Navigating Cycles: The Rationale for Data Centre Investment

July 2025

AI Application and Computing Power Demand

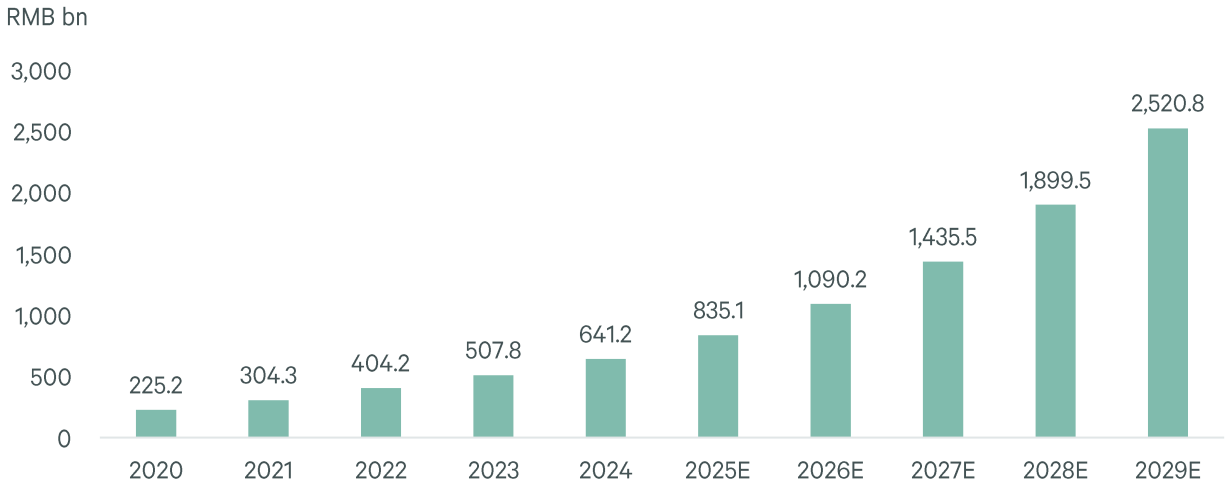
Led by the launch of DeepSeek-R1 in January 2025, recent breakthroughs in China's large-model capabilities and sharply lower deployment costs are driving the rapid emergence of Artificial Intelligence (AI) applications across a broad range of sectors. This has spurred the launch of AI Agents; autonomous software systems that harness AI to perform tasks for users.

Demand for computing power has consequently shown strong growth momentum. IDC estimates China's intelligent computing power[1] will reach 1,037.3 EFLOPS in 2025, with a 168% surge projected by 2028.

Being the physical repositories of computing power, data centres are poised for new growth opportunities, with leading domestic internet firms planning to boost capital spending on cloud and AI infrastructure. CBRE expects Tencent's, Alibaba's and Baidu's combined 2025 capital expenditure to exceed RMB 230 billion, 1.5x 2024 levels.

KZ Consulting[2] forecasts China IDC market to see a 32% CAGR from 2025 to 2029. Following recent data centre REIT launches, data centre investment demand continues to grow, with the sector set to emerge as a focal point of China's commercial real estate investment market during the 15th Five-Year Plan period.

Figure 1: China IDC Market Scale and Forecast



Source: KZ Consulting, CBRE Research, July 2025.

Note 1: The scale of intelligent computing power is calculated based on FP16.
Note 2: 2024-2025 China IDC Industry Development Research Report, KZ Consulting, March 2025.

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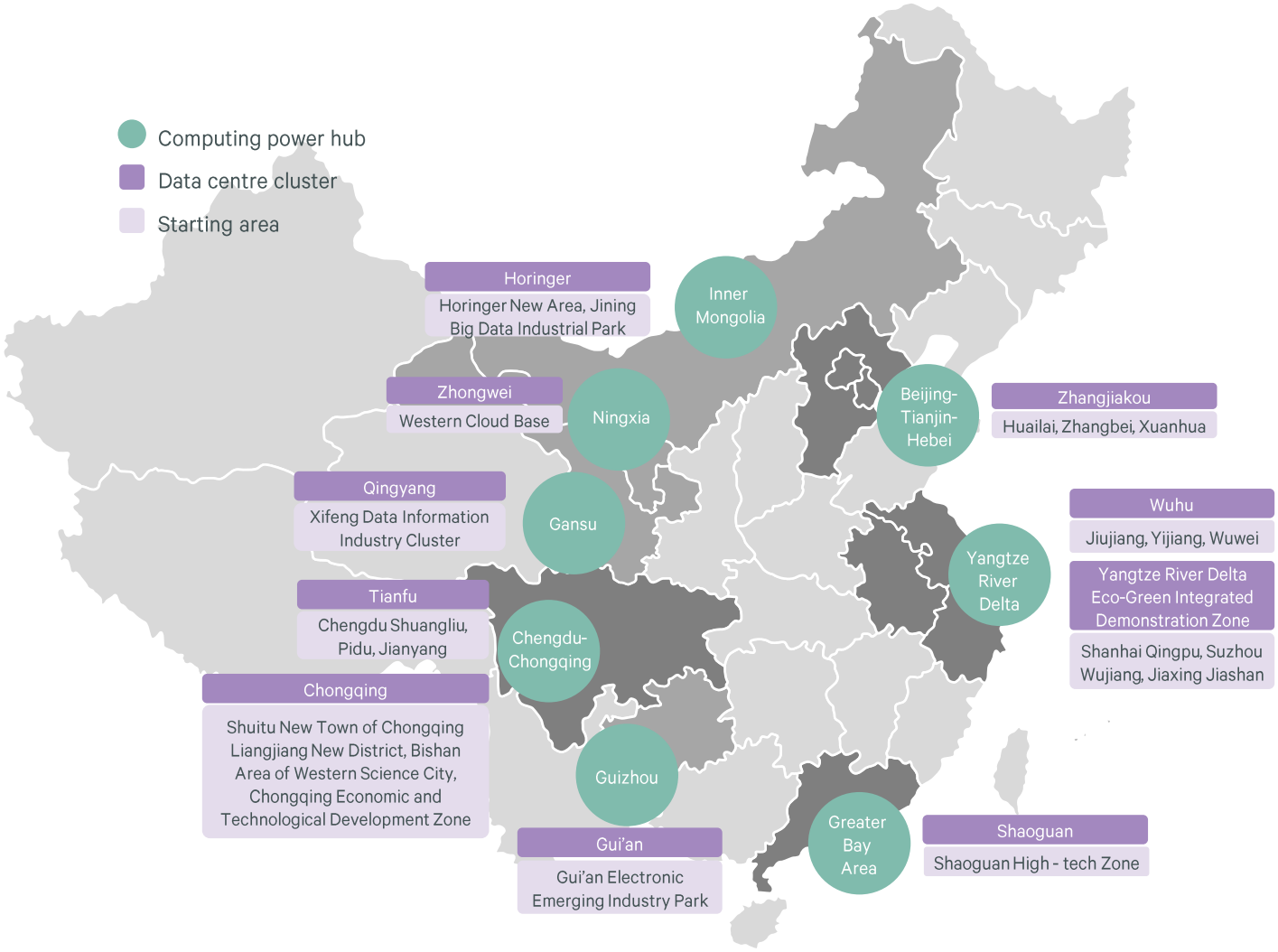
Data Centre Development Trends

Intensification

In February 2022, the government launched the Eastern Data and Western Computing project. Eight regions—Beijing-Tianjin-Hebei, Yangtze River Delta, Greater Bay Area, Chengdu-Chongqing, Inner Mongolia, Guizhou, Gansu and Ningxia—were approved as national computing power hubs, with 10 national data centre clusters planned. This strategy aims to optimise national computing resource allocation and shape current data centre distribution.

Given low-latency needs for financial transactions, industrial internet and AI inference, Beijing-Tianjin-Hebei, Yangtze River Delta and Greater Bay Area remain key for real-time computing demand. Western hubs such as Ningxia and Guizhou, with vast land and ample clean energy, focus on non-real-time tasks such as data storage, offline analysis, large-model training. Efficient data transmission enables collaborative complementarity between eastern and western computing resources.

Figure 2: China's Eight Major Computing Power Hubs and Ten Data Centre Clusters



Source: CBRE Research, July 2025.

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Sustainability and Energy Efficiency

China Academy of Information and Communications Technology data show that nationwide data centre electricity demand reached 150 billion kWh in 2023, accounting for 1.6% of total social electricity consumption. China Petrochemical's China Energy Outlook 2060 (2025 Edition) predicts that by 2030, this demand will hit 500 billion kWh, comprising 3.3% of total consumption. With its share of total consumption doubling, the low-carbon transition of the data centre industry is now a priority.

Published in July 2024, the Special Action Plan for Green and Low-Carbon Development of Data Centres stipulates that by the end of 2025, the national average PUE of data centres should drop below 1.5; new and expanded large and extra-large data centres' PUE should be under 1.25; and data centres in national hubs' PUE should be under 1.2. In addition, new data centres in national hubs should source over 80% of their electricity from clean energy.

Local governments have also set energy efficiency requirements. For example, starting in 2026, Beijing authorities will impose differential electricity prices on data centres with a PUE above 1.35, and Shenzhen's local government has announced plans to renovate or phase out outdated small-scale data centres with a PUE over 1.4.

Growing ESG requirements from the demand side are also driving a stronger focus on sustainability and energy efficiency in the data centre sector. Alibaba's 2024 ESG report noted that Alibaba Cloud leased data centres currently have a PUE of 1.269, with six in Guangdong using 100% clean energy. Leading users such as Alibaba Cloud, Tencent Cloud, and ByteDance have committed to using 100% green electricity supply by 2030.

Figure 3: Latest Requirements for Data Centres in Beijing, Shanghai and Shenzhen

BEIJING	SHANGHAI	SHENZHEN
By 2027 Average annual PUE Below **1.35**	In 15th Five-Year Plan period New projects PUE Below **1.25**	By 2025 New projects PUE Not exceeding **1.25**
By 2025 Proportion of green electricity used **20-40%**	Existing projects PUE Not exceeding **1.4**	Clean energy Usage Rate of New Project Over **50%**

Source: Beijing Existing Data Centre Optimisation Work Plan (2024-2027), Shanghai New Infrastructure Carbon Peak Implementation Plan, Shenzhen Carbon Peak Implementation Plan, CBRE Research, July 2025.

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Intelligent Computing-Oriented Development

McKinsey[3] predicts that global computing power demand will nearly triple by 2030 compared to 2025, with approximately 70% coming from AI-related workload. The new wave of AI will drive growth in China's intelligent computing data centre market. IDC projects China's intelligent computing power scale will achieve a CAGR of 38.9% from 2025 to 2028, outpacing the 17.8% growth rate of general computing power. Intelligent computing data centres are already emerging as a new growth engine for the data centre industry.

Unlike general-purpose data centres, which have broad applicability, intelligent computing data centres are specialised computing hubs designed to provide computing power, data, and algorithm services for AI applications. Their technical architecture and service models are more tailored to core scenarios such as AI model training and inference. The shift from CPU chip architectures to GPU clusters entails more than just an increase in the number of server racks; it also imposes higher requirements on physical real estate.

Figure 4: Property Parameters and Site Selection Requirements

	General-Purpose Data Centre	Intelligent Computing Data Centre
Power density per cabinet	6-15 kw	20-40 kw
Cooling system	Mostly adopt air-cooled heat dissipation technology	Air-liquid hybrid or liquid cooling is the mainstay
Property type	Large flat or low-rise buildings (≤3 floors) Enable quick delivery of prefab modules; Maximise natural cold sources to boost refrigeration efficiency	Multi-story stacking (3-5 floors) Vertical links between adjacent floors; Enables compact cluster networking and shorter transmission distances
Floor height	4.5-6 m	6-8 m
Load-bearing capacity	8-12 kn/M²	12-20 kn/M²
Site selection requirements	Balancing cost and reliability, prefer tier II cities	Training segment focuses on electricity costs and tends to select regions rich in renewable energy such as Inner Mongolia, Ningxia, and Guizhou Inference segment has higher latency requirements and tends to choose tier I cities and surrounding areas
Site selection core indicators	- Electricity prices and power stability - Network connectivity - Land cost	Training segment - Proportion of renewable energy (≥50%) - Electricity price (<0.3 RMB/kWh) - Heat dissipation conditions Inference segment - Radius from the user-end (≤50 km) - Backbone network node level (≤2 hops) - Urban emergency support capability

Source: CBRE Research, July 2025.

Note 3: The cost of compute: A $7 trillion race to scale data centers, McKinsey, April 2025.

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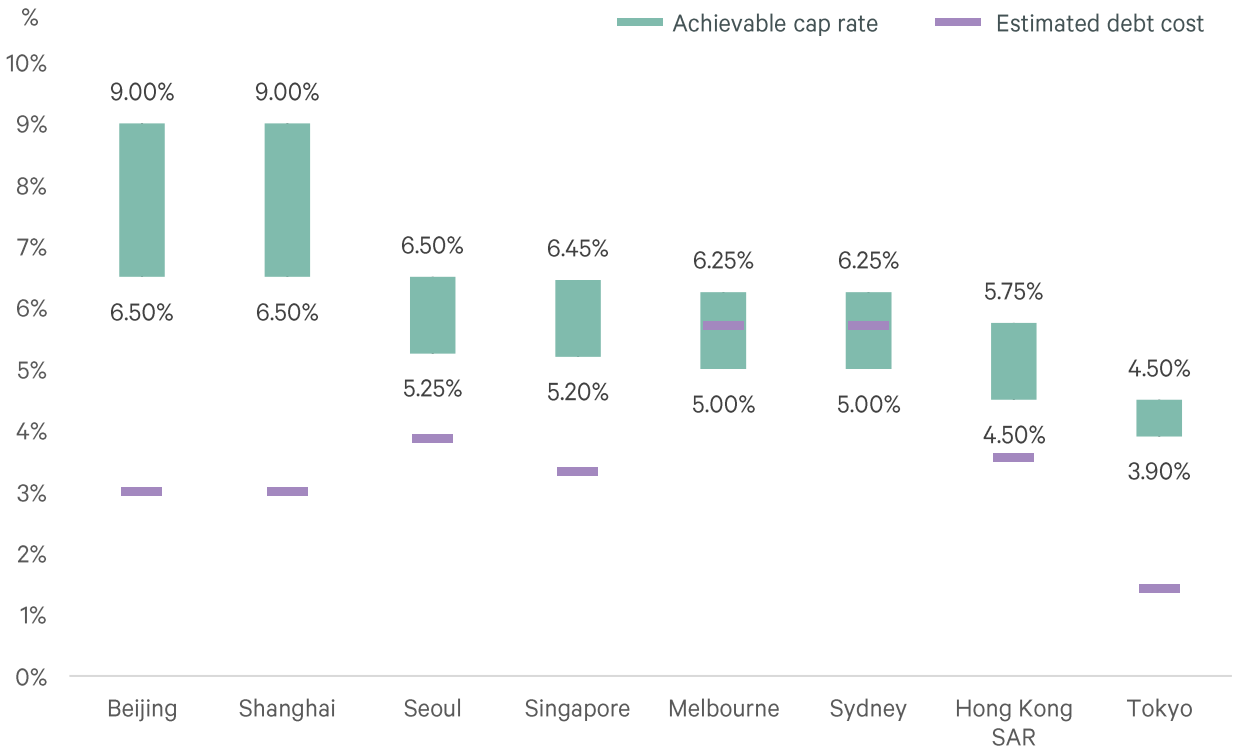
Data Centre Investment Demand

CBRE's latest Asia Pacific Cap Rate Survey uncovered a sharp increase in investor enquiries about data centres, rising from 49% in Q3 2024 to 63% in Q1 2025. Data centres are emerging as one of the most closely watched asset classes in Asia Pacific.

In China, CBRE has observed a substantial increase in data centre-related fundraising activity. Highlights include GLP's completion of its raising for its first China's data centre fund, with an investment scale of approximately RMB 2.6 billion, and the first close of CDH Mezzanine's new specialised fund focusing on data centres, with a value of RMB 1 billion.

In terms of asset pricing, data centre cap rates in Beijing and Shanghai range from 6.5% to 9.0%. Coupled with the steady decline in financing costs witnessed this year, these two markets command a spread advantage over other cities in Asia Pacific. CBRE's comparison of cap rate trends across property types in China reveals that, compared with traditional asset types, data centre cap rates have shown greater stability; an attribute which should attract more attention from long-term capital.

Figure 5: Q1 2025 Data Centre Cap Rates in Major Asia Pacific Markets



Source: Q1 2025 Asia Pacific Cap Rate Survey, CBRE Research, June 2025.
Respondents include CBRE Capital Market and Valuation teams across the region.

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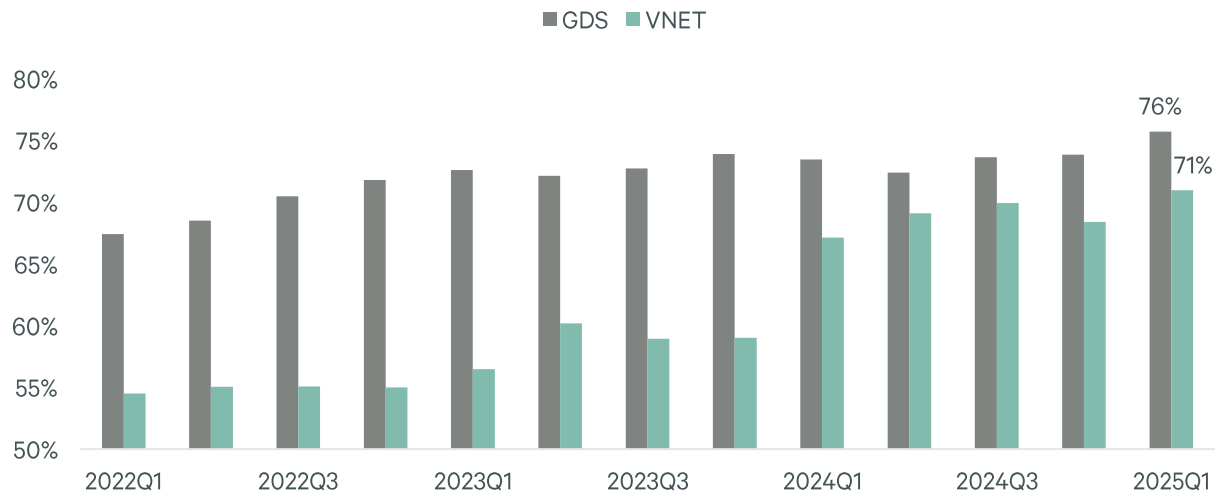
Data Centre End-User Demand

Since the start of this year, third-party data centre service providers such as GDS and VNET have successively secured new orders in AI, cloud computing and other fields. The accelerated development of AI applications is significantly boosting demand for data centres across China.

An analysis and calculation by CBRE based on data disclosed by GDS and VNET shows that these two firms' combined new rack-up demand reached 109,000 KW in Q1 2025, up 43% from the average quarterly figure of last year. Their average rack-up rates at the end of Q1 2025 stood at 76% and 71% respectively, the highest since 2022.

Figure 6: Third-Party Data Centre Operator Utilisation Rate[4]



Source: GDS and VENT Quarterly Financial Report, CBRE Research, June 2025.

Note 4: GDS statistics cover the mainland China market, excluding self-built data centres in Hong Kong but including third-party data centres in Hong Kong and Macau; VNET data from 2024 onwards, the base-type capacity is converted into the number of cabinets at a standard of 8KW per cabinet, then added to the number of urban-type cabinets to calculate the overall utilisation rate.

Benefiting from the rapid growth in demand, China data centre rents have gradually stabilised since 2024. Rents in tier I cities and surrounding areas, where energy consumption indicators are tight and low-latency demand is concentrated, are expected to see growth in the coming years.

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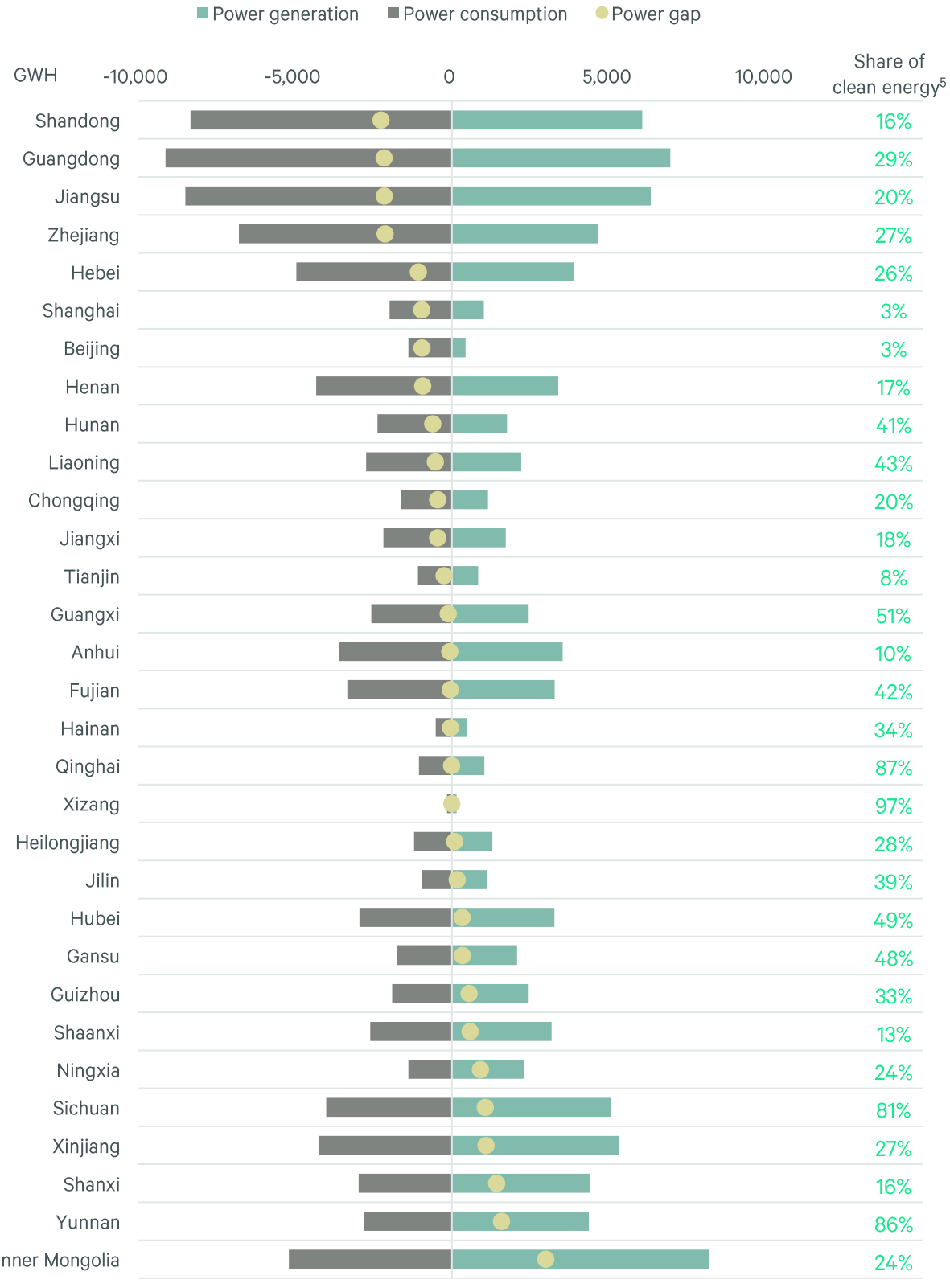
Figure 7: Power Generation and Consumption by Province & Municipality in China



Source: National Bureau of Statistics, CBRE Research, July 2025.

Note 5: Clean energy includes hydropower, nuclear power, wind power and solar power.

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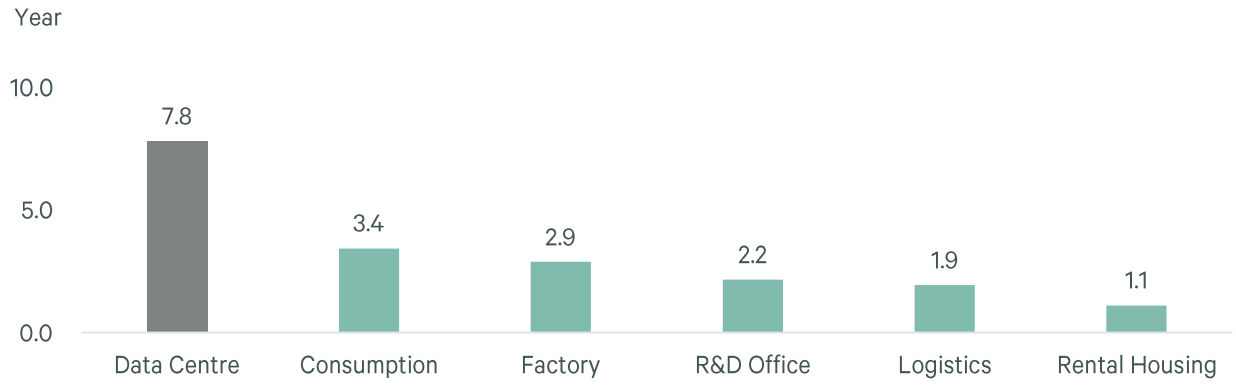
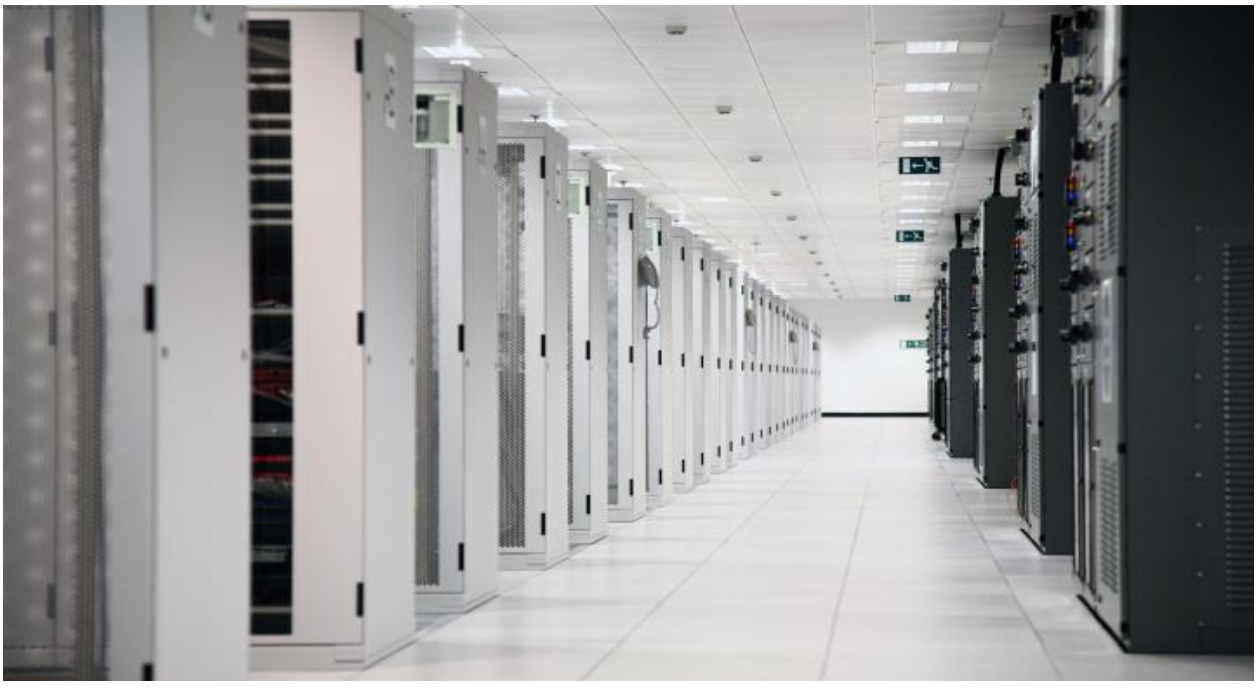
For existing projects, DC Byte data show that wholesale projects dominate the market with an absolute share of 94%. Thanks to their advantage of lease terms ranging from five to 15 years or even longer, wholesale projects have played a key role in stabilising data centre leasing demand in China. CBRE's analysis of the underlying assets of public REITs reveals that the average remaining lease term of data centres in China is 7.8 years, significantly higher than that of other asset types. The certainty of long-term returns holds substantial appeal to investors seeking to navigate economic fluctuations.

Figure 8: Q1 2025 Average Remaining Lease Terms of Underlying Assets in public REITs[6]



Source: Public REIT Quarterly Report, Public REIT Prospectus, CBRE Research, July 2025.
Note 6: Excludes REITs with missing data. Data related to data centres is derived from two public REITs that have been approved and are pending listing.
Data centres are weighted averaged based on the number of cabinets, other property types are weighted averaged based on leased area.



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Exit Routes for Data Center Investment

Five data centre asset securitisation products have been approved or issued since Q4 2024, with total fundraising expected to reach RMB 15.11 billion, reflecting strong capital market recognition and maturing exit mechanisms.

CBRE's analysis shows that underlying assets are in the Beijing-Tianjin-Hebei and Yangtze River Delta regions, with a PUE of 1.2-1.3, aligning with data centre sustainability trends and confirming the importance of energy efficiency.

At the product structure level, diversified securitisation tools cover data centres' full life cycle:

Pre-REIT: For data centres in the operational ramp-up or renovation and upgrade phase. Funds are raised via private placement to support the cultivation period, with exits via public REIT upon maturity.

Hold-to-own real estate ABS: For projects with stable operations but not yet meeting public REIT listing standards. Funds are raised privately, offering financing flexibility and stable returns.

Public REIT: For mature, stably operating data centres with steady cash flows. Asset securitisation is realised through public issuance, providing investors with standardised, highly liquid investment targets.

Figure 9: China Data Centre Asset Securitisation Products

Time	Type	Product Name	Fundraising Scale[7] (RMB bn)	Underlying Asset
2024Q4	Pre-REIT	VNET Data Centre Pre-REIT Fund	5.74	Taicang Data Centre PhI / II
2025Q1	Hold-to-own Real Estate ABS	CITIC Securities - GDS 2025 Series 1 Data Centre Hold-to-own Real Estate Asset-backed Special Plan	1.61	Beijing Shunyi Nanfaxin Data Centre
2025Q2	Hold-to-own Real Estate ABS	CPIC Asset - VNET Data Centre Hold-to-Own Real Estate Asset-Backed Special Plan	0.86	Beijing Yizhuang Data Center
2025Q2	Public REIT	Southern Range Technology Data Centre Closed-end Infrastructure Securities Investment Fund	4.50	Hebei Langfang ICFZ Data Centre A18
2025Q2	Public REIT	Southern GDS Data Centre Closed - end Infrastructure Securities Investment Fund	2.40	Kunshan Guojin Cloud - computing Data Centre

Source: CBRE Research, July 2025.
Note7: Fundraising scale of VNET Data Centre Pre-REIT Fund is based on asset valuation.

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