



COORDINATING MINISTRY FOR ECONOMIC AFFAIRS
REPUBLIC OF INDONESIA

Eco-Industrial Parks (EIPs) in Indonesia

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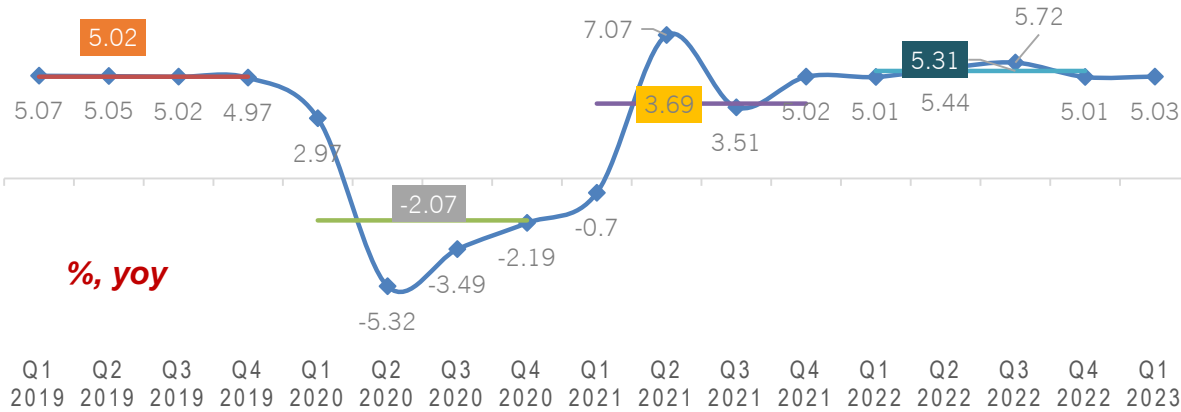
July 10-14th 2023



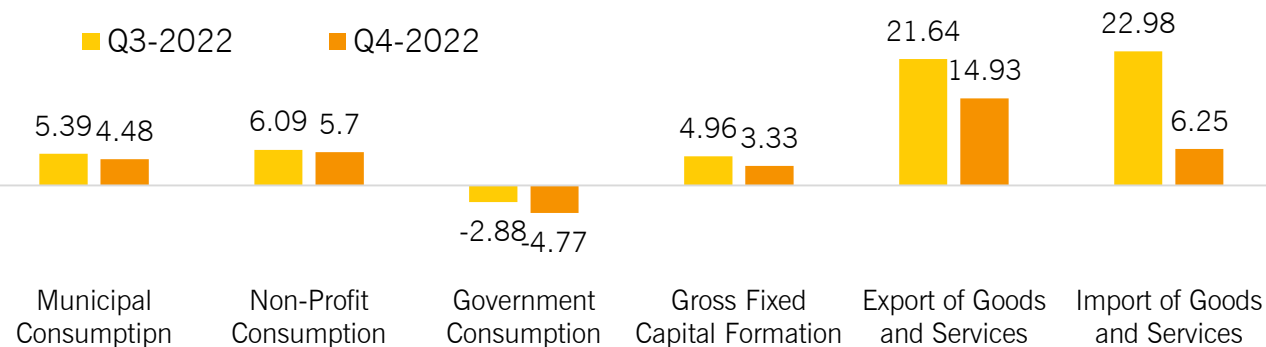
Indonesia's Economic Growth

Despite the challenging and unjust global economic, in Q1 2023 Indonesia's economic grew shown a positive number of 5.03% (YoY). **The positive trend also reflected on the full year of 2022 economic growth that shown a solid 5.31% (YoY) growth.** This situation also supported by the growing export rate.

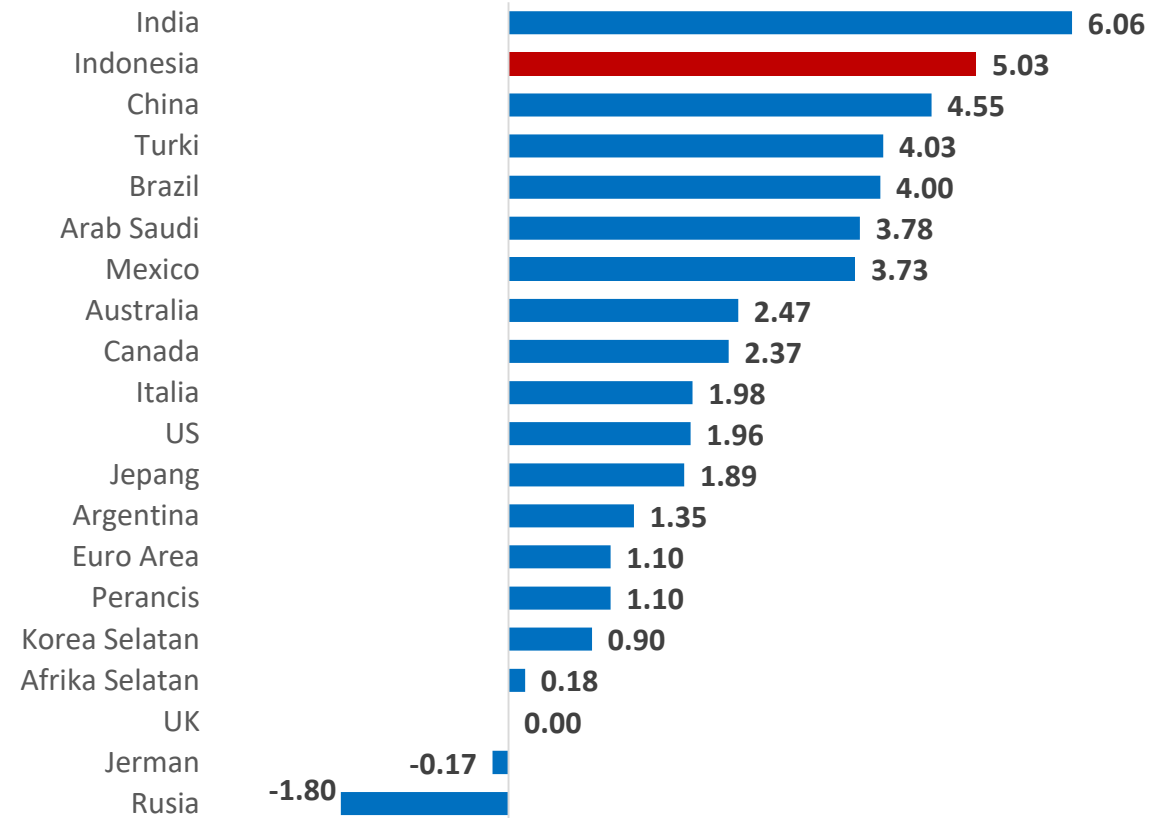
Indonesia's Economic Growth



Indonesia's Export



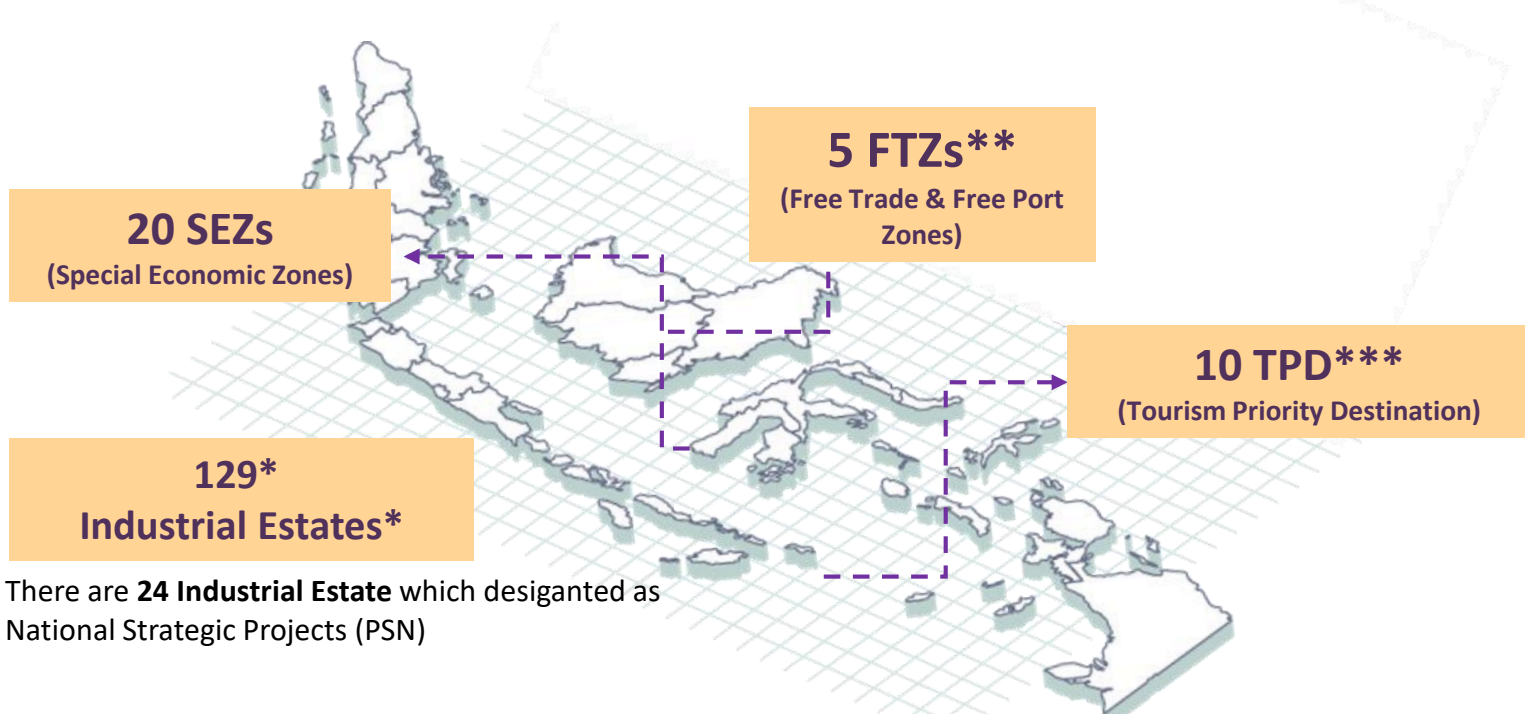
GDP Growth of G20 Countries Q1 2023 (YoY in %)





Strategic Economic Area Development

An Intensive effort to eradicate inter-regional dependency, and create sustainable yet inclusive regional economic growth around Indonesia



***129 Industrial estate that acquired Industrial Estate Business License (IUKI).**

****FTZs in Bintan Island has 2 enclave areas: Bintan FTZ and Tanjungpinang FTZ**

***** 5 out of 10 TPD classified as Super Priority Destination**

There are **24 Industrial Estate** which designated as National Strategic Projects (PSN)

Area	Purposes
SEZ (Special Economic Zone)	Enhance export competitiveness and growth, and foster investment and regional development
FTZs (Free Trade and Free Port Zone)	Increase trade sectors and enhance export competitiveness
Industrial Estate	Create a sustainable growth and industrial competitiveness in regional (local) level for export and domestic demand
TPD (Tourism Priority Destination)	Establish a high quality tourism destination and enhance local product competitiveness





Multi-Stakeholder Approach in Development EIPs' Indonesia

Coordinating Ministry for Economic Affairs
Synchronize and coordinate development policies on National Strategic Projects & Industries

National Development Planning Agency
Circular Economy; sustainable development

Ministry of Industry
Industry supervision

Ministry of Agrarian Affairs & Spatial Planning
Spatial Planning roadmap

Ministry of Finance
Incentives and Funding counsel

Ministry of Energy & Mineral Resources
Renewable Energy; Electricity Commercial Area (*Wilayah Usaha*)

Ministry of Forestry & Environment
Conservations; Flow of Material, zero waste

Ministry of Foreign Affairs
International cooperation related to environment

Ministry of Investment
Promote Environmentally-Sound Industrial Estate

Ministry of Public Works & Housing
Provide water for industries; permit on the usage of water surface

Ministry of Home Affairs
Regional/Local Development & Monitoring

- The EIPs Development in Indonesia required a framework on regulation harmonization throughout all Ministries, to foster the circular economy concept on the industrial sector
- A more strategic and intensive coordination is required to empower the environment conservation



Improving Indonesian Industrial Park Competitiveness Through EIPs

- ❑ In the past few years, **Sustainable and Responsible Investments (SRI)** experienced a positive trends in several countries. According to Global Sustainable Investment Alliance Report 2021, there is an increase of 15% of sustainable and responsible investments (SRI) in the last two years bringing the total to USD 35.3 trillion.
- ❑ *Sustainable And Responsible Investments (SRI)* countries are dominated with developed countries (Canada, US, Japan, European countries, and Australia) However, Indonesia has a potential to be attractive to SRI as potential country partner. One of the strategy is through the development of EIPs.
- ❑ EIPs development will increase Indonesia competitiveness index, which in the past few years showed a positive trends. Other that, EIPs development align with Industrial Park 4.0 Principle for the thematic sub-industrial estate.

INDUSTRIAL PARK 4.0



Smart Infrastructures

Smart Logistic System



Human Capital Infrastructures

Digital Hub & Innovation Park



Thematic IP: Halal IP, Horticultura IP, SMES IP, Eco Industrial Park, Smart Industrial Park

Pilot Project of the Green Industrial Park located in Tanah Kuning, North Kalimantan



The President of the Republic of Indonesia statement on 13th October 2021:

“Strengthening the sustainable economic principle and good natural resources management in Indonesia initiated by establishing **Green Industrial Park** with total 20,000 hectare area, designated as **the green industrial estate in North Kailmantan** to be able to compete with US or EU countries which no longer using fossil fuel in the future”



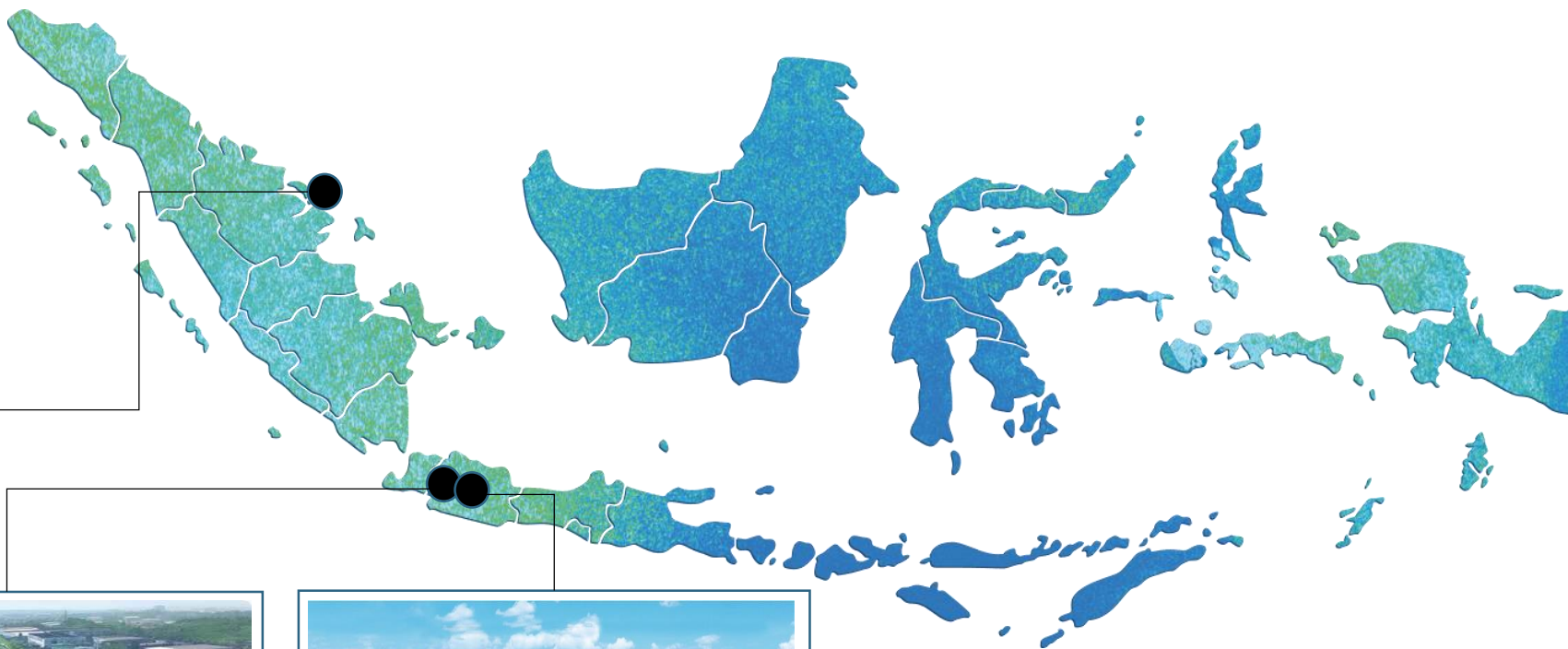
- Tanah Kuning Industrial Estate Project is one of the National Strategic Project (PSN) which the ground breaking by the President had been done on 21st December 2021
- Investment value of the project is USD 132 billion (up to 2029)
- Workforce created from the project estimated around 100,000 people (construction phase) and 60,000 people (operational phase)
- Expected to create a added value from the abundant raw material that processed through hydropower energy (renewable energy) as much as 10 gigawatts and solar cell energy as much as 10 gigawatts
- The Industrial Estate has potential to develop the establishment of New Energy Battery, which will support the Electric Vehicle acceleration program to reducing Green House Gas Emission by 2030.





Current Eco-Industrial Park Development in Indonesia

Currently there are 3 (three) Eco-Industrial Parks that have been designated as Global Eco Industrial Park Program (GEIPP) implementation pilot projects, located in West Java and Riau Island Province. GEIPP is collaboration between Government of Indonesia, UNIDO and SECO which provide a coherent structure in the development of environmentally friendly industrial estates through economy, environment, social and business performance, as well as the utilization of industrial technology 4.0.



Batamindo Industrial Estate, Riau Island Province



Karawang Internasional Industrial City (KIIC), West Java Province



MM2100 Industrial Estate, West Java Province



Regulation on EIPs Development in Indonesia

- One of the main challenges on the EIP development in Indonesia is the comprehensiveness of specific framework or regulation. Up to this moment, the government keep progressing to integrate and advancing the legal framework that involves related stakeholders. Thus, an umbrella regulation on the EIP Development from the Government with inputs from related stakeholder will be an expected outcome in the near future.
- In contrary, EIP development has implicitly administered in several existing regulations on Environmentally-Sound Industrial Development and regulations on the Implementations of Green Industry in Indonesia. The implementation of EIP Development is indivisible from the provisions in existing regulations

Challenges in EIP Development



Regulation

An umbrella regulation on the EIP Development from the Government with inputs from related stakeholder is highly called upon



Management

Commitment from the Industrial Estate Management and its tenants (communication, environmental permits, etc)



Environment

The implementation of Resource Efficiency and Cleaner Production (RECP): waste management and/or water & energy management



Social

Potential social fractions with the surroundings residential area due to the hampered environment quality and/or the employment of foreign workers



Economy

Funding, potential partnership with the society surroundings, and green investment.

Green Industry

1. Law Number 3 of 2014 on Industry;
2. Government Regulation Number 14 of 2015 on Masterplan of National Industrial Development;
3. Government Regulation Number 29 of 2018 on Industry Empowerment;
4. Government Regulation Number 28 of 2011 on the Industrial Management;
5. Ministry of Industry (MoI) Regulation Number 51 of 2015 on Guidelines on Green Industry Standard Composition;
6. MoI Regulation Number 8 of 2016 on Green Industry Pricing;
7. MoI Regulation Number 41 of 2017 on Green Industry Certification Institutions;
8. MoI Regulation Number 39 of 2018 on Green Industry Certification Procedures.

Eco-Industrial Park

Implicit EIP Development regulations embodied within:

1. Law Number 3 of 2014 on Industry;
2. Government Regulation Number 14 of 2015 on Masterplan of National Industrial Development;
3. Government Regulation Number 142 of 2015 on Industrial Estate;
4. Government Regulation Number 28 of 2021 on Industrial Sector Management;
5. MoI Regulation Number 40 of 2016 on Technical Guidelines on the Industrial Estate Construction.





Regulation on EIPs Implementation Principles (Implicitly)

Regulation	Environmentally-Sound Principles
<p>Law Number 3 of 2014 on Industry</p>	<ul style="list-style-type: none"> ▪ Restrictions on the use of technology with ineffective energy consumption, including high energy consumption, safety hazardous, and high possibility on environmental hazards. ▪ Efficiency and effectivity of the sustainable resources usage, which aim to harmonize the industrialization development with environment preservation, and eco-socially beneficial for surroundings. ▪ Implementation of the environmentally-sound management system in the development of Green Industry.
<p>Government Regulation Number 142 of 2015 on Industrial Estate</p>	<ul style="list-style-type: none"> ▪ The development of a environmentally-sound industrial estate ▪ Requirement to obtain environmental document (AMDAL) as one of the prerequisite to obtain business permit to operate within the Industrial Estate ▪ Designate a particular area for small and medium industries which has potential production of pollution
<p>Government Regulation Number 28 of 2021 on Industrial Sector Management</p>	<ul style="list-style-type: none"> ▪ Environmental Management is one of the main aspects from mandatory standard for a company to operate within the Industrial Estate ▪ Compulsory usage of a sustainable and efficient raw and/or auxiliary material ▪ Natural resource exertion has to be suitable for its initial purpose and has to consider the aspect of sustainability and efficiency ▪ Partnership and cooperation in developing industrial estate has to solely based on environmentally-sound considerations ▪ The role of the surrounding's society in monitor the industrial estate development through information sharing of a regular reporting
<p>Ministry of Industry Regulation Number 40 of 2016 on Technical Guidelines on Industrial Estate Construction</p>	<ul style="list-style-type: none"> ▪ Environmental Management to be implement to create a green industrial estate, inter alia: <ol style="list-style-type: none"> 1. Promote and encourage the green practices to every tenant 2. Compliance towards the environment preservation customs (locally), one of them by send the periodically report of RKL/RPL 3. Energy efficiency and the usage of Renewable Energy 4. Water efficiency or encourage water saving mode 5. Waste water management 6. Monitoring and Evaluation of K3L Practices (Health, Work Safety, and Environment) 7. Quality standard for gas, liquid and particle waste 8. Visual monitoring of waste/emission potential, and hazardous waste management



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THANK YOU

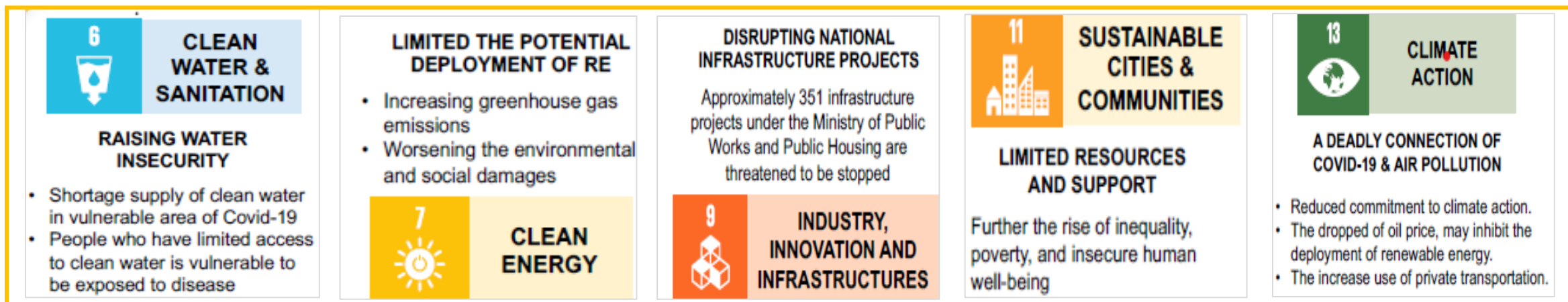
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EIPs Development: The New Way for Sustainable Recovery

The COVID-19 pandemic **has had a severe impact on the global sustainability agenda**. The current risk from the pandemic will jeopardize the countries' efforts in achieving the SDGs.



Source: Bappenas & LPEM FEB UI (2020)

Countries across the globe should make efforts to embed sustainable aspects in their **recovery agenda**. When it comes to environmental aspects, the recovery agenda items, such as a green stimulus program, must make a fundamental change in economies and industrial activities (i.e. the development of EIPs).

EIP and green industrial policy is the new way for sustainable recovery:

- develop industries;
- upgrade domestic capabilities;
- reduce dependence on finite resources such as fossil fuels;
- and improve access to basic services as well as livelihoods of lower-income groups.



Economy benefit of EIPs policy:

- industrial parks and their companies to become more resource efficient and innovative;
- developing and providing access to new technologies;
- fostering the creation of new industries and markets.

Social benefits of EIPs policy:

- creation of local jobs, job security and better working conditions.



Rationale, Key Objectives, and Success Factors of EIPs-Related Policies



RATIONALE

▪ The policies adopted to disseminate EIPs (Daddy, et. al. 2016):

DIRECT REGULATION

VS

VOLUNTARY TOOLS

▪ Direct regulation **seem to be preferred by governments**. Direct regulation have been applied in many countries in Europe, North America, and Asia to promote specific eco-industrial initiatives. **Governments will play a crucial role** by creating the appropriate market conditions, policy and regulatory frameworks, technical guidelines, and by initiating learning and participation processes.



KEY OBJECTIVES

1. **Create effective policy and regulatory processes** to support the planning, development and implementation of EIPs and associated practices (e. g. RECP, park management, spatial planning and zoning, park level infrastructures and utility services).
2. **Facilitate enabling settings and structural changes** to capture sustainable and inclusive industrial development opportunities through industrial parks emerging from rapidly changing technical, economic, environmental and social conditions.
3. **Mainstream environmental and social issues** into economic and industrial development policies.



SUCCESS FACTORS

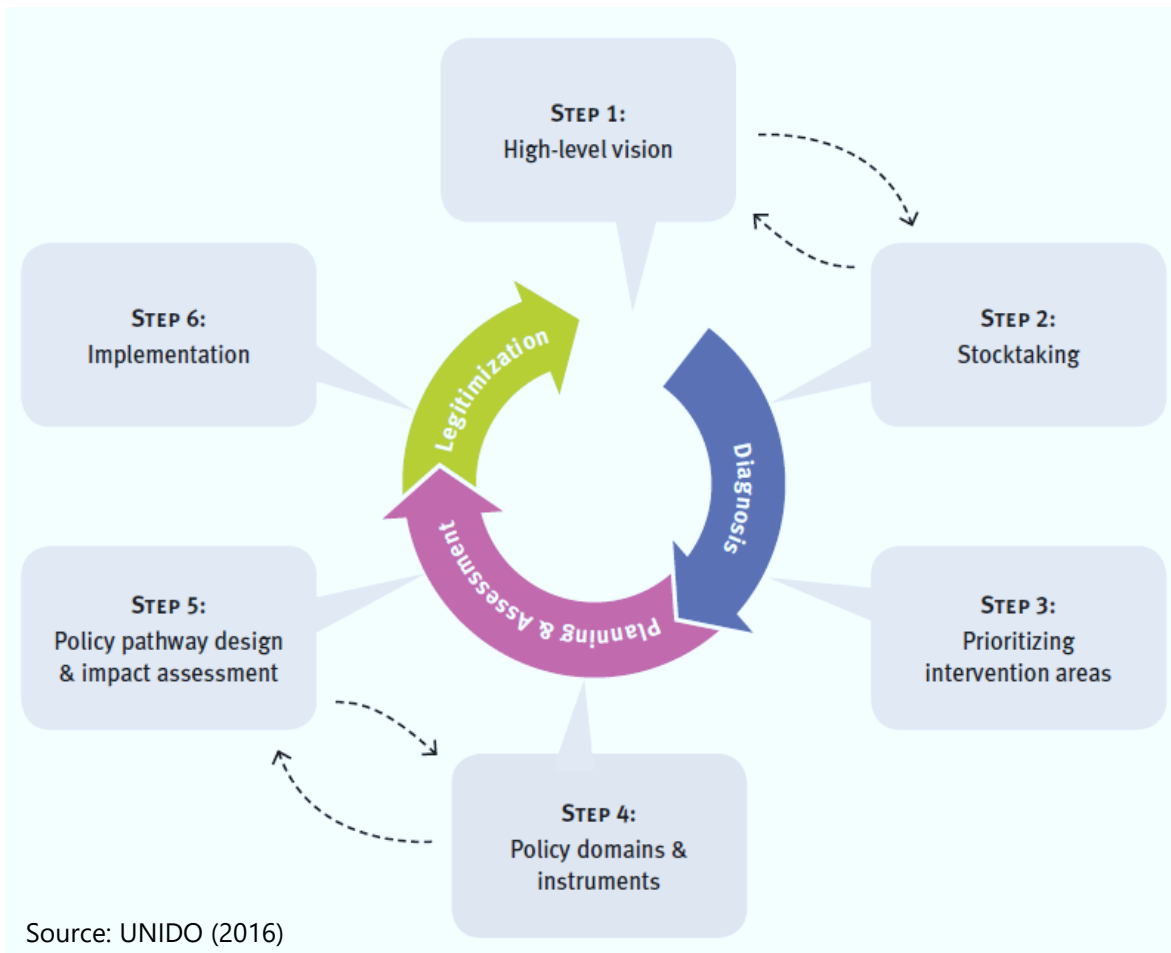
Success factors in developing a country's sustainable industrial policy (PAGE, 2016a; UNEP, 2015):

- **High-level and long-term commitment:** political support is necessary for any successful policy implementation
- **Prioritize policy interventions:** policy interventions should be prioritized, ideally based on systemic impact.
- **Apply multi-stakeholder approaches:** adequate communication and education for all stakeholders increases the likelihood of successful implementation.
- **Integrate policy interventions:** preferable to formulating them as stand-alone policy areas
- **Recognize benefits, costs and risks:** vital to understand and continuously address their risks, costs and benefits.
- **Address policy implementation and enforcement challenges:** important to address direct policy mainstreaming, effectiveness and enforcement activities.
- **Monitoring and performance indicators:** to ensure the effectiveness of measures



Holistic Steps to Develop EIPs-Related Policies

- This section outlines the different steps of a complete policy cycle as a holistic and investigative instrument to develop eco-industrial parks based on United Nations Industrial Development Organization (UNIDO).



Steps	Description
EIP high-level vision setting	It is recommended that at the start of the policy intervention process, an easily communicated long-term vision/goal for EIP development and implementation is defined.
Policy and data stocktaking for baseline setting and benchmarking	This requires a detailed analysis of existing policies, including a review of policy instruments which are already in place.
Prioritizing intervention areas and goal setting	This new approach is known as Growth Identification and Facilitation (GIF), and offers practical development paths that enable developing countries to follow their comparative advantages in industrial development and thereby directly work towards sustained and dynamic growth
Policy domains and policy instruments	Any policy intervention requires a careful selection of policy domains and policy instruments as well as the design of policy pathways in which they will be operationalized
Policy pathway design and impact assessment	A variety of policy paths and scenarios should be developed to aid in visualizing and anticipating how the EIP policy intervention and its respective policy instruments could be operationalized.
Policy implementation	The implementation of new policies should be strengthened by regular monitoring and evaluation, and requires ongoing attention as it is a dynamic process which may need adjustment.



Key Regulatory Challenge for EIPs and Potential Solutions

▪ **The regulatory challenge for EIPs come mainly from:**

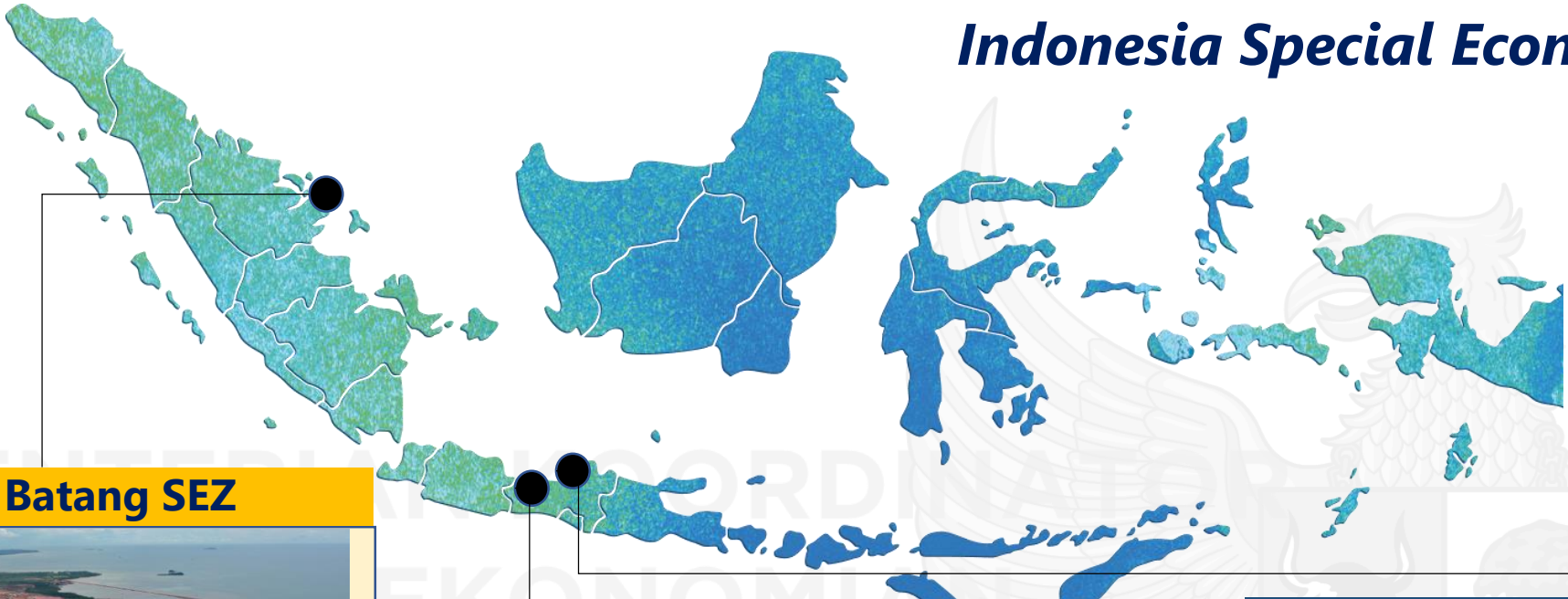
1. Lack of sufficient, appropriate regulations, and their enforcement.
2. Lack of incentives for conventional industrial parks and their resident firms to prioritize sustainability.

Challenge	Solutions
<ul style="list-style-type: none"> ❑ Lack of suitable policies to encourage EIP development (both command and control, and fiscal incentives). ❑ Lack of policies to encourage clean technology development and adoption. ❑ Lack of transparency surrounding industrial regulations and enforcement. ❑ Regulations not applied universally, leading to competitive disadvantages. ❑ Limited capacity of stakeholders to engage with more favorable regulatory frameworks. 	<ul style="list-style-type: none"> ❑ Seek to understand the key national and local barriers to the adoption of environmental and social standards in industrial operations. ❑ Set hard and soft targets for the development of EIPs. ❑ Develop command and control, and fiscal incentives that encourage EIPs. ❑ Develop regulations that are conducive to the development of an enabling environment for EIPs. ❑ Engage in national, regional, and international dialogue to source best practices, rather than duplicate existing practices.





Indonesia Special Economic Zones



Galang Batang SEZ



- Galang Batang SEZ is located in Bintan Island, Riau Islands Province and strategically located in Malacca Strait chokepoint central.
- Galang Batang was proposed by PT GBKEK Indutry Park and was stipulated through the Government Regulation Number 42 Year 2017 on 12th of October 2017. Galang Batang SEZ will be developed as the mineral processing industry central of mining products, primarily bauxite industry and its derivatives, both from refinery and smelter processes.
- The SEZ will also develop various potential industries, namely textile, garment, automotive, manufacture and light industry.
- Galang Batang SEZ is estimated to absorb 23.200 of manpower and development investment value is 2,5 billion USD.

Batang Integrated Industrial Park



- Batang Integrated Industrial Estate (KITB) is a government-solicited project to capture the momentum of foreign investment relocation.
- The development of Grand Batang City is expected to increase Indonesia's regional competitiveness compared to neighboring countries, especially Vietnam and Thailand.
- In order to provide regulatory certainty, Grand Batang City has been designated as a National Strategic Project according to Presidential Regulation Number 109 of 2020

Kendal SEZ



- The excellence of the KEK Kendal rests on the geographical location of Kendal Regency which is close to Ahmad Yani International Airport, Tanjung Emas International Port, and is passed by the Semarang-Pejagan toll road which is part of the Trans Java Toll Road, the North Java Coast route, as well as the Dual Railway Line. Jakarta Semarang-Surabaya.
- The KEK Kendal excels in the export-oriented industrial sector, import substitution, high-tech products (HTP), and in special applications that support Industry 4.0 and Industry 4.0-based logistics. The KEK Kendal is projected to attract an investment of IDR 72T and a workforce of 20,000 workers by 2025.

Galang Batang Special Economic Zone

Galang Batang SEZ is the biggest heavy industry in Riau Island Province. The aim of Galang Batang SEZ is to support the government policy of downstream-industry focus. The strategic location of Riau Island Province complement the logistic operation of Galang Batang SEZ

BACKGROUND

- Galang Batang was proposed by PT GBKEK Industry Park and was stipulated through the Government Regulation Number 42 Year 2017 on 12th of October 2017. Galang Batang SEZ will be developed as the mineral processing industry central of mining products, primarily bauxite industry and its derivatives, both from refinery and smelter processes. The SEZ will also develop various potential industries, namely textile, garment, automotive, manufacture and light industry. Galang Batang SEZ is estimated to absorb 23.200 of manpower and development investment value is 2,5 billion USD.

PROJECT PROFILE

Location
Bintan Regency, Riau Islands Province

Administrator
PT GBKEK Industrial Park

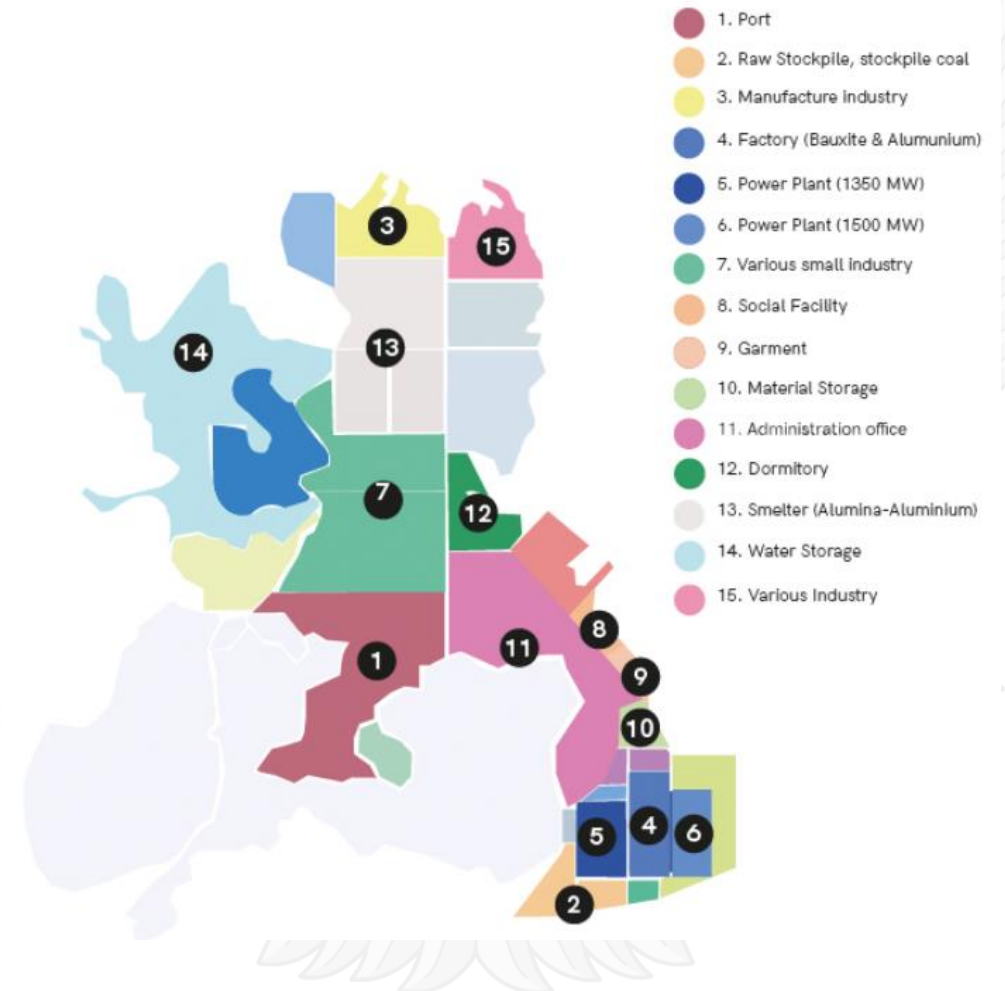
Investment
Targeted USD 20 billion

Employment
+ 23.200 labor

Industrial Sector
Bauxite Processing Industry,
Logistics

Land
Total = ± 2.333,6 Ha

MASTERPLAN



Batang Integrated Industrial Estate







Batang Integrated Industrial Estate (KITB) is a government-solicited project to capture the momentum of foreign investment relocation.

BACKGROUND

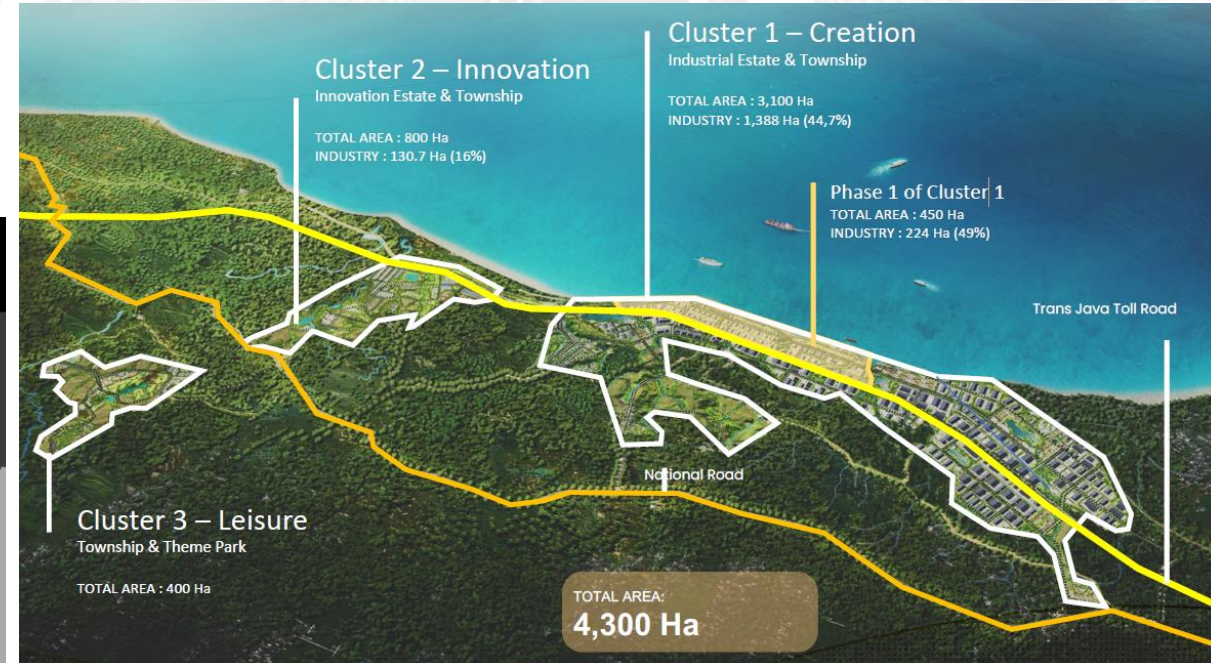


- Grand Batang City is designed as an integrated industrial zone to **capture opportunities for industrial relocation** to several developing countries.
- The development of Grand Batang City is expected to **increase Indonesia's regional competitiveness** compared to neighboring countries, especially Vietnam and Thailand.
- In order to provide regulatory certainty, Grand Batang City has been **designated as a National Strategic Project** according to Presidential Regulation Number 109 of 2020

PROJECT PROFILE

 Location Batang Regency, West Java Province	 Industrial Sector General industry, heavy industry, chemical industry
 Administrator PT. Kawasan Industri Terpadu Batang	 Land Total = 4.300 Ha Cluster 1 = 3.100 Ha, Cluster 2 = 800 Ha, Cluster 3 = 400 Ha
 Investment Projection = Rp5.797 Billion	
 Employment 1.088 Labor	

MASTERPLAN



2018

2019

2020

- The issue of the US-China trade war.
- Increase in import duty tax rates in China

- The Covid-19 pandemic started in China.
- Industrial relocation from China (30 firms) → 23 industrial companies relocated to Vietnam.

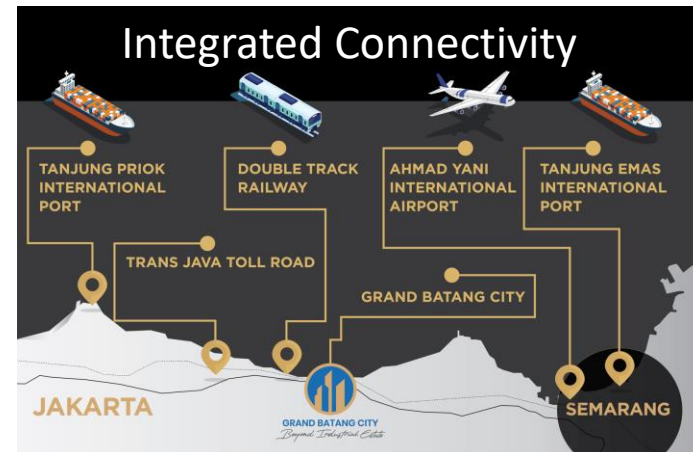
- 1000 US-based industries plan to leave China
- **The Indonesian Government is preparing the Grand Batang City as Integrated Industrial Zone in Central Java province**

THE EXCELLENCES

5 years free period for long term lease

80 years of lease term for Building Use Rights over Land Use Rights

Ease of access to logistics





Kendal Special Economic Zone

Kendal SEZ is located in Central Java and currently evolve as the biggest industrial estate locus in the province.

BACKGROUND

- Kendal SEZ is a form of cooperation between Indonesia and Singapore. On November 2016, Prime Minister Lee Hsien Loong delivered a speech at the opening ceremony and said that this project is a win-win result for both parties
- The excellence of the KEK Kendal rests on the geographical location of Kendal Regency which is close to Ahmad Yani International Airport, Tanjung Emas International Port, and is passed by the Semarang-Pejagan toll road which is part of the Trans Java Toll Road, the North Java Coast route, as well as the Dual Railway Line. Jakarta Semarang-Surabaya.
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PROJECT PROFILE



Location

Kendal Regency, Central Java



Administrator

PT Kendal Industrial Park



Investment

Attracted ± US 18 billion



Employment

+12.000 Labor



Industrial Sector

Furniture, Textile, Food, Electronic, Automotive



Land

Total = ± 1000 Ha

MASTERPLAN

