



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

GMN SUMMARY REPORT

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JULY – DECEMBER 2018



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MESSAGE FROM THE EDITOR

As we approach the fourth year of the Global MTCC Network (GMN) project, great progress has been made to complete Pilot Projects, develop the capacity of stakeholders in the respective GMN regions and build the strong foundations that will allow the Maritime Technology Cooperation Centres (MTCCs) to continue their important work long into the future.

Between July and December a total of ten capacity building activities were delivered by the MTCC network, with topics ranging between training on MARPOL Annex VI, ship operational measures and the application of new energy efficiency technologies.

During the same period, the number of vessels contributing data to the Fuel Consumption Pilot Projects increased enormously; with new data sets being submitted from a much greater number of participating countries.

The GMN also continued its expansion with a new MTCC-Asia branch office being established in Myanmar.

In October, the IMO pushed forward with its commitments for the reduction of greenhouse gas emissions from ships, by approving a programme of follow-up actions. The GMN with its growing expertise and regional outreach is perfectly positioned to support these actions.

Finally, there were changes to the Project Coordination Unit, with the previous Project Manager, Ms Tamuna Barabadze, leaving IMO due to family commitments. She was succeeded in her role by Mr Anton Rhodes.

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



GMN OUTREACH

PROMOTING TECHNOLOGIES TO CUT SHIPPING'S GHG EMISSIONS

Practical efforts to implement ship energy-efficiency measures and promote technology transfer are an integral part of IMO's initial strategy to reduce greenhouse gas emissions from shipping. This is embodied in the GMN project.

Between 24-26 October technical training for MTCC staff on energy efficiency in ship design and operations, port energy management and adaptation to climate change was complemented by a dedicated technology providers' session - featuring presentations on harnessing wind power, electric and digital solutions, and a vision of how ports of the future might look. The session was attended by Circle, SkySails, ABB, DNV GL, CLS (Collecte localisation satellites) and Offshore Monitoring.



ENGAGEMENT AT THE BLUE ECONOMY CONFERENCE

MTCC-Africa participated in the Sustainable Blue Economy Conference in Nairobi, Kenya, with a side-event on Capacity Building for Climate Mitigation in the Maritime Shipping Industry (27 November). A 250-strong crowd attended the event, including representatives from the European Union Delegation to the Republic of Kenya, IMO, the Ministry of Transport Infrastructure, Housing and Urban Development of the Republic of Kenya, MTCC-Pacific, as well as regional stakeholders and focal points of the Network from Ghana, Nigeria, Madagascar, South Africa and Namibia. Mr. Bruno Pozzi, Deputy Head of the European Union Delegation to the Republic of Kenya, emphasized the importance of the IMO strategy, which calls for a reduction in shipping emissions by at least 50% by 2050 compared to 2008, whilst pursuing efforts towards phasing them out completely, consistent with the Paris Agreement temperature goals.



SPREADING THE WORD ABOUT IMO'S GHG STRATEGY - COP 24

IMO was at the UN climate change conference (COP 24) in Poland, highlighting key elements of the Initial IMO Strategy on reduction of GHG emissions from ships. IMO reported to the Subsidiary Body for Scientific and Technical Advice (SBSTA 49) on the Organization's actions and commitment to reduce emissions from international shipping, including the adoption of the Initial IMO Strategy and work on technology cooperation and capacity building. The implications for economic development, including for vulnerable countries, were discussed at a number of side events; and the role of IMO projects, like GMN, for supporting developing countries to implement IMO energy efficiency measures and to push forward with pilot projects and trials for emissions recording and reporting were emphasised.





IMO AND CLIMATE CHANGE DEVELOPMENTS – MEPC 73 OUTCOMES

IMO's Marine Environment Protection Committee (MEPC 73) moved ahead with its work to deliver the IMO initial strategy on the reduction of greenhouse gas emissions from shipping, approving a programme of follow-up actions.

The programme of actions is intended to be used as a planning tool in meeting the timelines identified in the initial IMO strategy, which was adopted in April 2018. The Committee invited concrete proposals on candidate short-term measures to the next Committee session, MEPC 74 (May 2019), for consideration, as well as on the procedure for assessing the impacts on States.

During the plenary discussions there were also many country interventions that acknowledged the important role of the GMN to support developing countries in implementing the

IMO strategy. There were also calls for the IMO secretariat to consider options (such as a voluntary trust fund) to provide long term support to the MTCCs.

FOURTH IMO GHG STUDY

The MEPC developed draft terms of reference for the Fourth IMO GHG Study, which drafting should be initiated in 2019. It was agreed that an Expert Workshop should be held in order to discuss technical and methodological issues and advise the Committee on the terms of reference of the Study. The Fourth IMO GHG Study is intended to provide an update of emissions estimates for international shipping for the period 2012 to 2018 and may include scenarios for future shipping emissions and estimates of carbon intensity.

HOST INSTITUTIONS AND NEW BRANCH OFFICES

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
 Ⓣ Second branch office in Yangon, Myanmar

SUMMARY OF DELIVERED ACTIVITIES BY MTCCS



JULY – MTCC-ASIA GLOBAL FORUM ON GREEN SHIPPING

Shanghai Maritime University (SMU), jointly with the International Maritime Lecture Association (IMLA) and MTCC-Asia, organized the Global Forum on Green Shipping in Shanghai, China. The event took place on 11 July and it was attended by IMO and EU representatives, maritime authorities, shipping industries and maritime institutions. The forum helped to raise awareness on environmental protection, both marine and atmosphere, from shipping operations. Under the theme of IMO 70 years anniversary celebrations, the institutions also organized other international activities, which included the International Conference on Ship Energy Efficiency and the Global MTCC meeting.



AUGUST - MTCC-PACIFIC 7TH NATIONAL WORKSHOP

MTCC-Pacific 7th National Workshop took place in USP Marshall Islands Majuro Campus, Marshall Islands. The workshop saw high-level participation including representatives of the Pacific Community (SPC), the University of the South Pacific (USP) and German Development Agency (GIZ). Furthermore, a Women in Maritime meeting was held on the third day by the Maritime Training Adviser while the Maritime Industry Energy Efficiency Adviser visited Pacific International Inc. office and delivered tailored presentations on SEEMP, ship technical and operational measures to the target group consisting of ship managers, captains, chief engineers and crews.



AUGUST - MTCC-LATIN AMERICA 2ND NATIONAL WORKSHOP

Between 22-24 August 2018, MTCC-Latin America organized its Second National Workshop at the Almirante Hotel, in Cartagena, Colombia. This capacity building activity was attended by 39 participants: ship and port operators, mariners, fuel and bunker providers, fuel oil refineries and other technical experts. During this workshop, various presentations addressed key policy, regulatory and technical aspects of the international ship energy efficiency measures, as well as other important related experiences in the port, ship repair and fuel oil production and refining sectors in Colombia. The event was closely coordinated with the Maritime Authority of Colombia (DIMAR).



AUGUST – MTCC-AFRICA 3RD NATIONAL WORKSHOP

Namibia Ports Authority (NAMPORT), Namibia's maritime authority, in collaboration with MTCC-Africa conducted the 3rd national workshop in Walvis Bay Town, Namibia, between 29-30 August 2018. The delegates who attended the two days' workshop were largely drawn from the Namibia Ports Authority, a state corporation, which is the dominant player on maritime shipping in Namibia. The participants were informed on the impact of maritime shipping on air quality within ports, effects on climate change and the need for energy efficiency on-board ships and at port facilities.



OCTOBER – MTCC-CARIBBEAN 4TH NATIONAL WORKSHOP

Between 4-5 October 2018 MTCC-Caribbean organized the 2nd of two workshops targeting the countries of the Northern Caribbean at New Kingston, Jamaica. The aim was to facilitate capacity building in the region by working with the maritime administrations, port authorities, relevant government departments and related stakeholders to facilitate compliance with MARPOL Annex VI. The workshop was attended by maritime administrations, shipping agents, ship owners, ship operators, regulators, ministry representatives, maritime technology providers, international organizations and academics; achieving 83% of targeted attendees from the region.



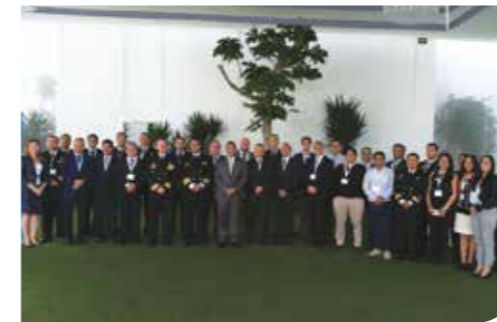
OCTOBER – GMN 2ND TECHNICAL WORKSHOP, 2ND GSC MEETING AND WMU TAILORED COURSE

Representatives from the five MTCCs met between 22-26 October for the second annual meeting in London, United Kingdom, on the side-lines of IMO's Marine Environment Protection Committee (MEPC 73) meeting. Technical training for MTCC staff on energy efficiency in ship design and operations, port energy management and adaptation to climate change was complemented by a dedicated technology providers' session – featuring presentations on harnessing wind power, electric and digital solutions, and a vision of how ports of the future might look.



NOVEMBER – MTCC-ASIA 2ND NATIONAL WORKSHOP

MTCC-Asia organized its second national workshop in Yangon, Myanmar between 5-7 November, during the opening of the branch office. In addition MTCC-Asia delivered a Train the Trainer Course sharing a package of updated knowledge and strategies in the prevention and control of ship emissions.



NOVEMBER – MTCC-LATINA AMERICA 3RD NATIONAL WORKSHOP

Between 14-16 November, the MTCC-Latin America organized its third national workshop at Los Delfines Hotel & Convention Center in Lima, Peru. This capacity building activity was attended by 41 participants, representing the General Directorate of Harbour Masters and Coastguard, the Maritime Authority of Peru (DICAPI), ship operators, governmental organizations, shipyards, maritime training institutions, mariners, marine fuel and bunker providers, as well as other technical experts. This event was organized in cooperation with the Peruvian Coast Guard (DICAPI), who also provided a speaker for Day 1 of the event.



DECEMBER – MTCC-ASIA 3RD NATIONAL WORKSHOP

MTCC-Asia organized its second sub-regional workshop in Putrajaya, Malaysia. The three-day event (5-7 December 2018) was attended by 25 participants from China, India, Indonesia, Malaysia, Sri Lanka and Thailand. The main objective was to share the knowledge and experience in the context of the relevant IMO regulations regarding energy efficiency but it also strengthened the links between MTCC-Asia and the wider region. In addition, MTCC organized a seminar on the current needs analysis, challenges and solutions for GHG control and EE.

HIGHLIGHTS



GREEN DEVELOPMENT NEWSLETTER

The European Commission-DEVCO Newsletter dedicated an article to the GMN Project, describing its efforts to reduce Greenhouse gas (GHG) emissions from maritime transport.

The article also featured information about the Pilot Projects and it highlighted their positive impacts in the Pacific region. Following the implementation of recommendations from the GMN energy audit pilot project, the Solomon Islands Port Authority reported overall energy savings of 8 % (reducing 15 tonnes of GHG emissions), worth AUD 17 000 per month in 2018.



MYANMAR NEW BRANCH OFFICE

The MTCC-Asia branch office was successfully launched on 5 November 2018 at the Myanmar Maritime University (MMU), Yangon.

Mr. Thaung Kyaing, Director General of the Department of Maritime Administration, highlighted the critical importance of GHG emissions reduction for the shipping industry and appreciated the GMN project for the opportunity to increase the uptake of low-carbon technologies and operations in the country.

About 80 delegates from Myanmar maritime authority and shipping industry joined the launch event. The Myanmar office is the 2nd branch of MTCC-Asia and it represents the latest expansion efforts.



GMN PILOT PROJECTS: WHY, WHAT AND HOW

The aim of the Global MTTC Network (GMN) project is to help beneficiary countries limit and reduce GHG emissions from their shipping sectors through technical assistance and capacity building. In this context, each MTCC undertakes 2 Pilot Projects, the first relates to low-carbon technologies and operations in maritime transport, and the second relates to fuel consumption data collection and reporting (DCR) systems from ships.

The purpose of the “uptake of ship energy efficient technologies and operations” Pilot Project is to demonstrate to stakeholders the feasibility of such initiatives to improve energy efficiency, and also to showcase their applicability for future sustainable operations. In addition, the successful completion of these pilots will help develop and highlight the technical competency of the MTCCs. The focus of each Pilot Project on “uptake of ship energy efficient technologies and operations” varies between the different MTCCs, such as ship trim optimization (MTCC-Asia), energy audits in maritime ports and retrofitting vessels (MTCC-Pacific), maritime technology case studies (MTCCs Latin America and Caribbean), et al.

The second category Pilot Project is on fuel consumption data collection and reporting in association with ship operators/owners and flag administrations. This voluntarily submitted baseline data will provide regional stakeholders with the opportunity to make informed decisions towards investment

in energy efficient technology, emissions abatement and control methods. It should be noted that the data collected by MTCCs will not be submitted to IMO as part of the mandatory requirements. The approach to collecting data varies between the different MTCCs. For example, MTCC Caribbean uses e-reporting with web based applications, targeting a minimum of 50% traffic in the region. For MTCC Asia and Africa, the focus has been on the use of a real-time fuel data collection and communication system to collect data.

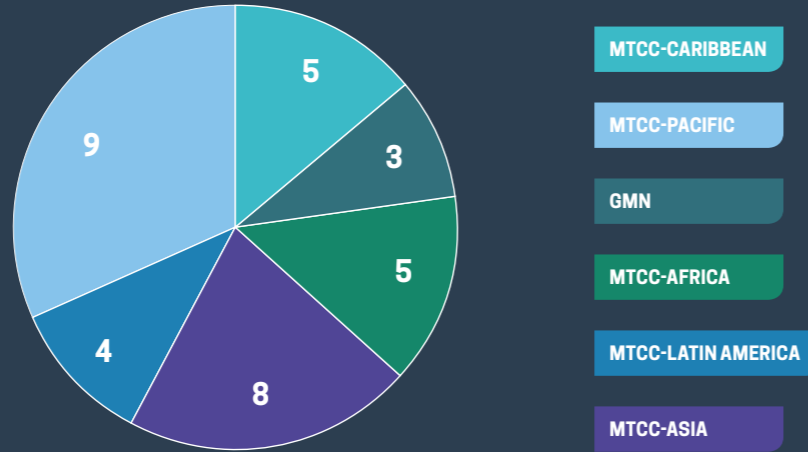
Excellent progress has been demonstrated in the implementation of the ten Pilot Projects. To give an example from Africa, the data collection is being achieved through delivering tablets on board the selected ships. The tablets are fitted with standardized e-forms that facilitate reporting of key data parameters such as fuel type, fuel consumed, engine rating etc. This data is then submitted through satellite communication to a web-based platform where the data collected can be processed. Despite some challenges, a lot of data has been reported by the participating ships. By the end of 2018, over 1000 data sets on ship fuel consumption had been reported by the participating vessels. The GHG experts continue to monitor the data reported and addressing any challenges as they arise.

All the Pilot Projects are scheduled for completion in 2019. The results will be shared via the GMN website from July.

OUTREACH ACTIVITIES

GMN CAPACITY BUILDING

Activities delivered by GMN from March 2017 to December 2018

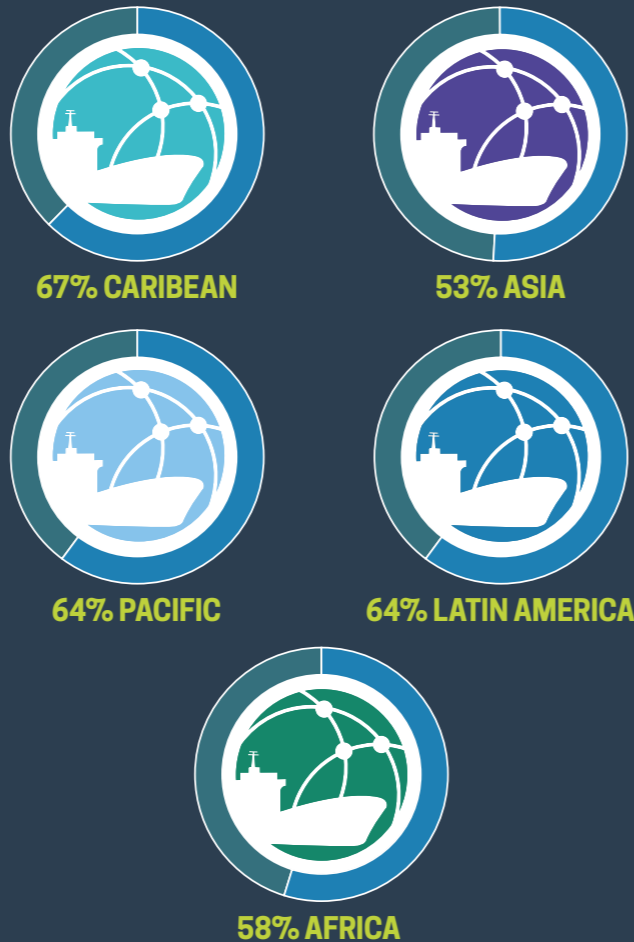


GMN PROGRESS TRACKER - JAN 2017 - DEC 2018

GMN overview (5 MTCCs)



Individual MTCC's



Results based upon the percentage of MTCC contract deliverables completed or outstanding as of 14 December 2018

LOOKING AHEAD: JANUARY TO JUNE 2019



MTCC-CARIBBEAN 5TH NATIONAL WORKSHOP

29-30 January 2019
Saint Vincent and the Grenadines



MTCC-AFRICA 4TH NATIONAL WORKSHOP

4-5 February 2019
Accra, Ghana



MTCC-LATIN AMERICA 4TH NATIONAL WORKSHOP

13-15 March 2019
Mexico City, Mexico



MTCC-CARIBBEAN 6TH NATIONAL WORKSHOP (2ND SOUTHERN SUB-REGIONAL)

18-19 March 2019
Port of Spain, Trinidad and Tobago



GLOBAL MTCC NETWORK MEETING AND TECHNICAL WORKSHOP DOCKS THE FUTURE CONFERENCE

1-5 April 2019
Trieste, Italy



MTCC-PACIFIC 8TH NATIONAL WORKSHOP

15-17 April 2019
Cook Islands



MTCC-ASIA 2ND INTERNATIONAL CONFERENCE ON SHIP ENERGY EFFICIENCY

22-26 April 2019
Shanghai, China



MTCC-ASIA 4TH NATIONAL WORKSHOP

May 2019 TBC
TBC



MTCC-PACIFIC 9TH NATIONAL WORKSHOP

June 2019 TBC
Tonga

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>

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

gmn.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

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



www.imo.org

