MEDITERRANEAN ACTION PLAN (MAP)
REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE MEDITERRANEAN SEA (REMPEC)

Sixteenth Meeting of the Focal Points of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)

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Agenda Item 8: Reduction of GHG emissions from ships

Legal and Technical Implications of the European Union Emission Trading Scheme (EU ETS) for shipping in the Mediterranean

REMPEC
Malta, 2025

Note by the Secretariat

This document provides the main elements of the Study assessing both the legal and technical implications of the European Union Emission Trading Scheme (EU ETS) for shipping in the Mediterranean region, as well as provides recommendations on possible way forward for CPs, including relevant stakeholders.

Background

1 In July 2021, the European Union (EU) introduced its ambitious "Fit for 55" package, aiming for a 55% reduction in greenhouse gas (GHG) emissions by 2030 across all industrial sectors. The shipping sector was subjected to four new regulations, including the European Union Emissions Trading System (EU ETS) Directive's extension to shipping which is effective from 1 January 2024.

2 The inclusion of shipping in the EU ETS has significant implications for the shipping industry, including potential costs associated with purchasing emissions allowances or investing in emissions reduction technologies. It also incentivises the adoption of cleaner fuels and technologies to comply with emission targets. It presents challenges and opportunities for the shipping industry to decarbonise and contribute to global efforts to mitigate climate change, especially in the Mediterranean region.

3 The Mediterranean region, with its unique challenges and opportunities, requires tailored approaches for the successful implementation of the 2023 IMO GHG Strategy by Contracting Parties to the Barcelona Convention (CPs), including relevant stakeholders. The EU ETS is a key policy instrument aimed at reducing GHG emissions in the EU. As the EU extends its climate policy ambitions, understanding the implications of the EU ETS for shipping in the Mediterranean region becomes crucial.

4 It is a common belief that implementing the EU ETS will promote research, development and deployment of low-/zero-carbon fuels and advance new propulsion systems. Although there are a few issues and challenges, the opportunities cannot be ignored. Therefore, Mediterranean coastal States that are EU Member States should work together with the Mediterranean coastal States that are not EU Member States to implement emission reduction measures to achieve net zero in the fight against climate change.

5 To this effect, a Study was carried out by the Secretariat with its efforts towards assessing both the legal and technical implications of the EU ETS for shipping in the Mediterranean region as well as recommending a possible way forward for CPs, including relevant stakeholders.

6 The study is presented in document REMPEC/WG.61/INF. 14.

Technical feasibility and challenges of implementing the EU ETS

7 The EU ETS requires shipowners and/or operators to purchase EU Allowances (EUAs) for vessel emissions. Ships with high emissions will be considered a liability as their EUAs will be high which will reduce their net earnings. Therefore, the inclusion of shipping under the EU ETS will result in the growth of green technologies and low-/zero-carbon fuels. These will lower emissions from ships in the Mediterranean region.

8 Achievement of energy efficiency in shipping is possible through a multi-pronged approach as listed below:

.1 installing devices such as Energy Saving Devices (ESDs) and Propulsion Improvement Devices (PIDs) on vessels;

.2 voyage optimisation, adequate maintenance of vessels, weather routing or vessel speed optimisation;

.3 biofouling management; and

.4 others

9 There are several areas where feasibility studies or pilot projects for reduction of GHG emissions are currently being carried out before their full-scale adoption. In recent years, the shipping

industry has increasingly focused on the development and application of low-/zero-carbon fuels to reduce emissions due to the regulatory push from the IMO and the EU which encourage the use of synthetic/bio-LNG, green methanol, sustainable biofuel, green hydrogen and green ammonia. Since the emission of vessels while at port will be considered in the overall EUA liability under the EU ETS, onshore power supply (OPS) is gaining momentum in the Mediterranean region. Green ports are increasingly becoming an economic necessity rather than just a regulatory requirement.

10 In the Mediterranean region, these regulations have paved the way for establishing green corridors. Green corridors are shipping routes that allow for the deployment of low-/zero-carbon emission ships, enabling emission reductions through both private and public actions and policies. In order to create a green corridor, some elements must be taken into account, such as a feasible fuel pathway, consumer demand for sustainable shipping, supportive laws and regulations and cooperation across value chains.

11 The Study identified a number of challenges and opportunities related to technical issues:

Challenges	Opportunities
1. The high cost of low-/zero-carbon fuels is a critical barrier that needs to be addressed. 2. Lack of availability of green fuels and insufficient infrastructure can discourage owners from ordering new dual-fuel vessels. 3. Feasible fuel pathway, consumer demand for sustainable shipping, supportive laws and regulations, and cooperation across value chains are some of the challenges while forming a green corridor. 4. Sustainability certification for fuels (in particular for sustainable biofuels) can be an issue. The EU is working towards addressing the issues related to the proof of sustainability documentation. 5. Reducing emissions from old ships is not easy and may not keep them commercially viable. 6. Many viable options are available for zero-carbon ships, which are currently in the development stage and this requires massive investment in technology and infrastructure. Options such as green fuel production, bunkering infrastructure, OPS infrastructure in ports, construction of modern ships and retrofitting require massive financial support and technological advancements.	7. The implementation of the EU ETS is already boosting the research for green marine fuels and propulsion systems. Similarly, there are opportunities for engine manufacturers, equipment manufacturers, software developers, amongst others that can provide emission reduction solutions. These will ultimately lower emissions, improve human health and reduce the impact of climate change on the environment. 8. States that have renewable energy sources can cash in on the economic development of the country. Therefore, the Memoranda of Understanding (MoUs) and strategic partnerships will increase between States that are EU Member States and States that are not EU Member States to achieve net zero emission (for example, the EU-Namibia Partnership). 9. Demand for shipyards is likely to increase in the near future. It may encourage the shipyards in the Mediterranean region to expand their capacity for retrofitting PIDs and ESDs, or converting to dual-fuel engines or build low-/zero carbon ships. 10. The potential for the development of multiple green corridors in the Mediterranean region represents a significant opportunity. These corridors would support the Mediterranean region to develop better infrastructure and improve the availability of green fuels.

12 The Study proposed the following recommendations to address the challenges and opportunities identified above:

.1 investment needed for decarbonisation in the Mediterranean region will be substantial. All stakeholders in the region should get together and create a decarbonisation fund, which could be exclusively used for such activities in the region;

.2 a study of the Mediterranean shipyards capable of carrying out retrofitting of vessels for various PIDs or ESDs or conversion to dual-fuel vessels could be carried out to evaluate their capacity and capability to undertake the required retrofitting for decarbonisation of vessels. The shortlisted shipyards could be given the required support. In addition, the potential opportunities for shipyards due to retrofitting, in terms of generating employment and economic growth, should be communicated to Mediterranean coastal States that are not EU Member States. This will lead to investment in shipyards and also help in decarbonising the shipping sector. For example, shipyards of Türkiye are already reaping the benefits from these investments. Such a study should be carried out by a neutral third party, which could later play the role of a facilitator in terms of capacity-building and resource mobilisation.

.3 Mediterranean coastal States should showcase their requirement for green fuels which would give a clear indication of the demand from Mediterranean coastal States that are EU Member States. On the other hand, Mediterranean coastal States that are not EU Member States should continue to develop renewable energy and green fuels and ensure appropriate bunkering infrastructure. A neutral third party could also play the role of a facilitator between Mediterranean coastal States to push the demand and supply for green fuels;

.4 an ecosystem should be created to support decarbonisation through green corridors and encourage policymakers to allow these corridors to implement safety regulations, take targeted regulatory actions and promote financial incentives. Green corridors could also lead to secondary benefits such as reducing shipping emissions on other routes in the Mediterranean region;

.5 if onboard carbon capture system (OCCS) gains popularity, ports in the Mediterranean region could invest in infrastructure for receiving liquid CO2 containers or liquid CO2 via pipelines or even CO2 byproducts such as limestone;

.6 a coordinated effort for increasing technical awareness amongst stakeholders is required. This could be done through workshops, seminars, webinars, classroom sessions and conferences, amongst others, in the Mediterranean region with a clear focus on disseminating the correct technical awareness amongst stakeholders. There is also a need to train those involved in the calculation and enforcement of the EU ETS, possibly facilitated by a neutral third party for the Mediterranean coastal States.

Actions requested by the Meeting

13 **The Meeting is invited to**:

.1 **take note** of the information provided in the present document; and

.2 **comment** as deemed appropriate.

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