GLOBAL SULPHUR CAP!

5%

4.5%



IAPH Webinar on Sustainable Port Development (Asia, South East and Oceania Region)

"Decarbonization Initiatives in Johor"

Tuesday, 29 September 2020 4pm – 6pm 0.5% 12 2020 iel for all commercial sels

MUHAMMAD RAZIF AHMAD JOHOR PORT AUTHORITY

WHAT IS DECARBONIZATION?

• Decarbonization means reducing greenhouse gas (GHG) emissions produced as a result of transport, including emissions released directly during transport and emissions due to the production of transport for example emissions from the production of electricity used to power a given mode.

>> Reducing carbon footprint <<



WHAT IS DEVELOPING GLOBALLY?



MALAYSIA's COMMITMENT



JOHOR PORT AUTHORITY'S GREEN PORT POLICY



MONITORING OF EMISSIONS FROM SHIPS



MONITORING NON-SHIPPING EMISSIONS

JOHOR PORT 2019									
	TEU's / Tonnage	HDV Movements	HDV Operation (Hours)	CO ₂	SO _x	NO _x	HC	PM ₁₀	PM _{2.5}
HDV		358,455	137,626.81	1,412.61	0.01	8.60	0.33	0.02	0.02
CONTAINER EQUIPMENT Direct Emission	1,043,854			9,305.76	0.15	140.94	4.52	13.87	5.30
CONTAINER EQUIPMENT In-Direct Emission				2,695.82	7.01	9.12	0.06	0.30	0.15
BULK EQUIPMENT Direct Emission	4,580,616			200.24	0.00	3.15	0.09	0.39	0.13
BULK EQUIPMENT In-Direct Emission				23,343.95	60.68	78.97	0.54	2.57	1.27
PORT of TANILING PELEPAS 2019									

PORT of TANJUNG PELEPAS 2019									
	TEU's	HDV Movements	HDV Operation (Hours)	CO ₂	SO _x	NO _x	HC	PM ₁₀	PM _{2.5}
HDV		270,633	79,717.21	2,107.86	0.02	10.82	0.50	0.04	0.04
CONTAINER EQUIPMENT Direct Emission	9,077,485			44,333.26	2.25	605.18	23.22	15.61	15.84
CONTAINER EQUIPMENT In-Direct Emission				47,248.87	122.78	159.86	1.08	5.19	2.70

CARBON FOOTPRINT REDUCTION INITIATIVES



Way Forward Going Green

Monitoring, Tracking, Reporting

- Continuous monitoring, tracking & reporting
- Data gathering & analytics
- Set benchmarks & emission reduction targets
- SEMS PTMS VTMS

2030: 30%

emission reduction

Energy Strategy

- Focus on energy sources used by ship or port equipment
- Sustainable Energy Program (SEP)
- On Shore Power Supply (OPS)
- Convert warehouses to solar powered
- Clean fuel, LSFO, LNG as alternative

Equipment Strategy

- Reduce emissions from engines & boilers by improving technologies
- Install pre- and after-treatment engine emission reduction technologies
- Retrofit existing equipment to improve efficiency
- Replace old engines with new efficient engines

Operational Strategy



- Focus on ship & port operational efficiencies
- Application of technologies: 14.0, Digitalization, Automation,
- Just in Time (JIT), Ship Speed Reduction (SSR), Reduce idle times



THANK YOU

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#moving towards sustainable & digitalized ports