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Beansprout

Data Centre Sector

Riding on structural growth

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Introduction to Data Centre

Data centres are specialised physical facilities that house IT infrastructure such as servers, storage systems and network equipment. They are essential for every online service, from business operations and cloud services to modern artificial intelligence (AI). Businesses require them to handle the large volumes of data generated from their online operations.

In the global data centre industry, the installed capacity has grown at compound annual growth rate (CAGR) of 14.2 percent between 2019 – 2025, to reach 114.3 GW in 2025. Fuelled by demand from AI and machine learning, the momentum is set to continue. The installed base is expected to grow to 240.1 GW by 2030, at a CAGR of 16.0%. In terms of the revenue size, the market is forecasted to grow at CAGR of 11.2 percent from 2025 to 2030, to US$652.0 billion.

The four main types of data centres are Enterprise, Colocation, Hyperscale and Edge. We will focus on capacity growth, revenue models and capital expenditure trends of Colocation and Hyperscale data centres.

Singapore-listed companies with significant exposure to data centre assets are the REITs operating the stabilised data centres - include Digital Core REIT (SGX: DCRU), Keppel DC REIT (SGX: AJBU), NTT DC REIT (SGX: NTDU) and Mapletree Industrial Trust (SGX: ME8U).

In the global data centre industry, the dominant data centre REIT in the U.S. include Digital Realty and Equinix. In Australia, the leading data centre operators are NextDC and Airtrunk.

REIT vs Corporate

Investors can gain exposure to data centres through either REITs or listed corporates, which differ mainly in their revenue model, cash flow profile and risk-return characteristics.

(1) **Revenue model:** A data centre REIT receives rental revenue from customers who lease the space to host servers and IT infrastructure. The rental revenue is based on rent per kW, per cabinet or per square foot. A data centre corporate generates revenue from providing services including cloud computing, managed hosting, connectivity or AI compute.

(2) **Cash flow visibility:** REIT is distribution oriented and defensive. REIT is required by law to distribute a high proportion of taxable income as dividends. Investors receive a steady and recurring source of income. Corporate, on the other hand, has full discretion over dividends and would typically prefer to reinvest profits into expansion. Thus, corporate provides higher capital appreciation potential but less income certainty.

(3) **Risk-return characteristics:** REIT offers more predictable returns, driven by long term lease contracts. The tenure of the lease contracts ranges from 5 to 15 years, with built-in escalation clauses. Corporate's revenue is driven by execution, operational and technological positioning. At the same time, corporate offers significant upside potential in an upcycle.

Industry Growth Trends

The data centre industry grew rapidly in recent years, fuelled by demand from cloud computing and AI. For the period 2020 to 2025, the industry revenue grew at CAGR 9.1 percent to US$383.8 billion. Based on the pipeline of data centre under development, the industry is poised to continue with the steady growth.

The global data centre market is projected to grow at a compound annual growth rate (CAGR) of 11.2 percent from 2025 to 2030, reaching US$652.0 billion.

Key Metrics to evaluating a Data Centre

For investors assessing data centre assets, several operating metrics are critical in determining the attractiveness and performance of the properties. These include vacancy rate, rental rate trend, power usage effectiveness (PUE) and IT load capacity. We will discuss these further on page 22.

(1) IT load capacity measure the maximum amount of electrical power that a data centre can supply to IT equipment, expressed through the Density metric. Rack Density refers to the amount of power a fully populated server rack consumes.

(2) Vacancy rate and rental rate are key operating metrics of data centres. Vacancy rate is the percentage of commissioned power that is currently available to be leased.

(3) Rental rate refers to the monthly cost per kilowatt ($/kW/month) that data centre operators charge tenants for colocation and power. A higher occupancy rate and rental rates translate to stronger revenue.

(4) PUE measures the ratio of the total power consumption of data centre to the energy solely used by IT equipment. The closer the ratio is to 1.0, the more efficient the data centre.

Investment risks

Power supply risk: A reliable source of power supply is imperative to a data centre. Power is also the largest cost component. Any interruption, including grid failure, can create immediate revenue loss and customer defection.

Regulatory and environmental risk: Governments are classifying data centres as critical infrastructure requiring interventions. There are energy efficiency directives that include mandatory PUE reporting and sustainability disclosures.

Interest rate and leverage risk: Data centre developers and operators are highly leveraged to the capital-intensive business model. With rises in interest rates, the annual debt service costs increases as well.

Cybersecurity and data breach risk: Data centres are prime targets for cyber-attacks. Ransomware attacks on facility management systems can shut down entire operations. This can lead to reputational damage and loss of business as tenants switch to more reliable providers.

Oversupply risk: There is the possibility that the primary growth drivers like AI and cloud computing do not sustain and that the demand may not meet the future supply. As excessive capacity is being built in many regions, this may lead to potential declines in occupancy rates.

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Introduction to Data Centre Sector

Data Centre Sector: A Defensive Asset Class With Strong Growth

Data Centre: An essential infrastructure driving digital transformation

Data centres are specialised physical facilities that house IT infrastructure such as servers, storage systems and network equipment. They are essential for every online service, from business operations and cloud services to modern AI. Businesses require them to handle the large volumes of data generated from their online operations.

Colocation

Colocation or multi-tenant data centres are third-party facilities renting data centre space, power and cooling to businesses that wish to host their servers and computing hardware offsite. These facilities provide proper components for a functioning data centre. Companies that do not have the space for their own enterprise data centre, or an IT team to manage, would opt for a colocation data centre. As an organisation's needs change, they can quickly scale up or down.

A key attraction is location, as they are often located near internet exchange points, providing high-speed and low-latency connectivity. It offers tenants scalability and flexibility when adjusting their capacity according to demand. Tenants typically commit to a lease period of three to five years. Tenants have access to the physical space, power, and security to host their critical applications and workloads in an integrated ecosystem.

For investors, the appeal of the colocation data centre lies in its cashflow visibility. The monthly billing generates monthly recurring revenue for the data centre operator, providing predictable cash flow. In addition, the asset is highly diversified across multiple tenants and requires lower capital investment per revenue dollar compared to hyperscale data centre. As businesses increasingly rely on both on-premise and servers and cloud services, along with backup systems for disaster recovery, demand for colocation data centre space is set to grow. The global colocation market is projected to grow at a 16% CAGR from 2025 to 2030.

Figure 1: Comparison of Colocation and Hyperscale DC

Aspect	Colocation	Hyperscale
Purpose	Lease space, power, and cooling to multiple tenants	Built and operated by a single cloud provider for massive workloads
Users	Small-to-large businesses, IT firms, enterprises needing off-site hosting	Large cloud providers, AI platforms, hyperscale cloud clients
Size & Scale	Medium to large; flexible modular growth	Extremely large; tens of thousands of servers
Revenue Model	Recurring income from multiple tenants (space, power, services)	Revenue tied to cloud services and subscriptions
Capex	Moderate; spread across tenants; operator invests in facility	Very high; operator funds entire facility for massive infrastructure
Growth Driver	Demand from multiple businesses needing reliable shared facilities	Rapid expansion of cloud, AI, and big data workloads
Flexibility	High – multiple tenants can scale individually	Lower flexibility for others; capacity dedicated to one operator
Key Operators	Equinix, Digital Realty, NTT, Keppel DC	AWS, Microsoft Azure, Google Cloud, Meta (Facebook)

Source: Beansprout Research

Hyperscale

Hyperscale data centres are large facilities owned or leased by major cloud providers. Hyperscale data centres are typically around 10,000 square feet or larger. They are designed to support very large-scale IT infrastructure. The number of large data centres operated by hyperscale companies reached over 1,000 at the end 1Q2025 and they account for 44% of the worldwide capacity of all data centres. Companies which use them include Amazon, Meta, Microsoft, and Google.

Amazon, Microsoft Azure and Google Cloud are three dominant cloud computing providers. They account for 65% of global cloud infrastructure spending.

As enterprises continue migrating from on-premises infrastructure to online cloud models, the surge in cloud services has resulted in steady demand for hyperscale data centres designed to handle large-scale workloads and provide reliable, high-capacity connectivity.

For investors, hyperscale data centres could provide a sustainably higher profit margin and cost advantages from efficiently designed facilities. Investors also benefit from exposure to reputable blue-chip cloud providers like Amazon, Microsoft and Google. These clients are of very low default risk and are ready to commit on large and long-term contract.

The global hyperscale data centres is projected to grow from US$162.8 billion in 2024 to US$608.5 billion by 2030 – implying a robust 24.6% CAGR over that period.

Enterprise

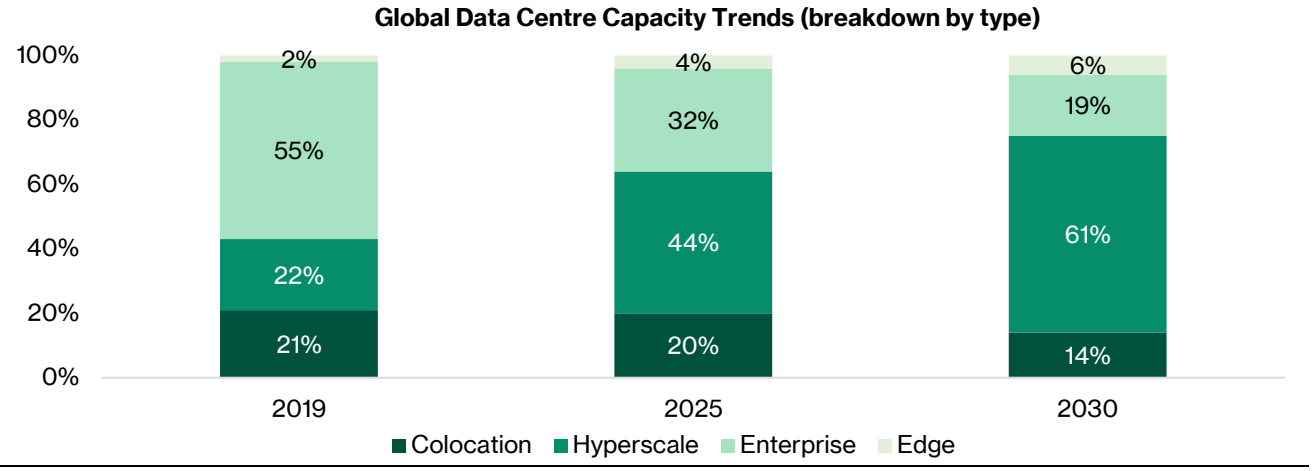
Enterprise data centres are privately-owned facilities that a company builds and operates for its own exclusive use. All the servers, networking, storage and IT equipment.

They remain relevant for companies that require dedicated infrastructure to meet compliance, regulatory, security requirements, or legacy application constraints. Enterprise data centres also provide low-latency connections to on-site operations, example factories.

Typically owned by large companies including banks and financial institutions, telcos, industrial conglomerates with legacy setups, healthcare groups and government agencies.

As capacity is sized for peak workloads, the facilities operate at low utilisation. That said, enterprise data centres grow more slowly, usually only when the company itself needs more capacity. The enterprise data centre is projected to grow from US$1.26 billion in 2024 to US$4.73 billion by 2030, representing 24.7% CAGR over 2025 to 2030.

Figure 2: Global Data centre capacity trends, breakdown by type



Source: Synergy Research, Global market insights

Edge

Edge data centers are smaller, decentralized facilities located closer to where the data is actually being generated and consumed.

The idea is to process data near the "edge" of the network – the point where end users, devices, or sensors connect – reducing latency from 50-100 milliseconds down to single digits. They support applications that require near-instantaneous processing, such as 5G, augmented reality, IoT devices, autonomous vehicles, real-time analytics, and content delivery or streaming services.

By processing data closer to the source, edge data centers reduce network congestion and improve performance, making them critical for use cases where speed and responsiveness directly impact outcomes.

Type of operating models

Data centres are usually developed and operated under the following operating models – self-build, powered shell, fully fitted data centres and colocation.

Self-build

Hyperscalers like AWS, Microsoft, and Google are increasingly building and operating their own data centre facilities rather than leasing space from colocation providers.

In this model, developers are instrumental in sourcing land, managing shell construction, and arranging essential utilities. Developers commonly benefit from early-stage revenue opportunities, such as premiums on land acquisition and profits from initial design-build projects.

Additionally, hyperscalers often commit to large-scale, multi-phase developments for future expansion, providing developers with a clear and predictable project pipeline.

Developers with expertise in land assembly, permitting, and large-scale shell delivery are best positioned to thrive in this environment.

Colocation

Colocation facilities are owned and operated by a provider who leases space, power, and cooling to multiple tenants, each housing their own IT equipment.

This model creates diversified income from many tenants, reducing dependence on any single tenant and often delivering higher internal rates of return (IRRs) than other data centre models.

However, it requires the owner to manage complex operations like power, cooling, maintenance, and tenant relations, demanding specialized industry knowledge. There are also substantial capital investments and ongoing operational expenses involved in running these facilities. Colocation data centres tend to be more management intensive, and the owner is exposed to operational risks including the maintenance and replacement of M&E infrastructure.

Figure 3: Hyperscale self-build vs leasing

Factor	Self-build	Leasing
Cost	High CapEx, lower OpEx long-term	Lower CapEx, higher OpEx long-term
Time-to-Market	Slower (years to build)	Faster (months to deploy)
Control	Full control over infrastructure	Limited to provider's offerings, although there's more control in a build-to-suit scenario
Scalability	Tailored to projected long-term needs	Easier to scale incrementally
Risk	Greater risk during construction	Shared risk with the lessor
Customizability	High	Moderate to low, although more customizability in a build-to-suit scenario
Geographic Expansion	Slower, requires local expertise	Faster, utilizes provider networks
Operational Complexity	High, requires in-house expertise	Low, outsourced to provider

Source: Independent research

Shell & core or powered shell

The powered shell model involves the owner delivering a partially finished data centre building that includes the building shell, basic utilities, and power infrastructure, while tenants take responsibility for interior fit-out and IT operations.

The landlord is only responsible for the provision of power to the property, and the exposure to technical and operational risks is limited. These properties are typically let to a single data centre operator and leases tend to be relatively long, at least 10 years.

This model enables faster development and lower upfront costs compared to colocation facilities, as tenants complete the specialized interior setups themselves. Lease terms are often structured by square meter, similar to traditional real estate leases, offering reduced operational complexity for the owner.

This model offers a middle ground between full owner-operated colocation centres (higher revenue but complex operations) and hyperscale facilities (one-time development revenue) by balancing upfront investment, flexibility, and operational roles.

Fully-fitted data centres

Landlords handle the full fit-out of these facilities, including the mechanical and electrical (M&E) systems inside the data halls.

Fully fitted data centres are usually leased to a single tenant on long-term agreements.

These leases are often structured on a triple-net basis (NNN), so the tenant manages the upkeep of both the building and the installed M&E systems.

While fully fitted centres carry minimal operational risk, they do come with higher exposure to M&E obsolescence compared with shell-and-core facilities.

Type of pricing models

Different pricing models of colocation data centre contracts cater to different operational priorities, whether a customer need guaranteed power, lower costs, or room to scale.

- Gross pricing like per contracted kW address high-power demands with reserved allocations, whereas consumption-based billing supports businesses with fluctuating needs.
- Per-kW or pass-through pricing are suitable for companies who want tighter cost control and transparency.
- Triple Net (NNN) leases are common as well, passing operational costs such as maintenance and utilities to tenants.
- Per-rack or bundled pricing are suitable for customers who prefer straightforward, predictable bill.

Figure 4: Pricing models

Pricing Model	Description	Primary Users	Key Features
Modified Gross	Fixed fee for reserved power capacity (kW), regardless of usage. Includes share of operating expenses.	Businesses with steady, high-density workloads.	Guaranteed power allocation; predictable billing; overage billed per kWh.
Gross (All-in) Pricing	Fixed fee for reserved power (kW) inclusive of utility rate changes, power consumption, and operating expenses.	Customers seeking steady, consistent billing	Consistent billing; risk is taken on by provider.
Triple Net (NNN)	Base price. Respective operating expenses passed through to the tenant.	Large businesses with desire to oversee and operate equipment and operations.	Ability to minimize operating expenses, greater operational efficiency resulting in lower costs to the user.
Per Rack	Flat monthly fee per rack or cabinet.	Businesses with predictable, moderate resource needs.	Simplified pricing; bundled services (space, power, connectivity); predictable costs.

Source: datacenterhawk

From an investor's perspective, the triple-net lease with its stable and predictable margins, is the most preferred.

The contracts are repriced when the leases expire. Hyperscalers tend to sign longer leases of between 10 to 15 years. Colocation customers usually commit for a shorter contract period of 1 to 5 years.

For example, in January 2026, Digital Core REIT signed a 10-year agreement with a global cloud service provider to occupy the facility at 8217 Linton Hall Road. On the other hand, Keppel DC REIT's portfolio of colocation contract has a weighted average lease expiry (WALE) of 3.2 years as at 31 December 2025.

Demand drivers of Data Centres

While cloud computing, data generation and storage are long-term demand drivers for data centres, artificial intelligence and machine learning are powerful catalysts since 2022. The trend is set to continue, supported by several structural factors.

#1 – Rising demand for cloud computing

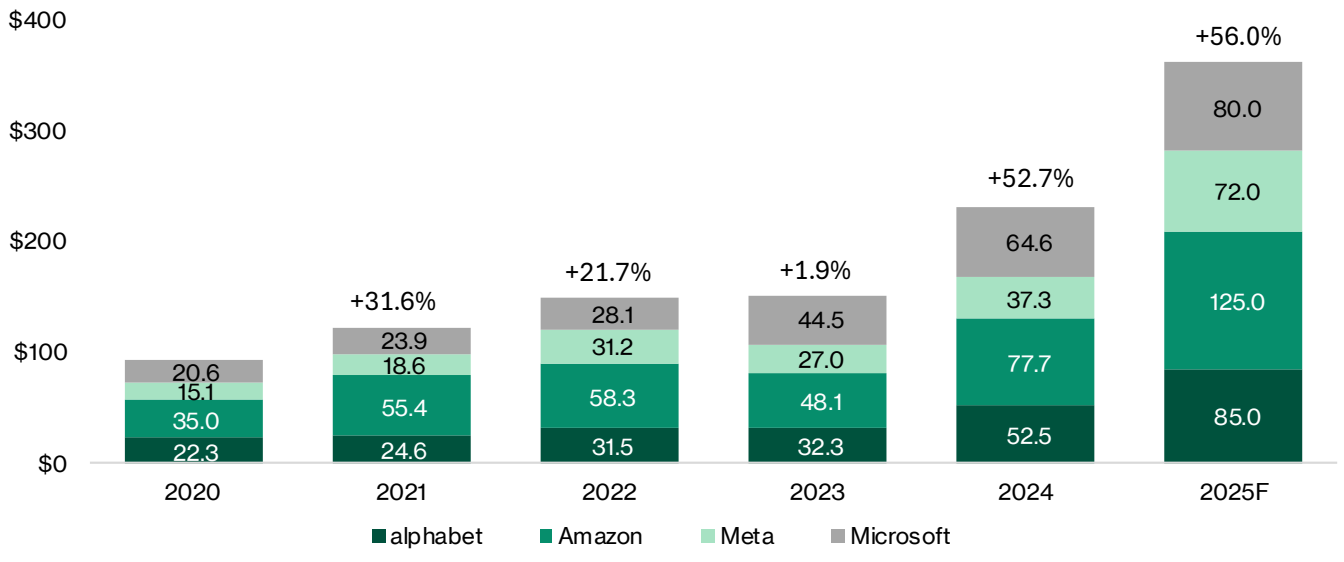
Cloud computing is the biggest data centre demand driver. Enterprises are still shifting workloads from on-premise systems to public and hybrid cloud. This migration creates sustained demand for both colocation and hyperscale capacity.

As more organizations move workloads to the public cloud for scalability and convenience, hyperscalers will continue to expand across markets. The structural demand drivers continue to fuel growth in the data-centre industry, attracting significant capital.

Hyperscalers are securing new development projects, creating additional cloud regions, and upgrading digital infrastructure to serve clients and meet rising demand.

The big three cloud providers – Amazon Web Services, Microsoft Azure, and Google Cloud – keep expanding their offerings, adding more edge and core services. This strengthens their role as the go-to platforms for large enterprises and government agencies.

Figure 5: Capital expenditures investment by Alphabet, Amazon, Meta and Microsoft, US$ billion



Source: Beansprout research

Public cloud providers drive most of the world's data centre leasing, in both self-build and colocation capacity. They accounted for 40% of leasing transactions in 2024 and roughly 36% of total leasing activity to date.

Combined cloud revenues for the four major US cloud providers – Microsoft, Amazon Web Services, Google, and Oracle – grew 16% in 2024 and have expanded at a 23% CAGR over the past four years.

The global cloud computing market size is estimated to reach US$2,390 billion by 2030, registering to grow at a CAGR 20.4% from 2025 to 2030.

Notably, major tech giants like Alphabet, Amazon, Meta, and Microsoft more than tripled their capital expenditures from around US$93 billion in 2020 to approximately US$362 billion in 2025.

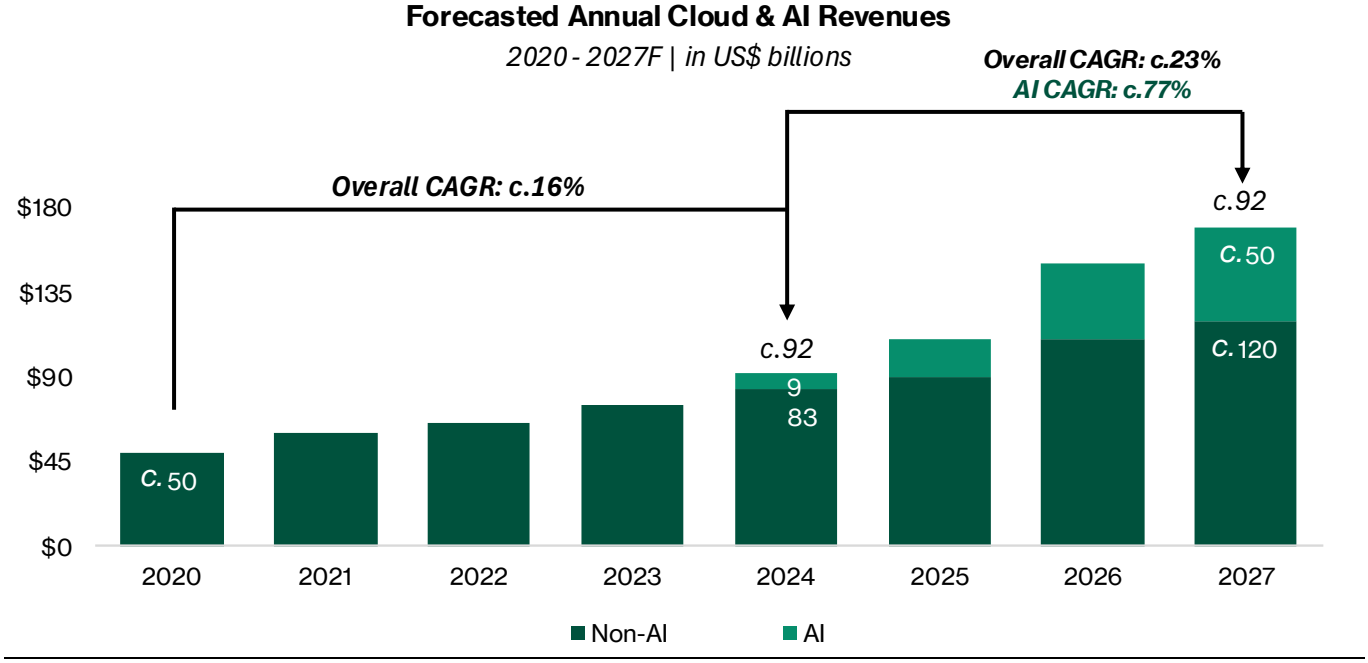
#2 – Artificial intelligence models

AI has also become a key driver in data centre demand worldwide. The increase in capital expenditure is also mainly AI-driven, with heavy investment in data centres, high-performance GPU infrastructure, and cloud capabilities to support the next wave of AI innovation.

AI-specific infrastructure is growing rapidly. In the US, OpenAI's $500 billion "Stargate" project aims to build next-generation AI facilities nationwide. Japan plans to fund domestic AI chips and edge infrastructure to reduce reliance on foreign technology. In the UK, government involvement in data centre planning shows a commitment to boosting AI capabilities and research infrastructure.

Generative AI, including tools for creating images, videos, text, and chat, is being widely adopted by major companies worldwide. Models like OpenAI's DALL-E and ChatGPT are key drivers of this AI revolution.

Figure 6: Cloud and AI revenues forecasts



Source: Cushman & Wakefield

As AI models become larger and more powerful, they require more data centre capacity. Generative AI is driving significant growth in the global data centre market.

AI workloads, particularly generative AI, are projected to account for approximately 40% of total data centre demand through 2030. AI workloads consume vastly more electricity than traditional computing, as they require fundamentally different hardware configurations with exponentially higher power consumption. The computational intensity of AI model training is staggering as training GPT-4 alone required around 30 megawatts of power.

Cloud and AI revenues are expected to grow at a 23.3% CAGR from 2024 to 2028, up from 16.4% from 2020 to 2024, with AI-related revenue alone projected to grow 72.5% annually over the same period.

#3 – Meeting regulatory requirements

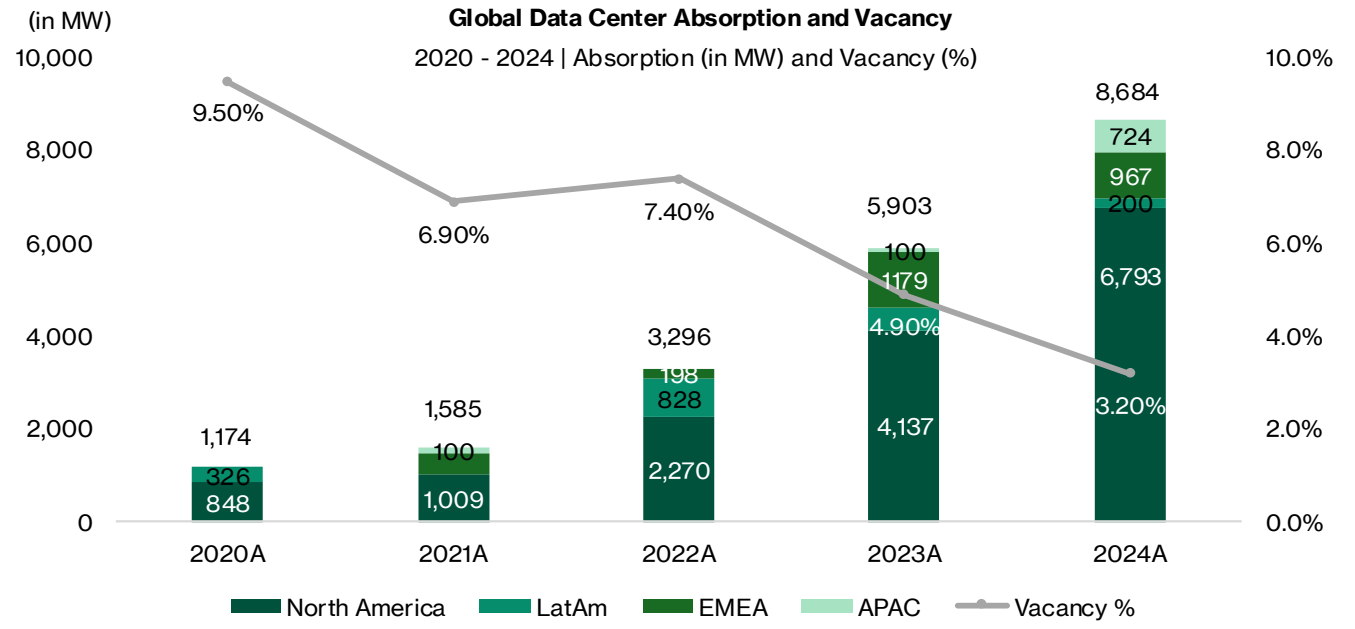
As data centre markets mature, regulations tend to tighten. Established markets worldwide face measures such as temporary halts on new projects, stricter sustainability requirements, limits on noise and environmental impact, and restrictions on suitable locations for building data centres. Stringent regulations in established market could persuade companies to explore emerging markets.

Many countries now require certain types of data to remain within national borders. This drives demand for local data centres:

- **Local storage mandates:** sensitive data (financial, healthcare, government) must be stored domestically.
- **Edge computing deployment:** closer proximity to users is required to reduce latency while complying with local data laws.
- **National security considerations:** governments prefer domestic infrastructure to protect critical data from foreign access.

In Europe, growth in data centre market was partly to support compliance with data-sovereignty regulations such as General Data Protection Regulation (GDPR).

Figure 7: Global data centre absorption (MW) and vacancy (%)



Source: datacenterhawk.com

#4 – 5G adoption

With rising 5G deployment, data centres are crucial for telecommunications infrastructure, processing calls, messages, and data for mobile and internet services. With 5G, edge data centres help bring computing resources closer to users for lower latency.

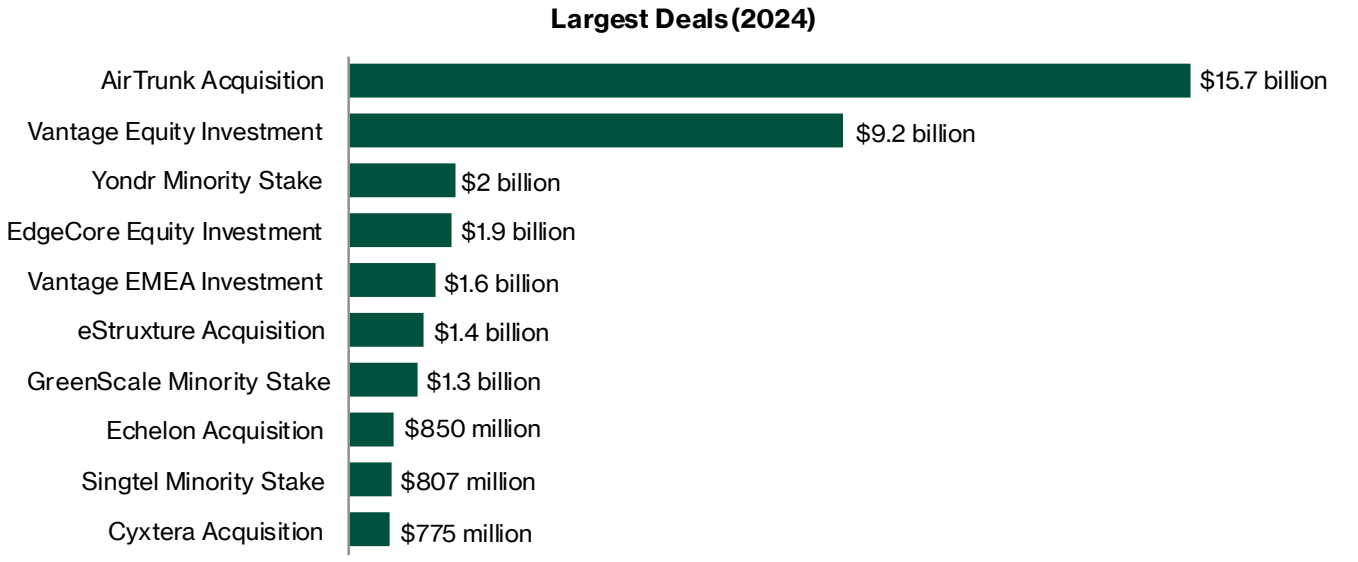
Example telecommunications or 5G networking companies include Verizon, AT&T, China Mobile, Comcast, and Vodafone.

#5 – Others

- **Website, application and content hosting**: Data centres host websites, applications, and mobile apps, ensuring they are available to users with high reliability, speed, and scalability. As of December 2024, approximately 33.0% of all websites are hosted on servers located in the United States. In addition, data centres power content delivery networks that cache and distribute media, enabling fast, high-quality streaming for videos, games, and other content. The rise of platforms like Netflix has pushed global internet traffic higher, driving additional demand for data centre capacity.
- **Enterprise Resource Planning (ERP) and business applications:** Data centres host ERP systems and business applications like finance and supply chain management. Users include SAP, Oracle and Workday.
- **Data storage, backup and analytics:** Data centres hold large volumes of information, supporting backup and disaster-recovery needs. This helps organizations maintain data integrity and meet regulatory requirements. Data centres power analytics platforms that process and analyse large datasets in fields like finance and healthcare, providing insights for data-driven decision-making. Example big data and analytics companies include Databricks, Snowflake and Palantir.

Figure 7 shows the demand, as represented by absorption, refers to the newly leased capacity each year, as measured in MW. North America has the highest demand for data centre, at 6,793 MW in 2024. Absorption refers to the new leases recorded and is a reflection of the demand for data centre capacity. As demand has outpaced new supply, vacancy rates have been declining since 2020. Among the regions, North America has seen particularly strong growth in data centre absorption.

Figure 8: Global largest investment deals (2024)



Source: Knight Frank

Investing in the Data Centre Sector

The data centre industry is one of the fastest-growing asset classes in commercial real estate. Amid increase in joint ventures, mergers and acquisitions, greater institutional capital commitments and rising capital expenditures from hyperscalers, the growth extends across colocation operators, hyperscale and infrastructure.

Capital flows into data centre market has increased from US$12 billion in 2018 to US$60 billion in 2023. Transaction volume continued to be strong in 2024 with large acquisitions, including Blackstone's US$16 billion acquisition of the AirTrunk portfolio.

In another example of private equity funds making large investments into the data centre industry – a Blackrock-led consortium comprising Nvidia, Microsoft and xAI, bought Aligned Data Centers for US$40 billion. The acquisition was announced in October 2025. The deal with Macquarie Asset Management, is the biggest acquisition ever of a data centre company. Texas-based Aligned has a total active and planned capacity of 5GW.

Stable and high visibility of income streams

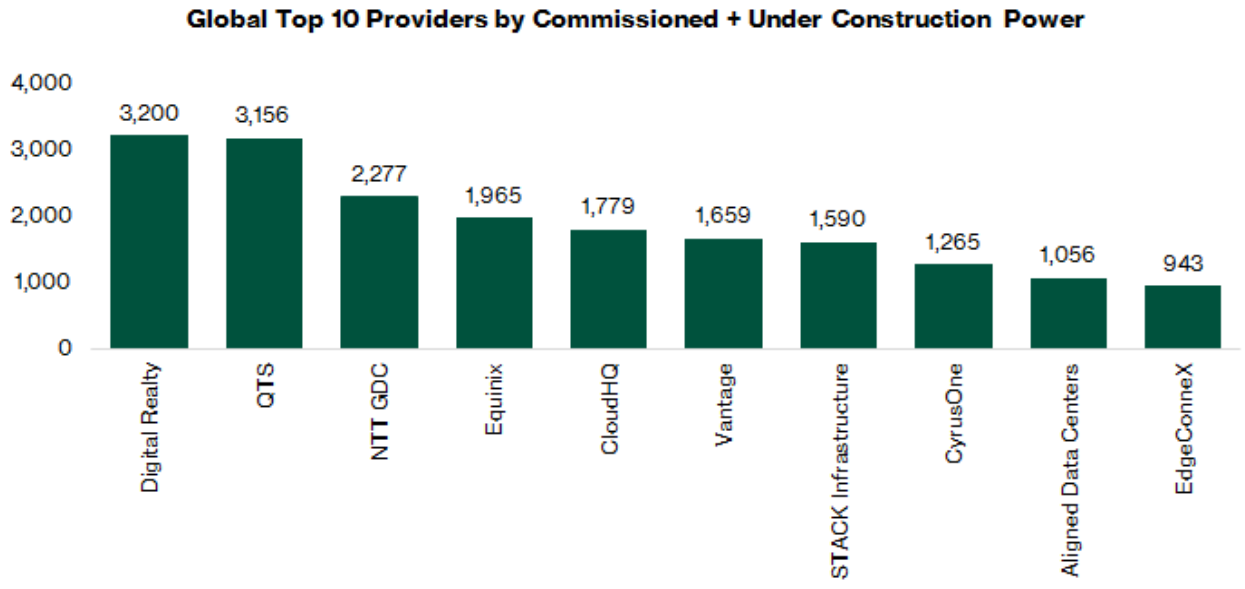
Data centres offer predictable cash flows from long-term lease contracts with the tenants, often extending to +15 years. Furthermore, hyperscalers, enterprises, and colocation clients are usually well-established with strong credit profile.

Tripe-net leases that allow passing operational costs such as maintenance and utilities to tenants are common. About 31% of Keppel DC REIT's attributable revenue for the first nine months of 2025 comes from triple-net leases. Mapletree Industrial Trust has 74.2% of the data centre portfolio on triple net lease structures.

Tenants such as cloud providers and financial institutions require uninterrupted operations, resulting in high retention rates that further strengthen the stability of income.

Besides rental income, power and cooling contracts generate incremental revenue, helping to maintain profitability across economic cycles.

Figure 9: Global Top 10 Providers (excluding China) by Commissioned + Under Construction Power



Source : datacenterhawk

As mission-critical infrastructure, these facilities experience consistently strong demand, even during downturns. Moreover, strong demand relative to limited supply has kept global data centre utilization rates above 90% since 2000, highlighting the sector's resilience and supporting its low vacancy rates.

Attractive return on investment

Data centres require high level of investment on land acquisition, facility construction, and power/cooling infrastructure. Currently, construction cost of modern facilities is about US$20 million per MW, with another 10-15% for acquiring land and power. Despite the high capital expenditure, data centres offer attractive return on investment.

Yields often outperform traditional real estate, with prime markets achieving cap rates between 4.5% and 5.5%. enhance overall risk-adjusted returns.

Investment returns can be enhanced via lease escalations, strategic expansions, and improved energy efficiency.

Resilient returns

In the last ten years, data centres have outperformed traditional real estate asset class. Supported by good quality cashflows, the yields have tightened from 8-10% in 2010 to today's 4.5-6% in prime locations, as reported in Knight Frank 2025 Global Data Centres Report.

The base case scenario changed following the Covid-19 pandemic in 2020. It drove unprecedented demand for cloud computing, streaming, remote work and e-commerce. Data centres posted outstanding performance, pushing yields lower.

Yields in Ashburn, London and Singapore fell to 4.5% - 5.5% for the prime assets.

During the rising interest rates and global macroeconomic uncertainty in 2022 – 2023, data centre yields increased modestly to 5-6% in key global markets. In 2024, data centre yields are back in the range from 4.5% - 5.5%, reflecting sustained investor demand.

Major Data Centre Operators

Major global data centre operators are moderately concentrated with a few players holding significant share. In the global data centre industry, the notable data centre operators in the U.S. include Digital Realty and Equinix. In Australia, the leading players are

Figure 10: Singapore's data centre operators/ owners

Data centre operators/owners	Sponsor	2024 Revenue (S$ million)	Key portfolio characteristics	Portfolio (as of 31 Dec 2024)
CapitaLand Ascendas REIT	CapitaLand Investments	127.0	CLAR's data centres are in Singapore, the UK and Europe.	15 data centres with net lettable area 1.51m sq ft
Mapletree Industrial Trust (FYE Mar 2025)	Mapletree Investments Pte Ltd	296.9	portfolio contract type: Shell and core 62%, fitted hyperscale data centres 21%, fitted data centres 17%	62 data centres with total lettable area 9.48m sq ft
Keppel DC REIT	Keppel Ltd	310.3	WALE 6.7 years; portfolio contract type: colocation 78%, fully-fitted 16%, shell and core 6%	25 data centres with total lettable area 3.18m sq ft
Digital Core REIT	Digital Realty Trust	135	WALE 4.7 years; fully-fitted 84%, colocation 10%, shell & core 6%	10 data centres with total IT load capacity 1.16m sq ft
NTT DC REIT	NTT Limited	160.9	WALE 4.8 years; Hyperscale 51%, colocation 49%	6 data centres with total IT load capacity of 90.7MW
STT GDC Pte Ltd	ST Telemedia Pte Ltd	1666.5	NA	89 data centres with total IT load capacity of 1.68 GW

Source: Independent research

NextDC and Airtrunk. In Japan, NTT Group is the country's most influential telecom player and has the dominant presence in data centre.

Singapore-listed companies with significant exposure to data centre assets are the REITs operating the stabilised data centres - include Digital Core REIT (SGX: DCRU), Keppel DC REIT (SGX: AJBU), NTT DC REIT (SGX: NTDU) and Mapletree Industrial Trust (SGX: ME8U).

Global Leaders in Data Centre

- **Digital Realty (DLR):** The largest data centre owner and operator, by capacity as it holds ~3GW as at 31 December 2025. DLR offers a full product spectrum including interconnection, colocation and hyperscale. Listed on New York Stock Exchange with a market capitalisation of US$54.7 billion, DLR is the 5th largest listed US REIT. As of September 30, 2025, DLR's portfolio consists 311 data centres and landbank of 57.7 million square feet available for future development.

- **QTS:** US-based data centre operator, QTS was taken private by Blackstone in June 2021 at US$10 billion, representing US$9.5 million per MW in available utility power or implied EV/EBITDA 40x.

- **NTT GDC:** NTT GDC, part of the NTT Group (9432.T), is 3rd largest data centre provider globally with 2.2GW of IT load capacity.

- **Equinix (EQIX):** Equinix is the world's largest interconnection platforms, operating a global network of carrier-neutral faciliies under its IBX and xScale brands. Equinix plans to double its data centre capacity to ~3GW by 2029. Equinix is listed on New York Stock Exchange with a market capitalisation of US$71.4 billion.

Singapore-Based Data Centre Asset Owners

- **Digital Core REIT (SGX: DCRU):** Listed on Singapore Stock Exchange with market capitalisation at S$668 million, Digital Core REIT holds a portfolio of 11 data centres with 59.1 MW in IT load capacity.

- **Keppel DC REIT (SGX: AJBU):** Listed on Singapore Stock Exchange with market capitalisation at S$5.6 billion. Portfolio consists 24 data centres across ten countries.

- **NTT DC REIT (SGX: NTDU):** Listed on Singapore Stock Exchange with market capitalisation of US$1.0 billion. Portfolio consists six data centres that are Tier III-equivalent and are carrier-neutral. The portfolio has IT load capacity of 90.7MW.

- **Mapletree Industrial Trust (SGX: ME8U):** Listed on Singapore Stock Exchange with market capitalisation of S$5.8bn, Mapletree Industrial Trust is the entity holding the data centre assets of Mapletree Investments Pte Ltd. The portfolio of 59 data centres in North America, Japan and Singapore is valued at about S$5.0 billion as of end-September 2025.

- **Singtel (SGX: Z74): Nxera is Singtel's** regional data centre arm. In 2023, private equity investor KKR invested US$800 million for a 20% stake in Nxera. The investment valued Nxera at US$4.0 billion or EV/EBITDA 32x. In February 2026, Singtel launched the new DC Tuas with 58MW of capacity, increasing Singtel's capacity in Singapore to 120MW. Nxera is developing a portfolio of hyper-connected, AI-ready data centres in the region. New data centres in Singapore, Malaysia, Thailand and Indonesia will double Nxera's capacity to over 200MW by end-2026. Singtel has set a target to increase Nxera's EBITDA contribution from 12% in FY2023 to 20% by FY2028.

Data centre supply chain

- **CSE Global (SGX: 544):** CSE Global provides critical electrical infrastructure integration for the data centre market. In 2025, management has sharpened its strategic focus on higher growth, longer cycle markets, particularly data centres and general infrastructure, as demand rises for power and reliable digital infrastructure driven by AI and cloud expansion. In 2025, CSE anchors its deep involvement with hyperscaler data centre when it secures a long-term partnership with Amazon. CSE has issued warrants to Amazon which is conditional upon Amazon giving orders of up to US$1.5 billion to CSE over the next 5 years. At this run rate, revenue contribution from data centre is estimated to rise from 5% in FYY2025 to approximately 30% by FY207. When the warrants are fully converted into equities, Amazon will become a significant with 8% shareholding validating CSE as the key system integrators for their data centres.

- **Sembcorp Industries (SGX: U96):** Sembcorp Industries Runs the grid that powers much of Singapore's DC ecosystem, with a 33% share of energy provision to local data centres, counting key clients including Singtel and Equinix.

- **Others – semiconductor enablers**: These are companies in the upstream AI/chip supply chain, supplying to equipment and system installed in data centres. They are beneficiaries of data centre growth.

- **AEM holdings (SGX: AWX)** designs and builds high-performance test handlers and systems that test integrated chips (ICs). AEM supplies chip testing equipment to producers of AI GPUs and DRAM memory.

- **Frencken (SGX: E55)** is a high-precision manufacturing and engineering company who supplies components to semiconductor equipment maker. For example, supplying components to ASML who manufacture lithography machines used to produce two-nanometre chips.

- **UMS Holdings (SGX: 558)** manufactures precision components used in semiconductor equipment, especially front-end wafer fabrication tools. UMS supplies these critical components to Original Equipment Maker (OEMs).

- **Micro-Mechanics (SGX: 5DD)** supplies high-precision consumable precision tools to semiconductor chip producer.

Industry Growth Trends

Global datacentre set to reach US$652.0 billion by 2030, 11.2 percent CAGR

Key regions such as North America, Europe, and Asia-Pacific are seeing strong data-centre capacity expansion, driven by advancing digital technologies and the rising need for reliable, high-capacity connectivity.

North America

The United States dominates the region, with major hubs like Northern Virginia, Phoenix, and Atlanta experiencing strong demand.

North Virginia (NoVA) is the world's largest and most established data centre hub, with operational capacity at 5.9GW. The region sits at the centre of the East Coast internet backbone, giving it extremely low-latency routes to major U.S. metros and Europe. About 70% of global internet traffic goes through Northern Virginia. The region reported 538.6 MW of net absorption in 1H 2025. With continued strong demand from hyperscale and AI users, vacancy fell to a record low of 0.7% in 1H 2025.

North America's data centre revenue size, estimated at US$152.4 billion, is expected to grow at 10.5% CAGR during the period 2025 to 2030, to reach US$253.3 billion.

Asia-Pacific

The surge in AI and cloud computing is fueling strong demand for both colocation and hyperscale data centres. Key hubs such as Tokyo, Hong Kong, Seoul, Singapore, and Sydney offer advanced infrastructure and strategic connectivity. Meanwhile, emerging markets like India and Indonesia are attracting significant investments as businesses look to capitalize on growing internet penetration and economic development.

Tokyo has the largest concentration of data centres. Operational capacity in Tokyo edged up 2% in 1H 2025 to 1.16 GW, while the development pipeline grew almost 10% to 1.95 GW, reflecting a steady build-out of new facilities. Inzai remains the city's dominant cluster, holding 32% of current capacity. Even

Figure 12: Global capacity by region

Region	2024 - Data centre capacity, MW (live IT load capacity)	Share of global DC capacity, 2024	2027F - Data centre capacity, MW (live IT load capacity)	Share of global DC capacity, 2027F	Capacity growth, 2024 - 2027F	Quick rationale
North America	32,043	65%	71,474	70%	31%	Largest cluster of hyperscale campuses (Northern Virginia, Chicago, Phoenix, Atlanta). Heavy hyperscaler buildout and the deepest pipelines.
Asia-Pacific	7,014	14%	11,958	12%	19%	Fastest capacity growth in several markets (China, Singapore, Malaysia, India, Japan, Korea) Strong construction pipeline and government/enterprise demand. Power and land constraints are key local issues.
EMEA (Europe, Middle East and Africa)	8,933	18%	15,458	15%	20%	Europe concentrated in UK/Ireland/ Nordics/Frankfurt with rising hyperscale activity; Middle East (UAE, Saudi) is an emerging growth cluster. Regulatory and grid considerations matter.
Latin America	1,151	2%	2,965	3%	37%	Small but growing; investment focused in Brazil, Mexico and regional hubs as cloud adoption increases.

Source: datacenterhawk

with new capacity coming online, the market tightened further, with vacancy falling to 6% as cloud providers and AI-driven workloads continued to absorb space.

Asia Pacific maintained strong momentum in data centre expansion throughout the first half of 2025, adding nearly 2,300MW to its development pipeline. The region's operational capacity now stands at around 12.7GW, with 3.2GW under construction and a further 13.3GW in planning stages.

Data centre market revenue in Asia Pacific is projected to reach US$150.5 billion by 2030. The represents CAGR 10.2% from 2025 to 2030of 11.6 percent.

Europe

Europe's data-centre market is expanding rapidly, fuelled by rising demand for cloud services, digital transformation, and compliance with data-sovereignty regulations such as General Dara Protection Regulation (GDPR).

Major hubs – including Frankfurt, London, Amsterdam, Paris, and Dublin (the FLAPD region) – host hyperscale and colocation facilities supported by strong connectivity and infrastructure.

Vacancy in Europe is project to average 7.6% by end-2025, a historic low for the region.

Frankfurt is the largest data centre market in Europe. As a major financial hub and the internet capital of Europe, Frankfurt is strategically located to support companies' trans-European operations. Frankfurt has planned development of 1.1GW, of which 47% of this planned capacity already preleased.

Sustainability remains a key priority, with operators investing significantly in renewable energy and energy-efficient technologies.

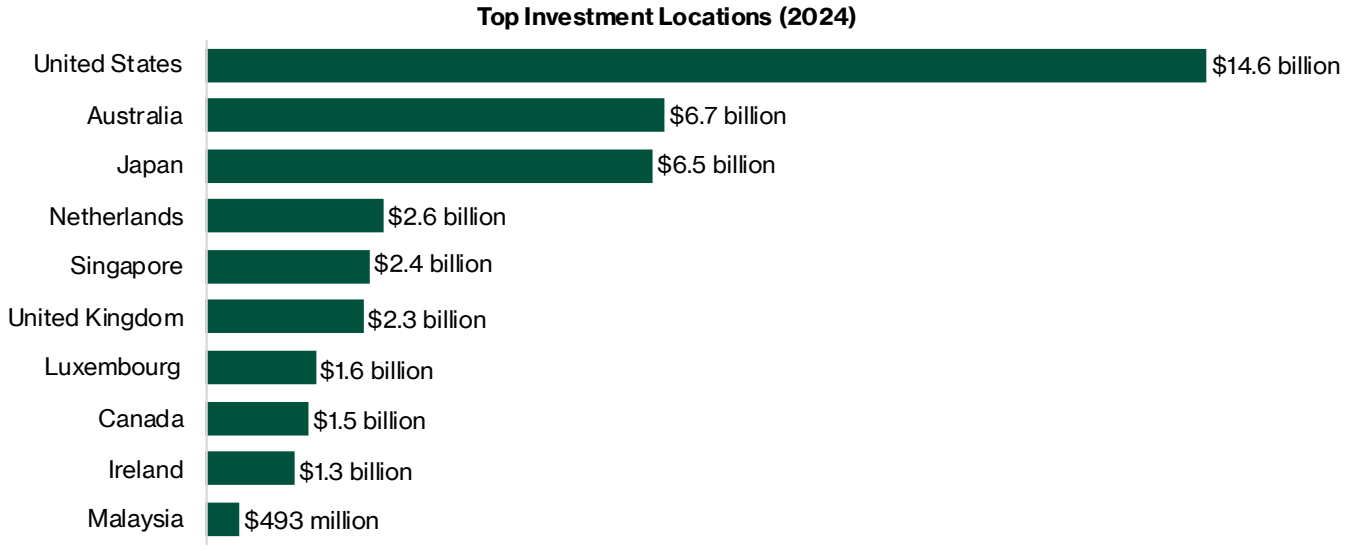
Europe's data centre revenue size is expected to grow at 10.1% CAGR during the period 2025 to 2030, to reach US$154.4 billion.

Singapore Spotlight

Singapore is a leading data centre hub due to its strategic location, with 26 subsea cables that provide low-latency, high-capacity links to major global markets, including Asia, Europe, and the United States.

It has a highly skilled engineering workforce, a stable energy grid, and strong investments in renewable energy and energy-efficient technologies to support sustainable growth.

Figure 13: Global's top investment locations (2024)



Source: Knight Frank

In 2019, moratorium on new data centre construction was imposed. New capacity can be approved under the Data Centre – Call for Application (DC-CFA) scheme. This initiative invited data centre operators to propose projects emphasizing energy efficiency, decarbonization, and contributions to Singapore's economic objectives.

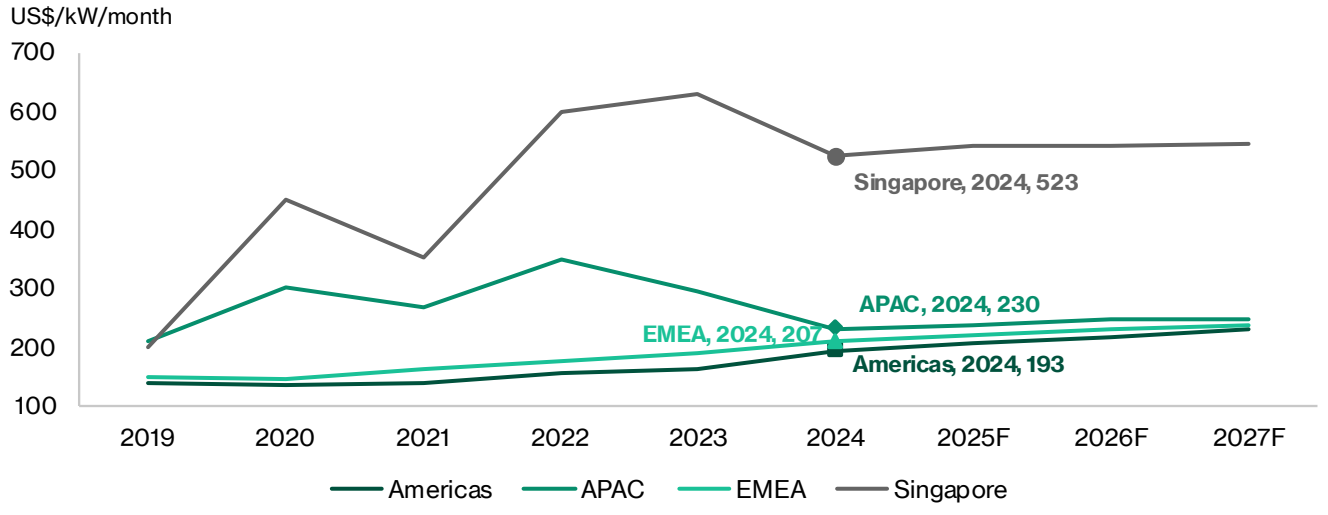
The government's Green Data Centre Roadmap sets strict guidelines for energy-reuse effectiveness and pushes operators toward more efficient cooling technologies. Currently, the total data centre capacity stands at 1.4 GW across over 70 data centres. The latest plan, announced in October 2025, is to build a low-carbon data centre park on Jurong Island with 700 MW of capacity.

Figure 14 shows the monthly cost per kilowatt of data centre capacity, for a 4MW deployment, excluding power/electricity costs. For Singapore, the wholesale price was US$523/kW/month in 2024. Singapore's wholesale pricing has been consistently above the peers in the region

As shown for the period till 2027F, all the regions are expected to register gradual rise in pricing.

Going forward, hyperscale prices in Singapore are expected to grow by 4.9% between 2024 and 2027F. Overall pricing is expected to increase from the current levels.

Figure 14: Wholesale pricing (4MW, excluding power costs)



Source: datacenterhawk

Figure 15: Top 10 largest facilities in Singapore, by commissioned power

Provider	Address	Commissioned Power (kW)	Commissioned Space (Sq Ft)	Year Built	Purpose Built or Retrofit
AirTrunk	22 Loyang Drive	60,000	215,278	2020	Purpose Built
Digital Realty	11 Loyang Close	55,500	370,000	2020	Purpose Built
Singtel	8 Yung Ho Road	41,000	150,694	Under Construction	Purpose Built
Keppel Data Centres	82 Genting Lane	40,000	74,000	2024	Purpose Built
STTelemedia Global Data Centres	1 Loyang Close	39,700	107,639	2021	Purpose Built
Digital Realty	29A International Business Park	31,500	206,667	2011	Purpose Built
Keppel Data Centres	13 Sunview Way	24,000	92,889	2015	Purpose Built
Global Switch	2 Tai Seng Avenue	22,500	150,000	2008	Purpose Built
Global Switch	7 Woodlands Height	20,000	150,000	2018	Purpose Built
Equinix	6 Sunview Drive	19,500	104,666	2021	Purpose Built

Source: datacenterhawk

Singapore – key incentives and support

As a leading data centre hub in the region, the Singapore government has rolled out initiatives to support a sustainable development. These include promoting a deep capital market to facilitate financing to private data centre operators. In addition, there are grants and enhance the efficiency for companies in the data centre industry.

Some of these initiatives are part of the Singapore Green Data Centre (DC) Roadmap that was launched in 2024 by IMDA. The aim is to allow public and private participants to work closely in developing a sustainable growth path for Singapore's data centres ecosystem.

Singapore's government, through Infocomm Media Development Authority (IMDA) and Economic Development Board (EDB), has rolled out targeted schemes to elevate Singapore as a successful data centre hub:

- **DC-CFA Programs**: Launched in July 2022, the pilot Data Centre Call for Application (DC-CFA) lifted Singapore's 2019 moratorium on data centres. The aim is to build sustainable and energy-efficient data centre. 80 MW of new capacity was awarded to four data centre operators. The second program, launched on 1 December 2025, Singapore's Data Centre – Call for Application 2 (DC-CFA2) offers capacity allocation for 200MW of new and high-efficiency data centre. These >50% green energy mandate, PUE ≤1.25 were awarded to operators like Microsoft, Equinix for economic/job contributions.
- **Energy Efficiency Grants (EEG)**: To accelerate data centre energy efficiency, IMDA extend grants to companies who adopt energy efficient IT infrastructure. Small and Medium Enterprises (SMEs) and non-SMEs could receive to 70% and 30% of equipment costs, respectively. The support is capped is S$30,000 per company, until 2027.
- **Tax Incentives for global or regional HQ**: In order to promote a vibrant business ecosystem, Economic Development Board (EDB) aim to attract companies to set up their global or regional headquarter (HQ) in Singapore. These global or regional could access Pioneer Certificate (PC) and Development/Expansion Incentive (DEI) for tax exemptions/reductions on headquarter activities and infrastructure. Companies with approved PC or DEI status is able to apply corporate tax exemption or a concessionary tax rate of 5% or 10%.
- **Tax incentives to promote energy efficiency.** Investment Allowance for Emissions Reduction (IA-ER) and Resource Efficiency Grant for Emissions (REG(E)) are available to companies and data centres when they invest in in equipment that result in reductions in greenhouse gas emissions. Based on the reduction in carbon emissions, the green projects could recover up to 50% of the project costs.
- **Land Access**: Singapore Land Authority (SLA) provides long-term leases and preferential industrial land for data centre construction. Through a Concept and Price tenders exercise, the land is awarded based on evaluating the projects' efficiency and sustainability markers. These include target PUE close to 1.3; advanced cooling system; MW per sqm; carbon reduction strategies and the operators' track record.

To sum it up, by focusing on high quality growth, the Singapore government aim to attract best-in-class hyperscalers and potential public listings into Singapore.

Key Data Centre Evaluation Metrics

Vacancy, rents, PUE, and IT load capacity are key metrics

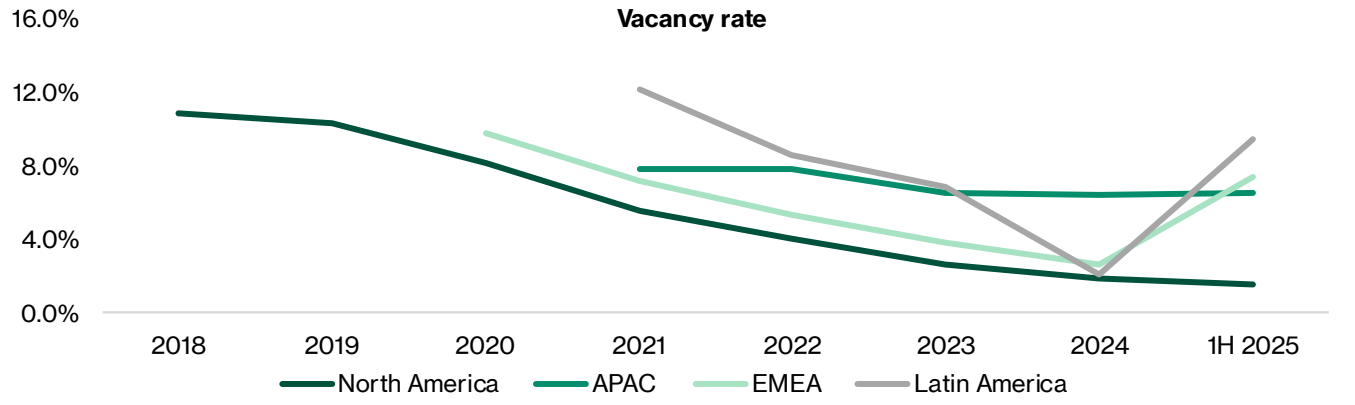
For investors assessing data centre assets, several operating metrics are critical in determining the attractiveness and performance of the properties. These include vacancy rate, rental rate trend, power usage effectiveness (PUE) and IT load capacity.

For the REIT, they are asset owners and are likely to focus on vacancy rate and rental growth. For the operators, they may not own the assets and are focus on growth. As operators are providing a service, they do not have the avenue to pass on the operating expenses. They focus on PUE and rack density in order to optimise the profitability.

Vacancy Rate

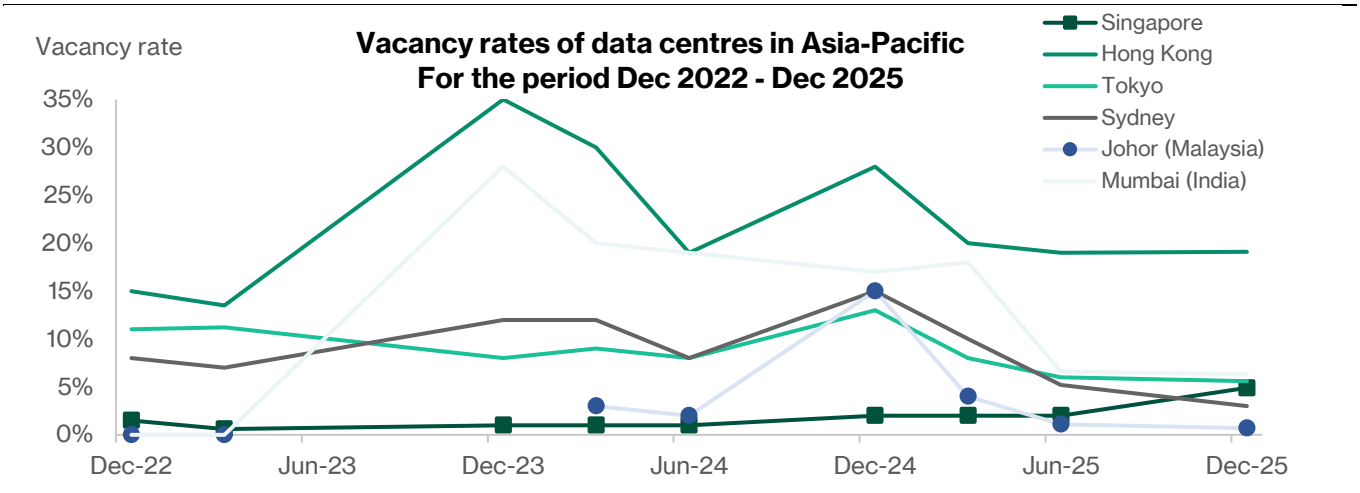
Vacancy rate and rental rate are key operating metrics of data centres. Vacancy rate is the percentage of commissioned power that is currently available to be leased.

Figure 16: Vacancy rates across region



Source: JLL

Figure 17: Vacancy rates of data centres in Asia Pacific, Dec 2022 – Dec 2025



Source: CBRE, Cushman & Westfield

Vacancy rates are extremely tight. About 20 markets across the world have extremely tight capacity, with vacancy below 5%. Several markets reported vacancy rates below 1%.

Singapore remains one of the tightest markets globally. In late 2024, Singapore had only 7.2 MW of available capacity with a vacancy rate of about 1%, and by 1Q25, this had edged up only slightly to about 2% The market's overall vacancy rate stays tight at around 2%, with operators awaiting government approval of an additional 300 MW of capacity.

Rental Rate and Rental Growth

Rental rate refers to the monthly cost per kilowatt ($/kW/month) that data centre operators charge tenants for colocation and power. A higher occupancy rate and rental rates translate to stronger revenue.

To offset inflation, the agreements with tenants have contracted rental escalations per annum during the relevant lease periods.

Pricing trends have generally been on a uptrend and expected to grow in the medium term. Hyperscale prices are expected to rise by 15.2% in the Americas, 6.7% in APAC and 16.9% in EMEA between 2024 and 2027F. Wholesale prices are similarly expected to rise across all three regions, with increases of 18.8% in the Americas, 6.7% in APAC and 13.0% in EMEA between 2024 and 2027F.

Power usage effectiveness (PUE)

PUE (Power Usage Effectiveness) is a key metric used to measure the energy efficiency of a data centre.

PUE measures the ratio of the total power consumption of data centre to the energy solely used by its IT equipment. The closer the ratio is to 1.0, the more efficient the data centre.

Launched in May 2024, the Singapore government's Green Data Centre Roadmap targets for all Singapore data centres to achieve a PUE below 1.3 at 100% IT load in the next 10 years. According to Uptime Institute, the average PUE across global data centres is around 1.55. In Singapore, our facilities' PUE ranges from 1.2 to 1.9, with an average of around 1.47. Newly built data centres, however, achieve a PUE of about 1.35.

IT load capacity and rack density

IT load capacity measure the maximum amount of electrical power that a data centre can supply to IT equipment, expressed through the Density metric.

Power density refers to the amount of electrical power supplied to a specific area within the data centre, usually measured in kilowatts per square foot (kW/sq ft) or kilowatts per rack (kW/rack).

Rack density refers to the physical concentration of servers, storage, and networking equipment within a rack, typically

measured as the number of units (U) of equipment installed per rack.

Rack density determines the physical space utilization in the data centre. It impacts cooling

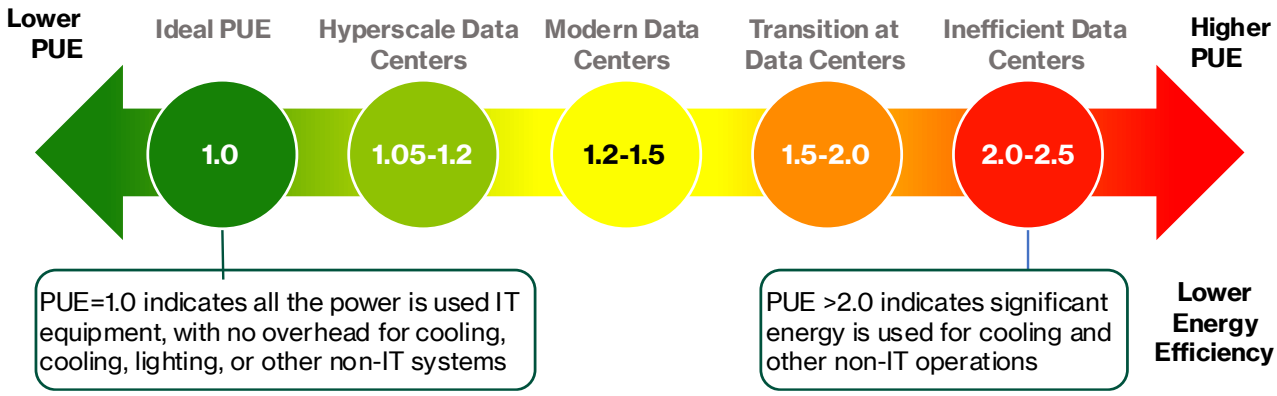
and airflow design, as densely packed racks generate more heat.

Rack density has been climbing steadily, and that shift matters for valuation. In 2010, most data centres ran at 4–5 kW per rack. By 2020, densities had doubled to 8–10 kW. New completions today average 12–15 kW, and operators are still chasing demand as customers push peak loads toward 16–20 kW.

What this really means is that facilities built for higher densities can command better economics. They support more compute per square foot, attract AI-heavy workloads, and justify higher pricing because the power and cooling backbone is tougher to replicate.

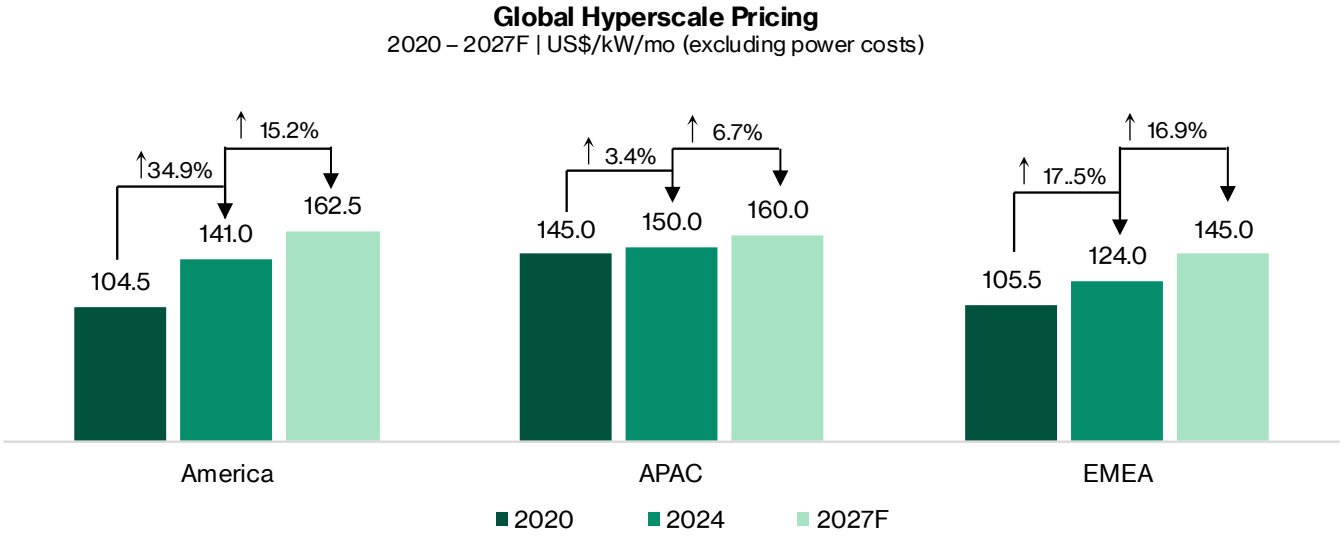
In hyperscale environments above 10 MW, roughly half of operators already use racks above 20 kW, and close to one in five run beyond 40 kW. AI applications, particularly those involving large language models (LLMs) and deep learning (DL), need significantly more computational power. This has led to the development of high-density racks that can support 60-120 kW or more per rack.

Figure 18: PUE spectrum



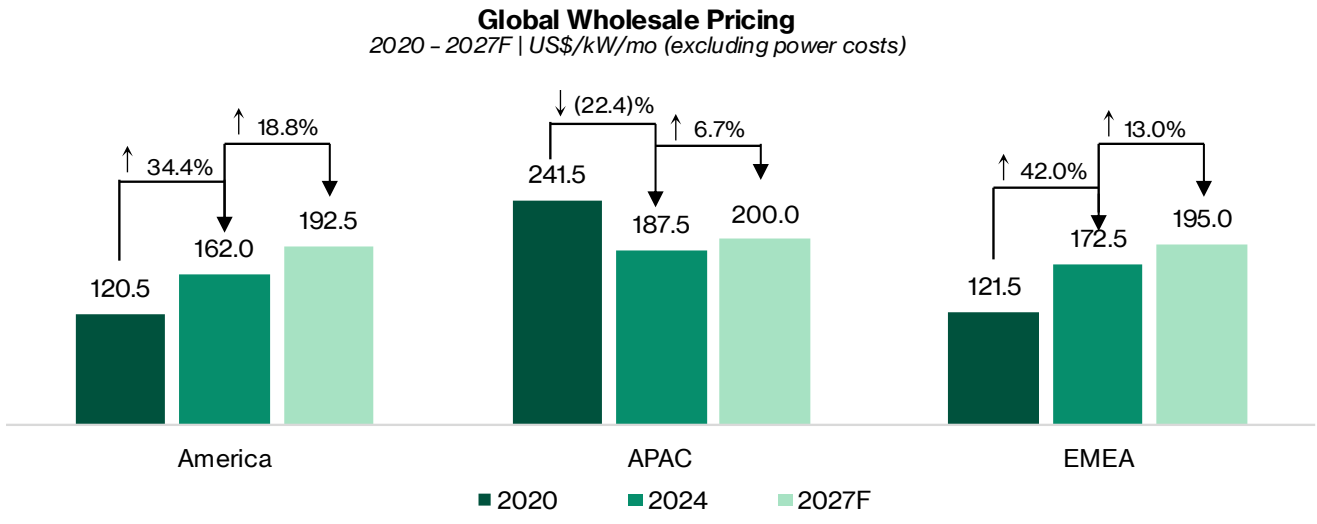
Source: Beansprout Research

Figure 19: Global Hyperscale Pricing, 2020- 2027F, US$/kW/month (excluding power costs)



Source: datacenterhawk

Figure 20: Global Wholesale Pricing, 2020- 2027F, US$/kW/month (excluding power costs)



Source: datacenterhawk

Figure 21 : Portfolio metrics, as of 31 Dec 2025

Description	Digital Core REIT	Keppel DC REIT	NTT DC REIT	Mapletree Industrial Trust	Capitaland Ascendas REIT	Digital Realty Trust, Inc.	Equinix, Inc.
Ticker	DCRU-SES	AJBU-SES	NTDU-SES	ME8U-SES	A17U-SES	DLR-USA	EQIX-USA
REIT/ Corporate	REIT	REIT	REIT	REIT	REIT	Corporate	Corporate
Asset under management	US$1.8 bn	S$6.3 bn	US$1.5 bn	S$8.5 bn	S$18 billion	US$26 billion	US$22 billion
Data centre, %	100%	100%	100%	58%	13%	100%	100%
No. of data centres	11	25	6	60	17	310	280
Freehold land, %	100%	44%	83%	89%	17%	100%	> 90%
Main data centre type	Fully fitted	Colocation	Colocation	Shell & core	Shell & core	Colocation	Colocation
Main pricing model	Gross + Electricity	Gross + Electricity	Gross + Electricity	Triple net	Triple net	Gross + Electricity	Gross + Electricity
Occupancy rate	97.0%	95.8%	97.3%	89.3%	91.5%	82.6%	78.0%
WALE, by rental income	4.6 years	4.9 years	4.4 years	6.2 years	4.3 years	5.0 years	contract 1 to 3 years
PUE	estimate 1.58	Not disclosed	1.34	Not disclosed	Not disclosed	1.58	1.39
Top 3 customers, % of rental income	59%	60%	55%	16%	7%	26%	7%

Source : Company data

Note :

Mapletree Industrial Trust : statistics based on North America portfolio

Capitaland Ascendas REIT : post the Japan DC acquisition (49% interest) , in Greater Osaka

Keppel DC REIT : Due to confidentiality reason, the effective PUE has been excluded in disclosure.

Equinix does not disclose WALE as a standard metric. Customer contracts are typically colocation agreements of 1 to 3 years.

Figure 22: Valuation table

Name	Symbol	Fiscal Period	Currency	Price	Market cap, S$ million	Revenue, S$ million	Dividend yield, FY2026E %	Price to earnings FY2026E, x	Price to book FY2025, x	ROE %	Total debt/ Total equity, x
SREIT											
CapitaLand Ascendas REIT	A17U-SES	12/31/2025	SGD	2.53	11,691	1,574	6.1	16.4	1.1	7.5	78.0%
CapitaLand India Trust	CY6U-SES	12/31/2025	SGD	1.03	1,396	318	8.1	12.4	0.7	17.3	87.4%
Digital Core REIT	DCRU-SES	12/31/2025	USD	0.51	864	231	7.0	16.5	0.6	4.5	59.2%
Keppel DC REIT	AJBU-SES	12/31/2025	SGD	2.30	5,614	457	4.8	19.3	1.3	11.3	56.5%
Mapletree Industrial Trust	ME8U-SES	03/31/2025	SGD	2.00	5,702	658	6.2	15.7	1.2	6.8	73.0%
NTT DC REIT	NTDU-SES	03/31/2024	USD	0.93	1,222	248	8.3	22.7	1.0	-	53.8%
Data centre owner/operator											
Digital Realty Trust, Inc.	DLR-USA	12/31/2025	USD	186.51	81,714	7,987	2.7	96.6	2.9	5.9	86.2%
Equinix, Inc.	EQIX-USA	12/31/2025	USD	1,029.32	128,935	12,043	2.0	63.4	7.1	9.8	160.3%
NTT Inc	9432-TKS	03/31/2025	JPY	154.60	102,601	109,638	3.5	11.6	1.3	10.0	99.5%
Singapore Telecommunications Limited	Z74-SES	03/31/2025	SGD	4.96	81,847	14,064	4.0	24.4	3.3	16.5	50.9%
Data centre supply chain											
AEM Holdings Ltd.	AWX-SES	12/31/2025	SGD	4.56	1,431	399	0.6	38.7	2.9	3.5	3.3%
CSE Global Limited	544-SES	12/31/2025	SGD	1.24	898	969	2.7	18.5	3.3	14.1	96.1%
Frencken Group Limited	E28-SES	12/31/2025	SGD	2.38	1,016	865	1.3	23.0	2.1	8.6	18.8%
Micro-Mechanics (Holdings) Ltd	5DD-SES	06/30/2025	SGD	2.66	370	65	2.3	-	7.5	26.0	4.2%
Sembcorp Industries Ltd.	U96-SES	12/31/2025	SGD	6.79	12,073	5,799	4.0	12.6	2.2	18.0	165.4%
UMS Integration Limited	558-SES	12/31/2025	SGD	1.71	1,517	251	2.8	26.0	3.5	9.8	2.1%

Source : Factset, 10 April 2026

Valuing the Data Centre Operators

Data-centre companies are often valued using EV/EBITDA or AFFO

Data centre owners are typically valued based on EV/EBITDA and adjusted funds from operations (AFFO).

EV/ EBITDA

Data centre companies have massive non-cash charges like depreciation that obscure the true operating performance. Additionally, we have to exclude the CapEx and one-time charges when calculating for the EBITDA. If we do not recognise that the future EBITDA will be much higher once the growth CapEx matures, we may undervalue a company.

Data centre EV/EBITDA multiples can vary from 13x to 61x depending on their positioning. Equinix has premium valuation of 24.75x which is justified by superior interconnection network and high operating margins (22%). While Digital Realty has a discount valuation of 20x due to wholesale positioning of lower per-MW pricing power and lower operating margins (15%).

Adjusted Funds From Operations (AFFO)

This is more specifically for valuing REITs. AFFO focuses on the actual cash required to maintain operations and how much of it is available to be distributed to shareholders after maintaining the asset base. It is meant to help determine the REIT dividend sustainability as well as calculate the distribution yield.

Financial Ratios

Beyond headline valuations, assessing financial strength is critical. Key ratios include loan-to-value (LTV), investment yields, and debt-to-asset metrics, which provide insight into balance sheet resilience and return potential. Companies with lower leverage and consistent rental yields are often rewarded with narrower discounts or valuation premiums.

Market Leadership Premium

Industry leaders with established track records, scale, and strong operational expertise tend to trade at a premium to smaller players. Market leadership provides greater resilience across economic cycles and the ability to attract institutional capital.

Recent transactions - STT GDC

In February 2026, Singtel and KRR announced to acquire 100% of STT GDC, a wholly owned subsidiary of ST Telemedia. Currently, STT GDC has operational capacity of 673 MW as at December 2025, across 50 data centres in 12 countries. With a pipeline of 1.7GW, STT GDC has approximately 2.3 GW in data centre capacity across 100 data centres. Singtel and KKR will acquire STT GDC for S$6.6 billion in cash. Singtel an KKR will own 25% and 75% of STT GDC, respectively. The transaction implied STT GDC's enterprise value at about S$13.8 billion. Management indicated that the transaction is valued at high teens EV/EBITDA, based on forward contracted stabilised EBITDA. Pending regulatory approvals, the transaction is expected to complete in 2H26.

Investment Risks

Data-centre operators face market, economic and operational risks

Key Risks

While the data centre sector offers long-term growth prospects, investors should be mindful of several key risks. These include macroeconomic conditions, regulatory changes, higher borrowing costs, and operational risks.

Power supply and cost risks

A reliable source of power supply is imperative to a data centre. Power is also the largest cost component. Any interruption, including grid failure, can create immediate revenue loss and customer defection.

Many utility providers estimated wait times of at least four years to deliver significant power to new developments.

While power costs continued to see increases across the markets, advances in technology are helping bring down power costs. For example, using AI for workload prediction, and more sophisticated cooling systems, can help reduce power costs.

Renewable power is typically more cost effective than power from non-renewable sources, and EMEA stands out on a global scale for power affordability. Reykjavik (Iceland), with 100% renewable energy powering its grid, recorded one of the lowest power costs globally.

Regulatory and environmental risks

Governments are classifying data centres as critical infrastructure requiring interventions. There are energy efficiency directives that include mandatory PUE reporting and sustainability disclosures.

Interest rate and leverage risks

Data centre developers and operators are highly leveraged to the capital-intensive business model. With rises in interest rates, the annual debt service costs increases as well.

Cybersecurity and data breach risks

Data centres are prime targets for cyber-attacks. Ransomware attacks on facility management systems can shut down entire operations. This can lead to reputational damage and loss of business as tenants switch to more reliable providers.

Oversupply risk

There is the possibility that the primary growth drivers like AI and cloud computing do not sustain and that the demand may not meet the future supply. As excessive capacity is being built in many regions, this may lead to potential declines in occupancy rates.

Obsolescence risk

Technology obsolescence may require operators to upgrade the facilities to support rising power density, advanced cooling requirements, or specialised hardware used in artificial intelligence and high-performance computing. Data centre operators have to incur the capital expenditure in fully-fitted facilities. As demand shifted towards AI-enabled data centres to support AI use cases, operators will incur the capital expenditure to equip data centres with new design of mechanical and electrical systems. EBITDA.

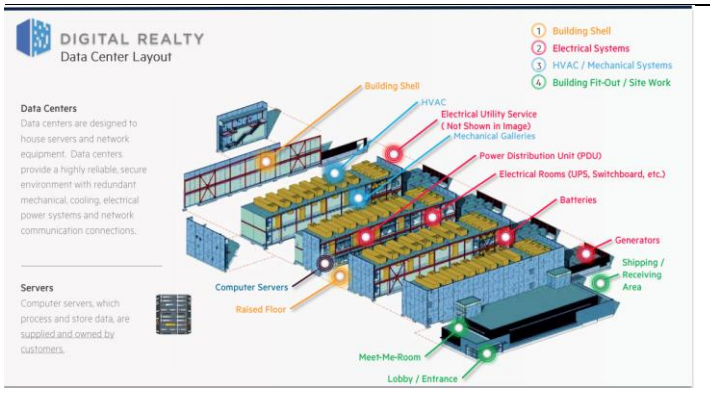
Appendix

What is a Data Centre?

Appendix 1: Key components of a data centre

Data centres are specialised physical facilities that house IT infrastructure such as servers, storage systems and network equipment. They are essential for every online service, from business operations and cloud services to modern artificial intelligence (AI). Businesses require them to handle the large volumes of data generated from their online operations.

Figure 23: Data centre layout

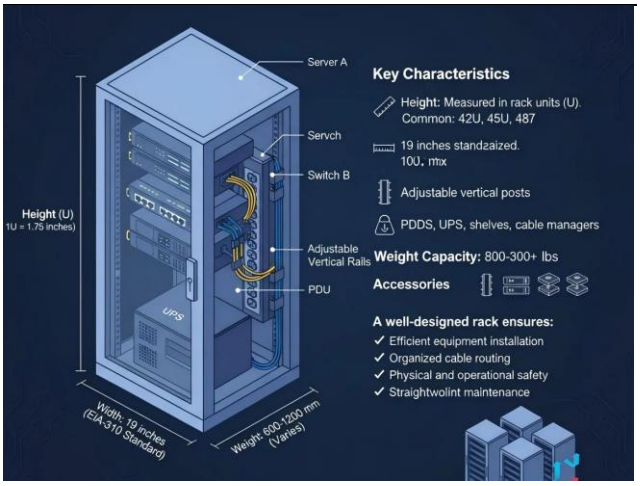


Source : Digital Realty

Appendix 2: A data centre rack

A standard data centre rack has dimensions of 19 inches in width, 73.5 inches in height, and 42 inches in depth. Servers, switches, and storage are mounted inside in standardised slots.

Figure 24: Data centre rack



Source: NextDC

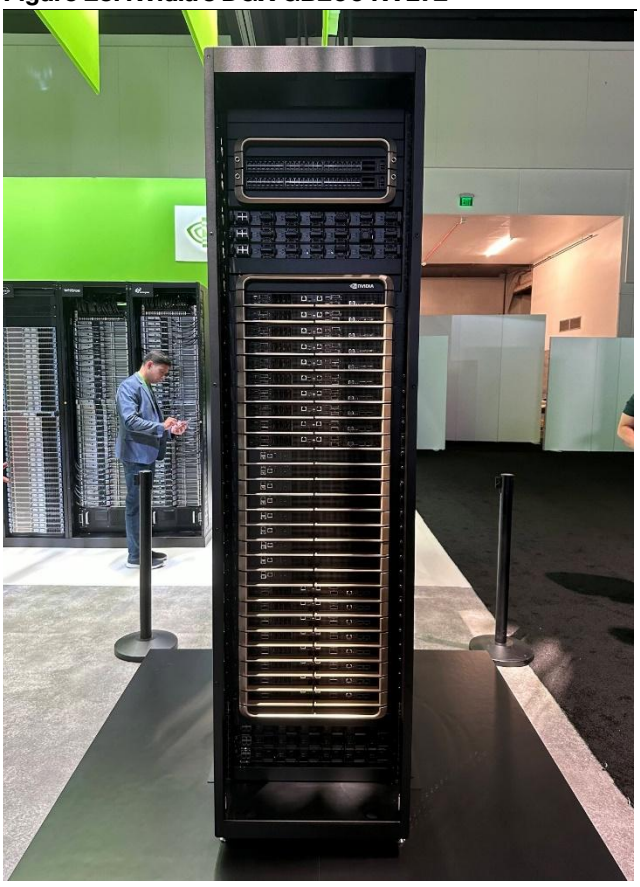
Appendix 3: Rack density

Rack density refers to how much power (in kW) each rack consumes, which directly correlates to compute intensity:

A high-density rack will have all the slots filled, leaving no empty slots.

This is a high-density rack – Nvidia's DGX GB200 NVL72.

Figure 25: Nvidia's DGX GB200 NVL72



Source: Nvidia

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