

**RED**PAPER

# Insights on Thailand's Future-Focused Industrial Property Sector

Issue 6







# INSIGHTS ON THAILAND'S FUTURE-FOCUSED INDUSTRIAL PROPERTY SECTOR

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# INSIGHTS ON THAILAND'S FUTURE-FOCUSED INDUSTRIAL PROPERTY SECTOR

Over the past 2-3 years, the rise of e-commerce and relocations prompted by global geopolitical shifts and the China Plus One policy have spurred growth in Thailand's industrial property sector. These factors have led to a significant increase in demand for factories and warehouses, resulting in a more competitive market with new players emerging and existing players expanding their portfolios.

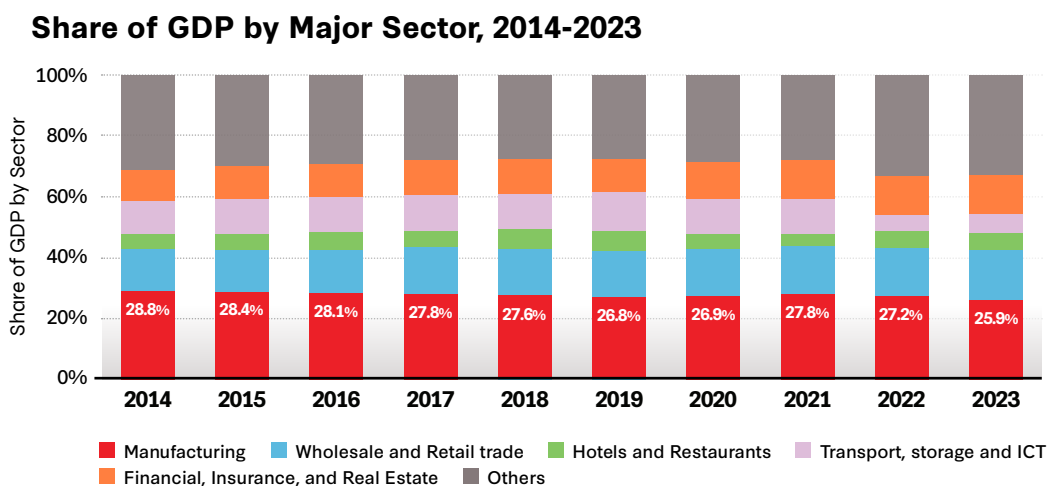
**REDPAPER** an insight report on real estate data and trends by Frasers Property (Thailand) and Jones Lang LaSalle (Thailand) Company Limited, or JLL Thailand, focuses on Thailand's industrial sector by analysing key macroeconomic indicators and examining significant economic trends. Additionally, it will explore the impact of the China-plus-one strategy on the industrial property in Southeast Asia. By examining crucial markers such as the dynamics of Foreign Direct Investment (FDI), and Gross Domestic Product (GDP) components, this paper will identify key opportunities and possible changes in real estate development to best match that of the new market practice.

## Thailand's Industrial & Logistics Sector Outlook: Thailand's macroeconomics overview and global geopolitical impact

As a leading manufacturing hub in Southeast Asia, Thailand has attracted substantial domestic and foreign investment in key industries including automotive, electronics, textiles, and chemicals. These sectors have been instrumental in boosting GDP growth, generating employment, and driving technological advancements. Foreign Direct Investment (FDI) has been pivotal in propelling Thailand's manufacturing capabilities. Factors such as favourable investment policies, a skilled labour force, strategic location, and robust infrastructure have fuelled FDI inflows. Additionally,

Thailand's participation in regional trade agreements, notably the ASEAN Economic Community (AEC), has further enhanced its appeal to foreign investors.

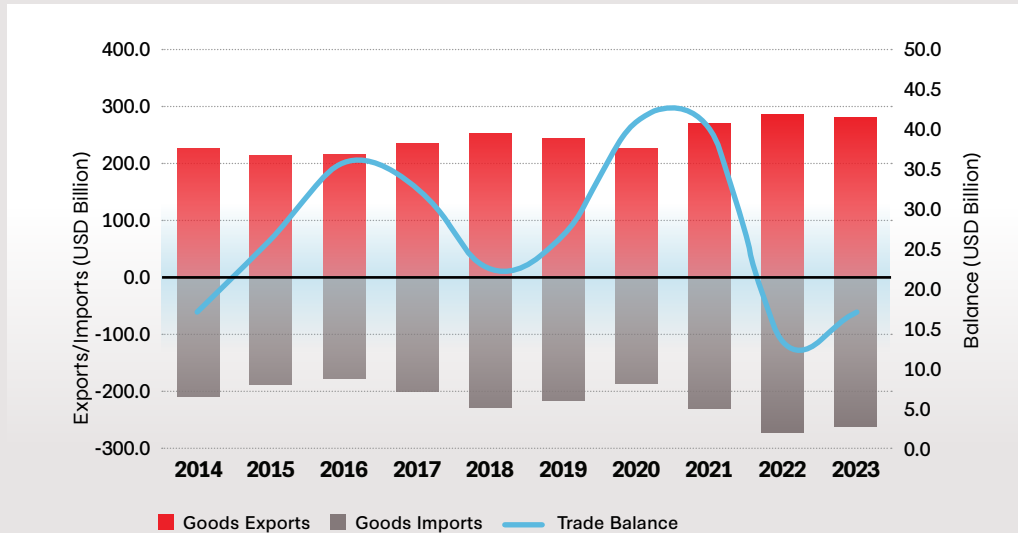
The manufacturing industry accounts for a substantial portion of Thailand's GDP, at approximately 27-28% in recent years, underscoring its significance to the nation's economic well-being. The sector not only drives growth but also creates employment opportunities and contributes to technological advancements, all supported by proactive government policies and initiatives.



Source: JLL Thailand Research and Office of the National Economic and Social Development Council

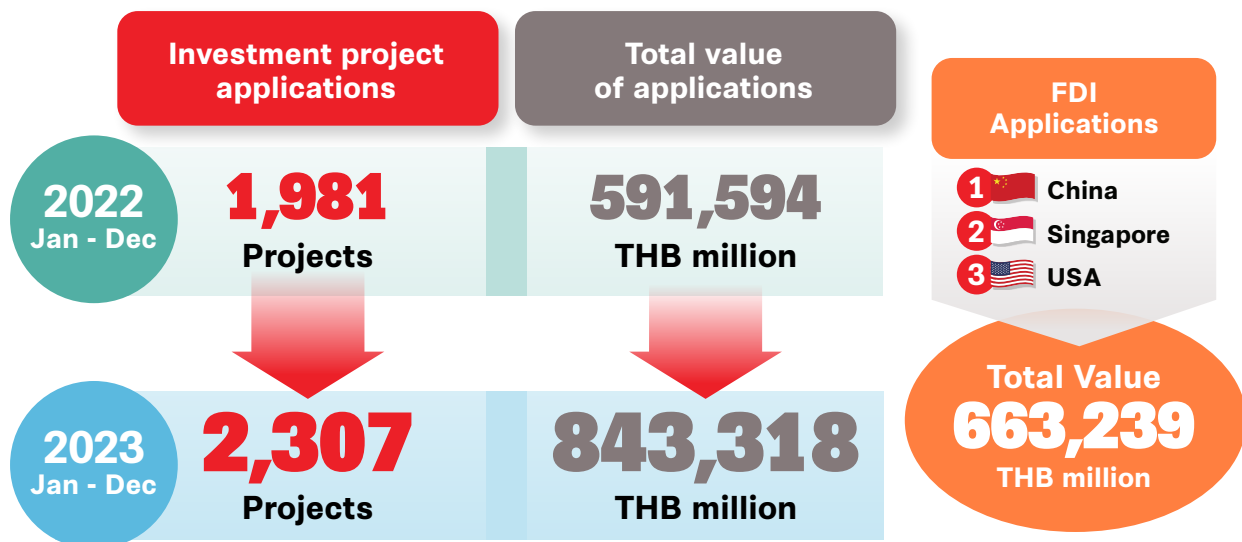
Thailand's manufacturing sectors heavily rely on international trade, both as a source of raw materials and as key export markets. The country has maintained a relatively balanced import-export trade balance due to its dynamic manufacturing capacities, with machinery, electrical equipment, and automotive products being significant export-oriented industries. However, increasing competition from neighbouring countries and fluctuations in global demand pose challenges that need to be addressed.

### Exports, Imports, and Trade Balance, 2014-2023



Source: JLL Thailand Research and Bank of Thailand

Geopolitical tensions and the China-plus-one strategy have significantly impacted manufacturing sectors in Southeast Asia, positioning Thailand as an alternative for businesses looking to diversify their supply chains beyond China. The ongoing trade frictions between the United States and China have further accelerated this trend. Thailand's robust infrastructure, skilled workforce, and geographic proximity to China have positioned it favourably within the China-plus-one strategy, a risk-mitigation approach adopted by companies looking to reduce their over-reliance on China for their manufacturing and supply chain operations.



Source: BOI/EECO

Southeast Asian nations, including Thailand, have significant opportunities for further growth in the manufacturing sector. The expansion of regional trade agreements, such as the Regional Comprehensive Economic Partnership (RCEP), presents new avenues for collaboration and trade integration. Moreover, the government's focus on promoting technological advancements, innovation, and sustainability creates opportunities for industries to upgrade their manufacturing capabilities.

## Unlocking the Growth Potential of EV and E&E Manufacturing



Thailand's focus on its new S-curve industries, specifically electric vehicles (EV) and electrical appliances and electronics (E&E), particularly semiconductors, have led to significant advancements. These sectors have experienced substantial growth, evident from key data points such as surging EV manufacturing investments and EV registrations. In this context, Thailand has been proactive by taking decisive steps to encourage the adoption of EVs and the production of electrical appliances and electronics, connecting these efforts to the country's broader economic development objectives.

The electrical appliances and electronics industry in Thailand is booming, with investment applications for the Board of Investment's incentives reaching over THB 340,169 million in 2023, representing 256% growth over the previous year and capturing an impressive 56% of total investment promotions, significantly overshadowing the automotive parts sector, which accounted for 14% or THB 82,282 million. As a major contributor to the country's economy, this sector has established Thailand as a manufacturing hub for global producers and facilitates the production and export of a wide range of electronic products.

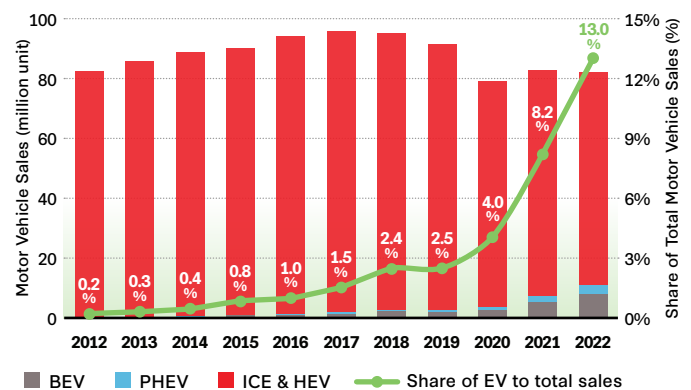
However, the Electric Vehicle Association of Thailand (EVAT) had reported significant growth in EV registrations, indicating a promising future for electric mobility in the country. In 2023, new registrations for Battery Electric Vehicles (BEVs) surged to 76,366 units, a substantial increase from the previous year. Overall, new registrations for various EV types reached 100,219 units in 2023, demonstrating extraordinary growth of 380% compared to 2022. The BEV category experienced 311% growth, with all types of EVs showing promising results. Numerous major players, particularly prominent European and Japanese automakers, have entered the market, introducing hybrid models or fully electric vehicles. Additionally, several Chinese automakers have entered the market, exclusively focused on the EV sector, further contributing to the competitive landscape.

In recent years, the sales dynamics of EVs in Thailand have displayed a positive trajectory, with the country witnessing a notable increase in sales volumes for EVs. Prior to 2017, the automotive market in Thailand was largely dominated by vehicles powered by internal combustion engines (ICE). However, a significant turning point for the EV market in Thailand occurred in 2022 when the Thai

government introduced the EV 3.0 scheme, which incorporated tax incentives and other subsidies. This policy shift led to a remarkable growth in sales, with sales figures rising from 20,480 units in 2022 to 84,300 units in 2023.

As a result, the share of EV sales surged from 2.4% in 2022 to 10.9% of total vehicle sales in Thailand in 2023. Although most EV sales in 2023 comprised imported vehicles, the EV 3.0 scheme mandates that carmakers establish domestic production lines and manufacture EVs locally. This strategic initiative ensures that there is an equivalent domestic production capability for the number of EVs imported and sold under special incentives. Consequently, we can anticipate growth in EV manufacturing in Thailand in the years to come.

### Global sales of motor vehicle by powertrain, 2012-2022



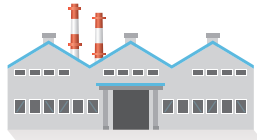
Thailand is on a mission to revolutionise its automotive industry through the adoption of EVs. Spearheaded by the National Electric Vehicle Committee, or 'EV Board,' this effort involves the collaboration of various stakeholders to promote EV manufacturing, encourage adoption, and expand EV infrastructure. Initiatives range from manufacturing incentives and reduced import duties to tax reductions, subsidies, and the development of charging networks. This strategic approach aims to position Thailand as a major player in the global EV market, while reducing emissions and driving economic growth.

Furthermore, the rapidly expanding EV industry is driving up demand for warehouse space. With EVs becoming increasingly popular, there is a heightened need for charging infrastructure and parts distribution centres, increasing the demand for warehouse space near manufacturing sites and strategic distribution hubs for storing and distributing components and finished products.

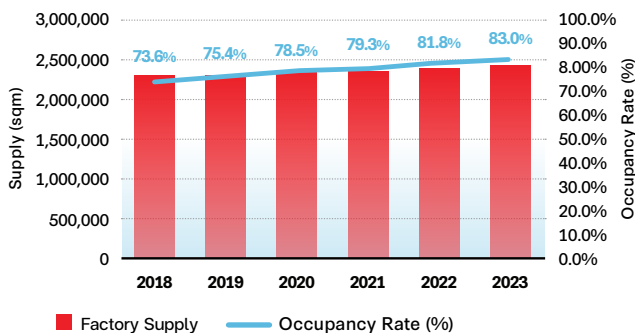
The growth of emerging industries in Thailand is impacting the availability of factory and warehouse spaces. As the demand for these facilities grows, the challenge of finding suitable spaces increases making it essential for real estate developers and investors to identify opportunities for expanding existing facilities or developing new industrial parks to keep up with rising demand. Taking proactive measures to maintain a balanced supply of factory and warehouse spaces is crucial in supporting the growth of new and innovative industries.

# Overcoming industrial building challenges with tailored logistics solutions

Over the years, the industrial building development landscape in Thailand has experienced significant shifts, requiring developers to quickly adapt to evolving standards and demands. This section explores the complexities of the warehouse development process, focusing on the timelines and key considerations, including industry-specific requirements essential for creating custom warehouse solutions. By examining these aspects, the relevant insights can help support developers in overcoming limitations while meeting the specific and unique needs of the logistics industry.



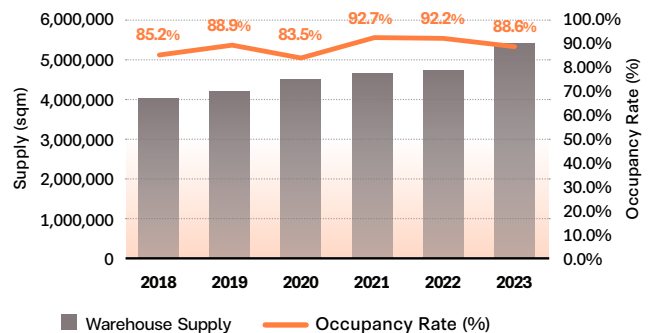
**Factory Supply and Occupancy Rate (2018-2023)**



Source: JLL Thailand, Frasers Property Thailand



**Warehouse Supply and Occupancy Rate (2018-2023)**



The for-rent factory and warehouse markets have shown a positive trajectory in recent years, with strong demand growth while maintaining a healthy occupancy rate, even amidst economic uncertainty caused by the Covid-19 pandemic. Particularly for the factory market, the supply of factories had consistently increased from 2,297,000 to 2,422,000 sqm between 2018 and 2023, averaging at 25,000 sqm of new supply per year. Accompanying this growth, the market saw an improved occupancy rate, with an average annual net absorption of 64,000 sqm. As a result, the market's occupancy rate rose from 73.6% in 2018 to 83.0% in 2023.

Meanwhile, the warehouse market has experienced even more significant expansion, particularly following the Covid-19 pandemic. With an average annual growth rate of 6.2% or 282,000 sqm per year between 2018 and 2023, the market has witnessed a remarkable increase in warehouse stock. In 2023 alone, the market seen a record stock growth of 681,000 sqm, partly due to the upending stock delayed or postponed during the pandemic. Despite the strong supply growth, the occupancy rate has remained healthy, ranging from 83.5% to 92.2% as the demand remained strong with net absorption averaging at 277,000 sqm per year.

This positive performance can be attributed to a few factors, including the recovery of domestic consumption, the growth of the emerging sectors forementioned and the continuous growth of the E-commerce sector. As a result, more developers and investors are showing keen interest in this asset class, considering the market's positive trajectory, stable returns, and its resilience to the unstable economic climate.

However, fully capitalising on the positive market trends while adequately balancing the stock of warehouses and factories for rent stock with future demand has proven to be a challenging task. The process of warehouse development is long and multi-staged,

involving in-depth market research and feasibility analysis, site selection, and product development, obtaining building permits and other compliance reviews, construction and coordination, and eventually tenant acquisition and facility management. The timeline can take between 8-10 months, varying greatly depending on the project's complexity and any unforeseen factors.

Moreover, tenants from different industries inevitably have distinct requirements for warehouse facilities. For instance, the e-commerce sector requires higher ceilings to accommodate advanced racking systems and automated picking operations, while pharmaceuticals or cold storage demand precise temperature and humidity controls to safeguard the integrity of their products. Automotive or heavy manufacturing may need warehouses with enhanced floor load capacities and ample column spacing to accommodate specialised equipment and machinery, whereas small parcel distribution benefits from facilities with multiple dock doors and efficient flow layouts to handle large volumes of shipments. These specific needs not only require extra time for building adaptation to better suit different operations but also add to the overall timeline, and in some cases, limit the options of facilities tenants can choose.

To shorten this process, developers can analyse the unique requirements of potential tenants and specific industries by involving tenants and industry experts during the warehouse development process in order to better plan and cater to industry-specific requirements from the outset. Consequently, developers can provide functionally optimised warehouses for potential tenants. More importantly, integrating these elements from the beginning eliminates the need for costly and time-consuming retrofitting while making sure that warehouses remain fully aligned with the industry's latest operational requirements.

## Transforming logistics with next generation industrial buildings, green certifications, and built-to-function solutions

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## Types of Industrial Buildings

	Ready-Built	Built-to-Function	Built-to-Suit
<b>Locations</b>	<ul style="list-style-type: none"> <li>General-purpose</li> </ul>	<ul style="list-style-type: none"> <li>Specialised area (e.g., location for e-commerce product delivery)</li> </ul>	<ul style="list-style-type: none"> <li>Strategic location with excellent distribution access</li> </ul>
<b>Target Clients</b>	<ul style="list-style-type: none"> <li>Third-Party Logistics (3PL)</li> <li>General clients</li> </ul>	<ul style="list-style-type: none"> <li>Third-party logistics (3PL) providers specialising in specific goods/services</li> <li>General corporate clients in need of specialised facilities</li> </ul>	<ul style="list-style-type: none"> <li>Large corporate clients require specialised buildings for their business operations</li> </ul>
<b>Building Design &amp; Features</b>	<ul style="list-style-type: none"> <li>Standard buildings that are suitable for the majority of clients/products</li> </ul>	<ul style="list-style-type: none"> <li>Standardised layouts with flexibility (e.g., adaptable for e-commerce fulfillment, GMP compliance, or temperature-controlled storage)</li> <li>Pre-installed features for common needs, including sustainability standards</li> <li>Scalable building options</li> </ul>	<ul style="list-style-type: none"> <li>Tailored to client's needs and client's business, including various standards as well as sustainability standards</li> </ul>
<b>Delivery Time</b>	<ul style="list-style-type: none"> <li>Ready to use</li> </ul>	<ul style="list-style-type: none"> <li>Ready to use</li> </ul>	<ul style="list-style-type: none"> <li>Upon agreement (Construction period: 8-10 months)</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>Flexibility and readiness</li> </ul>	<ul style="list-style-type: none"> <li>Flexibility and readiness</li> <li>Standardised operation for specific needs</li> </ul>	<ul style="list-style-type: none"> <li>Maximised operation</li> </ul>

Source: Frasers Property Thailand

Sustainability has become a critical element in the development of logistics facilities. Property developers are increasingly incorporating sustainable practices and technologies into their projects to minimise environmental impacts while optimising resource utilisation. This includes implementing energy-efficient systems, like LED lighting and solar energy, as well as smart HVAC and lighting controls. Additionally, water conservation measures and waste management strategies are being adopted to reduce the environmental footprint of warehouses.

ESG goals are now a significant focus in the logistics industry, integrating sustainable practices into business strategies to emphasise environmental stewardship, social responsibility, and corporate governance. Companies are prioritising warehouse developments that align with ESG commitments, such as reducing carbon emissions, promoting sustainable supply chains, and ensuring ethical labour practices. Committing to ESG goals enhances a company's reputation and brand value, while also contributing to long-term business resilience.

Green building certifications, such as LEED (Leadership in Energy and Environmental Design), are instrumental in recognising and promoting sustainable industrial building developments. These certifications evaluate a range of factors, including energy efficiency, indoor air quality, water conservation, and material selection, validating a facility's sustainability while also providing assurance of its sustainability to tenants. This is attractive to environmentally conscious businesses and can potentially lead to cost-savings through improved operational efficiencies.

Two common market practices for industrial building

development are the ready-built and built-to-suit schemes, addressing different needs. Ready-built buildings involve constructing facilities in advance without a pre-determined tenant (speculative demand). These can be designed to meet the diverse requirements of potential tenants or serve as multi-tenant buildings, providing flexibility and reducing the development timeline, allowing tenants to move in quickly. In contrast, built-to-suit buildings are designed and constructed to meet the specific requirements of a pre-identified tenant, ensuring the facility is tailored to their operations, optimising space utilisation and functionality. Built-to-suit developments offer long-term lease opportunities, tailored infrastructure, and specialised features that meet a tenant's unique needs.

However, in recent years, there has been a growing interest in a hybrid model known as built-to-function. This model combines elements of both ready-built and built-to-suit schemes. Instead of constructing speculative buildings without a tenant or designing facilities for a specific tenant, built-to-function focuses on understanding the operational requirements of potential tenants in advance. This approach allows developers to construct flexible and scalable building facilities that meet the evolving needs of businesses while minimising vacancy risks.

The built-to-function approach in building development capitalises on data analysis, market insights, and collaboration with potential tenants to ensure the supply of building space effectively meets demand. By embracing this method, developers can significantly shorten the development timeline, reduce costs, and enhance occupancy rates by delivering facilities specifically optimised for the specific needs of future tenants.



Data analysis plays a critical role in understanding market dynamics and identifying emerging trends. By analysing market data, developers can better understand the varying demands for different types of building spaces across and within specific industries. This data-driven approach helps identify market gaps, anticipate tenant needs, and make informed decisions regarding the design, size, and features of planned warehouse facilities.

In addition, collaboration with potential tenants is essential during the planning and design stages. Engaging with industry experts and companies in specific sectors allows developers to gather important perspectives on the functions, workflows, and operational requirements of potential tenants. By actively involving tenants in the design process, developers can customise building facilities to meet their specific needs and optimise the use of space.

The built-to-function approach also facilitates efficient resource use by minimising costly retrofitting or modifications. By accurately capturing tenant requirements during the initial design and development stages, developers can eliminate the need for subsequent modifications or customisation, providing advantages in terms of cost and timeline.

This approach improves tenant satisfaction by offering building facilities that precisely meet their needs. Tenants are more likely to be drawn to facilities that have been purpose-built to boost their operations. By aligning supply with demand and creating building spaces tailored to specific industry requirements, developers can increase the appeal and desirability of their facilities, leading to higher occupancy rates and reduced vacancies.

# 5 factors impacting industrial properties in Thailand

**Geopolitical tensions and the China-plus-one strategy are positively impacting Thailand's manufacturing sector.**

- Thailand's manufacturing sector accounts for roughly 27-28% of GDP, serving as a valuable hub for the region.
- Amidst the ongoing US-China political tensions, Thailand is emerging as a promising alternative for businesses looking to diversify their supply chains beyond China.
- This shift is evident with the increased investment volumes reported by the BOI in 2022 and 2023.

**New S-curve sectors as new demand drivers for logistics and industrial assets.**

- The electrical appliances and electronics industry is one of the key manufacturing categories of Thailand. In 2023, this sector took centre stage with BOI investment volumes, accounting for 56% of the total.
- Electric vehicle (EV) manufacturing is a new frontier for Thailand's manufacturing sector. Sales of EVs surged exponentially in the country in 2023, with EV registrations skyrocketing by 380% y-o-y.
- The rise of these new S-curve sectors is set to drive demand for logistics and industrial facilities, requiring an expansion to accommodate the supply chain infrastructure.

**The factories and warehouses market has demonstrated strong and steady growth in the recent years.**

- The data shows continuous growth from 2018-2023 in the total supply of factory and warehouse space for rent.
- The occupancy rate of factories has seen a solid improvement, increasing from 73.6% in 2018 to 83.0% in 2023.
- Meanwhile, the warehouse market occupancy rate has fluctuated within a healthy range of 83.5% to 92.2% over the same period.

**Processes and challenges in industrial building development**

- Industrial building development timelines can fluctuate considerably, shaped by diverse factors like project size, complexity, and regulatory approvals.
- Each industry has unique requirements for warehouse facilities to ensure smooth operations tailored to their specific needs.
- Early insights into industry-specific requirements allows developers to better design products, minimising the need for extensive customisation.

**The "Built-to-function" model shortens the development process.**

- Built-to-function serves as a hybrid model between the two, offering prebuilt facilities tailored to more specific tenant types.
- By leveraging market data analysis, the built-to-function model aims to provide industry-specific facilities and meet the required specifications of tenants.
- Tenants further benefit from this model since it is pre-built, requiring fewer modifications and allowing for shorter occupancy timelines.



## About US

**REDPAPER**, Frasers Property Thailand's insight report, provides a series of articles which address trends, gaps, and analysis of the real estate industry in Thailand, particularly in the residential, industrial and commercial sectors, in addition to reporting useful facts and commentary from market leaders to readers.

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