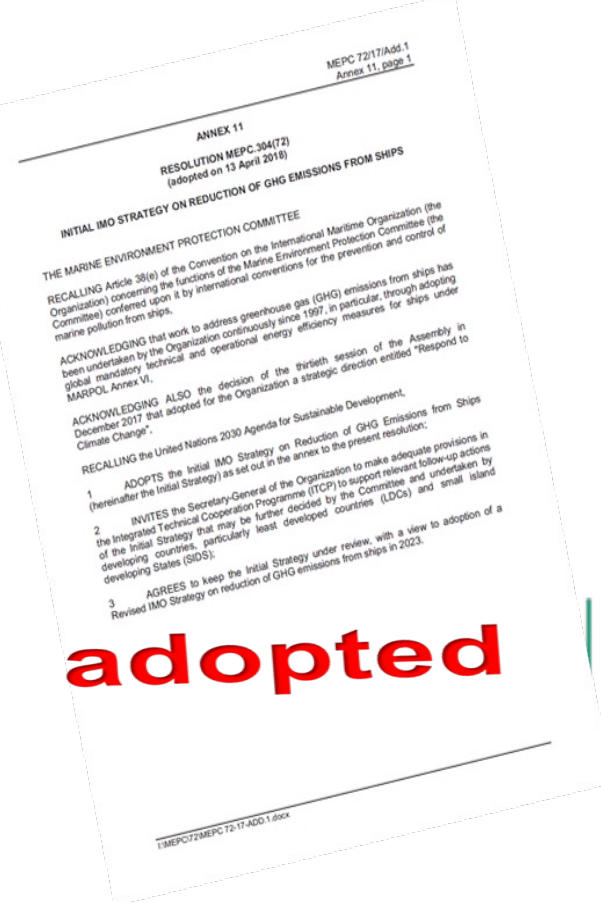


**“ENERGY EFFICIENCY IN LINE WITH  
REGULATIONS SUPPORTING  
DECARBONIZATION” BY LYDIA NGUGI,  
MTCC AFRICA**

**Building Capacity for Climate Change Mitigation in the  
Shipping and Maritime Industry.**



# ENERGY EFFICIENCY IN SHIPPING: FOCUS ON AFRICA



**MTCC AFRICA**  
Maritime Technology Cooperation Centre



# 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

## Uptake of ship energy efficient technologies and operations

Promote of the uptake of energy-efficient technologies and operations through information dissemination platforms

Identify and report impacts of the implemented energy-saving/emission reduction strategies at the selected Port

Conduct Energy Audits in selected ports

## Fuel Consumption and Emissions Data Collection and Reporting

Quantify the impact of greenhouse gases from the shipping industry in selected ports and waterways

Collect and process data-sets to calculate the Energy Efficiency Operation Index (EEOI) of participating ships

The information compiled and reported to IMO can further be used for subsequent decision and policy making

## Quantification of Emissions within the Port of Mombasa Limits

Undertake emission inventory assessment within the port of Mombasa

Provide a comprehensive ship's emission inventory

Provide information to decision-makers on the levels of emission from ships within the port for development and tracking of emissions reduction strategies





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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



Youth Empowerment

11 individuals Trained

During Phase 1 of of the 3rd  
MTCC Africa Pilot Study



+8000

Data Sets Collected

Phase 1 of Pilot Project 3

\*November-December 2021



10

Stakeholder  
Engagements



MTCC AFRICA  
Maritime Technology Cooperation Centre



This project is financed by the  
European Union  
and implemented by the  
International Maritime Organization



GMN | The Global  
MTCC Network  
A global network for energy-efficient shipping



# WHAT NEXT FOR



**MTCC AFRICA**  
Maritime Technology Cooperation Centre

- 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





# MTCC AFRICA AND STAKEHOLDER SUPPORT



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*"Greening Port Technologies"*



**MTCC AFRICA**  
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**GMN** | The Global  
MTCC Network  
A global network for maritime technology



This project is financed by the  
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