

FIRST NATIONAL WORKSHOP ON ENERGY EFFICIENT OPERATION OF SHIPS

Suva, Fiji, 24-27 October 2017

OUTCOME

1. The First National Workshop on Energy Efficient Operations of Ships was held in Suva, Fiji from 24 to 27 October 2017. The meeting was coordinated and facilitated by the Maritime Technology Cooperation Centre in the Pacific (MTCC-Pacific) and attended by representatives from the Fiji Ministry of Infrastructure and Transport (MoIT), the Maritime Safety Authority of Fiji (MSAF), The Fiji Port Corporation Limited (FCPL), the Fiji Ships and Heavy Industry Limited (FSHIL), the Pacific Islands Development Forum (PIDF), Patterson Shipping/Searoad Shipping, Seaquest Fiji Ltd/Sealand Processors, Inter Link Shipping Line Ltd, Government Shipping Services, Tokalau Shipping, All Barging and Marine (Fiji) Limited, Billett Wright & Associates (Fiji) Limited and Solander Pacific Limited. The list of participants is attached in Annex 1.
2. MTCC-Pacific is hosted by the Pacific Community (SPC) in collaboration with the Secretariat of the Pacific Regional Environment Programme (SPREP) and forms part of the Global MTCC Network (GMN), a project implemented by the International Maritime Organization (IMO) and funded by the European Union with the aim of building the capacity of developing countries for climate mitigation in the maritime industry.
3. The Director of the SPC's Geoscience, Energy and Maritime (GEM) Division, Dr. Andrew Jones welcomed the participants on behalf of SPC as the MTCC-Pacific Host Institution and recalled that shipping remains the lifeblood of the Pacific but like all sectors has to participate in national efforts to reduce greenhouse gas (GHG) emissions. The SPC's Deputy Director Transport, Head of MTCC-Pacific, Thierry Nervale revealed the objectives and expected results from MTCC-Pacific in terms of capacity building for climate mitigation in the maritime industry. The Fiji Permanent Secretary for Infrastructure and Transport, Paul Bayly provided the keynote remarks enhancing Fiji Government commitment to raise awareness and build the capacity to implement energy efficient measures in the Fiji maritime industry. Lastly, GMN project Manager from IMO, Tamar Barabadze, highlighted that the establishment of MTCC-Pacific will assist the region by providing expert support to industry and Governments and is now playing a key role in the region and as part of the wider GMN.
4. The purpose of the workshop was to gather Fiji government, the maritime administration and ship operators to agree on measures to improve energy efficiency of shipping in Fiji and provide them with technical tools to progress towards energy efficient operations of ships.

The participants:

5. Agreed to implement relevant actions to progress towards a Green Maritime Industry (ships, shipyards and ports) in Fiji in order to support a long-term objective for low-carbon maritime transport and contribute to the reduction of GHG emissions in Fiji and the Pacific.

6. Recognize the drivers, needs, barriers and relevant actions stated in Annex 2 that should include:
 - i. Capacity building and awareness;
 - ii. Policy and legislation review;
 - iii. Incentives towards energy efficiency and use of new technologies;
 - iv. Private-public partnerships; and
 - v. Ship maintenance and use of energy efficient equipment on board existing vessels.
7. Agreed to lead by example and be involved in MTCC-Pacific pilot-projects on energy efficient operations of ships and data collection that will assist in implementing immediate actions adapted to Fiji registered vessels, ports and shipyards.
8. Agreed to collect and share relevant data on fuel consumption through protocols with MoIT and MTCC-Pacific and request MTCC-Pacific to provide templates and assist in the collection and reporting, ensuring confidentiality and accessibility of information.
9. Recognized existing capabilities and future opportunities in Fiji to build and maintain energy efficient vessels or produce and use alternative fuels that require support from the Government of Fiji.
10. Noted existing incentives in Fiji that can maximize opportunities for energy efficient operations of ships but recognized the need for improved awareness and further incentives adapted to the special circumstances of domestic shipping in Fiji.
11. Raised the issue of lack of infrastructure in outer islands to facilitate shipping services and reduce fuel oil consumption and the opportunity to explore onshore power supply at domestic wharves.
12. Invited all ship owners to contribute to the revival of the Fiji Ship Owners Association to champion a Green Maritime Industry in Fiji.
13. Requested MTCC-Pacific to coordinate and facilitate a follow-up workshop to present and discuss progress in measures implemented in 2017-2018 related to energy efficiency and data collection in Fiji maritime industry.

Annex 1 – List of participants

#	Name	Job Title	Organisation	Email Address
HIGH-LEVEL WORKSHOP				
1	Paul Bayly	Permanent Secretary	Ministry of Infrastructure & Transport	paul.bayly@govnet.gov.fj
2	Kalusiani Vuki	Legal Officer	Maritime Safety Authority of Fiji	kvuki@msaf.com.fj
3	Lui Tusiga Naisara	Deputy Secretary Policy & Planning	Ministry of Infrastructure & Transport	lui.naisara@moit.gov.fj
4	Faranisese Kinivuwai	Acting Director Transport & Policy	Ministry of Infrastructure & Transport	faranisese.kinivuwai@govnet.gov.fj
5	Lesi Vuatalevu	Acting Principal Transport Planner	Ministry of Infrastructure & Transport	lesi.vuatalevu@moit.gov.fj
6	Joji Wata	Research Officer	Ministry of Infrastructure & Transport	joji.wata@moit.gov.fj
7	Mark Borg	Team Leader Programme Management	Pacific Islands Development Forum	markborg@pacificidf.org
8	Lopeti Radravu	Operations Manager	Fiji Ships and Heavy Industries Limited	lopeti@fijiports.com.fj
9	David Patterson	Assistant General Manager	Patterson Shipping/Searoad Shipping	fijisearoad2@gmail.com
10	Netane Waqalala	Manager	Seaquest Fiji Ltd/Sealand Processors	netane@seaquest.com.fj
11	Manoj Kumar	Operational Manager	Inter Link Shipping Line Ltd	operations@interlinkshipping.com.fj
12	Josese Lawaniasana	Acting Director	Government Shipping Services	josese.lawaniasana@moit.gov.fj
13	Isireli Mokunitulevu	Manager	Tokalau Shipping	isirelimokunitulevu@yahoo.com
14	Chris Dewhirst	Shipping Manager	All Barging and Marine (Fiji) Ltd	allprojects@allengineering.com.fj
15	Josateki Tagi	Director	Billett Wright & Associates (Fiji) Ltd	billett@unwired.com.fj
ORGANISER				
1	Andrew Jones	GEMD Director	The Pacific Community	andrewj@spc.int
2	Thierry Nervale	MTCC-Pacific Head	MTCC-Pacific	thierryn@spc.int
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7	Lore Croker	Administrative and Information Assistant	MTCC-Pacific	lore@spc.int
TECHNICAL WORKSHOP				
1	Kalusiani Vuki	Legal Officer	Maritime Safety Authority of Fiji	kvuki@msaf.com.fj
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7	Thomas Patterson	Assistant Operations Manager	Patterson Shipping/Searoad Shipping	fijisearoad2@gmail.com
8	Robert Kubukawa	Assistant Fleet Engineer	Solander Pacific Ltd	robert@solander.com

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15	Ignesio Mow	Foreman Engineer	Fiji Ships & Heavy Industries Limited	isirelimokunitulevu@yahoo.com

Annex 2 – Matrix of drivers, needs, barriers and relevant action

Drivers	Needs	Barriers	Relevant action
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Costs of energy	<ul style="list-style-type: none"> • Reduced fuel oil consumption from domestic ships • Collect data for baseline to show reduction in fuel consumption • Cold ironing to save energy/costs • Implement Energy Management Systems in shipping companies to improve practices 	<ul style="list-style-type: none"> • No transparency in the use of data collected to improve systems – lack of open and timely process • Transition costs for additional or change of equipment • No SOPs and standards set for all Fiji fleet 	<ul style="list-style-type: none"> • Collect data and provide accessibility to data to use in fuel savings measures through a Public Website with dedicated independent data • Infrastructure development in Fiji ports to provide onshore power supply – support from Fiji Government • Implement SMS/MMS including energy management with the support of SPC (PIDSS and MTCC-Pacific and MSAF jointly)
Improve profitability of ships, reliability and efficiency of domestic shipping	<ul style="list-style-type: none"> • Appropriate/relevant legal, regulatory and technical measures adapted to the size of the vessels and the capacity and resources of Fiji shipowners • Training on safety, efficiency including energy efficiency, etc. • Reduced competition that can compromise safety, efficiency and reliability of shipping services provided in Fiji • Reduce lost time for berthing 	<ul style="list-style-type: none"> • Over-regulation and not locally adapted measures that are too prescriptive • Lack of crew qualification • Measures are often adapted to vessels of more than 50 meters while most of domestic vessels are under this size and old • Lack of infrastructure in outer islands to accommodate domestic vessels 	<ul style="list-style-type: none"> • Government financial through subsidies and incentives • Waiver depending the size and age of vessels • Implementation of measures adapted to the Pacific domestic fleet • Control domestic fleet tonnage and pre-inspection/limitation for vessels purchase overseas • Capacity building of ship operators and crews on energy efficiency measures and practises • Infrastructure development in outer islands to facilitate domestic shipping
Improved standards of domestic ships including safety, training, pollution prevention and efficiency	<ul style="list-style-type: none"> • Consider the inclusion of outboard small vessels in measures to reduce fuel consumption and GHG emissions taking into account the basic needs of communities mobility (4-stroke engines, electric outboard engines) • Regular hull cleaning with adapted hull coating systems compliant with best standards and independent inspection • Reduced competition that can compromise safety, efficiency and reliability of shipping services provided in Fiji • Financial support from Fiji Government to support new measures • Revive or develop capabilities in Fiji to build and maintain new concept equipment and vessels 	<ul style="list-style-type: none"> • Awareness and practices in communities that must travel between islands and use small outboard powered vessels • Lack of dry-dock facility • Lack of infrastructure in outer islands to accommodate domestic vessels • Lack of support to provide information and technical tools on energy efficiency • No government support/incentive to revive/develop ship building and maintenance in Fiji 	<ul style="list-style-type: none"> • Availability of new equipment affordable to communities • Technical support and capacity building provided by MTCC-Pacific, SPC, MoIT and MSAF to implement adapted measures • Infrastructure development in outer islands to facilitate domestic shipping and in Fiji ports to provide onshore power supply • Support from government through subsidies and tax incentives for safety, energy efficiency equipment, ship building and maintenance
Reputation	<ul style="list-style-type: none"> • Improve the reputation of shipping with regards to the protection of the environment and the emissions of GHG 	<ul style="list-style-type: none"> • Lack of cooperation between all shipowners due to high competition 	<ul style="list-style-type: none"> • Communicate efforts to implement energy efficient measure in Fiji domestic shipping • Revive the Fiji Ship Owners Association to support Green Shipping in Fiji