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MAIN DECISIONS OF MEPC 83

The scope of the Marine Information Notice publication is to provide the Shipping Sector with information relevant to RINA, its organization, initiatives and services as well as to disseminate information of a general nature which in RINA view may be of interest. The information provided does not intend to be exhaustive and is given for reference only.

The 83rd session of the IMO Marine Environment Protection Committee (MEPC 83) was held from 7 to 11 April 2025. The main decisions taken are summarized below on the basis of the information obtained while following the debate.

In this issue:

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MEASURES TO REDUCE GHG EMISSIONS FROM SHIPS

Review of the short-term GHG reduction measures

Following discussions during the intersessional Working Group on Air Pollution and Energy Efficiency (held the week before MEPC 83) and at MEPC 83, the Committee – inter alia:

1. approved the draft amendments to MARPOL Annex VI - in view of their adoption at the MEPC extraordinary session in October 2025 - modifying the IMO Data Collection System (DCS) accessibility to allow Parties to access to the non-anonymized database containing data for all ships strictly to their analysis and considerations; and Administrations/ROs to access all the reported data of their own ships for all the preceding calendar years (Reg. 27);
2. amended the following CII-related Guidelines:
   - G3 Guidelines (Res. MEPC.400(83)) to define CII reduction (Z) for the years 2027 to 2030, which are 13.625% (2027); 16.250% (2028), 18.875% (2029) and 21.500% (2030). The reduction factor for years beyond 2030 will be further considered at a later stage;
   - 2024 SEEMP Guidelines (Res. MEPC.401(83)) to include the definition of “hours under way and not under way” in line with FA.5/Circ.42/Rev.3 (i.e. Under way is defined as the period between full ahead on passage (FAOP) and end of sea passage (EOSP) as per the guidelines for setting up a maritime single window) and editorial modifications in the Sample Form (i.e. replacing the term "boilers" by "fired boilers" in sections 4 and 6 and including a table for reporting of the method for measurement of total fuel consumption in section 6);
3. agreed with a work plan for Phase 2 of short-term measures review (after 1 January 2026), including – inter alia:
   - finalization of cgHRS metric for cruise ships by MEPC 84 (spring 2026);
   - finalization of the enhanced SEEMP framework (spring 2026);
   - considerations of development of other CII metrics (autumn 2026-2028);
   - considerations of proposals for CII corrective factors and/or reference line adjustments (spring 2027-2028).

Agreement on the mid-term GHG reduction measures

MEPC 83 reached an agreement on the mid-term GHG reduction measures and approved the draft of amendments to MARPOL Annex VI - including also a new Chapter 5 “Regulations on the IMO net-zero framework” - in view of their adoption by the MEPC extraordinary session in October 2025.

The new draft measures will be applicable to ships of 5.000 GT and above – excluding ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the flag State; not propelled ships; platforms regardless of their propulsion; and semi-submersible vessels - and require each ship to:

1. From 1 October 2027, have an account with the IMO GHG fuel intensity (GFI) Registry and by 30 June 2028 and by 30 June of each year thereafter, pay an annual administration fee which will be determined by the IMO Secretary-General to cover the administrative cost of the IMO GFI Registry.
2. On or before 1 January 2028, amend the SEEMP to include:
   - a description of the methodology that will be used to collect the data to comply with the new requirements (see bullets No.3 and 4); and
   - the processes that will be used to report the required data to the ship's Administration.
3. After the end of 2028 and after the end of each calendar year thereafter, calculate its attained annual GFI ($GFI_{attained}$) over a 12-month period (1 January to 31 December) expressed in grams of CO_{2eq} per unit of energy (gCO_{2eq}/MJ) on a well-to-wake basis (WtW).
4. At the end of each reporting period, determine its GFI compliance balance (expressed in tonne of CO_{2eq}), representing the measurement of the ship's GFI compliance status against the target annual GFI which consists of two tiers:
   - base target; and
   - direct compliance target.

   Both values are calculated considering the average GFI of international shipping in the year 2008 (GFI_{2008}) on a WtW basis (i.e. 93.3 $grCO_{2eq}/MJ$) and reducing it each year by annual factors (Z_T): one for the base target and one for the direct compliance target. So far, Z_T are defined for the years 2028-2035 (see table below) and Z_T for the base target for 2040 is set at 65%. By 1 January 2032, the Z-factor (Z_T) for the 2036 to 2040 shall be determined.

Year	Z_T for base target	Z_T for direct compliance target
2028	4.0%	17.0%
2029	6.0%	19.0%
2030	8.0%	21.0%
2031	12.4%	25.4%
2032	16.8%	29.8%
2033	21.1%	34.2%
2034	25.6%	38.6%
2035	30.0%	43.0%

   GFI compliance balance is calculated as the difference between the direct compliance target and $GFI_{attained}$, multiplied by total energy used.

   4.1 If its GFI compliance balance is equal to or greater than zero, the ship shall be considered in direct compliance and be eligible to receive surplus units for its positive compliance balance. A surplus unit credited to the ship account in the IMO GFI Registry has a validity of two calendar years and may be used for one of the following purposes:
   - be transferred to another ship to balance that ship's Tier 2 compliance deficit;
   - be banked for use in the following reporting periods; or
   - be voluntarily cancelled as a mitigation contribution.

4.2 If its GFI compliance balance is less than zero, determine its compliance deficit, calculating emissions that exceed one or both targets as follows:
- If direct compliance target < $GFI_{attained}$ ≤ base target
  Tier 1 compliance deficit is calculated as the difference between the direct compliance target and the $GFI_{attained}$, multiplied by total energy used.
- If $GFI_{attained}$ > base target
  - Tier 1 compliance deficit is calculated as the difference between the direct compliance target and the base target, multiplied by total energy used; and
  - Tier 2 compliance deficit is calculated as the difference between the base target and the $GFI_{attained}$, multiplied by total energy used.

4.3 Balance its Tier 1 compliance deficit through remedial units acquired by means of GHG emissions pricing contributions to the IMO Net-Zero Fund, priced at Tier 1 benchmark rates, which shall have until 2030 a price of US$ 100 per tonne of CO_{2eq} on a WtW basis.

4.4 Balance its Tier 2 compliance deficit through one or more of the following GFI compliance approaches:
- surplus units transferred from other ships;
- surplus units banked from previous reporting periods; and/or
- remedial units acquired by means of GHG emissions pricing contributions to the IMO Net-Zero Fund which will have higher prices in US$ per tonne of CO_{2eq} than Tier 1 (i.e. until 2030 US$ 380 per tonne of CO_{2eq} on a well-to-wake basis).

5. By 31 March of each year starting from 2029 (for the reporting period of 2028), electronically report to its Administration, or any organization duly authorized by it (RO), its $GFI_{attained}$, target annual GFI (both base target and direct compliance target) and GFI compliance balance. The Administration or its RO shall verify the data by 30 June of each year starting from 2029 (for the reporting period of 2028) and report the verified data to the IMO GFI Registry.
6. Within one month after the ship's verified data has been reported to the IMO GFI Registry or on 31 July at the latest, determine in the IMO GFI Registry its selected GFI compliance approach(es).
7. By 31 August of each year starting from 2029 (for the reporting period of 2028), be provided by the IMO GFI Registry with a ship account statement reflecting the transactions recorded.
8. By 30 September of each year starting from 2029 (for the reporting period of 2028), be provided with a Statement of Compliance issued by the Administration/RO.

In case of use of sustainable fuels, GHG emission factors and sustainability themes or aspects shall be certified by a Sustainable Fuels Certification Scheme/Standard (SFCS) which shall be recognized by the Committee. By 1 March 2027, a list of recognized SFCSs will be published and then periodically updated. The recognition of a SFCS shall be subject to renewal every five years and periodic review.

In case of use of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs), the ship may receive rewards from the IMO Net-Zero Fund. ZNZ shall include technologies, fuels and energy sources and be evaluated on a WtW basis. The GFI threshold for ZNZs shall be set at not greater than 19

gCO_{2eq}/MJ for an initial period until 31 December 2034, and from 1 January 2035, the threshold shall be set at not greater than 14 gCO_{2eq}/MJ. The Committee shall define the reward from the IMO Net-Zero Fund for each ZNZ not later than 1 March 2027 and every 5 years thereafter.

Despite the approval of the draft amendments, the necessary guidelines (e.g. SEEMP Guidelines, GFI Calculation Guidelines; Guidelines for the establishment, the administration and management of the IMO GFI Registry; Guidelines on the definition of ZNZs, of ZNZs rewards and the methodology to determine such rewards; Guidelines on requirements and procedures for recognition of certification schemes/standards and reporting of certification activities) are still to be developed to uniformly and clearly implement such new requirements and a work plan will be agreed in October 2025.

Guidelines for test-bed and onboard measurements of methane (CH_4) and/or nitrous oxide (N_2O)

The Guidelines (Res. MEPC.402(83)) specify the procedures for test-bed and onboard measurements and verification of CH_4 and/or N_2O emission values which can be accepted for an individual engine or for an engine group represented by the parent engine (but not for an engine family).

The measurements, calculations and reporting for CH_4 and N_2O emission values should be carried out in accordance with the NO_x Technical Code 2008 as amended, (NTC 2008) other than what specified in Appendix 1 of the Guidelines.

The applicant for the establishment of the emission values should prepare a CH_4 and/or N_2O File which should be submitted to the Administration for verification and contain the following information:

- a copy of the relevant engine test data (Appendix 2) and any additional data to fully define the engine performance and enable calculation of the gaseous emissions of CH_4 and/or N_2O. For test-bed measurements, this information can also be provided in the test report as referred to in section 5.10 of the NTC 2008.
- Where a CH_4 and/or N_2O reducing device or system is used, the CH_4 and/or N_2O File should contain documentation on the emission reduction device, including CH_4 and/or N_2O emission values and temperatures at both inlet and outlet of the reduction device.

On receipt of the CH_4 and/or N_2O File from the applicant and satisfactory completion of the verification, a Statement of Compliance for the CH_4 and/or N_2O emission values should be issued by the Administration.

AMENDMENTS TO MANDATORY INSTRUMENTS

Amendments to the NO_x Technical Code 2008 (engine re-certification)

The amendments to the NO_x Technical Code 2008 (Res. MEPC.398(83)) will enter into force on 1 September 2026 and include the re-certification procedure to be followed when an installed marine diesel engine has been subject to substantial modification or to a Tier to which the engine was not certified at the time of its installation (new para. 7.2).

Amendments to NO_x Technical Code 2008 (use of multiple engine operational profiles and clarifications of engine test cycles)

The amendments to the NO_x Technical Code 2008 (Res. MEPC.397(83)) will enter into force on 1 March 2027 and include requirements for:

1. the use of multiple engine operational profiles for a marine diesel engine, specifying in new Chapter 8 their acceptance, certification criteria and use;
2. engine test cycles (para.s 3.2 and 3.3).

Such requirements are applicable also for recertification following a substantial modification as follows:

- for engines installed on ships constructed on or after 1 January 2000, the version of the NO_x Technical Code that was used for the original certification is to be applied except if the engine was or is now equipped with an auxiliary control device or has multiple engine operational profiles. In these latter cases, the new draft amendments apply (new sections 2.5, 3.3 and new Chapter 8);
- for engines installed on ships constructed before 1 January 2000, the new draft amendments apply (new sections 2.5, 3.3 and new Chapter 8).

Despite its entry into force on 1 March 2027, the implementation of the requirements for the use of multiple engine operational profiles for a marine diesel engine is clarified as follows:

- For a new individual engine or a parent engine of an engine family or engine group that has not been previously certified, the new requirements apply no later than 1 January 2028, based on the issue date of the EIAPP Certificate for the individual engine or parent engine.
- In the case of a new member engine to an engine family or engine group for which the parent engine was certified before 1 January 2028, prior to the certification of that member engine it would need to be shown that the engine family or engine group met the new requirements at a date no later than 1 January 2030 based on the issue date of the EIAPP Certificate for that member engine;
- the new requirements do not apply to a marine diesel engine which already has an EIAPP Certificate except:
  - In the case of an engine that is subject to substantial modification on or after 1 January 2028, the new requirements would apply as specified in the definitions of "substantial modification" set out in amended paragraph 1.3.2 of the NOx Technical Code 2008 based on the issue date of the EIAPP Certificate for that engine.
  - In the case of an identical replacement engine installed on or after 1 January 2028, the version of the NOx Technical Code at the time of issuance of the EIAPP Certificate to the original engine applies, unless the replaced engine is already equipped with multiple engine operational profiles, in which case the provisions of the new chapter 8 of the NOx Technical Code 2008 apply.

DRAFT AMENDMENTS APPROVED IN VIEW OF THEIR ADOPTION IN OCTOBER 2025

In addition to the draft MARPOL Annex VI amendments on measures to reduce GHG emissions from ships (refer to section above), the following draft amendments were approved in view of their adoption in October 2025.

Draft amendments to MARPOL Annex VI (North-East Atlantic Ocean ECA)
The draft amendments to MARPOL Annex VI modify Regulations 13.5, 13.6, 14.3 and Appendix VII to designate the North-East Atlantic Ocean as an Emission Control Area as follows:

- from the entry into force of the amendments (expected in March 2027) as NO_x ECA for ships contracted for construction on or after 1 January 2027, or constructed on or after 1 July 2027, or delivered on or after 1 January 2031;
- from one year after the entry into force of the amendments (expected in March 2027) as SO_x ECA for all ships.

RECOMMENDATORY INSTRUMENTS ADOPTED/APPROVED

Interim guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships
The guidance has been issued (MEPC.1/Circ.917) as an interim solution pending the development of carriage requirements for bunker ships engaged in the carriage of blends of biofuels and MARPOL Annex I cargoes intended for use on board a ship. It clarifies the following:

- a "conventional bunker ship" refers to an oil tanker, as defined in regulation 1.5 of MARPOL Annex I, that is engaged in the transport and delivery of fuel oil for use by ships;
- conventional bunker ships may transport blends of not more than 30% by volume of biofuel, as long as all residues or tank washings are discharged ashore unless the oil discharge monitoring equipment (ODME) is approved for the biofuel blend(s) being shipped; and
- the international oil pollution prevention certificate (IOPP certificate) issued to a conventional bunker ship carrying blends between 25% and 30% by volume of biofuel or synthetic fuel does not need to be modified.

2025 Guidelines on Selective Catalytic Reduction (SCR) Systems
The SCR Guidelines have been amended to remove ambiguities and ensure consistent application, including clarifying the pre-certification procedure and developing additional guidance for certifying SCR arrangements where more than one engine is connected to a common SCR system.
In particular, the 2025 SCR Guidelines (Res. MEPC.399(83)) include – inter alia:

- clarifications that NOx measurement device, incorporated in an SCR feedback or feed-forward reductant control system, should not be required to be in compliance with appendix III of the NTC 2008 if the suitability of this NOx measurement device is proven by a comparison with measurements according to chapter 5 of NTC 2008 (para. 3.2.8.1);
- guidance on how to assess catalyst NOx reduction efficiency in cases where a feed-forward reductant control strategy is adopted without a NOx monitoring device (para. 3.2.8.2.3). Details are provided on how to perform periodical spot checks (i.e. at least 50% of the rated power (for propulsion engines, 75% is preferable)) and on the items to be included in the procedure;
- criteria to accept alternative strategies on monitoring the catalyst condition/degradation (paragraph 3.2.8.3); and
- description of a method of storing records clarifying which kind of records should be included for the purpose of maintenance, surveys and inspections (new para. 3.2.13).

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The Guidelines will be applicable to:

- SCR systems installed on ships the keels of which are laid or which are at a similar stage of construction on or after 1 November 2025; or
- SCR systems installed on ships the keels of which are laid or which are at a similar stage of construction before 1 November 2025 which have a contractual delivery date of SCR systems to the ship on or after 1 May 2026; or
- in the absence of a contractual delivery date, the actual delivery of the SCR system to the ship on or after 1 May 2026.

OTHER RESOLUTIONS AND CIRCULARS ADOPTED/APPROVED

- Res. MEPC.403(83) - Amendments to the 2022 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)
- Res. MEPC.404(83) - 2025 Action Plan to Address Marine Plastic Litter from Ships
- Res. MEPC.405(83) - Amendments to the 2023 Guidelines for the development of the Inventory of Hazardous Materials (Res. MEPC.379(80))
- MEPC.1/Circ.916 - Methodology for submission, scientific review and recommendation of proposed default emission factors by GESAMP-LCA WG
- MEPC.1/Circ.918 - Guidance on in-water cleaning of ships' biofouling
- MEPC.1/Circ.919 - Rules of procedure of the marine environment protection committee
- MEPC.2/Circ.30/Rev.1 - Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code

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