



ASEAN – German Technical Cooperation Sustainable Port Development



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Environmentally Sustainable Initiatives in the ASEAN Ports

18 November, 2015

Da Nang, Vietnam

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Project Director**





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Content

- Brief introduction to GIZ and the project
- Objective of session
- Main challenges for sustainable ports
- Project outcomes and partner achievements
- Best practices and initiatives in the region
- Conclusion





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Sustainable Port Development

The project is part of the regional ASEAN programme “**Cities, Environment and Transport**”

Project objective:

“Selected ports have improved the quality and efficiency of their Safety, Health and Environmental (SHE) management”

Project impact:

“The quality of life and welfare of port workers and nearby communities have improved”



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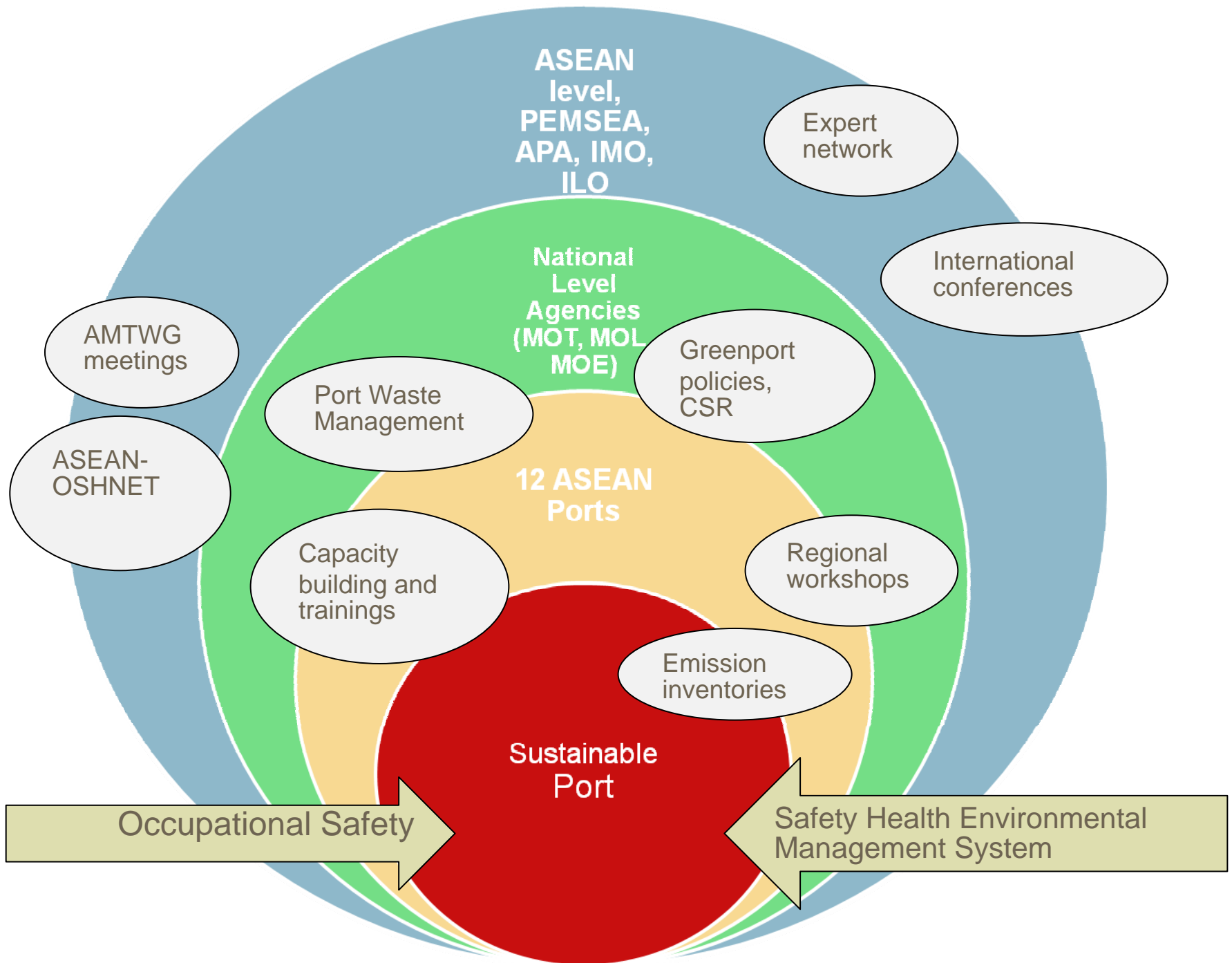
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Participating ports

7 countries / 12 ports

1. Bangkok
2. Laem Chabang
3. Phnom Penh
4. Sihanoukville
5. Iloilo (Panay/Guimaras)
6. Cagayan de Oro / (Misamis Oriental)
7. Sabah
8. Johor
9. Saigon
10. Saigon Newport
11. Tanjung Priok
12. Yangon Port







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Objective of session

“To showcase initiatives and achievements of various stakeholders (our ASEAN ports) in promoting environmental sustainability in the maritime sector”



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Main challenges for sustainable ports in ASEAN

- **Building up** capacity of port staff and personnel
- **Change management** of existing practices and structures
- **Commitment** of top management as a driving force for sustainable change
- **Engagement** and buy-in from key stakeholders
- **Balancing** environmental challenges with economic demands
- **Gaps regarding** national legislation and enforcement and international standards and conventions





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Project Outcomes and Partner Achievements

- Increased efficiency of cargo operations and traffic management in the port area
- Increased awareness, providing capacity building and support the port's goal to improve SHE management and performance
- Sharing of know how within the region and south-south cooperation (port to port learning, training network)
- Supported the ports to move towards international compliance on waste management and establishing port regulations
- Successful changes made at the institutional level
 - Organizational structures, establishment of SHE committees, divisions and departments
 - Improved procedures and methodology on reporting and monitoring



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Best Practices and Initiatives in the Region

- ASEAN ports have implemented measures to mitigate environmental impacts
- Some of these initiatives were achieved with support from the project
- Initiatives include reduction of air emissions, improving water quality, improvement of waste management and proactive policies toward a green port



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Cold Ironing – PMO Cagayan de Oro (PH)

- The port installed a shore based power supply (SBPS) for domestic ferries
- Provides low voltage (125kW) power to ships when at berth – ships do not use their auxiliary engines to generate power
- The port has calculated the payback period for installation was less than 2 years (comparing saved costs for fuel with electricity)





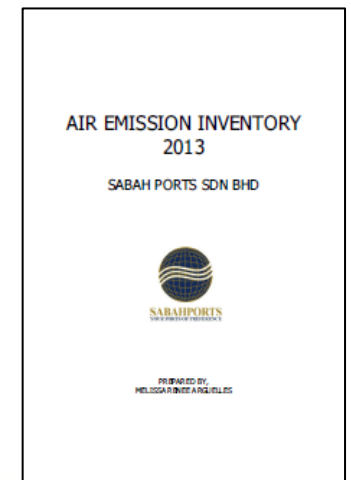
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Emission Inventories – Sabah Ports (MAL)

- In cooperation with the project in 2011, the port developed its own emission inventory in the following years up to now
- Results from annual emission inventories led to measures to reduce environmental problems and to go beyond compliance of local air quality standards
 - Development of a Cargo Handling Equipment Idling Guideline
 - Replacement of diesel powered equipment (E-Retrofitting)
 - Energy efficient lighting of port area (LEDs)





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Waste Management – Bangkok Port (THA) and Port of Tanjung Priok (IND)

- Efforts to move towards compliance to MARPOL Annex V
- Both ports developed a revised Ship Waste Management Manual (SWMM) - including notification forms, internal waste collection procedures and requirements
- Roles and responsibilities of internal and external stakeholders clearly defined and assigned
- Implementation of SWMM expected in 2016





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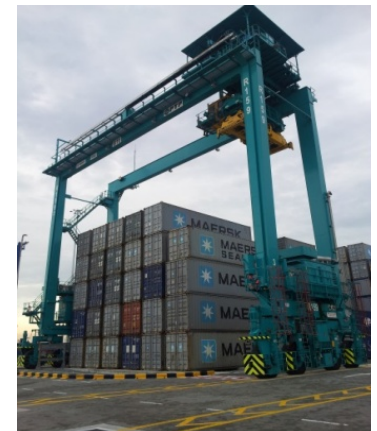


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Green Port Initiatives – Johor Port (MAL)

- The port's Green Port Policy was launched in 2014 as a guide for all port operators to move towards better environmental performance and sustainable development
- Led to one of many initiatives on improving environment:
 - Installation of energy efficient lighting systems for cranes – reduced electricity consumption by 76%
 - RTGs retrofitted to E-RTG – 40% reduction in diesel consumption in 2014 compared to 2013





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Waste Water Treatment – Saigon Port (VN)

- Waste water treatment systems installed at the port
 - Household water – waste water from household uses (restroom, washrooms) are collected and processed
 - Industrial water – waste water from maintenance workshops (oily waste water) collected and processed
- Treatment is done prior to discharging to the river





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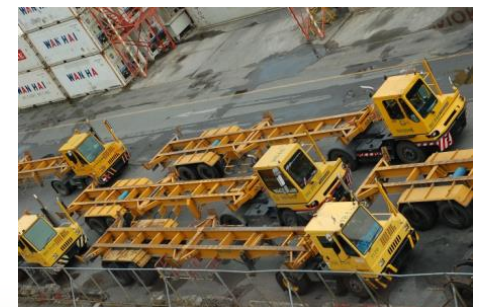


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Traffic Management Plan – Bangkok Port (THA)

- The plan was developed in cooperation with SPD
- Measures to reduce traffic congestion and emissions generated from port activities include (but not limited to):
 - Revised gatehouse policies and procedures, restructuring of key routes within the port, relocation of commercial areas surrounding the port, coordination with external authorities
- Traffic congestions decreased at gates – lower emissions and faster turnaround times
- Increase efficiency of cargo movement





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Conclusion

- Simple yet effective measures to mitigate environmental impacts caused by port operations
- ASEAN ports are stepping up to improve environmental management in their ports
- These proactive approaches ensure the sustainability of port operations in the region and promotes a Blue Economy for the seas of East Asia



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Responsible
Franca Sprong

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