billion investment across its businesses in India that was outlined in December 2025.
CtrlS Datacenters Limited	CtrlS Group	**Secured Strategic Investment:** In June 2026, the company secured INR 70 billion investment commitment from the Canada Pension Plan Investment Board (CPP Investments) to expand hyperscale and AI-ready data centres across India. **Plans for IPO:** In April 2026, it initiated preparations for an IPO, targeting a fundraise of approximately USD 300 million (INR 25–27 billion).
Iron Mountain Data Centers (erstwhile Web Werks India Pvt. Ltd)	Iron Mountain Inc. (U.S.)	**Acquired by Iron Mountain:** In April 2025, Web Werks India Pvt. Ltd., was fully acquired by US-based Iron Mountain through a transaction valued at approximately INR 14 billion and now operates as Iron Mountain Data Centers.
L&T Cloudfiniti	Larsen & Toubro (L&T)	**Greenfield Investment:** Larsen & Toubro (L&T) plans to invest approximately INR 45 billion in West Bengal to develop a 13 MW Tier-3 data centre (~INR 20 billion) and expand its software park operations (~INR 25 billion).
NTT Global Data Centers India	NTT Group (Japan)	**USD 1.5 billion for capex:** In July 2025, Tokyo-based global IT services and consulting company NTT Data announced plans to invest USD 1.5 billion through its Indian subsidiary, NTT Global Data Centers India, to add 400 MW of data centre capacity over the next three years.
Nxtra Data Limited	Bharti Airtel Ltd.	**Securing USD 1 billion investment:** In March 2026, Nxtra secured a USD 1 billion investment from affiliates of Alpha Wave Global, Carlyle, and Anchorage Capital to accelerate the expansion of its hyperscale data centre infrastructure.

[42] *Rajya Sabha, Unstarred Question No. 4151*
[43] *Tech Target, July 2023*

RMZ Corp	RMZ Corp	**Mega capex:** In June 2025, diversified real estate and investment firm RMZ Corp announced plans to scale its data centre capacity, which is currently 250 MW, to 2–3 GW over the next five years as part of a USD 35 billion investment push.
Reliance Industries Ltd. (Data Centre Business)	Reliance Industries Ltd	**Partnering with Meta:** Reliance Industries will build a 168 MW data centre at Jamnagar, Gujarat, which Meta Platforms will lease under one of India's largest hyperscaler colocation agreements, with options to scale capacity further.
ST Telemedia Global Data Centres India Pvt. Ltd. (STT GDC India)	ST Telemedia (Singapore)	**Land Acquisition for Expansion:** In June 2026, the company acquired a 3.48-acre industrial plot in Navi Mumbai for INR 2,820 million to support future data centre expansion.
Sify Infinit Spaces Ltd	Sify Technologies Ltd.	**Debt Financing for Capacity Expansion:** In June 2026, Sify Technologies' wholly owned subsidiary, Sify Infinit Spaces, secured USD 71 million in debt financing from the International Finance Corporation as part of a broader USD 371 million financing package which will enable the development of two AI-ready, next-generation data centres in Navi Mumbai and Chennai with a combined capacity of 103 MW, catering to the colocation needs of hyperscalers, enterprises, and neo-cloud customers. **Plans for IPO:** In October 2025, Sify Infinit Spaces Ltd filed a Draft Red Herring Prospectus (DRHP) with SEBI for a proposed INR 37 billion IPO.
Yotta Data Services Private Limited	Hiranandani Group	**USD 7 billion capex:** In June 2026, the company announced that it expects to deploy ~USD 7 billion in capex during 2026, with ~USD 3 billion already deployed and another USD 4 billion planned by early 2027. **Plans for an IPO:** The company is considering an IPO that could raise up to USD 900 million.

Note: Selected initiatives available in the public domain have been considered for selected major players. Initiatives are arranged in company-wise alphabetical order.
Source: Company press releases, news sources

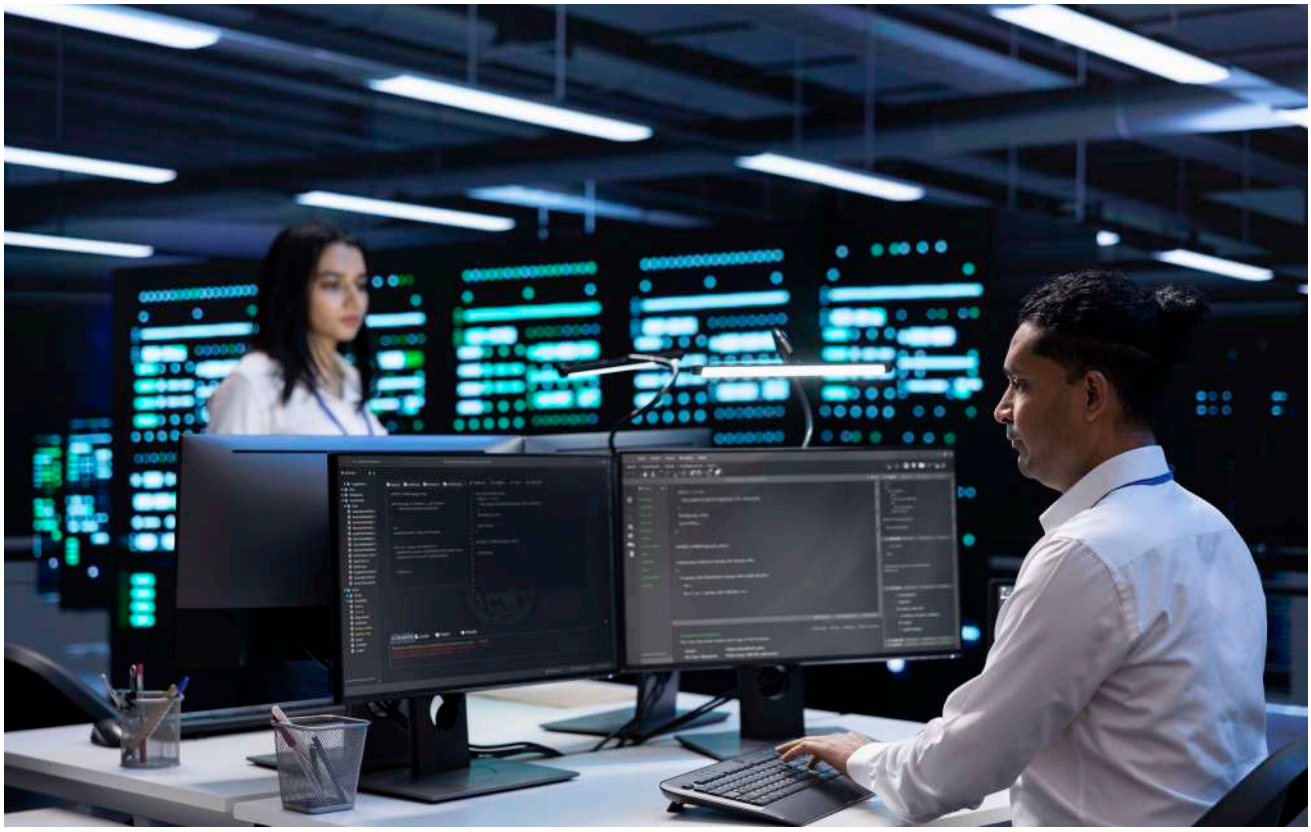
Outlook

India's data centre industry is poised for sustained long-term growth, supported by a favourable combination of demand fundamentals, policy support, and global investment trends. Despite generating nearly 20% of the world's data, India accounts for only around 3%–4% of global data centre capacity, with significant headroom for expansion[44]. At the same time, mature data centre markets across North America, Europe, and parts of the Asia-Pacific region are facing land, power, and regulatory constraints, prompting global hyperscale cloud providers to diversify capacity into less-constrained markets. With abundant growth potential, improving digital infrastructure, supportive data localisation policies, and continued investments from companies such as Amazon Web Services (AWS), Google Cloud, and Microsoft Azure, India is well positioned to emerge as one of the world's leading destinations for hyperscale and colocation data centre development. According to S&P Global Commodity Insights, India is expected to become the second-largest market for data centre electricity demand in the Asia-Pacific region over the next two years, with the rapid expansion of installed capacity and the growing energy intensity of AI- and cloud-driven workloads[45].

India's competitive advantage will increasingly depend not only on creating additional capacity but also on strengthening execution capabilities across the entire data centre value chain. Meeting the rapidly growing demand for AI-ready infrastructure will require coordinated investments in reliable power, renewable energy, water-efficient cooling technologies, high-speed fibre connectivity, skilled talent, and integrated infrastructure delivery. A collaborative approach involving governments, private developers, utilities, telecom operators, renewable energy providers, and technology partners will be essential to address these challenges while meeting increasingly stringent ESG and regulatory requirements. As deployment complexity rises, organisations are expected to adopt integrated lifecycle delivery models that combine design, construction, operations, sustainability, and digital infrastructure management, enabling India to strengthen its position as a resilient, scalable, and globally competitive digital infrastructure hub.

[44] *National Association of Software and Service Companies (NASSCOM) and Care Ratings, March 2026*
[45] *S&P Global*

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ABOUT RUBIX

Rubix Data Sciences Pvt. Ltd. helps you to take prudent credit risks, build a robust supply chain and monitor compliance for your business partners in India and around the world. Rubix helps you collect payments in time from your debtors, helping generate predictable cash flows.

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