

MARINE ENVIRONMENT PROTECTION
COMMITTEE
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Agenda item 7

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REDUCTION OF GHG EMISSIONS FROM SHIPS

Draft "Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG levy/contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies"

Submitted by Bahamas, Liberia and ICS

SUMMARY

Executive summary: In support of document ISWG-GHG 18/2/5 (Austria et al.), the annex to this document sets out draft "Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG levy/contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies". These guidelines would be adopted concurrently at MEPC/ES.2 with the MARPOL Annex VI amendments. While it is suggested that these guidelines do not need to be finalized until after MEPC 83, the Committee is nevertheless requested to make a number of important decisions, which are set out in document MEPC 83/7/6 (Bahamas et al.), with respect to the way forward and the content of the draft guidelines. This is so that when the MARPOL Annex VI amendments are approved for circulation, Parties to Annex VI will have a broad understanding of the final shape of the entire package to help expedite adoption at MEPC/ES.2.

Strategic direction, if applicable: 3

Output: 3.2

Action to be taken: Paragraph 6

Related documents: MEPC 82/17, MEPC 82/WP.9; MEPC 83/7/6, MEPC 83/7/7, MEPC 83/7/8; ISWG-GHG 16/2/2; ISWG-GHG 17/2/2, ISWG-GHG 17/2/5, ISWG-GHG 17/2/13; ISWG-GHG 18/2/5 and ISWG-GHG 18/2/7

Introduction

1 In document ISWG-GHG 18/2/5 (Austria et al.), the co-sponsors of that document (which include Bahamas, Liberia and ICS) set out a consolidated proposal, inter alia, for a maritime GHG emissions pricing mechanism, with the annex to the document containing draft MARPOL Annex VI amendments requiring an annual GHG levy/contribution to be made by ships per tonne of CO_{2e} emitted via an IMO GHG Strategy Implementation Fund.

2 To support uniform and effective implementation of the proposed IMO GHG Strategy Implementation Fund, the annex to this document, co-sponsored by the Bahamas, Liberia and ICS, sets out draft "Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG levy/contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies". It is suggested that these guidelines should be adopted via an MEPC resolution at MEPC/ES.2 concurrently with the amendments to MARPOL Annex VI. So far as possible, the terminology used is intended to be consistent with the draft regulatory text proposed in the annex to document ISWG-GHG 18/2/5 (Austria et al.) and the 2023 IMO GHG Strategy.

3 To demonstrate how these draft guidelines could be implemented, the Committee is invited to explore an updated prototype of the web-based GHG levy/contribution and reward system, submitted with document ISWG-GHG 18/2/7 (ICS), a link to which can be found [here](#).

4 The co-sponsors suggest, given the short amount of time available, that the Committee should focus on finalizing the text of draft amendments to MARPOL Annex VI for approval. The guidelines, such as those suggested in the annex to this document, do not need to be finalized until MEPC/ES.2.

5 Nevertheless, in document MEPC 83/7/6, supported by documents MEPC 83/7/7 and MEPC 83/7/8, the co-sponsors request the Committee to make some important decisions with respect to the way forward and the content of the draft guidelines. This is to support the approval of the amendments to MARPOL Annex VI at MEPC 83 and the finalization of the implementation guidelines at MEPC/ES.2, and to help ensure, when the amendments to MARPOL Annex VI are approved for circulation, that Parties to MARPOL Annex VI have a broad understanding of the final shape of the entire package to help expedite adoption at MEPC/ES.2.

Action requested of the Committee

6 The Committee is invited to:

- .1 consider the proposed draft "Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG levy/contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies", as set out in the annex to this document, with a view to their finalization and adoption at MEPC/ES.2 in October 2025; and
- .2 consider the decisions requested, as set out in document MEPC 83/7/6, with respect to the way forward and the content of these draft guidelines to be made at MEPC 83, whilst also taking account of the detailed comments provided in documents MEPC 83/7/7 and MEPC 83/7/8.

ANNEX

RESOLUTION MEPC.XXX(XX)

(Adopted on [same date as adoption of draft amendments for IMO Net Zero Framework])

[To be completed....]

ANNEX

[2025] GUIDELINES FOR THE ADMINISTRATION OF THE MARITIME GHG EMISSIONS PRICING MECHANISM BY THE IMO GHG STRATEGY IMPLEMENTATION FUND, AND FOR DETERMINING THE ANNUAL GHG LEVY/CONTRIBUTION AND REWARDS FOR THE USE OF ELIGIBLE ZNZ FUELS, ENERGY SOURCES AND TECHNOLOGIES

Collection of annual GHG levy/contributions from ships by the IMO GHG Strategy Implementation Fund

1 Before [January 2028], the Organization should establish a fully automated internet-based maritime GHG emissions pricing mechanism, for the collection of GHG levy/contributions by ships per tonne of CO₂ emitted, to be administered by the IMO GHG Strategy Implementation Fund.

2 The IMO GHG Strategy Implementation Fund should establish an account for each ship to which chapter [5] of MARPOL Annex VI applies, in accordance with the IMO ship identification scheme (resolution A.1078(28)) to which annual GHG levy/contributions can be transferred by the Company, as defined by paragraph 2.8 of regulation 2 of MARPOL Annex VI, that is responsible for that ship.

3 Pursuant to regulation 27 of MARPOL Annex VI, when a flag State Administration submits verified annual fuel consumption data to the Organization for each applicable ship registered with that flag State Administration, the Organization should ensure that on receipt of this data it should be automatically and immediately transferred to the IMO GHG Strategy Implementation Fund, and be accessible to the Company, as defined by paragraph 2.8 of regulation 2 of MARPOL Annex VI, via the account established for each ship referred to in paragraph 2 above.

4 The IMO GHG Strategy Implementation Fund should calculate and provide a notification to each ship of the annual GHG levy/contribution which is due within 24 hours of the verified annual fuel consumption data for that ship being provided by the flag State Administration to the Organization, pursuant to regulation 27 of MARPOL Annex VI, provided that verified data for the preceding calendar year is received by the Organization between 1 January and 30 April.

5 If the required annual GHG levy/contribution for the ship is received before 31 July, and there are no discrepancies, the IMO GHG Strategy Implementation Fund should ensure that the ship receives an annual Electronic Account Statement within 24 hours, to confirm that the required annual GHG levy/contribution for the ship has been received.

6 The IMO GHG Strategy Implementation Fund should allow the Company, as defined by paragraph 2.8 of regulation 2 of MARPOL Annex VI, that is responsible for making the annual GHG levy/contribution on behalf of the ship, to make a single annual contribution calculated from the data reported to the IMO Fuel Oil Data Collection System in accordance with regulation 27 of MARPOL Annex VI. In addition, the IMO GHG Strategy Implementation Fund should allow the Company the option to make GHG levy/contributions in advance, on a quarterly basis or as frequently as may be required, based on fuel oil purchased for consumption by the ship.

Disbursement of rewards to ships by the IMO GHG Strategy Implementation Fund

7 Each ship using an eligible zero or near-zero GHG fuel, technology and/or energy source, as determined by the Organization, should receive a reward, disbursed by the Organization via the IMO GHG Strategy Implementation Fund. The reward should be based on an initial minimum reward rate of at least US \$ [100] per tonne of CO₂e emissions prevented each calendar year, calculated on a life cycle basis, based on the CO₂e which would have been emitted had the ship consumed marine fuel with a well-to-wake (WtW) CO₂e conversion factor of 4.0¹. The equivalent reward rate per tonne of eligible ZNZ fuel consumed each calendar year is set out in paragraph 15 below, taking into account the 2024 LCA Guidelines².

8 The IMO GHG Strategy Implementation Fund should calculate and provide a notification to each ship of the annual reward, if any, which is due to be received within 24 hours of the verified annual fuel consumption data for that ship being provided by the flag State Administration to the Organization, pursuant to regulation 27 of MARPOL Annex VI, provided that data on the consumption of eligible ZNZ fuels during the preceding calendar year is received by the Organization between 1 January and 30 April.

9 If the reward for which the ship is due, for eligible ZNZ fuels consumed during the previous calendar year, is less than the annual GHG levy/contribution which is due for the same reference period, the reward should be deducted by the IMO GHG Strategy Implementation Fund from the required annual GHG levy/contribution, and presented on both the notification to the ship of the annual GHG levy/contribution due and on the annual Electronic Account Statement (when the contribution has been received) as a "net GHG levy/contribution".

Equivalent rate and value of GHG levy/contribution for different fuel types³

10 The annual GHG levy/contribution should be based on the lower of the tank-to-wake (TtW) or WtW CO₂e conversion factors⁴, as determined by the 2024 LCA Guidelines and will not be less than zero.

11 Pursuant to regulation XX of MARPOL Annex VI, and taking account of the 2024 LCA Guidelines, the annual GHG levy/contribution to be made for each ship to the Organization via the IMO GHG Strategy Implementation Fund should be calculated as set out below:

¹ 4.0 is the WtW CO₂e conversion factor for diesel/gas oil, subject to confirmation by the [202X] LCA Guidelines.

² [202X] LCA Guidelines, as may be amended.

³ The list of fuel types in these guidelines is for illustrative purposes only, and will need to be adjusted/expanded to reflect the exact descriptions in the [202X] LCA Guidelines, potentially including variants such as synthetic fuels and different types of biofuels.

⁴ Paragraph 4 of proposed Regulation X [*Economic mechanism(s) to incentivize the transition to net-zero*] as set out in document ISWG-GHG 18/2/5 (Austria et al.) stipulates that the annual GHG levy/contribution per tonne of CO₂e should be on a life cycle basis. To accommodate objections by many States to ships being charged for emissions which are the responsibility of other sectors, it is envisaged that annual GHG levy/contribution for most conventional fuel types would in practice be based on TtW conversion factors whilst rewards for the use of eligible ZNZs would be based on WtW conversion factors. However, if the WtW emissions of any fuel type are lower than the TtW emissions then the annual GHG levy/contribution will be calculated on a WtW basis, whilst the GHG levy/contribution for zero GHG fuels will be zero.

Rate of annual GHG levy/contribution: US\$ [18.75] per tonne of CO₂e emitted by the ship

For Diesel/Gas Oil, Light Fuel Oil (LFO) and Heavy Fuel Oil (HFO):⁵ equivalent to US\$ [60] per tonne of fuel consumed by the ship, based on a CO₂e conversion factor of [3.2]⁶ and an energy density ratio by mass compared to Diesel/Gas Oil of 100%.

For all other fuel types⁷:

For LNG: equivalent to US\$ [...] per tonne of LNG consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For 100% Bio-diesel: equivalent to US\$ [0] per tonne of bio-diesel consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For 24% Bio-diesel: equivalent to US\$ [...] per tonne of bio-diesel consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...] %

For Methanol: equivalent to US\$ [...] per tonne of methanol consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Green Methanol: equivalent to US\$ [0] per tonne of methanol consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Ammonia: equivalent to US\$ [...] per tonne of ammonia consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Green Ammonia: equivalent to US\$ [0] per tonne of ammonia consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Hydrogen: equivalent to US\$ [...] per tonne of hydrogen consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas oil of [...]%

For Green Hydrogen: equivalent to US\$ [0] per tonne of hydrogen consumed by the ship, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas oil of [...]%

12 In the case of a ship equipped with a dual fuel main or auxiliary engine, pursuant to regulation [X] of MARPOL Annex VI, the Organization should provide the IMO GHG Strategy Implementation Fund with verified fuel oil consumption data for both types of fuel, as provided to the IMO Fuel Oil Data Collection System by the Administration in accordance with regulation 27.3 of MARPOL Annex VI.

⁵ For the purpose of calculating the annual GHG levy/contribution, the CO₂e emissions of all types of liquid fuel oil are treated as being equal to diesel/gas oil.

⁶ 3.2 is the TtW CO₂e conversion factor for diesel/gas oil subject to confirmation by the [202X] LCA Guidelines.

⁷ List of fuel types, and their precise descriptions, to be decided by the Committee, taking account of the LCA Guidelines.

13 Notwithstanding the requirement under regulation [X] of MARPOL Annex VI for a ship to transfer an annual GHG levy/contribution to the IMO GHG Strategy Implementation Fund, the entity ultimately responsible for paying for the cost of the fuel oil should ultimately be responsible for meeting the cost of the contribution. When a ship is operating under a charter party clause which requires the charterer to pay for the fuel oil purchased for consumption on that ship, the cost of the associated GHG levy/contribution for that ship should be the responsibility of the charterer.

14 To avoid double charging for CO₂e emissions, both in measures adopted by the Organization and other regional or national measures, the mandatory annual GHG levy/contribution made by a ship via the maritime GHG emissions pricing mechanism established for international shipping should not be duplicative, and emissions or fuel consumption that forms the basis of such a GHG levy/contribution or charges for GHG emissions should be accounted for only once.

Reward to ships from IMO GHG Strategy Implementation Fund

15 Pursuant to regulation [X] of MARPOL Annex VI, and taking account of the 2024 LCA Guidelines, the reward for each ship using eligible zero or near-zero GHG fuels, energy sources or technologies⁸ should be calculated on a life cycle basis as follows:

Rate of reward: US\$ [100] per tonne of CO₂e emissions prevented compared to using a marine fuel with a WtW CO₂e conversion factor of 4.0⁹ as determined by the 2024 LCA Guidelines

For Bio-diesel Blend: equivalent to US\$ [...] per tonne of 100% biogenic component of bio-diesel blend consumed by the ship, calculated on a life cycle basis, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Green Methanol: equivalent to US\$ [...] per tonne of methanol consumed by the ship, calculated on a life cycle basis, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Green Ammonia: equivalent to US\$ [...] per tonne of ammonia consumed by the ship, calculated on a life cycle basis, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Green Hydrogen: equivalent to US\$ [...] per tonne of hydrogen consumed by the ship, calculated on a life cycle basis, based on a CO₂e conversion factor of [...] and an energy density ratio by mass compared to Diesel/Gas Oil of [...]%

For Carbon Capture: equivalent to US\$ [...] *[Methodology for calculating CO₂e emissions prevented to be developed in due course.]*

⁸ Eligible zero/near-zero GHG fuels and their precise description to be decided by the Committee. Other technologies and energy sources as may be decided by the Committee e.g. possibly onshore power supply, wind, solar nuclear, etc.

⁹ 4.0 is the WtW CO₂e conversion factor for diesel/gas oil, subject to confirmation by the [202X] LCA Guidelines.