



GRI GLOBAL DATA CENTRE OUTLOOK 2025

Expert insights from around the world on what's next in the ascent of this exciting new asset class

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INTRODUCTION

Since 1998, GRI Club's exclusive networking events have been providing unique opportunities for the industry's decision makers to exchange valuable insights and experiences, igniting deal flow and potentialising the real estate market worldwide.

GRI Club reports present the key takeaways from these events, including the most valuable insights, the most ardent discussions, and the most intriguing strategies, and it was at these events that we witnessed the rise of data centres as a core discussion subject among top real estate leaders.

In this report, we compile the collected intelligence gathered from recent GRI Club events across the globe with the latest industry research for a closer look at the incredible growth of this asset class in the US, EMEA, APAC, and Latin America, and to analyse the trends and challenges that are shaping the future of this emerging but rapidly-maturing sector.

THE GLOBAL RISE OF DATA CENTRES

80 years in the making

From the early mainframe rooms of the 1940s to the emergence of purpose-built data centres in the 1970s, the real estate industry has continuously adapted to technological advancements.

The 1990s saw a significant shift with the rise of the internet and the resultant dot-com boom, leading to increased investments in colocation facilities and the rapid expansion of digital infrastructure as well as the development of large-scale internet data centres.

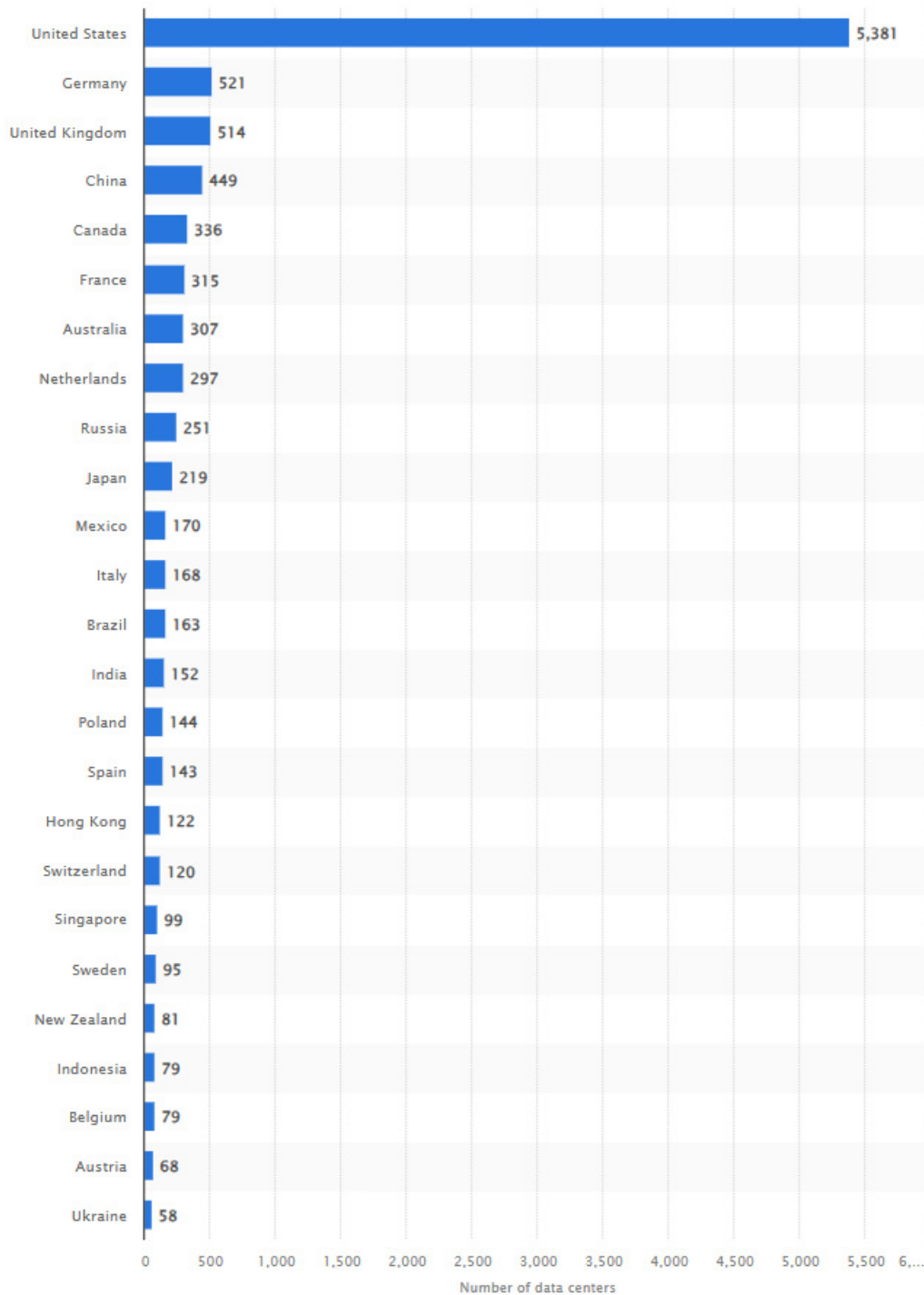
Then, as internet access became ubiquitous and cloud computing gained momentum, hyperscale facilities reshaped the data centre landscape, requiring vast investments to support global demand.

The last decade has seen unprecedented growth, with real estate developers and investors - both institutional and alternative - recognising data centres as a crucial component of their portfolios.

Although the US currently leads the global data centre market, holding well over half of the world's capacity and driving most of the industry's growth, Europe, APAC, and the Middle East are expanding rapidly, and China remains a key player, continuing to invest heavily in data centre development despite US export restrictions on advanced chips.

Despite the rapid growth in global demand for the asset class, there is a notable lag in supply, and the sector faces substantial medium-term challenges, including power availability, sustainability requirements, and skill shortages in key trades, all of which impact expansion timelines and costs.

Leading countries by number of data centres



(As of March 2024 | Source: [Statista](#))

Types of Data Centres

Enterprise Data Centres

Owned and operated by a single organisation, enterprise data centres support internal IT operations. These facilities are typically located on-premises or in a dedicated off-site location, serving industries such as finance, healthcare, and manufacturing.

Colocation Data Centres

These are third-party facilities where multiple businesses rent space, power, cooling, and connectivity for their servers and IT infrastructure. Colocation data centres offer cost efficiency, scalability, and enhanced security while allowing companies to maintain control over their hardware.

Hyperscale Data Centres

Designed for large-scale cloud providers and tech companies, hyperscale facilities house vast numbers of servers to support high-performance computing, AI applications, and global cloud services. Companies like Amazon Web Services (AWS), Google Cloud, and Microsoft Azure operate hyperscale data centres.

Cloud Data Centres

These facilities support cloud computing services by providing virtual storage, computing, and networking resources. Cloud data centres are typically operated by public cloud providers and offer flexible, scalable solutions to businesses worldwide.

Edge Data Centres

Located closer to end users and devices, edge data centres process and store data locally to reduce latency and improve real-time application performance. These are crucial for applications such as 5G, Internet of Things (IoT), and autonomous vehicles.

Modular Data Centres

Built as prefabricated units, modular data centres can be rapidly deployed and scaled according to demand. They are often used in remote locations, disaster recovery scenarios, or as temporary solutions.

Government Data Centres

Operated by government agencies, these facilities handle sensitive and classified information. They often feature high-security protocols and strict regulatory compliance to protect national data assets.

Micro Data Centres

Compact, self-contained units that provide computing, storage, and networking within a small footprint. These are often used in retail, healthcare, and industrial environments where space is limited but real-time processing is required.

AMERICAS

» USA

Market Growth Drivers

Surging Data Demand

As global computing demand surges, with USD 1.8 trillion in capital investment planned between 2024 and 2030, the US data centre market's structural boom, is contributing to record construction levels for this relatively young asset class.

Data centre investments could add up to 20 basis points to US GDP growth in 2025-2026 according to some estimates, with spending on construction, technology, and power generation already contributing to economic growth and each 5-10GW of new capacity requiring an estimated USD 20 billion as energy consumption reaches record highs.

Hyperscalers including Amazon, Meta, Microsoft, Google, and Oracle are driving industry growth, increasing their share of demand to 45% by 2028 while investing record amounts in AI infrastructure, with Microsoft committing USD 80 billion, Meta up to USD 65 billion, Google USD 75 billion, and Amazon USD 100 billion in 2025, securing most new data centre capacity through pre-leasing.

Although growth projections for US data centres still vary significantly, with some CAGR estimates sitting as low as 5%, the many others predicting rates of 15% or even more around the end of the decade cement the current overall outlook as extremely positive.

M&A activity in the US data centre market remains high, with nearly USD 29 billion in pending transactions, though it is expected to slow as joint ventures in emerging markets become the preferred strategy. At the same time, hyperscalers are increasing their influence, now accounting for over 10% of total development site purchases, further shaping the market's expansion.

Construction Pipeline

The data centre construction pipeline reached nearly 50 MSF by the end of 2024, doubling in size over the past five years, with record levels of development expected in 2025, where 100+ MW projects are expected to become the norm.

Vacancy rates in primary markets are at historic lows of 2.8%, and preleasing activity is at record highs, with rates potentially exceeding 90% in 2025 and rental prices returning to levels last seen in 2011-2012. While vacancy rates may see a temporary increase as new colocation capacity enters the market, overall supply constraints will almost certainly keep availability tight.

Financing

Data centre debt financing remains strong despite high interest rates, with USD 25 billion in development financing underwritten for Q1 2025 and an estimated USD 170 billion in assets requiring financing this year.

Developers are expected to take on more debt to fund hyperscale projects scheduled for completion between 2026 and 2028, while non-investment-grade AI companies such as CoreWeave, OpenAI, and Lambda Labs are increasing leasing activity, driving demand for creative financing solutions.

Funding sources range from equity and bank loans to corporate and securitised bonds and project finance vehicles, with private equity firms heavily investing in medium-to-large data centre REITs and developers.

Permanent financing solutions such as CMBS and ABS are gaining traction, while major partnerships, including Blackrock, Microsoft, and MGX's USD 100 billion Global AI Infrastructure Investment Partnership and KKR and Energy Capital Partners' USD 50 billion fund, are shaping the future of data centre investment.

Challenges

Site Selection

With AI training and inference facilities becoming more specialised, training centres, which have significantly higher power demands, are being built closer to power sources to optimise performance.

Limited power availability in traditional data centre hubs such as Northern Virginia, Dallas, Chicago, Phoenix, and Northern California is driving expansion into suburban, rural, and emerging markets, increasing competition for land and requiring rezoning in key areas.

Tax incentives are playing a crucial role in attracting new developments to states that have not historically been major data centre locations.

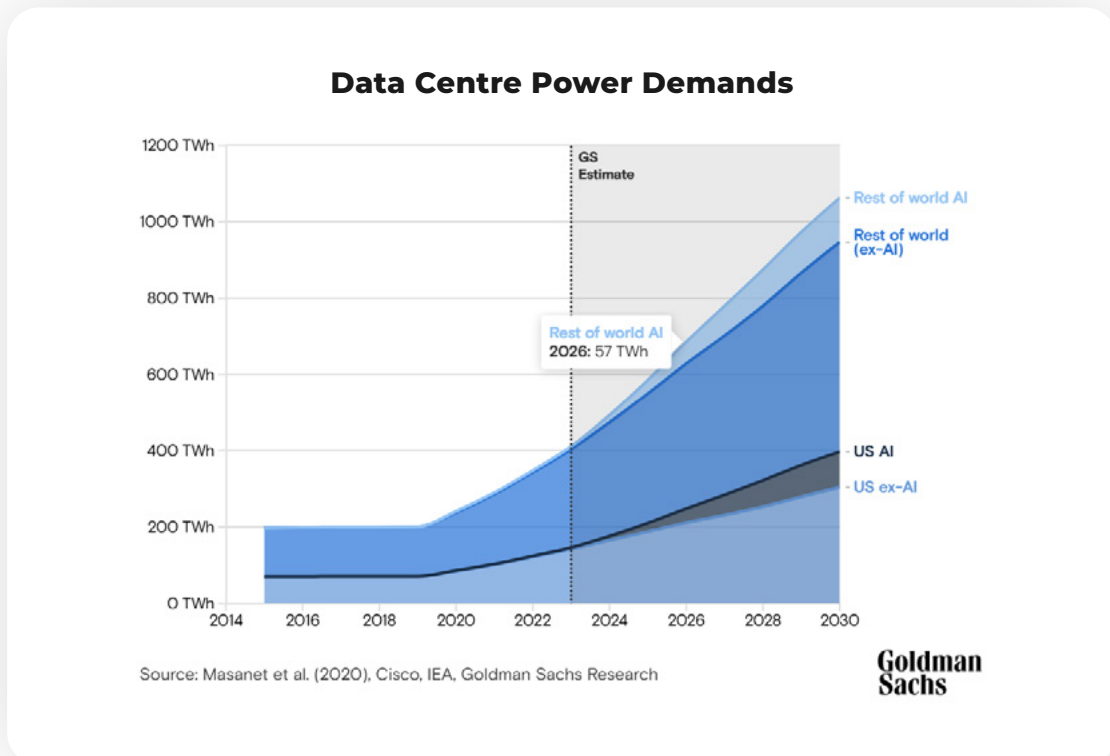
Site selection is increasingly focused on power availability, with a growing shift towards legacy nuclear partnerships for colocation opportunities and the conversion of retired coal plants into renewable energy hubs.

As a result, investment is accelerating in emerging markets, including West Texas, which offers abundant but underutilised energy and is seeing growth in AI and cryptocurrency mining operations, as well as Pennsylvania and the Carolinas, which are attractive for latency-agnostic applications like AI training.

Energy

With power demand from US data centres expected to reach 30.7GW while utilities are only set to supply 20.6GW, there is a significant mismatch between supply and demand which is driving investment in alternative energy solutions and infrastructure upgrades.

Electricity demand is expected to rise by 4% in 2025, the highest rate in two decades, with data centres accounting for approximately 2% of global electricity consumption and up to 60% of US grid load growth between 2023 and 2030.



(Source: [AI is poised to drive 160%](#))

Grid upgrades take four to eight years, while data centres can be built in two to three years, creating further strain. To address these challenges, operators are collaborating with utilities to optimise grid planning and de-risk investments through financial guarantees, such as take-or-pay contracts.

Some data centre operators are taking control of their energy supply through “Bring Your Own Power” (BYOP) strategies, signing Power Purchase Agreements (PPAs) with geothermal, solar, wind, battery, and even nuclear projects.

Nuclear power is emerging as a preferred long-term solution due to low carbon emissions, stable baseload supply, and reliability amid increasing environmental regulations. Small modular reactors (SMRs) are also gaining traction, with deployment expected to double in 2025, although large-scale adoption is unlikely before 2030.

Major operators have already secured nuclear power agreements, including deals with the Susquehanna and Three Mile Island plants in Pennsylvania, and partnerships between energy providers, nuclear firms, and data centre operators are set to become standard.

New market entrants will require extensive due diligence as utilities adapt to serving large power users, and on-site power generation such as microgrids and power-sharing agreements will become more common despite their operational complexity.

Labour, Policy, & Community Issues

Skilled labour shortages, regulatory scrutiny, policy interventions, and environmental concerns are causing critical delays in the US data centre market, with the construction industry's 500,000 worker deficit prompting some community colleges to expand MEP (mechanical, electrical, plumbing) certifications to address the skills gap.

Meanwhile, beyond the challenges of simply supplying energy to the data centres, concerns over power consumption and growing public resistance to new developments are driving increased regulatory oversight and political scrutiny, even as state and regional governments continue offering tax incentives to attract data centre investment.

Supply chain constraints also continue to impact data centre development, with shortages in semiconductors, power and cooling systems, networking, and workforce availability, while lead times for critical equipment such as backup generators have extended to months or even years, increasing delays.

To mitigate these risks, operators are implementing bulk purchasing strategies for long-lead items, forming strategic partnerships with suppliers to co-invest in production, and developing talent pipelines through initiatives like Microsoft's data centre academies.

At the same time, data centres are placing strain on local resources such as land, water, and electricity, leading to even greater regulatory pushback. To address these challenges, fair cost allocation for grid expansions is needed to prevent local ratepayers from bearing the burden, while community investment in workforce training and energy efficiency programmes could help ease tensions.

Rising energy demand is also delaying decarbonisation, as increased consumption could extend the lifespan of fossil fuel plants. To mitigate this, operators are investing in carbon capture and hydrogen-ready energy plants, driving the adoption of emerging clean technologies such as small modular reactors and geothermal energy, and forming long-term partnerships with renewable energy providers.

Federal policy is playing an increasing role in supporting the sector's energy demands and AI expansion. Initiatives such as Project Stargate in Abilene, Texas, are driving AI infrastructure investment, while broader federal support for AI development is expected to continue attracting capital into the industry.

Simultaneously, advancements in the cost-efficiency of AI, such as China's DeepSeek, could accelerate AI monetisation by reducing training costs and improving adoption rates, further impacting the trajectory of the data centre market.

» **Latin America**

Overview

Undergoing rapid growth driven by increasing demand for cloud computing, AI, big data and IoT, Latin America's data centre market has never before enjoyed such prestige as it does at the start of 2025.

An exclusive survey conducted by GRI Club Latam on real estate investment intentions for the next two years revealed that data centres rank among the top two most preferred assets, with 35% of investment intentions, second only to the industrial-logistics sector, which reached 55%.

The growing interest in the sector is unsurprising, especially considering recent market projections showing that the market is expected to double by 2029, reaching up to USD 10 billion, with major investment concentrated in Brazil, Mexico and Chile, while Colombia, Peru, Costa Rica and Panama are also emerging as key destinations.

The rise of nearshoring to the US, data localisation requirements, and digital transformation efforts spurred USD 2 billion in planned investments in 2024 alone. Hyperscale providers and colocation firms are leading this expansion, with 30 new data centres built or under construction since 2022.

According to CBRE, the Latin American data centre market began 2025 with a total capacity of 877 megawatts, marking a 7.7% increase compared to 2024. The region is expected to close the year with an additional 340 megawatts, driven by the increasing demand for digital infrastructure.

However, energy availability remains a significant obstacle. Colombia, for example, faces challenges in this area, which limits its expansion in the sector. Currently, the country accounts for 9% of the Latin American market, with 20 units and more than 14,000 m² of installed infrastructure.

Brazil

Even the most optimistic forecasts seem insufficient to capture the growth potential of data centres in Brazil, according to industry leaders already active in the market.

With power accounting for nearly half of a data centre's operational costs, the country's energy infrastructure, with approximately 7GW available, positions it as one of the most competitive in terms of energy costs for data centre growth.

Brazil led new stock growth in Latin America in 2023, establishing itself as one of the region's most attractive markets for hyperscalers and international investors, alongside Mexico, Colombia, and Chile.

Projections for 2025 indicate that demand will continue to exceed supply, driving an increase in leasing activities, built-to-suit developments, and opportunities in greenfield, brownfield, and sale-leaseback projects. While São Paulo remains the dominant market, Rio de Janeiro is also emerging as a key player in the sector.

The outskirts of São Paulo and the state's interior are regarded as the most attractive locations for asset deployment, with the South and Northeast regions also offering strong potential. However, the sector may struggle to keep pace with demand due to shortages of generators, batteries, and essential equipment, which could extend development cycles.

Growth is expected across a range of industries beyond the technology giants Google, Meta, Amazon, and Microsoft, which continue to drive demand. Sectors such as finance, healthcare, agriculture, and smart cities are also expected to become major consumers of data centre infrastructure.

Interest in the market is high, with financial investors, energy firms, and real estate companies actively exploring opportunities, reinforcing expectations that resource availability will not be a limiting factor.



Mexico

Mexico's data centre market is experiencing rapid expansion, being valued at USD 5.18 billion in 2023 and projected to reach USD 8.92 billion by 2030, with a CAGR of 8.1%.

The country's strategic location and its increasing role in North-South digital interconnection further strengthen its appeal for hyperscale and colocation providers, with Querétaro emerging as the country's primary data centre hub, attracting several major global players.

The sector is benefiting from substantial investments, including USD 8.5 billion in the Bajío region and USD 5 billion from AWS over the next 15 years, underscoring confidence in the country's infrastructure.

However, as in the rest of the world, the Mexican market also faces challenges related to power grid limitations and water scarcity, particularly in Querétaro, which has been experiencing prolonged droughts in recent years.

By 2029, data centres could consume up to 1,492MWh of electricity, necessitating USD 8.73 billion in grid upgrades. In response, hyperscale operators are implementing air-cooling technologies and renewable energy solutions to mitigate environmental impact.

In spite of these challenges, Mexico remains a key destination for AI-driven infrastructure, edge computing and cloud expansion, positioning itself as Latin America's second-largest data centre market after Brazil.

Chile

Chile's low natural disaster risk and strong renewable energy policies make it an attractive market for data centre expansion in Latin America.

The market is expected to grow from 338.3MW in 2025 to 554.5MW by 2030, with colocation revenue projected to rise from USD 2.59 billion to USD 4.53 billion in the same period. The rollout of 5G, increasing e-commerce activity, and a shift towards hybrid IT strategies are further accelerating demand.

Santiago dominates the sector, hosting over 85% of the country's data centre capacity, while key operators continue investing in high-reliability Tier 3 and Tier 4 facilities.

Despite strong growth, Chile faces challenges including high infrastructure costs and the need for extensive energy, although strategic initiatives, including government-backed digitalisation efforts and fibre optic rollouts, are supporting industry development.

Defined by stable economic conditions, a pro-investment climate, and increasing foreign direct investment, Chile is emerging as a key data centre hub in South America's growing digital economy.

EMEA

» Europe

Market Growth

The European data centre market continues to experience rapid growth, expanding by nearly 20% year-over-year in Q1 2024, with Paris leading at over 40% growth.

The core FLAP-D markets (Frankfurt, London, Amsterdam, Paris, and Dublin) remain critical hubs, but they face supply constraints, leading to high preleasing rates and rising rental costs.

AI and cloud computing advancements have transformed data centre requirements, increasing demand for high-performance computing, power density, and efficient cooling solutions.

Facilities are becoming more complex, requiring Direct Liquid Cooling (DLC) and high-capacity energy infrastructure. Meanwhile, multi-tenant colocation centres are gaining traction, offering greater flexibility for startups, SMEs, and government agencies.

Investment and Financial Structures

Investors are approaching data centres as infrastructure assets rather than traditional real estate, leading to greater capital allocation but also higher risk assessment. Cap rates range between 4.5% and 5%, and investment decisions now hinge on factors like power access, scalability, and regulatory risks.

Private equity, hedge funds, and infrastructure investors are entering the market, but the economics of large-scale development remain uncertain. Hyperscalers, including Amazon, Microsoft, and Google, are increasingly keeping data centres on balance sheets, making financing more challenging for external investors.

Debt and credit markets have adapted, with mezzanine and development financing becoming more attractive. Some lenders prefer standing assets over development loans due to lower risk, while infrastructure funds and cash-rich investors continue to reshape construction and take-out financing dynamics.

Location Latency

As FLAP-D markets face power and land constraints, secondary and emerging markets are seeing greater investment. Southern Europe, including Spain and Italy, is gaining attention due to lower energy costs and strong network connectivity.

AI-driven data centres require proximity to urban areas for low-latency applications, while cloud infrastructure can operate remotely.

This divide is influencing site selection, with high-megawatt urban sites facing regulatory hurdles and remote locations encountering grid transmission constraints.

Berlin and London are nearing capacity in terms of power allocation, with hyperscalers securing most of the available energy.

In contrast, cities like Madrid and Milan offer more flexibility in securing power before land acquisition, making them attractive for future development. However, in markets like Italy, power approval is more complex, increasing investment risk.

Challenges and Solutions

Power Availability

Power constraints are now a greater challenge than location, as grid upgrades take 5-15 years, exceeding standard data centre construction timelines. Much as in the US, developers are turning to alternative energy solutions, including nuclear power, hydrogen, and renewable energy partnerships.

Governments are also balancing data centre expansion with broader infrastructure needs, with the UK classifying data centres as Critical National Infrastructure (CNI), increasing investor confidence, whereas Ireland has faced political resistance due to high energy consumption concerns.

Regulatory Pressures

EU sustainability regulations are tightening efficiency requirements, with Germany's Energy Efficiency Law mandating PUE targets of 1.5 by 2026 and 1.3 by 2028. The transition to 100% renewable energy is becoming an industry standard, pushing operators toward innovative cooling technologies and efficiency upgrades.

Talent Shortages

The rapid expansion of the sector has created a shortage of skilled labour, particularly in construction, energy systems, and facility management. Developers are addressing this through vocational training partnerships and workforce development programmes.

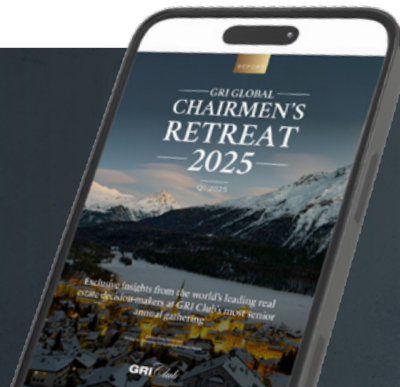
Future Outlook

European data centres are set to continue expanding, with leasing and financing models becoming more structured as institutional capital increases. AI and edge computing will drive further market diversification, creating opportunities in both hyperscale and colocation segments. Regulatory compliance and sustainability will remain central concerns, shaping long-term investment strategies and technological advancements in the industry.

For more insights into the European data centre market, check out these recent GRI Club reports:

GRI GLOBAL CHAIRMEN'S RETREAT REPORT 2025

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» Middle East

Overview

The Middle East's strategic location, connecting Europe, Asia, and Africa, is integral to its appeal for data traffic management, with Saudi Arabia and the UAE emerging as the region's primary hubs, attracting significant investment from global hyperscale providers including AWS, Microsoft, and Google.

The market is currently expected to double in size by 2030, with government initiatives like Saudi Vision 2030 and UAE Vision 2031 contributing to this impressive growth, as large-scale infrastructure projects and smart city developments create demand for high-capacity, energy-efficient data centres.

Scalability constraints, energy consumption concerns, and geopolitical instability remain the key threats to future expansion and market growth, while sustainability and regulatory compliance are also playing an increasing role in shaping investment strategies.

Gulf Cooperation Council (GCC)

The GCC data centre market is undergoing rapid expansion, with investments in the sector expected to exceed USD 7 billion by 2029 and more than 115 ongoing projects valued at over USD 20 billion.

Saudi Arabia, the UAE, and Qatar are leading this growth, with the UAE, particularly Dubai and Abu Dhabi, becoming a major hub and playing host to the highest number of colocation facilities in the region.

Meanwhile, Saudi Arabia's Vision 2030 is driving significant investments in hyperscale data centres, supported by its USD 18 billion allocation for digital infrastructure and renewable energy.

Despite strong growth, the classic data centre challenges remain, including power constraints, talent shortages, and the high cost of infrastructure development. However, the region benefits from relatively low electricity costs, a favourable regulatory environment, and significant government incentives to attract foreign investment.

Sustainability is also becoming a key focus, with major players incorporating renewable energy and innovative cooling solutions into their operations.

As the GCC positions itself as a global tech hub, the data centre sector is set to play a crucial role in supporting economic diversification and digital transformation across the region.

To learn how you can be part of GCC's growth, don't miss out on our upcoming events in the UAE - [full calendar here](#).

» Africa

With hyperscalers and international operators looking beyond saturated markets in Europe and North America, Africa presents a compelling opportunity for data centre expansion.

As more businesses and consumers on the continent rely on digital connectivity, investments in data infrastructure are accelerating, with revenue reaching almost USD 6.5 billion in 2024 and growing at a compound annual growth rate of 7.18% through 2029.

Despite this momentum, the market still faces structural challenges, including limited infrastructure, slow digital transformation, and unreliable power grids. Much of the existing capacity is concentrated in South Africa, Nigeria, Egypt, Kenya, and Morocco, while other regions remain largely underserved.

The expansion of data centres across Africa is closely tied to the continent's evolving energy landscape. Many African countries continue to rely on unstable, coal-intensive grids, leading to frequent power disruptions that pose a challenge for facilities requiring uninterrupted operations.

However, significant public and private sector investments in renewable energy, including solar and wind, are enabling more sustainable solutions. Onsite solar plants, energy wheeling agreements, and liquid cooling technologies are emerging as viable alternatives, reducing reliance on traditional power sources while enhancing efficiency.

Strategic locations with strong connectivity, regulatory support, and a commitment to sustainable energy are increasingly attracting global investment, setting the stage for long-term growth in the region.



APAC

» Overview

The Asia Pacific (APAC) region is emerging as a key data centre hub, with transaction volumes soaring in 2024 to nearly ten times the levels seen in the previous year.

Nearly 80% of the region's operational data centre capacity is concentrated in the top five markets, each exceeding 1GW. Mainland China leads with 4.5GW, followed by Japan with 1.5GW, Australia and India with 1.3GW each, and Singapore, which surpassed the 1GW mark in 2024.

At 2.8GW and 2.7GW respectively, Japan and India currently have the largest data centre development pipelines in the region, with each representing approximately 20% of the region's total under-construction and planned capacity.

» China

China is a global leader in digital infrastructure, with almost 450 operational facilities and a digital economy contributing USD 278 billion in 2024, the country's data centre market is experiencing rapid expansion as certain regions emerge to become key hubs chasing ambitious targets.

Driven by the increasing adoption of cloud computing, hybrid and multi-cloud strategies, 5G networks, and edge computing, the sector's value is expected to grow from USD 14.47 billion in 2023 to USD 33.37 billion by 2030, at a CAGR of 12.7%.

The country is also at the forefront of innovation, exemplified by the development of submerged commercial data centres that improve energy efficiency, while government-backed initiatives such as the Digital China Summit further reinforce the nation's commitment to technological advancement.

Yet, despite this strong momentum, high initial investment costs and stringent environmental regulations pose challenges for smaller enterprises entering the market. And compliance with energy efficiency standards requires continuous upgrades, further increasing expenditure.

» India

With a well-established reputation for producing top STEM graduates, the recent rise of large language models (LLMs) and AI-driven enterprises has propelled India to become one of Asia's busiest data centre hubs and making it a key global player in the sector and the AI infrastructure race.

Investment in data centres is capital-intensive, with traditional financing challenges easing due to their reclassification as infrastructure assets, enabling longer-term financing. Despite this shift, data centres still rely on debt financing, exposing lenders to risks such as technological obsolescence and tenant instability.

The rise of speculative builds, where developers construct without pre-leased commitments, has reshaped the landscape, allowing operators to capitalise on AI and cloud demand but requiring careful risk management.

Unlike mature markets such as Japan and Australia, where data centre builds can take 3-5 years, India's rapid deployment capabilities have made it an attractive destination for hyperscalers and enterprise clients.

The capacity requirements are also surging from 3-5 MW to 30-40 MW per contract over the past decade, with the scaling of operations being driven by hyperscalers like Microsoft and AWS, and also by a growing number of Indian enterprises recognising the need for large, scalable infrastructure to support AI and cloud applications.

In response to these demands, India's data centre operators are increasingly focusing on providing tailored solutions that balance advanced technologies with operational flexibility. The industry is seeing a shift from standardised models to more customised, modular approaches, offering solutions that allow for rapid scaling, enhanced energy efficiency, and future-proof capabilities.

However, as demand grows, supply chain and power issues remain significant challenges. Despite India's relatively abundant power resources, green power access remains limited and expensive, making green energy procurement a vital challenge for future growth. Operators must work closely with local and renewable energy providers to meet sustainability goals while managing operational costs effectively.

On the technology front, advanced cooling solutions and liquid-cooled systems are making headway in addressing the growing power density and energy consumption of modern data centres. Operators are investing in innovative cooling systems, with some using hydrogenated vegetable oil to reduce emissions from backup generators.

For more insights into the Indian data centre market, check out [the full calendar of events in the region here.](#)

» **Australia**

Australia's data centre market continues to grow, with Sydney remaining the dominant hub following a 6% increase in operational capacity in 2024 and a 9% colocation vacancy rate.

Hyperscalers like AWS and Microsoft maintain substantial land reserves for expansion, with operators currently holding secured land parcels that could add over 2GW of future capacity. The city is also enhancing its subsea connectivity with five new undersea cables, reinforcing its role as a digital infrastructure hub.

The Australian government has introduced regulatory measures to support AI development, including ten mandatory guardrails for AI deployment in high-risk environments while Sydney hosted the second AI Month in late 2024 to showcase the country's AI capabilities.

Meanwhile, sustainability remains a key focus, with data centre providers investing in renewable energy and energy-efficient infrastructure to manage rising operational costs and meet growing consumer demand for environmentally friendly solutions.

» **Japan**

Japan remains one of the most active data centre markets in APAC, accounting for 31% of the region's total transaction volume in 2024. Despite constraints related to land and power availability, operational capacity grew significantly in the past year.

The development pipeline in the country also expanded significantly, with under-construction and planned projects increasing, backed by news of Microsoft announcing a USD 2.9 billion investment in cloud and AI infrastructure, and the Canada Pension Plan Investment Board partnering with Mitsui & Co to develop hyperscale facilities.

Key trends shaping the market include sustainability initiatives, AI-focused data centre developments, and the rise of small-scale urban data centres. However, much of Japan's existing supply is not AI-ready, necessitating infrastructure upgrades to accommodate growing demand for AI-driven processing power.

The Japanese government released its Seventh Strategic Energy Plan, setting ambitious targets for renewable energy and nuclear power to support carbon neutrality. Major operators have also intensified sustainability efforts, with Amazon signing a 9.5MW solar power purchase agreement.

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