



JOHOR PORT AUTHORITY

GREEN PORT POLICY

Towards Sustainable Port
Operation and Development

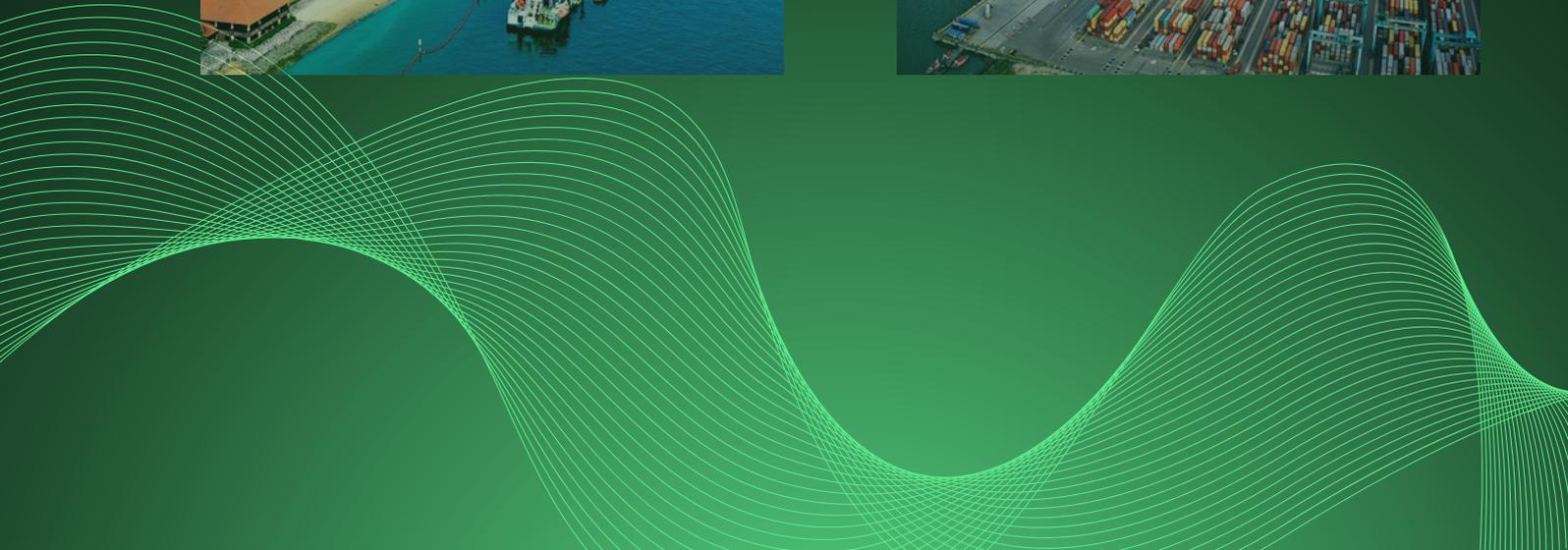


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MESSAGE FROM OUR LEADER

Dear colleagues and partners,

In recent years, we are facing challenges due to climate change. The effects of rapid industrialization, economics growth and population, along with increase of demand for resources and environmental impacts, adversely have left the footprints. These trends and their repercussions require our attention on how we could manage and sustain the impacts by anticipating in developing the Green Port Policy.

I would like to express my heartfelt gratitude on writing a message in the new version of Johor Port Authority Green Port Policy. As Port Authority, it is our role as the port regulator, coordinator and trade facilitator for port operators, private jetties and terminal operators in both port limits of Pasir Gudang and Tanjung Pelepas. This new policy shows our commitment for the integration of environmental sustainability principles and initiatives that will act as a guide in business decisions, development and operations towards sustainable port.

I would like to take this opportunity to extend my appreciation to the JPA teams who worked diligently to create the new version of Green Port Policy. I would also like to express my gratitude to each and every individual and team from various stakeholders who have been successfully completed and continuously plan for more sustainable initiatives to come towards a better future.

Dato' Monaliza binti Suhaimi
General Manager
Johor Port Authority



INTRODUCTION

Johor Port Authority (JPA) Green Port Policy guides decision-making and establishes a framework for environmentally friendly port development and operation. We aspire that the Green Port Policy will catalyze more sustainable port operation and development in Malaysia.

As the port and regulatory authority, Johor Port Authority oversees all development within the port limit. The green port policy will ensure the sustainability of port development and operation, considering that any port development has a minimal environmental impact. We also hope the Green Port Policy will encourage all stakeholders, from port and terminal operators, port users, government agencies, academia and the port community, to become more creative and innovative, adopting a more sustainable business approach in their daily operations.

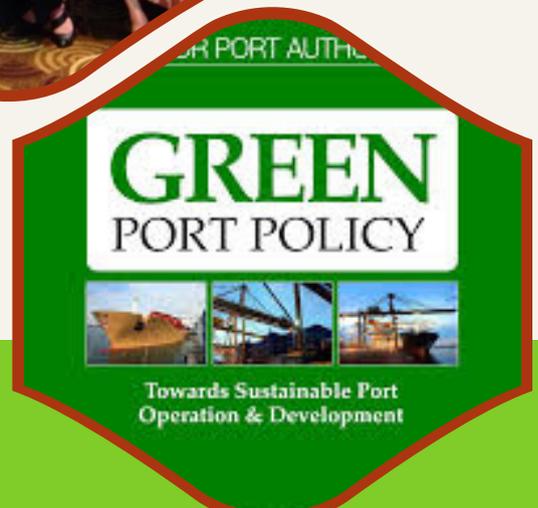
The Green Port Policy outlines some basic principles, strategies, and practices for areas where port development and operation can be both environmentally friendly and commercially viable. This policy also suggests some proactive approaches and solutions where impacts on the local community and the environment can be better managed.

HISTORY

Our green port policy journey started with collaboration with Germany Technical Cooperation (GIZ), Johor Port Authority (JPA), Johor Port Berhad (JPB), and Port of Tg. Pelepas Sdn. Bhd. (PTP). The policy was officially launched on 13 October 2014, aimed at action plans for 2014- 2020.

The policy has the following objectives

- to ensure a balance of environmental, social and economic during planning development and operational decisions
- to prevent pollution and improve personal, community and ecological health
- to define and establish performance driven environmentally and sustainability objectives, targets and programs
- to monitor key environmental indicators and consistently improve performance
- to engage and educate the community
- to develop energy, electricity and fuel saving initiative



GREEN PORT POLICY GUIDELINES



Protecting the community and environment from negative economics externalities as a result of port operation and related activities



Adapting economic, social and governance (ESG) framework in port planning, operation and development



Inculcating green and sustainability elements among stakeholders by embracing sustainable technology and environment-friendly material



To form alliance and foster strategic partnerships between stakeholders towards sustainability



Improving the quality of life and environmental conservation by pollution preventive measure and environmental protection



Encouraging positive impacts towards environment, social, and governance (ESG) benefits



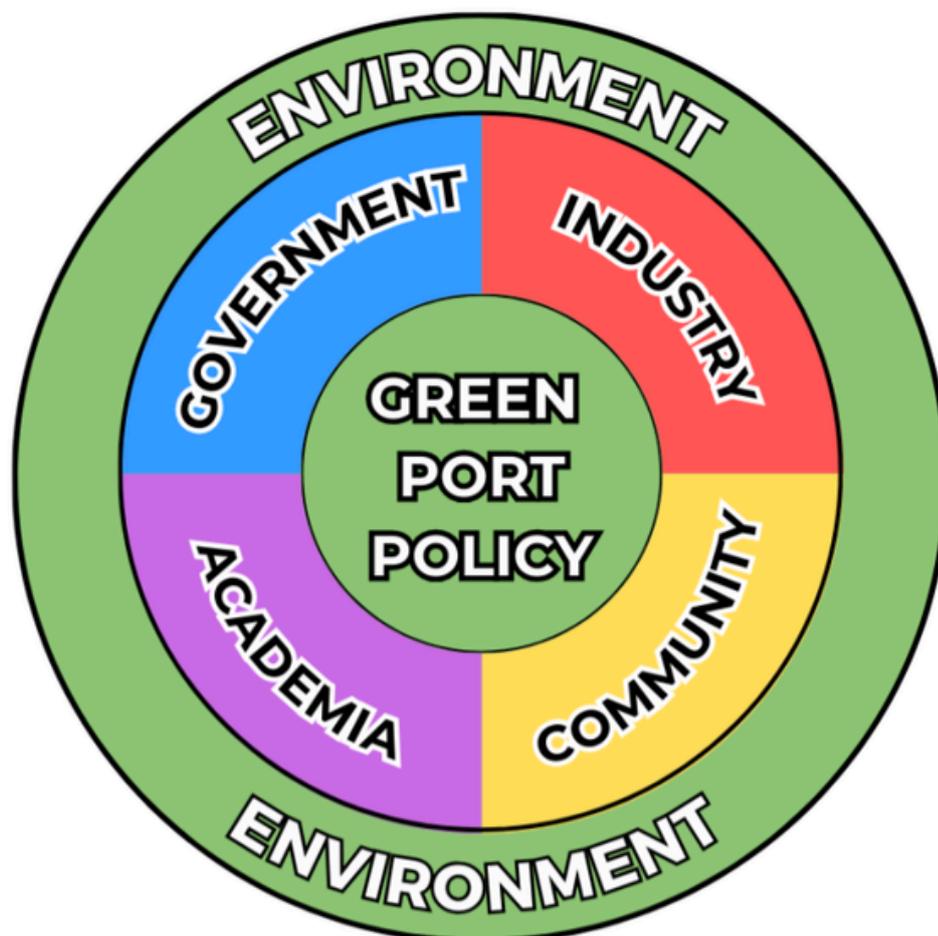
To provide principal direction inline with environmental legislation compliance and conservation initiatives



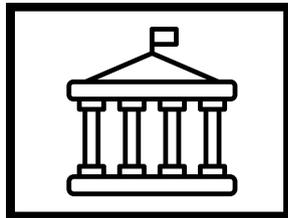
To encourage renewable energy and energy efficiency initiatives toward net zero carbon

GREEN PORT POLICY FRAMEWORK

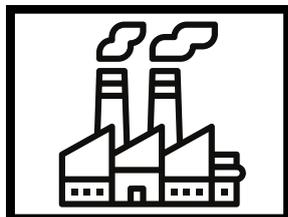
The framework of the JPA Green Port Policy considers four stakeholders directed towards green initiatives and environmental sustainability. As port regulatory and authority, our role as policymaker is to drive and act as an interlink to connect stakeholders to achieve targets and objectives.



SYNERGIZING STAKEHOLDERS WITH UNITED NATION SUSTAINABLE DEVELOPMENT GOALS (UN SDG)



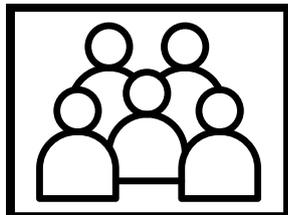
GOVERNMENT



INDUSTRY



ACADEMIA



COMMUNITY



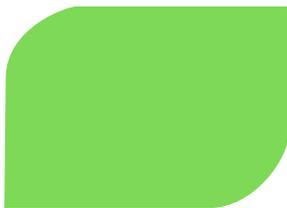
ENVIRONMENTAL SCOPES



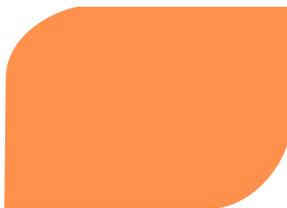
AIR QUALITY



WATER QUALITY



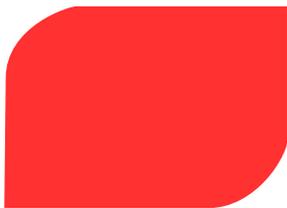
AQUATIC ECOSYSTEM & MARINE HABITAT



WASTE MANAGEMENT



ENVIRONMENTAL MANAGEMENT



ENERGY MANAGEMENT



AIR QUALITY

OBJECTIVES

To reduce harmful emission from ships and port activities

To protect and improve air quality

To reduce carbon emissions and greenhouse gases

To comply with international and local regulations toward air quality and GHG emission

INITIATIVES FOR AIR QUALITY

1

Establish air monitoring stations for air quality control and air pollution prevention

2

Control and reduce carbon emission and greenhouse gases (GHGs) from shipping and non-shipping sources

3

Measure the amount and quality of fuel from vessels at berth

4

Develop a research for MARPOL Annex VI implementation

5

Encourage the use of alternative modes of transportation and electric vehicle (EV)

6

Plan for Green Flag Incentive Program (vessel speed reduction, clean fuel, vessel and truck program)

8



WATER QUALITY

OBJECTIVES

To protect and improve water quality in port area

To preserve the water reservoir in port

To ensure ballast water management compliance

To comply with international and local regulations toward water quality and standards

INITIATIVES FOR WATER QUALITY



Coordinate and implement water quality monitoring program on regular basis



Monitor and control domestic and schedule wastes



Collaborate with government and industry to prevent oil and chemical spillage into port reservoirs



Conduct a study with subject matter expert (SME) for water quality monitoring



Coordinate river conservation initiatives with various stakeholders



Ensure all new development are comply with local and international regulations



Collaborate with strategic partnerships to ensuring water quality and hydrodynamic regime impact are minimize



Conduct regular inspections to all port facilities for regulatory compliance and industry best practices to prevent water pollution



AQUATIC ECOSYSTEM AND MARINE HABITAT

OBJECTIVES

To develop initiatives that protect and conserve the shore, mangrove, and wildlife

To prevent invaded species of foreign origins that may harm the local ecosystem

To ensure ballast water management compliance for all ships

To comply with international conventions and local regulations toward biodiversity and environmental conservation

INITIATIVES FOR AQUATIC ECOSYSTEM & MARINE HABITAT

1

Develop the initiatives that will protect and conserve the shore, mangrove forest and habitats

2

Collaborate with strategic partnerships with government, industry and community

3

Gather information and develop database that can support decisions and actions toward environment sustainability

4

Conduct research and monitor the impact of port operations and its activities on aquatic ecosystem

5

Implement special sensitive or same risk area in port water limit



WASTE MANAGEMENT

OBJECTIVES

To have proper waste management system to reduce environmental and health impact

To accelerate 3R concept of waste minization (reduce, reuse & recycle) initiatives and increase its infrastructure capacity

To monitor correct handling of waste and its disposal at port reception facility or by licensed contractor at approved facility outside the port

To comply with international and local regulations, standards and best practices towards environmental sustainability

INITIATIVES FOR WASTE MANAGEMENT

1

Implement a waste management plan, which include identification of opportunities to reduce the amount of waste being disposed

2

Provide a dedicated storage area for the separation, collection and recycling of waste

3

Implement 3R concept (Reduce, Reuse, and Recycle)

4

Ensure the safe storage and handling of hazardous wastes and its disposal by licensed contractor and approved facility

5

Manage hazardous wastes and secure appropriate licenses and approvals.

6

Develop a waste management system and procedure for handling wastes from vessels and port premises

7

Ensure the Port Reception Facilities (PRF) at port can be sustained in term of service demand and operational cost



ENVIRONMENT MANAGEMENT

OBJECTIVES

To identify the risks and opportunities resulting from environment, social and governance (ESG) factors

To encourage the port industry to have Environmental Management System (EMS)

To engage among stakeholders about environmental issues

To comply with international and local regulations, standards and best practices towards environmental sustainability

PROGRAM FOR ENVIRONMENTAL MANAGEMENT

1

Engage with stakeholders about environmental issues (government, industry, academia and community)

2

Gather information and develop database that can support decisions and actions toward environment sustainability

3

Comply with national environmental legislation and energy transition roadmap

4

Encourage innovation in environmental management across all aspects of planning, development and operations

5

Encourage developers, tenants and employees on environmental, sustainable and energy management

6

Implement awareness program for stakeholders on minimizing environmental impacts

7

Formulate Green Tariff and incentives for ports, shipping, logistics and maritime sectors

INITIATIVES FOR ENVIRONMENTAL MANAGEMENT (continued)



Interact with all stakeholders regarding port operations and environmental protection awareness program



Develop programs to ensure that the balance between port development and the environment is maintained



Communicate with port community with regard the massive development within the port limit.



Use Green Technology Initiatives by employing best equipment and practices to reduce environmental impacts



Maintain green landscaping and encourage biodiversity within the port



ENERGY MANAGEMENT

OBJECTIVES

To increase energy efficiency usage

To comply with energy legislation

To accelerate energy transition towards clean and sustainable energy in order to improve climate resilience

To promote energy efficiency and energy-saving continuous improvement

To promote renewable energy and clean fuel usage

To reduce carbon emission up to 45% towards net zero carbon

INITIATIVES FOR ENERGY MANAGEMENT

1

Collaborate with all stakeholders to plan, implement and monitoring low carbon initiatives and environment sustainability

2

Synchronize and integrate related national action plans and roadmaps into Green Port Policy

3

Facilitate the energy transition to a high-value clean and green fuels

4

Implement energy, electricity and fuel saving initiatives

5

Encourage the adoption of green mobility and transportation

6

Harmonize energy trilemma between energy security, affordability and environmental sustainability

7

Encourage in implementation of Energy Management System (EnMS)

8

Initiate in providing shore power connections (cold-ironing)



CONCLUSION

JPA Green Port Policy serves as a guideline which requires ambitious, decisive, committed action that will drive port operation and its development in Johor as southern gateway towards environmental sustainability and resilience.

Together with many objectives and initiatives, will shape a new level of solutions, mitigating actions, strategic collaboration, technology adaptation and business model, in order to achieve positive and sustainable outcomes in the years ahead.

It is our hope that this policy will enhance the sustainability and resilience plan to the ports by ensuring the resource allocation, investment and decision are being made in coordinated manner and with support from key stakeholders.



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