

Presentation by Lydia Ngugi

MTCC Africa Head

Title, “Regional Reflections: Challenges and Opportunities for Innovation and Deploying New Solutions. Focus on the MTCC Africa Region.”



**ZERO AND LOW-EMISSION
INNOVATION FORUM**

27-29 September 2021 12:00pm – 15:00pm GMT+1

Presentation Outline

1. Overview of the African Region
2. MTCC Africa Regional best practices,
3. Innovation models for decarbonization,
4. What are the challenges and lessons learnt?
5. How can developing countries benefit from regional cooperation?
6. How can developing countries benefit from specific projects, innovation models?


The African Region Overview Emission Factors



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IMO environment program

MTCC Africa Best Practices Capacity Building



MEPC 72/17/Add.1
Annex 11, page 1

ANNEX 11
RESOLUTION MEPC.394(72)
(adopted on 13 April 2018)
INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS

THE MARINE ENVIRONMENT PROTECTION COMMITTEE

RECALLING Article 38(e) of the Convention on the International Maritime Organization (the Organization) concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution from ships,

ACKNOWLEDGING that work to address greenhouse gas (GHG) emissions from ships has been undertaken by the Organization continuously since 1997, in particular, through adopting global mandatory technical and operational energy efficiency measures for ships under MARPOL Annex VI,

ACKNOWLEDGING ALSO the decision of the thirteenth session of the Assembly in December 2017 that adopted for the Organization a strategic direction entitled "Respond to Climate Change",

RECALLING the United Nations 2030 Agenda for Sustainable Development,

ADOPTS the Initial IMO Strategy on Reduction of GHG Emissions from Ships (hereinafter the Initial Strategy) as set out in the annex to the present resolution;

INVITES the Secretary-General of the Organization to make adequate provisions in the Integrated Technical Cooperation Programme (ITCP) to support relevant follow-up actions of the Initial Strategy that may be further decided by the Committee and undertaken by developing countries, particularly least developed countries (LDCs) and small island developing States (SIDS);

AGREES to keep the Initial Strategy under review, with a view to adoption of a revised IMO Strategy on reduction of GHG emissions from ships in 2023.

adopted

MEPC 72-17-ADD.1.docx




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IMO **UN**
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Capacity Building Events Virtual Events 2020-2021



Success of MTCC Africa Road Map to Decarbonization

- Capacity building for regional focal points committee
- Benefiting from roll out of virtual events 2020-2021
- Stakeholder engagement in the industry
- Implementation of the IMO GHG Strategy
- Pilot projects completion and building up on the recommendations
- Consideration of bankable long term projects ie current on going Port Emissions Pilot Project
- Promoting the ratification of Marpol Annex VI
- Plans in place to commence publications of ongoing pilot project

VIRTUAL ENERGY EFFICIENCY CONFEX
Date: Wed 17th - Thur 18th & Wed 24th - Thur 25th March 2021
Time: 1400Hrs - 1700Hrs (East Africa Time)

Target Audience:

- Maritime Administrations
- Port Authorities
- Bunkering Companies
- Marine Engineering Firms
- Ship Owners & Ship Agents
- Maritime Technology Companies
- Maritime Logistics & Transport
- Financial Institutions
- Ship Operators & Seafarers
- Maritime R&D Institutions
- Government Authorities/Institutions
- International Organisations
- Ship Building & Repair Yards
- Maritime Lawyers

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MTCC Africa's Pilot Project and Action Items

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



Impacts of the Pilot Projects to the Region

- 20% saving on energy efficiency at the Port of Mombasa
- Use of RIS-GA system on RTG and MHC: Optimizes diesel generator speeds during the crane's stand-by mode and typically reduces total fuel consumption by 20%
- Trained a number of maritime administrators and ship operators through capacity-building programs
- Identification of baselines of emissions at the Port of Mombasa area
- Port of Douala is currently implementing the recommendations of energy efficiency audit



Challenges

- **Technical Cooperation:** to ensuring no country is left behind in the move to decarbonise shipping. long-term partnership of the EC and IMO is absolutely critical. With the establishment of Maritime Technology Cooperation Centre's (MTCC's), and their growing status and success, IMO and EC have embarked on a common journey that we hope will eventually lead to full decarbonisation in all regions.
- **Financing models** promoting innovation and uptake of new technologies especially in the context of developing countries in Africa, and in particular the small island developing States (SIDS) and least developed countries (LDCs).
- **Capacity Building:** sustainable maritime sector and the need to build back better and greener in a post pandemic world, through use of 'New technologies for greener shipping' reflecting the need to support a green transition of the maritime sector into a sustainable future.
- **Funding Gap:** Results from the ongoing pilot projects on quantification of emissions within the ports limits of Mombasa, ought to be replicated to the wider African region, a plus that will be in support of item number 2, this is seriously being hampered by the funding gap This gap will also stall the implementation of the Initial IMO GHG Strategy which is directly linked to bankable project consideration.

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Needs as Derived from the MTCC Africa National Needs and Technical Barriers Assessment Study: Case Study African Region towards Shipping Decarbonisation

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 bunker fuel, port infrastructure
- Sustainability models



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"Greening Port Technologies"



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This project is financed by the
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