

Multi-year Expert Meeting  
on Transport, Trade Logistics and  
Trade Facilitation  
8th Session

**Climate Change Adaptation for Seaports  
in Support of the 2030 Agenda  
for Sustainable Development**

27–28 October 2020

**The Case of the Port Management  
Programme**

Presentation by

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Knowledge Development Branch, Division on Technology and  
Logistics, UNCTAD



# MYEM: TRANSPORT, TRADE LOGISTICS AND TRADE FACILITATION

## CLIMATE CHANGE ADAPTATION FOR SEAPORTS IN SUPPORT OF THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

### THE CASE OF THE PORT MANAGEMENT PROGRAMME

28 October 2020  
Mark Assaf, UNCTAD

## THE TRAINFORTRADE PROGRAMME (TFT)

**MISSION:** Strengthening Knowledge and Skills for Sustainable Economic Development



**GOALS:**

- ◆ Encourage development-oriented trade policy to reduce poverty and to promote transparency and good practices
- ◆ Promote digital solutions and innovative thinking to enhance capacities of international trade players
- ◆ Build sustainable networks of knowledge to enhance national ownership, South-South and triangular cooperation

**AREAS:**

**TRAINFORTRADE E-COMMERCE**

- ◆ Legal Aspects
- ◆ Best Practices
- ◆ Digital Identity for Trade and Development

**TRAINFORTRADE TRADE STATISTICS**

- ◆ International Trade in Services
- ◆ International Merchandise Trade

**TRAINFORTRADE PORT MANAGEMENT PROGRAMME (PMP)**

- ◆ Supports port communities' quest for efficient and competitive port management services to increase trade flows and foster sustainable economic development



## THE PORT MANAGEMENT PROGRAMME

### MAIN GOAL:

- ◆ To support port communities' quest for efficient and competitive port management services to increase trade flows and foster sustainable economic development

"HUMAN RESOURCES DEVELOPMENT:  
THE STRONG LINK IN PORT PERFORMANCE"



*"A port can only be as efficient  
as the people that work in it"*  
Dr. Mukhisa Kituyi,  
UNCTAD Secretary-General



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#### PARTNERS (6)

BELGIUM  
FRANCE  
IRELAND  
PORTUGAL  
SPAIN  
UNITED KINGDOM (NI)

#### SPANISH-SPK (15)

ARGENTINA  
BOLIVIA  
CHILE  
COLOMBIA  
COSTA RICA  
CUBA  
DOMINICAN REPUBLIC  
ECUADOR  
EL SALVADOR  
GUATEMALA  
MEXICO  
NICARAGUA  
PERU  
URUGAY  
VENEZUELA

#### PORTUGUESE-SPK (7)

ANGOLA  
BRAZIL  
CAPE VERDE  
EAST TIMOR  
GUINEA BISSAU  
MOZAMBIQUE  
SAO TOME E PRINCIPE

#### ENGLISH-SPK (16)

BENGLADESH  
CAMBODIA  
GHANA  
INDIA  
INDONESIA  
JAMAICA  
KENYA  
MALAYSIA  
MALDIVES  
NAMIBIA  
NIGERIA  
PHILIPPINES  
SERBIA  
SOUTH AFRICA  
SRI LANKA  
TANZANIA

#### FRENCH-SPK (16)

ALGERIA  
BENIN  
CAMEROON  
COMOROS  
CONGO  
COTE D'IVOIRE  
DJIBOUTI  
GABON  
GUINEA  
HAITI  
MADAGASCAR  
MAURITANIA  
SENEGAL  
SEYCHELLES  
TOGO  
TUNISIA

## THE PORT MANAGEMENT PROGRAMME COVERAGE: 60 COUNTRIES



> 3700 PORT MANAGERS

WORLDWIDE NETWORKS



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## BACKGROUND: ADVISORY GROUP 12



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## THE PORT MANAGEMENT PROGRAMME: MODULES

M1: International Trade and Transport

M2: The Organisation of a Port System

M3: The Functioning of a Port System

M4: Challenges of Sustainable Ports

M5: Methods and Tools of Port Management

M6: Economic, Commercial and Financial management

M7: Administrative and Legal Management

M8: Technical Management and HR Development

**New content:**

1. Climate Change and Environment (35%)
2. Safety (25%)
3. Quality (10%)
4. Security (10%)
5. Corporate Social Integration (10%)
6. Emerging Trends and Future Proofing (10%)



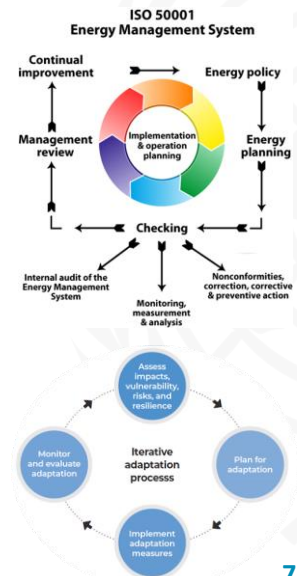
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## M4-S1: CLIMATE CHANGE AND ENVIRONMENT

- ◆ MARPOL
- ◆ Circular economy
- ◆ Air quality
- ◆ Assessment of the port environmental impact
- ◆ Adaptation of old infrastructures
- ◆ Energy management
- ◆ Energy transition (fossil vs renewable)
- ◆ Economic models of ports
- ◆ Port preparation for new ships (LNG)
- ◆ Diversification of port activities (carbon => green)



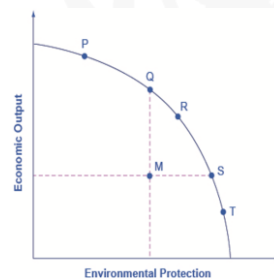
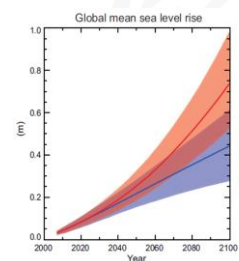
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## M4-S1: CLIMATE CHANGE AND ENVIRONMENT

- ◆ Ports contribution to green shipping
- ◆ Port tariffs in the modern economy
- ◆ Climate change - dual challenges
- ◆ Interacting with port meteorological officers (information, observation, instrumentation)
- ◆ Sea levels rising (mitigation, impact, adaptation, resilience, capacity building)
- ◆ Climate factors in port management (extremes, adaptation/mitigation measure)
- ◆ Develop port city relationship perspective towards carbon-free future and emission reduction



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CATEGORIES	PORT ENTITIES 26 INDICATORS (2015-2019)	N	Mean
FINANCE	EBITDA/revenue (operating margin)	85	38.8%
	Labour/revenue	91	22.6%
	Vessel dues/revenue	90	15.9%
	Cargo dues/revenue	90	34.9%
	Concession fees/revenue	84	14.7%
	Rents/Revenue	85	6.3%
HUMAN RESOURCES	Tonnes/employee	96	61982 t
	Revenue/employee	90	\$199563
	EBITDA/employee	82	\$102937
	Labour cost/employee	84	\$35495
	Training cost/wages	84	1.6%
GENDER	Female Participation Rate - Global	98	17.4%
	Female Participation Rate - Management	97	37.4%
	Female Participation Rate - Operations	86	13.0%
	Female Participation Rate - Cargo Handling	62	5.3%
	Female Participation Rate - Other employees	27	29.4%
VESSEL OPERATIONS	Average waiting time	84	13 h
	Average gross tonnage per vessel	95	18284
	Average of Oil Tankers arrivals	80	10.3%
	Average of Bulk Carrier arrivals	81	10.8%
	Average of Container Ship arrivals	79	31.8%
	Average of Cruise Ship	78	1.4%
	Average of General Cargo Ship	82	23.6%
	Average of Other Ship	80	24.1%
CARGO OPERATIONS	Average tonnage per arrival (all)	103	7865 t
	Tonnes per working hour, dry or solid bulk	62	411 t
	Tonnes per hour, liquid bulk	40	428 t
	Box Per Ship Hour at Berth	47	28
	Twenty-foot equivalent unit dwell time in days	55	7
	Tonnes per hectare (all)	91	140408 t
	Tonnes per berth meter (all)	102	10091 t
	Total Passengers on Ferries	58	1433448
	Total Passengers on Cruise	63	122947
ENVIRONMENT	Investment in Environmental Projects/Total CAPEX	35	7.2%
	Environmental expenditures/Revenue	50	2.3%

## PORT PERFORMANCE SCORECARD (PPS): 2015-2019



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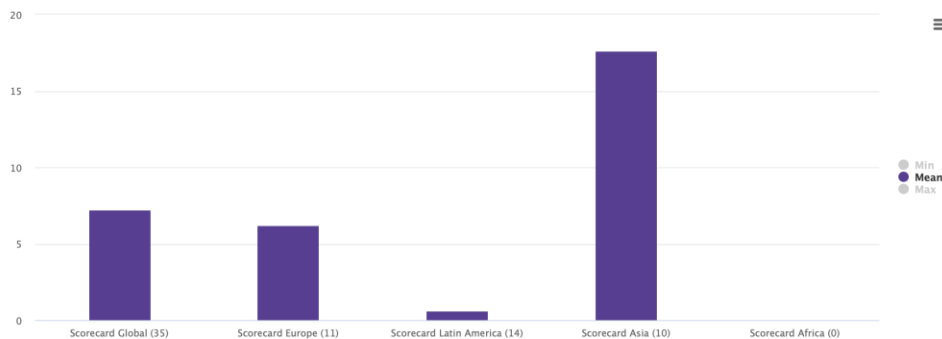
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## PORT PERFORMANCE SCORECARD (PPS)

### Investment in Environmental Projects/Total CAPEX

(No description)

Scorecard	N	Min	Mean	Max
Scorecard Global	35	0.0%	7.2%	85.2%
Scorecard Europe	11	0.0%	6.2%	26.5%
Scorecard Latin America	14	0.0%	0.6%	4.4%
Scorecard Asia	10	0.0%	17.6%	85.2%
Scorecard Africa	0			



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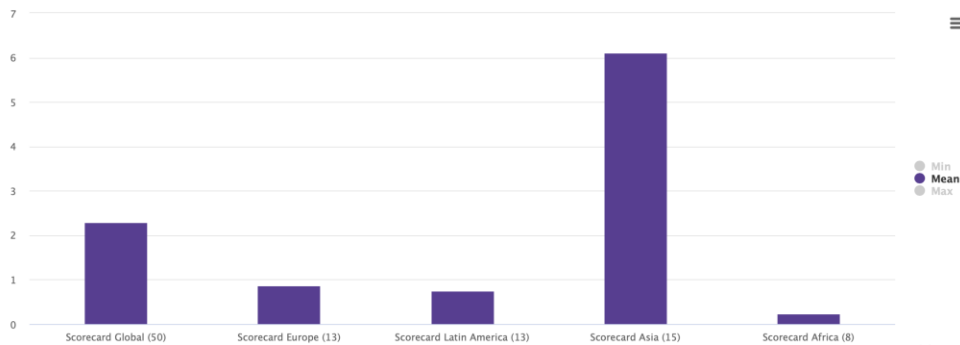
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## PORT PERFORMANCE SCORECARD (PPS)

### Environmental expenditures/Revenue

(No description)

Scorecard	N	Min	Mean	Max
Scorecard Global	50	0.0%	2.3%	82.3%
Scorecard Europe	13	0.1%	0.9%	2.0%
Scorecard Latin America	13	0.0%	0.8%	1.8%
Scorecard Asia	15	0.0%	6.1%	82.3%
Scorecard Africa	8	0.0%	0.2%	1.0%



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## UNCTAD TRAINFORTRADE PORT MANAGEMENT SERIES

### An Assessment of Waste Oil Storage and Disposal Practices in Takoradi Port

**Author of the case study:** Mr. Kingsley Amamu Caiquo, Principal Maintenance Officer, Ghana Ports and Harbour Authority



“Around 5% or 2,000 litres of waste oil is spilled each year. Thus, a large quantity of hazardous waste ultimately ends up polluting the land and sea causing serious damage to water quality as well as the marine and aquatic life.”

“The use of mainly **unlicensed scrap dealers** to take away 90% of the waste oil generated by port operations is more than likely going to mean that oil is not treated in accordance with proper environmental standards such as ISO 14001.”



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[https://tft.unctad.org/tft\\_documents/publications/port-management-series/](https://tft.unctad.org/tft_documents/publications/port-management-series/)

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## UNCTAD TRAINFORTRADE PORT MANAGEMENT SERIES

**Author: Mr. Mahad Abdi Aden, Port de Djibouti, 2014**

**Title: Étude de Faisabilité d'un parc solaire photovoltaïque à Djibouti**

The study explores the opportunities and constraints of an energy transition within the port of Djibouti. It finds out that the development of photovoltaic power stations can contribute to an efficient energy transition, but that requires high levels of investment, while thermal power stations might be more efficient.



PORT DE DJIBOUTI S.A.

**Author: Mr. Daniel ASARE, Ghana Ports and Harbours Authority, 2010**

**Title: Examining the environmental performance of Tema Port – the case of operational pollution**

The study outlines the various forms of pollution within and outside the port environs emanating from port operations. The study served as a guide for the elaboration of the port's environmental policy and contingency and response plans.



**Author: Mr. Armand TEHE, Port Autonome d'Abidjan, 3rd cycle, 2019**

**Title: Contribution de la communication à l'amélioration des performances environnementales du PAA**

The study shows how the communication unit at PAA could help changing behaviour within the structure to reduce environmental impact of port activities. Recommendations could reduce the annual consumption of water (-15%), paper (-10%), ink (-10%), and energy (-25%).

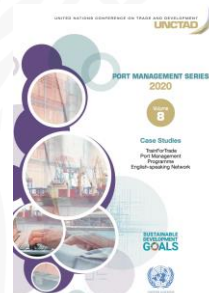


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## PRIORITIES – THE WAY FORWARD

- ◆ Integrate policy recommendations from MYEM into capacity building activities for the PMP Networks
- ◆ Promote the research on Climate Change and Environment subjects as case studies (Port Management Series)
- ◆ Feature best practices and commercially viable port projects
- ◆ Engage port managers in establishing top priorities for port investments and Climate Change
- ◆ Support collaboration between Port Communities and with International Institutions for SDGs



WORLD  
METEOROLOGICAL  
ORGANIZATION

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## LEAVING NO ONE BEHIND

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