

Hong Kong Data Centre Development

Team effort is needed to attract international occupiers

Data centres' vital role in the development and success of an information economy is becoming more apparent every year. The work, commerce and leisure sectors have come to depend on connected devices to generate and transmit information because of technology's central role in everyday life.

The facts suggest that Hong Kong will need more data centres than the 28 it has now¹. According to Colliers' data, they occupy about 8.6 million square feet, with a further 5.2 million due before 2026².

Why Hong Kong

Hong Kong is a top data centre hub in Asia, offering:

- information security
- an international legal system
- access to mainland China
- 12 submarine cables handle traffic to and from the world. Several more cables are **planned**³ to cope with the increased demand from e-commerce, hyperscalers, content streaming, fintech, proptech and the Internet of Things
- a reliable and relatively cheap power supply
- 5G, which enhances the ability to meet foreign and PRC operator demand

HK vs Singapore

Hong Kong vies with Singapore to be Asia's top data centre arena⁴. This year, Singapore moved up the global rankings to 2nd place. Hong Kong is ranked 2nd in the Asia Pacific region and 6th globally after missing the Top 10 last year.

As the Greater Bay Area comes online, Hong Kong can massively expand its data centre market, whilst Singapore has no such land generation policy.

With its eye on its carbon emissions goals, Singapore had a moratorium on new data centre builds, which it has only just lifted. Hong Kong has a more flexible approach.

¹ "Hong Kong Data Center Facilities and Providers"; https://www.datacenterjournal.com/data-centers/hong-kong/hong-kong/#:~:text=Hong%20Kong%20has%20%20providers%20running%20its%20%28,Solutions%20%27s%20facilities%20include%20Evoque_Hong%20Kong%20-%20HK1. (Last updated December 2 2022, last accessed December 4 2022)

² "How are ESG mandates set to transform the SAR's thriving data centre landscape?", August 9 2022; <https://www.colliers.com/en-hk/news/e22-expert-talks-hong-kong-s-data-centres-stay-the-course> (Last accessed December 4 2022)

³ "Landing of submarine cables in Hong Kong"; https://www.ofca.gov.hk/en/industry_focus/infrastructures/submarine_cables/index.html, (Last revision March 25 2022, last accessed December 4 2022)

⁴ <https://www.bangkokpost.com/property/2261963/asia-pacific-set-to-become-worlds-largest-data-centre-region-over-next-decade>

Hong Kong's government foresight has resulted in several positive changes for data-centre development:

- Amending the land premium policy⁵. Developers pay a land premium to the government when a modification or change in land use results in a higher land value. Usually, this amount depends on the difference in value between the land value before and after. The government requires the company's bid to determine the premium, while the developer needs the figure to use in their bid. The government has changed to using a standard rate in some instances, making the entire process transparent, shorter and more streamlined.
- Launching the Industrial Revitalisation Scheme 2.0⁶ in recent years to encourage developers to convert aged industrial buildings to other commercial uses.

ESG's effect on the market

Environment, Social, and Governance principles are crucial to international operators and users committed to maintaining a high sustainability score. Data centres, especially top-grade outfits, cannot operate without a reliable power source. All stakeholders must be in harmony to achieve the best outcomes.

Developing new data centres includes creating sustainable buildings that adhere to ESG principles and will contribute to Hong Kong meeting its 2050 target for carbon neutrality. Retrofitting existing industrial facilities to meet green standards and certifications is an essential aspect of decarbonisation.

China Light & Power (CLP) has been at the forefront of helping developers add the requisite power infrastructure to their projects. For example, in June 2022, the company finalised a memorandum of understanding with ESR, a real estate services and investment company, to develop sustainable data centres and logistics facilities in Hong Kong and the Greater Bay Area⁷.

Key operational challenges faced by HK power suppliers

Data centre operators and investors are reluctant to invest without the all-important power infrastructure in place or at least guaranteed.

Like any business, investors do not want to be hindered by a tedious permissions process.

To plan effectively, investors and power suppliers need to know how the power will be allocated to ensure it is sufficient for a planned project.

Developers, occupiers and investors still, in many cases, do not have a standard rate for land use exchange, making budgeting a challenge.

⁵ "Arrangements for charging land premium at standard rates for lease modifications in New Development Areas"; <https://www.info.gov.hk/gia/general/202203/31/P2022033100469.htm>

⁶ "Revitalisation of Industrial Buildings"; <https://www.landsd.gov.hk/en/land-disposal-transaction/land-transaction/revitalisation-industrial-buildings-2018.html> (Last revision July 26 2022, last accessed December 4 2022)

⁷ "CLP Signs MoU with ESR For Developing Sustainable Data Centre and Logistics Projects"; <https://esr-publicweb-hk.oss-cn-hongkong.aliyuncs.com/wp-content/uploads/2022/06/Press-release-CLP-signs-MoU-with-ESR-20220606.pdf> (Last accessed November 27 2022)

Recommendations

Status quo	Recommendations	Expected outcome
Land Sales do not allow sufficient time for stakeholders to plan projects	Plan land sales for data-centre sites further ahead with a greater degree of detail and certainty	Power suppliers will be able to work with potential occupiers regarding their power needs
Stakeholders cannot be sure their power application will be accepted	Implement a transparent power application procedure	Reduce uncertainty around this core issue for data centres to bolster investor confidence
Data Centres can take between six and 10 years to go from plan to project	Streamline related approvals from government authorities	Minimise the time for ROI
Data centres require a large amount of power, but the heat returned is not high enough to be recycled and is often absorbed by the ambient atmosphere or dumped into the ocean, exacerbating environmental damage	Seek advice from specialists on how best to reuse the heat generated from Hong Kong's data centres. For example, better industrial planning that allows ghost kitchens to benefit from nearby data centre heat	Mitigate the adverse effects of heat from data centre cooling systems, increasing users, occupiers and Hong Kong's sustainability ratings
Land premiums are set by gauging the difference in value between the bare land and the land with a completed development.	Implement a standard rate for all data centre land exchanges or spontaneously change use rights to accommodate data centres before the land enters the sale.	Knowing how much they will pay for land exchange, or that exchange being <i>a fait accompli</i> by the time the property enters the market, allows prospective developers and investors to ascertain their budgets.