

The logo for Industrial Malaysia, featuring the word "INDUSTRIAL" in a smaller, uppercase font above the word "malaysia" in a larger, lowercase font, both in white text on a red square background.

INDUSTRIAL  
**malaysia**

# GUIDE

## Establishing a Warehouse in Malaysia

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# DISCLAIMER

**This guide should be used only as a guide and in no way should be used as a substitute for any legal or regulatory advice.**

It is recommended that, for clarification of any detailed information, users should contact the relevant authority or organisation involved in the functions, processes or transactions of interest. It should be noted that the information contained in this guide was correct when it was obtained.

Functions, systems, processes and procedures are dynamic and subject to change from time to time in order to align them with new policies, strategies and practices of the day.

While the guide may be revised periodically, the information contained herein may change before any updates can take place and it will be necessary to confirm the information herein stated with the relevant authority or organisation, especially if the version being used has not been updated for some time.

While every effort has been made to verify the accuracy of the information at the time of writing, the authors bear no legal responsibility or otherwise for the accuracy or content, as information is dynamic and subject to change from time to time.

# OBJECTIVE

The purpose of this guide is to provide essential and relevant information to those who wish to invest, buy and own warehouses in Malaysia. We understand that it can be challenging for users to find such knowledge, which is usually scattered in different documents and sites.

That is why we have gathered the relevant information and made this guide accessible and convenient for you to begin your journey of investing and buying a warehouse in Malaysia.

# WHO IS THIS GUIDE FOR?

Our guide is catered for individuals and SMEs who intend to invest, buy and own warehouses in Malaysia. This guide covers:

- 1.0 AGENCY IN CHARGE OF BUILDING INDUSTRIAL AREAS**
- 2.0 DEFINITION OF A WAREHOUSE**
- 3.0 FIVE CLASSIFICATIONS OF WAREHOUSES THAT YOU MUST KNOW**
- 4.0 GENERAL PRINCIPLES FOR PLANNING WAREHOUSE BUILDINGS AND STORAGE FACILITIES**
- 5.0 IMPORTANT GUIDELINES FOR MANAGING LAND USAGE**
- 6.0 MUST-KNOW GUIDELINES FOR BUILDING WAREHOUSES IN AN INDUSTRIAL OR ZONED AREA**
- 7.0 CONSIDERATIONS FOR BUILDING DESIGN**
- 8.0 CONSIDERATIONS FOR THE GENERAL SAFETY OF THE WAREHOUSE**
- 9.0 KEY GUIDELINES FOR SPECIALISED WAREHOUSES**
- 10.0 KEY DIFFERENCES BETWEEN BUYING OR RENTING WAREHOUSES**
- 11.0 HOW INDUSTRIAL MALAYSIA CAN GUIDE YOU IN YOUR JOURNEY OF OWNING A WAREHOUSE**

## 1.0 AGENCY IN CHARGE OF BUILDING INDUSTRIAL AREAS

The **local government** is in charge of planning industrial areas or sites, encouraging the construction, development, management, maintenance, and supervision. It also publishes rules, specifications, performance criteria, and procedures about the building, development, administration, operation, and maintenance of these industrial sites or zones.

## 2.0 DEFINITION OF A WAREHOUSE

A warehouse is where all goods are received and then dispatched quickly, effectively and efficiently. The primary warehouse management includes receiving the goods, processing its orders, replenishing, and finally dispatching the goods for distribution.

Sometimes, value-added services are included to perfect the warehouse management process. The increased use of technology and automation has successfully improved performance measurement and the effective management of warehouses, making its processes leaner and more environmentally friendly.



## 3.0 FIVE CLASSIFICATIONS OF WAREHOUSES THAT YOU MUST KNOW

There are five categories of warehouses, which are:

### General warehouses

A general warehouse has the purpose of storing pallets, bins, and bulk for a certain period until they are merchandised. It usually operates at room temperature (25° to 28°C) and includes receiving, shipping and loading spaces, storage areas, and the required aisles and spaces for offices and workers' services.

### Cold storage warehouses

Cold storage warehouses are constructed to maintain the quality, health, and safety of perishable materials and products. It operates at temperatures between 0°C and 4°C for chilling and 0°C and -16°C for freezing. Cold storage warehouses include specific spaces for freezing and cooling, as well as equipment facilities and mechanical equipment.

### Controlled humidity warehouses

Controlled humidity warehouses are designed with steam insulating barriers. They contain control equipment to maintain a specific humidity level inside the building.

### Flammable or hazardous storehouses

Flammable or hazardous storehouses are unique due to the dangerous aspect of the stored materials and the necessary measures to prevent, eliminate, and extract gases and vapours.

The development of warehouses and storing flammable or hazardous substances must comply with the criteria and standards of the fire department (Bomba) and the Department of Occupational Safety and Health (DOSH).

### Shed storage

Shed storage is used to store gas, petrol and oil cylinders, lubricant-filled cylinders, trucks, unpolished wood, and their construction materials.

## 4.0 GENERAL PRINCIPLES FOR PLANNING WAREHOUSE BUILDINGS AND STORAGE FACILITIES

### Location

A location's attractiveness can change rapidly by evolving demographics and rezoning. Prospective buyers need to factor in these geographical considerations. Assuming there is a crisis, geographical considerations come into play as owners have to determine how far substitute raw materials are located. For the best usage option of any chosen piece of land, it is always advisable to consult an industrial property specialist.

### How can Industrial Malaysia help you identify the best location?

We have extensive experience in dealing with businesses and know different business models require different types of warehouses and locations. We can advise our clients on where best to establish their warehouses in major industrial parks.



We have shortlisted eight key areas to establish your warehouses:

### Shah Alam

Shah Alam is the capital city of the state of Selangor. Due to major urban expansion, it is now surrounded by Subang Jaya and Petaling Jaya, Klang, Kuala Selangor, Selayang, and Kuala Langat. It has various housing areas and commercial centres scattered throughout the various *seksyens* (sections). Famous industrial parks include Seksyen 36 Industrial Park, Keras 32 Industrial Park, Berjaya Industrial Park, Nouvelle Kemuning Industrial Park, Anggerik Mokara, Bukit Raja Industrial Park, and many more.

### Klang

Port Klang, the 12<sup>th</sup> busiest container port in the world, is situated in Klang. Its well-developed infrastructure and strategic location among the world's shipping lanes is a boon for your business, which can benefit from fast and efficient logistics. There are prominent industrial parks in Klang, including Port Klang Free Zone, Welloyd Industrial Park, Seri Alam Industrial Park. Nearby Northport and Westport are also key areas for industrial activity.

### Northport

Northport ranks amongst the world's top 20 ports. It is one of the most crucial hub ports in the Asian region, offering extensive connectivity for worldwide imports and exports due to its connectivity to over 300 ports. Northport comprises dedicated multipurpose port facilities and services.

### Westport

Westports Malaysia Sdn Bhd is a multi-cargo terminal located on Pulau Indah, Port Klang. It handles all types of cargoes in containers, breakbulk, dry bulk, liquid bulk, vehicles (roll-on roll-off) and other conventional cargoes.

### Cheras

Cheras is a township located southeast of Kuala Lumpur, adjacent to Ampang and Kajang. It is in a unique position as it is halfway between Kuala Lumpur and Cyberjaya, and the highway linkages to Cyberjaya are excellent. Its population also benefits from improved connectivity to major highways and well-served public transportation, including the Light Rail Transit (LRT) and MRT Line 1. The Cheras Jaya Industrial Park is well-known here.

**Rawang**

Rawang is a township located about 30 km (18 mi) northwest of Kuala Lumpur's city centre with excellent accessibility from Sungai Buloh, Kepong, Selayang, and Batu Caves which is only about 10 to 20 minutes away by car. Rawang is a prime location with excellent highway connectivity interlinking the North-south Expressway, LATAR Expressway, Guthrie Corridor Expressway, West Coast Expressway, Rawang Bypass and closer travel distances to main business mid-points such as Petaling Jaya and Damansara. Its geographical advantage will contribute to lower entry costs and potential future capital appreciation. The Rawang Integrated Industrial Park is a matured industrial hub with ready infrastructure and adjoining within established industrial zones such as Velox Rawang Industrial Park, Rawang Hi-Tech Industrial Park, Rawang Industrial Estate, and more.

**Sungai Buloh**

Sungai Buloh is located at the northern quarter of the Petaling Region, bordering Damansara, Subang, Kuang, and Kepong. Sungai Buloh Industrial Park is a commercial development that consists of leasehold factories. Sungai Buloh Industrial Park is a development that is easily accessible and enjoys excellent connectivity to other parts of Selangor via main roads and highways such as Jalan Sungai Buloh, and the New Klang Valley Expressway.

**Penang**

Penang's steady growth prospects provide a conducive environment for investment, making Penang one of the preferred destinations for investors. Choice spots to establish warehouses in Penang are in Batu Kawan Industrial Park and Bayan Lepas Free Industrial Zone.



## 5.0 IMPORTANT GUIDELINES FOR MANAGING LAND USAGE

**Industrial Malaysia has seven guidelines that you should take into consideration while managing land usage:**

- 1.** Always follow the conditions and restrictions of your purchase contract, rental, or lease to avoid early termination by the leaseholder or owner. We advise warehouse operators to note the type of land use, pre-check existing improvements undertaken to the land against the contract conditions, and double-check any additional modifications against the contract. Sometimes, a warehouse operator might not even know that fences or walls that they intend to build might violate contract conditions.
- 2.** Only commit to the allocated areas inside the approved perimeter of your land boundary.
- 3.** Only use the building for its purpose as determined by the purchase contract, rental, or lease agreement.
- 4.** If you intend to modify the building, always remember to obtain authorisation from the authority, building owner, or leaseholder before the modification occurs.
- 5.** Avoid using the setbacks (including back and lateral) for parking of trucks and private cars, storing of waste, damaged equipment, or even placing air-conditioning components.
- 6.** Preservation and maintenance of the building's facade should always be done, including regular paintwork to comply with local authority requirements.
- 7.** Restrict yourself from using the main roads as your marshalling or waiting areas for your incoming trucks.



## 6.0 MUST-KNOW GUIDELINES FOR BUILDING WAREHOUSES IN AN INDUSTRIAL OR ZONED AREA

### 6.1 Considerations for the design of warehouse building block

**Industrial Malaysia always advises warehouse buyers and investors to consider these four key items while designing the warehouse building block.**

**First**, position the general siting of the warehouse and warehouse building effectively so that there are no direct views of the service and maintenance areas.

**Second**, Industrial Malaysia always advises covering all working areas facing main roads or adjacent buildings with plants, trees or concrete walls to improve privacy.

**Third**, Industrial Malaysia always recommends its clients to conduct a study of the warehouse location and check traffic flows to prevent conflicts with existing traffic flows. Of course, if the client engages Industrial Malaysia, our team will help conduct a location study before they invest in the property.

**Fourth**, it is essential to provide the necessary parking areas for trucks and trailers, including marshalling and waiting rooms, within the location of the warehouse

### 6.2 Considerations on land occupancy for elements of the building

**There are four key considerations for land occupancy that businesses should take note of:**

**First**, always ensure the balance space reserved for traffic movement, setback areas, parking areas, landscape areas, and loading and unloading areas should occupy between 40% and 50% of the approved land area.

**Second**, always make sure the warehouse area should be between 50% and 60% of the land the approved area and it should never be

less than 50%.

**Third**, always remember that the floor area ratio (FAR) should be less than or equal to a value of 1.

**Fourth**, if there is a need to increase the FAR by more than 1, proper considerations should be placed upon building structure, location, traffic access, and types of cargo stored. All considerations made require approval from the authorities and a permit to construct the modification of the warehouse.

### 6.3 Considerations for the setback provisions

**There are four key considerations for setback provisions.**

**First**, provide a specific allowance to create the frontal setback, especially against the frontal road. Industrial Malaysia advises that this frontal setback should be between 20 to 30 meters, while the lateral space should not be less than 10 meters from the rear setback is not Guidelines for Building Warehouses in an Industrial or Zoned Area 4. 36 below 6 m (including 1 m allocated for the site landscape and a sidewalk of 1-meter width around the building, except the loading and unloading docks.

**Second**, set aside some space in the allowed setback to be used for the electricity room, the standby generator, the guard room, car parking lots, and the fuel and gas tanks. Always consider space separators and safety walls.

**Third**, Industrial Malaysia advises SMEs to allow an additional setback of 6 meters from the frontal fence or wall while using the front setback as parking areas for private cars.

**Fourth**, while considering using the lateral side of the warehouse for the loading and unloading bays for trucks, Industrial Malaysia recommends a minimum distance of 45 meters in addition to the setback mentioned above. In creating a marshalling area for trucks, it is best to allow a distance of more than 35 meters from the edge of the loading and unloading dock.

### 6.4 Considerations on the elevation of warehouse

**There are three key considerations on the elevation of warehouse**

**First**, the operating height of a general warehouse should be less than 7.5 m from the operating floor to the lowest point of the ceiling structure. The height can be further raised to accommodate storage system usage but there must be a minimum clearance of more than 0.5 meters from the top of the storage system to the lowest point of the ceiling structure.

**Second**, elevations may vary depending on the type of storage or racking systems used. Such variation may be due to the type of material or cargo to be stored, the storage technique or system employed.

**Third**, always remember to submit applications to the approving authority if your business requires an elevation increase. Always attach the application with supporting documents from the manufacturer or supplier of the storage system for special approval before the commencement of construction of the warehouse.

### 6.5 Considerations for the loading and unloading areas

**There are two key considerations for the loading and unloading areas.**

**First**, Industrial Malaysia advises that the location of the loading and unloading areas must always be distinctly identified in the master plan of the warehousing project.

**Second**, you should always consider easy traffic movement within the warehouse vicinity and avoid obstacles that may hinder the passage of vehicles. If there is any blockage, you should allocate a proper spatial allowance so that cars, trucks, and trailers can manoeuvre easily.

## 7.0 CONSIDERATIONS FOR BUILDING DESIGN

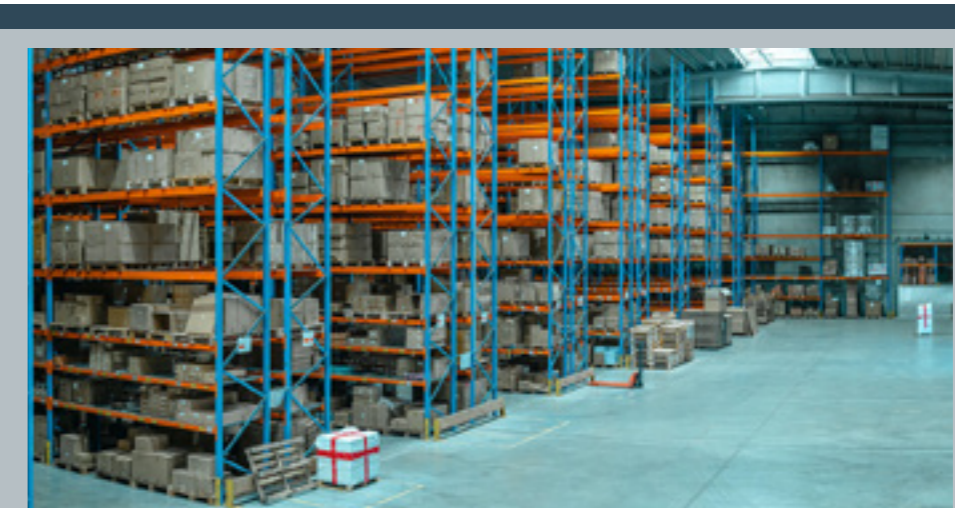
**It is key to note that architectural design or warehouse building must achieve two main objectives.**

**First**, the design must ensure a homogeneous space with a designated functionality.

**Second**, the design must ensure the building is equipped with a visual outlook that reflects the functionality of a warehouse.

Always make sure the chosen design should be simple, with modern architectural patterns, and incorporate adequate architectural materials.

Warehouse operators should also make sure that the elevation of their warehouse buildings and their neighbouring buildings should be homogeneous and gradual.



## 8.0 CONSIDERATION FOR THE GENERAL SAFETY OF THE WAREHOUSE

We have shortlisted five key considerations for the general safety of the warehouse.

**First**, Industrial Malaysia recommends placing the location of warehouses as far as possible from main trunk roads, residential buildings, and other industrial facilities.

**Second**, always make sure the materials used for the construction of the warehouse should be non-flammable, especially when the warehouse is designed for the storage of flammable materials or products.

**Third**, the materials stored in warehouses must be properly organised with racks and shelves.

**Fourth**, secure wire and electrical devices in cable channels or trays.

**Fifth**, place lighting installations directly above the respective aisles or places that are not easily exposed to accidental events.



## 9.0 KEY GUIDELINES FOR SPECIALISED WAREHOUSES

### Cold storage warehouses

Cold storage warehouses are facilities designed to preserve the quality of food and food supplies, biomedical materials, and perishable manufactured substances. Cold storage warehouses are equipped with cooling units, due to their ease of installation and operation.

Another type of cold storage warehouse is pre-fabricated cold storage warehouses. Prefabricated cold storage warehouses are constructed using ready-made insulation boards that form the walls for each of the storage chambers.

Industrial Malaysia team advises that each storage chamber should have a nominal storage capacity of 200 metric tons with dimensions of 12 meters by 12 meters by 6 meters.

It should be constructed with isolating and supporting polyurethane boards that are surfaced lined on its inside and outside with thick plastic sheets and reinforced with galvanised steel frames. We also recommend that companies cover the floor of their warehouses with epoxy paint to prevent condensation.

When designing for cold storage warehouses, our expert team always helps clients consider the location of the engine rooms and the location of the cooling equipment as some key conditions for the cold storage warehouses.

Some famous cold storage companies in Malaysia include Tasco Bhd, IGLO Malaysia Sdn Bhd and Integrated Cold Chain Logistics Sdn Bhd.





## SPECIALISED WAREHOUSE

### **We have shortlisted three key components to take care of while building cold storage warehouses:**

**First**, water sewage. The storage chambers need to be thoroughly washed and cleaned periodically. The residue contained in the water from the washing and cleaning activities is required to be transferred into the water sewage system.

**Second**, quality and health inspection rooms. Some larger cold storage facilities have a team of well-qualified personnel to conduct quality and health inspections. The quality and health inspections must be conducted in a more regulated and systematic way for certain health authorities to undertake their statutory duties.

**Third**, environmental considerations for food storage. Warehouse operators should equip all storage chambers with efficient cooling or freezing units and thermal measurements for temperature monitoring. We recommend that our clients store products with odours in special chambers with air-tight doors. Engage us to know more about environmental considerations for food storage.

### **Flammable or hazardous material warehouses**

These storage facilities should be designed and built to standard specifications in order to protect the materials from health, safety and environmental hazards.

Industrial Malaysia has experience advising companies in managing warehouses that store dangerous products.

Dangerous goods (DG) storage is regulated under the Occupational Safety Health Act 1994. The storage of hazardous goods is highly regulated with strict compliance to protocols, safe practices, and paperwork to ensure compliance and safety. Dangerous chemicals that are stored improperly in the warehouse can cause a fire or explosions that result in injury or death.

## SPECIALISED WAREHOUSE

You should take extra care to manage hazardous wastes if it is reactive with each other. All these wastes must be stored less than the time permitted by the competent authority.

Always remember to place bins and tanks designed to collect and store hazardous waste in a special location within the warehouse boundary, preferably isolated by a fence or wall. If it involves the storage of strong liquid substances classified under the DG list, equip the warehouse with secondary containment surrounding the storage tanks or bins to allow separate containment storage to avoid any leakages or incidents.

Companies in Malaysia that handle dangerous goods include **Sanhe Logistics** and **KC Forwarding Sdn Bhd**.

## 10.0 KEY DIFFERENCES BETWEEN BUYING OR RENTING WAREHOUSES

**There are five key factors to consider before deciding to buy or rent a warehouse.**

**First**, understand the proprietor's nature of business. If you foresee that the landlord might object to any substantial modification and renovation, purchasing from a long-term perspective will be more strategic. However, if you are a new business owner, still growing and scaling your business, you may consider renting as the rental might be less expensive and more predictable.

**Second**, evaluate the cost to purchase or rent in the long run. The main advantage of renting an industrial property is that your initial capital outlay will be lower. However, the main advantage of buying industrial real estate is that you end up paying less in the long term.

**Third**, be clear on the location you intend to rent or purchase. If you are renting in an area where you think the land value

will appreciate, it would be better to own the property rather than rent it.

**Fourth**, find the right size for business operations. Renting saves start-up time as the construction of a factory or warehouse typically takes at least a year to complete. If you choose to buy the warehouse, you will likely have to forgo the business opportunities.

**Fifth**, by purchasing an industrial warehouse, the buyer must undergo lots of paperwork such as a construction permit, construction contracting, and more. These processes tend to be challenging and take a lot of time. On the other hand, renting can be a hassle-free process if you engage an experienced industrial property specialist like Industrial Malaysia.



## 11.0 HOW INDUSTRIAL MALAYSIA CAN GUIDE YOU IN YOUR JOURNEY OF OWNING A WAREHOUSE

Industrial Malaysia offers insights and support to achieve your investment objectives by helping you to discover the warehouse value. We help you to make the best decision about location, pricing, and the value creation of investment opportunities or new operations, and business asset support.

We also help our client focus on **Certification of Completion & Compliance and the Fire Service Certification.**

These certificates demonstrate that the building is safe to be used and it is equipped with life safety, fire prevention, fire protection, and fire-fighting facilities.

We can bring in a selection of tenants, local support of property experts, and legal counsel to assist you. We believe in the impact of data; thus, we constantly leverage technology and trusted intelligence to help our clients make informed decisions.

This hard-to-get data and analytics can help you understand the key trends impacting real estate and why our customised solution work for you.

We are experienced in building flexibility in your business processes. Our experts help clients relook at their pricing and cost structure so they get the best deal.

Reach out to us at [hello@industrialmalaysia.com.my](mailto:hello@industrialmalaysia.com.my) to get started on your industrial real estate transaction today!



## APPLICABILITY OF THIS GUIDE

1. This guide is subject to all general legal and regulatory provisions and requirements that are implemented in Malaysia, as well as all international codes, references and agreements that Malaysia complies with.

2. The Building Codes, including international codes, references and agreements adopted by Malaysia includes the following:

**a)** Electrical Code: MS 1979, Electrical Installations of Buildings – Code of Practice (minimum),

**b)** Energy Code: MS 1525, Code of Practice on Energy Efficiency for non-residential Buildings, UNDP Malaysia Building Sector Energy Efficiency Project, National Energy Policy (minimum),

**c)** Water & Sanitation: Water Services Industry Act 2006, National Water Services Commission Act for Peninsular Malaysia (not affecting East Malaysia), Sewerage Act 1994 (Affects both), and Water Forum, Ministry of Energy, Green Technology and Water (mandatory),

**d)** Mechanical System: MS 1460, MS 1918, MS IEC 60335 (minimum),

**e)** Indoor Air Quality: Code of Practice on IAQ, Department of Occupational Safety and Health (minimum),

**f)** Lighting: MS 1038, MS IEC 60364, MS 603, MS ISO 8995, MS 825, MS IEC 60335, MS 947 (minimum)

**g)** Security: No clear guidelines

**h)** Fire: Circular & Code issues by Fire Department

**i)** Structural: ICS D Section, MS 416, MS 977, MS IEC 8124, MS 544, MS 1294, MS 1057, MS 229, MS 1933, MS 1195, MS 1226, MS 1553, MS 1314, MS 1490 etc. (included in Building Code and mandatory),

**j)** Location, Siting & Zoning: 10th Malaysia Plan, Malaysia Economic Planning Unit, Town and Country Planning Act (mandatory but enforcement depends on the situation),

**k)** Environment: Environmental Quality Act 1974-2011, Fisheries Act, Land Conservation Act, Local Government Act, National Forestry Act, National Park Act, Protection of Wildlife Act, Radioactive Substances Act, Water Enactment Act, Sarawak Biodiversity Center Ordinance, Sabah Biodiversity Enactment, Sarawak Natural Resources and Environment Ordinance, Sabah Environmental Protection Enactment, Sabah Forest Enactment, Sarawak Forest Ordinance (mandatory),

**l)** Safety: Department of Occupational Safety and Health's guidelines for public safety and health at construction sites, and code of practice for safe working in a confined space. Occupational Safety and Health Act 1994 (mandatory), and its related conditions and specifications are considered an integral part of this guide.

3. The latest Green Building Index (GBI) published by the Malaysian Green Building Confederation (MGBC) is considered an integral part of this guide, and is adopted when the related content is not included in this guide.

4. In case there is a contradiction between one of the guide's regulations and the codes, referential requirements, or it is impossible to reconcile between them in such a way as not to affect the specific conditions, the conditions as stipulated by the relevant authorities and agencies shall have the priority in implementation.

# ABOUT INDUSTRIAL MALAYSIA

Industrial Malaysia is a digital marketing communications company for registered real estate agents based in Shah Alam, one of Malaysia's key industrial regions

Since our founding in 2019, we have served over 132 clients and enabled over RM180 million in industrial real estate transactions.

We pride ourselves in using data and technology to market high-value industrial properties with the view that these properties should enable more business opportunities for buyers and tenants. We pull data from hard-to-get sources and then scrutinise and analyse it to determine buyers' locations, the best pricing strategy, property unique value propositions and much more.

We are also able to consolidate information across various industrial locations to generate a big-picture view of the Malaysian industrial real estate market.

This helps buyers and tenants identify opportunities for property investment or helps inform them of the best options for their industrial real estate needs. You can read more about that [here](#).

Unlike what other property platforms can offer in terms of marketing, we focus only on industrial property and employ a one-agent-one-area policy because we value quality over quantity.

We offer genuine listings that other property portals cannot provide (many portals employ duplicate or fake listings). Buyers can always be assured that the agents that list with us are true area specialists and do not have to compete with other agents through hyper-saturated area listings.

Our buyers get the best customer service, attention and information because our agents are primed to focus on transacting the best value deals and not rush to close a large volume.

We invite you to browse our listings and get in touch with our area specialists today so that we can help you market your industrial real estate today.