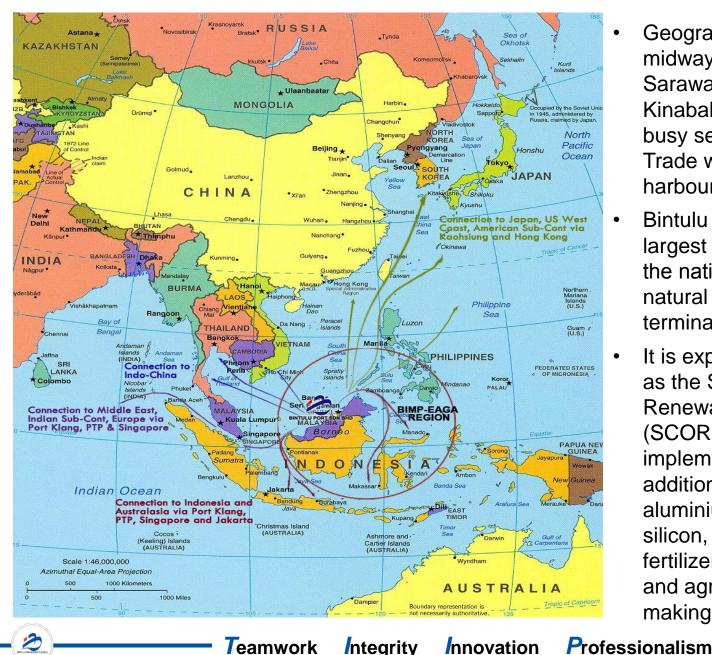


# Green Port: Balancing the Economic with the Environment

Bintulu Port Holdings Berhad Asean Port & Shipping Conference 2020

#### **Background of The Port**



- Geographically situated midway between Kuching,
  Sarawak and Kota
  Kinabalu, Sabah along the busy sea lanes of Intra Asia
  Trade with a deep sea
  harbour.
- Bintulu Port is one of the largest container port and the nation's sole liquefied natural gas (LNG) export terminal for East Malaysia's
- It is expected to be increase as the Sarawak Corridor for Renewable Energy (SCORE) Initiatives are implemented, with additional shipment of aluminium, pulp and paper, silicon, manganese, fertilizer, downstream timber and agro produce & product making its way to the dock.

2

# Bintulu Port

### **Vision Statement**

# A WORLD CLASS PORT OPERATOR



World Class Denotes wanting to be among the best in the world (i.e. signifies being among the highest caliber and having best in class operations

Port Operator Omission of reference to geography

Port operations to remain BPHB's core business activity

Reference to location (e.g. previously BIMP-EAGA) was omitted as Management believes BPHB should be strategic in its expansion without constraining to a set geography

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### **Mission Statement**

# Delivering Operational Excellence & Ensuring Our Long Term Sustainability based on 3Ps; (Profits, People, Planet)



# Delivering Operational Excellence

#### Delivering quality services in an efficient manner

 Providing excellence services that meet customer requirements in a cost / resource efficient manner including safe and secure

#### Being the preferred business partner

Becoming a partner of choice to governments, port authorities, port operators and customers (e.g. Oil & Gas, Shipping Line & Logistic Companies

#### Providing dynamic and innovative solutions

 Responsive / adaptive to changing needs od stakeholders and inculcating innovation in all ports of business (e.g. process innovation)

Ensuring our long term sustainability based on 3Ps (Profits, People, Planet)

Carry out investments and operations in a way that maximizes shareholder value over the long term based on 3Ps (Profits, People, Planet)

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### **Green Port Policy**

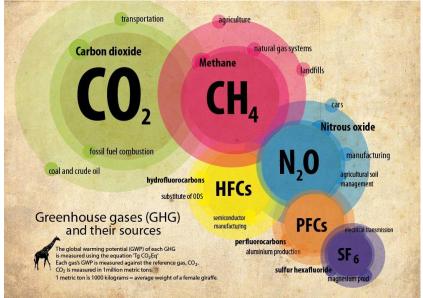
Promote sustainability. **Project the Port as a** leader in promoting Inclusiveness. environmental compliance. Employ the best available technology to **Protect the community** mitigate negative from harmful environmental impacts. environmental impacts of Port operations.

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## **Malaysian Government**

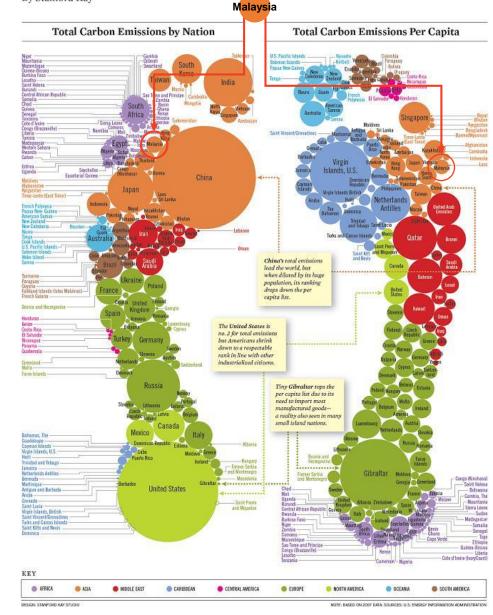
Malaysia Pledges 45% Reduction in Greenhouse Gases by 2030



Malaysia is fully committed to being a key part of the global transition to a low-carbon, and eventually carbonneutral society, with ambitions of achieving this by 2050.

#### **Tracking Carbon Emissions**

A footprint comparison of total carbon dioxide emissions by nation and per capita shows there's plenty of room for smaller countries to reduce their carbon footprints. By Stanford Kay



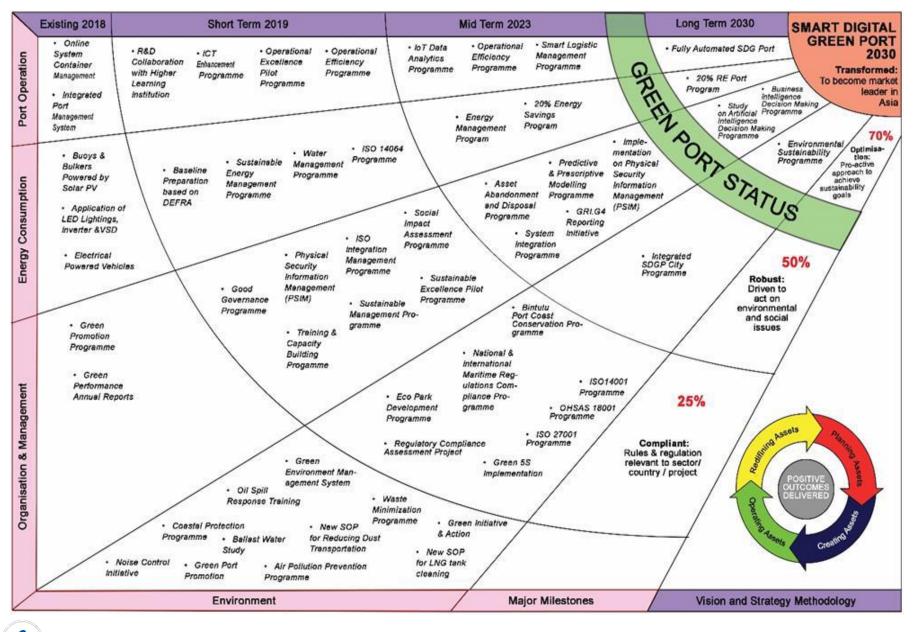
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#### **Bintulu Port Smart Digital Green Port Blueprint**

Teamwork

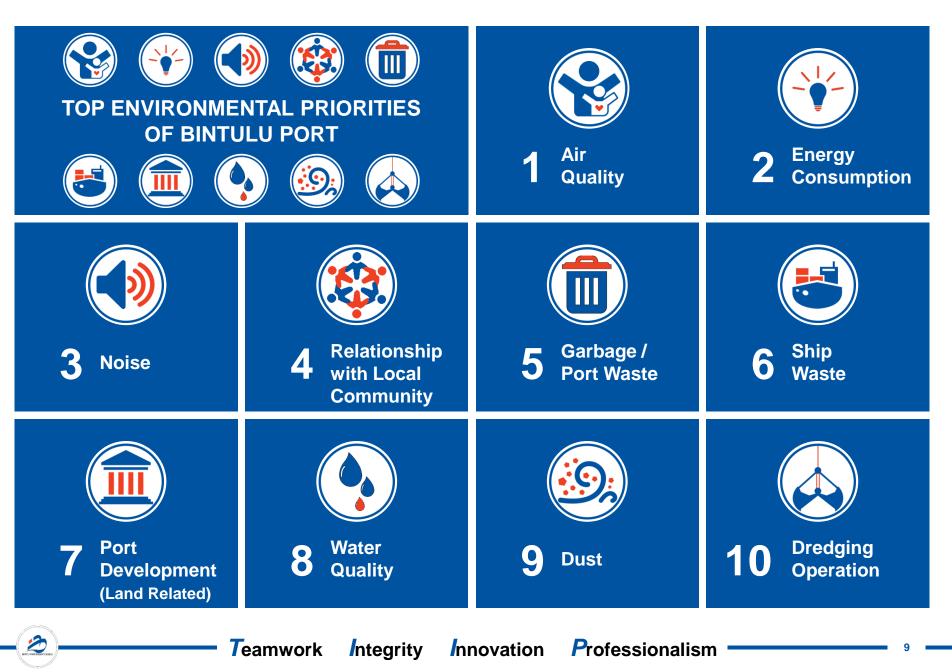
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#### **Ten Basic Elements for Bintulu Green Port Policy**



#### **Green Port Program**

Developed to achieve long-term environmental, societal, and economic benefits through resource conservation, waste reduction, and pollution prevention.



**T**eamwork

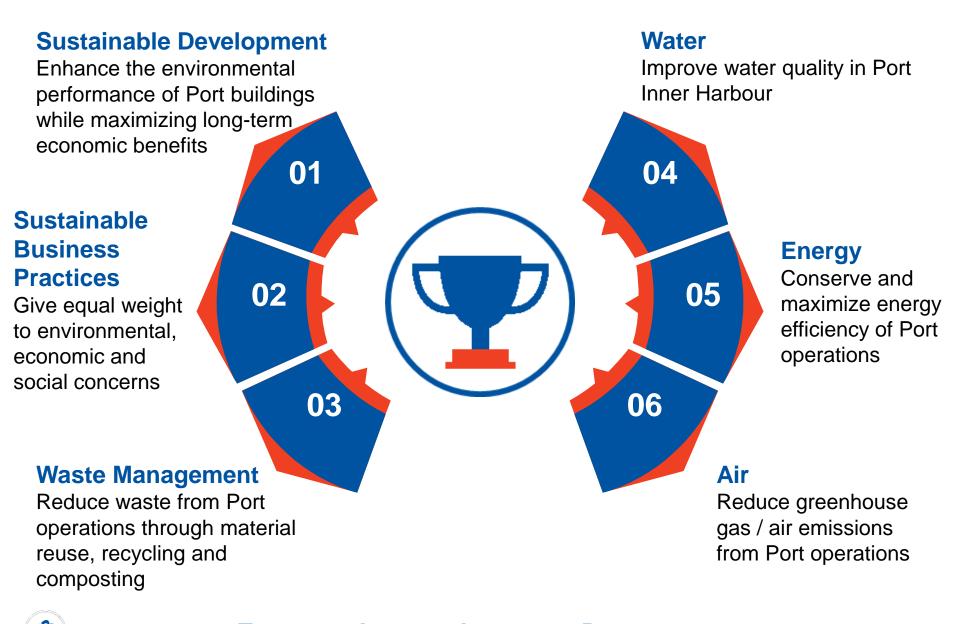
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### **Goals of Green Port Initiatives**



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KPI Target is **10%** reduction of electricity by managing usage of high mast lights, and the achievement was **13%** reduction

Usage of **shore electrical power supply** for tugs when berthing at marine base, thus reducing emission of fuel

All buoys and transit lights are using **solar panels** and thus using of renewable energy

04 Replacement progressively of bulbs to LED energy saving lights

Replacement of air conditioning with inverter type – more energy efficient type

<sup>06</sup> Syarikat Sebangun Sdn Bhd had installed conveyors thus reduce congestion of lorries thus emission causing air pollution

Dry Bulk Operations – improvement had been conducted to reduce air pollution by using grabs and purchasing sweepers

Usage of LNG in replacement of Diesel for Boilers – using of clean fuel thus reduction of emission Sulphur Dioxide (SO2) and Nitrogen Dioxide (NO2) to the air.



**Green Power** 

Solar panel as a renewal energy source, is utilised since 1998 to power up to 16 units of buoys and transit light.



**Solar Panels** 



• The port provides shore power which is fully utilized by the tug boats (12 units) with total capacity approximately 4 MW.

Can reduce diesel combustion emission.



Usage of solar panel for lightings in certain areas, in which is using of renewable energy

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#### **Original lamp**



Lighting has been changed from 55 W yellow lamp to 36 W fluorescent lamp with reflector

**Energy Efficient Lightings** 



Posters / stickers of energy and resources conservation are displayed on numerous strategic locations in the building to remind and create awareness for energy and resources saving.

#### **Poster / Sticker**

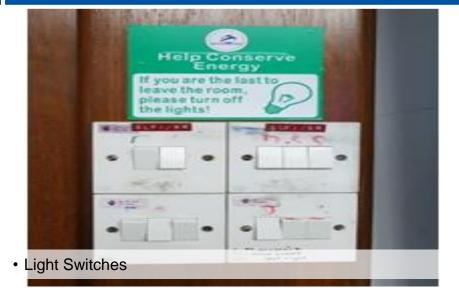


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Fluorescent lamp with Reflector





**Environmental Monitoring** 



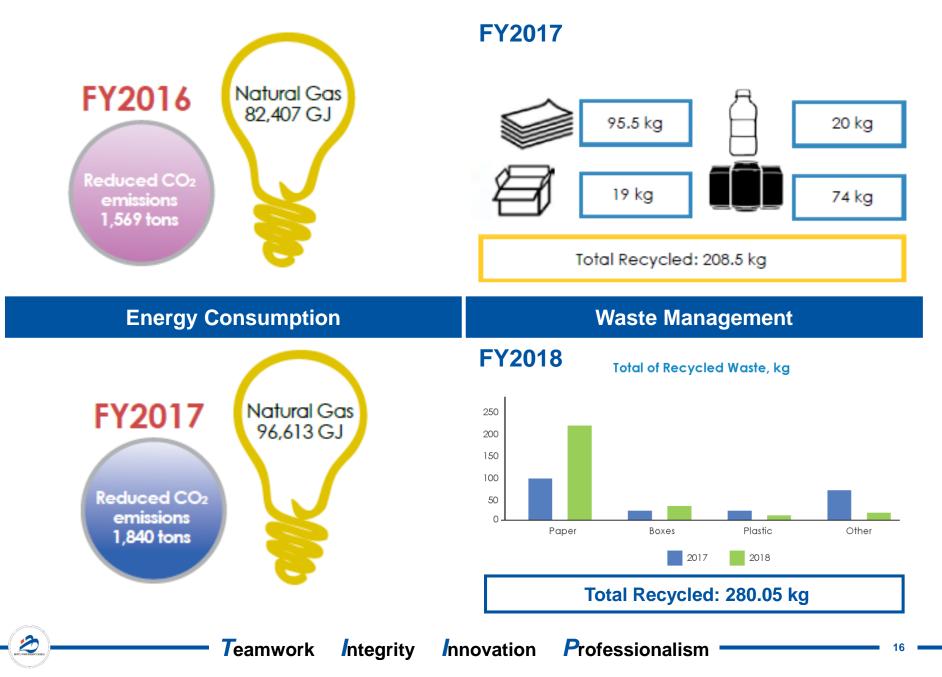
#### **Coral Reef Monitoring**





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## **Carbon Footprint Monitoring**

Source of Carbon Emission		Carbon Emis	sion (CO <sup>2</sup> -eq)	Percentage	
Scope 1 (All Direct Emissions) Fuel Usage	MSD	8,133.10		3.31	4.64
	CTD	2,186.93	1	0.89	
	CHSD	531.74	11,416.50	0.22	
	GHSE	390.17		0.16	
	Company Owned Vehicle	174.56		0.07	
Scope 2 (Indirect Emissions) Electricity	Marine Operation	673.47		0.27	2.53
	Bulkers Jetty	47.82	1	0.02	
	South Dyke A	50.39		0.02	
	South Dyke B	33.28		0.01	
	South Dyke C	119.11		0.05	
	Bacom Fertilizer	72.53	6,207.30	0.03	
	Wharf Extension	2,819.71		1.15	
	Sub-Station no.1	17.66		0.01	
	Sub-Station no.3	26.10		0.01	
	Sub-Station no.4	37.44		0.02	
	Pejabat LPB Jln Tg Kidurong	1,600.34		0.65	
	Petroleum Jetty	68.49		0.03	
	Street Lighting no.1	13.11		0.01	
	Street Lighting no.2	57.95		0.02	
	Guard House (Sg Spait)	0.50		0.00	
	Lot 37 (Port Gate House)	2.51		0.00	
	Lot 37 (Behind 950m berth)	106.60		0.04	
	Operation Building	460.29	1	0.19	
Scope 3 (Other Indirect Emissions)	Shipping Activities			91.83	92.83
	- vessel berthing	225,740.42			
	- vessel maneuvering				
	Employee Commute to Work	1,476.04		0.60	
	Fuel used by Equipment		228,195.84	0.15	
	Owned by the Contractors	359.49		0.15	
	Contractor Travel	306.15		0.12	
	Business Travel via Airplane	278.10	]	0.11	
	Disposal of Scheduled Waste	35.64		0.01	
GRAND TOTAL		245,819.64	245,819.64	100.00	100.00
_	eamwork Integrity	Innovation			

### **Corporate Social Responsibilities**



SIPSB organized First Shore Cleaning – Plogging Event to promote Clean and Greener World



Collaboration with Jabatan Agama Islam Sarawak (JAIS) and Coast Guard Malaysia (APMM) at Bintulu Port water area

**Disposal of Al Quran Ashes** 

#### Environmental Activities at Samalaju Beach



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#### **Green Management**

Bintulu Port has been awarded with more than 10 awards and certifications from various organizations following the implementation of EMS in the port. Bintulu Port has also been included in Malaysia Book of Record for the outstanding achievement as an organization that receives most certifications in Malaysia. Some of the awards and certifications include ISO14001, OHSAS18001, ISO28000, ISO9001, Sarawak Chief Minister's Environmental Award, and OSH award



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#### **Green Management**





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### Green Port Award System (GPAS) 2017



### **Port Challenges**

- SOLAS 1974
- Marpol 73/78
- OSHA 1994
- EQA 1974
- ISPS Code
- Bintulu Port Authority Act 1981
- Port By-Laws
- Merchant Shipping Ordinance, Sarawak 1960
- Merchant Shipping Ordinance, Sarawak 1952

**T**eamwork

- Port (Privatisation) Act 1990
- Etc.

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