Data Centres
The APAC Report

Knight Frank

September 2025

Navigating the Data Centre landscape in the Asia-Pacific region.

knightfrank.com/research

Foreword

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The first half of 2025 has been marked by sustained momentum across Asia-Pacific, with almost 13GW of new projects announced since January. This highlights both the scale of demand and the ambition of operators and investors. Delivering this pipeline will require over $180 billion in capital commitments, bringing total APAC capital requirements close to $750 billion. However, announcements do not automatically translate into construction - with power procurement, general contractor availability, and binding customer commitments remaining key hurdles the operator market is trying to address.

Even so, the scale of the pipeline reflects the region's growing significance in the digital infrastructure landscape and underscores the challenge of synchronising vast expansions with evolving technology and energy demands.

Big Tech is already deploying capital at unprecedented levels: Amazon is on track to exceed $100 billion in capex in 2025, up from around $82 billion in 2024, while Microsoft invested $55 billion last year and has already deployed more than $33 billion this year. Collectively, Microsoft, AWS, Google, and Meta have committed over $160 billion in 2025 alone. In parallel, KF is also seeing the emergence of GPUaaS providers seeking double-digit MW capacity across the region, bringing greater customer diversity into leasing conversations. As ever, creditworthiness and shortened deployment timelines remain challenges, but innovative guarantee structures are enabling some operators to compete in this space.

AI demand is the primary driver behind this wave of investment, with hubs emerging in locations such as Johor, Melbourne, and Hyderabad. However, in certain Tier 2 APAC markets, caution persists regarding U.S. chip export policy following the rescission of the "Framework for Artificial Intelligence Diffusion". While this lifted GPU import restrictions for much of the region, the possibility of future curbs under the Trump administration remains. As a result, investors and banks are adopting a more risk-averse approach to speculative developments in unproven markets, particularly given the delta in the alternative use value proposition.

What has become clear is the strict requirement for operators to design facilities with capacity that can be flexibly deployed for either Cloud or AI workloads, offering tenants maximum optionality. While this adds cost, it is now a decisive factor in site selection. Locations that combine proximity to parent sites with sufficient power allocations to support long-term runway are winning out - though this remains a significant challenge given national grid constraints and permitting delays in Tier 1 APAC markets.

Despite a well-publicised slowdown in leasing from Microsoft and AWS - typically through large pre-lease agreements - APAC's unique dynamic, where Chinese and Korean customers compete directly with U.S. hyperscalers, has kept demand strong. Around 1GW of new leases have already been signed in 2025, maintaining upward pressure on rents as supply remains difficult to deliver. Chinese customers in particular have been deploying at more significant scale in Japan and Korea and are having to pay a premium to secure space previously allocated to US customers given the increased debt costs the operators will face whilst financing construction.

This report explores how rising capital commitments intersect with accelerating AI demand, intensifying energy pressures, and shifting investment strategies in the rapidly evolving APAC region.

Contents

Tokyo

37.0m
Population

87%
Internet Users

0.50%
Interest Rate

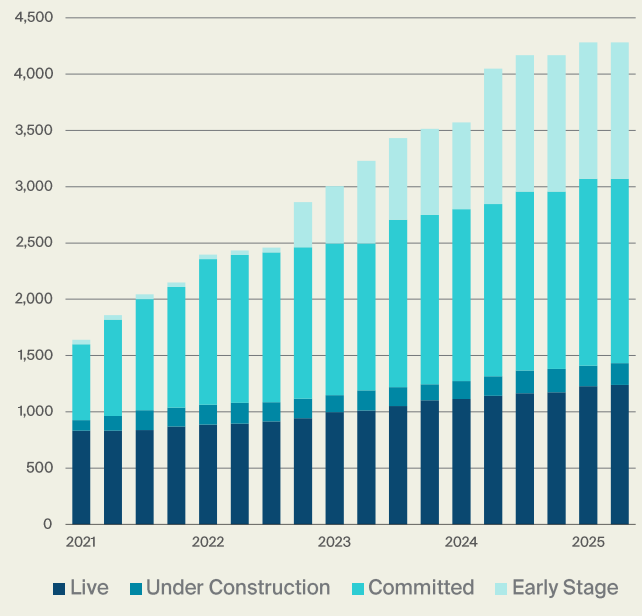
0.205
Electricity Price, USD per kWh

SUPPLY

Tokyo's data centre market in 2025 has been characterised by rapid campus expansion, material capital deployment, and accelerating corporate renewable procurement. Aggregate capacity has now surpassed 4.2GW, marking a 2.7% increase on volumes recorded at the end of Q2 2024. Live IT capacity also grew by 5.8% in the first half of 2025, with 67.6MW of new projects becoming operational. NTT is expanding its footprint through a major 90MW project. Ares, via its opco Ada Infrastructure, completed the final close of a $2.4 billion Japan-focused data centre fund, Japan DC Partners I LP. The fund will initially invest in three campuses in the Greater Tokyo, signaling strong foreign private equity confidence in local platforms. Similarly, Mitsui & Co. Asset Management acquired a 50% stake in an operational hyperscale asset for ¥18bn to seed a domestic fund.

Land in the right locations in Tokyo is very difficult to find, especially with sufficient power supply. We are seeing land prices rise significantly. Most major operators entering the market have secured parcels in Osaka, but Tokyo remains challenging. Operators are partnering with local developers or real estate businesses to access land banks that are unlikely to ever come to the open market.

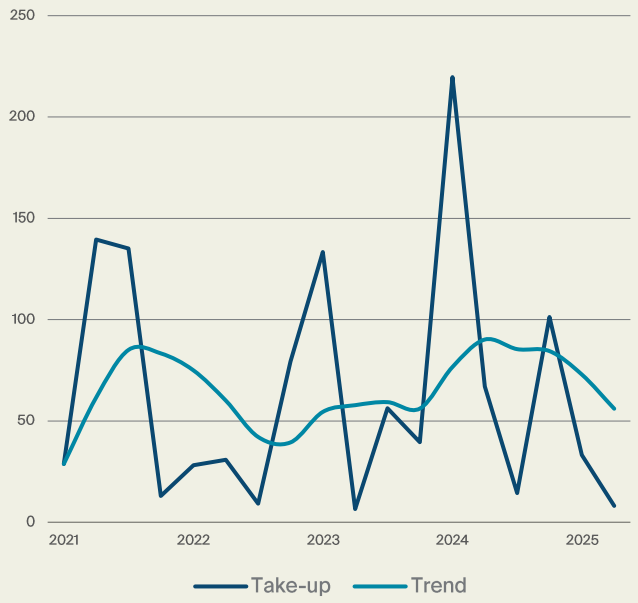
Supply



TAKE-UP

Over the past six months, Tokyo recorded 41.1MW of capacity transacted. Demand continues to be driven primarily by public cloud providers. This is a slowdown from the first half of 2024, when 286.6MW was transacted. But this is because of reduced supply in the market rather than reduced demand. Tokyo continues to be a tightly constrained market, with colocation vacancy rates at just 7.0%. There are no sites available that can accommodate hyperscale-sized requirements. Additionally, 61.5% of the space currently under construction has already been pre-leased.

Take-up



LEADING OPERATORS

Tokyo's data centre market is highly competitive, with a vibrant capital markets landscape where a number of fully fitted and powered shell assets are actively trading. AT TOKYO leads with an 11% share, followed closely by NTT Global Data Centers and Equinix at 10% each, and Amazon Web Services at 8%. AirTrunk, currently has the largest IT capacity under construction at 36.0MW. Looking ahead, Ada Infrastructure, Amazon Web Services, and AirTrunk together account for nearly half of all planned development in Tokyo.

Osaka

18.9m
Population

87%
Internet Users

0.50%
Interest Rate

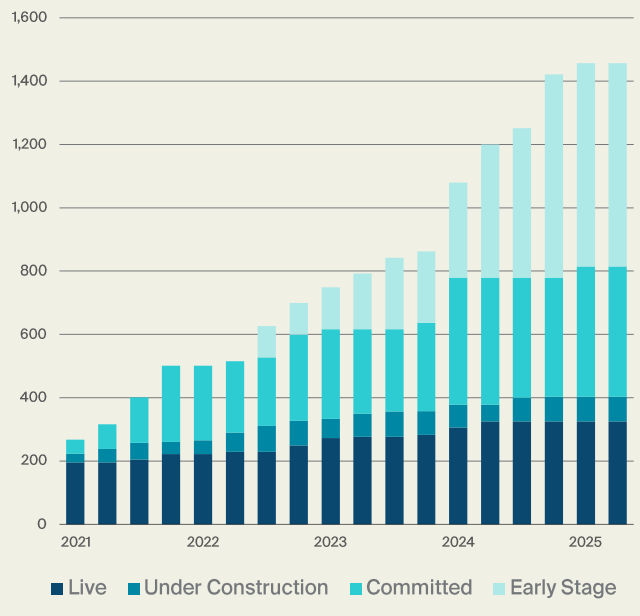
0.205
Electricity Price, USD per kWh

SUPPLY

Large brownfield conversions, hyperscale campus roll-outs, and targeted institutional investment are the themes that have defined the Osaka market in 2025. SoftBank agreed to acquire the majority of Sharp's Sakai plant for $676m, providing 440,000m² for the development of a 150MW facility, with the potential to expand to 400MW. On the same site, KDDI also acquired a separate 33,000m² parcel for the development of a large-scale facility set to open in 2026. Both sites are set to support generative AI and AI-related business, with HPE to supply Nvidia Blackwell infrastructure to KDDI.

Osaka experienced a slow start to 2025, with aggregate supply increasing by 2.5% in the first half of the year to reach 1.5 GW. No new capacity was delivered during this period, though the market remains well positioned for future growth, backed by a robust 1.1 GW long-term development pipeline. Many operators have large land banks in the market but are slowed by general contractor (GC) delays, with many local GC providers experiencing lead times of four to five years. EdgeConneX, CapitaLand, MC Digital Realty, NTT, and Equinix each have land held for development, at a combined deployment volume of c.260MW.

Supply

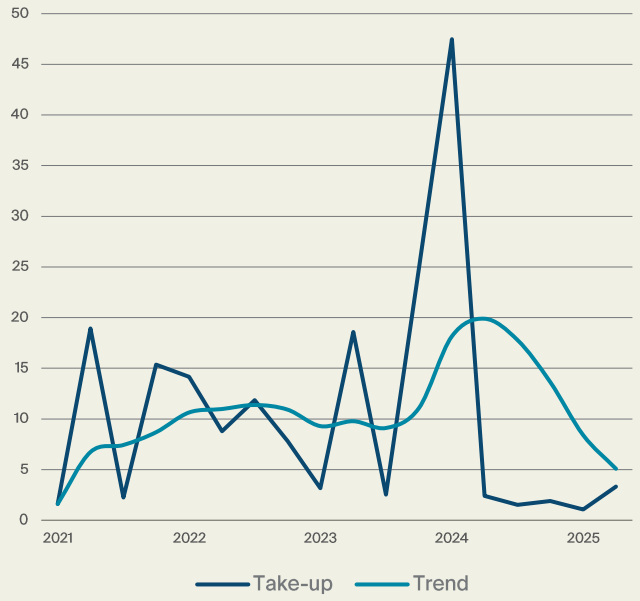


TAKE-UP

Osaka recorded 4.4MW of transactions over the past two quarters, with 3.3MW in the second quarter of 2025. This follows a trend over the past 12 months, during which the market averaged a quarterly take-up of 2.03MW.

Live colocation vacancy currently stands at 11.0%, with 35.3MW of available IT capacity spread across 19 facilities. However, none of these sites are capable of supporting hyperscale requirements, and only four have more than 2.5MW of capacity available. The construction pipeline is 18.1% pre-let.

Take-up



LEADING OPERATORS

Japanese-based operators control 75% of the market's built IT capacity, led by MC Digital Realty with a 25% share and NTT Global Data Centers at 17%. The under construction pipeline is highly competitive, with Colt DCS and CyrusOne KEP holding 23% and 21%, respectively. Looking ahead, the future pipeline is attracting interest from EdgeConneX, SoftBank Corp., Vantage Data Centers, and CloudHQ.

Sydney

5.6m
Population

97%
Internet Users

3.85%
Interest Rate

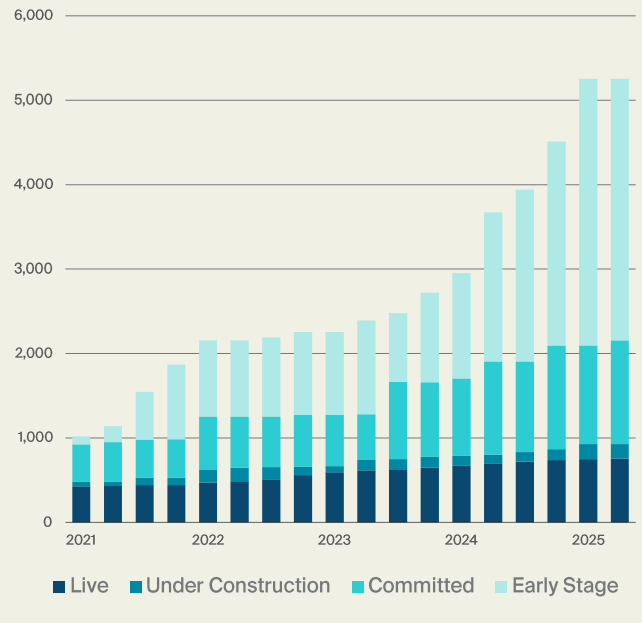
0.264
Electricity Price, USD per kWh

SUPPLY

Aggregate supply grew by 16.4% in the first half of 2025, surpassing the 5.2GW mark. During this time, 18.9MW of new capacity became operational, bringing total live IT capacity to 757.0MW. Operators and investors continue to scale investment in the region. NEXTDC lifted its 2025 capital expenditure guidance by AUD$100m, citing rising AI-related demand. CDC Data Centers is arranging new debt financing, seeking to add c.$905m (AUD$1.4b). AWS has added further weight to Sydney's role within its global footprint, announcing a c.$12.9b (AUD$20b), five-year investment programme across Sydney and Melbourne and separately lodging plans for a c.$291m (AUD$450m), 53MW facility in Gregory Hills.

Sydney continues to operate as a traditional cloud market, with steady pre-lets and slower ramp-ups. Rising costs, land and power constraints limit scope for AI expansion and customers are increasingly leveraging Sydney's connectivity to serve regional cloud demand. On the development front, Goodman has filed to develop a 90MW facility at Land Court West, whilst STACK Infrastructure unveiled plans for a 450MVA campus in Erskine Park. Macquarie Data Centres signed a c.$157m (AUD$240m) land option for a new campus expected to exceed 150MW.

Supply

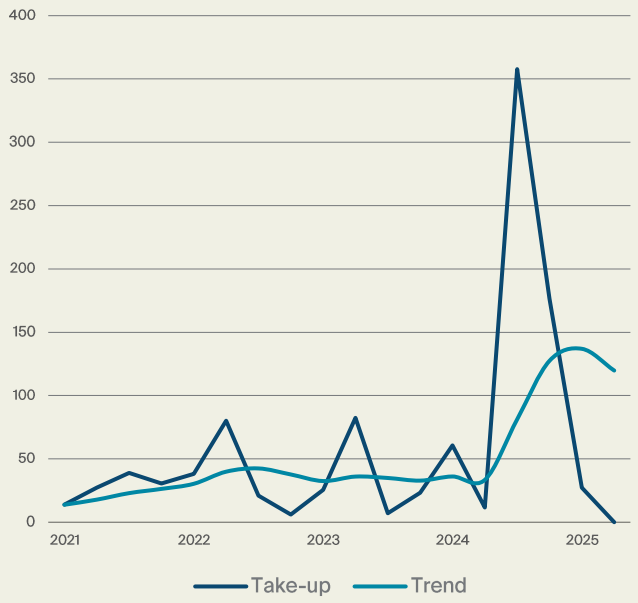


TAKE-UP

In the first half of 2025, a total of 27.4MW in transactions was recorded, all of which took place in the first quarter. Demand continues to be driven by public cloud providers, which accounted for all colocation take-up during this period.

Colocation supply in Sydney is running at a 11.6% vacancy rate, with 72.5MW of available capacity across 14 properties. Only one site can accommodate hyperscale requirements, and 53.0% of space under construction is already pre-let.

Take-up



LEADING OPERATORS

AirTrunk holds the largest share of built IT capacity in Sydney at 24%, followed by CDC Data Centres with 16% and Amazon Web Services with 15%. AirTrunk also leads in capacity under construction, holding 30%, with CDC Data Centres close behind at 28%. In the future pipeline, NEXTDC is in the lead, followed by CDC Data Centres and AirTrunk.

Blackstone is now exploring the sale of two data centres in Sydney and Melbourne, a move that could raise up to $2.6 billion to fund AirTrunk's expansion into new markets.

Melbourne

5.4m
Population

97%
Internet Users

3.85%
Interest Rate

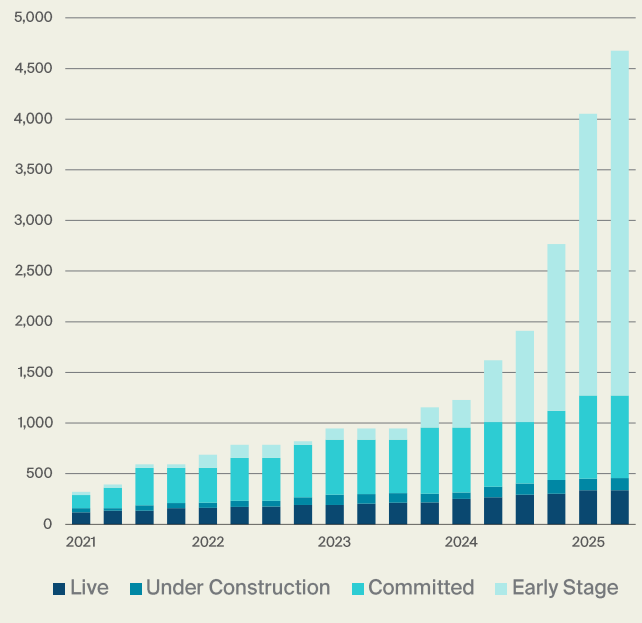
0.264
Electricity Price, USD per kWh

SUPPLY

Melbourne, long considered Australia's secondary data centre market, is quickly stepping into the spotlight as a hub for next-generation digital infrastructure. Accelerated demand for cloud and AI services is driving strong growth, supported by a solid industrial real estate base and a favourable business environment. The city now hosts dedicated cloud regions from all four major U.S. providers: AWS, Microsoft, Google, and Oracle.

With Sydney grappling with land and power constraints, Melbourne presents a more attractive alternative, offering larger, more accessible land parcels and fewer grid limitations. However, power availability is also becoming constrained in Melbourne due to extensive builds over the past three years and the rapid ramp-up of AI demand. Even so, its proximity to renewable energy sources in Victoria enhances its appeal to developers prioritising ESG goals. As a result, Melbourne's total supply has nearly tripled over the past year, reaching 4.7GW as of Q2 2025. Live IT capacity is now 337.1MW, marking a 25.4% YoY increase. This growth trajectory is expected to continue, supported by a pipeline of 934.8MW in committed and under construction projects. AirTrunk alone has added 1.0GW to its pipeline through the development of four new sites.

Supply

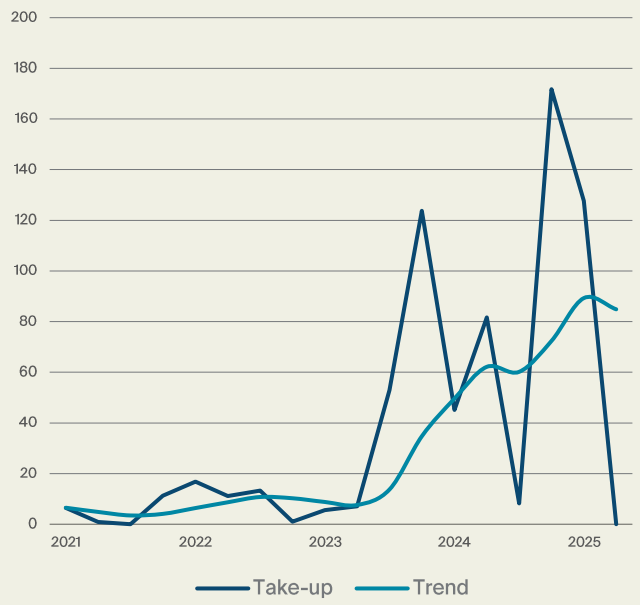


TAKE-UP

In the first half of 2025, Melbourne saw 127.6MW of transacted capacity, with artificial intelligence remaining a primary driver of demand and representing 95% of all colocation take-up.

Live vacancy currently stands at 4.5%, with 14.0MW of available capacity spread across nine sites, none of which can accommodate hyperscale requirements. At the same time, construction pipelines remain tight, with 96.3% of capacity already pre-let.

Take-up



LEADING OPERATORS

AirTrunk leads Melbourne's data centre market with 27% of built IT capacity, followed closely by NEXTDC at 22%. The construction pipeline is led by Microsoft, which accounts for 28% of current development, with NEXTDC, AirTrunk, CDC Data Centres, and STACK Infrastructure making up the rest. Looking further ahead, AirTrunk also tops the long-term pipeline with a 26% share, followed by CDC Data Centres at 17% and Goodman at 12%. Despite lower rental pricing than Sydney, increased scale and take-up is allowing operators to still hit highly desirable IRR's.

Mumbai

22.1m
Population

56%
Internet Users

5.50%
Interest Rate

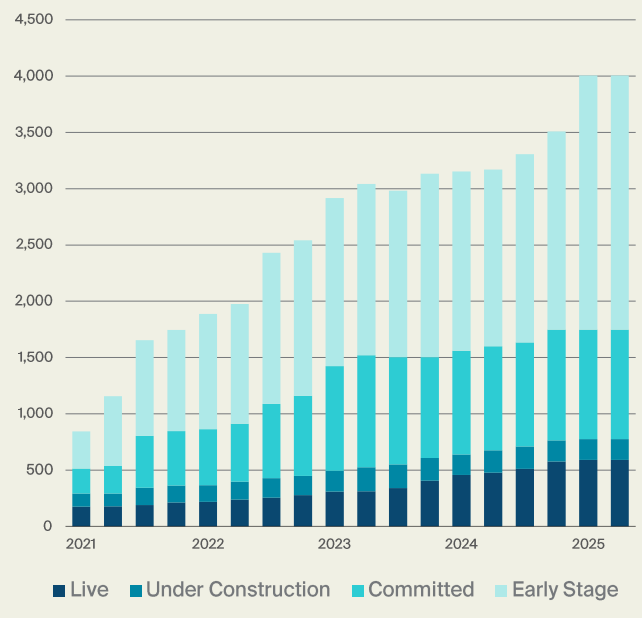
0.126
Electricity Price, USD per kWh

SUPPLY

Mumbai is a focal point for India's 2025 data-centre buildout, driven by hyperscale campuses, large brownfield and land acquisitions, facility expansions and an active PPA market supporting decarbonisation strategies. Mumbai's hyperscale build-out accelerated in 2025. NTT confirmed its NAV2 campus in Navi Mumbai, a 500MW site with c.336MW IT capacity across three facilities, and phase one financing of c.$650m (₹5,500 crore). Blackstone and Panchshil Realty announced a 500MW AI campus (Lumina CloudInfra), backed by c.$2.3bn (₹20,000 crore). Gramercy Info Park, a Panchshil Realty subsidiary, purchased c.50 acres in Ghansoli for c.$105m (₹900 crore). At the same time, availability zones (AZs) are expanding, with hyperscalers acquiring land outside the three known AZs for future campus builds.

Sourcing and energy deals also scaled. Equinix signed a 33MW captive PPA with CleanMax to support its Mumbai IBX sites, whilst AWS executed two PPAs in Q1 2025 totalling 199MW and added an 80MW wind PPA with Gentari in August. Maharashtra state government approved "Green Integrated Data Centre Parks" targeting 1.5 GW of IT capacity across three 500MW sites with a 100% green-energy mandate and long-tenor incentives.

Supply

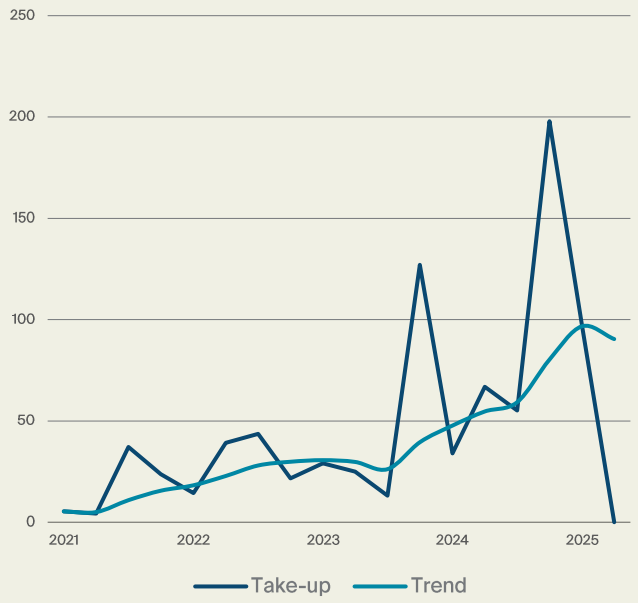


TAKE-UP

Over the past six months, Mumbai recorded 97.6MW of take-up, all of which occurred in the first quarter of 2025. Public cloud providers accounted for 98% of colocation demand during this period.

Currently, 30.5MW of live colocation capacity is available across 18 sites, translating to a vacancy rate of just 5.4%. Among these, only one site can support deployments above 2.5MW. Additionally, 62.5% of the capacity currently under construction has already been pre-leased.

Take-up



LEADING OPERATORS

Netmagic Solutions, NTT's India-based data centre and cloud infrastructure division, leads the market in built IT capacity, managing 40% of live capacity. It is followed by domestic operators CtrlS and Sify Technologies, with 16% and 12% respectively. Together, these three account for half of all capacity under construction, outlining the continued dominance of local players in a market where domestic experience remains vital. Local developers and operators maintain large land banks around the city, waiting for any incoming hyperscale deals.

Singapore

6.2m
Population

94%
Internet Users

1.69%
Interest Rate

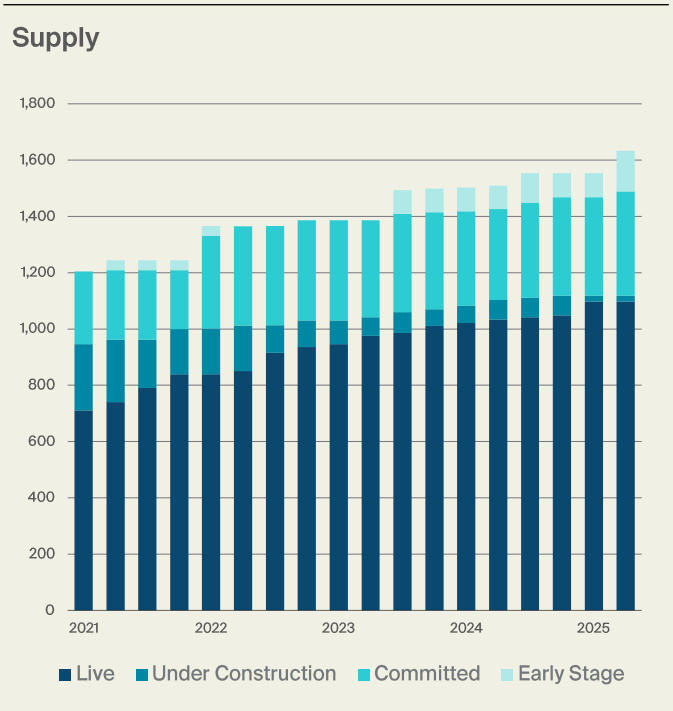
0.239
Electricity Price, USD per kWh

SUPPLY

Following on the from Singapore's 'Call for Applications' process in July 2022, which saw 80MW awarded to four operators, at the close of Q2 2025, the EDB and IMDA announced a launch for the second round of applications (DC-CFA2). 'At least' 200MW of new capacity is to be awarded, in minimum 20MW tranches, with PUE and 'brown-to-green' energy ratio requirements. The process is expected to launch in Q3 2025, with an application window of c.3 months. Successful applicants will be announced in Q1 2026, with operations to commence by 2029.

In the first half of 2025, total capacity increased by 5.2%, reaching 1.6GW. During the same period, 48.0MW of new projects became operational, a 4.6% increase, bringing live capacity to 1.1GW. Despite this growth, future expansion remains constrained, with Singapore currently holding one of the smallest development pipelines in the APAC region at just 536.6MW.

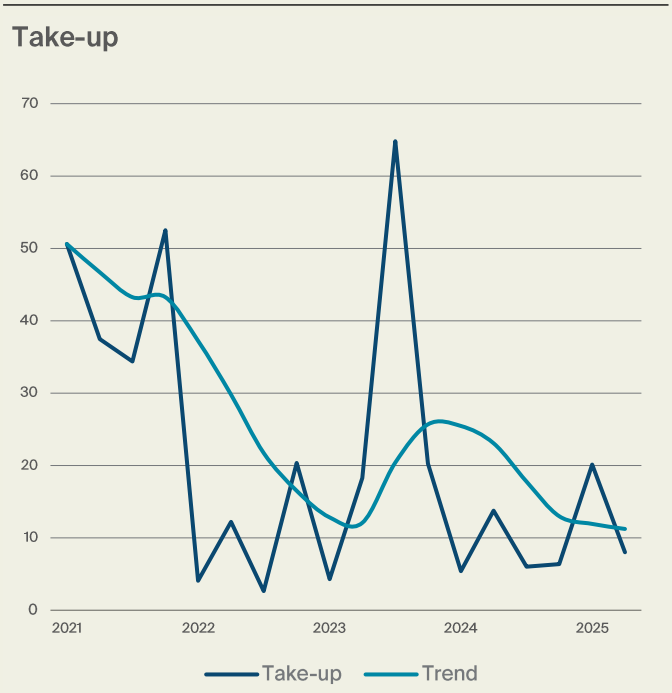
Recent activity includes Keppel Data Centres' planned 21MW expansion at its Genting Lane Campus. Additionally, AirTrunk is seeking a $1.7 billion green loan to support an 80.2MW greenfield project. At the onset of Q3, DayOne broke ground on its CFA-awarded 20MW development.



TAKE-UP

During H1 2025, Singapore transacted a total of 28.1MW across three deals. Singapore maintains its position as the most expensive colocation market in APAC, with negotiating power in the hands of the operator. Enterprise customer churn continues as banks move their bases from Hong Kong amidst political tensions.

Colocation supply is operating at a 4.0% vacancy rate, with 28.1MW of available capacity spread across 15 sites. Demand continues to exceed supply, as 90.2% of under-construction capacity has already been pre-leased.



LEADING OPERATORS

When it comes to built IT capacity, Google leads the market with a 17% share. Following that, colocation providers, including ST Telemedia GDC, Equinix, Digital Realty, AirTrunk, and SingTel, collectively account for the next 40%. Singtel has the largest share under construction, with 8.3MW currently under construction across two sites. Looking ahead, Google, Meta, and AirTrunk together represent most of the future development pipeline, contributing a combined 66% across both committed and early-stage projects. Although, this is expected to change as more power is drip fed to the market.

Seoul

12.9m
Population

97%
Internet Users

2.50%
Interest Rate

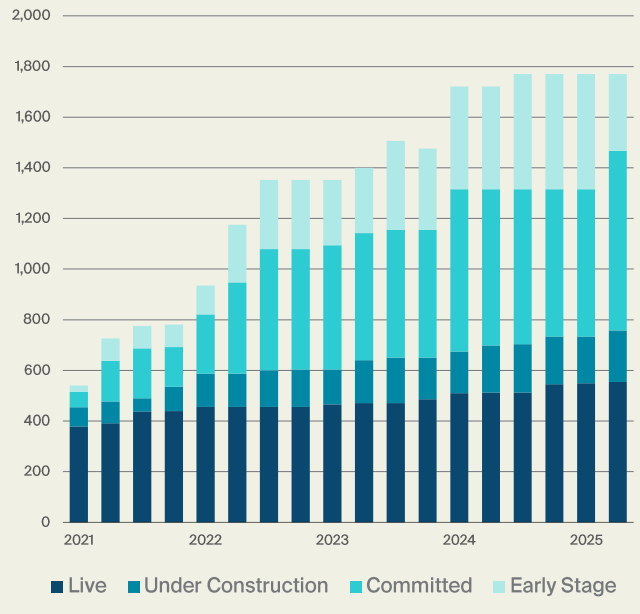
0.122
Electricity Price, USD per kWh

SUPPLY

Once dominated by local telecoms and enterprises, the sector now includes global players such as AWS, Google, Microsoft, and Oracle, as well as Korean cloud and AI firms competing for capacity. The bottleneck is upstream risk, power and permits, not leasing. Expansion into Uijeongbu, Ilsan, and south of Ansan reflects a shift toward suburban and peripheral areas where land is more available, but approvals remain the deciding factor. Once cleared, construction and leasing move ahead with fewer obstacles. Meanwhile, rising geopolitical pressures are driving South Korea to ramp up semiconductor support to reduce reliance on foreign chips and strengthen security.

Investor appetite remains strong. LG U+ is set to grow its 87.2MW footprint with a $441.7m investment in a new AI-focused data centre. Meanwhile, Macquarie Asset Management has acquired the 40MW Hanam Data Centre for around $538.4m. No new capacity has been added to the market since Q3 2024, keeping total supply steady at 1.8GW. Live IT capacity has seen only a modest increase of 1.6%, with 9.0MW energised across two projects. Securing permits, power, and grid connections has become increasingly difficult. Resultingly, operators who can delivery capacity can enjoy a strong leasing environment.

Supply

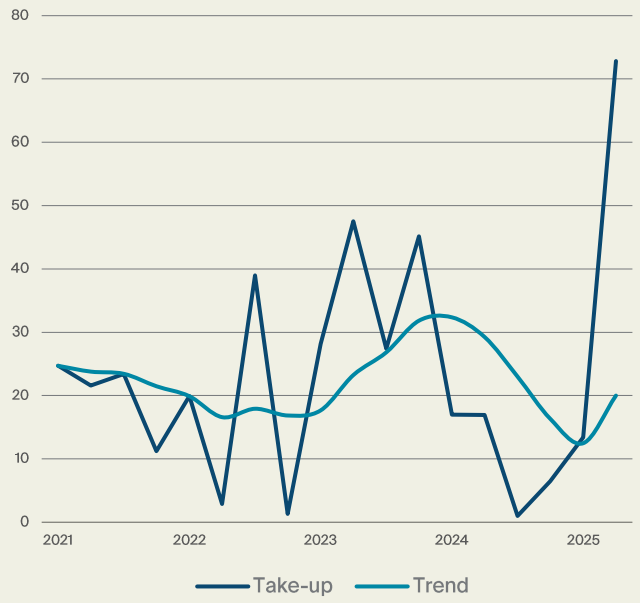


TAKE-UP

In the first half of 2025, Seoul recorded 86.2MW of leasing activity, with 85% of that taking place in the second quarter. Demand was split between enterprise users and public cloud providers, alongside an emergence of Chinese tenants entering the market in a bid to diversify their AI strategies across APAC.

Seoul remains constrained, with a vacancy rate 3.5%, one of the lowest in the APAC region, and 15.2MW of available capacity across 13 properties. Looking ahead, 54.2% of the space currently under construction has been pre-let.

Take-up



LEADING OPERATORS

South Korean operators control 87% of live colocation capacity in Seoul, with SK Broadband, KT, and LG U+ each holding a 17% share. LG CNS, a Seoul-based subsidiary of LG Corporation, leads current construction, representing 28% of capacity under construction. The future pipeline is attracting growing interest from global players such as Actis, Amazon Web Services, Digital Realty, and Digital Edge DC, all making strategic investments in the market.

Johor

1.1m
Population

98%
Internet Users

2.75%
Interest Rate

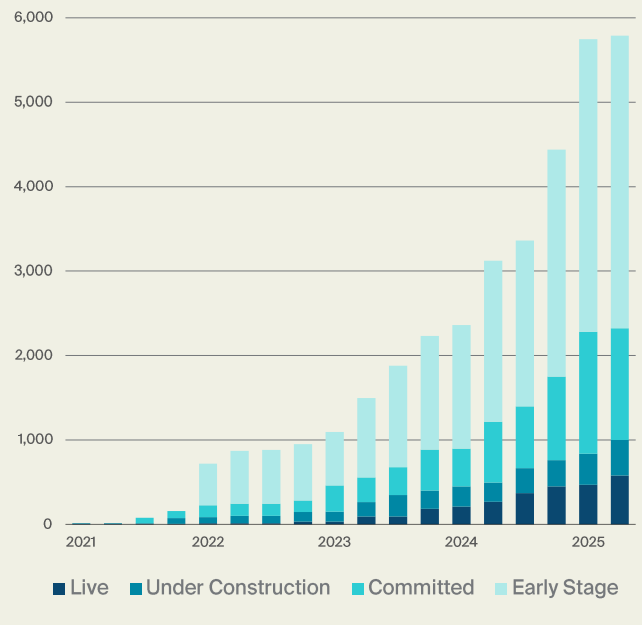
0.135
Electricity Price, USD per kWh

SUPPLY

Johor has established itself as Southeast Asia's fastest growing data centre hub, with aggregate supply nearly doubling over the last 12 months to 5.8GW in Q2 2025, including 2.0GW of new project announcements, backed by strong government support and the rollout of national Data Centre Planning Guidelines. Customer demand is also shaping delivery timelines, with many Chinese clients now requiring 9-11 month build times and quick move-ins. To meet these expectations, pre-fabricated builds are increasingly prevalent. However, the onset of Q3 saw new power tariffs aimed at data centres that could see costs rise by 10-14%.

Microsoft expanded its presence in Q1 2025 with a $147m acquisition of a 6m sq ft site, while ZData followed with a $55.9m purchase of a 1.7m sq ft parcel. Major projects include AirTrunk's 270MW second facility (bringing Johor to 422MW), Bridge Data Centres' 400MW power agreement at MY07, and new entrants such as CURRENC Group and Stack Infrastructure, both set to go live in 2026. All regional operators are still looking to enter the market. Land parcels in major tech parks are now scarce and the next phases of these parks are already being booked. Developers from other regions and sectors are also entering the market.

Supply

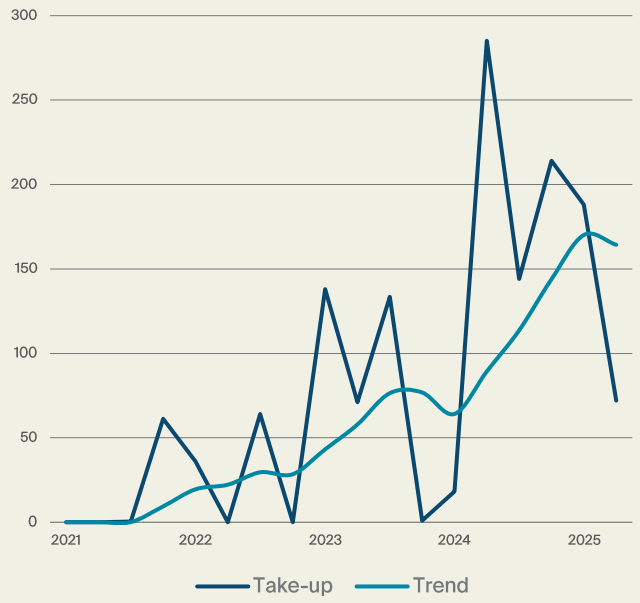


TAKE-UP

Singapore's strict planning controls have pushed global tech firms and data centre operators to look across the border, with Johor emerging as the top alternative due to its proximity and strong connectivity. Johor recorded 260.0MW of take-up in the first half of 2025, with social media accounting for 61% and the remainder driven by AI demand.

The market is now highly constrained, with a vacancy rate of just 1.1%, as planning becomes more challenging and power shortages coming through.

Take-up



LEADING OPERATORS

Bridge Data Centres and DayOne are the leading operators in the Johor data centre market, collectively managing 58% of the market's built IT capacity. They are also major contributors to current development, with DayOne and Bridge Data Centres responsible for 24% and 17% of the capacity under construction, respectively. These two players are performing well due to affordable and faster builds, as they can leverage Chinese supply chain mechanisms. In terms of the future pipeline (both committed and early-stage), Microsoft holds the largest potential share, with 600MW in progress if fully built out.

Hong Kong

7.8m
Population

96%
Internet Users

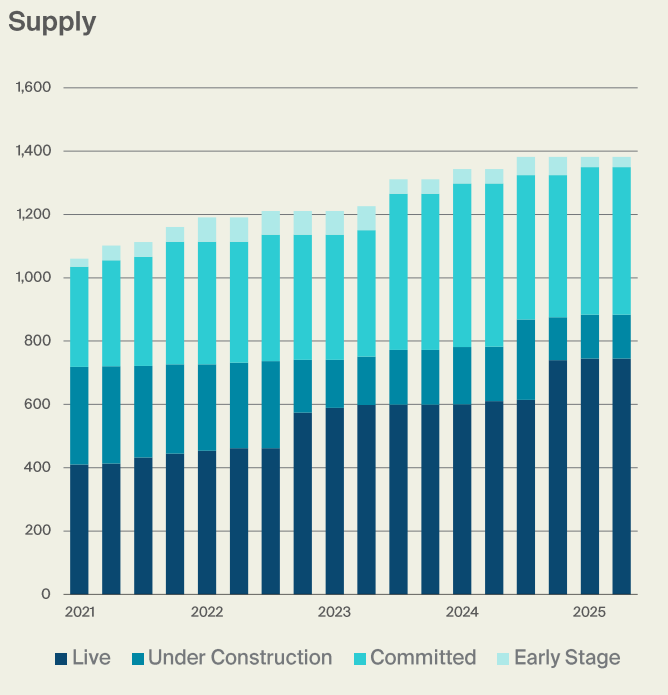
4.75%
Interest Rate

0.168
Electricity Price, USD per kWh

SUPPLY

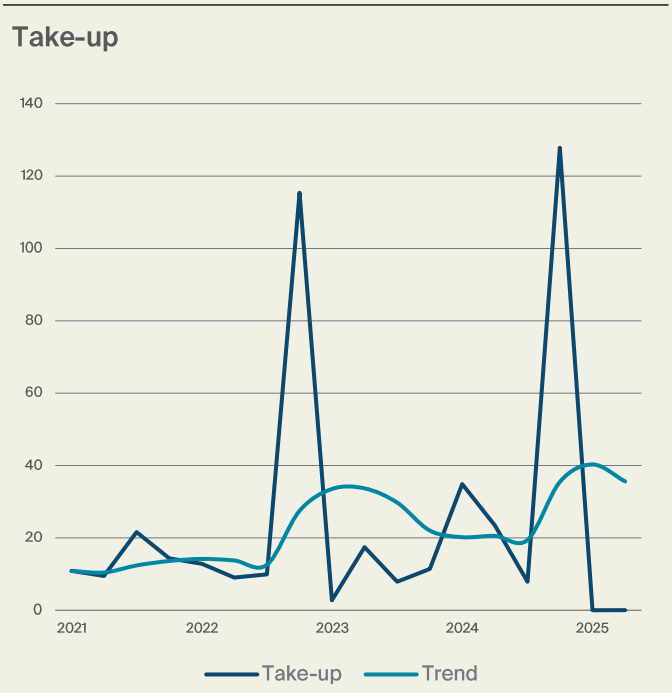
Despite the recent recission of US AI diffusion rules providing some regulatory relief for the market, core hardware-related restrictions remain in place. Combined with ongoing US-China political tensions, the market has witnessed an exodus of US-focused customers, with a number of investors seeking to exit the region. A number of assets are available for acquisition or are up for sale as western capital looks to leave the market. Despite this, there is still capital being allocated towards the sector: Goodman has launched a new $2.7 billion investment fund - GHKDC - signaling long-term confidence in the market from a selection of global investors.

Supply growth has slowed over the past 12 months, increasing by just 2.9%. This is a significant drop compared to the 13.4% growth recorded the previous year. Total capacity now stands at 1.4GW. During this period, 134.8MW was added, bringing live IT capacity to 745.0MW. Among the few major project announcements, Equinix's $124m, 26.4MW development stands out, alongside DayOne's 37MW across two sites and SUNeVision iAdvantage's 40MW build. Additionally, BDx Data Centers has secured funding for a new project in Hong Kong, though specific details have yet to be disclosed.



TAKE-UP

Hong Kong saw no leasing activity in the first half of the year, largely due to the lack of new supply. This marks a slowdown from the same period last year, when take-up reached 58.31MW. Currently, 74.5MW of live colocation capacity is available across 22 sites, translating to a vacancy rate of 15.0%, one of the highest in APAC. However, only two of these sites can meet hyperscale requirements, while 41.4% of the capacity under construction has already been pre-leased. We are seeing a number of vacant DCs, with operators increasingly willing to cut prices just to lease their assets.



LEADING OPERATORS

Colocation-based capacity accounts for 98% of the Hong Kong data centre market, with SUNeVision iAdvantage leading in terms of built IT capacity. SUNeVision currently operates 21% of the live market capacity, followed by Global Switch at 13% and NTT Communications Corporation at 12%. In the construction space, DayOne and SUNeVision iAdvantage are the most active, together contributing 63% of the capacity under construction. Looking ahead, SUNeVision alone is responsible for 27% of the future pipeline.

We like questions, if you've got one about our research, or would like some property advice, we would love to hear from you.

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