

# Data Centres The APAC Report



March 2024

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

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This report has been produced in conjunction with DC Byte



# Foreword



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2023 will be a year that the data centre market reflects on with the same significance as 2006, which saw Amazon launch to market Elastic Cloud Compute II and the world was first introduced to virtualised servers.

The widespread emergence of AI this year has sent shock-waves through the global data centre market, with record absorption rates and ramp up quantum's being reported in the US, with Europe and Asia expected to follow shortly. Early indications are that markets such as Johor, Mumbai, and Jakarta will benefit from the proliferation of AI due to the cheaper cost of land and power. Operators, however, will need to proactively co-ordinate their approaches in lobbying governments for increased power production, with gigawatt power generation and distribution required across all key data centre markets to capture this demand.

Cloud adoption continues to surge throughout the Asia-Pacific region, propelling demand for data centre services. Tier-II markets, backed by government support, regulatory changes, and tax incentives, are seeing multiple new cloud regions being created, with data centre operators fighting to capitalise on the radical supply-demand imbalances that exist in these markets. Robust take up continues to be witnessed across most Tier-I markets, as enterprises remain committed to hosting their compute virtually on either Chinese or US cloud platforms.

2023 will also be remembered as the year that India overtook China as the world's most populous country, with GDP growth rates surpassing earlier forecasts and data centre absorption rates reflecting this positive trajectory. Areas outside of Mumbai, Delhi, Hyderabad, and Chennai

are seeing hyperscale customer attention and international operators partnering with in-country players to help them gain exposure to this growth in what has previously been a locally dominated market.

Nevertheless, the prospect of further conflict in the Middle East and Europe remains a real possibility, with central banks still taking a cautious approach towards global interest rates despite the green shoots that were reported at the tail-end of 2023. Whilst Asia is geographically removed from these conflicts, the negative effects on the data centre market would be felt globally were tensions to flare up and power costs to inflate further.

Contemplating on January's trip to PTC'24 (Pacific Telecommunications Council) and engagement with multiple global data centre operators, the focus point for 2024 can be defined in 3 key categories: Scale, Speed and Supply Chain Management. The data centre investors who can overcome these three challenges will prosper in 2024. We look forward to assisting you on this journey.

Our latest report examines the expanding markets in the Asia-Pacific region, the current opportunities and drivers within those markets, and how emerging technologies could influence these markets in the future.

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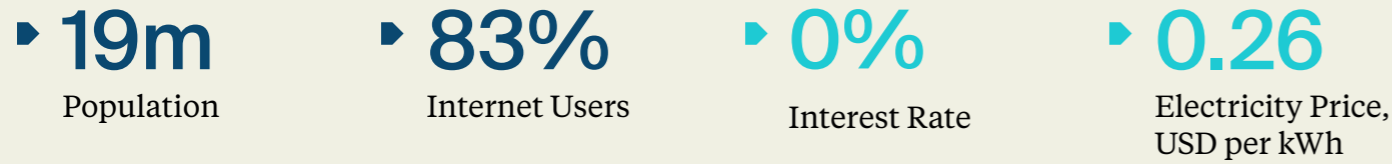


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# Osaka



## SUPPLY

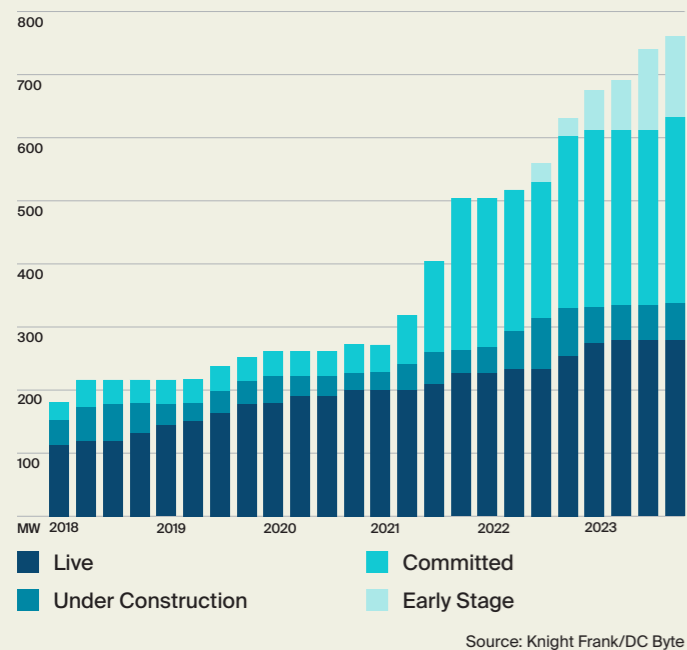
In 2023, Osaka added nearly 130MW of aggregate supply, reaching 760.7MW. The majority of this market capacity, 99%, is for colocation services, 68% of which is aimed at wholesale colocation.

Live IT capacity increased by 9.8%, with 25MW of new live supply coming online. New facilities completed include an 18MW project by Colt DCS at its Osaka Keihanna site, which is thought to have been rented to a US hyperscale customer, and MC Digital Realty's 6MW project at the Osaka 4 (KIX13) site.

Vantage has begun building phase one at its Osaka campus, a 5MW project expected in the second quarter of 2025, with a total project size of 40MW for the campus. SKYY Development had started a 3MW expansion of its Suma Data Centre before selling it to Mapletree Industrial for £282 million, at a yield of around 4.0%.

New plans announced for the region include a 50MW site from SC Zeus on Nanko Island, 16MW from Ada Infrastructure and 14MW from Optage at its Sonezaki Data Centre.

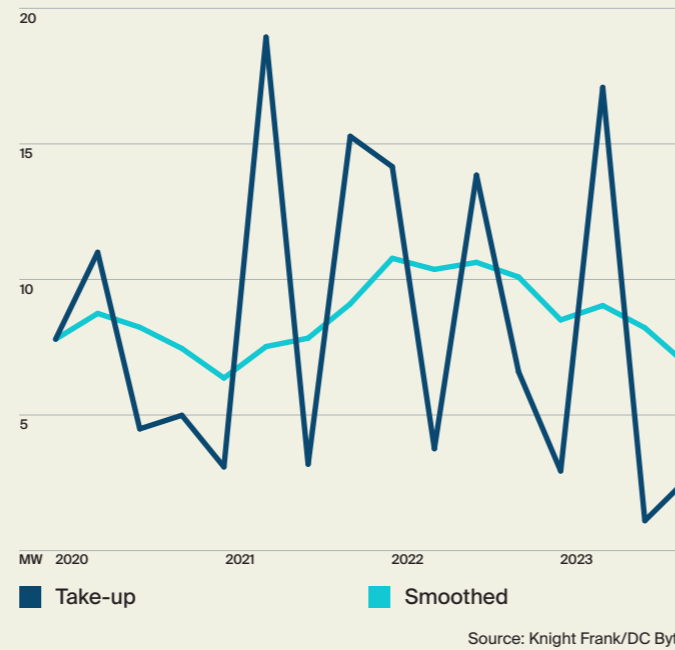
## Supply



## TAKE-UP

In 2023, Osaka had 23.79MW of space deals, with 2.65MW in the last quarter. Availability is limited by the slow growth of projects attaining power and planning. A rising cloud market will boost demand in Osaka in the next few years, with initial setups from major cloud providers AWS, Microsoft, Google, IBM, and Oracle already present in several colocation facilities in the city. Public Cloud based uptake has grown by 110% over the past three years.

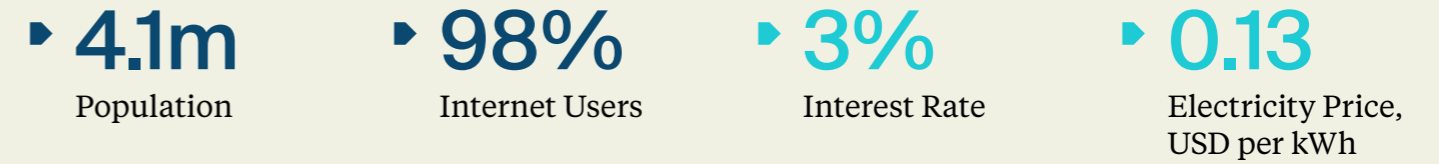
## Take-up



## MAIN OPERATORS

Live capacity in Osaka is divided across several operators, with MC Digital Realty owning 21% of the market, followed by NTT and Equinix. The construction pipeline is 33% owned by Colt DCS, whilst future pipeline developments are 38% controlled by ESR Group and STACK infrastructure.

# Johor



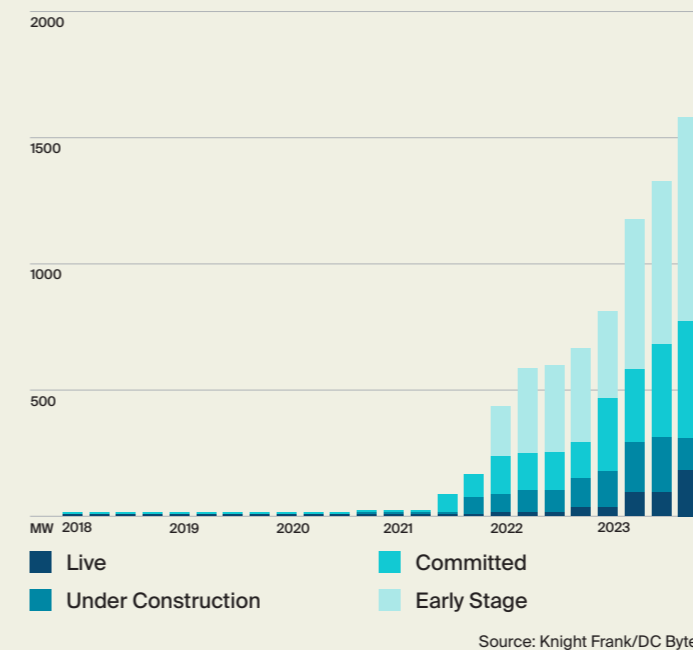
## SUPPLY

The proximity to Singapore and the lower land prices, along with Government incentives such as the smart grid creation and increased renewable production, are all creating a basis that satisfies the demands of both hyperscalers and data centre providers while addressing issues regarding power sustainability, stability, and scalability. As a result, the total supply in Johor has more than doubled in 2023, reaching 1,580.5MW. Live IT capacity is up 341%, following 107MW and 42.66MW completions from Bridge Data Centres and GDS Holdings, respectively.

92.7MW worth of new construction projects, alongside the 33.34MW worth of projects already underway, are now in development, with global operators GDS Holdings, Princeton Digital Group (PDG), K2, AirTrunk, and Equinix all vying for space.

Yondr has added 88MW to its 300MW Sedenak Technology Park (STP) development. GDS Holding has announced a further 151.2MW across its Site 3 & 4 developments at the Nusajaya Technology Park (NTP), alongside a further 108MW announcement in Starhill. BDC has unveiled its second, 114MW, venture at the STP, whilst DC-Science has also announced a 75MW project in the park.

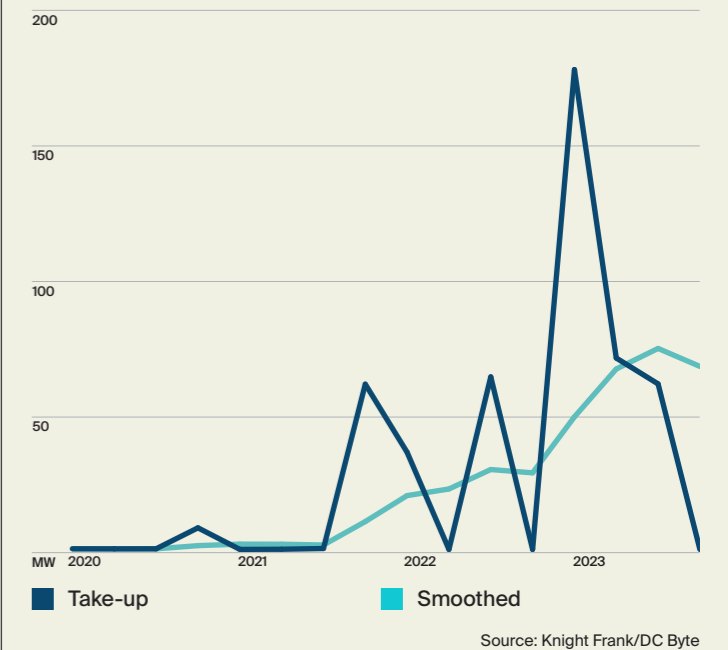
## Supply



## TAKE-UP

Johor has seen 310.4MW worth of transactions in 2023, more than triple the volumes transacted in 2022, the vast majority of which is attributed to a single Chinese customer, TikTok. Growing interest from global cloud operators could push this further, with Microsoft acquiring its first site in the region at the Nusa Cemerlang Industrial Park. Furthermore, Johor looks set to become an Artificial Intelligence (AI) destination, following Nvidia & YTL Power's partnership development of \$4.3 billion in AI cloud and supercomputer infrastructure to be hosted at YTLP's data centre park in Kulai, Johor.

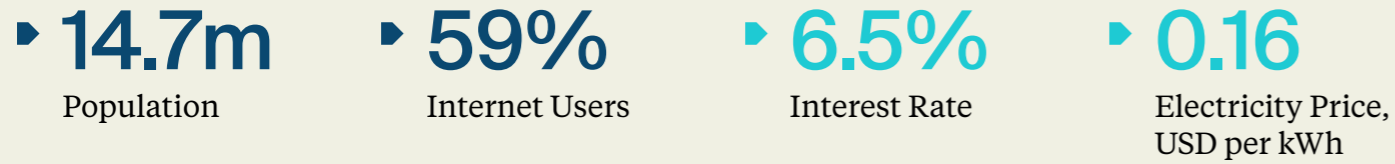
## Take-up



## MAIN OPERATORS

Bridge Data Centres currently dominates live IT capacity in Johor, owning 69% of the market, with GDS Holdings being the second largest operator at 23%. This dynamic is set to shift in the coming years, with deployments from GDS Holdings set to boost its market share to 31%. Future pipelines are dominated by GDS Holdings and Yondr, which own 25% and 23%, respectively. AirTrunk, PDG, Bridge Data Centres and STT GDC Malaysia make up the next 40%, with the remaining 10% distributed amongst several other operators.

# Manila



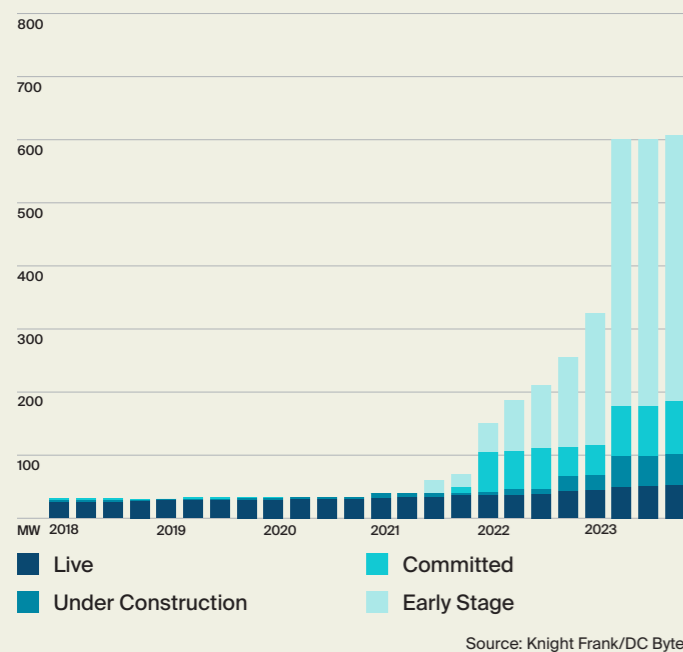
## SUPPLY

Manila, one of the world's most densely populated cities, hosts 85% of the country's data centre capacity. It is served by ten subsea cable networks, ensuring high-speed connectivity to Southeast Asia, China, Japan, and South Korea. The city attracts US and Chinese hyperscale interests, with facilities such as an Alibaba Cloud availability zone and an Amazon Web Services edge location.

In 2023, Manila's data centre supply surged by 352.5MW, a 138% increase, propelled by numerous new project announcements. Live IT capacity rose by 25%, adding 10.55MW. Construction commenced on 34.08MW of new projects, notably STT GDC's 28MW Fairview facility in the second quarter.

Supply growth was most pronounced in pipeline developments, which expanded by 169%. Key contributors included ePDLT's 100MW wholesale colocation facility, STC GDC's 96MW addition to its Fairview pipeline, and Evolution Data Centres' 69MW facility in a \$300 million partnership with Megawide. Converge ICT also plans to invest \$60 million in three new data centres.

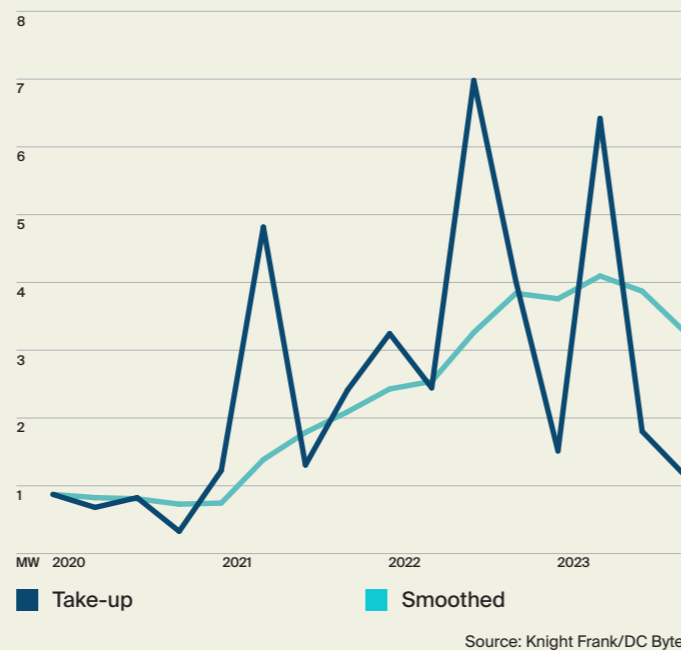
## Supply



## TAKE-UP

A lack of pre-letting combined with a market focus on retail colocation results in transaction volumes being heavily dictated by the growth of live supply. Forty-six percent of the live capacity added in 2023 has been leased. Cloud absorption is driving market activity, with 59% of new leasing being attributed to public cloud take-up.

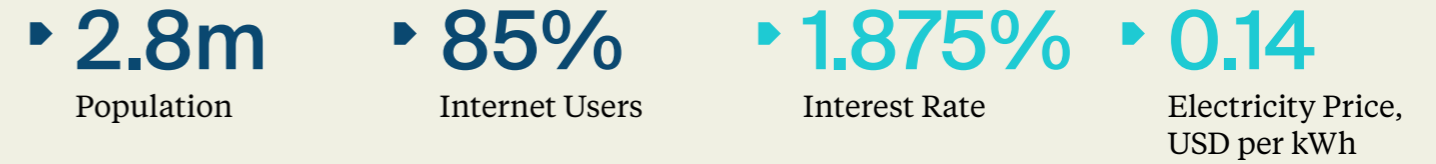
## Take-up



## MAIN OPERATORS

Live supply in Manila is currently 67% dominated by two operators. ePDLT is presently the largest operator, owning 39%, but is closely followed by STT GDC, which owns 28%. STT GDC is looking to grow its market share in the immediate term, developing 62% of the market's construction pipeline, whilst also being responsible for 19% of the future pipeline.

# Taipei



## SUPPLY

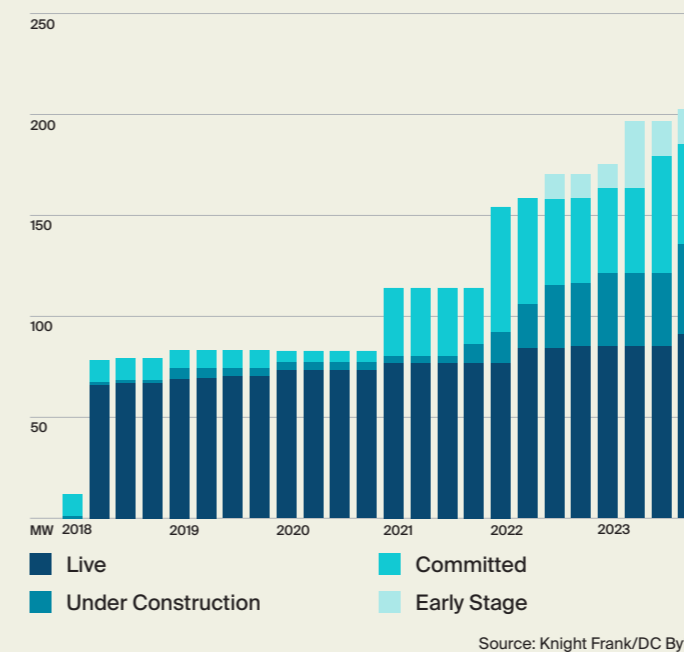
Taipei is one of several major cities across Taiwan which host data centres, accounting for 36% of the nation's live IT capacity, as well as 94% of under-construction volumes and 97% of future pipeline volumes. The market is diverse, offering a variety of retail colocation (44%), wholesale colocation (32%), and self-build (24%) capacity.

Aggregate supply has seen a 19.2% uptick in 2023, with 32.6MW added. A lack of growth in live capacity offerings, however, has temporarily dampened development, but long-term prospects look secure with a 31.2% growth in development volumes.

Construction volumes have seen a 41.3% uptick, with an additional 13MW of projects entering construction. Vantage Data Centers began phase 1 construction of its TPE1 facility, whilst BDx initiated development at its 5MW retail colocation facility.

Pipeline developments have grown 38.9% in 2023, with 13.6MW worth of projects being announced. Chunghwa Telecom has announced its thirteenth data centre in the region, Binjiang IDC, located in Taipei City.

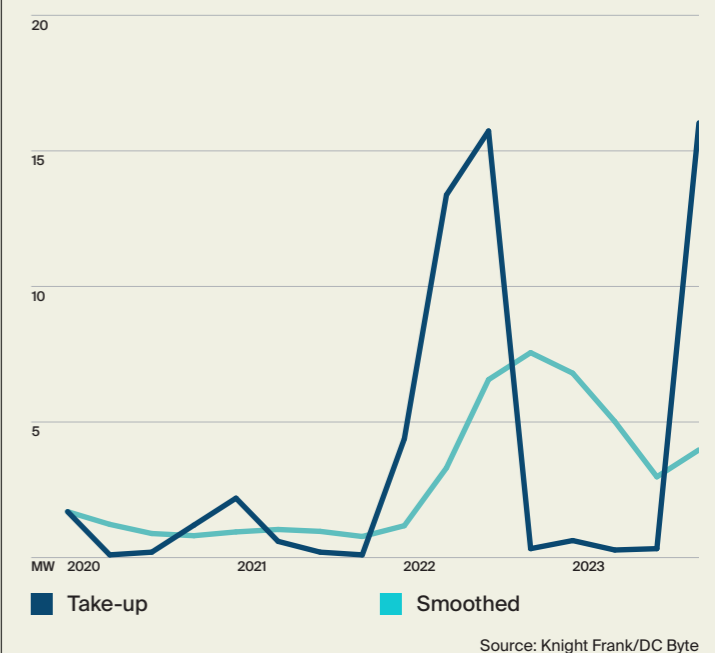
## Supply



## TAKE-UP

16.94MW worth of space was transacted in 2023, with 16MW in the fourth quarter alone. 12MW of transactions can be attributed to cloud take-up, with 8MW at ACER's Longtan eDC facility and 4MW at Vantage's TPE1 site. Cloud provision is driving the market, being responsible for 71% of transactions over the last year, with the region now hosting Amazon Web Services, Google, and IBM Cloud.

## Take-up



## MAIN OPERATORS

Chunghwa Telecom is presently the largest operator in the market, owning 46% of the market's live capacity and 16% of construction and future developments. Despite not currently operating any self-build capacity, Microsoft is looking to gain a foothold in the region through the establishment of its first self-build facility in the region. Amazon Web Services and Google Cloud are also present in the region; however, this is using local colocation facilities across the city.

# Hanoi

► 5.3m

Population

► 79%

Internet Users

► 4.5%

Interest Rate

► 0.07

Electricity Price, USD per kWh

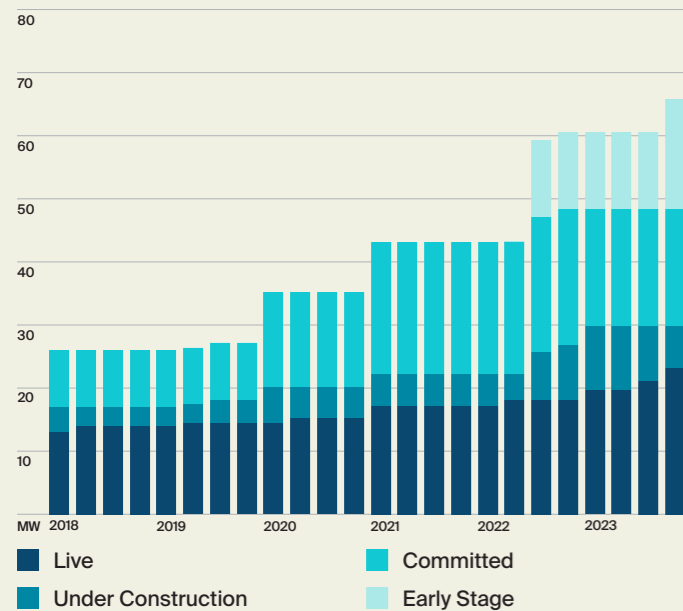
## SUPPLY

Recent regulatory challenges have lessened market activity over the last year, with minimal changes in aggregate supply since the third quarter of 2022. Retail colocation remains the dominant focus, comprising 91% of market capacity. The city plays host to an in-development Amazon Web Services edge location, whilst also attracting global retail providers such as KDDI Telehouse.

5MW of new live IT came online in 2023, a 27.5% increase on the fourth quarter of 2022. VNPT went live with 2MW at its Hoa Lac facility, whilst FPT Telecom completed two expansions totalling 3MW at its Fornix and Duy Tan facilities. FPT Telecom's retail colocation offering, resultingly, now has a combined capacity of 7.8MW, with a further 1.5MW under construction and 2.5MW in the pipeline.

Construction progresses on 6.7MW worth of projects, comprising a 2MW new site development from Viettel IDC, with the remaining 4.7MW as part of expansion projects for FPT Telecom, HTC-ITC, and VNPT.

## Supply

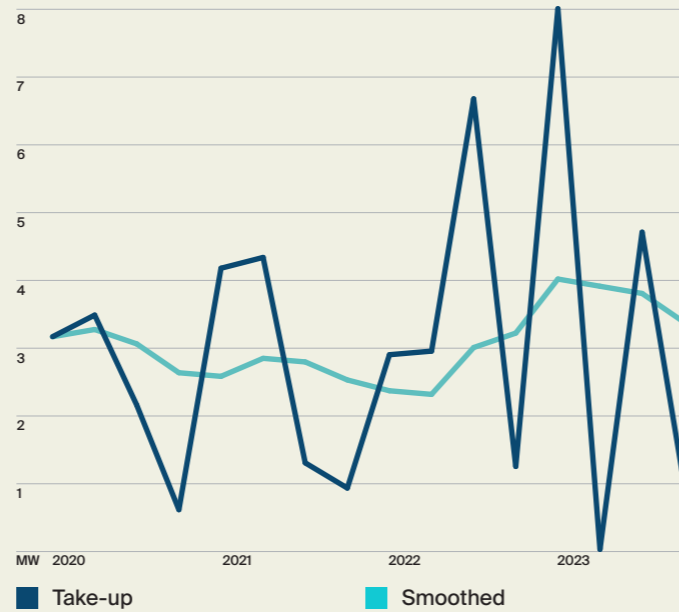


Source: Knight Frank/DC Byte

## TAKE-UP

2.56MW of take-up was recorded in 2023, of which 69% was take-up at new space launched in 2023. So far, 35% of the new space added in 2023 has been leased. The remainder of which, 3.24MW, is expected to be leased over the course of 2024.

## Take-up



Source: Knight Frank/DC Byte

## MAIN OPERATORS

FPT Telecom, Viettel IDC, CMC Telecom, and VNPT are the four largest operators in the Hanoi market, owning 85% of the market's live capacity offerings. FPT are the largest of these four at a 37% market share. However, based on construction and committed pipelines, FPT Telecom is set to lose its market position, with VNPT looking to become the largest operator in the market, followed closely by Viettel IDC.

# Melbourne

► 5.3m

Population

► 96%

Internet Users

► 4.35%

Interest Rate

► 0.23

Electricity Price, USD per kWh

## SUPPLY

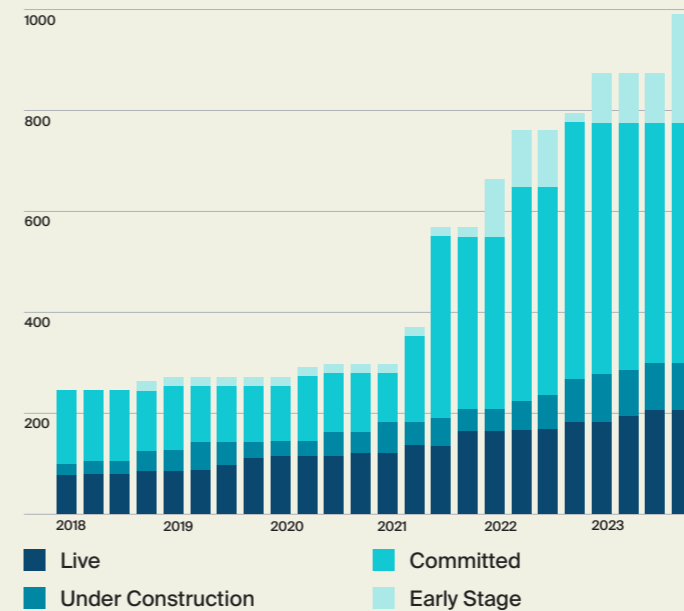
In 2023, Melbourne's data centre market experienced significant growth, expanding by 198MW, a 25% increase from the previous year, due to the burgeoning wholesale colocation sector. The city has attracted major global cloud providers like Amazon Web Services, Google, Microsoft, and Oracle, all of which have established cloud regions in Melbourne.

The live IT capacity in Melbourne has seen a 24.5MW increase over the year, surpassing 200MW. Notable developments include STACK Infrastructure completing a 12MW phase one at its Truganina campus and AirTrunk finalizing a 12.5MW expansion for its MEL1 facility, elevating its total capacity to 70MW.

The construction of new projects has also been robust, with 31MW entering construction phases in 2023. STACK Infrastructure began a 12MW phase two development at Truganina, and Microsoft initiated construction on its first facility in the city, aiming for operational status by the second quarter of 2024.

Additionally, the announcement of future projects totalling 198MW, including CDC's 118MW expansion at its Brooklyn site and NEXTDC's plans for an 80MW facility, underscored

## Supply



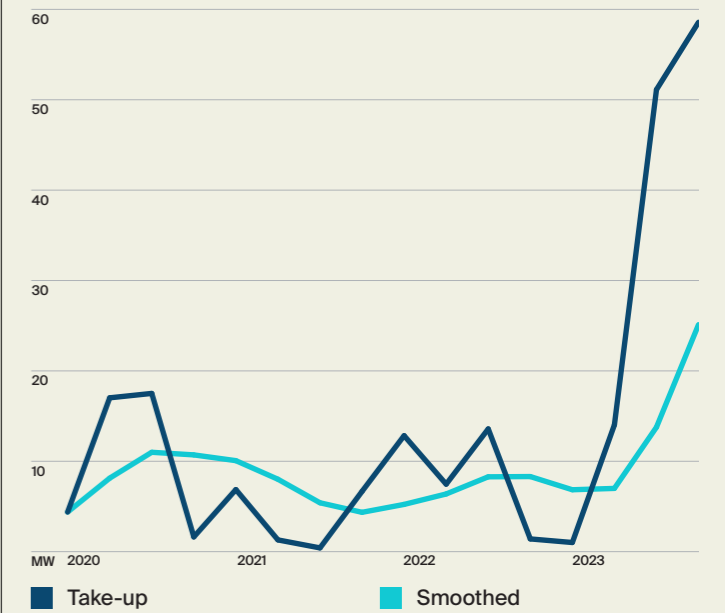
Source: Knight Frank/DC Byte

the region's ongoing growth and investment in data centre infrastructure.

## TAKE-UP

123.8MW of take-up was recorded in the Melbourne market in 2023. STACK Infrastructure has sold all its live and under-construction capacity at its Truganina campus. Similarly, NEXTDC has now sold all live space at its M1 and M2 facilities, as well as 79% of its M3 facility launched last year, customers for which include Amazon Web Services, Google Cloud, Microsoft Azure, and IBM Cloud. Resultingly, NEXTDC has seen its share price climb 56% over the last four quarters.

## Take-up



Source: Knight Frank/DC Byte

## MAIN OPERATORS

Sixty percent of the live market in Melbourne is currently owned by AirTrunk (34%) and NEXTDC (26%). NEXTDC is looking to become the market's largest operator, responsible for 37% of construction projects in the region, along with 45% of future pipeline projects. Microsoft looks set to become the largest cloud provider in the region, with a total pipeline of 154MW. Amazon Web Services has also announced its plans to invest AUD\$13.2 billion in cloud infrastructure in Sydney and Melbourne between 2023 and 2027, of which AUD\$2.2 billion will be allocated to the Melbourne region.

# New Delhi

▶ **32.9m** Population  
 ▶ **68%** Internet Users  
 ▶ **6.5%** Interest Rate  
 ▶ **0.10** Electricity Price, USD per kWh

## SUPPLY

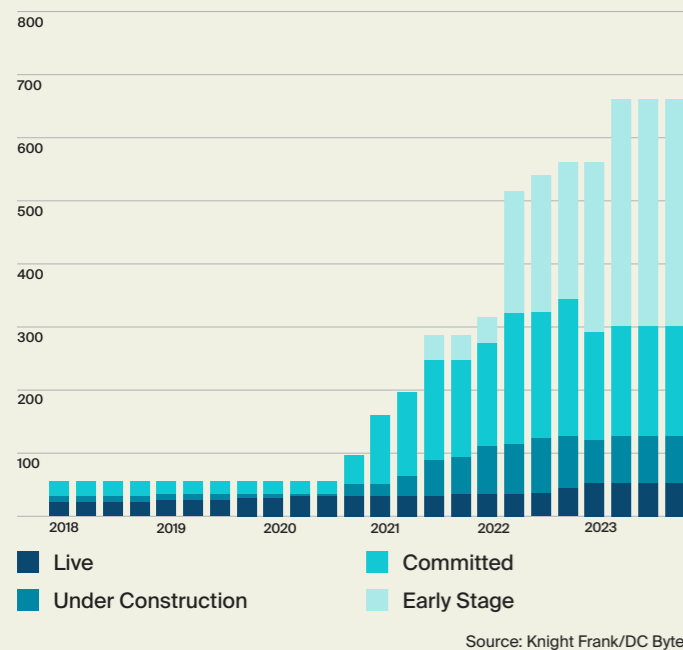
2023 has seen aggregate supply in New Delhi rise by 100MW, a 17.8% increase on 2022 volumes. This uptick is the sole result of an expansion announced by Yotta to its Greater Noida DC Park. Further growth in the region is anticipated to be enabled through the development of more cloud regions within the city, for which Amazon Web Services and Google Cloud are already present.

Live capacity has seen a 9MW uptick following the 6MW completion of STT GDC's Noida DC 1 facility and the 3MW completion of Anant Raj Cloud Private Ltd.'s IT Park Manesar site.

Construction has started on 11.48MW of new projects, bringing the total pipeline to 73.24MW. Yotta has increased its project at the Greater Noida DC Park development by 5MW, while NTT-Netmagic has expanded its Noida campus by 4.48MW.

111MW worth of new pipeline projects have been added, comprising a further 95MW commitment by Yotta to its Greater Noida DC Park and a 16MW addition by Sify Technologies to its Greenfort Noida data centre.

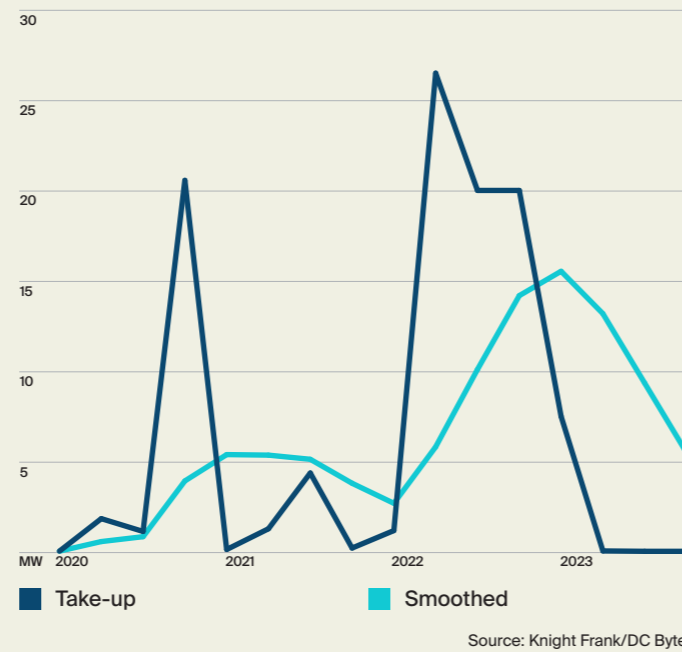
## Supply



## TAKE-UP

7.5MW of space has been transacted in 2023. NTT-Netmagic has pre-let an initial 10% of its Noida 2 facility. Likewise, STT GDC has also pre-let 3MW at its new STT Noida DC 1 facility, whilst also playing host to both Google Cloud and Amazon Web Services at its Delhi DC1 and DC2 facilities, respectively. CrtIS has also leased further space at its Noida I facility, which is now at 85% occupancy.

## Take-up



## MAIN OPERATORS

Presently, New Delhi's live capacity is 84% owned by four leading operators – STT GDC India (27%), Nxtra By Airtel (23%), Sify Technologies (20%), and Yotta (14%). Yotta is currently making the largest strides, owning 30% of under-construction projects and responsible for 26% of the market's future pipeline.

# Hyderabad

▶ **10.8m** Population  
 ▶ **31%** Internet Users  
 ▶ **6.5%** Interest Rate  
 ▶ **0.12** Electricity Price, USD per kWh

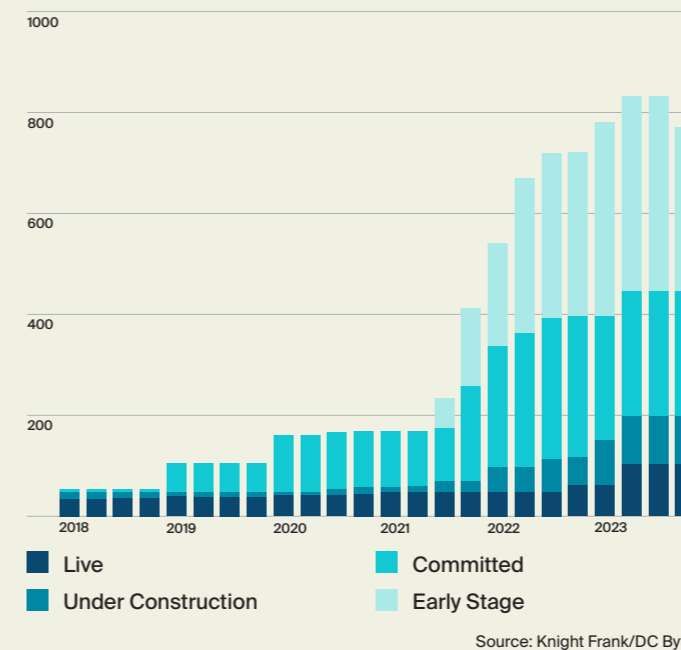
## SUPPLY

Hyderabad, a key hub for the technology industry, houses over 1,300 IT companies, including global giants like Microsoft, Apple, Amazon, Google, and IBM, as well as major Indian firms such as Tech Mahindra, Infosys, TCS, Polaris, Cyient, and Wipro. The city's demographic is young, with 60% under the age of thirty-four.

In 2023, the city's data centre market expanded by 50MW, an 8.1% increase, driven solely by public cloud service provider Amazon Web Services, which added 40MW at Raviryala and 10MW at Chandanvelly. This growth pushed the live IT supply up by 42MW, a near 70% rise on 2022 volumes.

46.3MW of new projects commenced construction, boosting the construction pipeline to 94.4MW. AWS is developing 10MW, while Microsoft is constructing 12MW at HYD01 and 9.6MW at HYD11. Furthermore, CrtIS, Nxtra Data Centres, and Pi Data Centres are investing in the region, with Pi planning a \$24 million investment in data centre infrastructure.

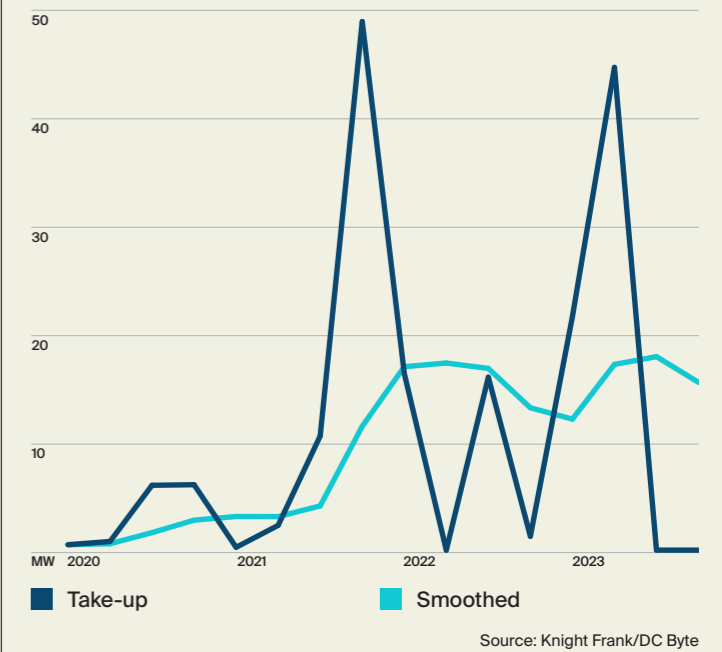
## Supply



## TAKE-UP

66.26MW of space has been transacted in 2023. Market occupancy is at 72%, however, there exists no single site wholesale colocation capacity capable of supporting hyperscale deployment in the region. Wholesale pipeline deployments from AdaniConnex will arrive entirely pre-let, whilst Reliance Communications has now eased its remaining capacity.

## Take-up



## MAIN OPERATORS

Over the past year, rapid cloud deployment has shifted market focus from colocation offerings to public cloud provision. Amazon Web Services has become the largest operator in the market in terms of live IT. Immediate construction deployments are set to be dominated by Amazon Web Services but with a growing presence from Microsoft. Microsoft owns the largest proportion of future pipeline projects, having over three times the planned deployment of Amazon Web Services.

# Chennai

▶ **11.8m**

Population

▶ **53%**

Internet Users

▶ **6.5%**

Interest Rate

▶ **0.13**

Electricity Price,  
USD per kWh

## SUPPLY

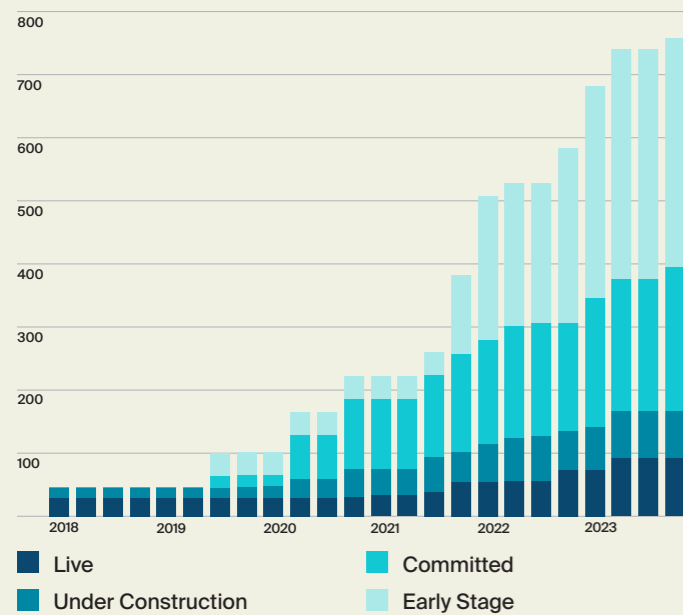
The Chennai data centre market rose to 758.62MW of aggregate supply by the end of 2023, a 176MW, or 30%, uptick in supply volumes. An ever-growing wholesale colocation market is behind most of the growth in Chennai, now representing 82% of the market.

18.6MW of new live supply has been added in 2023. NTT-Netmagic opened its second facility in the region, featuring an initial 17.1MW deployment, with an IT load upon completion of 34.8MW. The National Payment Corporation of India (NPCI) has expanded its existing Chennai Smart Data Centre by 1.5MW, bringing live IT for the site up to 3MW.

CapitaLand has started construction on an initial 15.6MW at the Chennai 1 facility. Likewise, Larsen & Toubro have initiated construction on a 6MW facility southwest of the city.

Yotta has announced a new project in the region, Orragadam Data Centre Park, with initial plans for a 60MW site. Similarly, CtrlS has added 99MW to the pipeline of its Chennai campus. Web Werks has also acquired land in west Chennai, where it is expected to develop 36MW.

## Supply

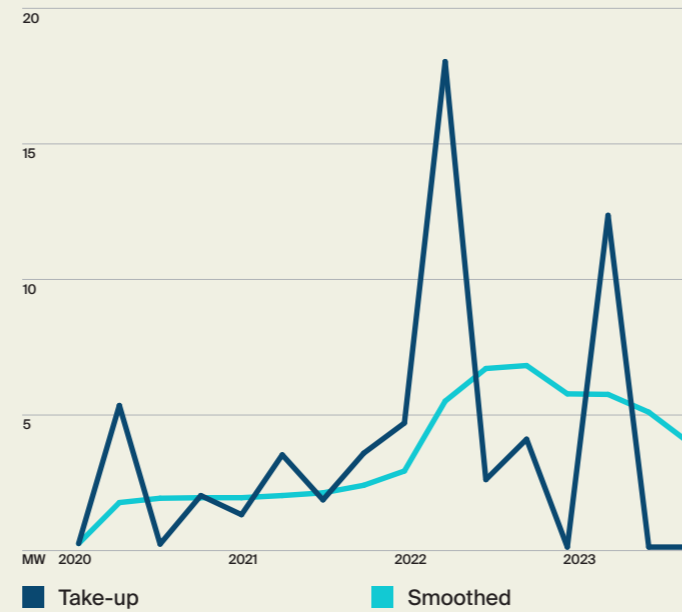


Source: Knight Frank/DC Byte

## TAKE-UP

12.3MW of take-up has been recorded in 2023, with NTT-Netmagic leasing the initial quarter of its new Chennai campus. Limited pre-letting results in many facilities arriving with open capacity, with most of the markets availability, 93%, being housed at the AdaniConnex and NTT-Netmagic facilities, currently the only facilities in the region with a live capacity capable of accommodating any hyperscale demand.

## Take-up



Source: Knight Frank/DC Byte

## MAIN OPERATORS

STT GDC is currently the largest operator in the market, being responsible for 41% of live capacity offerings. NTT-Netmagic is the second largest (21%), followed closely by AdaniConnex (19%) and Nextra By Airtel (12%). However, with 0MW in its pipeline, STC GDC looks set to lose market dominance as pipeline projects become realised. Sify Technologies has the largest capacity under construction and is looking to establish itself in the region. CtrlS has a pipeline of 120MW, followed by Digital Connexion, which also has a pipeline of over 100MW.

**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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