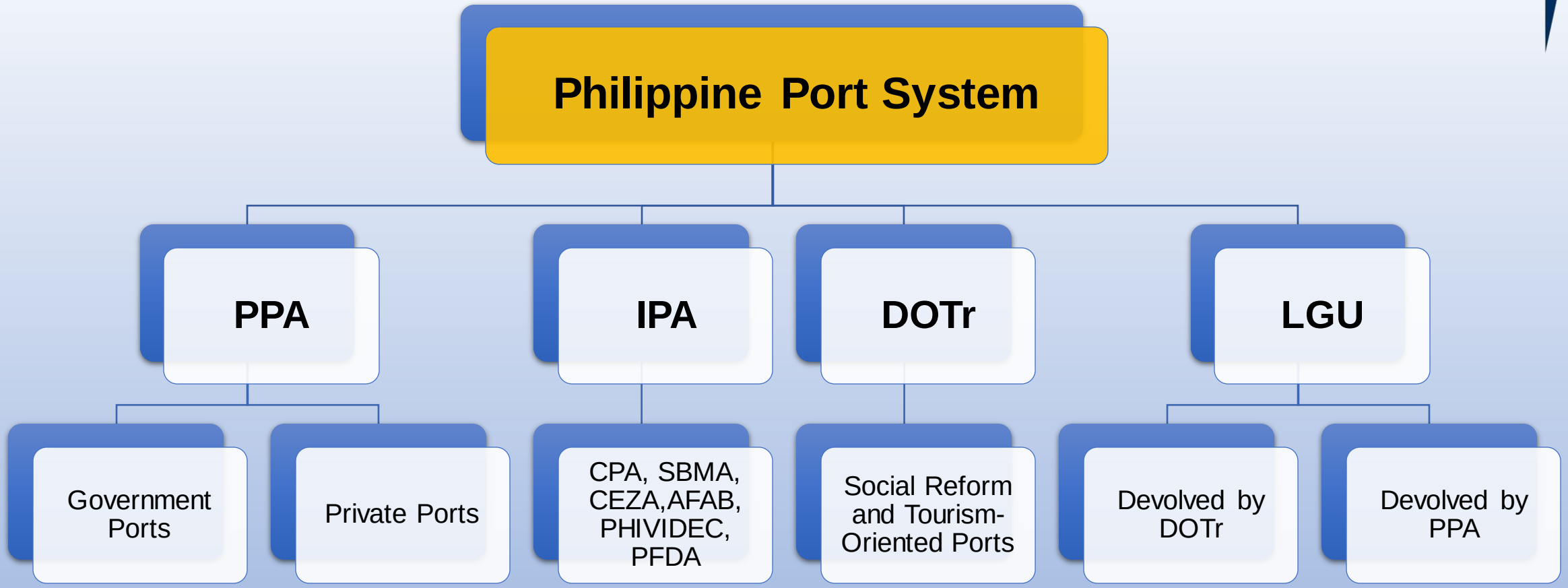
Infrastructure Development and Policy Priorities of Freight Transport

PHILIPPINE PORTS

Maria Asuncion Hiyasmin H. Delos Santos
Manager, Port Operations and Services Department
Philippine Ports Authority (PPA)



- ✓ PPA consists of 25 government baseports and 160 terminals, and 307 private ports (commercial and noncommercial)
- ✓ PPA Board of Directors chaired by the DOTr Secretary with members from NEDA, DTI, DPWH, DENR, DOF, MARINA, and PPA
- ✓ Separate governing boards or bodies for IPAs, LGUs

PPA PORTS : GOVERNANCE FRAMEWORK

Landlord Ports – Concession Agreements for the Development, Management, Operation and Maintenance valid for **25 years** (MICT, South Harbor, North Harbor, Batangas Port)

Tool Ports – Cargo Handling Contracts valid for **5 to 10 years**, majority have expired and operating on Hold Over Authority prior to bidding (Davao, Iloilo, General Santos)

Service Ports – directly being operated by PPA special take-over units after expiration of service contracts with private operators

Port Terminal Management Regulatory Framework (PTRMRF) Ports – permutation of the above models. As of December 2021, a total of **14 ports** were successfully bid out under the PTMRF, namely, Puerto Princesa, Ormoc, Legazpi, Tabaco, Zamboanga, Iligan, Ozamiz, Calapan, Tacloban, Matnog, Nasipit, Pulupandan, Fort San Pedro, and Surigao. Contracts are valid for 10 years

Port Planning and Development

Yearly proposals from 25 Port Management Offices for approval and budgetary purposes

6 Year Medium Term Plan submitted to and approved by the National Economic Development Authority (NEDA)

Feasibility Studies commissioned by PPA

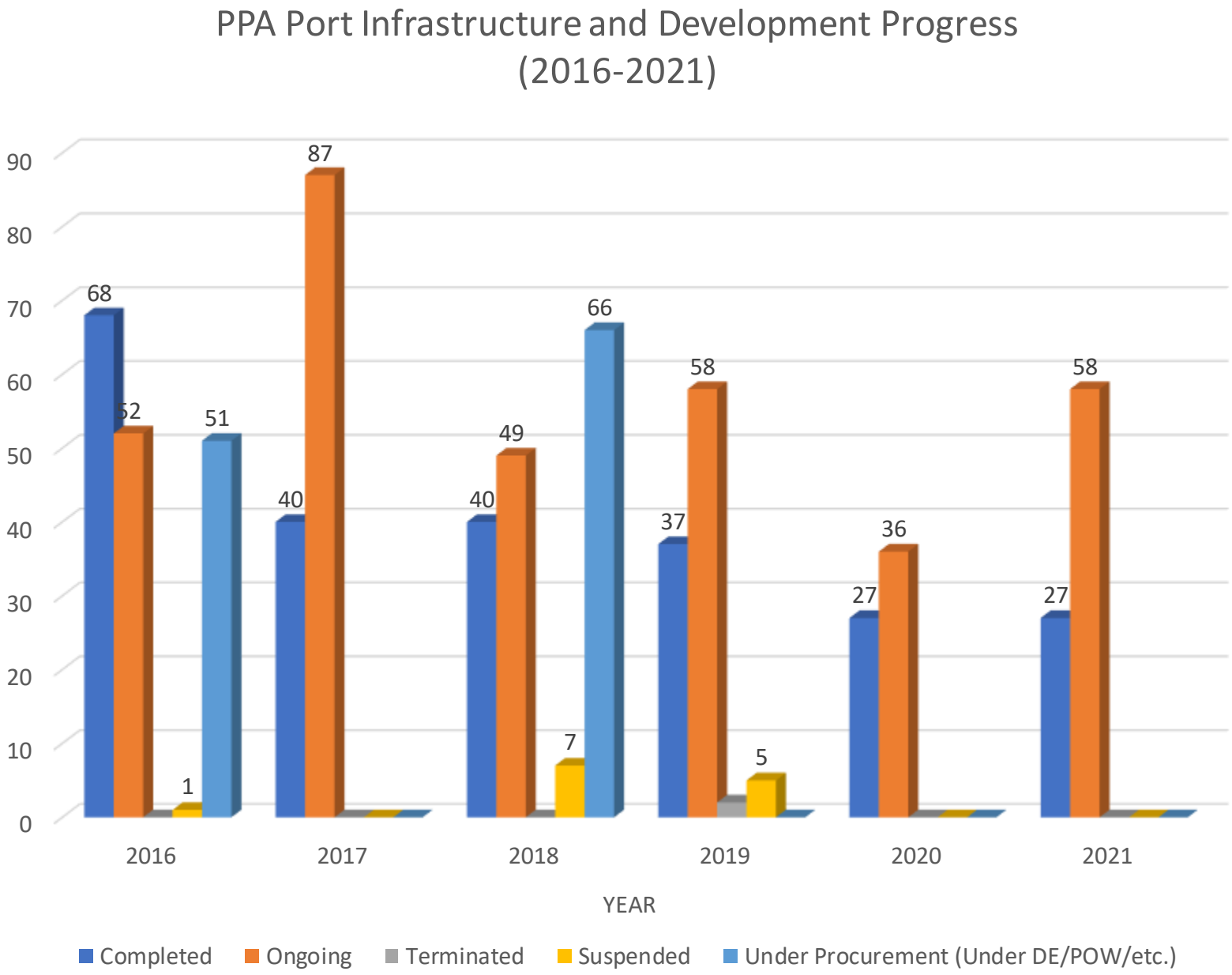
- Securing Environmental Compliance Certificate (ECC) which includes provision for pollution abatement technologies and environmental mitigation measures

Port Master Plan

Port development commitments in Concession Agreements, Port Terminal Management Contracts

PORT INFRASTRUCTURE AND DEVELOPMENT UPDATES

- PPA completed **240 port projects** from 2016 to 2021, which form part of the 585 port projects completed under the Build-Build-Build program of the current administration.
- PPA and the Department of Transportation (DOTr) are set to inaugurate at least **13 more completed port** projects before June 30, 2022.
- Funded through PPA Corporate Funds



OPERATIONAL PERFORMANCE
(CY 2021)

Cargo Throughput

266.764M MTs

9.3%

Container Volume

7.351M TEUs

8.8%

Passenger Traffic

22.332Million

10.3%

Shipcalls

372,199

15.6%

Shipcalls
Domestic – 96.8%
Foreign - 3.2%

Cargo Throughput
Domestic – 36.3%
Foreign - 63.7%
(Import – 58.5%)
(Export – 41.5%)

Container Traffic
Domestic – 38.8%
Foreign - 61.2%

Passenger Traffic
Domestic – 100%
Foreign - 0%

RORO Traffic
Inbound – 50.5%
Outbound - 49.5%

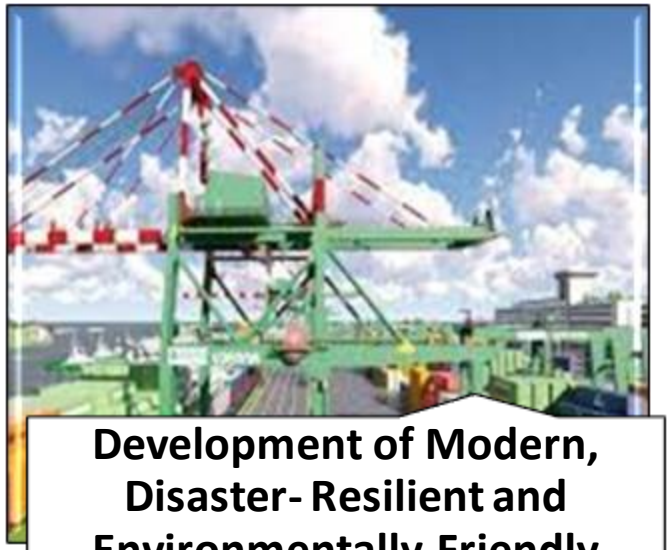
SUMMARY PORT STATISTICS
Philippine Ports Authority
2021

PARTICULARS	TOTAL	GRAND TOTAL				
		MANILA/ N. LUZON	SOUTHERN LUZON	VISAYAS	NORTHERN MINDANAO	SOUTHERN MINDANAO
1. Shipcalls	**372,199**	**18,110**	**90,305**	**156,579**	**53,184**	**54,021**
Domestic	360,439	12,948	87,914	155,634	51,901	52,042
Foreign	11,760	5,162	2,391	945	1,283	1,979
2. Cargo Throughput (m.t.)	**266,764,337**	**98,873,170**	**45,230,200**	**40,374,540**	**53,710,475**	**28,575,952**
Domestic	96,862,890	35,435,998	16,395,460	22,074,327	12,122,393	10,834,712
Inbound	55,179,030	17,173,803	10,446,620	14,072,392	6,322,654	7,163,561
Outbound	41,683,860	18,262,194	5,948,840	8,001,935	5,799,739	3,671,151
Foreign	169,901,447	63,437,172	28,834,739	18,300,212	41,588,083	17,741,240
Import	99,359,716	50,788,863	23,456,693	7,141,340	6,642,175	11,330,645
Export	70,541,731	12,648,309	5,378,046	11,158,872	34,945,908	6,410,595
3. Container Traffic (in TEU)	**7,351,110**	**4,976,014**	**410,953**	**468,634**	**369,109**	**1,126,401**
Domestic	2,848,941	1,395,373	151,078	468,634	369,109	464,748
Inbound	1,430,871	666,768	77,180	239,373	187,916	259,634
Outbound	1,418,070	728,605	73,898	229,261	181,193	205,114
Foreign	4,502,170	3,580,641	259,875	0	0	661,653
Import	2,276,598	1,846,990	129,189	0	0	300,419
Export	2,225,572	1,733,651	130,686	0	0	361,234
4. Passenger Traffic	**22,331,942**	**142,224**	**6,351,621**	**9,621,084**	**3,209,665**	**3,007,348**
Disembarked	11,420,548	61,796	3,151,231	4,959,702	1,658,299	1,589,520
Embarked	10,911,394	80,428	3,200,390	4,661,382	1,551,366	1,417,828
Cruise Ships	0	0	0	0	0	0
5. RoRo Traffic	**6,875,874**	**22**	**2,172,241**	**2,863,855**	**1,308,688**	**531,068**
Inbound	3,471,734	2	1,057,097	1,451,320	662,870	300,445
Type 1	788,197	0	103,881	304,935	225,665	153,716
Type 2	1,113,388	0	346,684	443,446	244,805	78,453
Type 3	447,068	0	169,270	170,830	79,525	27,443
Type 4	1,123,081	2	437,262	532,109	112,875	40,833
Outbound	3,404,140	20	1,115,144	1,412,535	645,818	230,623
Type 1	732,237	1	102,992	304,117	224,896	100,231
Type 2	1,115,581	9	402,009	413,684	232,609	67,270
Type 3	408,354	0	132,448	173,363	77,012	25,531
Type 4	1,147,968	10	477,695	521,371	111,301	37,591

Source: Port Management Offices' Monthly Statistical I
Notes:
(1) 2021 Q4 as of December may still change due to o
(2) Values may not add up due to rounding off.
(3) TMOs' statistics contain only the Terminal Ports unc
(4) Transhipment container traffic is included in foreign

CHALLENGES/ PRIORITIES OF PPA PORTS

Digitalization



Development of Modern, Disaster- Resilient and Environmentally-Friendly Port Facilities

Capacity Building

Regulatory Framework

Greening of PPA Ports

"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."

PPA Administrative Order No. 05-2018, Port Environmental Policy

GREEN PORT SOFT INFRASTRUCTURE

01

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

02

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

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

Port Environmental Policy (2018)

03

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

04

- ✓ Ban on the use of single-use plastics in all its controlled ports nationwide
- ✓ Mandatory tree planting
- ✓ 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%)	(1) Green strategy or development plans (2) Green support funding (3) Green annual reports (4) Others
	Green Port Promotion (40%)	(1) Green training programs (2) Green promotion campaigns (3) Others
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%)	(1) Using energy-saving devices & technologie (2) Optimizing power supply system (3) Others
	Environmental Protection (40%)	(1) Air pollution prevention (2) Noise control (3) Waste treatment (liquid and solid) (4) Others
	Green Management (15%)	(1) Green environment management system (2) Green performance assessment (3) Others
Efficiency and Effectiveness (25%)	Energy Saving (40%)	(1) Energy consumption reduction (2) Renewable energy increment (3) Others
	Environmental Protection (60%)	(1) Air quality improvement (2) Noise control result (3) Liquid & solid pollution control (4) Others

GPAS Indicator System developed by APSN

- The **Port of Cagayan de Oro** was awarded with GPAS in 2018 and 2021 while the **Port of Batangas** received the same recognition in 2017.
- This award is a testament to PPA's commitment on achieving sustainable port operations and maintaining a balance between efficient operating processes and environmental protection.

Shore-Based Power Supply (SBPS)

- The use of a SBPS has already been implemented at the Port of Cagayan de Oro.
- One of the widely accepted measures to reduce these negative environmental aspects of ships, is to provide electricity to the vessels from shore-side electricity supply. This provides the opportunity not only to improve air quality, but also to reduce emissions of CO2, one of the main contributors to global warming.

Establishment of Carbon Sink Areas (Tree Parks) inside PPA Ports

- The development of more carbon sink areas was not only aimed at maintaining a clean and fresh air in the port by absorbing carbon dioxide in the atmosphere and releasing fresh oxygen, but also to foster cooperation and coordination of the port stakeholders especially the port personnel who were all hands-on in the cultivation, harvesting of crops, and general maintenance of the areas.

GREEN Initiatives: Concessionaires

Upgrading/Provision of Additional Fuel-efficient Cargo Handling Equipment (RTGs)

ICTSI/MICT

Manila International Container Terminal (MICT), International Container Terminal Services, Inc.'s flagship operation at the Port of Manila, recently took delivery of eight new Mitsui hybrid rubber tired gantry (RTG) cranes for its container yard to further improve operational efficiency in light of growing volumes.

The latest acquisition expands MICT's RTG fleet to **52 units** – 40 of which are hybrids powered by a combination of lithium-ion battery and smaller diesel engine.

ATI/SH

In 2021, ATI's Manila South Harbor operation took delivery of **five (5)** state-of-the-art ZPMC rubber-tired gantry (RTG) cranes, These RTGs are powered by the latest eco-friendly Cummins QX15 engines and Stamford electric generators.

MNHPI/NH

Manila North Harbour Port, Inc. (MNHPI) also invested in innovative equipment and technologies as part of its modernization.

With the additional equipment, North Harbor's fleet now totals eight quay cranes and 27 RTGs.

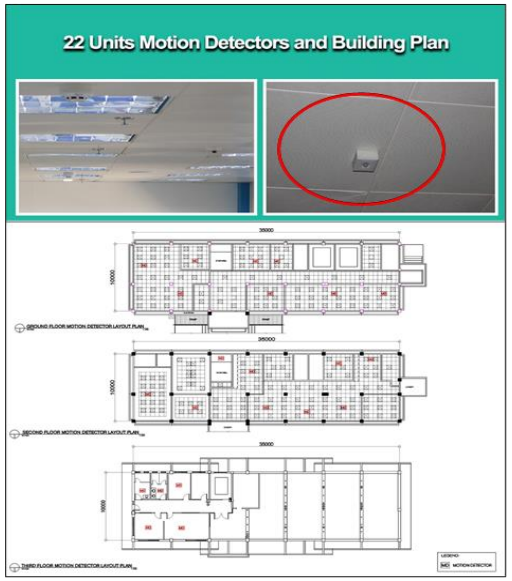
GREEN INITIATIVES AND PROJECTS: HARD INFRASTRUCTURE

Adopted the Use of Clean and Renewable Energy inside PPA Ports

Installation of Solar powered port lightning

Implemented energy conservation and energy efficiency measures

Replaced fluorescent lamps with LED lightning



Implemented Resource Efficiency and Reusage

Constructed Rainwater Harvesting Facility

Membership and Collaboration Initiatives

Capacity building of PPA technical personnel through a strong and continued partnership with the **Permanent International Navigational Congresses (PIANC)** which is a world association of waterborne transport infrastructure experts

Active member of the **APEC Ports Services Network (APSN)** which implements the Green Port Award System (GPAS). It aims to improve environmental awareness, promote sustainable development, advance green interoperability, and share best practices of ports in the Asia-Pacific Region that are willing to grow as green ports.

Membership and participation in activities of **International Association of Ports and Harbors (IAPH)** which is is a global alliance of ports, representing some 180 ports and some 140 port-related businesses in 90 countries, and aims to be the industry reference for sharing best practices of the most advanced and sophisticated ports. Three pillars of activity are Climate and Energy, Data Collaboration, and Risk and Resilience.

Sisterport Agreements/MOUs that aim to foster collaboration and exchange of best practices (i.e. Port of Osaka, Port of San Francisco, Port of Cork)

PPA's Green Way Forward

1. To continually participate by sending our candidate ports to the annual **Green Port Award System (GPAS)** of the APEC Port Services Network (APSN).

2. Moving further with the deployment of **port equipment that run on clean energy** such as electric forklifts, shore cranes, etc. and/or LNG-powered shore cranes, rubber-tired gantries.

3. Conduct study on **incentivizing vessels that run on clean fuel** through granting of discounted berthing fees and/or prioritized berthing at PPA ports.

4. Completion and implementation of the Port Environmental Code to prescribe and define the Roadmap towards **GREEN**, **RESILIENT** and **SMART** Ports

THANK YOU!