



DATA CENTRE GROWTH IN AUSTRALIA

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INTRODUCTION

The explosion of global data has transformed data centres into an essential component of modern economies, forming the digital backbone that supports everything from cloud computing to artificial intelligence. The sector is experiencing an unprecedented boom, with a long pipeline of new developments and soaring investment levels. Over the past two decades, Australian data centre capacity has expanded fortyfold, with nearly two-thirds of that growth occurring in just the last five years. In Australia, this momentum has been further strengthened by strong data sovereignty laws, which have made the country an attractive destination for investors seeking secure and stable digital infrastructure. However, the sector's rapid growth has also brought challenges, particularly around access to power — an issue that major players such as Amazon are addressing through renewable energy initiatives like purpose-built solar farms. With vacancy rates tightening and available space dwindling, the race to expand capacity is intensifying. Australia now ranks among the world's top ten data centre markets and is projected to climb into the global top three by the early 2030s, trailing only the United States and India.

DATA CENTRE OVERVIEW

Data centres are purpose-built facilities that provide a secure, reliable environment to store and process data while enabling seamless connectivity across communications networks. These facilities serve as the digital backbone of modern economies, supporting everything from cloud computing and e-commerce to artificial intelligence and government services.

Strategic Location and Infrastructure Drivers

The location of a data centre is one of the most critical determinants of its performance and pricing. Typically situated at or near the convergence point of multiple communications networks, data centres act as interconnection hubs that allow customers to exchange data traffic and connect to multiple network providers efficiently.

Proximity to major internet exchanges and fibre routes is essential for achieving the network density required to deliver superior processing performance and minimise latency. As technological applications become increasingly complex—particularly in areas such as AI, machine learning, and cloud computing—the need for low-latency connectivity has become a defining factor in site selection. Data centres positioned close to major fibre interconnection points enable enterprises to build globally distributed digital infrastructure that integrates edge and cloud solutions, maximising flexibility and performance.

Access to reliable utilities, especially power and water, is another crucial factor. Data centres consume large amounts of electricity to power servers and cooling systems, and reliable connections to high-capacity power and water sources can significantly enhance efficiency while reducing transmission costs. Facilities located near these resources are better able to support consistent performance, scale operations, and maintain resilience.

Data Centre Operating Models

The global data centre landscape is defined by four main operating models: in-house data centres, carrier-operated data centres, systems integrator-operated data centres, and neutral data centre providers.

- 1. In-house Data Centres** These facilities are owned and operated by businesses or organisations for their internal needs, and there are two types of in-house data centres. These are:
- Enterprise in-house data centres are typically small to medium-sized facilities, sometimes located within a company's office premises; and
 - Hyperscale in-house data centres, by contrast, are large-scale, purpose-built facilities owned by major technology firms such as Microsoft, Google, or Amazon. These serve as the central infrastructure for global cloud and computing services.

2. Carrier-Operated Data Centres

Owned and managed by telecommunications companies, these centres offer co-location services that allow customers to connect directly through the carrier's own network. They are strategically positioned to leverage the carrier's existing network footprint.

3. Systems Integrator-Operated Data Centres

These facilities form part of broader IT service offerings. Systems integrators provide data centre capabilities as part of a full technology solution for enterprise clients, typically without offering stand-alone co-location space.

4. Neutral Data Centre Providers

Neutral operators lease secure, powered, and cooled space to multiple tenants. They do not typically provide managed IT or carrier services but offer interconnection to multiple network service providers within the facility. This allows customers to choose their preferred carrier and scale their operations flexibly.

Neutral data centres can be divided into four key categories:

1.

Enterprise Data Centres:

Designed for single or limited enterprise customers, including corporations or government agencies, these facilities are dedicated to meeting specific operational needs.

2.

Hyperscale Data Centres:

Large, bespoke facilities tailored to the requirements of hyperscale clients such as cloud service providers, social media platforms, or AI companies. These sites offer high power density and scalability, ideal for AI model training and massive data workloads.

3.

Co-location Data Centres:

Shared facilities that host multiple tenants within the same site. They provide power, cooling, and security, often alongside IT and networking support. Common users include governments, telecommunications firms, and enterprises seeking flexible infrastructure without the capital outlay of owning their own data centre.

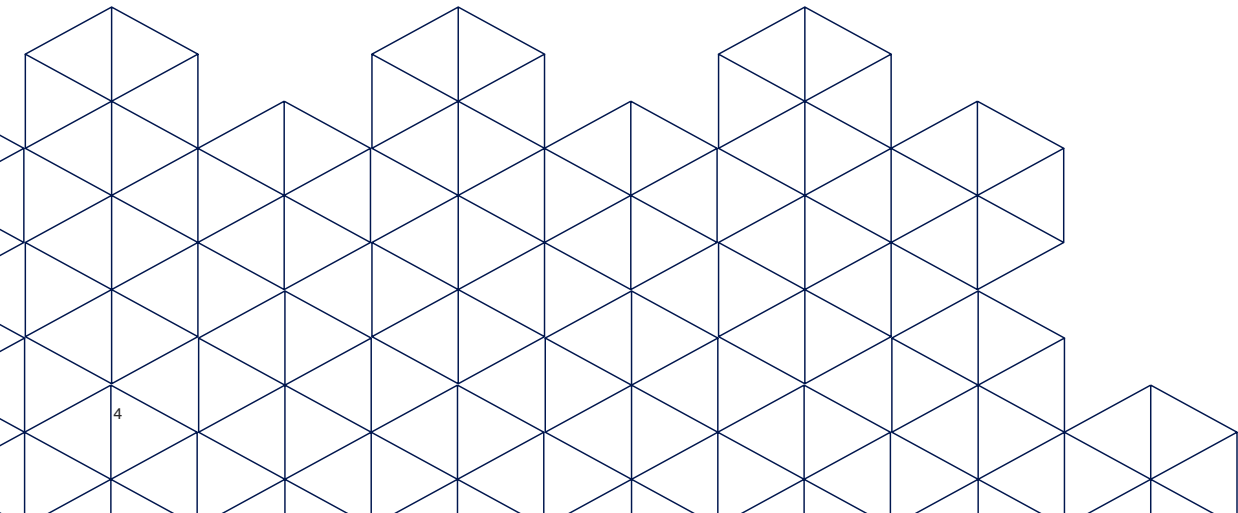
4.

Edge Data Centres:

Smaller facilities located closer to end-users and devices, reducing latency by bringing data processing nearer to where it is needed. Edge data centres are increasingly important for applications such as the Internet of Things (IoT), autonomous vehicles, and real-time analytics.

Measuring Capacity: How space in Data Centres is leased

Unlike traditional commercial or industrial real estate, where metrics such as net lettable area or tenancy rates dominate, data centres are measured primarily by megawatt (MW) capacity. MW capacity represents the amount of electrical power available to support computing infrastructure. It directly determines how much IT load a facility can sustain, making it the key indicator of a data centre's scale, capability, and market value. Space is leased to tenants as megawatt capacity rather than as floor space.

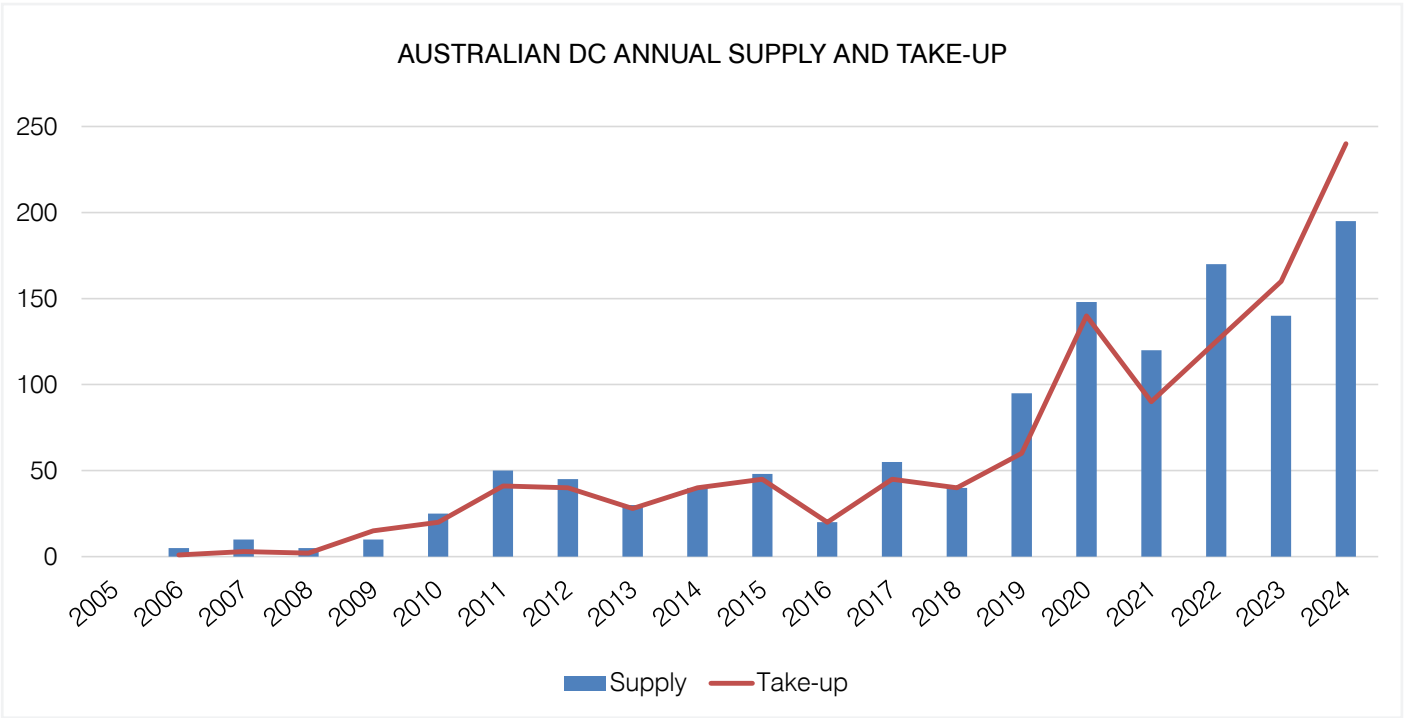


The Growth of Australia’s Data Centre Market

Australia’s data centre market has experienced extraordinary growth over the past two decades. Total national occupancy has expanded from just 37 MW in 2005 to 1,315 MW in 2025—a fortyfold increase. Notably, two-thirds of that growth has occurred within the past five years, driven by the rapid digitisation of the economy, the surge in remote work during the pandemic, and the exponential rise in AI-related computing demand. Facilities designed specifically for hosting AI workloads have seen demand increase nearly 27 times in the same period.

Demand Outpacing Supply

The Australian data centre property market has now reached a critical inflection point where demand is outpacing supply. For the first time on record, the volume of live data centre capacity taken up by users in 2023 and 2024 exceeded the amount of new supply brought to market.



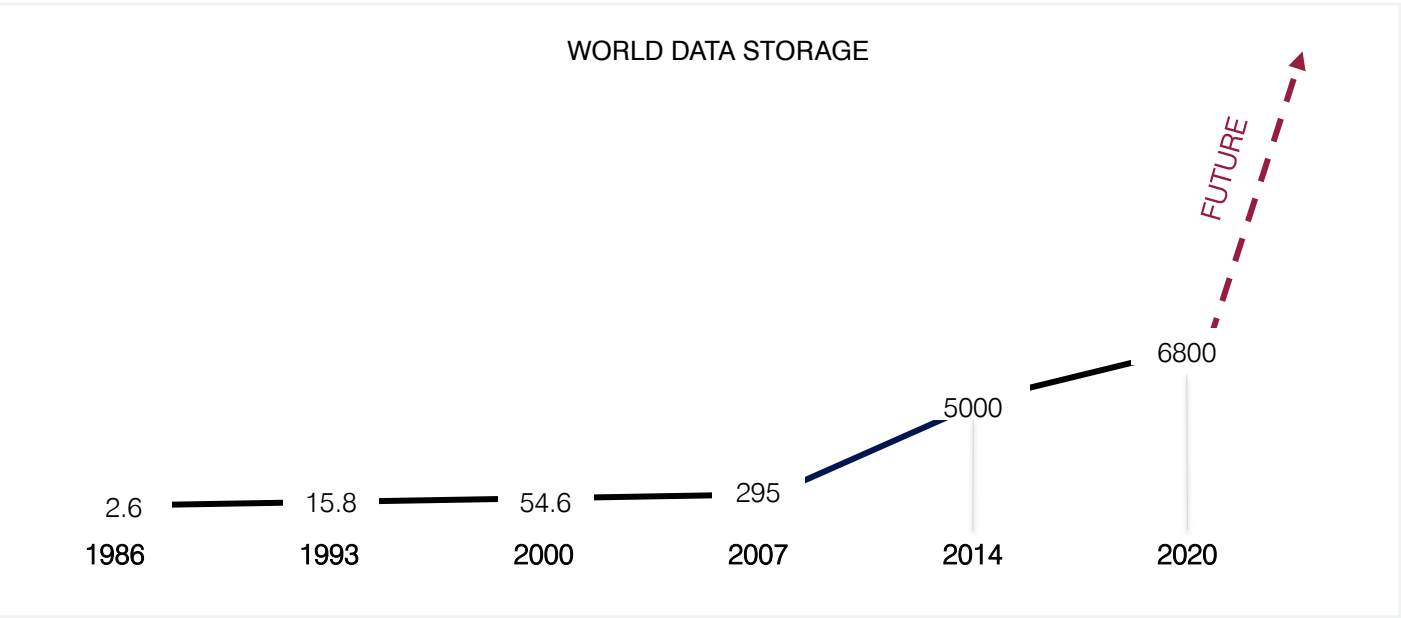
Source: Colliers Research, DC Byte

While 2023 marked the first year where demand officially outstripped new development, this imbalance has been building for several years. Between 2021 and 2024, total net take-up was greater than the total new supply added to the market. The result is a widening gap between cumulative net capacity growth (supply) and total net annual take-up (demand). This represents the longest sustained period of demand growth exceeding supply growth since records began in 2005, underscoring the sector’s increasing strategic and economic importance.

DATA CENTRE DEMAND DRIVERS IN 2025

The global data centre industry continues to experience extraordinary growth, underpinned by long-term structural trends that show no signs of slowing. Across both developed and emerging economies, the rise of digitalisation, the Internet of Things (IoT), and the rapid expansion of generative artificial intelligence (GenAI) are driving an unprecedented increase in data creation, storage, and processing needs.

In key developed markets such as North America and Australia the accelerating digital economy has led to large-scale investment in cloud computing and data technologies. These factors together form the backbone of ongoing demand growth for data centres, making the sector one of the most strategically significant in the modern economy.



Source: Statista

Expanding Data Creation and Digitalisation

The explosion in global data creation remains one of the strongest drivers of demand for data centre infrastructure. Advances in telecommunications, including 5G and fixed wireless access, have improved network connectivity and enabled more data-intensive technologies. As industries become increasingly digital, applications such as cloud computing, IoT, video streaming, online gaming, and GenAI have created enormous volumes of data that must be processed and stored securely.

This continual surge in internet traffic and bandwidth usage is driving demand for computing power and data centre services. As businesses and consumers rely more heavily on digital systems, the need for reliable, low-latency data infrastructure continues to intensify.

The Rise of Generative AI and High-Density Facilities

Generative AI has emerged as one of the defining technologies of the decade. Capable of producing text, images, audio, and synthetic data, GenAI systems are powered by advanced machine learning models that require vast computing resources. These workloads depend on high power density, specialised cooling systems, and sophisticated data infrastructure — conditions that only modern data centres can provide.

As AI adoption accelerates across sectors such as media, healthcare, and finance, the demand for high-density data centres optimised for AI workloads is expected to rise sharply. This creates new opportunities for both greenfield developments and the upgrading of existing facilities to support next-generation computing requirements.

Data Sovereignty and Regulatory Onshoring

In 2025, data is increasingly treated as a strategic national asset. Around the world, governments are tightening regulations on how data is stored, processed, and protected. Data sovereignty — the principle that data generated within a country must be stored and managed locally — has become a critical issue shaping the structure of national digital infrastructure.

Australia is no exception. With growing public and private concern over data privacy and cybersecurity, regulators have reinforced laws requiring local storage of sensitive data. Legislation such as the Privacy Act 1988 and the Australian Privacy Principles (APPs), alongside platforms like My Health Record, illustrate the need for data to remain within domestic borders.

By focusing on data residency — ensuring that information generated in Australia is stored and processed locally — the government is strengthening control over national digital assets, especially in key sectors such as healthcare, finance, and public administration. This trend has directly increased demand for domestic data centre capacity, as both local and international companies seek compliant, sovereign solutions.

Increasing Outsourcing to Specialist Operators

As data workloads become more complex and infrastructure needs grow, many organisations are choosing to outsource data centre management to specialist operators rather than building and maintaining their own facilities. Specialist data centre providers can deliver scalable power, cooling, and connectivity solutions at a level of efficiency and reliability that would be costly for individual enterprises to achieve internally.

This shift has contributed to a structural change in the market, with neutral data centre providers and co-location facilities seeing record demand from corporate and government tenants seeking flexibility and cost efficiency.

Market Constraints and Barriers to Entry

Despite soaring demand, new supply in the data centre market is constrained by several significant barriers to entry.

Location and site selection present a major challenge. Prime sites that are located near key customer hubs, with high network density and reliable access to utilities, are increasingly scarce — especially in major metropolitan areas – and are commanding premium land prices.

Power and connectivity access are also critical bottlenecks. Establishing continuous, large-scale power supply with reliable backup systems requires major investment and coordination with multiple energy and telecommunications providers.

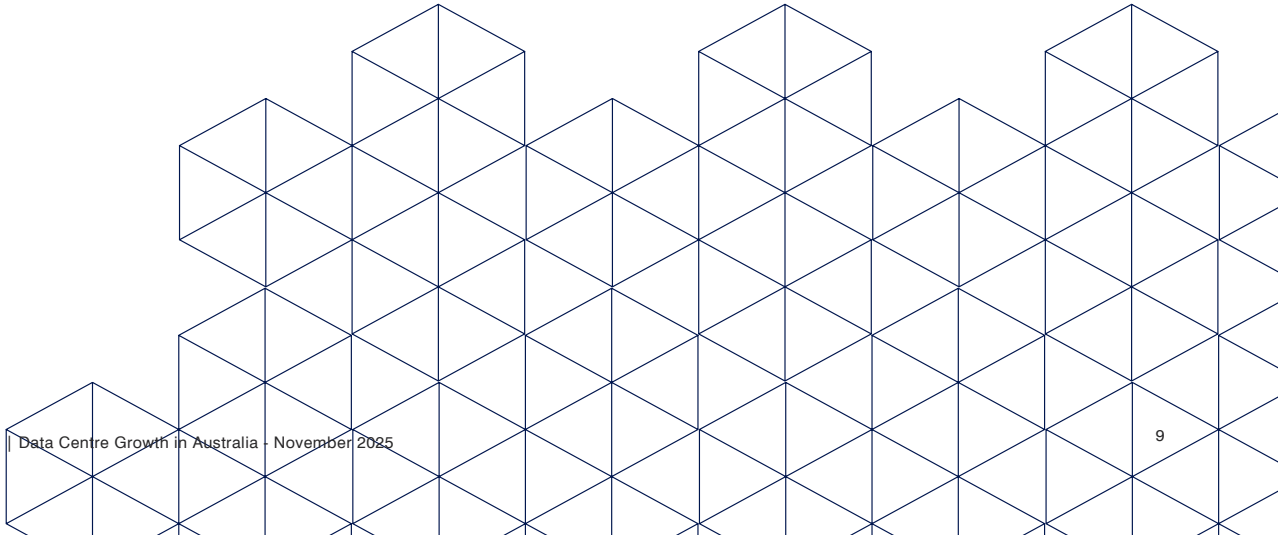
Capital intensity adds another layer of complexity. Data centres require substantial upfront investment, long development timelines, and highly specialised design and engineering expertise. Ongoing operation also depends on skilled technical staff capable of maintaining resilient, high-performance facilities.

Together, these barriers help regulate supply, ensuring that only well-capitalised and experienced operators can enter or expand in the market.

The Australian Market Outlook

Australia’s data centre market is now entering a phase of rapid expansion driven by AI adoption, hyperscale cloud growth, and the emergence of new “NeoCloud” customers — digital-native and AI-native companies that scale quickly but prefer to lease large blocks of data centre space rather than build their own campuses. Companies such as OpenAI and Zoom are examples of these fast-scaling tenants, already absorbing capacity in Sydney and Melbourne, often taking between 10 MW and 50 MW at short notice.

Australia is currently among the world’s top ten data centre hubs, with more than 250 operational facilities. However, projections suggest a further 175 will be required by 2030. National data centre capacity is projected to more than double in the next few years, rising from an estimated built out 1,350 MW in 2024 to a projected 3,100 MW by 2030, necessitating approximately \$26 billion in investment. This new capacity will be the equivalent of around 5-6% of the total Asia Pacific region demand and will be an estimated 2-3% of global data centre growth during the next few years. This expansion will also drive major upgrades to Australia’s telecommunications networks and power infrastructure to support growing digital workloads and will reinforce Australia’s position as a Tier 1 data centre market globally. However, given the increasing demands for data centre space, even this expansion will fall short of forecast demand, leaving a potential supply gap of 0.7–1.7 GW.



DATA CENTRE LOCATIONS

National Overview

Geography remains one of the most critical determinants of data centre demand, investment performance, and market valuation. In developed nations, cities with large population bases generally exhibit higher broadband penetration and, as a result, greater data usage. Combined with high levels of economic activity, these urban centres drive strong and sustained demand for data centre services. Within the global framework, such locations are typically classified as Tier 1 or Tier 2 data centre markets.

Tier 1 markets are defined by their role as major telecommunications, financial, and internet hubs. They are the preferred locations for both hyperscale and enterprise customers due to superior connectivity, dependable energy supply, and well-developed infrastructure. In the Asia-Pacific region, Tier 1 cities dominate regional capacity. Sydney is Australia's sole Tier 1 market, sharing that status with other major cities including Hong Kong, Singapore, and Tokyo. Sydney currently accounts for around 60% of Australia's total built-out data centre capacity.

By contrast, Tier 2 markets more broadly tend to hold smaller shares of national capacity due to factors such as limited power availability, fewer cloud service provider nodes, higher electricity costs, and local regulatory or environmental constraints.

Melbourne, an emerging Tier 2 market, has approximately half the capacity of Sydney but is experiencing the fastest rate of growth nationwide. This acceleration is driven by more competitive land pricing and greater land availability, which make the city increasingly attractive to both hyperscale and enterprise operators.

Data Centre vacancy rates across the country have reached record lows. The national vacancy rate now sits at 9%, compared with a long-term average of 21%. Melbourne's vacancy is among the lowest globally at just 4–5%, while Sydney and Brisbane sit at 6–14% respectively. Demand is absorbing available capacity at unprecedented speed—if current take-up rates persist, all vacant data centre stock could be filled within one year and seven months, compared to more than three years in 2021.

This tightening trend is consistent across all major markets. Melbourne has seen the most rapid shift: in early 2023, it would have taken over eight years to reach full capacity, but by early 2025 that figure had dropped to only four months. Sydney and Brisbane follow closely behind, with absorption periods of just under two years. Brisbane's transformation is particularly notable—despite no new capacity added since mid-2023, take-up has continued to climb sharply. In 2021, the city would have required nearly 12 years to absorb all available capacity; by early 2025, that timeframe had fallen below two years.

Overall, the national data centre footprint has expanded fortyfold over the past two decades—from just 37 MW in 2005 to 1,315 MW in 2025. Remarkably, two-thirds of this growth has occurred in the last five years alone, spurred by the pandemic, remote work, cloud computing, and the rise of AI-driven data generation.



Sydney

Sydney remains Australia's dominant data centre market and a key Tier 1 hub in the Asia-Pacific region. However, the data centre sector is becoming increasingly competitive nationwide as Tier 2 cities such as Melbourne and Brisbane attract spillover demand and new investment due to land and power constraints in Sydney's core zones.

A notable recent development in Sydney is the granting of "Certified Strategic" status to DigCo's SYD1 facility in Ultimo. With an installed IT capacity of 26 MW, scalable to 88 MW, this facility will support sensitive government workloads and strengthen Australia's sovereign digital infrastructure. Hyperscale customers continue to drive expansion in Sydney, accounting for roughly 80% of new demand, largely through the development of large campus-style data centres.

Melbourne

Melbourne is rapidly emerging as a major Asia-Pacific hub, reshaping the national data centre landscape. The city's combination of available land, competitive pricing, and expanding renewable energy options has made it a prime target for both domestic and international investors.

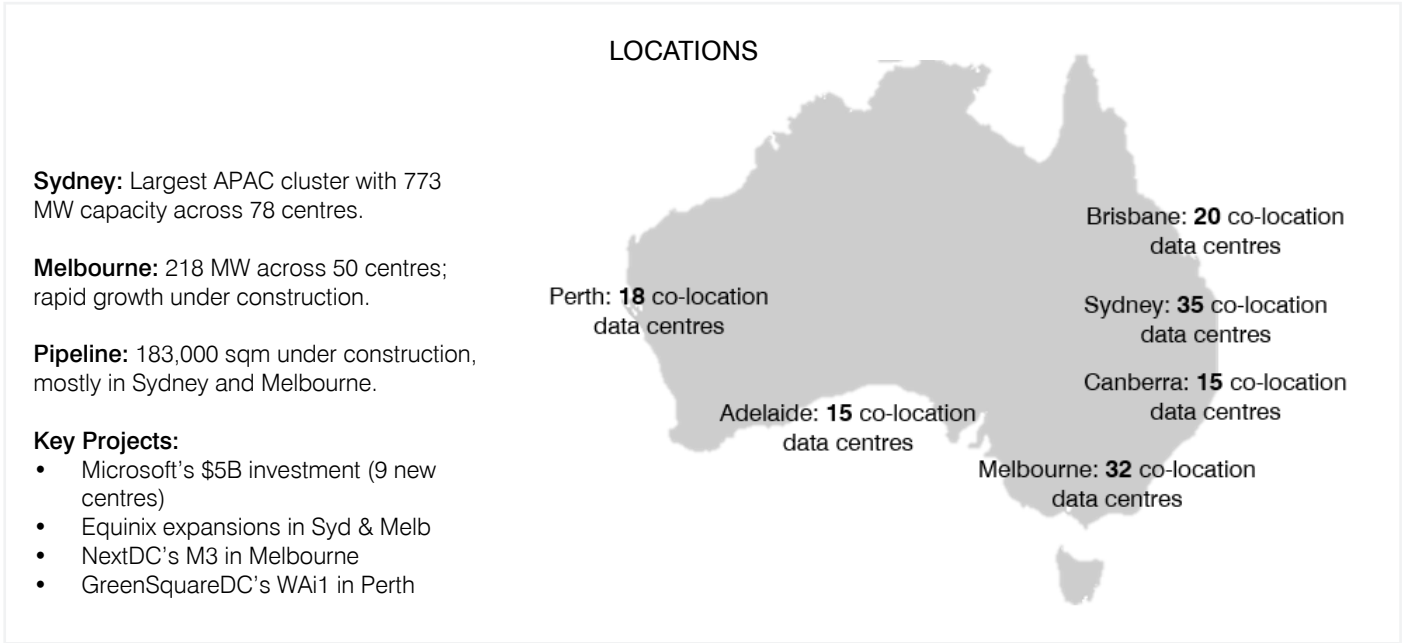
Recent announcements—such as NextDC's planned AI-focused data centre at Fishermans Bend—highlight the city's growing role in supporting advanced technologies and cloud-based innovation. Hyperscale operators increasingly view Melbourne as a complementary location to Sydney, adopting dual-campus strategies to ensure redundancy, resilience, and disaster recovery capabilities. The strength of the market is underlined by the fact that 97% of Melbourne's under-construction pipeline is already pre-committed.

Canberra

The Canberra data centre market is highly specialised, driven by demand from the Federal Government, defence sector, and critical infrastructure operators. While smaller in total capacity compared to Sydney and Melbourne, Canberra plays a strategic role in ensuring sovereign capability and cybersecurity. Its developments typically prioritise high-security, sovereign-grade facilities rather than hyperscale expansion. With few greenfield sites available, supply remains tight and development activity is guided by regulatory compliance and national security priorities.

Brisbane

Brisbane’s data centre market is strengthening as hyperscalers seek alternatives to Sydney and Melbourne. Much of the demand stems from disaster recovery needs, geographic redundancy, and Queensland’s growing digital economy. Although supply has remained static since 2023, take-up rates have accelerated sharply, compressing the absorption timeframe to under two years. The city’s evolving role as a secondary hub for resilience and regional service delivery suggests continued growth potential in the medium term.



Source: M3 Property

Summary

Australia’s data centre market is entering a period of exceptional demand and constrained supply. Sydney continues to dominate as a Tier 1 hub, but Melbourne’s rapid growth, coupled with increasing specialisation in Canberra and rising resilience-driven demand in Brisbane, points to a more distributed and mature national network.

With vacancy rates at record lows and absorption accelerating, new development—particularly outside Sydney—will be essential to meet Australia’s expanding digital infrastructure needs and to maintain its position as a leading data hub in the Asia–Pacific region.

AUSTRALIA’S DATA CENTRE PIPELINE AND CAPACITY

Australia’s data centre industry is on the cusp of transformative growth, with the nation poised to become a global leader in digital infrastructure. Currently ranking within the top ten worldwide for built-out data centre capacity, Australia’s projected pipeline—encompassing projects under construction, committed, or in early planning stages—could elevate the country to third place globally. By comparison, the United States leads the world with 24,000 MW of built-out capacity, potentially reaching 31,000 MW by the early 2030s, followed by India with projected growth from 2,000 MW to 10,000 MW. Australia’s built-out capacity of approximately 2,000 MW is expected to expand to 9,500 MW by the early 2030s as demand accelerates.

Within the Asia-Pacific region, the Sydney market plays a key role. Sydney alone accounts for roughly 60% of the nation’s current capacity and competes alongside Hong Kong, Singapore, and Tokyo in the region. The data centre pipeline across Australia is increasingly pre-committed, driven by the explosive growth of artificial intelligence (AI) applications and cloud adoption. Vacancy rates have fallen to just 12%, while the average time required to fully lease available IT capacity has decreased dramatically from 40 months in 2020 to just 13 months in 2024. Major global players are investing heavily; Amazon, for instance, plans a \$20 billion investment in Australian data centre infrastructure from 2025 to 2029, supported by the construction of three new solar farms in Victoria and Queensland.

Despite this momentum, construction costs remain among the highest in the Asia-Pacific, with Sydney and Melbourne ranking just below Tokyo and Singapore. The scarcity of suitable development sites in these cities, and particularly in Sydney—due to competing land uses, zoning restrictions, and infrastructure limitations—is shifting interest toward secondary markets such as Brisbane and Perth. In response, governments and operators are implementing solutions to accelerate development. The New South Wales Government, for example, has launched the Investment Delivery Authority to fast-track approvals for technology and data centre projects exceeding A\$1 billion, while operators are increasingly adopting prefabricated modular solutions to shorten construction timelines.

Power availability remains the critical determinant of data centre location, representing both the primary constraint and greatest opportunity for market growth. Australia’s current built-out capacity of approximately 1.5 gigawatts is expected to double over the next decade, contingent on reliable high-capacity electricity supply. Sustainability requirements further complicate expansion. The Australian government has mandated a Power Usage Effectiveness (PUE) target of 1.3 or less for data centres, prompting widespread adoption of advanced cooling technologies and renewable energy integration, including liquid cooling systems, free air cooling, and on-site renewable generation. Leading operators such as AirTrunk, NEXTDC, and CDC Data Centres are positioning themselves to capture both hyperscale and enterprise demand, intensifying competition for strategic land and power agreements.

THE DEMAND FOR NEW DATA CENTRES IS EXPECTED TO ACCELERATE IN PARALLEL WITH AI AND CLOUD COMPUTING ADOPTION.

The demand for new data centres is expected to accelerate in parallel with AI and cloud computing adoption. Rising connectivity in Australian households—expected to double the number of connected devices by 2030—further underscores the urgency of infrastructure expansion. As of December 2024, 68% of all data centre capacity under construction has already been pre-committed, well above the long-term average of 38%. However, only a quarter of the total pipeline is currently fully deliverable, with significant barriers—including power and water constraints, high upfront costs, long construction lead times, and regulatory hurdles—potentially extending the delivery of the full pipeline of planned projects over the next two decades.

Melbourne: Emerging as a National Hub

Melbourne has emerged as Australia's fastest-growing data centre market, particularly in its western corridors such as Tullamarine, West Footscray, Deer Park, and Truganina. These areas provide abundant flat land, robust power infrastructure, and proximity to transport networks, supporting large-scale construction. Melbourne's cooler climate also reduces energy-intensive cooling requirements, improving operational efficiency and sustainability. Major developments, including NextDC's \$2 billion M4 campus and CDC's Laverton facility, highlight the city's strategic focus on sovereign AI, high-performance computing (HPC), advanced manufacturing, and deep tech applications. Melbourne's data centre pipeline is already 97% pre-committed, reflecting strong market confidence and immediate demand. Nearly three-quarters of Australia's new supply under construction—approximately 183,000 sqm—is concentrated in Melbourne, signaling the city's growing role in national digital infrastructure.

Sydney: Maintaining Its Market Leadership

Sydney remains Australia's largest data centre market, with 770 MW of operational capacity and a further 230 MW under development. Major projects, including the AU\$5 billion Mamre Road campus and the Julius Avenue facility, underscore the city's commitment to large-scale, gigawatt-class developments. However, the city faces challenges from strained power and water resources, with data centres projected to consume up to 9.6 gigalitres of water annually by 2035. Despite these constraints, 72% of Sydney's space under construction is pre-committed, demonstrating strong demand and highlighting the need for continued investment in infrastructure upgrades.

Queensland, Perth, and Northern Territory: Emerging Opportunities

While Queensland currently represents a smaller share of national capacity, it offers opportunities for growth through large-scale campuses supported by lower land costs and emerging renewable energy zones. Brisbane, for example, has several 100MW+ projects planned, with NEXTDC proposing a second Maroochydore CBD data centre to support the Sunshine Coast ahead of the 2032 Olympics. Perth benefits from abundant renewable energy resources and competitive electricity pricing, positioning the city as a hub for sustainable data centre operations. Similarly, the Northern Territory offers strategic advantages for operators seeking low-latency connectivity to Southeast Asia, with Darwin's location and solar resources providing attractive opportunities for environmentally responsible development.

SELECTED DATA CENTRE DEVELOPMENTS

City	Project Name / Location	Details
Sydney	ISPT Mamre Road Data Centre Campus (706–752 Mamre Rd, Kemps Creek)	• AU\$5B project • 1GW capacity across 6 buildings (400,000 sqm) • 936 cooling units, 852 diesel generators • 7,488 lithium-ion battery cabinets • Up to 4 substations • ISPT acquired site in July 2024
Sydney	IC3 Super West (Macquarie Park)	• Hyperscale, co-location • 45MW
Sydney	GreenSquareDC SYD1 (3 Brookhollow Ave, Norwest)	• 110MW campus for hyperscale & AI • Stage 1 DA approved (15MW AI-ready by Q3 2026) • Site acquired March 2025 • Total investment: AU\$1.2B
Sydney	CDC Marsden Park (105 & 113 Hollinsworth Road, Marsden Park)	• At early stages of construction • Six 4 storey data centre buildings • 40 generators • 504 MW campus
Melbourne	M4 Data Centre (127 Todd Rd, Port Melbourne)	• AU\$2B investment • Sovereign AI infrastructure hub • Includes AI Factory, Mission Critical Ops Centre, Tech Centre of Excellence • Positioned for Five Eyes collaboration
Melbourne	CDC Laverton Data Centre	• AU\$2.7B cost • Announced Feb 2025 • 150MW planned capacity • Completion expected 2027 • Carrier-neutral co-location
Melbourne	NEXTDC M3 Stage 2 (West Footscray)	• Expansion project • 150MW campus
Melbourne	AWS Data Centre (50-80 Ferris Road, Cobblebank)	• Planned \$50 million data centre • 13.2 hectare site
Brisbane	BNE4 (DigiCo REIT)	• Planned 19.6MW IT capacity • 2,496 racks • 9,786 sqm land • Completion expected 2027

AUSTRALIAN DATA CENTRE INVESTMENT

Australia's data centre sector has evolved into one of the most dynamic and sought-after investment markets in the Asia-Pacific region. Over 2024–25, the country has witnessed a surge of landmark investment announcements from major global technology companies and institutional investors, signalling a shift in how Australia is perceived in the global digital economy. This transformation reflects a broader trend: Australia is now regarded as a preferred location for hyperscale data centres, cloud infrastructure, and artificial intelligence (AI) innovation.

Investor Confidence and Market Drivers

The country's appeal to investors is underpinned by several strategic factors. Australia offers a transparent and predictable regulatory environment, aligned with global data governance standards. The Security of Critical Infrastructure Act has elevated data centres to the status of essential infrastructure, further reinforcing investor confidence. Strong economic fundamentals, rapid digital adoption, and a stable political environment provide long-term certainty, while secure energy grids in key precincts address one of the most critical operational requirements for data centres.

Global tech giants have recognised Australia's strategic advantages. Amazon Web Services (AWS) has committed \$20 billion to expand infrastructure, including AI training programs and access to Nvidia's latest high-performance chips. NextDC is developing a sovereign AI hub in Melbourne, and Telstra has conducted a strategic review of its \$200 million data centre portfolio. These investments demonstrate the country's emergence as a regional hub for cutting-edge digital infrastructure and AI capabilities.

Investment Activity and Market Dynamics

The scale of investor activity in Australia is unprecedented. DigiCo REIT, for example, currently holds three properties and is expected to settle on nine more, creating an aggregate portfolio across Australian and North American markets valued at nearly \$4 billion. Similarly, Swiss private equity firm Partners Group has committed \$1.2 billion to acquire GreenSquare DC, while CDC Data Centres completed a \$2.05 billion transaction with Australia's Future Fund and New Zealand's Infratil. Notably, CDC differentiates itself by providing services to government agencies with the highest security requirements, attracting a customer base that is more than 95% triple-A credit rated—far above global averages.

Data centre investment in Australia is primarily pursued through direct acquisition and development, joint ventures, and mergers and acquisitions (M&A). While M&A activity has occurred—most prominently the Blackstone and CPPIB acquisition of AirTrunk—direct development and joint ventures remain dominant. Data centre yields in Sydney and Melbourne align broadly with prime industrial and office benchmarks, ranging between 4.75% and 8.50%. The sector's overall valuation, US \$4.5 billion in 2024, is projected to reach US \$7.8 billion by 2033, representing a compound annual growth rate of 5.7%, outpacing many developed markets worldwide.

Regional Investment Trends

Melbourne has emerged as a leading investment destination due to its superior power availability and land resources. The city's co-location market, valued at \$747 million in 2023, is projected to grow at a five-year compound annual growth rate of 17% through 2028, slightly outpacing Sydney's 16%. Major global operators such as Amazon and Microsoft have paid significant premiums for industrial land suitable for data centres, often more than double typical rates. In one instance, Amazon acquired a 12-hectare property in Craigieburn for \$71.2 million, while Microsoft purchased a 6.55-hectare Tullamarine site for \$60.5 million. These transactions illustrate the increasing value placed on industrial land capable of supporting critical digital infrastructure.

Sydney remains Australia's largest market, with a pipeline that includes triple the number of planned, operating, or under-construction data centres compared to Melbourne. Competition for available sites in Sydney drives land prices higher, with major operators like NextDC and CDC acquiring properties at Eastern Creek and Marsden Park well above standard industrial rates to secure strategic locations. The sites were purchased for about 10 per cent more than the typical Sydney

metro industrial rate of around \$1,250 per square metre. Despite constraints on power and water availability, Sydney continues to attract significant investment, with the state government actively facilitating development through streamlined approvals and support for state-significant projects.

Other states are emerging as investment opportunities. Queensland’s Sunshine Coast and Brisbane are positioned for large-scale campuses, supported by renewable energy initiatives and relatively affordable land. Western Australia’s Perth benefits from abundant renewable energy resources and competitive electricity pricing, while the Northern Territory offers strategic low-latency connectivity to Southeast Asia, supported by solar energy resources.

Government Support and Strategic Initiatives

State governments have been instrumental in supporting investment in the sector. In New South Wales, the Investment Delivery Authority aims to fast-track approvals for major projects exceeding \$1 billion, most of which are data centres. Victoria’s Development Facilitation Program provides pathways for data centre projects, leveraging the state’s available land and infrastructure to attract private capital. Ministers in both states have emphasised the strategic importance of data centres, likening their 21st-century economic impact to that of railways in the 19th century.

RECENT DATA CENTRE INVESTMENTS

Investor	Investment Amount	Details	Date
DigiCo REIT	\$4 billion	Portfolio across Australia and USA; seeded with \$400M iSeek acquisition (7 data centres) in December 2024; acquired Global Switch Australia for \$1.937B in November 2024; listed on ASX Dec 2024; founded by HMC Capital (who retain a stake ~\$500M)	December 2024 (ASX listing); November 2024 (Global Switch acquisition)
Partners Group	\$1.2 billion	Acquisition of GreenSquare DC	March 2025
Future Fund & Infratil	\$2.05 billion	Acquisition of further shares in CDC Data Centres by Future Fund and Infratil. Future Fund now holds 34.55% of shares, Infratil now holds 49.75% of shares and Commonwealth Superannuation Corporation holds 12.04%	December 2024

AUSTRALIA’S CHALLENGES AND SOLUTIONS IN THE SECTOR

Australia’s data centre industry is undergoing unprecedented growth, driven by the increasing adoption of cloud computing, artificial intelligence (AI), and digital services. However, this rapid expansion brings a host of challenges that threaten to constrain supply, strain infrastructure, and impact local communities. Addressing these issues requires a careful balance between development, environmental sustainability, and community engagement, supported by both technological innovation and government policy.

A number of challenges continue to face the Data Centre sector, including:

1. Supply Constraints and Land Scarcity

One of the most immediate challenges is the availability of land suitable for data centre development, particularly in major hubs like Sydney. Sites must meet stringent requirements, including proximity to network infrastructure, access to reliable power, and sufficient water supply. The scarcity of such sites, combined with long lead times for critical equipment and components, has created significant supply bottlenecks. With demand outpacing supply since 2023, forecasts suggest a supply gap of 0.7–1.7 GW could emerge by 2028, despite projected increases in live capacity from 1.3 GW in 2025 to 1.8 GW within three years.

2. Power Availability and Grid Challenges

Data centres are highly energy-intensive facilities, and securing sufficient and reliable power remains a critical constraint. Grid stability and the modernisation of electricity infrastructure are essential, as highlighted by concerns from the Australian Energy Market Operator regarding potential cascading failures. With current data centres consuming around 5% of national electricity generation—a figure expected to rise to 8% by 2030 and potentially 15% by mid-century—the sector faces the dual challenge of meeting energy needs while adhering to carbon emission reduction targets.

3. Long Planning Timelines and High Construction Costs

Lengthy planning and approval processes slow the delivery of new data centre infrastructure, while elevated construction costs pose further barriers to entry. These factors, combined with competition for suitable land, particularly in Sydney and Melbourne, constrain the ability of operators to respond quickly to market demand.

4. Environmental and Community Concerns

Data centres require vast amounts of energy and water, raising environmental and social concerns. Cooling systems alone can account for up to 40% of a facility’s total energy consumption, while large-scale operations may strain local water supplies. In Sydney, the NSW government’s 2024 ban on further data centre development in Macquarie Park—a key technology hub—illustrates the tension between urban sustainability goals and digital infrastructure growth. Additionally, communities living near large-scale facilities often express concerns regarding environmental impact, rising utility costs, and the minimal employment opportunities generated once operations commence.

5. Infrastructure Constraints and Delivery Delays

Despite a national pipeline of 8,181 MW, only 25% of this capacity is fully ready for development. Constraints related to power, water, and planning mean that full delivery could take over 20 years, even as committed stock could be absorbed by demand in just nine years. These challenges highlight the urgent need for coordinated planning and investment in both digital and energy infrastructure.

SOLUTIONS AND OPPORTUNITIES

1.

Sustainable Energy Integration

Global technology firms are increasingly responding to these challenges by prioritising sustainability. Australia’s abundant renewable energy resources, particularly solar and wind, make it an attractive location for green data centres. AWS’s commitment to build three solar farms in Victoria and Queensland, delivering over 170 MW of clean energy, exemplifies how infrastructure growth can align with ESG goals. Gas-powered generation and small modular nuclear reactors (SMRs) are also being considered as supplementary energy sources to ensure reliability and support high-density AI workloads.

2.

Innovative Cooling and Efficiency Technologies

Advanced cooling technologies are reshaping facility design across Australia. Liquid cooling systems, previously uncommon, are becoming standard for high-density AI workloads, while free air cooling leverages the local climate to reduce mechanical cooling needs. These innovations help operators meet stringent Power Usage Effectiveness (PUE) targets, lowering energy consumption and operational costs.

3.

Regulatory Support and Environmental Standards

The National Australian Built Environment Rating System (NABERS) has set rigorous standards, with five-star ratings requiring a PUE of 1.34 or below. Facilities such as NextDC’s M1 Melbourne have achieved this benchmark, combining free air-side cooling with rooftop solar arrays. Furthermore, the National Greenhouse and Energy Reporting Act mandates bi-annual reporting on PUE, water usage effectiveness, and renewable energy sourcing, creating transparency for environmentally conscious stakeholders.

4.

Government Facilitation and Incentives

State and federal governments are actively supporting the sector through streamlined planning, tax incentives, and skills development programs. Initiatives such as the NABERS data centre starter program provide financial support for energy efficiency improvements, while the Victorian Development Facilitation Program and NSW Investment Delivery Authority accelerate approvals for major projects. These programs enhance the attractiveness of regional expansion, ensuring that growth can occur in locations with adequate land, power, and water infrastructure.

STRENGTHS

- High demand
- Likely significant demand growth
- Emerging sector that is maturing

WEAKNESSES/CHALLENGES

- Access to power is difficult to secure and maintain
- Energy intensive
- Capital intensive

OPPORTUNITIES

- Potential for sector-specific REITs
- Regional development for decentralisation
- Access to power and operational efficiency

THREATS

- Sustainable power sourcing
- Approval challenges due to community concerns
- Obsolescence and technology change

CONCLUSION

Australia’s data centre sector stands at a critical juncture, balancing rapid growth with complex challenges related to supply, energy, environmental sustainability, and community engagement. The massive investment in data centres shows how important the sector has become to Australia, and with the potential for Australia to become one of the world’s top three data centre hubs by the early 2030s massive investment into the sector is likely to continue. While constraints on land, power, and infrastructure pose significant hurdles, innovative technological solutions, strategic government policies, and renewable energy integration provide a pathway for sustainable expansion. By addressing these challenges proactively, Australia can continue to attract global investment, support AI and digital innovation, and establish itself as a leading hub for data centre operations in the Asia-Pacific region.

SOURCES

1. DigiCo Infrastructure REIT Prospectus and Product Statement Dec 2024.
2. [Why tech giants are investing in Australian data centres](#) - BDO – 18 August 2025
3. [The global rise in energy demand from data centres](#) - BDO – 28 April 2025
4. [Melbourne is emerging as a major regional data centre hub](#) – Inligo Networks – 9 June 2025
5. [CDC brings \\$2.7BN groundbreaking opportunity to Melbourne's south-west](#) | CDC – 17 February 2025
6. [Plans filed for 1GW data center campus in Sydney, Australia - DCD \(Data Center Dynamics\)](#) – 21 September 2025
7. [ISPT files to build 170MW data center in Sydney, Australia - DCD](#) – 21 February 2025
8. [Locals need a say in Australia's AI data centre growth](#) – UTS – 8 July 2025
9. [Why Australia for Data Centres](#) | CBRE Australia – 29 August 2025
10. [Amazon will invest AU\\$20 billion in data center infrastructure in Australia](#) – June 14 2025
11. [AWS plans to invest \\$20 billion to expand digital infrastructure in Australia by 2029](#) | Austrade International – 14 July 2025
12. [Global Data Center Trends 2025](#) | CBRE
13. [Exclusive: In Australia, a data centre boom is built on vague water plans](#) | Reuters – 15 September 2025
14. [Australia emerges as a leading data centre market](#) | Mortgage Experts Altona and Melbourne West | Attain Loans – 2 July 2025
15. [Asia's lessons for Australia's data centre boom](#) - KWM – 15 August 2025
16. [Australia among world's leading data centre hubs](#) – CBRE – 2 September 2025
17. [Data centres are driving up industrial land prices in Melbourne and Sydney](#) – AFR – 7 August 2025
18. [The AI surge driving 175 new data centres, \\$26b in investment](#) – AFR – 12 Mar 2025
19. [Data centre boom: Swiss PE giant Partners Group swoops on Australian firm GreenSquare DC with \\$1.2 billion buyout](#) – AFR- 7 March 2025
20. [Canberra Data Centre worth \\$17b after \\$2b stock sale to Future Fund and Infratil](#) – AFR – 18 February 2025
21. [How many data centres Australia needs and where they will go](#) – commercialrealstate.com.au – 18 September 2025
22. [Colliers | AU | The Race for Data Sovereignty](#) – 15 September 2025
23. [Australia's Largest AI-Ready Data Centre: GreenSquareDC's 110MW SYD1 Project](#) – DCPulse – 11 September 2025

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