

MARITIME TECHNOLOGY COOPERATION CENTRE IN THE PACIFIC (MTCC-PACIFIC)

CAPACITY BUILDING FOR CLIMATE MITIGATION IN THE MARITIME SHIPPING INDUSTRY
THE GLOBAL MTCC NETWORK (GMN) PROJECT

THIRD MTCC-PACIFIC STEERING COMMITTEE MEETING

Suva, Fiji

28 August, 2018



INTRODUCTION

The third MTCC-Pacific Steering Committee (SC) was held on 28 August 2018 in Suva Fiji. It was attended by the following members: Fiji Ministry of Infrastructure and Transport (MoIT) and Fiji Ports Corporation Limited; Samoa Ministry of Works, Transport & Infrastructure and Samoa Ports Authority; Solomon Islands Ministry of Infrastructure Development and Solomon Islands Ports Authority; Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; the Delegation of the European Union for the Pacific; the Maritime Safety Authority of Fiji (MSAF); the Pacific Islands Development Forum (PIDF); the Pacific Islands Forum Secretariat (PIFS); the Pacific Community (SPC); the Secretariat of the Pacific Regional Environment Programme (SPREP); and the University of the South Pacific (USP). Also attended representatives from the Tonga Ministry of Public Enterprises, Ministry of Infrastructure and Port Authority Tonga (PAT); the Japan International Cooperation Agency (JICA); and Women in Maritime representatives as observers.

The meeting was chaired by Mr. Lui Naisara, Deputy Secretary, Fiji Ministry of Infrastructure and Transport.

ACTION POINTS

- Send meeting minutes as soon as possible for country reporting purposes
- Disseminate generic draft regulation on Ship Energy Management and Data Collection to all Pacific Islands Countries.

1 ADOPTION OF THE 3RD STEERING COMMITTEE MEETING AGENDA

The Chair welcome members and observers to the Third MTCC-Pacific Steering Committee meeting. The meeting agenda was adopted.

2 REVIEW OF THE PREVIOUS MEETING MINUTES

(Thierry Nervale, MTCC-Pacific, Project Director)

SPC presented and guided the meeting through the minutes and discussions of the last meeting held on 12 December 2017. SPC also provided a brief tour into the MTCC-Pacific website directing participants to all the resources available for download.

3 MTCC-PACIFIC PROJECT PROGRESS

(Thierry Nervale, MTCC-Pacific, Project Director)

MTCC-Pacific presented on the current progress of the project from May 2017 to date as such. Participants were given a project fact sheet summarising the activities over the last 15 months, namely:

- Delivered in 2017-2018:
 - a) All 7 National Workshops delivered
 - b) All 7 Port Energy Audits completed – one more audit completed in Solomon Islands
 - c) More than 30 vessels visited & 18 have been introduced with Ship Energy Efficiency Management Plan (SEEMP)
 - d) Reduction of GHG emissions (GHGe) in Honiara and Suva ports
 - e) Retrofitting of ships in Fiji started (Request for Proposal advertised)
- Major deliverables in 2018-2019:
 - ✓ 2019 Regional Conference

- ✓ Vessel retrofitted in Fiji
- ✓ SEEMP implementation reviewed in all 7 countries
- ✓ Data collection continued and Energy Efficiency Operational Index (EEOI) calculation + estimate maritime GHGe contribution.

DISCUSSION

a) Request for a draft regulation for ship energy efficiency be sent to Pacific Islands Countries.

A regulation is drafted from MARPOL requirements to ensure that countries with international vessels are compliant with MARPOL that is based on SEEMP implementation (vessels of more than 400grt) and data collection (vessels of more than 5000grt). The Pacific however has very few international vessels; hence the decision to work with domestic vessels in Pacific region. The proposed regulation has therefore been slightly altered to suit the purpose of domestic vessels that are more than 15m in length to implement energy management and assist the uptake of new technologies in future. The regulation also require vessels of more than 15m in length to collect fuel oil consumption data and communicate to the maritime administration. SPC can assist in legal drafting and adoption of the regulation.

b) SEEMP implementation in Samoa

MTCC-Pacific recalled that its project in 2 phases. First phase to deliver national workshops and introduce SEEMP and second phase to assist/verify implementation of SEEMP. For Samoa, the vessels have a management system compliant with the International Safety Management (ISM) Code, which just need inclusion of SEEMP as a procedure in the ISM system. At the second visit, focus will be on capacity building of the crew on how to collect data and how to implement SEEMP and will include ISM awareness.

c) Challenges in the continuance of operation of old age of the domestic vessels in the Pacific. Possible regulation on the age of the vessel

MTCC-Pacific emphasized the critical need to start implementation of operational efficiency now in order to reach significant milestones and objectives to be reached in 2030; which is only 11 years away. MTCC-Pacific project lifespans are much shorter than the average timeframe it takes for policies to be developed, adopted and implemented but all activities are used to recall the need for conducive policies. It is also why MTCC-Pacific has developed this technical regulation for SEEMP implementation and data collection now so that we will be able to develop informed policies for long-term objectives for low-carbon shipping.

d) Monitoring of data collection and enforcement of operational efficiency. What entity should be responsible?

There is no regulation to enforce data collection adopted in the region so far, so it is more on voluntary basis for countries involved in MTCC-Pacific projects with their private and public operated vessels. MoIT recalled that, in the case of Fiji, all information from vessel operators must go through MoIT and remain confidential between Fiji government, SPC and vessel operators.

MTCC-Pacific recalled that it is the government decision to be involved in MTCC-Pacific projects, to engage with national ship operators, collect information and implement pilot-projects. But the projects are useful if recommendations are followed and once again needs governments and ship operators commitments.

4 MTCC-PACIFIC PILOT-PROJECTS IMPLEMENTATION

(Zullah. M. A, Maritime Energy Efficiency Adviser, MTCC-Pacific)

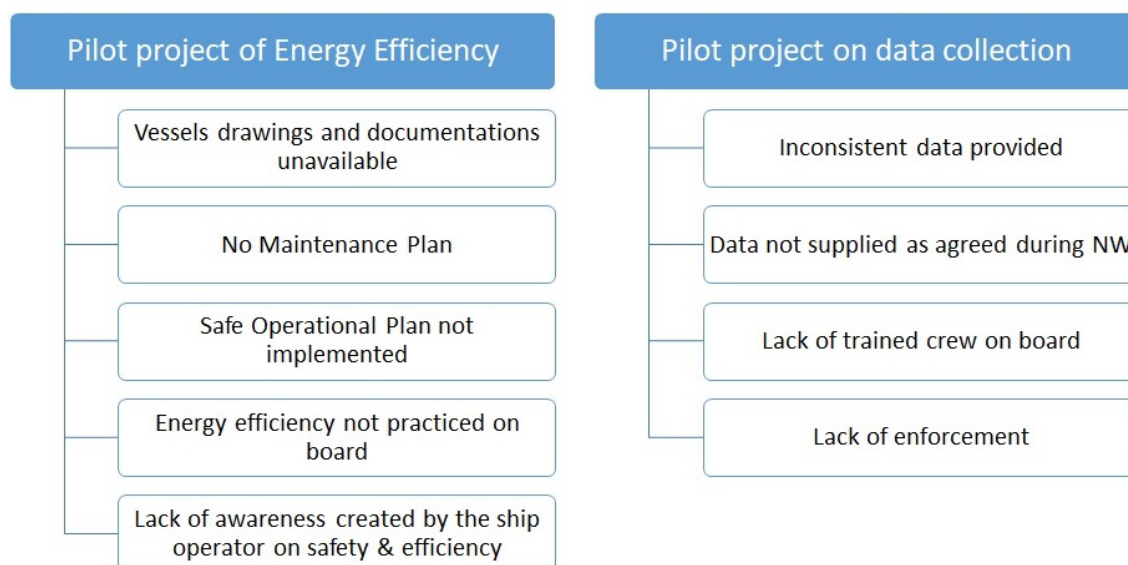
MTCC-Pacific presented on the two pilot projects currently implemented its targeted countries:

- Uptake of ship energy efficient technologies and operations
 - ✓ Focus mainly on domestic shipping and ports
 - ✓ Provide tools to develop/improve energy management in port and on board domestic vessels
- Fuel oil consumption data collection and reporting
 - ✓ Data collection on fuel oil consumption in domestic shipping

Tabulated below is the summary of the implementation of the above 2 pilot projects with respect to the drafting of the SEEMP and data collected from number of vessels by country.

Country	SEEMP	DATA
Fiji	7	1
Solomon Islands	5	1
Vanuatu	6	1
Tuvalu	1	1
Samoa	0	1
Kiribati	12	0
Marshall Islands	4	GIZ

Some of the challenges highlighted with respect to the implementation of the two pilot projects were:



MTCC-Pacific also presented on the Green Pacific Port pilot project and the highlights are as follows:

- Fiji Port Corporation Limited (Port of Suva):
 - ✓ Baseline energy usage: 2015/2016 – 3,100 tonnes of GHG (CO₂-e), cost FJ\$2,100,000
 - ✓ Implemented projects:
 - Data collection/tracking (exc. Terminal fuel)
 - Office lighting upgrade to LED end of 2016: Usage 21% lower in 2017 vs 2016, saving FJD \$31,000 and 32t CO₂-e.
 - Power factor correction installed (Aug 2018), expected to save FJD \$300,000 annually
- Solomon Islands Ports Authority, Port of Honiara:

- ✓ Overall energy use dropped 8%, saving 15 tonnes of greenhouse gas a month on average
- ✓ Electricity usage dropped 21%, saving 13 tonnes of GHG a month on average
- ✓ Diesel usage dropped 7%, saving 4 tonnes of GHG a month on average
- ✓ Monthly energy costs have dropped by 13% overall, saving on average SBD \$72,000 a month, or around AUD \$12,000 a month
- ✓ Implementation of measures recommended in the energy audit, over the 8 months to end of April 2018, 126 tonnes of GHG was saved, and SBD \$570,000 or around \$AUD 96,000 in energy costs.

DISCUSSION

a) Is it possible that the ship solar system be used instead to power the propeller?

Most vessels within the region do not have sufficient system on the deck to operate the propulsion system. However, working to assess the impact of this solar to the lighting system and extend this system to operate a propulsion system. With the vessels we have in the region, it would rather cost approximately \$200,000 to solar panel with battery system to operate a propulsion system. One of the challenges with existing vessels (particularly landing crafts) in the region is that they do not have sufficient space on deck for the solar panel as well as space to store the batteries to operate the propulsion system.

b) Availability of information on vessels size, age and type of operations by country

Information is obtained from the ship registry of each country. Information are analysed to extract data on age, type of operations and size and provide an idea of country emissions profiles in the near future. MTCC-Pacific is focusing on domestic vessel. However, as part of the project we are also looking at international vessels calling Pacific ports.

c) Availability of dry docks and other facility for hull and propeller cleaning

It is one of the challenges as there is not always adequate dry docking facility system in all targeted countries visited while hull and propeller cleaning is huge energy efficiency of vessels.

With regard to environmental impacts of anti-fouling systems and underwater cleaning, it was recalled the need to use compliant antifouling systems and that it is easier to consistently clean the hull including underwater cleaning.

d) Extension of MTCC-Pacific project to other Pacific Islands Countries than those targeted in the first 3 years

Some activities in the current project are targeting all countries such as the regional workshops, information sharing (guidelines and templates) and regulatory work. In addition, 10 Pacific Islands Countries are involved with the SPC Pacific Islands Domestic Ship Safety (PIDSS) Programme that is implemented in conjunction with MTCC-Pacific project and energy efficiency is introduced.

MTCC-Pacific is preparing the project post-2019 but is also collecting formal requests from other countries to include them in the future.

e) MTCC-Pacific results

MTCC-Pacific has achieved significant results in ports but yet to obtain some results with ship operators first because we are looking for consistent data for at least 6 months to be able to gauge results but also because the capacity of ship operators to commit and invest is less.

f) Sustainability of energy efficiency

There is a need for high-level commitment towards reduced fuel consumption, trained and qualified energy managers to continuously monitor energy efficiency and collect data to be able to measure progress.

5 MCST PROGRESS UPDATE

(Professor Derrick Armstrong, Deputy Vice Chancellor, USP)

The following points were highlighted in this brief progress update:

- Micronesian Centre for Sustainable Transport (MCST) was set up by USP in 2012 at the request of Marshall Islands (RMI)
- Moving on, RMI continue close collaboration, which developed into the reformulation of the centre to be jointly hosted by RMI government and USP illustrating the commitment of the RMI government
- MCST has been advertising for a director of the centre. A strong candidate with extensive experiences in sustainable transport, research and networks has been identified and offer made which cannot be revealed at the moment. The Director will be looking to develop a very strong relation with MTCC-Pacific and collaboration between these two centres
- MCST is also at the final stages in its agreement with GIZ in terms of the Low Carbon Sea Transport project
- MCST was also pleased to be involved in the IMO fourth intersessional working group on the GHG emissions and the way in which the Pacific countries collaboration contributed significantly to its outcomes
- MTCC-Pacific and MCST collaboration: both centres complement each other and MCST is committed to this collaboration.

6 THE PACIFIC GENDER & CLIMATE CHANGE TOOL KIT

(Ore Toua, Maritime Training Adviser, SPC)

The toolkit is designed to support climate change practitioners in the national governments, non-governmental organizations, regional and international organizations, integrate gender into all aspects of policy, programming and project work as:

- Social inclusion, especially for vulnerable groups is essential.
- Climate Change is now development issue no longer stand alone environment issue
- Maritime sector is equally impacted/affected by climate change.

The toolkit is divided into three parts module:

- Module 1 is the introductory module explains why gender is a critical consideration in climate change programmes, projects and strategies, and clarifies some common misconceptions;
- Module 2 focuses on the links between gender and climate change in specific sectors (e.g. food security, water and energy); and uses sector relevant case studies to explain how to take gender into consideration; and
- Module 3 is the 'how-to' section and will take you through the different phases of a typical climate change programme/project cycle, identifying potential entry-points for integrating gender in each phase and also includes a generic gender checklist that may be applied to programmes and projects.

The inclusion of this tool kit will now be more useful to inform Climate change practitioners to integrate gender dimension when developing policy, programmes and project work in the maritime sector.

DISCUSSION

a) At the national level, who are the climate change practitioners in the maritime sector?

Climate change practitioners are people involved in climate related initiatives whether it develops in on-the-ground programmes/project/activities or in high-level policy development. The toolkit is developed for these people to guide them in introducing gender dimension in the design, implementation and monitoring of programmes/projects/activities. For example, SPC is doing the same by mainstreaming gender into all its programmes and projects in maritime and in supporting Women in Maritime associations.

b) Analysis on barriers to women contribution and opportunities in the maritime sector?

SPC has collected good information on women presence in the Pacific maritime sector through the Women in Maritime network. Unfortunately, it demonstrate that women are more represented in low-level positions and almost absent on board vessels (despite some progress in some countries). there is a need to promote and support equal access to maritime jobs and to leadership roles for this. But it also require to work towards making ships safe for women. All of this baseline information and objectives are currently been incorporated into the Regional Strategy for Pacific Women in Maritime to be adopted in 2019.

7 Progress of the project on Transitioning to Low Carbon Sea Transport in Marshall Islands

(Christian Fedlmeier, Project Manager, GIZ)

The objectives of the GIZ Project on Transitioning to Low Carbon Sea Transport in Marshall Islands are:

- Reduce RMI's GHG emissions from domestic sea transport through:
 - ✓ Assessment of emissions, logistics and economics of domestic fleet operations
 - ✓ Development of options for low-carbon propulsion technologies for inter-atoll and intra-lagoon sea transport
- Policy support to the RMI Government to strengthen its contribution to high-level policy dialogues, i.e. the High Ambition Coalition (HAC) for UNFCCC negotiations/IMO.

RMI has been chosen because:

- Front Runner (High Ambition Coalition) in the international Climate Debate
- Transport Sector is part of their Nationally Determined Contribution (NDC)
- High Ambition in their NDC
- Highly dependent on Sea Transport
- Climate Vulnerable Country.

The impacts of the project is summarised below:

- Influence at international negotiations increased
- Raising of ambitions at IMO level in order to reduce emissions
- Lower costs in sea transport due to less fuel consumption
- Private sector operators: cost efficient sea transport
- Other States within the Pacific: fossil fuel reduction
- RMI mariners, students et al.: enhanced capacity
- Contribution to achieve RMI's NDC targets
- Increased project impact due to upscaling process
- For RMI: improved connectivity between and within atolls.

DISCUSSION

a) Relationship between this GIZ project and MCST?

This project is hosted at USP Campus in Majuro and will work closely with MCST as part of RMI initiatives.

8 IMO Initial Strategy to reduce GHG emissions from shipping (Thierry Nervale, MTCC-Pacific, Project Director)

A presentation was made on the IMO Initial Strategy to reduce GHG emissions from shipping.

Adoption of the initial Strategy

- Resolution MEPC.304(72) adopted 13 April 2018
- Strategy is in annex of the Resolution
- MEPC Res.:
 - ✓ Adopts the Strategy
 - ✓ Invites IMO SG to make adequate provisions in the Integrated Technical Cooperation Programme (ITCP) to support relevant action to be undertaken by developing countries, particularly LDCs and SIDS
 - ✓ Agrees to keep the Strategy under review with a view to adoption of a Revised IMO Strategy in 2023

Impact on States and barriers:

- Before adoption of measures, impact on states to be assessed particularly LDCs and SIDS:
 - ✓ Geographic remoteness of and connectivity to main markets
 - ✓ cargo value and type
 - ✓ transport dependency
 - ✓ transport costs
 - ✓ food security
 - ✓ disaster response
 - ✓ cost-effectiveness
 - ✓ socio-economic progress and development
- Disproportionately negative impacts should be assessed and addressed.
- Recognises special needs of developing countries particularly LDCs and SIDS with regard to capacity building and technical cooperation.
- Need to assist the efforts to promote low-carbon technologies by facilitating public-private partnerships and information exchange.
- Provide mechanisms for facilitating information sharing, technology transfer, capacity-building and technical cooperation
- Need to assess periodically the provision of financial and technological resources and capacity building to implement the Strategy through ITCP and other initiatives including the GloMEEP project and the MTCC network.

Key stages for the adoption of a Revised IMO GHG Strategy in 2023	
Spring 2018 (MEPC 72)	Adoption of the Initial Strategy, including, inter alia, a list of candidate short-, mid- and long-term further measures with possible timelines
January 2019	Start of Phase 1: Data collection (Ships to collect data)
Spring 2019 (MEPC 74)	Initiation of Fourth IMO GHG Study using data from 2012-2018
Summer 2020	Data from 2019 to be reported to IMO
Autumn 2020 (MEPC 76)	Start of Phase 2: data analysis (no later than autumn 2020) Publication of Fourth IMO GHG Study for consideration by MEPC 76
Spring 2021 (MEPC 77)	Secretariat report summarizing the 2019 data pursuant to regulation 22A.10 Initiation of work on adjustments on Initial IMO Strategy, based on Data Collection System (DCS)
Summer 2021	Data for 2020 to be reported to IMO
Spring 2022 (MEPC 78)	Phase 3: Decision step Secretariat report summarizing the 2020 data pursuant to regulation 22A.10
Summer 2022	Data for 2021 to be reported to IMO
Spring 2023 (MEPC 80)	Secretariat report summarizing the 2021 data pursuant to regulation 22A.10 Adoption of Revised IMO Strategy, including short-, mid- and long-term further measure(s), as required, with implementation schedules

9 COP24 – MEPC 73 – Regional Transport Forum

(Mark Borg, Programme coordinator, PIDF)

A presentation was made on MEPC 72-73, the Regional Transport Forum and the perspectives of COP24.

In preparation to MEPC72 in April 2018:

- A Technical Workshop was organised on 7-9 Feb. 2018 in Suva, Fiji
- Preparation and agreement on a Pacific position paper
- Two submission papers to MEPC 72 with Pacific input and backing
- Outcome of the MEPC72:
 - ✓ What did we get? Reduction of shipping emissions by at least 50% by 2050 compared to 2008 levels
 - ✓ What did we want? Reduction by 100% by 2035-2050
 - ✓ Caveat: targets have to be in line with Paris Agreement.

Transport at COP24:

- Expect a greater emphasis on transport than previous COPs
- PIDF organising side-event with theme “Technological Transfer in Transport Sector for Pacific Clean Transport implementation”.

Regional Transport Forum:

- To be held on 8-10 November 2018 with an expo
- Forum to be attended by transport ministers and officials
- Objective to adopt a roadmap for transport decarbonisation in the Pacific.

10 MTCC-Pacific Perspectives

(Thierry Nervale, MTCC-Pacific, Project Director)

- Appointment of one MTCC-Pacific Officer with SPREP:
 - ✓ Establishment of an office of MTCC-Pacific
 - ✓ MTCC-Pacific to benefit more from SPREP expertise (Env. Gov + CC)
- Regional framework
 - ✓ Regional Conference (outside of Fiji)
 - ✓ Collaboration in Marshall Islands:
 - with MCST for research
 - with GIZ to complement activities on board MISC vessels

- International framework
 - ✓ MTCC-Pacific own resource mobilisation strategy implementation
 - ✓ MTCC-Pacific is Chair of the MTCCs Coordinating Committee for RM
 - ✓ GMN and MTCCs identified as instruments to implement the IMO Strategy
 - ✓ Submission at MEPC 73 for further support post-2019 for GMN and MTCCs
 - ✓ Development of major project for GMN and MTCCs

11 CLOSING THE 3RD STEERING COMMITTEE MEETING AGENDA

The Chair closed the meeting and recalled the participants the need to work collaboratively to assist Pacific Islands Countries reduce their GHG emissions and reliance on fossil fuels.