AGENDA ITEM 5 – LOW CARBON MARITIME DEVELOPMENT IN THE PACIFIC ISLANDS REGION

Purpose

1. The purpose of this paper is to present results of current initiatives with regard to the uptake of low-carbon technologies and operations in the Pacific Islands region; and seek Transport Ministers’ agreement for the region to work towards reducing GHG emissions by 40% in 2030 and 100% by 2050.

Background

2. The Paris Agreement builds upon the United Nations Framework Convention on Climate Change (UNFCCC) that entered into force on 21 March 1994. All Pacific Islands Countries and Territories (PICTs) have committed to achieve its objectives and the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development. These commitments have been made in the Nationally Determined Contributions (NDCs) to reduce the greenhouse gas (GHG) emissions that need involvement of the transport sector; particularly domestic shipping, as GHG emissions from international shipping are left with the International Maritime Organization (IMO).

3. The Maritime Environment Pollution Committee (MEPC) of IMO deals with issues related to technical and operational measures for enhancing energy efficiency of international shipping. At the 72nd session, MEPC adopted an initial strategy on the reduction of greenhouse gas emissions from ships, setting out a vision to reduce GHG emissions from international shipping by at least 50% by 2050 compared to 2008, while, at the same time, pursue efforts towards phasing them out entirely. At the 73rd session, MEPC approved a programme of follow-up actions of the Strategy up to 2023. At the 74th session in May 2019, MEPC approved amendments to strengthen existing mandatory requirements on ships energy efficiency; initiated the Fourth IMO GHG study; adopted a resolution encouraging cooperation with ports to reduce emission from shipping; approved a procedure for the impact assessment of new measures; proposed and agreed to establish a multi-donor trust fund.

4. Pacific leaders are committed to be climate leaders through the 2013 Majuro Declaration for Climate Leadership and have signed declarations – 2014 SIDS Accelerated Modalities of Action (SAMOA), 2015 Suva Declaration on Climate Change, 2017 Tony de Brum Declaration, 2018 Laucala Declaration on the Decarbonisation of Pacific Islands Transportation. In 2017, the Third Pacific Regional Energy and Transport Ministers’ Meeting recognized that urgent reforms are required in the Transport sector of PICTs in order to contribute to global efforts to reduce GHG emissions. They acknowledged current initiatives and urged all stakeholders to take appropriate action to progress low-carbon maritime transport in the region and to actively participate in international negotiations.

Current status

5. The Maritime Technology Cooperation Centre in the Pacific (MTCC-Pacific) was established on May 2017, and is one of the five centres that form the Global MTCC Network (GMN), a project aiming at building the capacity of developing countries for climate mitigation in the maritime shipping industry. This project is funded by the European Union and implemented by IMO. MTCC-Pacific is hosted by the Pacific Community (SPC) in collaboration with the Secretariat of the Pacific Regional Environment Programme (SPREP) with an office in Samoa.
and funding extended in 2020. MTCC-Pacific has provided capacity-building activities to improve the capacity of the targeted countries to comply with international instruments and has facilitated the implementation of energy efficient measures in the domestic ships and ports. Workshops on energy efficient operations of ships has been delivered in 8 countries\(^3\), training 193 participants on ship energy efficiency operational and technical measures.

6. MTCC-Pacific’s approach is to collect relevant data on board domestic ships to make informed decision on the uptake of low carbon technologies and operational measures. As part of a pilot project, a solar system was installed on board a domestic vessel in Port Vila, Vanuatu. Initial analysis of the data indicates this landing craft will reduce 32% of its GHG emissions annually. Similar pilot project implemented in Samoa on a inter island ferry, will reduce approximately 10% of its GHG emissions annually. The project demonstrates the application of maritime solar energy to improve ship energy management through the implementation of a Ship Energy Efficiency Management Plan (SEEMP) and integrated to the existing safety management system (SMS) developed under the SPC’s Pacific Islands Domestic Ship Safety (PIDSS) Programme.

7. The Micronesian Center for Sustainable Transport (MCST) is a unique program and approach to addressing the need for Pacific Island States to transition to low carbon transport pathways. The MCST Framework sets out a structured fifteen-year program to achieve this by first aiming to achieve such transition in one country, Marshall Islands, and then use this as a catalyst to cascade successful results to neighboring States and outward through the region. The vision of MSCT is to be a center of excellence to prepare and implement a whole of country strategy to transition the Marshall Islands to a low carbon transport future as a pilot and catalyst for other Micronesian and Small Island States. MCST is currently working with a private partner, Swire Shipping, to design a low carbon cargo ship that can be built locally and commercially operated. It is also working with partners WAM, GIZ, and Hochschule Emden-Leer to develop low carbon shipping solutions for intra-lagoon transport and inter-island transport in Marshall Islands.

8. The Pacific Blue Shipping Partnership is coordinated by the Governments of Fiji and the Marshall Islands with the support of the Governments of Samoa, Solomon Islands, Tuvalu and Vanuatu. The Partnership calls on international development partners to support an initial blended finance package of USD$500 million enabling a 10-year work programme, 2020-2030, in 5–6 Pacific Island Countries. The Partnership builds on the agreement made at the occasion of the Third Climate Action Pacific Partnership in May 2019 in Suva, Fiji, between Fiji, Marshall Islands, Samoa, Solomon Islands, Tuvalu and Vanuatu, to work together to reduce fossil fuel use in their marine transportation by up to 40% by 2030 and 100% by 2050.

9. The Secretariat of the Pacific Regional Environment Programme (SPREP) submitted a Green Climate Fund proposal “The Vaka Motu (boat for the islands) - building indigenous community resilience with low emission sea transportation in the Micronesian region” on behalf of 5 participating countries\(^4\). The project presents an opportunity to mainstream and implement low emission sea transportation, and the interlinked strengthening of remote atoll community resilience, throughout the key development sectors in Micronesia. The project supports the transport sector’s comprehensive transformation at multiple levels, which represents a sub-regional paradigm shift for Micronesia’s overall resilience. The project will run over five years in its first phase for potentially upscaling to other parts of the Pacific, and consists of two complementary components: i) reduce and avoid carbon dioxide equivalent (tCO2e) emissions through a transformation in the sea transport sector; and ii) strengthen indigenous community resilience through a transformation in the sea transport sector to manage climate risk.

**Issues**

10. **Data and Information** – it remains a challenge to access reliable, consistent and timely data and to demonstrate the benefits of this data among ship operators. There is a need to build capacity

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\(^4\) Federated States of Micronesia, Kiribati, Marshall islands, Nauru and Palau
around data collection, including demonstration of how results can show inefficiencies and inform energy savings. Lack of reliable and accurate data from the maritime sector also creates barriers for decision-making and makes it difficult to set targets for port and ship operators. Given that IMO data collection requirements are not applicable to domestic vessels, data collection should be made mandatory through domestification of MARPOL Annex VI and use the SPC’s template developed by MTCC-Pacific to capture accurate data required for analysis.

11. **Business Management** – a fundamental behavioral shift is needed, whereby ship operators fully appreciate the benefits of effective business management practices. The assistance activities to the private sector should not only focus on energy efficiency measures and data collection but also provides understanding on how to run a maritime business, operate vessels and ports efficiently and plan for investments. The capacity of small maritime enterprises operating vessels to implement and continuously improve business management systems is paramount to uptake internationally recognized standards and best practices.

12. **Policies, Laws and Standards** – regional frameworks and declarations have set the direction for a low-carbon future in the Pacific maritime industry. However, this needs to be translated into the adoption of national policies and laws emphasizing the need for in-country legal capacity development. The introduction of new technologies requires adoption of technical standards that are understood and implemented by technology providers in the Pacific Islands region.

13. **Technology** – One of the main issues faced in the implementation phase of pilot projects is the unavailability of new technologies in the region, the lack of local suppliers who are able to design, install and maintain these technologies, and the lack of standards. There is insufficient or no dry-docking capacity and lack of ship engineering fit-out and maintenance capacity in most of the Pacific islands countries. Access to onshore power supply is limited and there is no alternative fuel available in the region. Most domestic vessels operating in PICTs are old and do not have proper documentation to facilitate cost-effective retrofitting of new technologies.

14. **Financial** – Shipping is generally a marginal business in the Pacific Islands region with more than 2000 private domestic ships primarily servicing more than 1000 islands. Many maritime routes are uneconomical and serviced by both government and subsidised private ship operators. Because shipping business in the Pacific does not provide adequate revenues, ship operators refrain from buying new ships, or investing in ship maintenance and retrofit. The result is that the fleets are generally in poor condition and have a low level of investment in equipment. It is now essential to adopt an innovative approach to financing the transition to low-carbon maritime transport in support to small and medium enterprises and existing franchise schemes.

**Recommendations**

15. Transport Ministers are invited to:

   i. **Acknowledge** the efforts made by countries and partners to implement pilot-projects and research, and demonstrate the uptake of new maritime technologies and operations;
   
   ii. **Urge** ship operators the Pacific Islands region to collect reliable and accurate data on fuel oil consumption and other associated information to improve ship energy efficiency and invest in low-carbon maritime technology and vessels;
   
   iii. **Agree** to endorse a template of regulations on ship energy management and data collection, and analyse energy consumption in shipping to establish baseline and inform the review of the NDCs in 2020;
   
   iv. **Request** further development and implementation of consistent programmes addressing the need for data, policies and laws, technology and finance; and
   
   v. **Applaud** the Pacific Blue Shipping Partnership and **agree** to work towards similar targets in the maritime transport of Pacific Islands Countries to reduce GHG emissions by 40% in 2030 and 100% by 2050.

[16 August 2019]