

**April 2025**

## **Demand for Data Centers Surges in Asia Amid Global AI Boom**

The demand for artificial intelligence-driven applications, cloud services, and big data analytics is rapidly increasing across Asia, with several major hyperscalers in the region expanding their digital infrastructure footprints. Although hyperscalers have made substantial investments in the construction and expansion of their own digital infrastructure, such efforts have not kept pace with the accelerating demand for capacity. Consequently, hyperscalers continue to depend heavily on third-party developers and operators, frequently engaging in the development of “build-to-suit” data center facilities in which the hyperscalers serve as the sole, long-term tenants and, in many cases, procuring additional capacity through colocation agreements with independent data center operators, or rights to acquire additional capacity via expansion of existing facilities.

Recognizing the importance of providing their populations and business communities with efficient access to the latest technologies, governments in the region are promoting digital transformation and smart city initiatives, thereby increasing the need for local data centers. There is a general acknowledgment of the need for robust and reliable local infrastructure to support these and other digital initiatives. Countries like China, India, Singapore, and Malaysia have begun offering tax incentives and subsidies for data center development, while the national governments of Japan and South Korea are investing heavily in AI research and cloud infrastructure.

This increase in activity is key to meeting accelerated demand. As the world's most populous continent, Asia also has the largest internet user base in the world, with billions of mobile and online users in established markets like Japan and South Korea, as well as less developed markets such as Indonesia, Malaysia, and the Philippines. In addition to housing an underserved user base, Asia serves as a global connectivity hub, linking Europe and North America via subsea cables and high-speed terrestrial fiber networks.

The demand for data centers in Asia is expected to grow at an almost exponential rate with the expected global AI boom. Industry experts predict that AI data center operators and large-scale cloud infrastructure companies will directly benefit from this global trend.

There are several main drivers for this explosive growth, including the increasing political focus in the region (and abroad) on data sovereignty and onshoring, with numerous jurisdictions enacting laws that require personal data to remain within national borders, thereby accelerating the need for locally situated data centers and the adoption of generative AI. Given its enhanced accessibility to users worldwide, generative AI is expected to account for nearly 33% of the increase in data demand over the next five years.<sup>1</sup> Within the next two years, the Asia region is expected to benefit from the localization of latency-sensitive workloads. This rapid expansion will not only strengthen the region's digital economy but also drive innovation across industries reliant on high performance computing (HPC), from financial services to health care and manufacturing. As hyperscalers and AI-driven enterprises scale their operations, the increased demand for power and connectivity will put pressure on local infrastructure, necessitating further investment in power generation and network resiliency to sustain long-term growth. As companies race to localize latency-sensitive workloads, governments may face increasing pressure to modernize regulations, improve cybersecurity measures, and enhance cross-border data policies to support the evolving digital ecosystem.

Looking ahead, a recent report from Bank of America predicts that data center capacity in the Asia-Pacific region will double within the next five years, representing an additional 2 GW of capacity added to the region each year, driven primarily by demand in Japan, South Korea, Indonesia, Malaysia, Thailand, and the Philippines. This is double the growth rate over the five years from 2018 to 2023 during which approximately 1 GW of capacity came online in the APAC region each year.

Accordingly, hyperscale data center investors—which include private equity firms, real estate investment trusts (REITs), and the hyperscalers themselves—are responding to the appetite for additional capacity from the region's hyperscalers, with most expecting demand to outstrip supply for some time to come. Despite its population and digital fluency, the Asia-Pacific region is home to just 26% of the world's existing hyperscale data capacity.<sup>2</sup> Investment in the development of hyperscale data centers in the region will have to grow in order for capacity to meet demand.

In addition to the third-party investment activity starting to bubble up, the major cloud companies themselves are actively expanding their own infrastructure, with many making multibillion-dollar investments in Malaysia and across the region.

Amid rapid growth and investment momentum, challenges may arise, including the need for sustainable energy solutions, enhanced regulatory frameworks, and continued innovation in network efficiency. Despite aggressive buildouts, demand continues to outstrip supply, which is constrained by limited access to reliable power, supply chain disruptions, a scarcity of experienced local contractors, and growing

---

<sup>1</sup> ABI Research, *Artificial Intelligence (AI) Software Market Size: 2023 to 2030* (2024).

<sup>2</sup> RETalk Asia, *Cloud adoption and AI to power Asia Pacific's future data centre market - JLL* (May 19, 2023).

restrictions on the export of critical hardware such as GPUs. Meanwhile, China presents a dual narrative. While domestic hyperscalers continue to drive significant capacity growth within China's borders, the market remains relatively insulated, with limited participation from foreign operators due to geopolitical, regulatory, and operational constraints. This divergence underscores a broader dynamic: while China's data center growth is largely fueled by domestic hyperscalers and remains relatively closed to foreign participation, expansion across the rest of Asia is being driven predominantly by U.S.-based hyperscalers, global operators, and an influx of regional and PE-backed platforms, reflecting a more internationally integrated and investor-driven growth trajectory. In parallel, the sector has captured the attention of global institutional investors, private equity sponsors, and infrastructure funds, all drawn by the promise of long-term returns driven by stable and regular revenues, as well as high-growth potential. Many investors have responded by launching dedicated digital infrastructure funds or partnering with operators to deploy capital across both hyperscale and emerging edge data center strategies.

As developers, operators, and investors navigate an increasingly complex environment, marked by technological evolution, regulatory tightening, and physical constraints, the market's future will hinge not only on scaling capacity but also on securing sustainable energy solutions and rethinking network distribution models. The question is no longer whether Asia will lead the next wave of digital infrastructure growth, but how effectively it can overcome these systemic and evolving challenges.

## Authors

This GT Advisory was prepared by:

- **Joe C. Wie** | +1 202.533.2330 | [Joe.Wie@gtlaw.com](mailto:Joe.Wie@gtlaw.com)
- **Joshua B. Forman** | +1 305.579.0500 | [Josh.Forman@gtlaw.com](mailto:Josh.Forman@gtlaw.com)
- **Chelsea Pullen** | +1 703.903.7533 | [pullenc@gtlaw.com](mailto:pullenc@gtlaw.com)
- **Jake Robson** | +65 8725 3592 | [Jake.Robson@gtlaw.com](mailto:Jake.Robson@gtlaw.com)
- **Shawn K. Ronda** | +1 312.476.5137 | [rondas@gtlaw.com](mailto:rondas@gtlaw.com)
- **Max Sternberg** ‡ | +44 (0) 203.100.6784 | [Max.Sternberg@gtlaw.com](mailto:Max.Sternberg@gtlaw.com)

‡ Admitted in the District of Columbia and Illinois. Not admitted in England and Wales.

Albany. Amsterdam. Atlanta. Austin. Berlin<sup>~</sup>. Boston. Charlotte. Chicago. Dallas. Delaware. Denver. Fort Lauderdale. Houston. Kingdom of Saudi Arabia<sup>\*</sup>. Las Vegas. London<sup>\*</sup>. Long Island. Los Angeles. Mexico City<sup>+</sup>. Miami. Milan<sup>\*</sup>. Minneapolis. Munich<sup>-</sup>. New Jersey. New York. Northern Virginia. Orange County. Orlando. Philadelphia. Phoenix. Portland. Sacramento. Salt Lake City. San Diego. San Francisco. São Paulo<sup>»</sup>. Seoul<sup>»</sup>. Shanghai. Silicon Valley. Singapore<sup>~</sup>. Tallahassee. Tampa. Tel Aviv<sup>^</sup>. Tokyo<sup>\*</sup>. United Arab Emirates<sup><</sup>. Warsaw<sup>~</sup>. Washington, D.C. West Palm Beach. Westchester County.

*This Greenberg Traurig Advisory is issued for informational purposes only and is not intended to be construed or used as general legal advice nor as a solicitation of any type. Please contact the author(s) or your Greenberg Traurig contact if you have questions regarding the currency of this information. The hiring of a lawyer is an important decision. Before you decide, ask for written information about the lawyer's legal qualifications and experience. Greenberg Traurig is a service mark and trade name of Greenberg Traurig, LLP and Greenberg Traurig, P.A. ~Greenberg Traurig's Berlin and Munich offices are operated by Greenberg Traurig Germany, LLP, an affiliate of Greenberg Traurig, P.A. and Greenberg Traurig, LLP. \*Operates as a separate UK registered legal entity. «Greenberg Traurig operates in the Kingdom of Saudi Arabia through Greenberg Traurig Khalid Al-Thebity Law Firm, a professional limited liability company, licensed to practice law by the Ministry of Justice. +Greenberg Traurig's Mexico City office is operated by Greenberg Traurig, S.C., an affiliate of Greenberg Traurig, P.A. and Greenberg Traurig, LLP. »Greenberg Traurig's Milan office is operated by Greenberg Traurig Studio Legal Associato, an affiliate of Greenberg Traurig, P.A. and Greenberg Traurig, LLP. »Greenberg Traurig's São Paulo office is operated by Greenberg Traurig Brazil Consultores em Direito Estrangeiro – Direito Estadunidense, incorporated in Brazil as*

*a foreign legal consulting firm. Attorneys in the São Paulo office do not practice Brazilian law. ∞Operates as Greenberg Traurig LLP Foreign Legal Consultant Office. ¯Greenberg Traurig's Singapore office is operated by Greenberg Traurig Singapore LLP which is licensed as a foreign law practice in Singapore. ^Greenberg Traurig's Tel Aviv office is a branch of Greenberg Traurig, P.A., Florida, USA. ¢Greenberg Traurig's Tokyo Office is operated by GT Tokyo Horitsu Jimusho and Greenberg Traurig Gaikokuhojimubengoshi Jimusho, affiliates of Greenberg Traurig, P.A. and Greenberg Traurig, LLP. ‹Greenberg Traurig's United Arab Emirates office is operated by Greenberg Traurig Limited. ~Greenberg Traurig's Warsaw office is operated by GREENBERG TRAURIG Nowakowska-Zimoch Wysokiński sp.k., an affiliate of Greenberg Traurig, P.A. and Greenberg Traurig, LLP. Certain partners in GREENBERG TRAURIG Nowakowska-Zimoch Wysokiński sp.k. are also shareholders in Greenberg Traurig, P.A. Images in this advertisement do not depict Greenberg Traurig attorneys, clients, staff or facilities. No aspect of this advertisement has been approved by the Supreme Court of New Jersey. ©2025 Greenberg Traurig, LLP. All rights reserved.*