“ENERGY EFFICIENCY IN LINE WITH REGULATIONS SUPPORTING DECARBONIZATION” BY LYDIA NGUGI, MTCC AFRICA

Building Capacity for Climate Change Mitigation in the Shipping and Maritime Industry.
ENERGY EFFICIENCY IN SHIPPING: FOCUS ON AFRICA
ENERGY EFFICIENCY IN SHIPPING INLINE WITH REGULATIONS SUPPORTING DECARBONIZATION.

- The Initial IMO GHG Strategy (short term, Midterm and Long term candidate measures) some under revision supports the implementation of the MARPOL Annex VI Clauses, on the backdrop that the mandate of the International Maritime Organization (IMO), as a United Nations specialized agency, is to promote:
  - safe,
  - secure,
  - environmentally sound,
  - Efficient and sustainable shipping.

- HOW DOES MTCC AFRICA SUPPORT THIS?
ENERGY EFFICIENCY/REGULATIONS/DECARBONIZATION/MTCC
AFRICA: THE 3 MAIN PILLARS

Capacity Building through Technology
- Pilot Project Progress implementation with a focus on port development
- Leverage on bankable projects
- Long term benefits to integrate with the private shipping industry

Policies/Regulations
- Implementation of the IMO GHG Strategy
- Domestication of Marpol Annex VI
- Public Policy in the region to leverage on IFI policies

Finance
- On bankable projects
- Demand driven not supply driven
- Positive returns on investment.
- Zero-low emissions i.e alternative fuel, port infrastructure.
- Sustainability models.
CAPACITY BUILDING TO SUPPORT: ENERGY EFFICIENCY IN LINE WITH REGULATIONS SUPPORTING DECARBONIZATION
**LEAVING NO ONE BEHIND IN THE ENERGY TRANSITION THROUGH PILOT PROJECTS**

<table>
<thead>
<tr>
<th>Uptake of ship energy efficient technologies and operations</th>
<th>Fuel Consumption and Emissions Data Collection and Reporting</th>
<th>Quantification of Emissions within the Port of Mombasa Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote of the uptake of energy-efficient technologies and operations through information dissemination platforms</td>
<td>Quantify the impact of greenhouse gases from the shipping industry in selected ports and waterways</td>
<td>Undertake emission inventory assessment within the port of Mombasa</td>
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<tr>
<td>Identify and report impacts of the implemented energy-saving/emission reduction strategies at the selected Port</td>
<td>Collect and process data-sets to calculate the Energy Efficiency Operation Index (EEOI) of participating ships</td>
<td>Provide a comprehensive ship’s emission inventory</td>
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<tr>
<td>Conduct Energy Audits in selected ports</td>
<td>The information compiled and reported to IMO can further be used for subsequent decision and policy making</td>
<td>Provide information to decision-makers on the levels of emission from ships within the port for development and tracking of emissions reduction strategies</td>
</tr>
</tbody>
</table>
61 Engagements With Regional Focal Point States

2 Films
Demonstrating Energy Efficient Port Measures

SDG 5
7 Virtual Forums
The Centre has provided technical expertise & assisted WOMESA in organising & hosting virtual forums in an effort to support SDG 5

1 MOU signed with a Regional Womens Association

10 Regional Virtual Forums

74 Participating Countries from 5 Continents
'33 African Participating Countries'

+815 Virtual Webinar Participants
Capacity Building & Information Dissemination Forums

+8000 Data Sets Collected
Phase 1 of Pilot Project 3
*November–December 2021

11 Individuals Trained During Phase 1 of the 3rd MTCC Africa Pilot Study

10 Stakeholder Engagements
• Need for more pilots to demonstrate energy efficiency technologies linked to regulations supporting decarbonization.

• Develop gap funding that can support developing countries to implement demonstration pilot projects.

• Important to underwrite the risk or to leverage the gap between available technology and green technology to encourage early adaptation.

• Region specific capacity building initiatives: MTCC Africa
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“Greening Port Technologies”