As we now approach the latter half of 2021, and the end of the GMN project, the importance of outreach and communication becomes even more important. And in this regard the project has been active to promote its achievements and the exciting potential of the MTCCs.

The start of 2021 opened with a rush of project activities, which included distance learning programmes, regional conferences, a regional workshop series, high level side events and national level workshops.

In addition, each of the Maritime Technology Cooperation Centres (MTCCs) has been focused upon implementing sustainability plans to help ensure their long-term future, with particular emphasis on strengthening existing relationships and establishing new partnerships. We hope these efforts will bear-fruit in the latter half of 2021.

One example of this outreach strategy is the Centres becoming more integrated with IMO GHG reduction initiatives, which include GHG SMART, Fin-SMART, the Green Voyage Project, the Norway-IMO-UNEP Low-carbon Maritime Innovation Forum, and the Integrated Technical Cooperation Programme (ITCP).*

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
GMN Project Manager

* https://www.imo.org/en/OurWork/PartnershipsProjects/Pages/default.aspx
GMN OUTREACH

FEBRUARY

Norway-IMO-UNEP Low-carbon Maritime Innovation Forum

MTCC Caribbean and MTCC Africa participated and took part in discussions in the Steering Committee Meeting of the Norway-IMO-UNEP Low-carbon Maritime Innovation Forum held on 18 February 2021. The Innovation Forum aims to exchange best practice between competent international policy makers, maritime, climate change/environmental administrations, technology developers, ports and finance to catalyze collaboration and innovation for climate action in the maritime sector. More specifically, it aims to promote knowledge management and information sharing, as well as fill the gap in terms of providing a global platform to discuss ideas related to the promotion of innovation and the dissemination of the latest developments.

MARCH

13th ASEAN-China Maritime Consultation Meeting

Professor Ruan Wei, Head of MTCC Asia, attended the 13th ASEAN-CHINA Maritime Consultation Meeting on 9 March 2021 and gave a presentation to highlight MTCC Asia’s achievements with regard to GHG emissions control within the context of Implementation of the ASEAN-China maritime education and training development strategy discussions.

MARCH

Regional Dialogue on Delivering Caribbean Climate Ambitions: Climate Finance, Civil Society and Partnerships

MTCC Caribbean Officer Mr. Michael Razack participated at the Regional Dialogue on “Delivering Caribbean Climate Ambitions: Climate Finance, Civil Society and Partnerships”. Hosted virtually from 16 to 18 March by CANARI, Climate Analytics and the International Institute for Sustainable Development (IISD), the 3-day workshop brought together key stakeholders in the Caribbean, including national designated authorities, accredited entities, funders, technical agencies and international partners. The workshop discussed and explored options for accessing climate finance with a focus on civil society’s role and capacity, expanding multi-stakeholder engagement in climate decision-making, and leveraging partnerships to realize national and regional climate ambitions.

JUNE

High-level Dialogue on Energy: Ministerial Thematic Forums – Side Event

Energy efficiency in ports to support maritime decarbonization

The maritime industry and particularly ports are part of the solution towards decarbonizing the maritime sector and can contribute towards the UN goal of achieving clean and affordable energy, panelists told a side-event on ports, held during the United Nations-led Ministerial-level Thematic Forums (21-25 June) on energy action. The forums bring together key stakeholders virtually, to mobilize actions as a major milestone on the road to the UN-led High-level Dialogue on Energy in September 2021.

“There is a large capacity to improve energy sustainability in port activities, operations and management. Meaningful improvement can be achieved through investment of in renewable energy, clean technological solutions, automations and through partnership, capacity building and education,” said Nancy Karigithu, Principal Secretary, State Department for Maritime and Shipping in the Ministry of Transport, Infrastructure Housing and Urban Development, Kenya. She was speaking at the side event on “Uptake of Port Energy Efficient Technologies and Operations” (22 June).

The event was hosted by the Government of Kenya, through the State Department for Shipping and Maritime, in collaboration with IMO and MTCC Africa.

Lydia Ngugi, Head, MTCC Africa, highlighted the MTCC’s work with ports across Africa, to undertake emission baseline studies, support the uptake of energy efficient technologies and facilitate the implementation of IMO’s mandatory energy efficiency requirements.

IMO’s Gyorgyi Gurban took the opportunity to highlight how a range

Continued over
of IMO-executed global projects, including the GMN Project, the GHG SMART project and GreenVoyage2050 are supporting developing countries on the path towards decarbonization in the maritime sector. Related initiatives are supporting information-sharing (IMO-Singapore NextGEN) and looking at ways to address innovation needs (UNEP-IMO Innovation Forum) and to mobilize finance, particularly in developing countries, for the decarbonization of the maritime sector (IMO-EBRD-World Bank FIN-SMART roundtable).

Improved energy efficiency across the maritime sector, including ports, will support the achievement of UN Sustainable Goal 7, which, inter alia, has a target to double the global rate of improvement in energy efficiency and expand infrastructure and upgrade technology for supplying modern and sustainable energy vices for all in developing countries.

**GMN Global Webinar Series: Maritime Energy Efficient Technologies – Identifying barriers and opportunities for developing regions**

During past few years there have been developments in the maritime sector in tackling the longstanding issue of GHG emissions from vessels. Specifically, these developments include international advancements in energy efficient technologies and subsequent adoption rates. That being said, there are still significant gaps to be addressed and work continues to be underway to tackle this pressing challenge for the industry.

The IMO’s MEPC adopted the Initial IMO GHG Strategy in April 2018 (MEPC 72) which marked another significant milestone in addressing maritime shipping emissions. The initial strategy identifies levels of ambition for the international shipping sector noting that technological innovation and the global introduction of alternative fuels and/or energy sources for international shipping will be integral to achieving the overall ambition. Technological advancements are at the heart of the strategy as these would enable significant improvements of the current standards and reduce the harmful impact that ships’ exhaust gases may have on the environment, ecosystems and human health.

In view of the key challenges that face the industry, the Global MTCCs Network organized this year’s 4-part Global Webinar Series in June 2021 where there was a specific focus on the potential barriers and opportunities to a low carbon shipping industry. The 4 webinars took place between 21–29 June and each was focused on an individual MTCC and its respective region.

The webinars provided insightful platform for sharing ideas and discussing the key challenges facing the industry in the immediate and long term future.

Notably the issue of raising awareness of EE technologies and facilitating prudent decision making were considered at length to broaden the approach on such matters as presently more restricted decision making process based on financial viability and regulatory compliance is currently being undertaken.

Furthermore, implementation of maritime technology transfer was also an important topic of discussion. This related to the relatively low uptake of EE technology as a result of high investment costs, scarcity of funds and lack of regulatory requirements in some instances.

Productive discussions were held where a collective assessment was made on how to overcome these barriers and create an environment to facilitate more robust and comprehensive regulatory frameworks, improvements to existing policies, the removal of organizational and market barriers, and a vital funding stream to support key initiatives to be implemented.

In summary the 4-part webinar series provided a great opportunity for stakeholders to network and hear directly from the MTCCs on the aforementioned topics. The webinars also crucially provided platform for sharing and disseminating of information on the latest maritime energy efficient technologies. Furthermore the MTCCs sensitized participants on the outcome of their respective National Technology Needs Barriers & Assessment Reports, all of which can be accessed [here](#). Each of the webinars were recorded and link has been included [here](#).
New mandatory measures to cut the carbon intensity of international shipping have been adopted by the International Maritime Organization (IMO), setting shipping on a course to meet greenhouse gas reduction targets established in the 2018 Initial IMO Strategy for Reducing GHG Emissions from Ships.

IMO’s Marine Environment Protection Committee (MEPC 76), meeting in a remote session from 10 to 17 June 2021, adopted amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI that will require ships to reduce their greenhouse gas emissions. These amendments combine technical and operational approaches to improve the energy efficiency of ships, also providing important building blocks for future GHG reduction measures.

The new measures will require all ships to calculate their Energy Efficiency Existing Ship Index (EEXI) following technical means to improve their energy efficiency and to establish their annual operational carbon intensity indicator (CII) and CII rating. Carbon intensity links the GHG emissions to the amount of cargo carried over distance travelled.

Ships will get a rating of their energy efficiency (A, B, C, D, E – where A is the best). Administrations, port authorities and other stakeholders as appropriate, are encouraged to provide incentives to ships rated as A or B also sending out a strong signal to the market and financial sector. A ship rated D for three consecutive years, or E, is required to submit a corrective action plan, to show how the required index (C or above) would be achieved.

The amendments to MARPOL Annex VI (adopted in a consolidated revised Annex VI) are expected to enter into force on 1 November 2022, with the requirements for EEXI and CII certification coming into effect from 1 January 2023.

The MEPC also adopted a work plan to develop mid- and long-term measures to further cut shipping’s GHG emissions, in line with the Initial IMO strategy on reduction of GHG from ships.

Future work
The MEPC discussed a number of submissions on how to progress the next stages of IMO’s work to cut GHG emissions from ships, leading to the revision of the initial GHG strategy in 2023.

The MEPC adopted a work plan on the concrete way forward to make progress with candidate mid- and long-term measures including measures to incentivize the move away from fossil fuels to low- and zero-carbon fuels to achieve decarbonization of international shipping.

The work plan envisages three phases:
• Phase I – Collation and initial consideration of proposals for measures (Spring 2021 to spring 2022);
• Phase II – Assessment and selection of measures(s) to further develop (Spring 2022 to spring 2023); and
• Phase III – Development of(a) measure(s) to be finalized within (an) agreed target date(s).

Guidelines adopted
Alongside the MARPOL amendments, the MEPC adopted related guidelines to support the implementation of the amendments.

The guidelines include the 2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII Reduction factor Guidelines, G3). This includes the required reduction (Z) factor, which is set at a rate, relative to 2019, of 11% by 2026. This would be further strengthened after that date, taking into account the review of the measure and latest climate science.

MEPC 76 – other outcomes
The MEPC also adopted other amendments:
• amendments to MARPOL Annex I (addition of a new regulation 43A) to introduce a prohibition on the use and carriage for use as fuel of heavy fuel oil (HFO) by ships in Arctic waters on and after 1 July 2024;
• amendments to draft amendments to MARPOL Annexes I and IV concerning the exemption of UNSP barges from survey and certification requirements;
• amendments to the IMO Convention for the Control of Harmful Anti-fouling Systems on Ships (AFS Convention), to include controls on the biocide cybutryne.

The MEPC approved the terms of reference for a Correspondence Group on Carbon Intensity Reduction.

Next steps for IMO
• 18 – 22 OCTOBER 2021
  Intersessional Working Group on the Reduction of GHG Emissions from Ships (Remote meeting) 9th Session
• 8 – 12 NOVEMBER 2021
  Marine Environment Protection Committee (MEPC) (Remote meeting) 77th Session
FOURTH IMO GREENHOUSE GAS EMISSIONS STUDY – HIGHLIGHTS PUBLISHED

The Fourth IMO GHG Study Executive Summary has been published. This study is the first iteration since the adoption of the Initial IMO Strategy on Reduction of greenhouse gas (GHG) Emissions from Ships in 2018, under which IMO Member States have pledged to cut GHG emissions from international shipping and to phase them out as soon as possible.

MARINE FUEL STAKEHOLDERS ENCOURAGED TO ACCESS FREE WORKSHOP

The IMO-Norway GreenVoyage2050 Project has launched a free-to-access ‘Alternative Fuels and Energy Carriers for Maritime Shipping’ workshop package to help users identify key next steps to explore when considering the uptake of new low- and zero-carbon fuels.

The workshop, which can be downloaded via the GreenVoyage2050 website, tackles key concepts related to alternative fuels and provides detailed information on commercially available fuels (such as LNG and LPG), those still in the demonstration phase (methanol, biofuels, battery-power), and some that are under development (hydrogen and ammonia).

Organisations across the marine fuels sector are encouraged to download the resources for educational purposes or to run the workshop themselves.

SHIP-PORT INTERFACE GUIDE RELEASED TO SUPPORT GHG EMISSIONS REDUCTION

A new Ship-Port Interface Guide.pdf focusing on eight practical measures which can support GHG emission reduction at the ship-port interface has been released.

Developed by the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA) under the IMO-Norway GreenVoyage2050 Project, the Guide aims to support the maritime industry in achieving IMO’s emission reduction goals and contribute to greener shipping.

While particularly useful for stakeholders within the port community (e.g. port authorities, terminals, nautical service providers), the Guide is also relevant for ship owners, operators, charterers, ship agents, shipbrokers, and other relevant stakeholders as they play a key role in implementing the necessary changes and facilitating the uptake of emission reduction measures in the ship-port interface.

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IMO AND GERMANY SIGN AGREEMENT TO DEVELOP PROJECT TO IDENTIFY OPPORTUNITIES AND SOLUTIONS TO PREVENT AND REDUCE TRANSPORT EMISSIONS

The International Maritime Organization (IMO) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany (BMU) have signed an agreement to undertake the preparatory activities leading to the development of a project proposal to reduce maritime transport emissions in East and Southeast Asian countries. The project is supported through the International Climate Initiative (IKI) of BMU. IMO will partner with the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) to undertake the preparatory project and to develop the full project proposal.

This agreement, which was signed on 1 April 2021, is the first step in an ambitious Asia Maritime Transport Emissions project (known as the Blue Solutions Project) that aims to support East and Southeast Asian countries in identifying opportunities to prevent and reduce transport emissions. The full-size project, once approved, will target reduction of GHG and other pollutant emissions from ships within ports, and from hinterland transport through energy efficiency improvements, optimized processes and innovative technologies (blue solutions).

Partner countries
At the preparatory stage, IMO will work with the following focus partner countries to develop the full-size project proposal: China, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. Efforts may also be undertaken to identify capacity building needs in other Asian countries. Japan, the Republic of Korea and Singapore are expected to be invited to serve as knowledge partner countries and their level of involvement in the project will be identified and confirmed during the appraisal stage.

All project components and work packages will be coupled with appropriate capacity building and knowledge exchange initiatives.

The full-size Asia Maritime Transport Emissions Project, which is slated to receive funding of some 15 million Euros, is one of several IMO-led initiatives designed to support the developing countries in the implementation of IMO Initial GHG strategy.

ENERGY EFFICIENT SHIP OPERATION – FREE ONLINE COURSE LAUNCHED

IMO’s public-private partnership initiative to tackle GHG emissions, the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA), has launched a free to access E-Learning course aimed at seafarers and anyone interested in this aspect of shipping. The self-paced course ‘An Introduction to Energy Efficient Ship Operation’ is intended as a first glimpse into how GHG emissions from ships can be addressed.

The online course, designed by e-learning specialist Ocean Technologies Group, features videos, text information, quizzes and more for an interactive experience. Each module includes interactive lessons, resources for additional learning as well as a final summary. The course is specifically designed to be accessible to non-technical audiences. It was developed and funded by the Low Carbon GIA, a partnership under the framework of the IMO-Norway GreenVoyage2050 Project.

A certificate of completion is awarded to learners who successfully complete the course assessments.

Take the course by clicking here.
SUMMARY OF DELIVERED ACTIVITIES BY MTCCS

**JANUARY**

**MTCC Asia – Virtual Regional Ship Energy Efficiency Technology Promotion Campaign, November 2020 – February 2021**

From November 2020 to February 2021, MTCC-Asia organized 6 Virtual Regional Ship Energy Efficiency Technology Promotion Campaign activities with 6 Asian countries, namely, Malaysia, Myanmar, Philippines, Bangladesh, Sri Lanka and Cambodia. The purpose of the Campaign was to establish a point-to-point and in-depth exchange between the selected Asian countries and MTCC-Asia in terms of the technical and operational views of the uptake of the ship energy efficiency.

The Campaign achieved its objectives of disseminating information and raising awareness of cutting edge GHG technologies, important conventions, and key maritime standards in the respect of MARPOL Annex VI, 2020 IMO Sulphur limit, and Implementation of initiative strategies of IMO.

**JANUARY**


At the Virtual Regional Ship Energy Efficiency Technology Conference, MTCC Asia shared technological insights and experiences on GHG emissions reduction from maritime sector with regional Maritime Administrations, Port Authorities and other relevant government departments and related shipping stake-holders. The main objectives of the conference were:

1) To consolidate the capacity building activities for the technological implementation of key IMO GHG-related convention and GHG control for ports and ships; and

2) To establish a new mechanism for technological transfer and co-operation, such as the RIAs, through intensive dialogue and technology exhibition.

Throughout the 3-day conference, participants, by means of presentation and panel discussion, had a chance to hear about and discuss the latest developments of EE technologies and policies.

The conference was attended by a broad range of participants from the maritime authorities, industry, academia and technology providers in Asia. The Conference addressed the outcomes of IMO’s MEPC 75, key points of the fourth GHG Study Report, and latest practices on ship energy efficiency solutions. The speakers of the event, in addition to MTCC Asia technical officers, also included those from MSA China, ABS, International Windship Association and IMO.

In this event, MTCC Asia paid special attention to the topic of “Women in Maritime”, by enrolling more women into the event and devised a session during capacity building event where women professionals were encouraged to have prominent presence. A special presentation on “Women in Maritime” was organized during the event.
MTCC Caribbean – Online Training Programme on Maritime Energy Management, 18th January – 30th March, 2021

MTCC Caribbean delivered its Online Training Programme on Maritime Energy Management and the Implementation of MARPOL Annex VI to facilitate capacity building for climate change mitigation in the maritime shipping industry. The training comprised of four modules covering the following thematic areas:

1. Introduction to Maritime Energy Management;
2. Energy Management Onboard Ships;
3. Alternative Fuels and Marine Energy; and
4. Policy Considerations on the Operational Implementation of MARPOL Annex VI.

The training programme provided the designated participants with an overview of the fundamentals of maritime energy efficiency in shipping and ports along with contemporary developments and policy considerations affecting climate action in the maritime industry, paying particular attention to factors affecting the Caribbean region.


The University of Trinidad and Tobago (UTT), in collaboration with the World Maritime University (WMU) and the Danish Maritime Authority (DMA), successfully hosted an International P2P Workshop on the IMO’s Global Sulphur Limit 2020 on 19 and 20 January 2021.

The workshop focused on building regional capacity on the best practices and challenges for the implementation of the Sulphur Limit. The workshop objectives were to:

- Identify the challenges of the global Sulphur Limit enforcement, as well as discuss the perspective of the relevant stakeholders along with the current best practices;
- Build capacity and further develop skills on how to proceed with implementation and enforcement;
- Highlight relevant case studies in relation to global Sulphur Limit enforcement in the Caribbean region; and
- Identify vector points to enable formation of the “Global Sulphur Limit” network.

The workshop, which was hosted virtually, served as a medium for the exchange of knowledge, ideas and experiences and saw an average participation of over 65 stakeholders across the two days. It was attended by a mix of regional stakeholders, comprising Port State Control Officers (PSCOs), representatives from maritime administrations and academics.
MTCC Africa – Focal Point Sensitization Training, 4 February 2021

MTCC Africa hosted a virtual Focal Point Sensitization training on 4 February 2021. This virtual training event focused on the Initial IMO GHG Strategy in-line with the MARPOL Annex VI within the context of the African Region. This training emphasized the need for developing countries to institute development plans akin to the promotion of energy efficiency at ports and the reduction of GHG Emissions from Ships and existing IMO activity related to reducing GHG emissions in the shipping sector. The meeting comprised of region focal point representatives who were sensitized on implementation measures that need to be put into consideration by developing States in the region while reviewing the Initial IMO GHG Strategy.

The main objectives of the webinar were:

1. To highlight how MARPOL Annex VI is aligned to the IMO GHG Strategy
2. What factors shape, enhance and/or hinder enforcement practices.
3. To elaborate on ways the maritime authority’s enforcement capacities can be strengthened

This training meeting facilitated the dissemination of knowledge to allow nations and institutions to contribute to the promotion of technical cooperation and technology transfer for improving energy efficiency in African ports and the African maritime transport sector.

MTCC Africa – Focus on North African States Bordering the Mediterranean Sea, 18th February 2021

MTCC Africa hosted, in collaboration with the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), a virtual webinar targeting Maritime Administrations, Port Authorities, and line Ministries in the Northern Africa Region bordering the Mediterranean Sea.

The main aim of this workshop was for MTCC Africa to create linkages in the North African region. MTCC Africa emphasised its role in mitigation of climate change in the maritime and shipping industry within the African region. In addition, the successes of the pilot projects were also showcased in line with the strategy to promote energy efficient technologies that are currently deployed at the Port of Mombasa.

This virtual webinar crucially highlighted the need for further promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency in ports as well as the shipping industry at large.
MTCC Caribbean – Maritime Climate Action Energy Efficiency Conference and Exhibition, 24–26 February 2021

The MTCC Caribbean Confex consisted of 3 days of online engagement based on thematic areas as follows:

- Showcasing the work of the MTCC – February 24th, 2021;
- Contemporary issues affecting climate action in the maritime sector – February 25th, 2021; and
- Technological considerations for decarbonization – February 24th, 2021.

MTCC Caribbean built a dedicated Conference and exhibition website which can be accessed here: The University of Trinidad and Tobago – MTCC Caribbean’s Virtual Conference (utt.edu.tt)

The Confex website showcased virtual exhibitions from maritime climate action technology solution providers in parallel to the conference, which was also live streamed on the website.

The Confex saw participation from over 100 stakeholders across 3 days. It was attended by a mix of regional stakeholders which comprised 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 Confex included:

- Recognition of the need for continued work under the umbrella of the IMO;
- Promoting stronger collaboration across regions within the GMN Network;
- Acknowledging the need to make climate finance available to the various MTCCs to assist in progressing decarbonization of the maritime industry;
- Underscoring the need for urgent action in parallel with our capacity building efforts and the creation of an enabling environment for non-party stakeholders and private institutions to lead in implementation of climate action;
- An expansion in focus that looks beyond the ships, with ports and other sector beneficiaries
- The need for National Action Plans to provide the required visibility and ambitions for the domestic shipping sector; and
- The need to tap into and synergize with blue growth initiatives.

Within the wrap-up session of the Confex, Mrs. Rambarath-Parasram and Captain Singh of MTCC urged collaboration, and expressed their appreciation for the financial support of the European Union and the assistance of the IMO in enabling the project’s implementation, as well as UTT for hosting the MTCC.
SUMMARY OF DELIVERED ACTIVITIES BY MTCCS (continued)

MARCH

MTCC Africa – Virtual Energy Efficiency Conference and Exhibition (Confex), 17–18 and 24–25 March 2021

Exploring tangible solutions in climate change mitigation in the shipping industry by use of technology was at the core of a virtual energy efficiency conference and exhibition (Confex) which opened on 17 March. The event has been organized by the Maritime Technology Cooperation Centre for Africa (MTCC-Africa), part of a global network of MTCCs in collaboration with the South African Maritime Safety Authority.

Open to private and public stakeholders in the maritime and shipping industry, the event heard from technology providers in the African region and from around the globe about new ideas transforming the shipping sector and contributing to the fight against climate change.

"By sharing experiences and promoting technologies and operations that can improve energy efficiency in the maritime sector, this conference and exhibition is another vital step in helping the region's shipping navigate towards a low-carbon future," said IMO Secretary-General's Kitack Lim.

Participants of the Confex series benefited from potential future business networks and identified future opportunities for regional and international collaboration to improve energy efficiency in the maritime sector. This will help to reduce greenhouse gas emissions and mitigate climate change.

MARCH


MTCC Africa hosted a virtual webinar in collaboration with World Maritime University (WMU) and Danish Maritime Authority (DMA) on the 30th and 31st of March 2021. The webinar brought various administrations together to share knowledge on Sulphur enforcement in the African region. Participants comprised of delegates from Cameroon, Comoros, Denmark, Ethiopia, Kenya, Madagascar, Nigeria, South Africa, Sweden, Tanzania, Tunisia, the United States and the United Kingdom. This workshop was supported by the Danish Maritime Fund, with contributions from the Danish Ministry of Environment.

The workshop provided the opportunity to discuss and share solutions and best practices for effective enforcement. Indicative topics included, among others, the associated legal basis, fuel samples, document checks, targeting mechanisms, remote sensing and use of sniffers, training of inspectors and sanctions.

Furthermore, the workshop explored the following:

a) During the interactive workshop proceedings, the organizing parties and the participants had the opportunity to explain and elaborate on the current situation in their respective maritime and shipping fields and the challenges with regard to compliance and enforcement of the new IMO’s 2020 (Global) Sulphur Limit.

b) A strong and practical element of the workshop provided the opportunity for participant groups to focus on case studies of particular local relevance.

c) The workshop provided a platform for capacity building and further development of skills on how to proceed with implementation and enforcement.

d) Participant groups were encouraged to identify vector points to enable formation of a ‘Global Sulphur Limit’ Network.

e) This specialized workshop ensured that the participants were proactive in the three case studies that had been presented to the team leaders in the breakout rooms. The aim/outcome of this breakout room activity was to bring a practical experience to the webinar training where real life situations can be related to the implementation of MARPOL Annex VI.

f) This webinar was also a network forum where MTCC Africa was able to add on to the focal point committee that will aid in established positive linkages in the African region. In addition to this, this webinar also paved way to the establishment of the regional industry alliance for the African region.

### FUTURE GMN EVENTS

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

<table>
<thead>
<tr>
<th>Event Description</th>
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<th>Location</th>
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<tr>
<td>MTCC Caribbean 3 Thematic Webinars</td>
<td>15 MAY 2021 – 15 AUGUST 2021</td>
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<tr>
<td>MTCC Pacific follow-up meeting/workshop Soloman Islands</td>
<td>27 AUGUST 2021</td>
<td>Soloman Islands, Pacific</td>
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<td>MTCC Pacific meeting with regional maritime industry stakeholders</td>
<td>28 AUGUST 2021</td>
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<tr>
<td>MTCC Africa Workshop on policy and legal aspects in the African maritime states under the value chain in line with IMO-GHG Strategy</td>
<td>15 SEPTEMBER 2021</td>
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<tr>
<td>MTCC Asia Virtual Regional Workshop on GHG Emissions Reduction from Maritime Sector</td>
<td>15 SEPTEMBER 2021</td>
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<tr>
<td>MTCC Pacific Talanoa (roundtable) with the Fiji Ship Owners Association</td>
<td>16 SEPTEMBER 2021</td>
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<tr>
<td>MTCC Pacific follow-up meeting/workshop in Cook Islands</td>
<td>20 SEPTEMBER 2021</td>
<td>Cook Islands, Pacific</td>
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<tr>
<td>MTCC Asia 2021 Global Green Shipping Forum</td>
<td>15 OCTOBER 2021</td>
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<tr>
<td>MTCC Africa Workshop on Energy Efficiency in the African ports in line with regulations supporting decarbonisation</td>
<td>15 NOVEMBER 2021</td>
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CONTACT DETAILS

**MTCC AFRICA**
Maritime Technology Cooperation Centre

mtccafrica@jkuat.ac.ke
+254 67 5870001-4

gmn.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

gmn.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

gmn.imo.org/mtcc/caribbean/
https://utt.edu.tt/?wk=68

University of Trinidad and Tobago, 2nd Avenue North, Western Main Road, Chaguaramas, Trinidad & Tobago

**MTCC PACIFIC**
Maritime Technology Cooperation Centre

mtcc-pacific@spc.int
+679 337 0733

gmn.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

gmn.imo.org

gmn@imo.org

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