



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

GMN SUMMARY REPORT

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INTERNATIONAL
MARITIME
ORGANIZATION



MESSAGE FROM THE EDITOR

Dear Reader,

We have reached the half way mark of the GMN project implementation. This newsletter updates you on our journey over the last six months, what we have achieved and what we have learned.

In April 2018, the initial IMO strategy on reduction of GHG emissions from ships was adopted setting an ambitious target of reducing emissions from the shipping sector by at least 50% from the 2008 baseline. In order to do so, IMO member states will need to focus on greater efficiency of the shipping sector, including building technical and human capacity. The Global MTCC Network with its strong expertise and regional outreach is ready to support the countries in achieving the set goals.

The Network is growing: the MTCC Pacific has established its representation in Samoa to have a greater outreach in the region. By next year we are expecting to have all three MTCC Asia branches established in Asia as well. The greater representation in the regions will result in greater impact and benefits to the individual countries.

The pilot projects are well under way with voluntary data collection successfully implemented and energy efficiency projects midway. In this newsletter, we are offering to our reader articles from the MTCCs to bring you the highlights of their activities.

Please enjoy reading the GMN newsletter. We look forward to your feedback.

Tamar Barabadze
GMN Project Manager



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GMN OUTREACH

MEPC 72

The adoption of an initial strategy on the reduction of GHG emissions from ships was one of the key items on the agenda of the International Maritime Organization's Marine Environment Protection Committee (MEPC 72), held at IMO Headquarters in London (9-13 April). The GMN network presented its goals and objectives during a lunchtime MEPC presentation, showing the progress of the project together with its challenges and future objectives. The presentation, delivered by the GMN team, MTCCs and European Commission DG MOVE representatives, was attended by Member States, Intergovernmental Organizations and Non-Governmental Organizations.

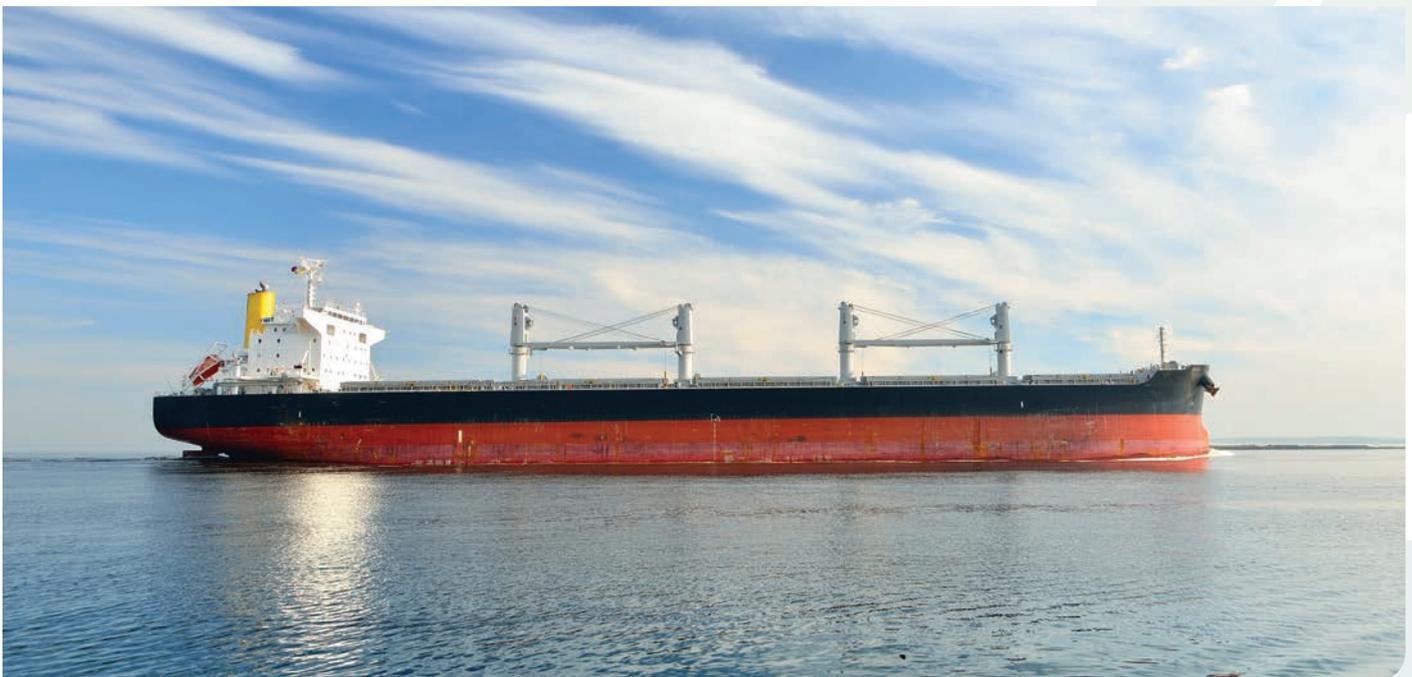


EUROPEAN COMMISSION

On 11 June 2018, the GMN team presented the lunchtime conference "Navigate maritime shipping into a low-carbon future" at the External Cooperation INFOPOINT of the European Commission, Brussels.

The presentation was part of the *Infopoint Lunchtime conferences* which organizes meetings and talks on European external cooperation.

The GMN team had the opportunity to give an overview of the planned and completed activities as well as to talk about the future of the project.





IMO CLIMATE CHANGE STRATEGY AND THE ROLE OF GMN

In April, nations meeting at IMO in London adopted an initial strategy on reducing greenhouse gas emissions from ships, setting out a vision to reduce GHG emissions from international shipping and phase them out, as soon as possible in this century. More specifically, under the identified “levels of ambition”, the initial strategy envisages for the first time a reduction in total GHG emissions from international shipping which, it says, should peak as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008, while, at the same time, pursuing efforts towards phasing them out entirely.

The strategy includes a specific reference to “a pathway of CO₂ emissions reduction consistent with the Paris Agreement temperature goals”. The initial strategy was adopted by IMO’s Marine Environment Protection Committee (MEPC), during its

72nd session at IMO Headquarters in London, United Kingdom. The meeting was attended by more than 100 IMO Member States. The initial strategy represents a framework for Member States, setting out the future vision for international shipping, the levels of ambition to reduce GHG emissions and guiding principles; and includes candidate short-, mid- and long-term further measures with possible timelines and their impacts on States. The strategy also identifies barriers and supportive measures including capacity building, technical cooperation, research and development.

Within the initial strategy, the MTCC network has been identified as one of the key initiatives to help support Least Developed Countries and Small Island Developing States to implement the IMO’s ambitious goals.

HOST INSTITUTIONS AND NEW BRANCH OFFICE

MTCC-CARIBBEAN

University of Trinidad and Tobago (UTT), Trinidad and Tobago

MTCC-AFRICA

Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya



MTCC-PACIFIC

Pacific Community (SPC) in collaboration with the Secretariat of the Pacific Regional Environment Programme (SPREP), Fiji

MTCC-LATIN AMERICA

International Maritime University of Panama (UMIP), Panama

MTCC-ASIA

Shanghai Maritime University (SMU), China
⊕ First branch office in Phnom Penh, Cambodia

SUMMARY OF DELIVERED ACTIVITIES BY MTCCS



FEBRUARY - MTCC-PACIFIC 2ND NATIONAL WORKSHOP

MTCC-Pacific organized its 2nd National Workshop on Energy Efficient Operations of Ships which took place in the Solomon Islands.

The purpose of the workshop was to support the Solomon Islands government, the maritime administration, ports authority and ship owners and operators to agree on measures to improve energy efficiency of shipping in the Solomon Islands and provide them with technical tools to progress toward energy efficient operations of ships.



MARCH - MTCC-CARIBBEAN 2ND NATIONAL WORKSHOP

The 1st Eastern Sub-Regional workshop in Antigua served as a medium for the exchange of knowledge, ideas and experiences concerning the reduction of emissions from ships. Valuable feedback and information was obtained from the territories of the eastern sub-region. On completion of the workshop, all participants emphasized the value the workshop had brought to the region. The representatives pledged to support the MTCC in raising awareness and visibility of the project and its objectives.



MARCH - MTCC-LATIN AMERICA 1ST REGIONAL WORKSHOP

The launch of MTCC-Latin America was held at the International Maritime University of Panama on 13 March 2018. The event was attended by representatives of the European Union, the Government of Panama, non-governmental organizations and academia as well as representatives from 17 countries in the region. Mr. Jorge Barakat, Minister of Maritime Affairs of Panama and Administrator of the Panama Maritime Authority, attended the event and congratulated IMO for its efforts toward the promotion of a more energy-efficient maritime industry and reaffirmed the support of the Panama Maritime Authority.



MARCH - MTCC-PACIFIC 3RD NATIONAL WORKSHOP

The National Workshop on Energy Efficient Operations of Ships was conducted in Vanuatu by MTCC-Pacific in conjunction with the SPC's Maritime Safety & Governance workshop. The national workshop provided capacity building in the areas of ship energy efficiency operations (SEEO), operational measures (SEEOM), management plans (SEEMP) and systems (SEEMS). The national workshop participants agreed to implement relevant actions to progress towards a Green Maritime Industry (ships, shipyards and ports) in Vanuatu in order to support a long-term objective for low carbon maritime transport and contribute to the reduction of GHG emissions in Vanuatu and the Pacific.



MAY - MTCC-PACIFIC 4TH NATIONAL WORKSHOP

The event was organized in Tuvalu and attended by the Ministry of Communication and Transport, Office of the Prime Minister, Department of Energy, Department of Agriculture, Department of Meteorology Services and other national institutions. Participants felt more needs to be done on implementation of regulations and enforcement on international vessels arriving in Tuvalu. They also suggested that more needs to be done on domestic vessels operational regulation and implementation of Standard Operating Procedures for safe and efficient journeys. The participants also agreed on MTCC Pacific's role for a safer and efficient domestic shipping as well as in reducing GHG emission.



MAY - MTCC-AFRICA 2ND NATIONAL WORKSHOP

Agence Portuaire, Maritime et Fluviale (APMF) and Madagascar's Maritime Authority, in collaboration with MTCC-Africa conducted the second National Workshop in Tomalina, Madagascar. It was a sensitization event on the GMN network, MTCC-Africa, MARPOL Annex VI and Debate on African Ports. The workshop saw the participation of different actors from Maritime Authorities, Port Authorities, Maritime Institutions of Higher Learning, Ship Owners/Agents and Government Institutions. At the end of the two-day workshop, a memorandum of understanding (MOU) was signed between APMF and MTCC-Africa.



JUNE - MTCC-PACIFIC 5TH NATIONAL WORKSHOP

The event was held at Secretariat of the Pacific Regional Environment Programme (SPREP) in Apia, Samoa. The purpose of the workshop was to support Samoa's Ministry of Works, Transport and infrastructure to agree on measures to improve energy efficiency of shipping (SEE) in the country. Also, to provide them with technical tools to progress toward energy efficient operations of ships (SEEO) to comply with the recent Marine Environment Protection Committee. The participants agreed to implement relevant actions to progress toward a Green Maritime Industry (ships and ports) in Samoa in order to support a long-term objective for low-carbon maritime transport and contribute to the reduction of GHG emissions in Samoa and the Pacific.



JUNE - MTCC-PACIFIC 6TH NATIONAL WORKSHOP

The National Workshop, held in Tarawa (Kiribati), was attended by representatives from the Ministry of Information, Communication, Transport and Tourism Development, Maritime Transport, Police, Training College, Port Authority and Kiribati Oil Terminal, and private shipping companies. The purpose was to gain agreement from the Kiribati government, its maritime administration and ship operators to measures to improve SEE in Kiribati, but also to provide them with technical tools to progress toward SEEOs. The event culminated in a group discussion where the participants agreed to implement relevant actions to progress toward a Sustainable Transport Industry.

HIGHLIGHTS



MTCC-ASIA BRANCH OFFICE MYANMAR

MTCC-Asia plans to launch their second branch office in Myanmar by the end of 2018. The communication between MTCC-Asia and Myanmar Ministry of Transportation was established in early 2018.

MTCC-AFRICA PILOT PROJECT ON FUEL CONSUMPTION DATA COLLECTION

Updates on MTCC-Africa Pilot Project on Fuel Consumption Data Collection and Reporting.

As part of the IMO efforts to implement MARPOL Annex VI, the MTCC-AFRICA has been tasked with collecting and consolidating fuel consumption data from selected ships operating within the African region.

MTCC-AFRICA is implementing this initiative using two methodologies; a manual data collection system using Thorium tablets and automatically through fitting of sensors within the fuel flow meters and transmitting the data via satellite to a MTCC-AFRICA Themis platform which receives the submitted data.

The work began through training the MTCC-AFRICA staff on how to use the Thorium tablets on fuel data collection and on the use of the Themis platform.

A number of Thorium tablets have already been delivered to various selected ships. MTCC-AFRICA experts have also



MTCC-PACIFIC BRANCH OFFICE SAMOA

MTCC-Pacific has taken steps to strengthen its expertise in environmental governance, through an agreement between the Pacific Community and the Secretariat of the Pacific Regional Environment Programme.

The agreement, which was signed by SPC Deputy Director General Dr. Audrey Aumua and the SPREP Director General Mr. Kosi Latu, provides for an MTCC-Pacific project officer to be recruited and based at the SPREP offices in Samoa. By establishing this position in the SPREP offices, MTCC-Pacific will be better positioned to ensure that it has direct access to environmental governance expertise, knowledge that will be essential to the success of its work. The branch office will be established in Samoa by the end of 2018.

trained the crew on the selected vessels on how to collect the fuel data using the tablets and submitting the collected data to the MTCC-AFRICA Themis platform. The tablets are supplied by Collecte Localisation Satellites (CLS), a strategic partner in the implementation of the project.

By July 2018, over 200 data sets have already been submitted by the vessels which received the tablets and have been received by MTCC-AFRICA via the Themis platform. MTCC-AFRICA experts have been designated to check this data on a daily basis and maintain a constant communication with the ship crew in case of any challenges encountered. MTCC-Africa is working closely with Pacific International Lines (PIL) in the implementation of the voluntary fuel consumption data collection and reporting.

The MTCC-AFRICA experts have also visited the vessels submitting the fuel consumption data at the Port of Mombasa for the purpose of verifying the data received in accordance to IMO requirements and guidelines.

Efforts by MTCC-AFRICA has also gone



into surveying the vessels selected for the pilot project to check their suitability for fitting the automatic fuel data collection system. The installation of automatic data collection system was expected to start at the end of July.

The data received will be consolidated and reported to IMO as part of an experience gathering exercise and to help in building capacity and establishing data reporting systems according to MARPOL Annex VI regulations.

Some challenges have been experienced in the projects for example irregularity in collecting and submitting data. However, these challenges have been overcome through regular communication with the stakeholders with a view to understanding their challenges and addressing them.

MTCC-CARIBBEAN PILOT PROJECTS

Under the International Maritime Organization (IMO) initiative on technology cooperation, MTCC Caribbean implemented two pilot projects aimed at promoting uptake of new technology and establishing a voluntary data collection and reporting system on fuel consumption. These two projects will provide the baseline data on the use of energy efficient technology, abatement methods and fuel consumption (type and quantity) on board merchant vessels within the Caribbean region. These projects require active participation and support from regional stakeholders and partners. The voluntary MTCC Caribbean data collection and reporting system is highly dependent on cooperation and reporting from 16 Caribbean territories. Preliminary results and reflections on the obstacles being encountered in implementation of the project indicate a need for greater stakeholder engagement to promote greater participation in data reporting from commercial shipping operators.

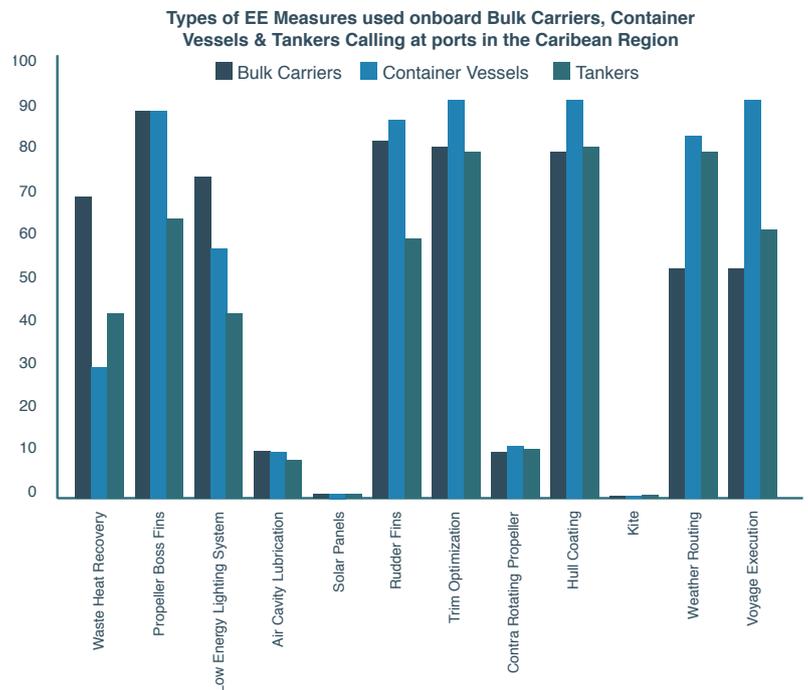
The two pilot projects encompass the uptake of energy efficiency in shipping and data collection associated with air emissions due to commercial shipping. These pilot projects are key to achieving the aims of MTCC Caribbean and are phased over three years. Through these pilot projects the baseline data on the use of energy efficient technology, fuel consumption (type and quantity) and GHG emissions on board merchant vessels trading in the region will be captured. This baseline data will provide regional stakeholders with data to make informed decisions towards investment in energy efficient technology, emissions abatement and control methods. The data will also highlight the compliance of MARPOL Annex VI among vessels trading in the region and be used as a baseline to inform governmental policies on environmental and maritime affairs.



Fig: MTCC Caribbean data collection process

In support of the pilot projects, energy efficiency focal points (EEFP) have been established across 14 of the 16 targeted territories. These EEFP's are required to facilitate the implementation of the MTCC Caribbean Data collection form, enabling the first phase of the implementation of a regional framework for fuel reporting and relevant technology uptake. In this regard, 5 of the 16 territories targeted by MTCC Caribbean have implemented this voluntary data collection form in the first year. The voluntary nature of data collection emerges as the biggest challenge in the process.

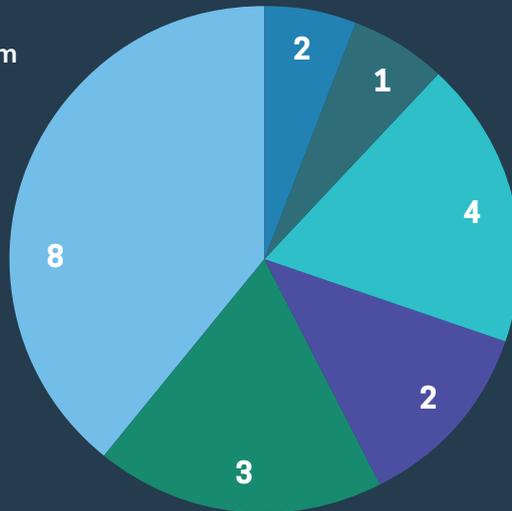
The preliminary data analysis confirms that the vessels trading within the region still predominantly use traditional fuels like Marine fuel oil and Gas Oil. The majority of ships reporting consist of Container Vessels, Tankers and Bulk Carriers. Among these vessels, trim optimisation, voyage execution and weather routing are the most commonly used operational measures.



OUTREACH ACTIVITIES

GMN CAPACITY BUILDING

Activities delivered by GMN from March 2017 to June 2018



MTCC-CARIBBEAN

MTCC-PACIFIC

GMN

MTCC-AFRICA

MTCC-LATIN AMERICA

MTCC-ASIA

GMN PROGRESS

GMN overview (5 MTCCs)



49% DELIVERED

Results based upon the percentage of MTCC contract deliverables completed or outstanding as of 5 June, 2018.

Individual MTCC's



56% CARIBBEAN



53% ASIA



50% PACIFIC



44% LATIN AMERICA



44% AFRICA

LOOKING AHEAD: JULY TO DECEMBER 2018



MTCC-PACIFIC 7TH NATIONAL WORKSHOP

1 - 3 August 2018
Marshall Islands



MTCC-LATIN AMERICA 2ND NATIONAL WORKSHOP

22 - 24 August 2018
Cartagena, Colombia



MTCC-AFRICA 3RD NATIONAL WORKSHOP

29 - 30 August 2018
Walvis Bay, Namibia



MTCC-CARIBBEAN 4TH NATIONAL WORKSHOP

4 - 5 October 2018
Kingston, Jamaica



GMN SECOND ANNUAL EVENT

22 - 26 October 2018
London, United Kingdom



MTCC-LATIN AMERICA 3RD NATIONAL WORKSHOP

14-16 November 2018
Peru



MTCC-AFRICA 4TH NATIONAL WORKSHOP

19 November 2018
Ghana



MTCC-ASIA 2ND NATIONAL WORKSHOP

29-30 November 2018
Malaysia

CONTACT DETAILS



MTCC AFRICA
Maritime Technology Cooperation Centre

mtccafrica@jkuat.ac.ke

+254 67 5870001-4

gm.imo.org/mtcc/africa/
<http://mtccafrica.jkuat.ac.ke/>

Jomo Kenyatta University of Agriculture and Technology, Mombasa Campus, JKUAT Main Campus, Office of the Vice Chancellor, P. O. Box 62000 – 00200 Nairobi, Juja, off Thika Superhighway, Kenya



MTCC ASIA
Maritime Technology Cooperation Centre

mtcc-asia@shmtu.edu.cn

+ 86 21 38284991

gm.imo.org/mtcc/asia/
<http://www.mtccasia.org/>

Shanghai Maritime University, 1550, Harbor Avenue, New Harbour City, Pu Dong New District, 201306 Shanghai, China



MTCC CARIBBEAN
Maritime Technology Cooperation Centre

mtcc@utt.edu.tt

+868 223 4888

gm.imo.org/mtcc/caribbean/
<https://utt.edu.tt/?wk=68>

The University of Trinidad and Tobago, Chaguaramas Campus, 2nd Avenue North, Western Main Road, Chaguaramas, Trinidad & Tobago W.I.



MTCC LATIN AMERICA
Maritime Technology Cooperation Centre

mtcclatinamerica@umip.ac.pa

+507 314-3700

gm.imo.org/mtcc/latin-america/
<http://mtcclatinamerica.com/en/>

Universidad Marítima Interamericana de Panamá, UMIP (International Maritime University of Panama), La Boca 918B, Panama, Republic of Panama



MTCC PACIFIC
Maritime Technology Cooperation Centre

mtcc-pacific@spc.int

+679 337 0733

gm.imo.org/mtcc/pacific/
<http://mtccpacific.spc.int/>

Pacific Community (SPC) Economic Development Division Private Mail Bag, Suva, Fiji



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

gm.imo.org

gm.imo.org

International Maritime Organization, 4, Albert Embankment, London, SE1 7SR, United Kingdom



Project Coordination Unit



www.imo.org

