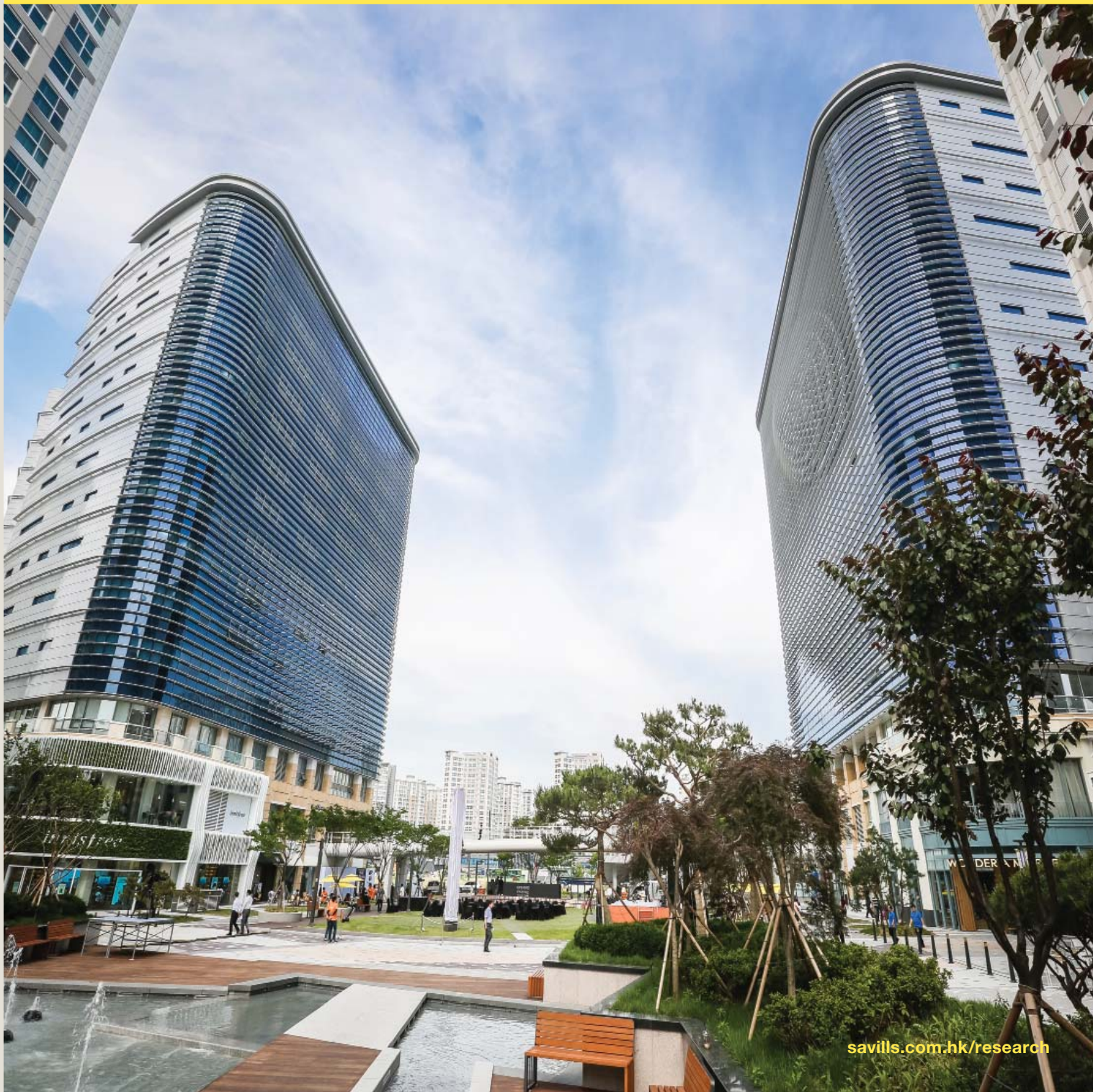


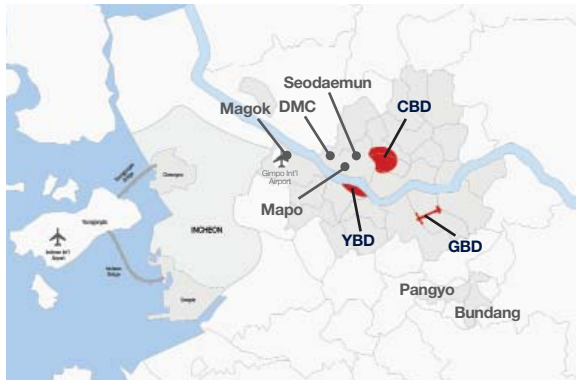


Asian Cities Report **Pangyo Office**

2H 2018



MAP 1
Seoul and Submarket Business Districts, 2018



Source: Savills Korea Research & Consultancy

MAP 2
Pangyo Business Districts, 2018



Source: Savills Korea Research & Consultancy

TABLE 1
Characteristics of First, Second and Third Pangyo, 2018

	First Pangyo	Second Pangyo	Third Pangyo
Land area	660,000 sq m	430,000 sq m	580,000 sq m
Year of completion	2015	2019 (E)	2023 (E)
No. of companies	1,300	750 (E)	500 (E)
Functions	IT, BT, CT, NT and fusion technologies	AI, Big Data, Automatic Driving and ICT technologies	Fin-tech, block chain, future financial industry and residential facilities

Source: Gyeonggi Urban Innovation Corporation, Savills Korea Research & Consultancy

Pangyo Development Plan

Located south-east of downtown Seoul, Pangyo is a planned city in Gyeonggi province which the Government developed to alleviate Seoul's housing shortage and accelerate IT industrial development. To prevent the city from becoming a commuter town and to be self-contained, the central and Gyeonggi provincial government constructed a venture valley called Pangyo Techno Valley I (First Pangyo) at Bundang-gu, Seongnam-si covering a 660,000 sq m land site.

Since its first office building came onto the market in 2009, around 1,300 companies have moved into First Pangyo. Together, they generated annual sales of KRW77.5 trillion (2016), a sum that is almost the same as Busan's GRDP (KRW78 trillion).

To foster the growth of the IT, BT, and CT industries, the Government offered land at lower-than-market prices to inbound occupiers. The discounted land prices meant discounted rents; and the Government imposed restrictive covenants on the leasable area/usable area ratio and types of business, and restricted the period of resale in order to support the growth of these industries.

Initially, the restrictions caused high vacancy rates in Pangyo office buildings. But the growth of IT and start-up companies, in conjunction with a preference for high-quality and pleasant working environments, saw explosive demand for office space in Pangyo. Moreover, the opening of the Shinbundang subway line in 2011 significantly improved accessibility to the Gyeonggi and Seoul regions. For example, it takes less than 20 minutes to get to Gangnam Station. Further improvement is expected with plans to extend the line to Yongsan station in 2025.

After First Pangyo's success, the Government is developing Techno Valley II (Second Pangyo), scheduled for completion by 2019. Located north of First Pangyo and covering a 430,000 sq m land site, Second Pangyo will focus on creating infrastructure to support start-up companies and collaboration between companies.

Second Pangyo will enjoy improved accessibility with construction of a transportation hub, called an "ex-hub", of buses from key areas in Seoul and southern metropolitan cities which will allow passengers to get to their offices within ten minutes of the bus stops on the expressway. Forty-five companies in the IT and BT sectors, including KT, CHA biotech, CJ Healthcare, Mando, and Interpark, will move into Second Pangyo by 2022. Companies are anticipated to lease the remaining extra space at lower-than-market prices to start-ups and small- and medium-sized enterprises.

Second Pangyo has been designated as an autonomous drive-testing area. Relevant companies will be drawn in, creating an infrastructure conducive to autonomous vehicle research and pilot programmes. As a result, a business venture cluster is likely to be formed from the technical synergies among the companies in Second Pangyo, fed by their cooperation with companies in First Pangyo.

Third Pangyo, with an estimated completion date of 2023, will be constructed on a 580,000 sq m land site near Second Pangyo. Fintech, blockchain solution, and financial services providers are expected to move in to create an innovation cluster. To evolve into a self-contained city, residential facilities will also be constructed.

Pangyo office leasing market

The Pangyo office market is approximately 3,300,000 sq m in size as of June 2018, after an increase of new supply from 2011. Pangyo's district is divided into the Techno Valley cluster and the Central Commercial District around Pangyo Station.

Because Techno Valley district has restrictive covenants on its leasable area/usable area ratio and types of business (IT, BT, CT, and NT), most buildings are owner-occupied such as corporate headquarters, while some buildings lease out allowed leasable area to IT-related tenants.

In contrast, the Central Commercial District, without restrictive covenants, saw the completion of Alpharium

Tower and Hyundai department store complex in 2015 and Alphadom III and IV in Q1/2018.

Alphadom III and IV achieved 100% pre-commitment before completion. Alphadom III attracted Kakaogames, Kakaopay, and Kakaomobility as tenants at the end of June 2018. HPI will move in by the second half of 2018. Alphadom IV attracted IT and game companies including Blue Hole, Naver, Snow and co-working operator WORK&ALL, demonstrating strong office demand in Pangyo.

As of Q2/2018, the average office face rent in Pangyo was KRW44,500/3.3 sq m. By district, the average rent was KRW40,300/3.3 sq m for First Pangyo and KRW64,200/3.3 sq m for Central Commercial District, 60% higher than First Pangyo. Factors driving the comparatively higher rents are: the recently completed Alpharium Towers and Alphadom Towers located close to Pangyo Station, growing commercial facilities surrounding the area, and no restrictions on the business nature of tenants.

Pangyo is home to major IT and game publishers, and their strong leasing demand has driven down vacancy rates to near 0%. It is the only business district which provides very little incentives for tenants, unlike Seoul's three main districts (CBD, GBD, and YBD). The effective rents for Pangyo's Central Commercial District are similar to YBD, and are approximately 86% of Seoul's average rent for prime office space.

Pangyo offices are also designed to be spacious, campus-style buildings, due to the low floor-area ratios (300~400%) set during its development. In addition, IT companies' casual dress codes, flexible working hours, and relatively younger workforce have created a vibrant and relaxed environment.

When IT and game companies grew, major local law firms such as BKL and SHIN & KIM also opened offices in Pangyo to provide legal services. Accountancy, consulting, and financial services companies are also expected to establish offices to support companies in Pangyo.

Pangyo office investment market

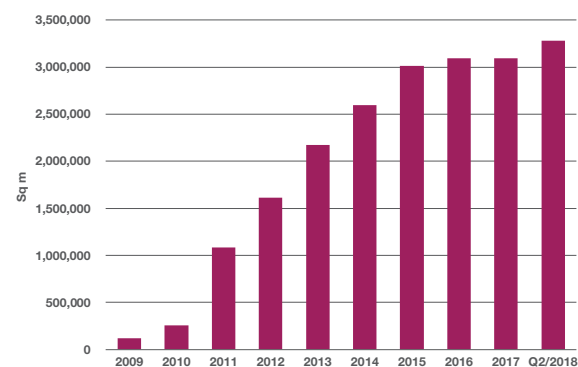
The sale of Alpharium Tower to ARA Korea in Q1/2017 sparked off significant interest from investors in Pangyo's office market. Two transactions involving Alphadom Tower III and IV, located in the heart of Pangyo's Central Commercial District, were completed in Q2/2018.

Alphadom Tower III was bought by Mirae Asset Management for KRW466 billion from Public Officials Benefit Association (POBA). Mirae Asset Management has invested a total of KRW2.2 trillion in Alphadom City by buying development sites in Alphadom City 6-1 and 6-2 blocks, in addition to buying Alphadom Tower III.

Alphadom Tower IV was bought by Shinhan REITs Management for KRW541 billion from LH. Shinhan REITs Management closed its REITs public offering on Alphadom Tower IV, raising KRW114 billion and attracting a total of KRW493 billion, which was 4.3 times the fund-raising target. Demand was driven by its superior location and long-term tenants (five to ten year lease period). Alphadom Tower III and IV traded at KRW17.5 mil/3.3 sq m and KRW18.0 mil/3.3 sq m, respectively, similar to average unit prices for YBD prime office.

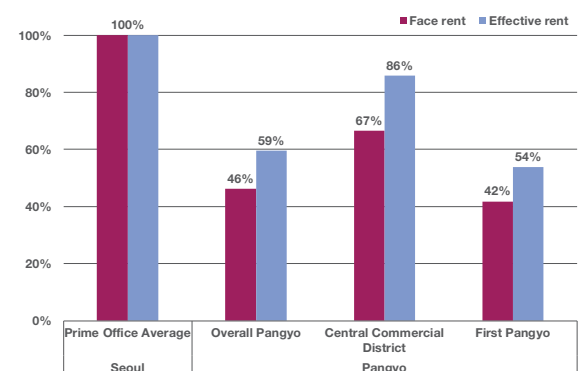
More offices in Techno Valley will gradually come on the market for sale when the ten-year resale restriction covenant lifts next year. In particular, office space available for sale is forecast to increase over the next three to four years, considering the rise in new supply since 2011. Transaction activity is expected to increase, driven by robust demand from the growth of IT-related industries and a near 0%-vacancy rate, and complemented by the lifting of resale restrictions. With more active development planned, more investors are likely to take an interest. ■

GRAPH 1 Pangyo office stock, 2009 – Q2/2018



Source: Savills Korea Research & Consultancy

GRAPH 2 Seoul prime vs Pangyo office rents, Q2/2018



Source: Savills Korea Research & Consultancy

MAP 3 Campus-style First Pangyo, 2018



Source: Gyeonggido Business & Science Accelerator

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Updated: 18 September 18

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