

MARITIME ENVIRONMENT PROTECTION
COMMITTEE
74th session
Agenda item 7

MEPC 74/7/10
8 March 2019
Original: ENGLISH

REDUCTION OF GHG EMISSIONS FROM SHIPS

Draft MEPC resolution that invites Member States to encourage voluntary cooperation between the port and shipping sectors to reduce GHG emissions from ships

Submitted by Argentina, Canada, Cook Islands, Islamic Republic of Iran, New Zealand, Panama, Singapore, ICS, IAPH, IMPA, WWF, RINA, IHMA and FONASBA

SUMMARY

Executive summary: MEPC 73 invited Member States and international organizations to work with Canada and the International Association of Ports and Harbors (IAPH) on a draft MEPC resolution that encourages port developments and activities to facilitate the reduction of GHG emissions from ships, for submission to MEPC 74. This document proposes a draft resolution for adoption by the Committee at MEPC 74.

Strategic direction, if applicable: 3

Output: 3.2

Action to be taken: Paragraph 20

Related documents: Resolution MEPC.304(72); MEPC 73/7/1, MEPC 73/7/5, MEPC 73/13/4, MEPC 73/19 and ISWG-GHG 4/2/1

Introduction

1 The *Initial IMO Strategy on reduction of GHG emissions from ships* (the Initial Strategy) sets out clear objectives, vision and levels of ambition. The Initial Strategy also lists candidate short-term measures that could be finalized and agreed by the Committee between 2018 and 2023, including measure 4.7.8 to encourage relevant port developments and activities.

2 Ports contribute to mitigating land-based emission sources. They are subject to local, regional or national GHG emission reduction plans under Nationally Determined Contributions (NDCs) under the Paris Agreement. While the main responsibility to achieve the objectives of the Initial Strategy lies with the shipping sector and ports themselves fall outside IMO's jurisdiction, it is acknowledged that ports and shipping can cooperate to facilitate GHG

emissions reductions from ships. MEPC 73 invited Member States and international organizations to work with Canada and the International Association of Ports and Harbors (IAPH) on a draft MEPC resolution that encourages port developments and activities to facilitate the reduction of GHG emissions from ships, for submission to MEPC 74 (MEPC 73/19, paragraph 7.21). This document proposes a draft resolution for adoption by Member States at MEPC 74.

Purpose of an IMO resolution

3 This resolution will support sharing best practices, guidelines and increasing knowledge of and access to available programs/initiatives. While ports themselves fall outside IMO's jurisdiction, the draft resolution encourages IMO, Member States, ports and the maritime industry to work together and communicate existing tools and methods that have been employed to support action to reduce GHG emissions from ships and build on these successes, and also encourages possible future action.

4 The goal is to enhance cooperation between ports and international shipping to develop the best possible pathways towards significantly reducing GHG emissions from international shipping and further build on collaborative action of parties across the maritime transport sector. Member States and observers are invited to highlight action taken in their States by sharing successes globally. Member States are encouraged to share information that illustrates examples and encourages further steps for supporting the reduction of GHG emissions from ships when engaged in ship/port interface.

5 A smooth interface between ports and international shipping is critical to world trade, and a strong partnership and ongoing cooperation is essential to supporting action to contribute to reducing GHG emissions from ships. Successful measures to reduce GHG emissions in ports require collaboration between ports, as well as cooperation with shipping companies, terminal operators and other service providers and partners in the logistics chain since these are key parts of logistic chains designed to provide vital transport links between industries and their market and supply sources.

Port initiatives targeting GHG emission reduction from ships

6 In order to assist the reduction of GHG emissions from international shipping, many ports are already working on a mixture of facilitating measures (see document MEPC 73/7/5). These include targeting ship emissions at berth, supporting the uptake and the safe and efficient bunkering of cleaner marine fuels, providing incentives to greener ships and cooperating with all partners in the transport chain on optimizing the port calls. Identifying and promoting ways in which ports can help and encourage the shipping sector in reducing its GHG emissions would further boost the uptake of such initiatives. The following section identifies an initial range of strategies for consideration, which could facilitate the reduction of GHG emissions from international shipping and identifies some of the challenges that hinder the uptake of these options. The proposed resolution promotes the consideration and adoption of measures by ports, within their jurisdiction, to address some of these challenges.

Onshore Power Supply

7 The use of Onshore Power Supply (OPS), preferably from renewable or low-carbon sources, reduces emissions from ships while at berth by replacing onboard-generated power from diesel auxiliary engines with electricity generated onshore. The primary motivation for installing OPS facilities is typically the improvement of local air quality in urban areas surrounding ports. However, depending on the energy source used, OPS can also significantly reduce CO₂ emissions by ships at berth. Where renewable energy is used at berth, CO₂

emissions reductions can reach nearly 100%. Additionally, OPS could promote the uptake of electrification (e.g. in short sea shipping).

8 Despite the maturity of OPS technology, including the availability of international standards, the deployment of OPS globally is progressing slower than anticipated. The main cause is that OPS requires significant investments at the port, the ship side and the port-grid connection. In most cases, the return on investment is not enough to constitute a viable business case. The financial viability of investing in and using OPS is an important element and may be improved by, for example, government funding, agreements or regulations on the use of available OPS and new partnerships involving multiple stakeholders.

Clean Marine Fuels

9 Significant reduction of GHG emissions from international shipping requires the introduction of alternative low- and zero-carbon fuels (e.g. electrification, hydrogen, bio-fuels). The ports' role, depending on its jurisdiction, can be to facilitate or to ensure the safe and efficient bunkering of all alternative fuels that the shipping industry selects on its pathway towards reducing GHG emissions. Ports already have an established record on developing safe LNG bunkering facilities for both seagoing and inland ships, for example through the development of a series of checklists and the use of IAPH Audit Tool for Bunker Facility Operators (BFOs). Despite its outstanding performance in terms of local air emissions, the potential of LNG fuel to reduce greenhouse gas emissions from international ships is limited. Nevertheless there could be potential for LNG to assist in the transition towards reduction of GHG emissions from international shipping and the existing work on LNG can function as a blueprint for the support of all upcoming alternative fuels.

10 The main challenge regarding low- and zero-carbon fuels is that their future mix remains unclear in terms of industry preferences, time frames of introduction, availability and costs, and current and potential life cycle GHG emission reductions and sustainability aspects. This makes it very difficult for ports to prepare and ensure the financing of corresponding investments on the port side and ensure the availability and safe and efficient handling of any alternative fuel in ports through infrastructure, appropriate standards and identification and removal of legal/ financial barriers.

Port Incentive schemes for ships that go beyond IMO requirements

11 Various ports promote and reward pro-active emission policies of shipping companies that choose to perform beyond legal requirements. They do so based on a number of established schemes.* Port incentive schemes are first and foremost voluntary instruments to reinforce pro-active environmental policies of shipping companies that can improve air quality in urban areas surrounding ports, reduce GHG emissions and/or other relevant local concerns (e.g. noise, waste).

12 A limiting factor of port incentive schemes is the fact that the cost of a port call constitutes only a relatively small fragment of the total operating costs of a commercial ship. Furthermore, port dues are only a small part of the total cost of a port call. Therefore, the reduction on port dues in cases of exceptional environmental performance is not by itself the main driver for improvement. It is clear however that as the number of ports offering incentives increases, more cost saving opportunities for frontrunner shipping companies are generated due to the scale effect. A close dialogue between ports and ship operators is important in order to take advantage of potential synergies.

* Such as the most commonly applied IAPH Environmental Ship Index (ESI), but also Green Marine, Green Award, Clean Cargo Working Group and Clean Shipping Index.

Port call optimization

13 Optimization of voyages and port calls can reduce GHG emissions and has a co-benefit on air pollutants through increased efficiency of operations, and can also improve safety. To achieve optimization, close cooperation and innovation among international shipping, ports, terminals, cargo owners and all other parties in the supply chain is essential. Under the international joint industry Port Call Optimization Task Force, international shipping and port stakeholders are working together to improve quality, availability and timelines of data exchange to allow better planning and optimization of port calls. This includes enhancing efficiency through just-in-time arrival mechanisms.

14 Functional definitions for nautical port information related to a ship's stay in port are essential to enhance the safe and efficient facilitation of maritime traffic. Benefits could include lower costs, lower air pollutants and GHG emissions, increased reliability and enhanced safety for shipping, terminals and ports. For achieving port call optimization it is fundamental to have standardized digital data available, allowing for real-time updates in the port call process. In addition, enhanced slot allocation policies and research into the use of innovative approaches to navigate vessels in coastal and confined waters will ensure readiness of port services and contribute to more efficient port calls.

IMO's role to support cooperation and coordination by other entities

15 As the forum that brings together participants from across the maritime sector, IMO is well-placed as a focal point to build bridges and boost cooperation among Member States, ports and the international shipping sector to address the important issue of climate change and shipping, where actions by all parties are important.

16 The successful Global Industry Alliance to Support Low Carbon Shipping (GIA) established under the GEF-UNDP-IMO Global Maritime Energy Efficiency Partnerships Project (GloMEEP Project) is an IMO initiative that has significantly raised awareness of port emissions and the development of reduction strategies. The aim of GIA is to identify and develop innovative solutions to address common barriers to the uptake and implementation of energy efficiency technologies for shipping and operational measures in the maritime transport system.

17 IMO has also already demonstrated the value of coordinated efforts through the work of GloMEEP. The overall goal of GloMEEP (<https://glomeep.imo.org/about/about-the-project/>) is to contribute to significant reduction of GHG emissions from international shipping via supporting 10 Lead Pilot Countries (LPCs) in taking a fast-track approach to pursuing relevant legal, policy and institutional reforms, driving national government action and industry innovation to support the effective implementation of IMO's energy efficiency requirements.

18 The recently finalized Ship and Port Emissions Toolkits were developed within the framework of the GloMEEP Project and in collaboration with IMarEST and IAPH. In particular, the Port Emissions Toolkit comprised of two guides – one on assessment of port emissions and one on development of port emissions reduction strategies – was well received. Since there was broad support for the continuation of the GloMEEP Project at MEPC 73, the co-sponsors are of the view that this work should continue.

19 Other current coordination work includes the World Ports Sustainability Program, International Taskforce Port Call Optimization, the International Collaboration on Ship Emissions Reduction (see document MEPC 73/7/1) and the World Port Climate Action Program.

Action requested of the Committee

20 The Committee is invited to consider the draft MEPC resolution on encouragement of cooperation between the port and shipping sectors to reduce GHG emissions from ships, as set out in annex to this document, with a view to adoption.

ANNEX

DRAFT MEPC RESOLUTION INVITING MEMBER STATES TO ENCOURAGE VOLUNTARY COOPERATION BETWEEN THE PORT AND SHIPPING SECTORS TO CONTRIBUTE TO REDUCING GHG EMISSIONS FROM SHIPS

THE MARINE ENVIRONMENT PROTECTION COMMITTEE

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

HAVING ADOPTED resolution MEPC.304(72) on the *Initial IMO Strategy on reduction of GHG emissions from ships* (hereinafter the Initial Strategy),

NOTING that the Initial Strategy includes a candidate measure to consider and analyse measures to encourage port developments and activities globally to facilitate reduction of GHG emissions from shipping, including provision of ship and shoreside/onshore power supply from renewable sources, infrastructure to support supply of alternative low-carbon and zero-carbon fuels, and to further optimize the logistic chain and its planning, including ports,

RECOGNIZING that many ports are already adopting measures to facilitate the reduction of GHG emissions from ships,

RECOGNIZING ALSO present-day initiatives for increasing cooperation between ports and other actors in the maritime industry in developing measures that aid the reduction of GHG emissions of the maritime transport system,

RECOGNIZING FURTHER the value of capacity-building, knowledge sharing and cooperation for all States, including developing countries, particularly least developed countries (LDCs) and small island developing States (SIDS),

HAVING AGREED the need to encourage further cooperation between ports and shipping to facilitate the reduction of GHG emissions from ships and the value of collaboration,

1 INVITES Member States to promote the consideration and adoption by ports within their jurisdiction, of (regulatory, technical, operational, and economic) measures to facilitate the reduction of GHG emissions from ships. Those could include but are not limited to the provision of: (a) Onshore Power Supply* (preferably from renewable sources); (b) safe and efficient bunkering of sustainable low- and zero-carbon fuels; (c) incentives promoting sustainable low- and zero-carbon shipping; and (d) support for the optimization of port calls.

2 INVITES Member States to facilitate the uptake of measures such as those identified in paragraph 1 through appropriate actions, which may include:

- .1 supporting the viability of business cases for ship and in-port renewable power-to-ship solutions and the use of these solutions;
- .2 encouraging cooperation between ports, bunker suppliers, shipping companies and all relevant levels of authority in addressing the supply and availability of sustainable low- and zero-carbon fuels, including the legal,

* Refer to MEPC.1/Circ.794 and further guidelines concerning the safe operation of onshore power supply under development by the Maritime Safety Committee.

regulatory and infrastructural barriers to the efficient and safe handling and bunkering of low- and zero-carbon fuels;

- .3 promoting existing incentive schemes that address GHG emissions and sustainability of international shipping and encouraging more incentive providers and shipping companies to join these; and
- .4 supporting the industry's collective efforts to improve quality and availability of data and develop necessary global digital data standards that would allow reliable and efficient data exchange between ship and shore as well as enhanced slot allocation policies thereby optimizing voyages and port calls and facilitating just-in-time arrival of ships.

3 INVITES ALSO Member States and international organizations to support collaboration, capacity-building and sharing of best practices through initiatives that bring together relevant stakeholders such as the GloMEEP project and its Global Industry Alliance to Support Low Carbon Shipping, and the Global MTTC Network (GMN);

4 INVITES FURTHER Member States and international organizations to bring to the attention of the Committee successful examples, including results, of initiatives taken in relation to port developments and activities to facilitate the reduction of GHG emissions from ships; and

5 REQUESTS Member States and international organizations to bring this resolution to the attention of port authorities, port and terminal operators, shipowners, ship operators, cargo handling and maritime service providers and other interested groups.
