



ARTICLE | Future Cities

# Through the Looking Glass

SEARCHING FOR THE NEXT DATA CENTRE WONDERLAND

By Hong Yi Ling and Udit Sabharwal

"Curiouser and curiouser!" – such is the state of the data centre landscape across the globe.

Over the past decade, data centres have become synonymous with business survival. The global data centre industry has grown exponentially over the past 10 years. According to the International Energy Agency (IEA), Data Centre workloads were 9.4 times those in 2020 as compared to a decade earlier.<sup>1</sup> CBRE Research shows that direct investment in the Asia Pacific data centre sector totalled US\$4.8 billion in 2021—more than double the previous high of US\$2.2 billion in 2020 and surpassing investment volumes for the past four years combined.<sup>2</sup> Driving these trends are a variety of factors including but not limited to the fourth industrial revolution, emergence of 4G/5G, Big Data & the Internet of Things, and the emergence of the public and private cloud. More than ever, data centres are showing up in investment portfolios, helping investors realise superior returns for their portfolios through this asset class.

To capitalise on opportunities, investors, developers and occupiers familiar with the asset class are moving beyond established or Tier-1 markets (Singapore, Hong Kong, Sydney and Tokyo). We have observed three key drivers of this trend over the past 12 months:

## DATA REGULATION AND LOCALISATION:

The Asia Pacific region is complex and comprises more than a dozen markets that can act as suitable data centre hubs. As Governments recognise the need to regulate certain data, markets are in the process of deploying data localisation laws. The advent of such policies will lead to more distributed data centre networks spanning multiple geographies. Optimising the network will be key to ensuring that costs are kept under control.

<sup>1</sup> <https://www.iea.org/data-and-statistics/charts/global-trends-in-internet-traffic-data-centres-workloads-and-data-centre-energy-use-2010-2020>

<sup>2</sup> <https://apacresearch.cbcre.com/en/research-and-reports/Asia-Pacific-Data-Centre-Trends-H2-2021>

**EDGE COMPUTING:**

Edge Computing relies on remotely located data centres to create a highly efficient computation model. To drive lower latencies and augment data centre capacities, data centres are moving beyond traditional Tier-1 markets and into Tier-2 and Tier-3 cities. For instance, in China – companies are moving beyond the Greater Beijing and Tianjin area and expanding into cities such as Langfang, Zhangjiakou and Hebei.

**LOWER INFRASTRUCTURE COSTS:**

One of the biggest drivers beyond Tier-1 markets is the availability of more affordable real estate, particularly large-scale industrial land parcels and cheap utilities. Compared to Tier-1 markets which have limited availability of land parcels for newer developments, Tier-2 markets offer significant opportunities for scaling, including setting up large hyperscale data centres.

Despite the ever-increasing interest from market participants, deployment of capital in the asset class has always been a challenge given the opacity of the market and the lack of transparent, timely and trustworthy information. Coupled with the geographic expanse of the APAC region, everyone is searching for the next data centre wonderland.

**Tier-1 and Tier-2 Markets**



Identifying the right market for investment or deployment cannot be based on ‘gut feeling’ alone. While there are clear areas where emerging markets outperform their Tier-1 peers, the Tier-1 markets also come with inherent advantages such as more mature data centre ecosystems, greater connectivity, and a stronger base of customers and end users which often make it challenging to choose the most suitable location for your business.

CBRE believes that there is no one-size-fits-all approach. Factors that may help one investor identify a suitable market may vary for another. Similarly, a co-location operator or a hyperscaler may wish to use synergies from existing operations in a country and expand to a different city rather than entering a new country entirely.

Some factors that should be considered include the macroeconomic environment, foreign ownership limits, business, political risks, natural disaster risks to the infrastructure, connectivity, power & utility availability, real estate and the data centre ecosystem.

A multi-dimensional approach is key to choosing the next Data Centre wonderland

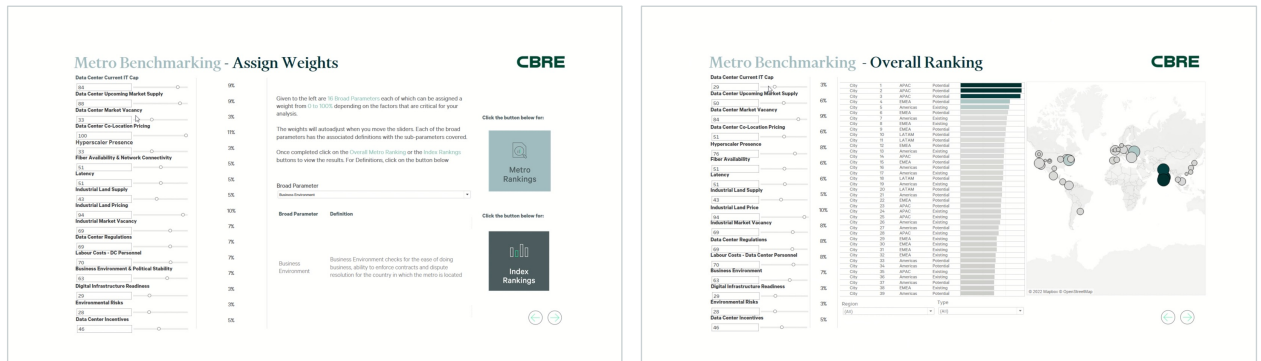


- A. Macro Environment
- B. Business & Political Risks
- C. Natural Disaster Risks
- D. Infrastructure
- E. Connectivity
- F. Real Estate
- G. Digital Readiness
- H. Data Centre Rentals
- I. Power & Utilities
- J. Data Centre Ecosystem
- K. Government Legislation
- L. Talent Availability
- M. Market Yields
- N. Global Data Centre Strategy

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In order to help clients make more scientific decision, CBRE has developed LID, or the Location Intelligence Dashboard – a data intelligence dashboard that enables a holistic benchmarking of markets at both the country and the metro area level. With over 100+ factors spanning 15+ categories, the insights that are provided can be tailored for occupiers, investors or developers. LID is a self-adjusting weighting and comparison tool that enables users to derive insights on all the major data centre markets in order to drive investment and strategic decisions around co-location / hyperscale deployments.

### CBRE Location Intelligence Dashboard



As markets change dramatically over the course of the next 18-24 months, new data centre wonderlands will emerge. Choosing the right location and being an early entrant can create a differentiated advantage for investors, occupiers and developers alike, and shape the next data centre hubs.

For more information on the Global Location Intelligence Dashboard for Data Centres please reach out to:

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