MARKETBEAT
SEOUL
Data Centre 1H 2024

CUSHMAN & WAKEFIELD

MARKET FUNDAMENTALS

22 /45
No. of Operators / Data Centres

476MW
In Operation

218MW / 537MW
Under Construction / Planned

14%
Vacancy Rate

** Key Indicators are based on operational or under construction Hyperscale Cloud, Colo, Edge & Telco data centre facilities by major operators in the greater Seoul market and excludes Captive and ICT.*
Source: Cushman & Wakefield

ECONOMIC INDICATORS

	YOY Chg	12-Month Forecast
3.3% GDP Growth	▲	▼
2.4% CPI Growth	▼	–
2.9% Unemployment	▲	–

Source: KOSIS, Bank of Korea, 2024 Q2

MARKET OVERVIEW

The development of data centres in the Greater Seoul Area (GSA) remains constrained by the availability of suitable land and the prolonged duration of the permitting process. Local opposition to these facilities has resulted in a lack of consensus regarding their design and location. Changes in demand from traditional colocation service users resulted in temporary oversupply in 1H 2024, leading the vacancy rate to rise to 14% from 9% in 2H 2023. In June 2024, the South Korean government enacted the Dispersed Energy Promotion Special Act, introducing power rate discounts and infrastructure support measures outside the GSA. Despite the constraints, the incorporation of 161 MW of data centre capacity within the metropolitan area has maintained its status as a key market for international operators. Currently, 63% of the operational capacity within the GSA data centre market is accounted for by colocation providers.

DEVELOPMENT / SALES & INVESTMENT

In the first half of 2024, a sole new data centre, MapleCloud in Siheung, obtained construction permits, a sharp drop from the seven new permits of 2H 2023. An amendment to the Electricity Utility Act in March 2023 limited electricity availability to data centres in the GSA, allowing KEPCO to reduce supply when demand exceeds 5 MW. Due to expected power restrictions and related complaints, the value of completed data centres in the GSA is likely to rise. Construction delays from public opposition have also reduced supply. Just one data centre, Gimpo Digital Seoul2, was completed in 1H 2024, with the Goyang data centre's construction delayed by local opposition. With ongoing power restrictions and opposition, existing data centre values in the GSA are set to increase. Completed data centres include the Epoch Anyang Center and Dreammark 1 Incheon Gajwa. Macquarie Infrastructure is the preferred bidder for the sale of Igis Asset Management's Hanam IDC, paving the way for data centre transactions in Korea. The final closing date is scheduled for the second half of 2024.

POLICY & REGULATIONS

Since 2023, South Korea has adjusted data centre regulations in response to power shortages and land speculation. Under the Dispersed Energy Promotion Special Act, KEPCO and MOTIE are offering a 50% discount on electric facility charges for data centers receiving 22.9kV power in non-metropolitan areas until May 2026.. However, data centre users still prefer the GSA due to latency and workforce concerns. The new Decentralization Law will require Power System Impact assessments for facilities using more than 10 MW, potentially increasing interest in edge data centres in strategic locations and encouraging creative solutions, such as utilizing existing buildings with infrastructure and permits already in place. Following the Pangyo data centre fire, new laws have been implemented to improve digital infrastructure safety. Data centres with 22,500㎡ of floor space, 40 MW of power capacity, and KRW 10 billion or more in revenue must establish a disaster management system. Facilities with 500㎡ or more must also take additional protection measures.

1H 2024 BUILDING PERMITS ACQUIREMENT LIST

PROPERTY	LOCATION	CLUSTER	OPERATOR/DEVELOPER	SQM	IT LOAD (MW)
Maple Cloud data centre	Siheung	Other	N/A	64,704	N/A

1H 2024 CONSTRUCTION COMMENCEMENT LIST

PROPERTY	LOCATION	CLUSTER	OPERATOR/DEVELOPER	SQM	IT LOAD (MW)
Digital Seoul 2 (ICN11)	Gimpo	Other	Digital Realty	95,051	64 (Phase1: 10.6MW)

1H 2024 NEW SUPPLIES LIST

PROPERTY	LOCATION	CLUSTER	OPERATOR/DEVELOPER	SQM	IT LOAD (MW)
EPOCH Anyang data centre	Anyang	Anyang	Actis / Pavilion AMC	33,711	26
DreamMark1 Incheon IDC	Incheon	Incheon/Bucheon	Dreammark1	7,314	6

1H 2024 SALES

LOCATION	ZONING	SQM	PRICE (Mn.KRW)	SALES DATE
Pungsan-dong, Hanam-si, Gyeonggi-do	Quasi-residential area	6,638 (Land) & 41,919 (Building)	743,606	Jun-2024 (Pending)

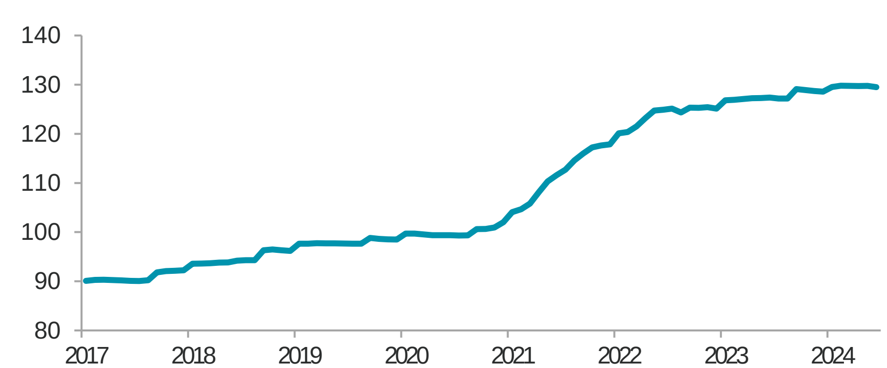
SIGNIFICANT CONSTRUCTION UPDATES[1]

PROPERTY	LOCATION	CLUSTER	OPERATOR/DEVELOPER	SQM	IT LOAD (MW)	STAGE
Digital Edge DC SEL2	Incheon	Incheon/Bucheon	Digital Edge DC	39,790	75 (Phase 1: 18.75MW)	U/C
Pacific Sunny Data Centre	Yongin	Seongnam/Yongin	LG CNS	99,074	64 (Phase1:32MW)	U/C
PEACH Data Centre	Bucheon	Incheon/Bucheon	KT Cloud	76,037	48 (Phase1: 6MW)	U/C
Gangnam IDC	Seocho	Gangnam	Empyrion DC	56,017	29.4 (Phase 1: 12MW)	U/C
Gasan Iwill Data Centre	Geumcheon	Mockdong/Gasan	KT Cloud	36,518	26 (Phase1: 13MW)	U/C
Actis Yangpyeong Data Centre	Yeongdeungpo	Mockdong/Gasan	Actis	26,411	26 (Phase1: 13MW)	U/C
SL3x	Goyang	Sangam/Ilsan	Equinix	22,027	24 (Pase1: 12MW)	U/C
Gasan Data Centre	Geumcheon	Mockdong/Gasan	DCI	17,423	15MW (Phase1: 6MW)	U/C
Gabia Gwacheon Data Centre	Gwacheon	Anyang/Gwacheon	Gabia	54,674	14 (Phase1 : 7MW)	U/C
Bucheon AI Data Centre	Bucheon	Incheon/Bucheon	Naver Cloud	18,683	4.8	U/C

[1] *Excludes Captive & ICT construction updates*

KOREA CONSTURCTION COST INDEX

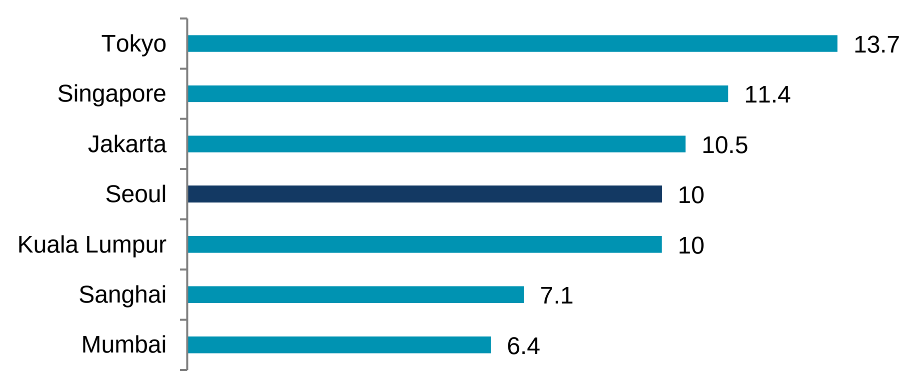
(2020=100)



Source: Korea Institute of Civil Engineering

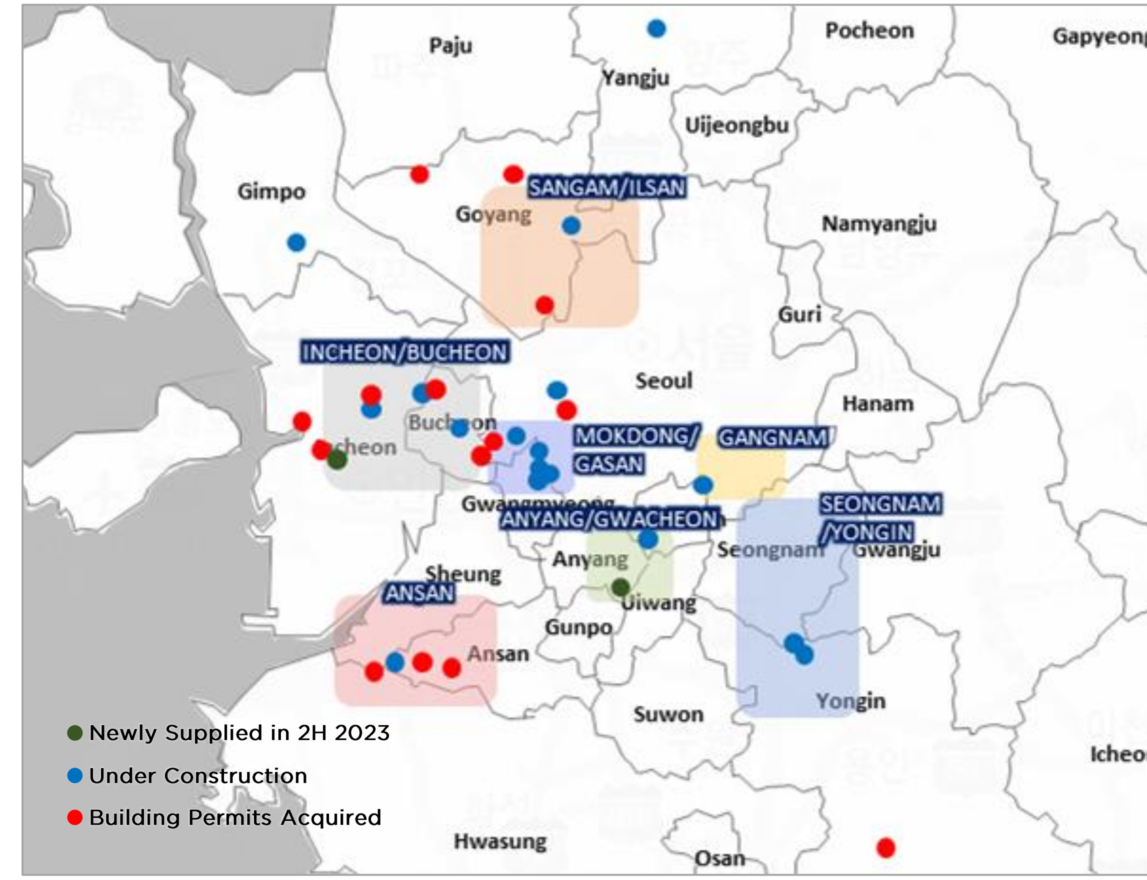
ASIA DATA CENTRE COST INDEX 2023

(USD/Watt)



Source: Turner and Townsend

1H 2024 DEVELOPMENT MAP*



** Based on Hyperscale Cloud, Colo, Edge & Telco data centre facilities that have completed construction permits or commencement notice to MOLIT by the 2H 2023 and excludes existing supplied facilities, Captive and ICT.*

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