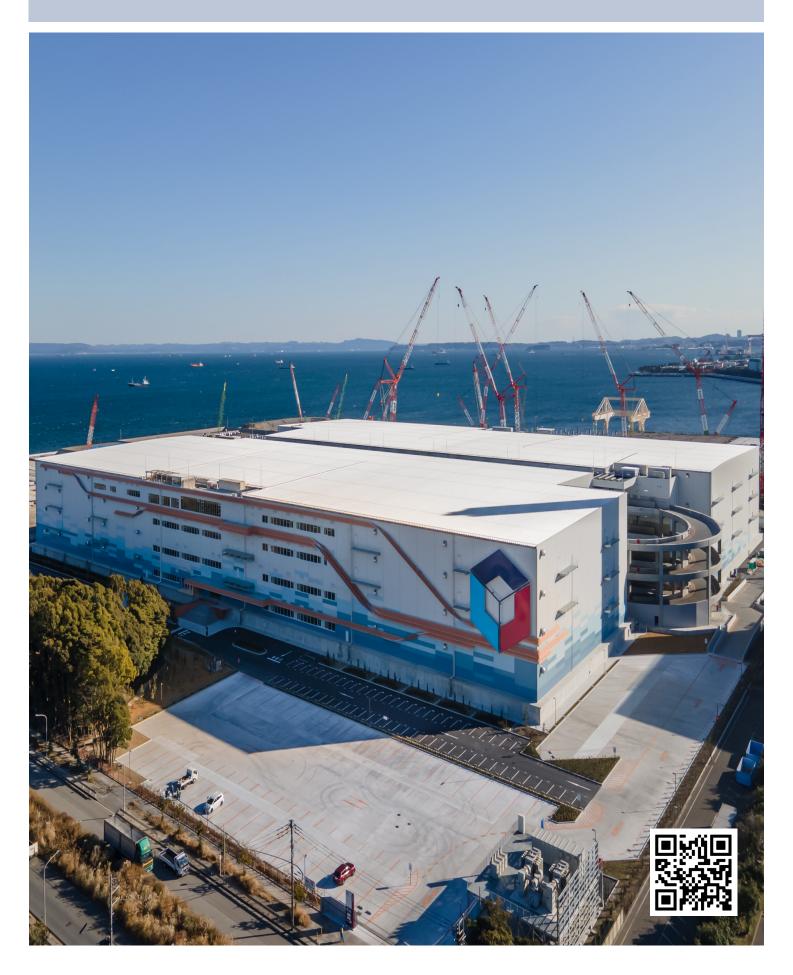


Japan Logistics





Sector remains strong but latent risks emerging

Summary

- In Greater Tokyo, even strong demand has been unable to keep pace with the elevated new supply levels, and vacancy rates have loosened again to 2.5%.
- On the other hand, vacancy rates have shrunk to 1.5% in Greater Osaka, as the region continues to experience robust demand.
- Rents in Greater Tokyo have risen by 4.8% year-on-year (YoY) and now average JPY4,620 per tsubo.
- Rents in Greater Osaka have also seen notable growth of 4.0%, and now stand at JPY4,160 per tsubo.
- In 2021, investment volumes in the logistics sector were lower than 2020 levels, but this was due to the exceptionally high levels seen in the previous year. Interest in the sector remains robust.
- While logistics real estate has performed well in recent years, investors should understand the key characteristics of the sector including low land values and the rising operational costs of tenants.
- Supply in both 2022 and 2023 is expected to surpass the record levels seen in 2021, suggesting that with the increased competition, logistics facilities that are older and poorly located may struggle.

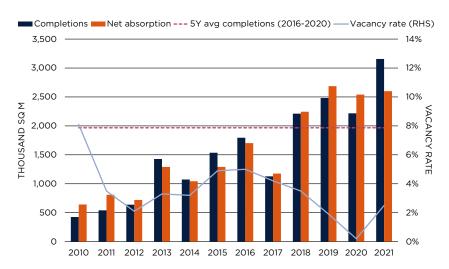
INTRODUCTION

Over the past half-year, the interest in logistics facilities has strengthened, with many investors pouring capital into the sector as the pandemic continues to dim the prospects of some other asset classes. Indeed, despite the all-time high supply in 2021, an even larger influx of supply is expected over the coming years, supported by the ongoing robust leasing demand for logistics facilities. Rents are at record highs, and vacancy levels have nevertheless remained low. These attractive conditions have further stirred investor appetite for logistics facilities, and

cap rates for prime assets in Tokyo have been compressed to the low 3% range.

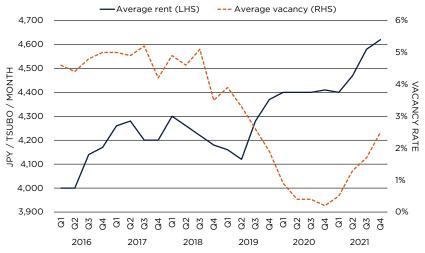
At the same time, the high levels of attention to the sector have resulted in cases of sharp pricing which could be a concern when considering the innate risks of the sector. For instance, the thin profit margins that the logistics industry runs on would make it challenging to increase rents going forward as transferring costs to the customer has been difficult. There are many other risks that the sector faces, discussed in greater detail in this report.

Graph 1: Supply, Net Absorption and Vacancy in Greater Tokyo, 2010 to 2021



Source Ichigo Real Estate Service, Savills Research & Consultancy Note: Annual periods from February to January. Vacancy rates are as of the year end for each annual period, while the rate presented for 2021 is as of January 2022.

Graph 2: Greater Tokyo Rent vs Vacancy, Q1/2016 to Q4/2021



Source Ichigo Real Estate Service, Savills Research & Consultancy Note: Annual periods from February to January.

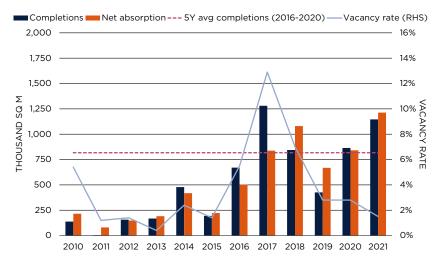
MARKET TRENDS

In Greater Tokyo, the logistics sector has held firm well into the pandemic. Pre-leasing activity in the market has remained strong despite the record levels of supply entering the market in 2021. Nonetheless, supply has once again outpaced demand, with vacancy increasing 2.3 percentage points (ppts) to 2.5% YoY. While many facilities have had successful pre-leasing activity and come onto the market fully occupied, other facilities have been affected by the large supply, and will take more time to lease.

On the other hand, average asking rents in the Greater Tokyo area have seen the largest increase since early 2020. Rents currently stand at JPY4,62 o per tsubo, having increased 4.8% YoY. Some of this rental growth was attributed to the tight supply and

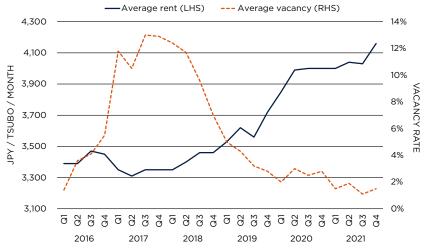
Logistics real estate has maintained its popularity, and cap rates have compressed even further as more capital has been poured into the sector. Leasing markets have also fared well despite the rapidly growing supply over the past few years. However, potential risks have started to emerge as fierce competition for acquisitions continues.

Graph 3: Supply, Net Absorption and Vacancy in Greater Osaka, 2010 to 2021



Source Ichigo Real Estate Service, Savills Research & Consultancy Note: Annual periods from February to January. Vacancy rates are as of the year end for each annual period, while the rate presented for 2021 is as of January 2022.

Graph 4: Greater Osaka Rent vs Vacancy, Q1/2016 to Q4/2021



Source Ichigo Real Estate Service, Savills Research & Consultancy Note: Annual periods from February to January. high demand in the market. However, this phase of tight supply in the sector is likely to approach an end, consequently slowing the strong rental growth seen at present.

While the growth in rents this half-year was encouraging, rental growth is likely to slow down going forward. Firstly, the massive supply forecast for 2022 and 2023 will introduce greater competition into the market, and owners will have to price rents reasonably in order to attract tenants. Furthermore, while the pandemic contributed to the boom in e-commerce over the past two years and has greatly helped to boost the demand for logistics facilities, it is uncertain if the same growth can be expected once the pandemic calms down, as some return toward brick-and-mortar stores is likely to occur.

In Greater Osaka, the strength of the logistics sector could also be seen throughout 2021. Like Greater Tokyo, Greater Osaka also saw record amount of supply enter the market. However, the demand in Greater Osaka exceeded the new supply, and vacancy rates were compressed even further - shrinking 1.3ppts YoY to 1.5%. Pre-leasing activity has been strong, and many facilities are already fully occupied upon coming to the market.

Average asking rents in Greater Osaka have grown to JPY4,160 per tsubo, a 4.0% increase YoY. The market in Greater Osaka is expected to remain stable in 2022 due to the low supply forecast for the year. Nonetheless, there are many large developments planned past 2023, which must be taken into consideration.

INCOMING SUPPLY

In Greater Tokyo, a record amount of supply was seen in 2021. The second half of the year added more than 1.7 million sq m of new space into the market, bringing the total supply in the year to over 3.0 million sq m.

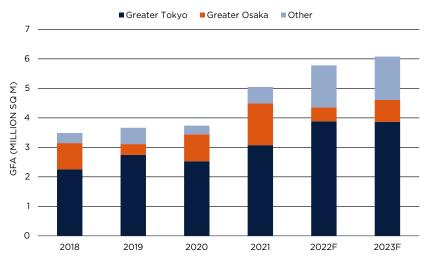
GLP was a major contributor to this, adding three large logistics facilities with GFAs totalling almost 600,000 sq m.

The largest addition was the GLP ALFALINK Sagamihara I, which had a GFA of 300,000 sq m, and was the first of five buildings planned in Sagamihara under its ALFALINK brand. These facilities span a large area with an open-concept design and have various amenities like restaurants,

nurseries, conference rooms, and gyms to make the facilities feel like a town. These features would make attaining labour easier. Third-party logistics companies including Sagawa Express, Seino Transportation, and Gion are reported to occupy about 20% of total leasable space in the facility.

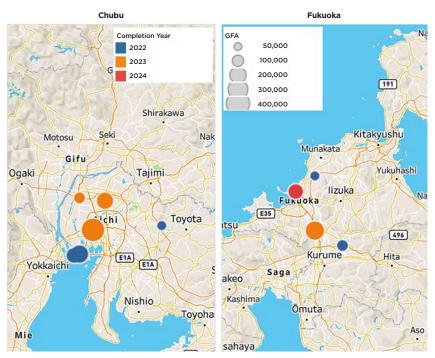
Other large developments that were completed in Greater Tokyo include Daiwa House's DPL Nagareyama IV, with a GFA

Graph 5: Annual New Supply* in Japan by Region, 2018 to 2023F



Source Ichigo Real Estate Service, Savills Research & Consultancy
* Projects in 2022 and beyond tend to be added later once details are ready to be announced.
The data only considers facilities with GFAs > 10,000 sq m and is as of February 2022.

Map 1: Upcoming Completions in Chubu and Fukuoka with GFA greater than 50,000 sq m, 2022 to 2024 *



Source Ichigo Real Estate Service, Savills Research & Consultancy * Projects where GFA and/or completion date are unavailable are omitted from the dataset New supply data is as of February 2022 of over 320,000 sq m, and adds on to the multiple facilities that have been developed in Nagareyama. This new logistics facility was by far the largest one built by Daiwa House yet, and it has more plans in the pipeline.

Looking ahead in Greater Tokyo, despite the record supply in 2021, 2022 and 2023 will both see almost 30% more supply than 2021. Given that absorption has already begun to slow in 2021, it is uncertain if the market will be able to absorb this enormous amount of new supply.

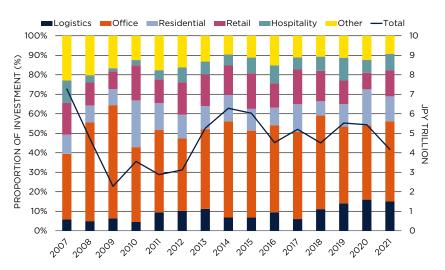
In Greater Osaka, the amount of new supply added to the market in 2021 was more than 1.4 million sq m – around 50% more than what was added in 2020. The largest addition that was added in the second half of 2021 was Prologis Park Inagawa 1, which has a GFA of over 200,000 sq m. However, 2022 and 2023 only have one logistics facility with over 100,000 sq m planned – DPL Ibaraki-Kita in mid-2022. The supply forecast in Greater Osaka for these two years is low overall, which should give the market some breathing room to absorb the supply.

While a majority of logistics facilities are built within Greater Tokyo and Greater Osaka, developers have also taken an interest in other regions in Japan. For instance, in Aichi, the tentatively named Nagoya Iwatsuka logistics centre planned in 2023 will have a GFA of more than 350,000 sq m to become one of the largest in the region so far. Daiwa House will also introduce three logistics facilities in Aichi between 2022 and 2023: DPL Meiko-Yatomi I & II, and DPL Komaki, which will add a total of more than 450,000 sq m of GFA. Further down in the south, a few large developments are also expected in Fukuoka past 2023. One new logistics facility by Mapletree will have a GFA of greater than 200,000 sq m, more than double the size of the largest development recorded in the region, which was by Daiwa House in 2017. Indeed, as Greater Tokyo and Greater Osaka become increasingly crowded with new logistics facilities, some developers and investors have turned to other major hubs like Aichi and Fukuoka, where land could be more affordable and more available.

INVESTMENT TRENDS

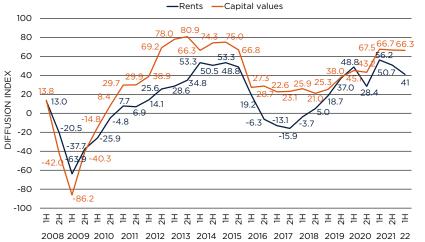
According to data aggregated by Real Capital Analytics (RCA), investment volumes in 2021 were about 25% less than levels seen in 2020 and 2019. With the global pandemic extending fully into 2021, some investment processes have slowed down in turn. Investment volumes in the logistics sector in 2021 have likewise decreased in tandem. It should be noted, however, that the data is preliminary and that investment volumes usually increase later as more transaction details are confirmed. Furthermore, although investment volumes in 2021 were lower

Graph 6: Share of Investment Volumes by Asset Class, 2007 to 2021



Source RCA, Savills Research & Consultancy

Graph 7: Six-month-ahead Expectations for Rent and Capital Appreciation, 2008 to 1 H/2022



Source Ichigo Real Estate Service, Savills Research & Consultancy

Table 1: Selected Investments, announced September 2021 to February 2022

PROPERTY NAME	TRANSACTION VALUE (JPY BIL)	APPRAISAL DIRECT CAP RATE	BUYER	SELLER
ESR Japan Income Fund Portfolio (4 facilities)	234.4	-	ESR Japan Income Fund	ESR Cayman
Daiwa House REIT Portfolio (3 facilities)	58.0	3.8% to 4.3%	Daiwa House REIT	Daiwa House Industry
Prologis REIT Portfolio (3 facilities)	57.7	4.0% to 4.5%	Nippon Prologis REIT	SPC of Prologis
Mitsui Fudosan Logistics Park Portfolio (3 facilities)	44.6	3.9% to 4.2%	Mitsui Fudosan Logistics Park	Mitsui Fudosan
Kuwana Logistics Center	35.0		Mapletree Logistics Trust	Undisclosed

Source Company Disclosures, Nikkei RE, Savills Research & Consultancy

than 2020 and 2019, they were still notably higher years prior to 2018, demonstrating the continued interest in the sector. On top of that, many big-ticket J-REIT transactions were also recorded in the second half of 2021.

Indeed, many more players have become increasingly active in the market. For instance, in the second half of 2021, Nippon Steel Kowa announced the construction of a new logistics facility with more than 200,000 sq m of GFA more than twice as large as its current largest development that was completed in 2021. Capitaland has also announced its intention to invest JPY100 billion more in Japanese real estate, with a focus on developing and operating logistics facilities. Furthermore, the market saw a particularly large transaction from ESR Japan Income Fund, which is a joint investment fund by ESR and four other investors, including AXA Investment Managers and GIC. In this transaction, four facilities valued at a total of US\$2.1 billion were acquired, including the US\$1 billion ESR Amagasaki Distribution Centre.

New international players have also made their way into the Japanese industrial market. For instance, in early 2022, Hines announced its first logistics acquisition and development in Nagoya, which is expected to total over 225,000 sq m. The development will be named Yatomi Distribution Center, and is expected to serve both ambient storage and cold storage users. In late 2021, ST Telemedia Global Data Centres, a data centre operator based in Singapore, announced its plans to develop two new data centres in Tokyo with Goodman Group, making its entry into the Japanese data centre market. Another new entrant was EQT Exeter, who has started expanding its footprint in Japan with the acquisition of Bear Logi, a logistics investment manager. The Japan logistics sector has kept attracting international capital, and more transactions are expected in 2022. Given the fierce competition in the acquisition market, the option of development has also become increasingly popular, which appears to have led to the new record logistics land prices in Tokyo late last year.

Overall, the logistics sector has received a lot of attention throughout the pandemic, with many deals seen over the past few years, and with large amounts of capital being invested into developing increasingly larger logistics facilities. At the same time, the high amount of interest poured in over a relatively short period of time might also be a cause for concern in the industry. According to the 29th bi-annual survey market sentiment conducted by Ichigo Real Estate Service, even though two thirds of respondents expect capital values of facilities to increase, more than half expected rents to stay flat, showing that some optimism over rental growth has waned.

POTENTIAL RISKS OF THE LOGISTICS SECTOR

The pandemic expedited growth in the e-commerce in Japan, which in turn spurred the need for more logistics facilities to keep up with the rapidly changing environment and to meet customer demand. As a result, many investors have been attracted to the logistics sector and cap rates of prime logistics in Greater Tokyo have been compressed to the low 3% levels – lower than those of sectors with a longer track record, like Grade B offices and residential. While the interest garnered has helped to grow the industry further, the rapidly compressed cap rates could be a harbinger of some overheating present in the market.

Indeed, while the high demand for logistics facilities at present is likely to remain, there are some risks in the sector that need to be taken into account. For instance, the unique characteristics of the logistics sector, such as the low land value, the difficulty of tenant diversification, and chronic labour shortage may disrupt the sector. Potential increments of logistics-related costs may incentivise tenants of logistics facilities to negotiate with owners for lower rents. In addition, there is a dire shortage of labour in the logistics industry, and the costs of training and hiring new labour have therefore increased. These factors will put a growing amount of strain on the already razor-thin margins in the industry, because it will probably remain difficult to transfer these costs on to consumers.

Going forward, the rapidly growing large supply in 2022 and 2023 are another concern. If the wave of supply in coming years loosens the currently

tight market conditions, tenants may gain more negotiation power. Investors should get ready to manage risks by diversifying their portfolios, making facility improvements, and strengthening relationships with tenants. Please refer to our [Japan logistics – Evidence of caution] report for further analysis.

OUTLOOK

The fundamentals of the logistics sector remain strong. Vacancy levels are low despite the record supply in 2021. It has retained the interest of many investors who are keen on purchasing logistics facilities. The sector has undoubtedly strengthened and maintained its popularity throughout the pandemic, especially when looking at the amount of attention it has received. The many developments in the pipeline and new entrants to the market also demonstrate a large amount of confidence in the sector.

At the same time, the overwhelming attention that the logistics sector has received may also be a sign that there is some overheating amidst the excitement present. Some investors, especially new entrants under strong pressure to deploy capital, may have turned to the logistics sector in desperation. As a result, cap rates for logistics facilities have been rapidly compressed and latent risks have become more apparent. Given this context, emerging asset classes like data centres may be a more attractive option with more limited competition. For instance, as of early 2022, GLP has raised JPY1 trillion to be invested into the Japanese industrial sector, with a focus on data centres, across the nation.

The risks that are particularly relevant to logistics properties are its low land value, limited tenant diversification, and increasing development costs. Although these risks by themselves will not likely be the downfall of the sector, they are likely to exacerbate the consequences of a downturn when the market experiences corrections. Going forward, another worry for the logistics industry is the large supply upcoming in 2022 and 2023. Both years are forecast to set new records for supply, and it is uncertain if the market will be able to smoothly absorb such a large amount.

Overall, while the logistics market remains strong and experienced investors can capitalise on the growing demand while managing risks, the market also appears to have some blind spots. In the current environment where cap rates are substantially compressed and development costs are significantly heightened, even a moderate correction could lead to significant consequences. Investors should be cautious and think twice before aggressively underwriting new assets. On the other hand, careful and diligent investors should become better off when the market faces harder times.



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