









# PHILIPPINE PORTS AUTHORITY

"Resilient Ports: Innovating Best Practices for Environmental

**Protection and Disaster Management"** 



International Network of Affiliated Ports (INAP) 2024 Conference Subic Bay Freeport Zone, Philippines October 16-17, 2024

# PPA AO NO. 05-2018: PORT ENVIRONMENT POLICY

"The Philippine Ports Authority (PPA), as a government agency tasked to administer the ports in the country including the development of the ports to spur regional and national growth, shall adhere to the concept of ensuring that *port activities are focused on minimizing the* adverse or negative impact to the environment and ensuring that all aspects of port operation and port development are geared towards the protection and preservation of the environment for the maximum utilization of port facilities."



## RATIONALE FOR GREEN PORTS:

- Combating Global Climate Change
- Promoting Environmental Sustainability
- Enhancing Public Health
- Strengthening Operational Sustainability
- Complying with Regulations
- Improving Stakeholder Relations
- Supporting Economic Growth

#### **GREEN PORT SOFT INFRASTRUCTURE**

01

Regulations are contained in Administrative Orders (AO), Memorandum Circulars (MC), Memorandum Orders (MO) ports



Terms of Reference for Bidding of Ports (i.e. provision of OPS)

02

**PPA Orange Book:** Book II is Environmental Management in Ports (2015)

AO 03-79 on "Environmental Protection Requirements" (1979)

**Port Environmental Policy** (2018)

04

- ✓ Ban on the use of single-use plastics in all its controlled ports nationwide was issued
- ✓ Mandatory tree planting (12.3M Trees Planted Across the Philippines)
- ✓ Transport Accreditation Permit and Pass for Ports System (TAPPS)
- ✓ Implementation of Terminal Appointment Booking System (TABS)
- ✓ Rethinking Plastic Ship Waste Management in Philippine ports

#### GREEN INITIATIVES AND PROJECTS: HARD INFRASTRUCTURE

## APEC Port Services Network (APSN) - Green Port Award System (GPAS)

Primary Indicator	Secondary Indicator	Reference Standard
Commitment and Willingness (25%)	Green Port Awareness and Willingness (60%)	<ol> <li>Green strategy or development plans</li> <li>Green support funding</li> <li>Green annual reports</li> <li>Others</li> </ol>
	Green Port Promotion (40%)	<ul> <li>(1) Green training programs</li> <li>(2) Green promotion campaigns</li> <li>(3) Others</li> </ul>
Action and Implementation (50%)	Clean Energy (15%)	(1) Using renewable energy sources (2) Using of LNG (3) Using cold ironing (shore power) (4) Others
	Energy Saving (30%)	<ol> <li>Using energy-saving devices &amp; technologies</li> <li>Optimizing power supply system</li> <li>Others</li> </ol>
	Environmental Protection (40%)	<ol> <li>Air pollution prevention</li> <li>Noise control</li> <li>Waste treatment (liquid and solid)</li> <li>Others</li> </ol>
	Green Management (15%)	<ol> <li>Green environment management system</li> <li>Green performance assessment</li> <li>Others</li> </ol>
Efficiency and Effectiveness (25%)	Energy Saving (40%)	(1) Energy consumption reduction (2) Renewable energy increment (3) Others
	Environmental Protection (60%)	<ol> <li>Air quality improvement</li> <li>Noise control result</li> <li>Liquid &amp; solid pollution control</li> <li>Others</li> </ol>



#### **CLEAN ENERGY AND ENERGY SAVING MEASURES**





















Before

After









1 UNIT 250A - SHORE BASED-POWER SUPPLY

## ENVIRONMENTAL PROTECTION





















#### STAKEHOLDER PARTICIPATION: DIGITALIZATION











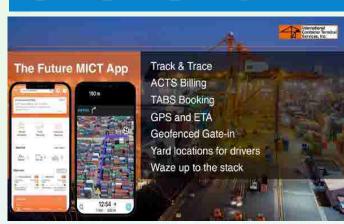


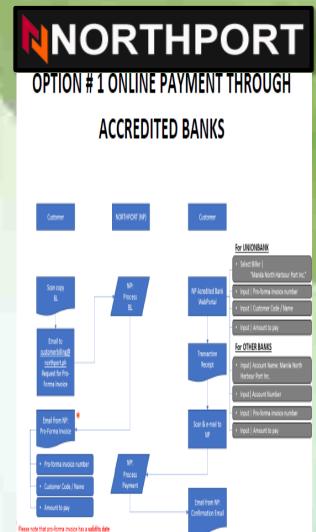
#### STAKEHOLDER PARTICIPATION: DIGITALIZATION











#### **MAJOR DISASTERS EXPERIENCED BY PPA PORTS**

#### **2013 BOHOL EARTHQUAKE**







#### Port of Catagbacan



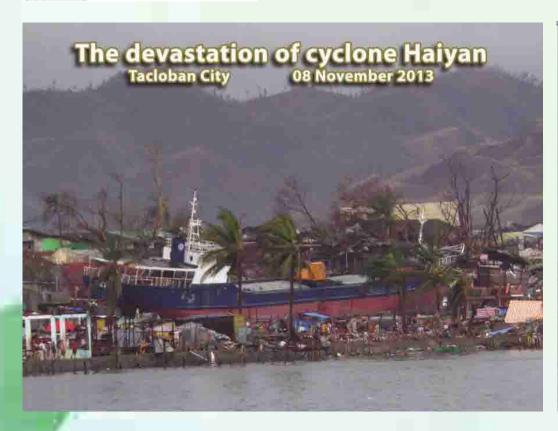


Port of Tubigon
(Earthquake)

#### MAJOR DISASTERS EXPERIENCED BY PPA PORTS

#### Port of Tacloban

(Typhoon)





#### RESILIENT PROJECTS/MEASURES BEING ADOPTED BY PPA

a) Upgrading of pavement or deck

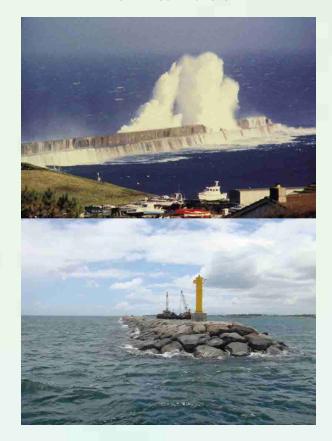


b) The deck elevation of piers and wharves





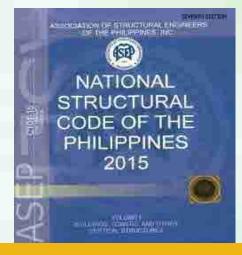
c) Upgrading and/or Construction of new Breakwaters



d) Construction of Deflectorwalls



e) PPA abides by the latest edition of the NSCP



### **EMERGENCY RESPONSE**

Rescue at Heights









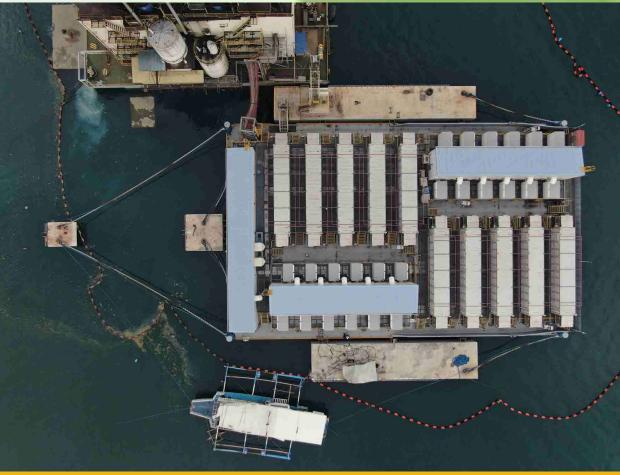


### **EMERGENCY POWER SOURCE**



Therma Marine Inc.
Maco Oil Power Barge
(Mobile1)

Therma Marine Inc.
TMI BESS Battery Energy
Storage System



#### PPA's Green Port Way Forward

- To continually participate by sending our candidate ports to the annual **GREEN PORT AWARD SYSTEM (GPAS)** of the APEC Port Services Network (APSN).
- Moving further with the full deployment of **port equipment that runs on clean energy** such as electric forklifts, shore cranes, etc. and/or LNG-powered shore cranes, rubber-tired gantries.
- Conduct study on **incentivizing vessels that run on clean fuel** through granting of discounted berthing fees and/or prioritized berthing at PPA ports.
- Adapt **technological advancements** in the global port industry in order to raise the level of PPA ports to become **Smart**, **Efficient** and **Climate Change Resilient** Ports
- Completion and implementation of the Port Environmental Code to prescribe and define the Roadmap towards **GREEN**, **RESILIENT** and **SMART** Ports
- PPA is an active member of different International Organizations which are the Permanent International Association of Navigation Congresses (PIANC) and International Maritime Organization (IMO)







