Setting the standard for world class industrial parks in Malaysia Professor Dr. Ong Kian Ming Pro Vice Chancellor for External Engagement Taylor's University 4th September 2024

Overview



Current challenges facing industrial parks in Malaysia

2 Good examples to follow



Characteristics of world class industrial parks



Strategic partnerships for world class industrial parks

Classifications / Measurement of industrial parks in Malaysia



Using the JSSEZ as a catalyst

Current challenges for industrial parks in Malaysia

- Many of the older industrial parks have very poor infrastructure (roads, drainage) which have not been properly maintained
- Management Committees (MCs) of some industrial parks not functioning well
- Some industrial parks have not yet been properly "legalised"
- The Industrial Park Management Committee (IPMC) at the PBT and state levels have insufficient power and resources. Funding from the federal government via MITI for development expenditure is also limited.
- No proper classification framework for industrial parks at the federal level

I-Park Senai by AME is one of the best in class integrated industrial parks in Malaysia (I)



I-Park Senai by AME is one of the best in class integrated industrial parks in Malaysia (II)



Infrastructure is well developed and wellmaintained <u>"</u>#

Shared facilities and recreational common areas are provided. Retention pond is part of the public landscaping Workers'

Workers' accommodation is part of the integrated industrial park



AME still runs and owns the management committee (MC) for the industrial park and the workers' accommodation



Suitable for smaller factory floor space (manufacturing, logistics, mixed use)



Expanding land bank for future projects in Johor and expanding into Penang in 2H 2024 via Northern TechValley Industrial Park

(Source: here)

Characteristics of World Class Industrial Parks

Transparent and detailed overall masterplan

- Energy & Environmental sustainability (Solar RE on rooftops, Centralized District Cooling and Heat Recovery systems, waste management plan including recycling of waste-water)
- 📩 Workers' accommodation, welfare, and safety (especially for foreign workers)
- Risk and safety management (safety of processes and for people, managing accidents, real time activities monitoring)
- Management of common property and infrastructure (usually, by the developer)
- *(* Internet and Mobile connectivity (Broadband, 4G & 5G)
- Alignment with government policies (tax incentives, customs clearance, special economic zones)

Integrated with nearby townships (commercial & residential)



Examples of Industrial, Environmental & Social Infrastructure Consideration



INDUSTRIAL INFRASTRUCTURE

- Development of integrated transportation infrastructure (on-site and off-site)
- Development of power/energy infrastructure
- Development of a logistics hub
- Development of communications infrastructure
- Development of integrated utilities infrastructure

ENVIRONMENTAL INFRASTRUCTURE

- Development of solid waste collection, transport and treatment facilities
- Development of an industrial waste collection, sorting, transport and management system
- Water source development and harvesting, including rainwater, treatment and recycling infrastructure
- Development of wastewater treatment and recycling
- Renewable energy infrastructure development
- Development of co-generation plants
- Centralized effluent treatment through centralized effluent treatment plants (CEPTs)
- Provision of pollutant and toxicity testing facilities and laboratories

SOCIAL INFRASTRUCTURE

- Establishing an industrial zone with compatible social infrastructure
- Integrated industrial, commercial, institutional and social development
- Development of knowledge, training and research support infrastructure
- Provision of emergency services

Source: UNIDO

Eco-Industrial Parks as a subset of World Class Industrial Parks

Figure 3: Overall Framework for Describing Eco-Industrial Parks **Process of Continuous Improvement:** Going Beyond the EIP Performance Requirements Going Beyond the EIP Prerequisites Core Categories and Topics **EIP Prerequisites and Performance Requirements** Social Economic performance performance Park management Environmental Social management Employment management and and monitoring generation services Social infrastructure · Local business and Monitoring monitoring Planning and Energy Community SME promotion outreach and Economic value designing management Water management dialogue creation Waste and material use Natural environment and climate resilience Compliance with local and national regulations and alignment with international standards Deutsche Gesellschaft UNITED NATIONS WORLD BANK GROUP für Internationale INDUSTRIAL DEVELOPMENT ORGANIZATION Zusammenarbeit (GIZ) GmbH

Source: UNIDO

Strategic Partnerships for World Class Industrial Parks

Bringing in energy and waste management players in the planning and marketing phase of industrial park development

Partner with foreign players if they can bring in technologies that are not available locally and if their presence can help increase the "branding" for industrial parks

Come up with models of rehabilitating "brownfield" industrial park sites into eco-industrial parks with support from local, state and federal governments, with the possible assistance of international organizations such as the ADB and the World Bank

Consider Malaysia-China, Malaysia-Japan, Malaysia-Korea, Malaysia-EU branded industrial parks with infrastructure players from partner countries to anchor these developments

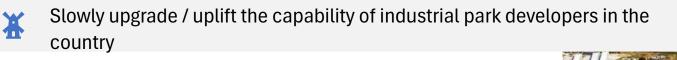
Some examples of strategic partners (domestic & foreign)

- PANTAS Climate Solutions for Carbon & ESG Measurement and Management (<u>https://pantas.com/</u>)
- Ihandal Heating & Energy solutions (<u>https://www.ihandal.com/</u>)
- KJTS District Cooling Systems & Facilities Management (<u>https://www.kjts.com.my/</u>)
- Solarvest RE solutions (<u>https://solarvest.com/</u>)
- UEM Lestra (<u>https://www.uem.com.my/ourbusiness_green.aspx</u>)
- Keppel Infrastructure (<u>https://www.keppel.com/infrastructure/</u>)
- Capital Land (https://www.capitaland.com/sites/nusajayatechpark/index.html)
- IHI Asia Pacific (<u>https://ihiap.com/</u>)

Classification / Measurement of our Industrial Parks is needed



Provide incentives for industrial park developers to provide better infrastructure and to incorporate more sustainability features.





Get the private sector more used to paying for quality infrastructure and investing in the long-term

Create business opportunities for the service sector involved in building better quality industrial parks



Allow local councils to collect more local taxes because of the higher valuation of property in higher quality industrial parks

An example of the parameters for measurement for industrial parks

Economic performance indicators relating to the ISID pillar "Advancing Economic Competitiveness":

- Good economic governance;
- Economically enabling site & infrastructure 'hardware';
- Economically enabling services 'software'; and
- Economically impactful nature (not applicable to new sites that are not yet fully operational).

Social performance indicators relating to the ISID pillar "Creating Shared Prosperity:"

- Socially appropriate site & social infrastructure;
- Social inclusiveness;
- Quality social management system & social services (not applicable to new sites that are not yet fully operational);
- · Occupational health & safety (not applicable to new sites that are not yet fully operational); and
- Good labour relations & welfare (not applicable to new sites that are not yet fully operational).

Environmental performance indicators relating to the ISID pillar "Safeguarding the Environment":

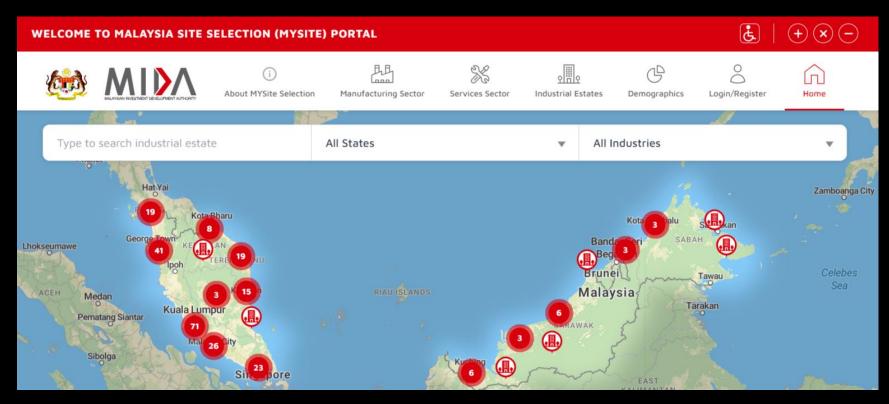
• Environmentally appropriate site;

Green infrastructure;

- Green systems (not applicable to new sites that are not yet fully operational); and
- Efficient & clean production, emissions & waste management (not applicable to new sites that are not yet fully operational).

Source: UNIDO

More coordinated marketing of our industrial parks can increase their value especially among international companies & investors



https://mysite.mida.gov.my/



The JSSEZ can be used as a catalyst to build more world class industrial parks

- Increase investments from Singaporean GLCs and real estate players which already have exposure to Johor
- Attract the interest of Singaporean GLCs which currently have limited exposure to the Johor ecosystem
- Bring in industrial park developers from other countries in the region (China, Japan, Korea, Taiwan)
- Increase opportunities for companies involved in the services sector for the industrial park ecosystem (including RE players, health and financial services for foreign workers, logistics players)
- Provide opportunities to integrate data centers into world class industrial parks (to save energy and water, for example)

Thank you and please keep in touch!

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