

India's Data Centre Ambitions

October 27, 2025 • vajiramandravi.com



What's in today's article?

- Why in News?
- The Indian Data Centre Sector
- Data Centres in the Emerging Markets in Asia-Pacific
- Case of India
- Efforts in India to Boost Computing Capacity

Why in News?

- Given the sector's expansion in emerging economies, India may become a major player in the data centre market in the years to come. However, it may also face stiff competition from nations like Malaysia and Vietnam.

- **A data centre refers** to a designated space within a building or a set of architectural configurations designed to accommodate computer systems and their associated components, including networking and storage systems.

The Indian Data Centre Sector:

- **Data centre segments in India:** It is categorised into two main segments: captive and outsourced (including colocation and hosting), and further divided by IT infrastructure type, which includes servers, storage, and enterprise networking.
- **Market overview:**
 - The Indian data centre market is currently in a **dynamic phase**, marked by impressive growth and substantial government support.
 - **In 2023**, India's data centre market achieved **revenues** of approx. US\$7.44 billion, with network infrastructure emerging as the dominant segment, valued at US\$5.09 billion.
 - **In 2022, the data centre capacity in India was at 637 MW.** India is ranked the **13th largest data centre market** in the world with 138 data centres.
 - Additionally, 45 new data centres with a combined 13 million square feet and 1,015 MW of capacity are scheduled to be developed by the end of 2025.
- **Government support:**
 - **Data centre policy:** To encourage investment and accelerate India's current rate of data centre expansion, the Indian government is formulating a data centre policy.
- **Salient provisions of the policy:**
 - Incorporating data centres under the Essential Services Maintenance Act (**ESMA**), Creating Data Centre Facilitation Units (**DCFU**),
 - Creating Data Centre Economic Zones, and
 - Creating a special category code for data centres under the **National Building Code of India**.
- **Outlook:**
 - India's data centre sector is set for growth, driven by a thriving digital economy, widespread internet access, and the transition to **5G networks** from 4G.
 - However, **emerging regulatory frameworks require data localisation**, which will impact demand in the data centre market.

Data Centres in the Emerging Markets in Asia-Pacific:

- **Highlights of a research by S&P Global:**
 - **As over \$100 billion** will be invested in such facilities in the Asia-Pacific region over the next 5 years, emerging markets in the region are **expected to outpace** established markets in capacity growth.
 - The spending will capitalise on strong data growth and the rise in AI, cloud computing and digitalisation.
- **Why are emerging markets in the Asia-Pacific an attractive alternative to developed markets?**
 - **Lower costs** to develop and operate data centres;
 - Significant growth in data demand due to **digitalisation and favourable demographics**; and

- **Government support** for the building of local data centres as part of their push for data sovereignty.

Case of India:

- **According to the S&P Global research,**

- India currently has a leased **data centre capacity of 1-3 GW**, which is the highest compared to other emerging markets like Indonesia, Malaysia, Philippines, Thailand and Vietnam.
- India is already home to data centres set up by big tech companies like **Google, Microsoft, and Amazon.**

- **Challenges for India:**

- **India could face competition** from both emerging markets and developed economies in attracting more data centres.
- **For example**, Johor Bahru in **Malaysia** has become a hot landing spot for new data centres. It can be a cheaper alternative to Singapore for regional data traffic, with more affordable land and power.
- **Japan** is offering subsidies to decentralise data-centre development, such that new centres will be built away from big cities like Tokyo and Osaka.

- **Opportunities for India:**

- **Stricter data sovereignty requirements in the Southeast Asian country** could give India an edge.
- **Data centres in tier-two or tier-three cities** typically have lower land and construction costs compared with tier-one cities.
- **The Indian government is looking to subsidise** setting up of data centres to capitalise on the AI boom, and **make access to computing capacity easier** for smaller entities like start-ups and research institutions.

Efforts in India to Boost Computing Capacity:

- **Need:**

- Apart from data sets and inventive algorithms, one of the **most crucial components of developing a huge AI system** is computing capacity.
- Due to the high cost, it is also **one of the most difficult components** for smaller businesses seeking to develop such AI systems.

- **Steps taken:**

- The Indian government is planning to **procure graphics processing units (GPUs)** as part of its ambitious **IndiaAI Mission**.
- This will **offer computing capacity** to Indian start-ups, researchers, public sector agencies and other entities approved by the government.

- **IndiaAI Mission:**

- Under the mission (launched at the GPAI Summit 2023), the Ministry of Electronics and IT (MeitY) will look –
 - **To establish a computing capacity** of more than 10,000 GPUs and

- **To help develop foundational models** trained on datasets covering major Indian languages for priority sectors like **healthcare, agriculture, and governance**.
 - Of the total outlay (of Rs 10,372 crore), Rs 4,564 crore has been earmarked for building computing infrastructure.
-

Q.1. What are graphics processing units (GPUs)?

A GPU is a processor that specialises in graphics-related tasks like video editing, 3D rendering, and design work.

Q.2. What is the Essential Services Maintenance Act (ESMA) 1968?

The ESMA is an act of Parliament of India which was established to ensure the delivery of certain services, which if obstructed would affect the normal life of the people. This includes services like public transport (bus services), health services (doctors and hospitals).

Source: India's data centre ambitions will have to go through Malaysia, Japan

Source: <https://vajiramandravi.com/current-affairs/indias-data-centre-ambitions/>

© Vajiram & Ravi. For personal use only.