

GMNI | 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



In the latter half of 2020, the GMN successfully overcame the challenges of COVID-19 to continue its important work to reduce shipping emissions from the participating regions.

For example, during this period technical workshops were delivered in Africa and Pacific; in Caribbean a regional workshop series was completed; and in Asia, the MTCC undertook a regional ship energy efficiency promotion campaign. The Centres also continued their important outreach activities, by participating in various forums and by producing new guidance material such as the Caribbean's 'Reflections on Capacity Building for Climate Action in Maritime Shipping'.

Great credit goes to the MTCC teams and Project Coordination Unit who have worked tirelessly in very difficult situations to ensure that the GMN remains on course and fully operational.

Also to be acknowledged is the key role provided by the European Commission, which has been steadfast in its support for the project and has allowed the type of flexibility to ensure that all COVID related barriers have been overcome.

Now when we look ahead, it is to ensure long term sustainability of the MTCCs.

This Newsletter updates you on our journey over the last six months, what we have achieved and what is upcoming for the GMN.

Please enjoy and we look forward to your feedback!

Anton Rhodes

Anton Rhodes
GMN Project Manager



GMN OUTREACH

JUNE

MTCC Africa – Prospects, challenges, and opportunities of low-/zero-emissions shipping

MTCC Africa participated in a virtual workshop series on the prospects, challenges, and opportunities of low-/zero-emissions shipping. The event, which was organized by the Embassy of Mexico in the United Kingdom in partnership with the World Bank and addressed to developing countries, small island developing States, and least developed countries, provided the opportunity to discuss the impacts that States may experience

as a result of IMO climate policy measures as well as the existing barriers that may impede optimal impact assessments of the measures and develop actionable solutions to overcome these barriers. The event also provided the opportunity to discuss concrete mechanisms to address negative impacts and identify development opportunities related to shipping's decarbonization.

JULY

MTCC Caribbean – Caribbean Maritime Industry at the Nexus of Climate Change and Covid-19

MTCC Caribbean participated and presented at a digital symposium titled "Caribbean Maritime Industry at the Nexus of Climate Change and Covid-19" on 3 July 2020. The event brought together industry leaders, business experts and active

members of the Caribbean maritime sector to explore opportunities for progress and development in light of Climate Change and COVID-19. The workshop was organized and hosted by Alixum International Limited.

JULY

CARICOM Virtual Security Conference

MTCC Caribbean's Director and Head participated and presented on Maritime Security and the Blue Economy: Investing in our Capacity, at the Virtual Security Conference 2020, Session 11. The conference, which was hosted by CARICOM's Implementation Agency for Crime and Security (CARICOM-IMPACS) on 31 July

2020, brought together leading representatives from government, regional and international agencies, academia, private sector and civil society and covered 12 thematic sessions aimed at discussing the impact and implications of COVID 19 and measures to respond.

SEPTEMBER

MTCC Caribbean – Caribbean Women in Sustainable Shipping for a Sustainable Planet

MTCC Caribbean participated in WiMAC's World Maritime Day 2020 webinar formally titled "Caribbean Women in Sustainable Shipping for a Sustainable Planet" on 25 September 2020. MTCC Caribbean's Deputy Director and Technical Head

featured a presentation on the world maritime day theme "Sustainable Shipping for a Sustainable Planet – Overview of trends and directions" which was moderated by MTCC Officer, Ms. Sarita Mahabir.

DECEMBER

4th Global Stakeholders Committee Meeting

On 2 December 2020, the Global Stakeholders Committee of the GMN Project held its 4th meeting via video conferencing. The meeting presented the main achievements of the GMN Project and highlighted, in particular, the significant impact that the MTCCs had in terms of capacity building, the successful completion of the Pilot Projects, as well as the MTCCs' initiatives in communicating and disseminating information. As a result of the impressive results achieved and the benefits made to the regions since the beginning of the Project, many countries formally expressed their support to the

GMN Project. Despite the significant disruption caused by the Covid-19 pandemic, the MTCCs managed a smooth transition to virtual environment in the delivery of capacity building activities and continued to explore possible linkages with other IMO projects and funds with the aim of ensuring their sustainability. In light of the well-recognised role that the MTCCs are playing in supporting developing countries with the implementation of IMO's GHG reduction strategy, a concept paper for a second phase of the GMN Project is under consideration.

IMO MEETINGS

IMO AND CLIMATE CHANGE DEVELOPMENTS

NOVEMBER

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC) 75, 16-20 NOVEMBER (VIRTUAL SESSION)

The MEPC approved draft new mandatory regulations to cut the carbon intensity of existing ships.

This builds on current mandatory energy efficiency requirements to further reduce greenhouse gas emissions from shipping. The MEPC also agreed the terms of reference for assessing the possible impacts of the new requirements on States, paying particular attention to the needs of developing countries, in particular Small Island Developing States (SIDS) and Least Developed Countries (LDCs).

The draft amendments to the MARPOL convention would require ships to combine a technical and an operational approach to reduce their carbon intensity. This is in line with the ambition of the Initial IMO GHG Strategy, which aims to reduce carbon intensity of international shipping by 40% by 2030, compared

to 2008. The amendments were developed by the seventh session of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 7), held as a remote meeting 19-23 October 2020.

The draft amendments will now be put forward for formal adoption, together with the findings of the impact assessment, at the MEPC 76 session, to be held in June 2021.

Resolution on national action plans adopted

The MEPC adopted a resolution on national action plans. The resolution urges Member States to develop and update a voluntary National Action Plan (NAP) with a view to contributing to reducing GHG emissions from international shipping.

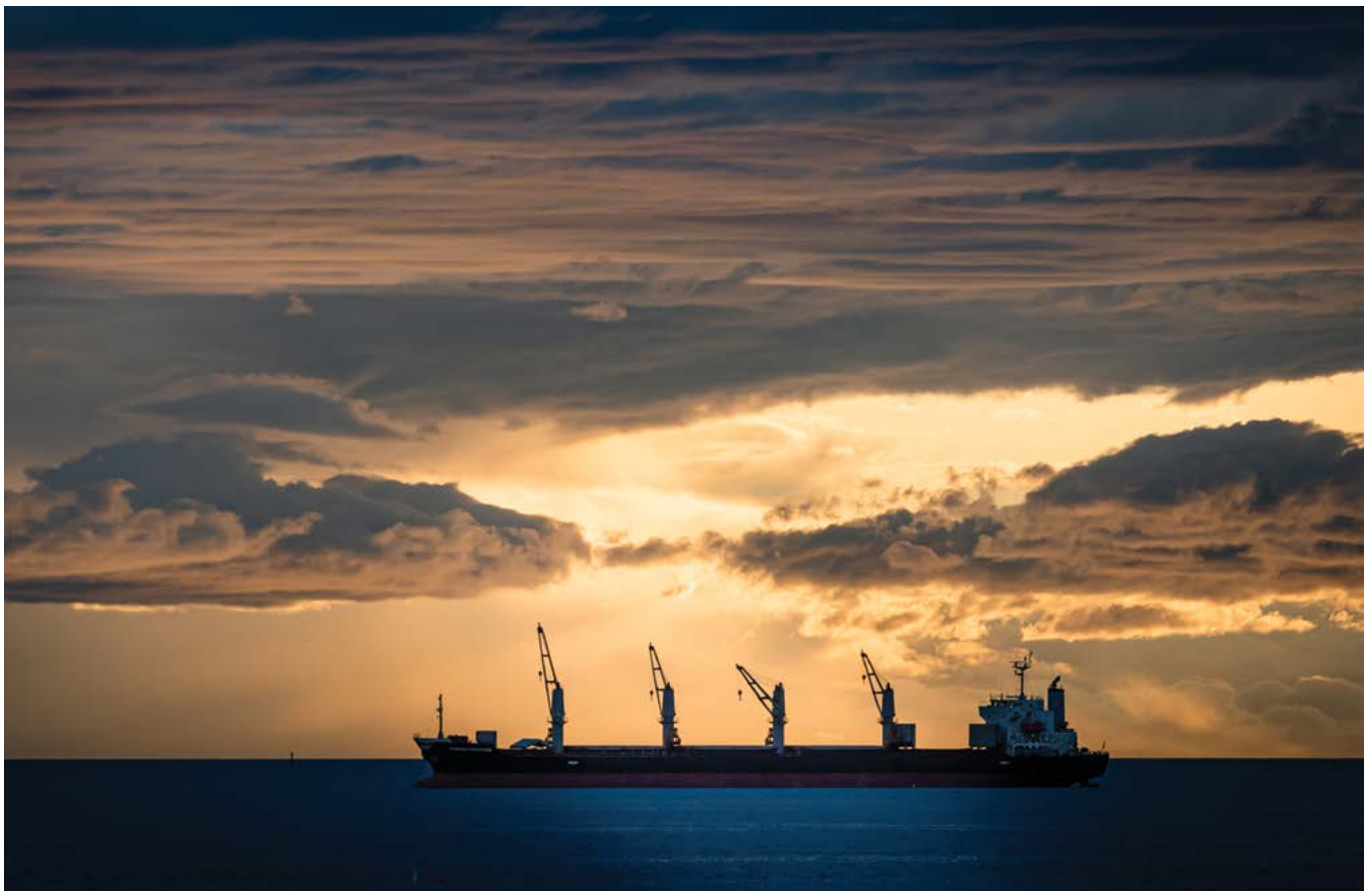
Fourth IMO GHG Study approved

The Committee approved the Fourth IMO GHG Study 2020. The study contains an overview of GHG emissions from shipping 2012-2018, developments in carbon intensity and emission projections towards 2050. The study will be published by IMO.

Proposal for an International Maritime Research Board discussed

The MEPC discussed an industry-led proposal for the establishment of a non-governmental International Maritime Research and Development Board (IMRB) and related fund.

Many delegations also recognized the ongoing work under IMO's GHG emission reduction projects and highlighted the need to keep the needs of developing States, in particular SIDS and LDCS, at the forefront of future discussions.



Following discussion, the Committee acknowledged the proposal and noted diverging views and concerns on the proposed mechanism, with regards to various administrative, legal and governance aspects. The Committee noted that the proposal would require more detailed consideration, including of the potential impacts on States, before taking any decision. The Committee invited interested Member States and international organizations to submit further commenting documents and proposals to the next MEPC session.

Amendments to MARPOL Annex VI to further strengthen the EEDI adopted

The MEPC adopted amendments to MARPOL Annex VI to significantly strengthen the Energy Efficiency Design Index (EEDI) "phase 3" requirements, with expected entry into force date of 1 April 2022.

The amendments bring forward the entry into effect date of phase 3 to 2022, from 2025, for several ship types, including gas carriers, general cargo ships and LNG carriers. This means that new ships built from that date must be significantly more energy efficient than the baseline.

Amendments to MARPOL Annex VI on sulphur content definition and sampling adopted

The following amendments were adopted, with expected entry into force date of 1 April 2022.

Amendments to Regulation 2 'Definitions', to include new definitions for "Sulphur content of fuel oil" - meaning the concentration of sulphur in any fuel oil, measured in % m/m as tested in accordance with standard acceptable to the Organization; "Low-flashpoint fuel", to mean gaseous or liquid



Further meetings highlight were:

- Amendments to BWM Convention adopted
- Draft amendments to prohibit the use, and carriage for use, as fuel of HFO by ships in Arctic waters ap-proved
- Draft amendments to AFS Convention approved

fuel having a flashpoint lower than otherwise permitted under paragraph 2.1.1 of SOLAS regulation II-2/4; "MARPOL delivered sample", to mean the sample of fuel oil delivered in accordance with regulation 18.8.1 of MAR-POL Annex VI; "In-use sample", to mean the sample of fuel oil in use on a ship; and "On board sample", to mean the sample of fuel oil intended to be used or carried for use on board that ship.

Fuel oil sampling and testing - amendments to Regulation 14 'Sulphur oxides (SOX) and particulate

matter', to add new paragraphs related to in-use and onboard oil sampling and testing, to add new paragraphs to require one or more sampling points to be fitted or designated for the purpose of taking representative samples of the fuel oil being used or carried for use on board the ship. The representative samples of the fuel oil being used on board are to be taken in order to verify the fuel oil complies with the regulation.

Appendix I amendments to the International Air Pollution Prevention (IAPP) certificate - Consequential amendments to update the IAPP certificate to add a reference to sampling points and also to note where there is an exemption to the provision for low-flashpoint fuel.

Appendix VI on the Fuel verification procedure for MARPOL Annex VI fuel oil samples consequential amendments to verification procedures, to cover verification of the representative samples of in-use fuel oil and on board fuel oil.



Next steps for IMO

- 22 - 26 MARCH 2021
Sub-Committee on Pollution Prevention and Response (PPR) (Remote meeting) 8th Session
- 24 - 28 MAY 2021
Intersessional Working Group on the Reduction of GHG Emissions from Ships (Remote meeting) 8th Session
- 10 - 17 JUNE 2021
Marine Environment Protection Committee (MEPC) (Remote meeting) 76th Session

NEW PROJECTS IN DEPARTMENT OF PROJECTS AND PARTNERSHIPS

The Department of Partnerships and Projects (DPP) serves as the gateway for developing partnership opportunities with a wide range of external partners, including IMO Member States, UN agencies, financial institutions, NGOs, IGOs and the private sector to help tackle key global challenges within a maritime context.



NEXTGEN, “GREEN AND EFFICIENT NAVIGATION”

A new concept for a collaborative global ecosystem of maritime transport decarbonization initiatives has been introduced by the International Maritime Organization (IMO) and Singapore, during a global webinar on decarbonization (17 September).

The NextGEN initiative aims to facilitate information sharing on decarbonization initiatives across many stakeholders (including IMO Member States, NGOs, industry and academia); identify opportunities and gaps for decarbonization in the global shipping community; and create important networks and platforms for collaboration across these initiatives. This network initiative has been named “NextGEN”, where GEN is short for “Green and Efficient Navigation”.

The webinar, attended by more than 500 maritime leaders and professionals, from 63 countries, was jointly organised by IMO and the Maritime and Port Authority of Singapore.

During the webinar, IMO Secretary-General Mr. Kitack Lim recognized the unprecedented times in which we are living and expressed his belief that “the single biggest challenge we are still facing is the battle against global warming and climate change”. He called for more action to speed up research into zero carbon marine fuels. “To achieve this, IMO is stepping up its efforts to act as a global forum and promoter in R&D in zero carbon

marine fuels, bringing together interested stakeholders from public and private sectors, and also private and development banks and other potential donors around the world,” Mr. Lim said.

The Minister for Transport, Singapore, Mr. Ong Ye Kung, said the world needed to keep up the fight against climate change, even while dealing with the COVID-19 crisis. “No one can do this alone. It is a global ambition, to be accomplished by the international maritime community. But we all have capabilities, expertise, and resources to contribute to this endeavour. Singapore will do our part,

“...the single biggest challenge we are still facing is the battle against global warming and climate change”

and we look forward to the maritime community coming together, under the leadership of the IMO, to redouble our efforts and build a better, greener world,” Mr. Ong Ye Kung said.

Outlining the principal features of the NextGEN concept, Mr. Jose Matheickal, Chief of Department of Partnerships and projects of IMO, said further discussions were envisaged at the forthcoming Future of Shipping Conference in Singapore in [February] 2021. Dedicated NextGEN workshops in 2021 will be organised by IMO and supported by

Singapore, to bring together various decarbonization initiatives, in order to map out in detail the global shipping decarbonization web.

A subsequent global mapping document will inform a wider audience through relevant IMO meetings. It is envisaged that NextGEN will act as a catalyst to spur collaboration among the various initiatives once the NextGEN collaboration platform is fully developed by 2022/2023.

Other speakers at the webinar gave presentations spanning the entire spectrum of various

existing cooperation-frameworks on decarbonization, ranging from initiatives in the Pacific to actions led by the maritime industry and financial institutions.

Panel discussions provided an opportunity to share views on additional opportunities for cooperation and outlining potential next steps to support achieving the 2050 level of ambition of reducing GHG emissions from international shipping by at least half compared to 2008, as set out in the IMO GHG Strategy.

FIN-SMART “FINANCING SUSTAINABLE MARITIME TRANSPORT”

The FIN-SMART Roundtable is a platform for regular dialogue among key maritime stakeholders on addressing the financial challenges related to the transition of shipping to a more sustainable and resilient future.

More than 50 leaders from the financial, public and private sectors participated in the first “Financing Sustainable Maritime Transport (FIN-SMART) Roundtable” on 27 October. The high level virtual Roundtable was hosted by the International Maritime Organization (IMO), the European Bank for Reconstruction and Development (EBRD) and the World Bank Group.

The Roundtable aims to support accelerating financial flows - particularly in developing countries - for the decarbonization of the maritime sector, in line with country priorities and the goals of the IMO Initial Strategy on the reduction of GHG emissions from ships. Participants will also address the sector’s COVID-19 recovery needs.

Speaking at the opening of the meeting, IMO Secretary-General Mr. Kitack Lim highlighted the importance of maritime transport in the global economy as an engine of growth and a driver of social development. He called for strong support to accelerate finance for sustainable maritime transport, in particular in decarbonization and sustainable recovery post COVID-19. “These will be only possible with targeted investment and strategic partnerships, particularly addressing special needs of developing countries, LDCs and SIDS,” he said.

Mr. Josué Tanaka, Managing Director of Operational Strategy and Planning, Energy Efficiency and Climate Change at EBRD, said, “What brought us here today is to exchange ideas on how to support the development of the long-term decarbonization of the shipping industry and create financial products to achieve this. It is the EBRD’s ambition to support the formulation of a lowcarbon pathway for the shipping industry that aligns industry stakeholders, encourages

the uptake of technological solutions and develops the instruments to enable the necessary investments. These activities require close cooperation based on strong partnerships.”

During the inaugural meeting participants looked for concrete opportunities to help accelerate global financing for sustainable shipping, especially in low- and middle-income countries. Among the options were identifying priorities

mechanisms, showcasing existing financial solutions to promote replication and scaling-up, and increasing awareness about the potential role financial institutions can play.

The FIN-SMART Roundtable will meet regularly and bring in additional important stakeholders to the workstreams discussions, from the public and private sectors, civil society and international organizations. Subsequent



“ What brought us here today is to exchange ideas on how to support the development of the long-term decarbonization of the shipping industry and create financial products to achieve this ”

and investment opportunities across the maritime supply chain, as well as addressing barriers to financial flows, and harnessing support for country reform efforts.

The need for innovative and tailor-made solutions to close the existing finance gap was a main discussion topic. These include exploring new financing models and risk sharing

discussions will involve multiple dedicated workstreams on the identified topics.

More than 50 senior officials participated in the inaugural meeting, including representatives from IMO, EBRD and the World Bank Group and participants from the maritime industry, donor countries and other States.



GHG-SMART “THE SUSTAINABLE MARITIME TRANSPORT TRAINING PROGRAMME”

Four-year partnership will support GHG reduction training in Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

The Republic of Korea and the International Maritime Organization (IMO) have signed an agreement to establish a training programme to support developing States to reduce greenhouse gas (GHG) emissions from shipping. This will facilitate the implementation of candidate measures to be adopted by IMO and the development of national action plans to reduce GHG emissions from the shipping and ports sectors.

The Sustainable Maritime Transport Training Programme (GHG-SMART) will focus on Least Developed Countries (LDCs) and Small Island Developing States (SIDS). It will help them to develop their capacity to achieve the goals set out in the

implement measures contained in the IMO Strategy. This would be complemented by support and training to develop and implement National Action Plans. It is widely recognized that national action plans may facilitate the implementation of IMO-adopted measures in the national context and support the achievement of international commitments through national action.

The agreement for the US\$2.5 million training programme was signed (on 27 October) by IMO Secretary-General Mr. Kitack Lim and the Minister of Oceans and Fisheries of the Republic of Korea Dr. Seong-Hyeok Moon.

GHG-SMART training and capacity building

Training packages will be developed to cover a range of activities, including analysis and review of

efficient technologies, filling gaps in technology and policies between developed countries and the LDCs and SIDS.

Link with other IMO-executed GHG emission reduction projects

The Programme will be strategically linked to the ongoing and proposed major projects implemented by IMO to achieve GHG emissions reduction. These include the Global MTTC Network (GMN) project, funded by the European Union, which unites Maritime Technologies Cooperation Centres (MTCCs) in targeted regions into a global network; and the GreenVoyage2050 Project, a partnership project between the Government of Norway and IMO, which is working with 12 pilot countries in different regions to meet climate change and energy efficiency goals related to international shipping. There will also be cooperation with the World Maritime University (WМУ) for technical input, and IMO’s Integrated Technical Cooperation Programme (ITCP).

Funding

This four-year programme will be funded through an allocation of US\$2.5 million under the existing Memorandum of Understanding (MoU) between IMO and the Republic of Korea on the Republic of Korea’s contribution to the Delivering Strategy and Reform – Voyage Together Trust Fund (DSR-VT TF).



“The IMO strategy envisages reducing total annual GHG emissions from ships by at least 50% by 2050”

Initial IMO Strategy on Reduction of GHG Emissions from Ships. The IMO strategy envisages reducing total annual GHG emissions from ships by at least 50% by 2050 compared to 2008, meaning a reduction in carbon intensity for individual ships and a move to new technologies and low/zero carbon fuels. A number of specific measures are under consideration to achieve the ambitious targets.

The strategy recognizes that there are potential barriers to achieving the targets and highlights the need for supportive measures, including capacity building, technical cooperation, technology transfer and research and development (R&D), particularly in developing countries.

The four-year GHG-SMART programme will, therefore, support States (specifically, SIDS and LDCs) to address gaps in technologies and policies, by building knowledge and capacity in those countries to identify ways to effectively

current policies, update on IMO regulations, how to develop national action plans, training of trainers to implement specific measures such as data collection, sharing of information and best practices. The training will also facilitate transfer and uptake of energy



SUMMARY OF DELIVERED ACTIVITIES BY MTCCS

JULY

MTCC Asia – Workshop on GHG Emissions Reduction, 15-17 July 2020



A workshop on GHG Emissions Reduction was successfully organized by Shanghai Maritime University (MTCC Asia), China Ministry of Transport and Communications, Department of Marine Administration of Myanmar, and Myanmar Maritime University from 15th to 17th July 2020 in Shanghai, China. 31 participants from Bangladesh, Cambodia, India, Myanmar, Malaysia, Thailand, and China attended the conference. Following a review of global shipping dynamics during Covid-19, the workshop was organized with the aim of covering the current needs analysis, challenges, and solutions for GHG control. This workshop was designed to help achieve several long-term goals relating to raising awareness of energy efficiency policies and technologies in the maritime industries, and implementation of IMO instruments and methodologies on Energy Efficiency to help mitigate climate change.

OCTOBER

MTCC Asia – Regional Ship Energy Efficiency Technology Promotion Campaign, 10 October 2020 – 25 February 2021

The technology promotion campaign aimed to enhance the engagement with governments on Nationally Determined Contributions (NDCs) with other Asian maritime countries, by providing a series of technological services. It aimed to disseminate and transfer knowledge of GHG technologies, conventions, and maritime standards in the respect of MARPOL Annex VI, 2020 IMO Sulphur emissions limit, and implementation of the GHG initial strategy of IMO by visiting relevant Asian countries and to help relevant Asian countries to assess and determine the Nationally Determined Contributions (NDCs) of GHG reduction by researching and consulting.

Presentations related to ship energy efficiency, theory and practice on ship speed reduction for promotion of energy efficiency, and in-situ introduction of the research projects in the SMU integrated engine room lab were delivered.

The technology promotion campaign comprised of a number of workshops with four workshops having been successfully held by MTCC Asia and its partners to date.

10th October 2020 - MTCC Asia and Malaysia

The workshop, organized by MTCC Asia, Marine Department Malaysia and Shanghai Maritime University (SMU), was attended remotely by 40 representatives from China and Malaysia's shipping industry.

26th November 2020 - MTCC Asia and Myanmar

The workshop, organized by MTCC Asia, Myanmar Maritime University (MMU) and Shanghai Maritime University (SMU), was attended remotely by 38 representatives from the shipping industry of China and Myanmar.

7th December 2020 - MTCC Asia and the Philippines

The workshop, organized by MTCC Asia, Maritime Academy of Asia & the Pacific (MAAP) and Shanghai Maritime University (SMU), was attended remotely by about 40 representatives from the shipping industry of China and the Philippines.



16th December 2020 - MTCC Asia and Bangladesh

The workshop, organized by MTCC Asia, Bangabandhu Sheikh Mujibur Rahman Maritime University (BSMRMU) and Shanghai Maritime University (SMU), was attended remotely by approximately 35 representatives from the shipping industry of China and Bangladesh.



FUTURE WORKSHOPS

The remaining 2 technology promotion campaign workshops with Indonesia and Cambodia will be delivered in the 1st quarter of 2021.

OCTOBER

MTCC Caribbean – Regional Webinar Series, 28 October – 18 November 2020

The webinar series served as a medium for the exchange of knowledge, ideas and experiences and received participation from over 100 participants across four weeks. Presentations were delivered by MTCC Caribbean as well as guest speakers. This was supplemented by panel discussions to help fuel collaboration and knowledge sharing. The webinars were attended by a mix of regional stakeholders which comprised of representatives from maritime administrations, port state inspectors, ship owners, ship operators, port authorities, regulators, ministry representatives, maritime

technology providers, green energy providers, international organizations, civil society and academics.

Valuable feedback was received and core issues on maritime climate action were discussed. The main outcomes of the webinar series included:

- An update on the level of compliance in the Caribbean region and contemporary challenges in the implementation of MARPOL Annex VI;
- The facilitation of discussions on the state of implementation of the IMO's 2020 Sulphur Limit, including approaches to achieve the IMO's initial GHG reduction strategy;



- The enhancement of the regional approach towards the implementation of MARPOL Annex VI; and
- Exchange of Perspectives on the national implementation of MARPOL Annex VI using existing legal and institutional capacity.

OCTOBER

MTCC Pacific – Women in Maritime Virtual discussion, 21 October 2020

The virtual tok-tok series focused on adaptive responses in implementing the work plan identified in the Regional Strategy for Pacific Women in Maritime (2020-2024). The meeting was organised by Pacific Community (SPC) and supported by the MTCC Pacific and Pacific Women in Maritime Association (PacWIMA).

This virtual series was centred around the impact that Covid-19 is having on the maritime sector, the increased importance of the sector, and the role women play as community users within the sector. Furthermore, the series provided an opportunity for the State Women in Maritime Associations to provide activity updates aligned to the Regional Strategy.

The participants agreed to continue the dialogue around the impacts caused by Covid-19 and sought adaptive responses that could contribute to inform the implementation of the PacWIMA Workplan 2018-2020 including the activities identified in the Regional Strategy.

OCTOBER

MTCC Africa – Role of Women in Decarbonization, 29 October 2020

MTCC Africa hosted a virtual webinar titled "Role of Women in Decarbonization" that was held on 29th October 2020. The workshop focused on climate change mitigation in the maritime and shipping industry, taking into account the 2030 United Nations Sustainable Agenda and Goals (UN SDGs) and in particular Goal 5 on gender equality.

the role women play in this issue. In her remarks, President of the World Maritime University, Ms. Doumbia-Henry highlighted that gender equality is fundamental to ensure the achievement of an efficient and effective transition to a low-carbon economy. "Decarbonization requires a complete transformation of society

from production to consumption taking into account the global supply chain and the need for the full participation of all members of society, including women" she said. Presentations on the topic were tailored to the legal, environment, innovation and technology aspects of decarbonization.

Keynote addresses were given in relation to decarbonization in the maritime and shipping industry and



MTCC Pacific – National Workshop Vanuatu, 12 November 2020

Vanuatu Virtual National Workshop for Domestic Ship Operators on MARPOL Annex VI

The second follow up National Workshop for Domestic Ship Operators on MARPOL Annex VI was held virtually by the MTCC Pacific staff based in Suva, Fiji, and Vanuatu maritime stakeholders at the Melanesian Hotel in Port Vila, Vanuatu on 12th November 2020. The meetings were attended by representatives from the newly established Office of Maritime Regulator (OMR), Ports and Marine, Ministry of Infrastructure and Public, and ship operators.

The purpose of the virtual workshop was to recall the first national workshop outcome, provide an update of the MTCC Pacific project on the solar PV system onboard Tiwi Trader and provide information to the participants on some of the progressive technical tools being deployed to drive energy efficient operation of ships. This included the knowledge of the benefits of MARPOL Annex VI with particular attention to the Sulphur limit.

MTCC Asia – Global Green Maritime Forum, 18 November 2020

The 2020 Global Green Maritime Forum, hosted by MTCC Asia on 18 November 2020, brought together interested stakeholders on discussions about the latest developments on national policies and crucial measures being taken to support decarbonization of the maritime sectors, with the key objective to facilitate the implementation of IMO Initial GHG Strategy. The forum was attended by around 100 representatives and participants from 22 countries including Denmark, Sweden, Turkey, the Philippines, India, Thailand, Myanmar, Cambodia, Sri Lanka and Malaysia.



In his welcome speech, Prof. Dr. Lu Jing, President of the Shanghai Maritime University (SMU), the Host Institute of MTCC Asia, pointed out the need for the international shipping industry to promote global governance and thereby bring about a win-win cooperation for decarbonization within the maritime sectors, and reaffirmed SMU's support for MTCC Asia to successfully fulfil its mission. Mr. Andreas Nordseth, Director General of Danish Maritime Authority, in his keynote speech, addressed major technological developments on GHG reduction from ships and praised MTCC Asia's concrete actions towards climate mitigation from the maritime shipping industry.

Speaking on behalf of IMO Department of Partnerships and Projects, Mr. Anton Rhodes, Project Manager of the Global MTCCs Network (GMN), acknowledged the tremendous achievements having been made by MTCC Asia in serving developing countries in Asia on capacity building activities and technology transfer initiatives for improving energy efficiency in ships and at ports. He then gave an update about IMO's latest developments and actions on the GHG agenda, including the launch of new major projects in respect of this endeavour.

Chaired by Prof. Xin Shi, Executive Director of MTCC Asia and Vice President of SMU, the forum was also addressed by speakers from Maritime Safety Administration of China, Directorate General of Shipping of India, Marine Department of Thailand, Shanghai Municipal Transportation Commission, and World Maritime University on their implementation strategies and operations for low-carbon shipping.

A technical panel discussion, moderated by Prof. Wei Ruan, Head of MTCC Asia, saw participation of technical experts from General Department of Waterway-Maritime Transport and Port of Cambodia, Department of Marine Administration of Myanmar, Maritime Safety Administration of Shanghai, China Classification Society, COSCO-Shipping Group, Shanghai International Port Group, Bernhard Schulte Group, and Costamare Group. There were lively discussions on the topic of Fourth IMO GHG Study Report and green actions post Covid-19.

This annual forum was the third of its kind delivered by MTCC Asia, with financial support being provided by the Shanghai local government, China. Despite the disruptions and challenges caused by the pandemic, this year's forum was delivered as planned with a modality combining virtual participation and in-person attendance on the campus of SMU.

DECEMBER

MTCC Pacific – National Workshop Samoa, 10 December 2020

Samoa Virtual National Workshop for Domestic Ship Operators on MARPOL Annex VI

The follow-up virtual National Workshop for Domestic Ship Operators on MARPOL Annex VI was held virtually by the MTCC Pacific staff based in Suva, Fiji and Samoan maritime stakeholders at the Samoa Ministry of Works, Transport, and Infrastructure (MWTI) conference room in Apia, Samoa on the 10th and 11th of December 2020. The meetings were attended by representatives from the MWTI, The Samoa Shipping Corporation (SCC) and the Samoa Ministry of Natural Resources and Environment (MNRE).

The National Virtual Workshop on MARPOL Annex VI concluded with discussions related to the specifics of both the SEEMP and EEOI implementation together with the continuity of the MTCC Pacific project where most ship owners and operators were showing interest in integrating the solar PV system onboard their vessels to reduce the operational costs and Greenhouse Gas emissions. Workshop participants commended the MTCC Pacific for engaging in such an innovative project in Samoa and also pledged their full support with any future collaborations with the MTCC Pacific and also nationally to ensure a reduction of GHG emissions from the maritime sector.

DECEMBER

MTCC Asia – E-learning Courses

MTCC Asia is in the process of developing new e-learning courses on energy efficiency. 7 e-learning courses subjects, i.e, the Implementation of IMO GHG Conventions and Regulations, Review and Researches on the IMO Forth Study Report, GHG Control Practices Onboard, Ship

Energy Efficiency Assessment, Port Energy Efficiency, Key Ship Energy Technologies, and National GHG Reduction Strategies are already finalized. MTCC Asia plans to use those course achievements and materials in capacity-building and research activities.





LOOKING AHEAD

WHAT IS NEXT FOR GMN

2021 will see MTCCs focus upon the following activities and initiatives:

- Disseminate the results of the pilot projects, which includes producing new guidance material and sharing recommendations to improve vessel and ports performance;
- Encourage technology transfer through delivery of regional conferences and technology exhibitions, which will provide a platform for technology providers to reach out to the respective regions;
- Focus on MARPOL Annex VI, where the MTCCs will continue their important capacity building work through workshops and technical training.

SUSTAINABILITY

A vital part of the MTCCs 2021 work programme is to continue to implement plans for financial sustainability of the Centres.

The current stream of financial support (based on EU contributions) is scheduled to end in June 2021. Due to the pandemic, a non-cost extension of the project is being negotiated, that if accepted, will push back project closure from June 2021, to March 2022.

It is expected that in the future, the funding model will evolve from having a single revenue stream to multiple revenue streams. Furthermore, a core component of the new financial model will be centred around the self-sufficiency of MTCCs, where funding would be raised through various means, which includes but is not limited to the provision of a diverse range of services.

In this respect, after 4 years of successful operations, the MTCCs have acquired the necessary experience and technical know-how to provide the following services:

- Delivering capacity building activities;
- Management and implementation of similar projects planned within the regions, as well as identifying

potential project opportunities for optimizing energy efficiency in the sector;

- Providing technical services related to maritime climate action; and
- Providing Advisory services and access to MTCCs data banks.

LOOKING AHEAD

After several fruitful years of operation, the MTCCs are now well established and respected in their regions. They have strong technical expertise and a proven track record of successful delivery.

MTCCs are also perfectly positioned to support and potentially partner with other regional and global initiatives.

The MTCCs have also an important role to play in IMO's efforts to implement the GHG reduction strategy, and to ensure no country is left behind. The Centres are already being connected to many of IMO's other GHG initiatives, such as the:

- IMO-UNEP Maritime Innovation Forum
- Green Voyage Project
- Next Gen Project, and
- GHG-SMART

Looking further ahead, we see the MTCCs undertaking new pilot projects, or expanding on the projects already undertaken. Of key importance will be assisting countries in the development and implementation of National Actions Plans to reduce emissions from shipping.

With important groundwork having been laid, the MTCCs will serve as a key platform to partner with other stakeholders and are open for business to find new and innovative ways to achieve the key objective of reducing GHG emissions in the maritime sector.

FUTURE GMN EVENTS

With the restrictions in place due to COVID-19, the GMN meetings and capacity building activities are delivered virtually.



MTCC ASIA
Maritime Technology Cooperation Centre

MTCC Asia Regional Ship Energy Efficiency Technology Conference
13 JANUARY 2021 – 15 JANUARY 2021
Shanghai, China, Asia



MTCC CARIBBEAN
Maritime Technology Cooperation Centre

MTCC Caribbean Online Training Programme launched
18 JANUARY 2021



MTCC CARIBBEAN
Maritime Technology Cooperation Centre

**MTCC Caribbean/WMU/Danish Maritime Authority –
Training workshop on IMO 2020 Sulphur Limit**
19 JANUARY 2021 – 20 JANUARY 2021
Trinidad and Tobago, Caribbean



MTCC AFRICA
Maritime Technology Cooperation Centre

MTCC Africa 5th National Workshop Benin
26 JANUARY 2021
Benin, Africa



MTCC AFRICA
Maritime Technology Cooperation Centre

**MTCC Africa Webinar for Climate Change Mitigation in the Shipping and Maritime
Industry with a Focus on North African States**
18 FEBRUARY 2021
Mediterranean



MTCC PACIFIC
Maritime Technology Cooperation Centre

MTCC Pacific follow-up meeting/workshop Suva, Fiji
22 FEBRUARY 2021
Suva, Fiji, Pacific



MTCC CARIBBEAN
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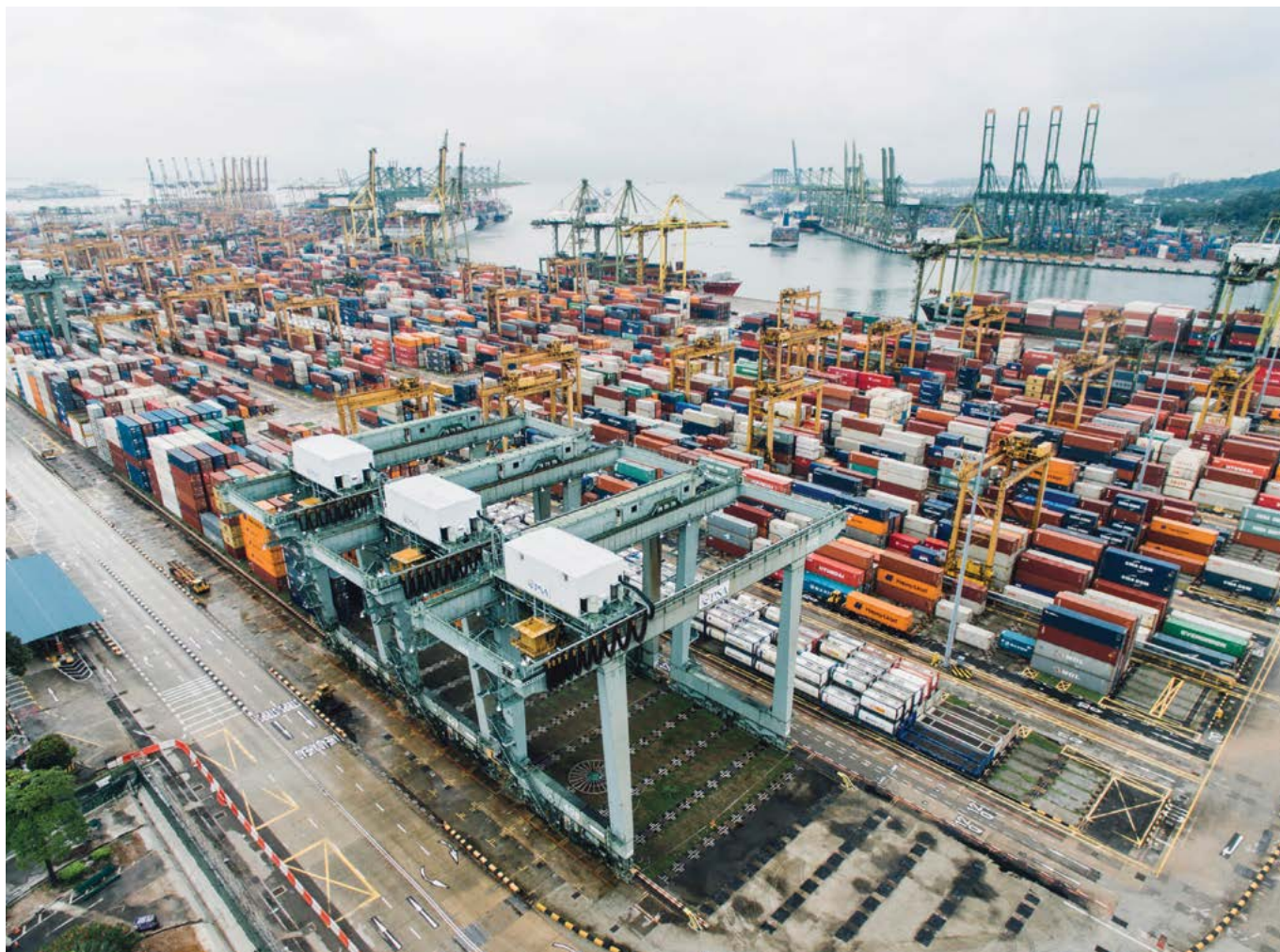
MTCC Caribbean Energy Efficiency Conference & Exhibition
24 FEBRUARY 2021 – 26 FEBRUARY 2021
Trinidad and Tobago, Caribbean



MTCC PACIFIC
Maritime Technology Cooperation Centre

MTCC Pacific follow-up meeting/workshop Nadi, Fiji
8 MARCH 2021
Nadi, Fiji, Pacific





MTCC AFRICA
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MTCC Africa Energy Efficiency Conference & Exhibition
17 MARCH 2021 – 25 MARCH 2021



MTCC AFRICA
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WMU Co-Sponsored MTCC Africa IMO 2020 sulphur limit implementation workshop
30 MARCH 2021 – 31 MARCH 2021
Mombasa, Kenya, Africa



MTCC PACIFIC
Maritime Technology Cooperation Centre

MTCC Pacific follow-up meeting/workshop Solomon Islands
3 MAY 2021
Solomon Islands, Pacific



MTCC ASIA
Maritime Technology Cooperation Centre

MTCC Asia Energy Efficiency Conference & Exhibition
10 JULY 2021 – 12 JULY 2021



MTCC PACIFIC
Maritime Technology Cooperation Centre

MTCC Pacific meeting with regional maritime industry stakeholders
28 AUGUST 2021

CONTACT DETAILS



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