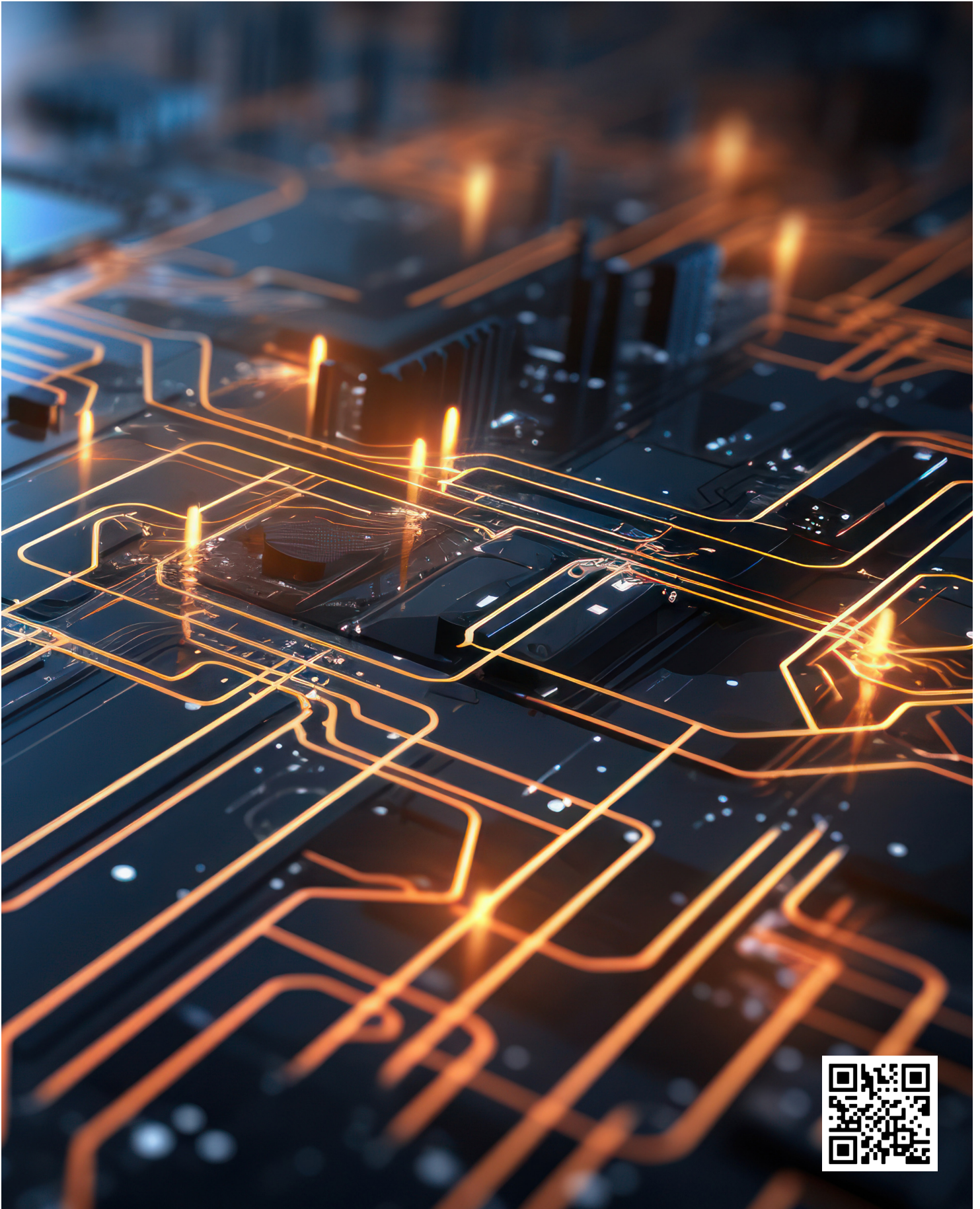


Asia Pacific - May 2024

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SPOTLIGHT
Savills Research

Asia Pacific Data Centres



Asia Pacific data centre demand at an all-time high

RAPID EXPANSION FOR ALL TYPES OF OPERATIONAL DATA CENTRES

The Asia Pacific data centre industry continues to demonstrate robust and dynamic growth with no signs of a deceleration. Growth is being driven by digitalization, the adoption of cloud computing and other data-intensive services, the proliferation of 5G networks and The Internet of Things, as well as regulatory policies mandating local data storage. Over the past few years, the region has already seen significant expansion of data centre infrastructure. Structure Research has

estimated that the APAC colocation data centre market size was around 10,233MW of critical IT capacity in 2023 and is projected to grow at a five-year compound annual growth rate (CAGR) of 13.3% to 19,069MW by 2028, indicating a formidable momentum.

The emergence of artificial intelligence (AI), especially the release of ChatGPT and other generative AI tools has further boosted the demand for this sector, particularly for hyperscale data centres which have a substantially larger critical IT capacity. A wave of tech giants like Amazon Web Services, Microsoft, and Google have

been aggressively leasing and developing hyperscalers and these three frontrunners now account for 60% of all hyperscale data centre capacity worldwide. According to Synergy Research, global hyperscale data centre capacity will double in the next four years, with around 120 to 130 facilities launching each year. The scale of these new projects on average will be more than double the capacity of current facilities, in order to accommodate AI operations. The increase in power requirements is another factor shaping the investment landscape.

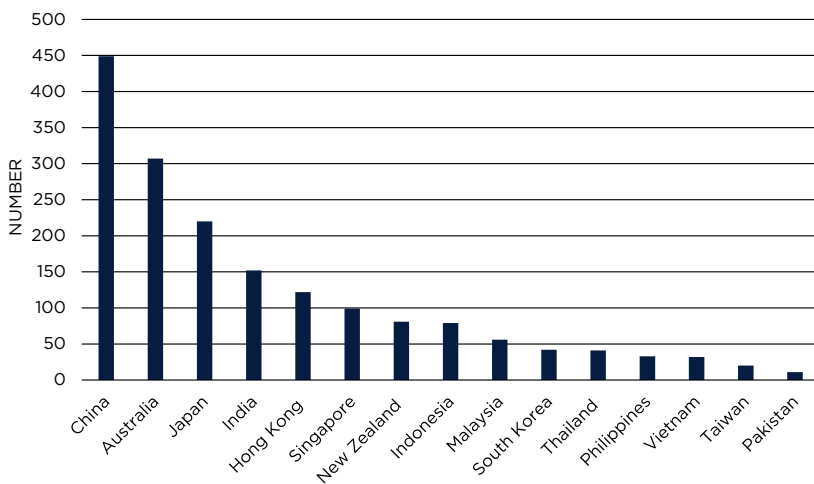
INVESTMENT IS HOTTER THAN EVER

In an environment where interest rates seem to be 'higher for longer', with the Federal Reserve postponing rate cuts, the pursuit of yield has intensified amid the mounting macro uncertainty. As a result, the data centre market has emerged as an exciting alternative asset class, offering better returns alongside plenty of growth potential. We saw considerable capital funnelled into the sector throughout the pandemic, but the influx has surged even further in Q1/2024. Asia Pacific data centre acquisitions topped US\$1.7 billion during the quarter, up 81% QoQ and 325% YoY, accounting for 80% of the total investment volume for the full year of 2023.

The biggest transaction took place when a group of institutional investors, including Hillhouse, Rava Partners, Boyu, Princeville Capital, Tekne Capital among others acquired a 43.9% stake in the international data centre business of the Chinese data centre operator GDS by subscribing to US\$587 million Series A convertible preferred shares. The portfolio comprises 330 MW of data centre capacity in service and under construction outside Mainland China, and a further 340 MW held for future development across strategic locations such as Hong Kong, Singapore, Malaysia (Johor), and Indonesia (Batam). Valued at an enterprise level at US\$2.3 billion, the deal banked on the full delivery of the existing and upcoming pipeline.

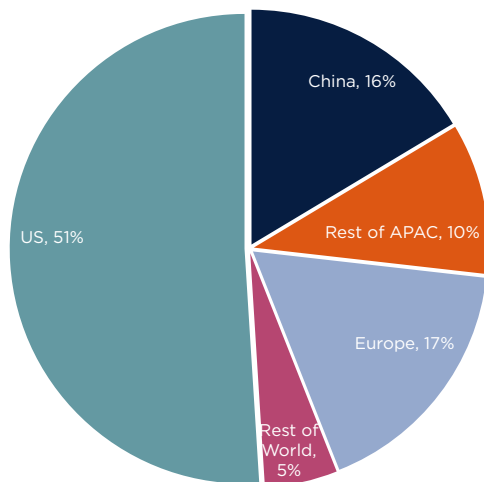
There have been two other deals worth noting. An entity linked to Singapore-based operator Big Data Exchange (BDx) acquired a freehold industrial building, OneTen Paya Lebar, from Hwa Hong Corporation Group for an estimated US\$104 million. The eight-story property currently houses BDx's SIN1 data centre, which offers 9.6MW over a gross floor area of 14,450 sq m. Both land and power supply for data centre developments are very limited within Singapore, despite the lifting of a four-year moratorium. According to DC Byte, Singapore's

GRAPH 1: Number of Data Centres in Asia Pacific by Market, Q1/2024



Source Cloudscene

GRAPH 2: Global Hyperscale Data Centre Capacity by Market, Q4/2023



Source Synergy Research Group

colocation data centre live IT capacity currently stands at 1227MW and is currently close to full occupancy, with a peak vacancy rate recorded at 1.89% in 2022. Although smaller in size compared to typical new data centres coming online these days, the buyer paid a sub-4% yield for the acquisition, as owning the freehold will give them greater flexibility to redevelop the facility to cater to their clients' evolving needs.

Meanwhile, Australian-based Macquarie Data Centres bought the Intellicentre campus in Macquarie Park, Sydney from Keppel DC REIT for US\$119.8 million. Keppel DC REIT divested the asset at an exit cap rate of approximately 3.6%. The campus includes the existing Intellicentre 2 and Intellicentre 3 East centres, occupied by Macquarie Telecom on a 20-year master lease. This acquisition will give the operator more control over the campus as they plan to construct a third centre, IC3 SuperWest, to meet expansion needs.

In a new market trend, we have seen local government putting a stop to new construction out of sustainability and energy supply concerns. As such, investors are turning to emerging markets with more accommodative policies such Malaysia, Indonesia, India and even Vietnam and this has been reflected in transaction flows. In terms of geography, 36% of transaction volume took place in Malaysia during Q1/2024, followed by Japan (23%), Hong Kong (16%) and Indonesia (14%). Meanwhile, investors have continued to divest from relatively more developed markets such as China and South Korea.

Asia Pacific's data centre industry is booming amid technological advances and a surge in investment interest, but is being challenged by resource constraints, prompting new markets to emerge.

THE FIGHT FOR LAND AND POWER RESOURCES POSES GROWTH CONSTRAINTS

While the data centre market has received a great deal of attention with a large amount of capital directed at it, the difficulty in securing suitable land and acquiring a reliable power supply have raised some sustainability and scalability concerns.

Data centres require proximity to essential infrastructure such as power grids and internet backbone connections. Securing suitable land which meets these criteria without venturing too far from the urban business area or cloud regions has become increasingly hard in developed markets, especially those with tighter planning restrictions and more legacy infrastructure. Tokyo, Singapore, Hong Kong, and Seoul are among the markets grappling with a scarcity of suitable land.

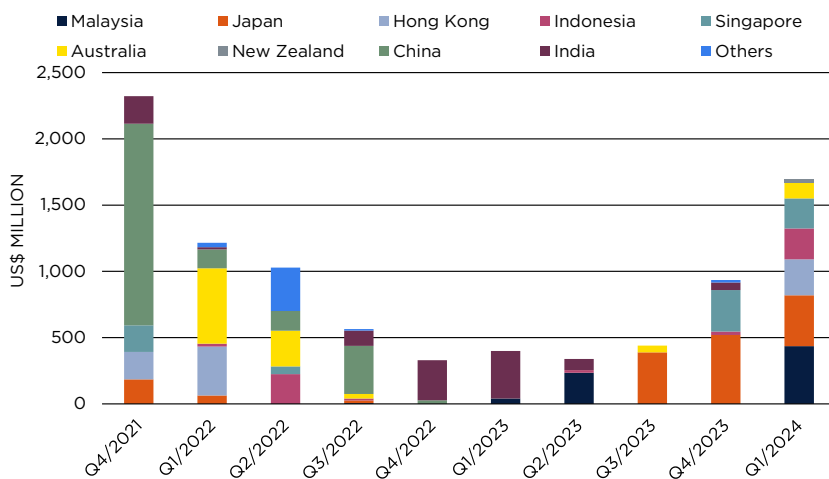
Another key consideration is the high energy consumption of data centres, particularly larger hyperscale facilities. As more projects are delivered, so demand for power increases, which can potentially strain local power grids and lead to delays in latency and other operational issues. This is often a reason why site selection is a crucial part of success when expanding in emerging markets like India and Indonesia.

The scramble for land and power resources has pressured participants to scale in strategic locations as soon as possible, and this has continued to drive up development costs. A study by Turner and Townsend reveals that Tokyo was the most expensive market worldwide to build, with costs hitting US\$13.7 per Watt in 2023. Zurich and Silicon Valley took second and third place. Within Asia Pacific, Singapore ranked as the second most costly, at US\$11.4 per Watt, with Jakarta and Kuala Lumpur not far behind at US\$10.5 and US\$10.0 respectively.

Amidst this cost surge, there is also mounting pressure from various stakeholders including governments, clients, and broader society, for data centres to utilize renewable energy sources and minimize their carbon footprint. However, sourcing sufficient renewable energy to meet the demands of large-scale data centres can be problematic, particularly in regions where renewable energy infrastructure is underdeveloped.

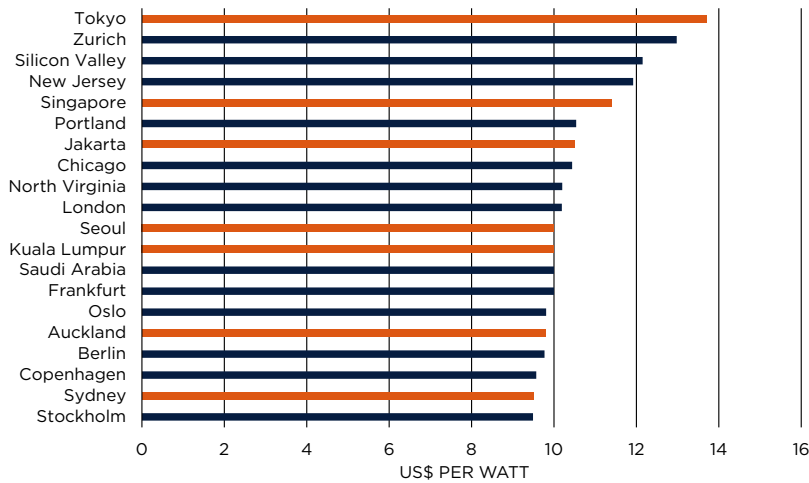
While AI technology is expected to spike data centre demand, it has also introduced a new set of challenges. AI data centres are estimated to consume two to five times more electricity than those hosting cloud applications, primarily due to the higher power requirements of graphics processing units (GPUs) compared to traditional central processing units (CPUs). The latest generation of individual Nvidia GPU chip can use as much or more power than entire cloud servers. The vast majority of the existing colocation sites cannot support this

GRAPH 3: Asia Pacific Data Centre Transaction Volume by Market, Q4/2021 to Q1/2024



Source MSCI Real Capital Analytics
Note Only includes transaction size over US\$10 million

GRAPH 4: Data Centre Construction Costs by Market, 2023



Source Turner & Townsend

level of power density, assuming 40-80kW per 42U rack, and retrofitting the existing infrastructure is a costly and challenging task as GPUs also generate significantly more waste heat than CPUs. The HVAC-based cooling solutions are sufficient for CPU server rooms with up to 30 kW rack power densities but fall short for GPU racks with a power density exceeding 40kW. This type of rack room requires liquid cooling which is extremely resource-intensive to operate. Microsoft reportedly consumed 6.4 million cubic metres of water to cool its data centres in 2022, reflecting a 34% jump from the previous year, thanks to its intensive AI development efforts. For regions facing water scarcity, this type of development may not be profitable to run despite the robust demand.

The high upfront costs, power tariffs, as well as operational and maintenance-related costs have made data centres a capital-intensive investment. As a result, we are seeing more collaborations between institutional investors and data centre operators to accelerate expansion. For example, mainland China-based GDS raised US\$587 million through an equity transfer deal, whereas KKR committed up to US\$800 million to acquire a 20% stake in Singtel's regional data centre business. The proceeds will be used to fund expansion across ASEAN markets, including Singapore, Indonesia, and Thailand, while exploring markets like Malaysia. Apart from direct investments, strategic partnerships have started to be forged, seen in the collaboration between Keppel DC and Mitsui Fudosan, who aim to tap into the opportunities in Japan and Southeast Asia. The duo has agreed on a proposed forward purchase of an under-development facility

in western Tokyo which will mark Keppel's first data centre project in the country.

However, the question arises whether data centre development will be constrained by location in the hunt for resources? In response, we have seen some innovative and sustainable solutions emerging, such as undersea and floating data centres, to address these concerns.

The viability of undersea data centres was first explored by Microsoft with its Project Natick experiment, which has tested two underwater prototypes in California and Scotland respectively since 2015. Locating data centres underwater near coastal cities could improve latency as a majority of the world's population lives within 120 miles of the coast. The servers in Microsoft's undersea data centre proved to be eight times more reliable than their land-based counterparts. According to Subsea Cloud, undersea data centres could reduce latency by up to 98% and cut power consumption and emissions by 40%. This concept is finding traction in Asia Pacific too, with China trialling it along its coast.

The Highlander Company launched a four-rack test vessel in Zhuhai in early 2021 and went live with China Telecom data on the servers later that year. This initial success soon bred further strategic alignments when the firm joined hands with the state-owned Assets Supervision and Administration Commission and Hainan Information Investment to develop the world's first commercial project, a massive 1,300-tonne project consisting of 100 vessels off the coast of Hainan Free Port. Subsequently, Hainan and Shandong provinces, as well as the two cities of Xiamen and Shenzhen have all included developing

underwater data centres as part of their five-year economic plan, indicating China's commitment to building a sustainable and efficient data infrastructure.

As sea levels rise and space on land is at a growing premium, some companies are exploring the concept of floating data centres. The first commercial project was launched by Nautilus Data Technologies, a US-based start-up. It consisted of vessels carrying server racks placed on a barge floating in the Port of Stockton in California. This prototype showed a 30% decrease in the energy consumption required for cooling. The mobility of these barges implies easy module deployment and replacement, promising cost-effective maintenance and scalability. Their natural buoyancy can also eliminate any flooding concerns, reducing the chances of equipment being damaged.

Subsequent expansions by Nautilus to Los Angeles and across the Atlantic to Marseilles signify a growing confidence in floating data centres. Meanwhile, in Singapore, Keppel Data Centres has also ventured out to sea after their US\$10 million investment in Nautilus. The company has recently received approval to build a floating data centre park in Singapore, potentially powered by liquefied natural gas and hydrogen. The master plan includes an entire marina filled with floating data centre modules sharing a floating power-generation module.

Compared to the facilities on the land, water-borne data centres are more cost-efficient and sustainable. It is also much easier to scale operations and customize to customer demand as there are no constraint on land.

Yet, despite these advantages, both concepts are still at a nascent phase and have yet to be commercialised. Many of these projects are either self-built facilities run by the tech giants or government-driven initiatives. The tried-and-true land-based data centres continue to dominate in the commercial field. Developed markets like Australia and Japan remain hotspots for investment, underpinned by advanced infrastructure and strong local demand. But as the scale of development expands, emerging markets present more growth opportunities, potentially giving rise to new regional clusters in the long term.

RAPID EXPANSION AHEAD IN SOUTHEAST ASIA

The Southeast Asian region is quickly catching up, with global and local players expressing an interest in establishing and enhancing their presence. Industry forecasts from Kearney suggest a bullish scenario for the data centre colocation sector, which is expected to grow at a CAGR of 16.5% over the next five to seven years, expanding from

1,100MW in 2021 to 2,674MW in 2026. This robust growth trajectory is set to eclipse the global rate of 11.6%, attracting a significant influx of capital ranging from US\$9 billion to US\$13 billion.

Malaysia

Malaysia is one of the fastest-growing markets, boosted by robust demand from Singapore and the rest of the Southeast Asia region. The country is currently connected to 29 submarine cable networks with 14 landing stations, offering excellent connectivity to the rest of Asia. A total investment of RM1.65 billion is dedicated to enhancing international submarine cable network connectivity, laying the foundations for further expansion. The Malaysian

government actively supports data centre growth by offering various tax incentives and subsidies, including 100% tax exemptions for eligible data centres and cloud business investments. The supportive policy, relatively lower cost of entry, the abundance of land and electricity at competitive prices, as well as good basic infrastructure have made Malaysia a development hotspot.

Tenaga Nasional Bhd (TNB), the largest electricity utility in Malaysia, had reportedly received 74 supply applications from data centre customers representing total maximum demand in excess of 11,000MW in Q1/2024. While not all the projects will be implemented, the group is expected to deliver electricity for nine data centre projects with a total energy demand of up to 635MW in 2023. In the long

run, TNB sees potential maximum electricity demand from data centres reaching more than 5,000MW by 2035.

At the moment, the dominant player in the Malaysian market is AIMS Data Centre, taking up most of the market share across different regions within the country, followed by TM One, NTT Global Data Centre and Bridge Data Centre. In recent years, we have also seen more international companies, including GDS, Yondr, Vantage Data Centre, YTL Data Center, AirTrunk, and Equinix, entering the field.

In terms of geography, the major clusters are located in Greater Kuala Lumpur (which includes Cyberjaya), Johor in Iskandar Malaysia, Penang and Kuching. Greater Kuala Lumpur is the largest market with about 37 facilities, contributing to around 75% of existing capacity, though Johor is quickly catching up in volume by capturing the overflow demand from Singapore. While the datacentre development moratorium in Singapore was recently lifted, new expansions are still subject to scrutiny and will probably be limited to a certain subset of operators. Rising costs and licensing hurdles have shifted the growth momentum to nearby locations like Johor in Malaysia and Batam in Indonesia.

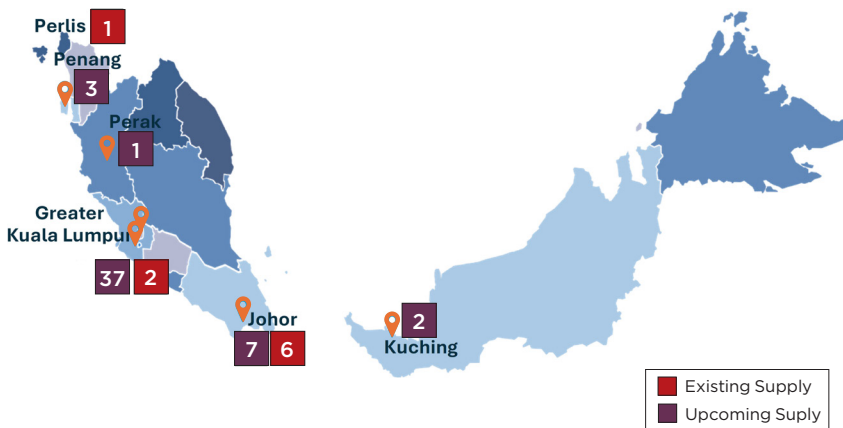
Johor is increasingly seen as a budding regional hyperscale hub, with expectations of over 700MW in supply joining the grid between 2024 and 2025, sporting an average size of 80MW. Local submarkets such as Nusajaya Tech Park and Sedenak Tech Park are the epicentres of these new projects. Some of the more notable market activity over the past six months includes YTL Power International’s partnership with US Tech firm NVIDIA to build AI capabilities into its 500MW campus, YTL Green Data Center Park, in the Iskandar region. The NVIDIA installation will be powered by on-site green energy, with YTL building a 300MW solar farm on location. Once completed, this project will become Malaysia’s first data centre campus to rely on solar energy for power. Meanwhile, Singapore-based ST Telemedia Global Data Centres (STT GDC) revealed plans to develop a 120MW green data centre campus in Nusa Cemerlang Industrial Park. Planned to span approximately 89,040 sq m, the STT Johor data centre campus will feature a smart energy management system, AI-enabled cooling and eco-friendly building materials, aiming to carry out carbon-neutral operations. Moreover, AirTrunk is also preparing to establish a hyperscale facility which employs an inventive cooling system, which combines direct-to-chip liquid cooling technology with an indirect evaporative cooling system, potentially resulting in a 20% reduction in energy consumption for its project AirTrunk(JHB1) in Johor Bahru.

TABLE 1: Notable Data Centre Occupiers in Malaysia by Region, 2024

REGION	NOTABLE OCCUPIERS
Northern Region (Penang & Perak)	open dc, TM ONE, EST GROUP, AIMS
Central Region (Greater Kuala Lumpur)	Microsoft, VANTAGE DATA CENTRES, NTT Group, YTL Data Centers, BRIDGE DATA CENTRES, Basis Bay, Edge Centres, TM ONE, AIMS
Southern Region (Iskandar Malaysia)	GDS 万国数据, AIRTRUNK, Keppel, EQUINIX, BRIDGE DATA CENTRES, yondr, YTL Data Centers, AIMS, TM ONE, open dc.

Source Savills Research & Consultancy

MAP 1: Malaysia Data Centre Distribution by Submarket, 2024



Source Savills Research & Consultancy

TABLE 2: Malaysia Data Centre Supply Pipeline, 2024

PROPERTY	LOCATION	CAPACITY (MW)	ESTIMATED COMPLETION
Sea Data Centre (JDC1)	YTL Green Data Center Park, Kulai, Iskandar Malaysia	72	2024
GDS and YTL Power International Berhad	YTL Green Data Center Park, Kulai, Iskandar Malaysia	NA	2024 (Phase 1)
AirTrunk (JHB1) Data Centre	Johor Bahru, Iskandar Malaysia	50 (Phase 1)	2024 (Phase 1)
International Business Exchange (IBX) Equinix Data Centre (JH1)	Nusajaya, Iskandar Malaysia	NA	2024
Yondr Data Centre	Sedenak Tech Park (STeP), Iskandar Malaysia	200	2024
Open DC	Delapan Economic Zone, Perlis	NA	2024
K2 Data Centre JHR1	Sedenak Tech Park (STeP), Iskandar Malaysia	300	2024
MN Holdings Berhad and Shanghai DC-Science Co Ltd	Sedenak Tech Park (STeP), Iskandar Malaysia	120	2024
ST Telemedia Global Data Centres (STT GDC) and Basis Bay	Cyberjaya, Greater KL	2.8 (Phase 1)	2024
PDG Data Center JH1	Sedenak Tech Park (STeP), Iskandar Malaysia	60 (Phase 1)	2024

Source Market sources, Savills Research & Consultancy

As Singapore’s policies continue to cap land-based data centres development, investor and operator interest is expected to continue tilting towards Malaysia. With its proactive approach to large-scale, sustainable development, Malaysia is poised to solidify its position as a leading market for data centre operations in the Southeast Asian region.

Indonesia

Indonesia is another growth engine for the data centre market in the Southeast Asia region. With an ambitious national vision, aiming to capture 40% of the ASEAN digital economy by 2025, the market is expecting to see more data centre developments as digital transformation gathers pace. Supported by the country’s growing digitalisation demand, high internet penetration rate, strong government support, accommodative policies and ease of market entry, Indonesia has continued to attract foreign investment. For example, Microsoft recently announced that it will invest US\$1.7 billion over the next four years in the development of cloud, data centres and AI services, marking the company’s largest single investment in its 29-year history in Indonesia.

There was a total of 61 data centre facilities located in Indonesia in 2023, spanning 474,000 sq m. While supply is spreading to new areas, the majority of the existing pipeline is still concentrated in Jakarta and West Java. These two regions have some of the best-in-class projects with specifications up to Tier IV, occupied by dominant operators like Keppel Data, NTT, DCI, Princeton, Equinix, Telkom, IDC, Logos and Amazon.

Major constraints hindering data centre investment in Indonesia include a lack of network infrastructure and an unstable power supply, particularly in rural areas. As such, developments have so far been concentrated only in the major cities. Therefore, most of the existing data centre projects are still largely concentrated around the Greater Jakarta region. Stock wise, the Greater Jakarta market will have 151.5MW of total colocation capacity by the end of 2023, with this number jumping to 192.2MW in 2024 and climbing to 462.8MW in 2028. With this spike in supply, this area is seeing temporary oversupply in the near term, leading some investors to sell their landbanks.

While investment in Jakarta may have cooled, the momentum has since shifted to other cities such as Surabaya, Bandung, Bali and Batam. Of these, Batam, an island just 20 km south of Singapore, is rapidly emerging as a strategic hyperscale market. The Indonesian government has designated one region in Batam, Nongsa Digital Park, as a Special Economic Zone to promote the

MAP 2: Indonesia Data Centre Distribution by Submarket, 2024



Source Savills Research & Consultancy

development of the digital economy, where companies are eligible for a 100 percent reduction in corporate income tax if they invest 100 billion rupiah (US\$6.56 million) for a period of 10 years.

With its strategic location, abundant power supply through both conventional and renewable sources and attractive tax tariffs, Batam has attracted around 291MW of data centre development. For example, a number of international operators, such as Data Center Frist (30MW), Princeton Digital Group (96MW), GDS (28MW) and BW Digital (80MW) have announced their hyperscale development plans in the Nongsa

Digital Park, boosting total capacity to over 200MW. Meanwhile, local operator Telkom Indonesia has formed a strategic partnership with Singtel and Medco Power and is building a 51MW hyperscale campus in Kabil Integrated Industrial Estate.

Looking ahead, we expect to see more local and international players entering the market. Overall, Indonesia’s data centre market capacity is set to increase from 514 MW in 2023 to a sizeable 1.41 GW in 2029. More hyperscale facilities are being developed outside Jakarta in Bekasi, Karawang, Bogor and Batam, reshaping the data centre landscape in Indonesia.

Vietnam

Vietnam is also growing rapidly in the region, with its market value forecast to grow to US\$1.04 billion by 2028, up from US\$561 million in 2022 and representing a CAGR of 10.7%. Steered by government initiatives to pivot the country as a crucial digital hub in the region, Vietnam is accelerating its digital transition. The government-backed Digital Transformation Program aims to transition 50% of businesses to digital platforms by 2025. Vietnam’s 5G connectivity supports edge data centre deployment and offers last-mile connectivity and lower latency services.

According to our data, Vietnam has 33 data centres with a total of 48 service providers, and an estimated capacity of about 80MW as of Q1/2024. The major hubs are located in Hanoi and Ho Chi Minh City, hosting 16 and 13 established facilities respectively. In terms of geographical distribution, the northern and southern regions account for 94% of existing supply and the central region only accounts for merely 6%. The country has five existing submarine cables connecting to APAC and EMEA countries and the US. Two upcoming cables expected between 2023 and 2024 include Asia Direct Cable (ADC) and Southeast Asia-Japan Cable 2 (SJC2).

The current data centre landscape in Vietnam is dominated by a handful of local telecommunication companies including Viettel IDC, VNPT, CMC Telecom, FTP Telecom and VNG Cloud. Meanwhile, foreign operators, such as GDS, Telehouse and NTT, who tend to enter the market through joint-venture partnerships, account for a much smaller share of the market.

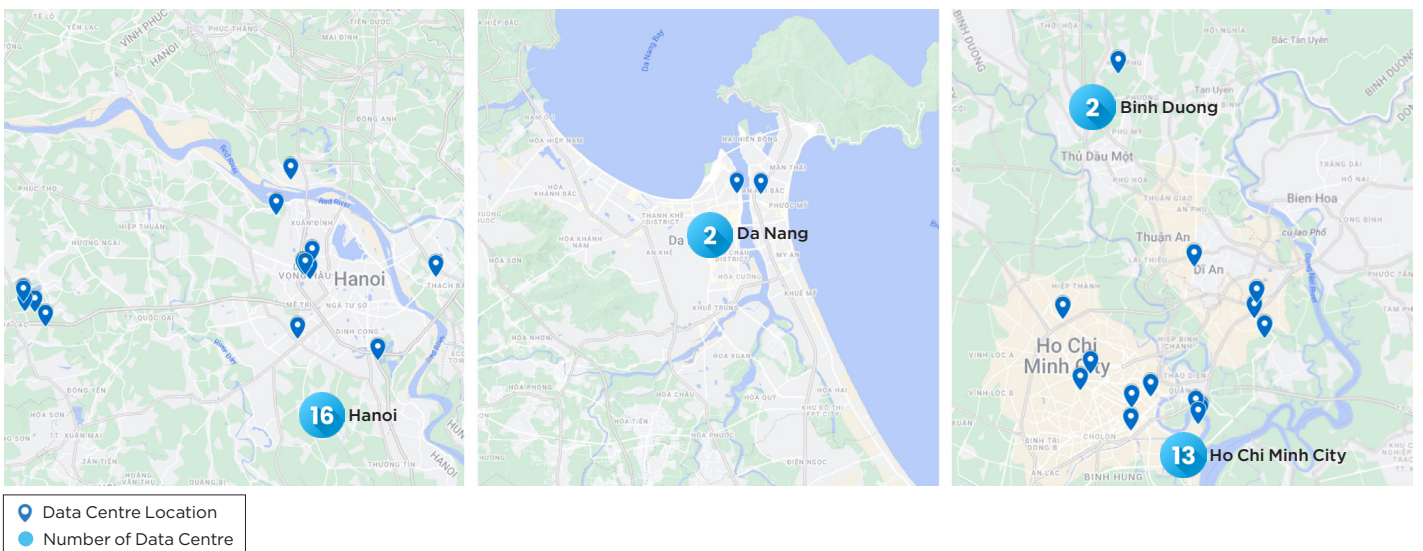
However, we have seen a surge in enquiries

TABLE 3: Batam Data Centre Supply Pipeline, 2023 to 2025F

DATA CENTRE OPERATOR	INVESTOR	LOCATION	CAPACITY (MW)	ESTIMATED COMPLETION
Data Center First	Data Center First, Gaw Capital Partners	Nongsa Digital Park, Batam	30	Q4/2023
Princeton Digital Group	Princeton Digital Group	Nongsa Digital Park, Batam	96	NA
NeutraDC	Telkom Indonesia, Singtel, Medco Power	Kabil Integrated Industrial Estate, Batam	51	2025 (Phase 1)
GDS	GDS, Indonesia Investment Authority	Nongsa Digital Park, Batam	28	2024
TBC	Gaw Capital Partners, Sinar Primera	Nongsa Digital Park, Batam	6	Q4/2024 (Phase 1)
BW Digital	BW Digital, Citramas Group	Nongsa Digital Park, Batam	80	NA

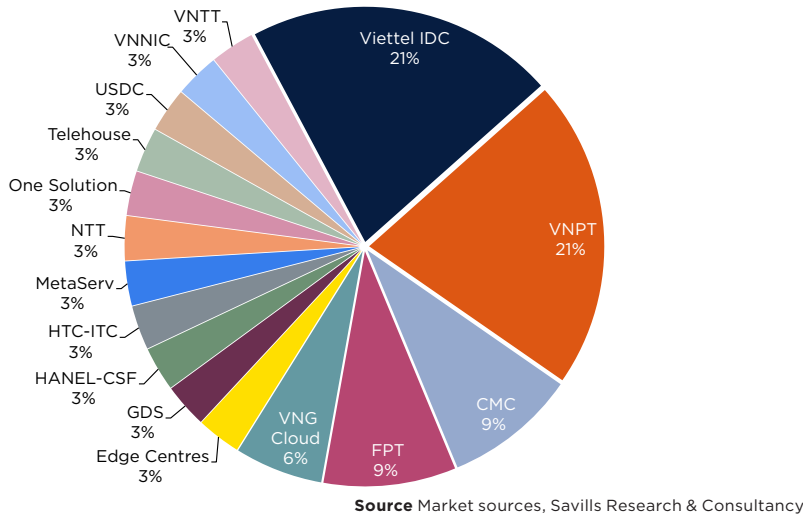
Source Market sources, Savills Research & Consultancy

MAP 3: Vietnam Data Centre Distribution by Submarket, 2024



Source Map data ©2024 Google, Market sources, Savills Research & Consultancy

GRAPH 5: Vietnam Data Centre Distribution by Operator, 2024



from foreign operators looking for locations in recent years. For example, Amazon Web Services announced the launch of edge data centres in Hanoi and Ho Chi Minh City in August 2022. Chinese tech giant, Alibaba, also announced a plan to build its own data centre to align with local regulations mandating data storage within the country. While specifics such as cost and timeline remain undisclosed, the company is expecting to invest more than US\$1 billion in this project, reflecting its confidence in the Vietnamese market.

At the moment, foreign entities are required to forge a commercial agreement with a Vietnamese telecom entity to offer data centre services within the country. However, this scenario may soon change.

The Vietnam Ministry of Information and Communications has recently proposed a Draft Telecom Decree, an expansion of its 2023 Telecom Law, which will enable direct foreign investment and 100% foreign ownership for the provision of data centre services, over-the-top services, and cloud computing. The 2023 Telecom Law is set to take effect from 1 July 2024, and policymakers expect the Draft Decree to be finalised and issued on the same day. We expect a substantial influx of capital to be directed to the Vietnam market once there is more clarity on related policies and regulations. According to a report by Research and Markets, Vietnam’s data centres market was valued at US\$685 million in 2023 and is expected to reach a worth of

US\$1.44 billion by 2029, reflecting a CAGR of 13.1% in the coming six-year period.

OUTLOOK

With digital transformation accelerating across industries, e-commerce services expanding their reach, and new technology transforming our lives, the demand for data centre capacity seems endless in Asia Pacific, cementing the region’s position as a pivotal player in the global data economy. This robust expansion is attracting considerable investment, with the sector emerging as an exciting asset class amid global macroeconomic uncertainties.

However, the industry also faces a number of challenges related to energy consumption, land acquisition and sustainability concerns. With the global push towards net-zero emissions gaining momentum, data centre operators are under increasing pressure to balance operational demands with environmental responsibility. The market has seen more efficient design solutions with the use of on-site renewable energy sources in the pipeline. Meanwhile, innovative solutions like undersea and floating data centres are being explored to mitigate these issues as well.

Looking forward, we also expect a dynamic shift in the region’s data centre landscape. The room for expansion in developed markets may be limited with higher levels of compliance and costs which are rapidly rising. Countries like Malaysia, Indonesia, and Vietnam are pivotal to the region’s growth momentum, each embracing digital ambitions and witnessing burgeoning data centre development. These emerging markets will help the region become a digital powerhouse over the next decade.



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