

NEWS BRIEF  
**MEPC 83**





The IMO Marine Environment Protection Committee (MEPC) held its 83rd session from April 7 to 11, 2025. This Brief provides an overview of the more significant issues progressed at this session.

## KEY DEVELOPMENTS

- Approval of the mid-term GHG reduction measures
- Review plan of the short-term GHG reduction measures
- Review of the Ballast Water Convention
- Approval of the North-East Atlantic ECA
- 2025 action plan to address marine plastic litter from ships

## ABS RESOURCES

- ABS Regulatory News ([link](#))
- ABS Global Sustainability Center ([link](#))
- ABS EEXI Services ([link](#))
- ABS CII Services ([link](#))
- ABS Simulation-based Energy Efficiency Evaluation Service (SIM EEE) ([link](#))
- ABS Greenhouse Gas Inventory and Carbon Accounting ([link](#))
- ABS Rules and Guides ([link](#))

## WORLD HEADQUARTERS

1701 City Plaza Drive  
Spring, TX 77389 USA  
P 1-281-877-6000  
F 1-281-877-5976  
ABS-WorldHQ@eagle.org  
www.eagle.org

© 2025 American Bureau of Shipping.  
All rights reserved.

## CONTENTS (CLICK TO FOLLOW)

### IMO STRATEGY ON GHG EMISSIONS

- **Approval of the mid-term greenhouse gas (GHG) reduction measures – Net-Zero Framework**
- **Terms of Reference for the Intersessional Working Groups ISWG-GHG 20 & 21**
- **Terms of Reference for the Fifth GHG Study**
- **Further development of the Life Cycle GHG Assessment (LCA) framework**

### AIR POLLUTION AND ENERGY EFFICIENCY

- **Review of the short-term GHG measure**
- **Annual carbon intensity and fleet efficiency (Reporting year: 2023)**
- **Guidelines for test-bed and onboard measurements of methane (CH<sub>4</sub>) and/or nitrous oxide (N<sub>2</sub>O)**
- **Work plan on the development of regulatory framework for the use of Onboard Carbon Capture and Storage (OCCS)**
- **Proposals and information related to IMO DCS**
- **Proposals and information related to the EEDI and EEXI framework**
- **Fuel oil sampling and bunkering procedures**
- **Use of multiple engine operational profiles for a marine diesel engine**
- **Certification of an engine subject to substantial modification or being certified to a tier to which the engine was not certified at the time of its installation**

### BALLAST WATER MANAGEMENT AND MARINE BIOSAFETY

- **Review of the Ballast Water Management Convention**

### MARINE BIOSAFETY

- **Developments of guidance on matters relating to in-water cleaning**
- **Amendments to the 2023 Guidelines for the development of the IHM**

### DESIGNATION OF SPECIAL AREAS, EMISSIONS CONTROL AREAS (ECA)

- **Approval of North-East Atlantic Ocean as an ECA for nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and particulate matter (PM)**
- **Proposal for the designation of the Nasca Ridge National Reserve and Grau Tropical Sea National Reserve as Particularly Sensitive Sea Area (PSSA)**

### OTHER DEVELOPMENTS

- **2025 Action Plan to Address Marine Plastic Litter from Ships**
- **Reduction of Underwater Noise from Commercial Shipping**
- **Interim Guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships**



## IMO STRATEGY ON GHG EMISSIONS

### Approval of the Mid-Term GHG Reduction Measures

#### Mid-Term GHG Reduction Measures

MEPC 80 had approved the *2023 IMO Strategy on Reduction of GHG Emissions from Ships*, which revised the initial GHG Reduction strategy from 2008, and set out the strategy for achieving decarbonization of the shipping industry by 2050.

#### Revised GHG Strategy

With Respect to 2008 Levels

##### Carbon Intensity of the Ship

Decline through further phases of the EEDI

##### Carbon Intensity of international Shipping

40% reduction by 2030

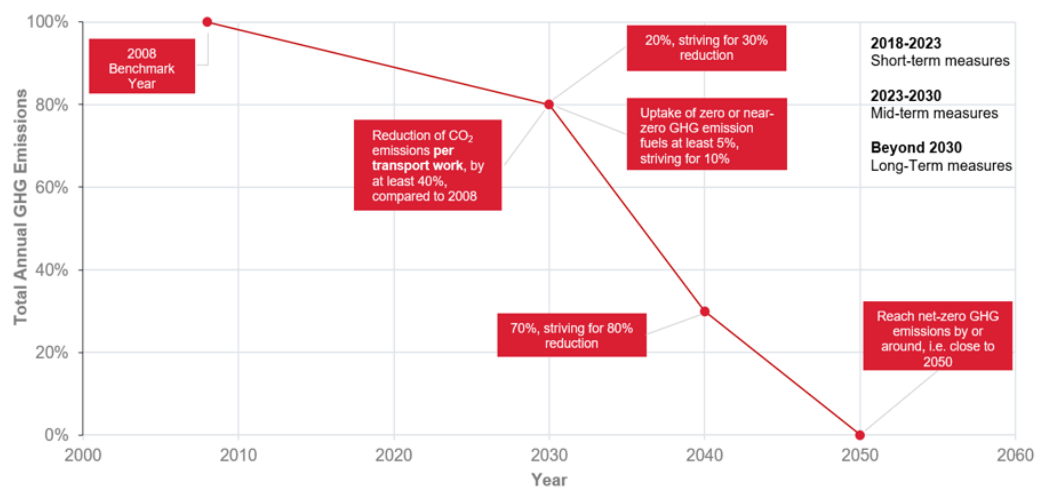
##### Uptake of (near) zero GHG emission technologies/fuels

5%, striving for 10% by 2030

##### Total Annual GHG Emissions

- 20%, striving for 30% by 2030
- 70%, striving for 80% by 2040
- Net zero by or around, i.e. close to 2050

#### IMO GHG Reduction Targets



To achieve the targets of the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, the IMO set out to develop measures to reduce GHG emissions from international shipping as soon as possible, by promoting the energy transition of shipping and providing the world fleet with a needed incentive while contributing to a level playing field and a just and equitable transition.

#### IMO Net-Zero Framework

The Committee approved the Mid-Term GHG Reduction measures – IMO Net-Zero Framework in the form of a new chapter 5 in MARPOL Annex VI, providing the regulatory framework for the reduction of GHG emissions, along with the necessary amendments to the other relevant chapters of MARPOL Annex VI.

#### Key elements of the approved Regulations:

##### 1. Application

The Regulation will apply to all ships of 5,000 gross tonnage and above, except

- ships solely engaged in voyages within national waters, ships not propelled by mechanical means, platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion, and semi-submersible vessels.

##### 2. Attained annual GHG fuel intensity (attained annual GFI)

The attained annual GHG fuel intensity (Attained GFI), expressed in gCO<sub>2eq</sub>/MJ of all fuels used on board in a calendar year on a Well-to-Wake (WtW) basis, must be below the target annual GHG fuel intensity (target annual GFI)



### 3. Sustainable Fuels Certification Schemes

The GHG intensity of a fuel shall be calculated using GHG emission factors and take into account all relevant metrics and indicators for each sustainability theme or aspect of a fuel as documented on the Fuel Lifecycle Label(s) (FLL), to be certified, as appropriate, by a recognized Sustainable Fuels Certification Scheme/Standard (SFCS).

### 4. Target annual GHG fuel intensity (target annual GFI)

The target annual GFI ( $GFI_T$ ) of a ship is to consist of two tiers:

- .1 A base target annual GFI (base target); and
- .2 A direct compliance target annual GFI (direct compliance target)

The  $GFI_T$  for each ship is to be determined as follows:

$$GFI_T = (1 - Z_T/100) \cdot GFI_{2008} \text{ where,}$$

- a.  $GFI_{2008}$  is the GFI reference value equivalent to **93.3 gCO<sub>2</sub>eq/MJ** (representing the average GFI of international shipping in 2008)
- b.  $Z_T$  is the annual GFI reduction factor as compared to the GFI reference value:

| Year <sub>T</sub> | Z <sub>T</sub> for Base target | Z <sub>T</sub> 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              | 21.2%                          | 34.2%                                       |
| 2034              | 25.6%                          | 38.6%                                       |
| 2035              | 30.0%                          | 43.0%                                       |

By 1 January 2032, the Committee shall determine the Z-factor ( $Z_T$ ) for the base target and direct compliance target for the years 2036 to 2040. The 2040  $Z_T$  for the Base target shall be set at 65 percent.

### 5. Annual GFI compliance approaches

At the end of each reporting period, each ship shall determine its GFI compliance balance, as follows:

$$\text{GFI compliance balance (expressed in [tonne of CO}_2\text{eq])} = (\text{Direct compliance target annual GFI} - \text{Attained annual GFI}) \times \text{Energy}_{\text{total}}$$

Ships with a GFI compliance balance equal to or greater than zero shall be considered in direct compliance and be eligible to **receive surplus units for its positive compliance balance**.

#### Surplus Units

- The amount of surplus units a ship in direct compliance is eligible to receive shall be equal to its positive compliance balance, expressed in tonne of CO<sub>2</sub>eq
- A surplus unit may be used once for one of the following:
  - .1 Transfer to another ship to balance that ship's Tier 2 compliance deficit
  - .2 Banked for use in the following reporting periods **with a validity of two years**; or
  - .3 Voluntarily cancelled as a mitigation contribution

A ship with a GFI compliance balance less than zero is to achieve compliance by balancing its deficit in accordance with the following GFI compliance approaches:

- a. Balance its Tier 1 compliance deficit through remedial units acquired, priced at Tier 1 benchmark rates
- b. Balance its Tier 2 compliance deficit through one or more of the following GFI compliance approaches:
  - .1 surplus units transferred from other ships
  - .2 surplus units banked from previous reporting periods; and/or
  - .3 remedial units acquired, priced at Tier 2 benchmark rates

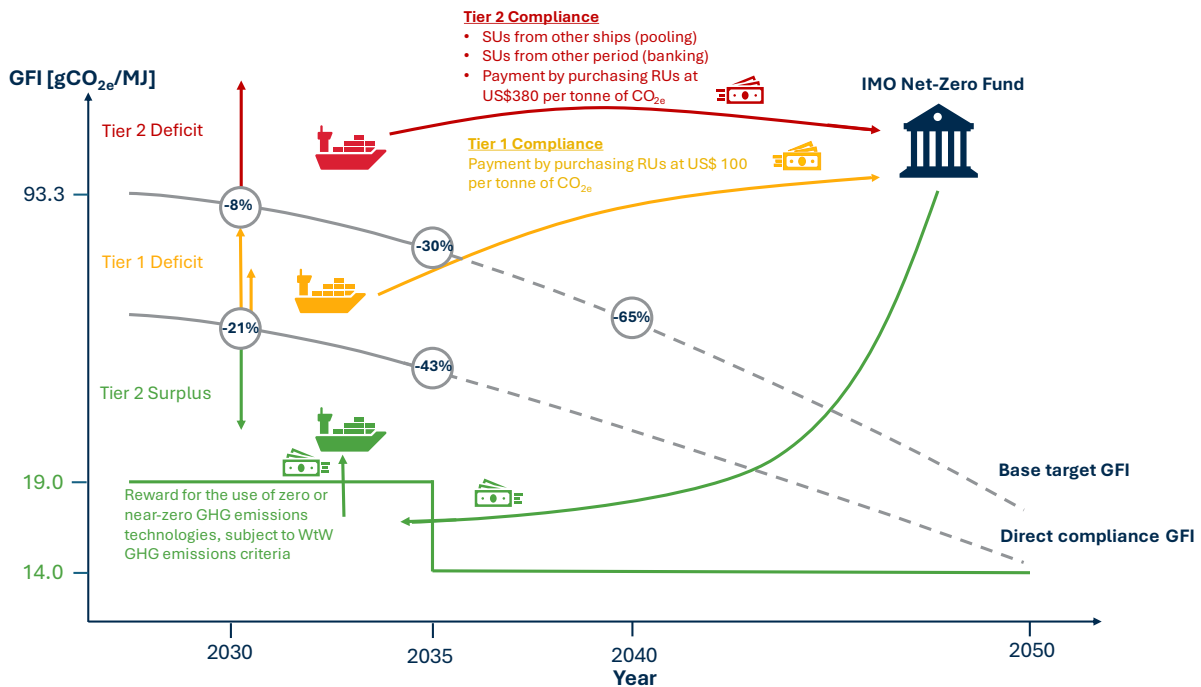


### Remedial Units

For the reporting periods 2028 to 2030, the initial price of the remedial units will be:

- For **Tier 1, United States (U.S.)** \$100 per tonne of CO<sub>2eq</sub> on a WtW basis.
- For **Tier 2, U.S.** \$380 per tonne of CO<sub>2eq</sub> on a WtW basis.

By 1 January 2028, the Committee shall determine the mechanism for reviewing and defining the price of a Tier 1 and Tier 2 remedial unit for the reporting periods starting 2031 and onwards.



## 6. Reporting and verification of the annual GFI

After the **end of the year 2028**, and after each reporting period the following actions shall be carried out:

- Within three months** – The ship shall report to the Administration or Recognized Organization (RO) the attained annual GFI, target annual GFI and GFI compliance balance, together with the data collected by standardized format for verification
- Within six months** – The Administration, or RO is to verify and report the verified data to the IMO GFI Registry
- By 31 July** – The ship is to determine and perform in the IMO GFI Registry its selected GFI compliance approach(es)
- By 31 August** - The IMO GFI Registry shall issue, for each ship account and reporting period, a ship account statement reflecting the transactions recorded
- By 30 September** – The Administration, or RO is to issue a Statement of Compliance related on the annual GFI attained

## 7. IMO GFI Registry

Each ship is to have an account with the IMO GFI Registry by 1 October 2027.

The IMO GFI Registry is to record and provide account statements on surplus units credited for direct compliance, banked or transferred surplus units, cancelled surplus units to balance its Tier 2 compliance deficit, and/or credit remedial units to a ship account, and cancel the remedial unit following proof of payment. The IMO GFI Registry is further to record information on the verified attained annual GFI, total energy consumption, total energy consumption of each zero or near-near technologies and fuels (ZNZs), GHG



emissions avoided by the uptake of ZNZs, and Statement of Compliance related to the annual GHG fuel intensity.

**8. Uptake of ZNZ GHG emission technologies, fuels and/or energy sources**

Zero or near-zero 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<sub>2eq</sub>/MJ** for an initial period until **31 December 2034**
- **14.0 gCO<sub>2eq</sub>/MJ** from **1 January 2035**.

Ships may receive rewards from the IMO Net-Zero Fund for the ZNZs used. The reward, and the methodology to determine such reward is to be defined no later than 1 March 2027 and every five years thereafter by the Committee.

**9. The IMO Net-Zero Fund**

The IMO Net-Zero Fund is to receive and manage GHG emissions pricing contributions made by ships, and disburse collected revenue in accordance with provisions on eligible entities.

**10. Disbursement of revenue**

The IMO Net-Zero Fund shall disburse collected revenue for the following purposes:

- a. Rewards for the use of ZNZs
- b. Promoting a just and equitable transition in States by facilitating environmental and climate protection, adaptation and resilience building, paying particular attention to the needs of developing countries, in particular least developed countries (LDCs) and small islands developing States (SIDS).

Relevant chapters of MARPOL Annex VI related to the new Chapter V Net-Zero Framework related to definitions, survey, certification and means of control, etc., are amended as appropriate.

Guidelines are to be developed for the operationalization of the Net-Zero Framework related to:

- Calculation methodologies for GFI and GFI compliance approaches
- Certification schemes
- Reporting and verification
- Administration and management of the IMO GFI registry
- Definition of ZNZs
- Governing provisions of the Net-Zero Fund
- Amendments to existing LCA guidelines, SEEMP guidelines, biofuels and Port State Control

**Next steps:** The Mid-Term GHG Reduction Measures - IMO Net-Zero Framework are to be submitted to the extraordinary MEPC session in October 2025 for adoption.

**Terms of Reference for the Fifth GHG Study**

The Committee considered the draft Terms of Reference for the Fifth GHG Study, associated logistical and administrative arrangements, and adjusted timelines.

The indicative outline of the Terms of Reference include:

1. Inventory of GHG emissions from international shipping 2018-2025
2. Estimates of carbon intensity
  - 2.1 Carbon intensity estimates for the years 2018-2025
  - 2.2 Emission estimates for the year 2008
3. Scenarios for future international shipping emissions 2025-2050

Suggested timelines:

|                    |  |
|--------------------|--|
| <b>Spring 2025</b> | MEPC 83 to further develop draft terms of reference for approval by MEPC 84  |
| <b>Spring 2026</b> | MEPC 84 to approve terms of reference and request the Secretariat to launch the call for nominations of members for a steering committee |



|                       |  |
|-----------------------|--|
| <b>June-July 2026</b> | Tender evaluation by the steering committee  |
| <b>September 2026</b> | Contract signed  |
| <b>Summer 2027</b>    | MEPC 86 to consider an interim report on the Fifth IMO GHG Study (initiation of the review of the 2023 IMO GHG Strategy) |
| <b>Spring 2028</b>    | MEPC 87 to consider the final report on the Fifth GHG Study with a view to approval                                      |

### **Further Development of the Life Cycle GHG Assessment (LCA) Framework**

The Correspondence Group on Development of the LCA Framework further considered "Other social and economic sustainability themes/aspects of marine fuels" for possible inclusion in the Guidelines.

The following final draft principle/objective for each theme/aspect were proposed to be included:

1. Land use rights: Production of sustainable marine fuels should respect formal and customary land rights, including Indigenous and/or customary rights
2. Water use rights: Production of sustainable marine fuels should respect prior formal or customary water use rights, including Indigenous and/or customary rights
3. Local and social development: Production of sustainable marine fuels should respect and contribute to social and economic development of local and rural communities
4. Human and labor rights: Production of sustainable marine fuels should respect human and labor rights
5. Food security: Production of sustainable marine fuels should promote food security

The Correspondence Group is to further consider possible ways to refine metrics/indicators, based on those highest rated possible indicators for the above themes/aspects.



## AIR POLLUTION AND ENERGY EFFICIENCY

### Review of the Short-Term GHG Reduction Measure

CII reduction (Z) factors for 2027 to 2030

Continuing on the work carried out by the Intersessional Working Group on Air Pollution and Energy Efficiency (ISWG-APEE 1), the Committee concluded on the CII reduction (Z) factors for 2027 to 2030. In the discussion, multiple delegations endorsed a Z factor of at least 21.5 percent for 2030 relative to 2019, viewing it as the minimum necessary to cut CO<sub>2</sub> emissions per transport work by at least 40 percent, compared to 2008, and in this regard an annual increment of 2.625 percent would be adequate.

Noting the broad support, the Committee adopted resolution MEPC.400(83) – *Amendments to the 2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factor guidelines, G3)*.

| Year | Reduction factor relative to 2019 |
|------|-----------------------------------|
| 2023 | 5%                                |
| 2024 | 7%                                |
| 2025 | 9%                                |
| 2026 | 11%                               |
| 2027 | 13.625%                           |
| 2028 | 16.25%                            |
| 2029 | 18.875%                           |
| 2030 | 21.5%                             |

Table 1: Reduction factor (Z%) for the CII relative to the 2019 reference line

### IMO DCS Accessibility

At MEPC 81, the Committee had identified the IMO DCS accessibility as one of the challenges to be considered in Phase 1 and Phase 2 of the review of the short-term GHG reduction measures. In this regard and building on the work carried out by ISWG-APEE 1, the Committee approved the draft amendments to Regulation 27 of MARPOL Annex VI, granting access to MARPOL Annex VI Parties to a non-anonymized database for their analysis and review, while providing the public with access to an anonymized version. The Committee also recognized the need to enhance anonymization measures further and encouraged Member States and international organizations to submit specific proposals to a future session.

### Work Plan for Phase 2 of the Review of the Short-Term GHG Reduction Measures

At MEPC 81, the Committee agreed on advancing the review of the short-term GHG reduction measures by adopting a two-phase approach. Phase 1, addressing urgent issues like the CII reduction (Z) factors, would conclude prior to 1 January 2026, while other matters, requiring deeper analysis or potentially clashing with developing mid-term measures, would be tackled after that date, depending on their urgency and complexity, in phase 2.

Phase 1 concluded at the current session with a consensus on the CII reduction (Z) factors, prompting the Committee to evaluate the work plan for Phase 2. Consequently, the Committee completed the work plan for Phase 2 of the review of the short-term GHG reduction measure, outlined as follows:

| Date        | Meeting | Objectives  |
|-------------|---------|---|
| Spring 2026 | MEPC 84 | 1. Further consider and finalize the development of the enhanced SEEMP framework. |





|             |         |   |
|-------------|---------|---|
|             |         | <ol style="list-style-type: none"> <li>2. Further consider and finalize the development of the cgHRS metric for cruise passenger ships.</li> <li>3. Consider proposals to ensure synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework (e.g. energy-based approach) with a view to finalization as soon as possible.</li> </ol>   |
| Autumn 2026 | MEPC 85 | <ol style="list-style-type: none"> <li>1. Further consider the development of other CII metrics.</li> <li>2. Further consider proposals to ensure synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework (e.g. energy-based approach) with a view to finalization as soon as possible.</li> </ol>  |
| Spring 2027 | MEPC 86 | <ol style="list-style-type: none"> <li>1. Further consider the development of other CII metrics.</li> <li>2. Consider further concrete proposals for CII correction factors and/or reference line adjustments, if any.</li> <li>3. Further consider proposals to ensure synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework (e.g. energy-based approach) with a view to finalization as soon as possible.</li> </ol>  |
| Spring 2028 | MEPC 87 | <ol style="list-style-type: none"> <li>1. Conclude the consideration of other CII metrics.</li> <li>2. Further consider and finalize the development of revised reference lines, as appropriate.</li> <li>3. Finalize Phase 2 of the review.</li> <li>4. Further consider proposals to ensure synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework, with a view to finalization as soon as possible, and develop a possible way forward for the IMO carbon intensity/energy efficiency framework beyond 2030, as appropriate.</li> </ol> |

#### Amendments to the 2024 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)

While reviewing the work plan for Phase 2 of the review of the short-term GHG reduction measure, support was noted for the proper development of other CII metrics in future sessions, such as the sea voyage-propulsion based CI metric, a precise definition of “under way” aligned with existing IMO terminology should be included in the SEEMP Guidelines. Finalizing the amendments to the SEEMP Guidelines at this session was considered essential to ensure consistent data reporting, especially since more detailed data collection and submission to the IMO DCS would commence on 1 January 2026.

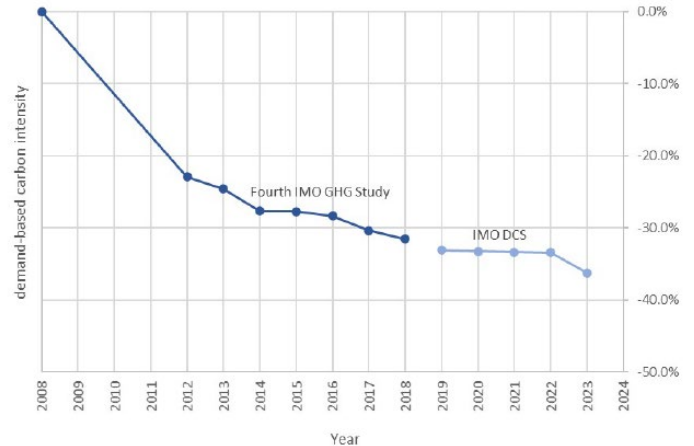
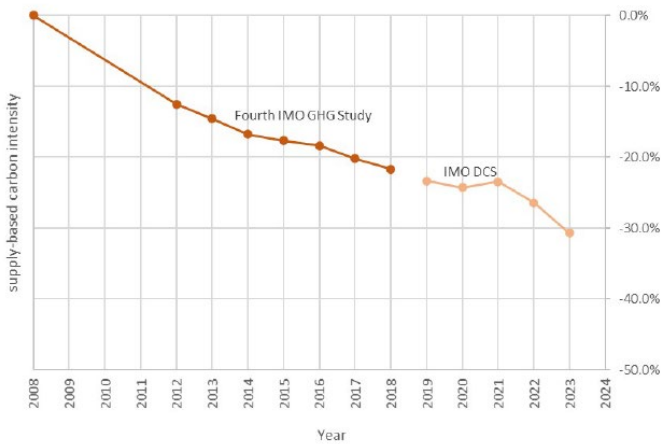
Consequently, the Committee adopted resolution MEPC.401(83) – *Amendments to the 2024 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)* .



### Annual Carbon Intensity and Fleet Efficiency (Reporting Year: 2023)

As per Regulation 27.10 of MARPOL Annex VI, but also Paragraph 1.5 of the CII Reduction Factors Guidelines (G3), the IMO should ongoingly track progress in annual carbon intensity improvements by employing both demand-based and supply-based metrics, alongside the yearly analysis of fuel consumption data submitted to IMO DCS.

| Year | Annual average carbon intensity and percentage change in carbon intensity compared to 2019 |       | Estimated EEOI           |       | IMO DCS Fuel Consumption Report to Committee |
|------|--|-------|--------------------------|-------|--|
|      | AER [gCO <sub>2</sub> /dwt/nm]   |       | [gCO <sub>2</sub> /t/nm] |       | Total fuel consumption [MT]                  |
| 2019 | 5.90   | 0.0%  | 10.94                    | 0.0%  | 213 million                                  |
| 2020 | 5.83   | -1.2% | 10.92                    | -0.2% | 203 million                                  |
| 2021 | 5.89   | -0.1% | 10.90                    | -0.4% | 212 million                                  |
| 2022 | 5.66   | -4.1% | 10.89                    | -0.5% | 213 million                                  |
| 2023 | 5.32   | -9.7% | 10.42                    | -4.8% | 211 million                                  |



The average supply-based and demand-based carbon intensity in 2023, has reduced by 31.0 percent and 36.5 percent respectively, compared to 2008, where the greatest decrease can be observed in 2023, which could be attributed to several reasons such as the application of the short-term measures (EEXI and CII) in 2023, and the change in efficiency driven by the change in shipping routes due to the geopolitical events leading to longer voyages.

### Guidelines for Test-Bed and Onboard Measurements of Methane (CH<sub>4</sub>) and/or Nitrous Oxide (N<sub>2</sub>O)

At MEPC 81, the Committee established a Correspondence Group (CG) and instructed it to consider the development of a framework for the measurement and verification of actual tank-to-wake methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emission factors and C<sub>slip</sub> value for energy converters and submit a written report to the current session. Continuing the work carried out by the CG, the Committee adopted resolution MEPC.402(83) – *Guidelines for test-bed and onboard measurements of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions from marine diesel engines*. The purpose of the Guidelines is to specify the protocol for test-bed and onboard measurements, calculation and reporting of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emission values from marine diesel engines, as well as their documentation and verification. Shipping companies may diverge from the default methane and nitrous oxide emissions factors as defined in the 2024 LCA Guidelines, following the procedures described in the adopted guidelines.

### Work Plan on the Development of Regulatory Framework for the use of Onboard Carbon Capture and Storage (OCCS)



Building on the work carried out by the CG, the Committee discussed further the work plan on the development of a regulatory framework for the use of Onboard Carbon Capture and Storage (OCCS). During discussions, several delegations expressed strong support for prioritizing the development of a regulatory framework for OCCS within the IMO's GHG reduction strategy, along with the development of guidelines on testing, survey and certification of OCCS, whereas all views expressed endorsed continued efforts on OCCS, either to promote its adoption and to ensure environmental integrity.

Noting support that work on OCCS should begin promptly, targeting completion by 2028 at the latest, the Committee finalized the work plan on the development of a regulatory framework for the use of OCCS, with the exception of matters related to accounting of CO<sub>2</sub> captured on board ships.

### **Proposals and Information Related to IMO DCS**

The Committee considered a proposal advising recategorizing the liquid petroleum fuel types in the EEDI Guidelines based solely on their sulfur content and discontinuing the use of the ISO 8217 specification to define these fuel types in the EEDI Guidelines as also initiating a comprehensive study into their actual carbon content.

Noting the divergent views expressed, the Committee invited member States and international organizations to submit proposals to a future session on possible terms of reference for a comprehensive study into the actual carbon contents of current liquid petroleum fuel types.

### **Proposals and Information Related to the EEDI and EEXI Framework**

The Committee considered two proposals advising of updating the *2022 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)* to make reference to the latest ISO Standard on the *Guidelines for the assessment of speed and power performance by analysis of speed trial data* (ISO 15016:2025) and to the [2024 update of the ITTC Recommended Procedures and Guidelines concerning the determination and verification of the EEDI requirements](#), and agreed to incorporate both the 2025 ISO Standard and ITTC Recommended Procedure for the conduct of sea trials in the EEDI survey and certification guidelines, while permitting the use of the 2015 ISO standard for ships undergoing sea trials before 1 May 2026, to facilitate a seamless transition.

In this regard, the Committee adopted resolution MEPC.403(83) – *Amendments to the 2022 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI)*.

### **Fuel Oil Sampling and Bunkering Procedures**

On the basis of a study highlighting inconsistent fuel oil sampling and bunkering practices by suppliers, the Committee evaluated two proposals to address these issues, suggesting either making the IMO fuel oil sampling guidelines mandatory or introducing a mandatory licensing scheme for fuel oil suppliers under MARPOL Annex VI. Recognizing the value in both proposals, but also the concerns with regard to converting the fuel oil sampling guidelines to mandatory instruments, the Committee invited member States and international organizations to submit information on the experience gained from the implementation of the *Guidance for best practice for Member State/coastal State* (MEPC.1/Circ.884/Rev.1).

### **Use of Multiple Engine Operational Profiles for a Marine Diesel Engine**

MEPC 82 had approved draft amendments to NO<sub>x</sub> Technical Code (NTC 2008) concerning the use of multiple engine operational profiles for a marine diesel engine, including clarifying engine test cycles, with a view to adoption at this session. The Committee also considered a proposal, advising to specify by when the new requirements are to be implemented with respect to a newly manufactured engine that is an individual engine or part of a new engine family or engine group, or a newly manufactured engine that is part of an existing engine family or engine group. In this regard, the Committee adopted resolution MEPC.397(83) – *Amendments to the NO<sub>x</sub> Technical Code 2008 (Use of multiple engine operational profiles for a marine diesel engine, including*



*clarifying engine test cycles*), with an entry into force date on 1 March 2027. The said amendments shall enter into force based on the following date's criteria:

- For a new individual engine or a parent engine of an engine family or engine group that has not been previously certified, these should apply no later than 1 January 2028, based on the issue date of the EIAPP Certificate for the individual 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 have to be shown that the engine family or engine group complied with the said amendments no later than 1 January 2030, based on the EIAPP Certificate for that member engine.
- These should 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 said amendments would apply as specified in the definitions of “substantial modification” set out in amended paragraph 1.3.2 of the NO<sub>x</sub> Technical Code 2008, based on the issue date of the EIAPP Certificate of that engine.
  - In the case of an identical replacement engine installed on or after 1 January 2028, the version of the NO<sub>x</sub> Technical Code 2008 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 NO<sub>x</sub> Technical code apply.

### **Certification of an Engine Subject to Substantial Modification or Being Certified to a Tier to Which the Engine was not Certified at the Time of its Installation**

MEPC 82 had approved draft amendments to NO<sub>x</sub> Technical Code (NTC 2008) to improve the recertification of existing diesel engines on board ships for retrofitting with modern engine technologies when improving their energy efficiency, whilst maintaining the levels for nitrogen oxide emission regulations, with a view to adoption at this session. In this regard, the Committee adopted resolution MEPC.398(83) – *Amendments to the NO<sub>x</sub> Technical Code 2008 (Certification of an engine subject to substantial modification or being certified to a tier to which the engine was not certified at the time of its installation)*, with an entry into force date on 1 September 2026, inviting also member States for an early application.

### **2025 Guidelines on Selective Catalytic Reduction (SCR) Systems**

PPR 12 finalized the 2025 Guidelines on Selective Catalytic Reduction (SCR) Systems and submitted them to the Committee for adoption. These Guidelines seek to resolve ambiguities and ensure consistent application of the 2017 SCR Guidelines. To address feasibility concerns with the 12-month spot check requirement for auxiliary engines, the test condition has been revised from 75 percent of rated power to 50 percent of rated power.

The Committee adopted resolution MEPC.399(83) – *2025 Guidelines on Selective Catalytic Reduction (SCR) Systems*. The 2025 Guidelines should apply only to new installations and existing Technical Files should not be revised.



## BALLAST WATER MANAGEMENT

### Review of the Ballast Water Management Convention

In MEPC 80, the Committee approved the Convention Review Plan (**CRP**), as set out in BWM.2/Circ.79, with the aim of defining a precise and workable scope for reviewing the Ballast Water Management Convention based upon clear principles that promote practicality, protectiveness, take a holistic view and achieve desired policy outcomes. In line with the CRP, the Committee in MEPC 81 established a Correspondence Group (CG) to begin drafting text of amendments.

Building up on the work of the CG, the Committee focused its work on topics that could benefit from in-person discussion to advance their resolution with a view to informing and facilitating the further work of the CG on the Review of the BWM Convention. The topics for consideration were as follows:

- 1. OMSM content:** New guidance will be developed to address the content of the Operation, Maintenance and Safety Manual (OMSM) of a ballast water management system (BWMS). It was agreed that the minimum critical spares for each BWMS would be best determined by the BWMS manufacturers.
- 2. Timing of OMSM approval:** Concurrently with modification of any type-approved BWMS, the OMSM shall be updated by the manufacturer and approved by the Administration.
- 3. Definitions of major/minor components and modifications:** Issues associated with the definitions of major/minor components and modifications to BWMS will be addressed by the CG.
- 4. BWMS testing parameters and test conditions:** All tests relating to BWMS type approval should be mandatory for all BWMS, while taking into account relevant system design limitations (SDLs). A new additional test on challenging water quality (CWQ) performance evaluation, which would be mandatory for all BWMS, should be introduced in the BWMS Code, with the currently existing general testing parameters and test conditions therein remaining unchanged.
- 5. Applicability of the Guidance on contingency measures:** The applicability of the Guidance on contingency measures under the BWM Convention (BWM.2/Circ.62) will be clarified by amending paragraph 6 of this Guidance.
- 6. Consequential amendments due to introduction of BWMS maintenance log:** The inclusion of a BWMS maintenance log in the BWRB, including development of a template for the log (to be used by ships that do not have an equivalent recording system) through an amendment to appendix II, and the consequential amendment to BWM.2/Circ.80/Rev.1 to reflect the amended form of the BWRB will be considered.
- 7. Transition from regulation D-4 to regulation D-2:** A survey scheme, including criteria for designating the BWMS installation date within the International BWM Certificate, will be established to facilitate a globally consistent approach to the transition of a ship's ballast water management method from compliance with regulation D-4 to regulation D-2, and appropriate guidance will be provided.
- 8. Framework for inspections and PSC:** The proposed framework for flag State inspection and PSC to address cases where ships equipped with type-approved, properly operated and well-maintained BWMS fail to meet the D-2 standard was not supported by the Committee.
- 9. Standardization of BWMS data logs and export files:** Issues related to the standardization of BWMS data logs and export files will be considered by the CG.
- 10. PSC initial checklist:** The addition of a review of BWMS maintenance log (as part of BWRB) and the BWMS operation and alarm logs to the PSC initial inspection checklist will be considered by the CG.
- 11. Mandatory crew training requirements:** New guidance will be developed to enhance crew training and familiarization with BWM systems. To support this, Regulation B-6 has been amended to ensure officers and crew understand their roles in implementing BWM and the ship's BWM plan, in accordance with the forthcoming guidelines.



### Timeline for Amendments to Mandatory vs. Non-Mandatory Instruments

The package of amendments to the BWM Convention are to be approved by MEPC 84 and adopted by MEPC 85 in 2026. The CG will work to finalize draft amendments to mandatory instruments, i.e., the Annex to the BWM Convention (regulations and appendices) and the BWMS Code, for approval by MEPC 84. Revisions to existing guidelines and development of new guidelines may extend beyond MEPC 84, targeting completion before the amendments to the Convention and the BWMS Code take effect.

The Committee agreed on the adoption of a revised BWM Convention and a revised BWMS Code, rather than individual amendments, due to the extensive scope of changes. This approach would create cleaner, consolidated versions of both instruments, benefiting stakeholders, and aligns with common practice for major overhauls, as seen with MARPOL Annex VI and the NOx Technical Code.

### Terms of Reference for the CG

The Committee prepared draft terms of reference for the re-establishment of the CG on Review of the BWM Convention, prioritizing the finalization of draft amendments to mandatory provisions (BWM Convention Annex and BWMS Code). The CG will report to MEPC 84 and continue its work on revising and developing non-mandatory guidelines until 2028. The preparation of the consolidated draft revised Annex and BWMS Code will take precedence, with guideline revisions only proceeding if time permits.

### Control of the Discharge of Disinfection By-Products from BWMS

The Committee considered proposals related to the control of the discharge of disinfection by-products (DBPs) from BWMS. This followed MEPC 82's call for solutions on DBP reporting and analysis. It was agreed to encourage data collection on DBPs, and it was recommended that the Committee invite member States and organizations to submit data on DBPs and relevant chemicals from BWMS to a future session for further consideration.

### Exemptions Under Regulation A-4 of the BWM Convention

The Committee considered proposals regarding exemptions from BWM requirements under regulation A-4 of the BWM Convention. It was pointed out that existing exemptions did not align with regulation A-4, suggesting a need for action to ensure future consistency. The Committee agreed that a template could improve consistency in both granting and reporting exemptions and recommended inviting Member States and organizations to submit specific proposals to a future session to enhance compliance with regulation A-4.

### Challenges and Implications for Ships Operating in Challenging Water Quality (CWQ) Conditions

The Committee considered proposals concerning challenges and implications for ships operating in CWQ conditions under the BWM Convention's relevant Interim Guidance. It discussed the emissions impact of measures following BWMS bypass, noting that Member States and organizations may submit relevant data and proposals to a future session. The Committee supported the need to address the availability of coastal State contact points for approving pre-emptive BWMS bypass but noted limitations in updating GISIS due to ongoing upgrades. Consequently, it recommended that member States provide current contact point information to the Secretariat for public dissemination.



## MARINE BIOSAFETY

### Developments of Guidance on Matters Relating to In-Water Cleaning

The Committee approved Circular MEPC.1/Circ.918 *Guidance on in-water cleaning of ships' biofouling*, providing guidance on matters relating to in-water cleaning of ships in line with the *2023 Guidelines for control and management of ships' biofouling to minimize the transfer of invasive aquatic species* (resolution MEPC.378(80)) and is intended to support the global availability of safe and environmentally responsible in-water cleaning services.

The document provides guidance on planning, conducting, and reporting on in-water cleaning operations, conducting pre-cleaning and post-cleaning inspections, approval of cleaning operations, in-water cleaning systems (IWCS) design, minimum performance standards, system approvals and coating compatibility, and the relevant in-water cleaning request form.

### Amendments to the 2023 Guidelines for the Development of the IHM

The 2023 Inventory of Hazardous Materials (IHM) Guidelines (resolution MEPC.379(80)) include for cybutryne the threshold corresponding to sampling of dry paint directly from the hull (i.e., 1000 mg/kg), but no threshold provided for wet sampling from a paint container. However, the threshold corresponding to wet sampling from a paint container (200 mg/kg) is considered relevant in cases where the development of the IHM is based on the collection of Material Declarations from suppliers to the shipbuilding industry.

Therefore the Committee adopted resolution MEPC.405(83) – *Amendments to the 2023 Guidelines for the development of the Inventory of Hazardous Materials (Resolution MEPC.379(80))*, which clarify the relevant threshold in respect to cybutryne, when samples are directly taken from the hull or when samples are taken from wet paint containers, amending the tables in Appendix 1 *Items to be listed in the IHM*, and Appendix 6 *Form of Material Declaration* to reflect the 200 mg/kg threshold for anti-fouling systems containing cybutryne.

---

## DESIGNATION OF SPECIAL AREAS, EMISSIONS CONTROL AREAS (ECA) AND PARTICULARLY SENSITIVE SEA AREAS (PSSA)

### Approval of the Designation of the North-East Atlantic Ocean as an Emission Control Area (ECA) for Sulfur Oxides, Particulate Matter and Nitrogen Oxides

The Committee approved the proposal to designate the North-East Atlantic Ocean as an ECA for NO<sub>x</sub> emissions under regulation 13, as well as sulfur oxides (SO<sub>x</sub>) and (PM under regulation 14 of MARPOL Annex VI, with a view to adoption at the extraordinary MEPC session in October 2025.

Provided the amendments would be adopted by the extraordinary MEPC session, the earliest entry into force date of the North-East Atlantic Ocean ECA in accordance with the MARPOL Convention would be after 16 months on 1 March 2027.

#### Sulfur Oxides (SO<sub>x</sub>) and PM:

The North-East Atlantic Ocean ECA will impose a fuel oil sulfur content limit of 0.10 percent by mass.

#### Nitrogen Oxides (NO<sub>x</sub>):

The North-East Atlantic Ocean ECA will apply to ships constructed on or after 1 January 2027 and operating in the ECA. Ships constructed on or after 1 January 2027 means a ship:

1. For which the building contract is placed on or after 1 January 2027; or
2. In the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2027; or
3. The delivery of which is on or after 1 January 2031.

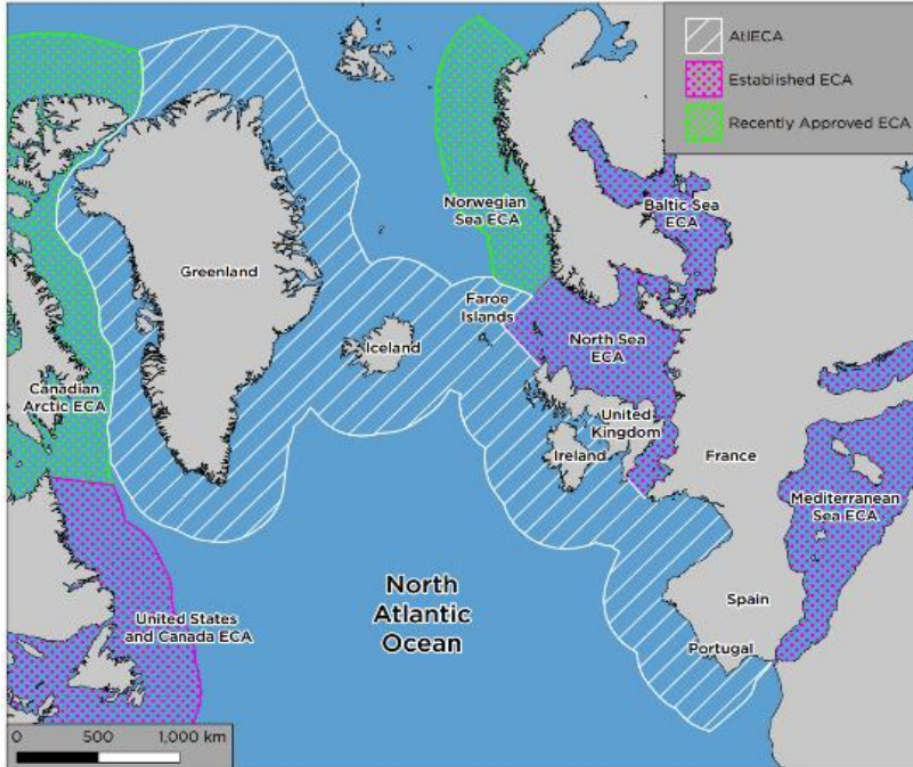


Figure 1. North-East Atlantic Ocean ECA [Source: MEPC 83/12]

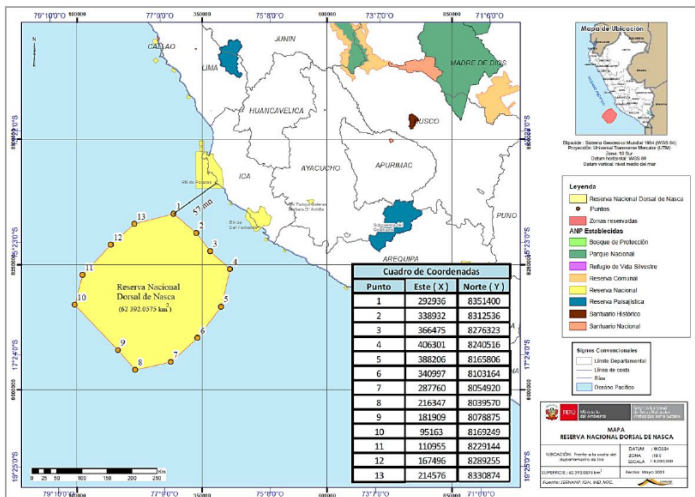
### Proposal for the Designation of the Nasca Ridge National Reserve and Grau Tropical Sea National Reserve as Particularly Sensitive Sea Area (PSSA)

The Committee considered a proposal by Peru to designate the Nasca Ridge National Reserve (NRNR) and the Grau Tropical Sea National Reserve (GTSNR) as PSSAs.

It was noted that both of the proposed PSSAs contained associated protective measures (APMs) to prohibit the discharge of oil, oily mixtures and sewage into the sea; the offloading or dumping of residues, pollutants, waste or garbage and the changing of ballast water while transiting the areas, but that these would need to be further developed and submitted to and considered by the appropriate Sub-Committee or Committee.

The Committee agreed in principle to the designation of the Nasca Ridge National Reserve and the Grau Tropical Sea National Reserve as PSSAs, subject to the further development and approval of the proposed associated protective measures and invited Peru to further develop the proposed associated protective measures and submit them to a future MEPC session for approval.





Figures 2 and 3: Nasca Ridge National Reserve and Grau Tropical Sea National Reserve PSSC  
 [Source: MEPC 83/12/1 & 83/12/2]

## OTHER DEVELOPMENTS

### 2025 Action Plan to Address Marine Plastic Litter from Ships

In 2016, the IMO adopted a "Recommendation to Encourage Action to Combat Marine Litter". In 2018, MEPC 73 adopted the Action Plan to Address Marine Plastic Litter from Ships (resolution MEPC.310(73)), with a view to assessing the effectiveness of its actions against intended outcomes in 2023. In 2021, MEPC 77 adopted the Strategy to Address Marine Plastic Litter from Ships (resolution MEPC.341(77)), agreeing to review it in 2025.

To build on existing policy and regulatory frameworks, identify opportunities for enhancement, and introduce new supporting measures, the Committee adopted resolution MEPC.404(83) - *2025 Action Plan to Address Marine Plastic Litter from Ships*. It is anticipated that this plan will be superseded at a future session by a single resolution containing the combining revised Strategy and 2025 Action Plan.

### Updated Grouping of Short-, Mid-, Long-Term and Continuous Actions of the 2025 Action Plan

To establish expected timeframes for each action, the Committee updated the grouping of short-, mid-, long-term and continuous actions in the 2025 Action Plan, using the 2018 Strategy (resolution MEPC.341(77)) as the basis for these definitions:

1. Short-term actions: Can be progressed now by relevant sub-committees
2. Mid-term actions: May be reliant on the outcomes of the IMO Study on marine plastic litter or other relevant research
3. Long-term actions: Require concrete proposals to the Committee to progress
4. Continuous actions: To be continuously addressed over the life of the Action Plan



### **Reduction of Underwater Noise from Commercial Shipping**

In 2024, MEPC 82 approved the Revised Guidelines for the Reduction of Underwater Radiated Noise (URN) from Shipping to address its adverse impacts on marine life. It also approved the Action plan for the Reduction of URN from Commercial Shipping (URN Action Plan) as a dynamic document, subject to period review and revision. Additionally, the Committee agreed to continue the three-year Experience-Building Phase (EBP) for the application of the Revised Guidelines and approved the Guidance on the EBP for the Revised guidelines.

In 2025, SDC 11 discussed the URN from ships, including the development of an EBP monitoring framework, scoping and objective of new URN studies, and agreed to establish a CG on URN.

In this regard, the Committee discussed the following points:

1. URN's detrimental impact on marine ecosystems, especially in sensitive areas, with mitigation supporting energy efficiency goals
2. The need for stakeholders to follow the Revised Guidelines, share experiences via the Experience-Building Phase (EBP), and enhance scientific understanding of URN mitigation
3. The need for further studies on URN's interplay with energy efficiency, its variation by ship type, and its interaction with local conditions (e.g., polar vs. tropical waters)
4. The allocation of sufficient time to EBP to incorporate experience from ships built and operated under the Revised Guidelines
5. The Arctic's unique biodiversity and underwater sound propagation, which require tailored URN mitigation measures
6. The necessity for global and regional cooperation to address URN's cross-border nature
7. The role of IMO's GloNoise Partnership Project, in collaboration with UNDP and the Global Environment Facility (GEF), within the wider efforts to mitigate URN's impact on marine life

The Committee forwarded several documents, along with plenary comments, to SDC 12 for further consideration and instructed the URN Correspondence Group to incorporate these documents and comments into its work.

### **Interim Guidance on the Carriage of Blends of Biofuels and MARPOL Annex I Cargoes by Conventional Bunker Ships**

According to MSC-MEPC.2/Circ.17, biofuel blends containing more than 25 percent biofuel are subject to MARPOL Annex II, and the carriage requirements of Chapter 17 of the IBC Code apply. As a result, the carriage of such biofuel blends on conventional bunker ships, which are certified under the requirements for oil tankers under MARPOL Annex I, is not allowed.

The Committee approved circular MEPC.1/Circ.917 *Interim Guidance for the Carriage of Biofuel Blends and MARPOL Annex I Cargoes by Conventional Bunker Ships* – defined as “oil tankers under Regulation 1.5 of MARPOL Annex I, which are engaged in transporting and delivering fuel oil to other ships”. This guidance allows conventional bunker ships to transport biofuel blends containing no more than 30 percent biofuel by volume, provided that all residues or tank washings are discharged ashore.

---

# CONTACT INFORMATION

## North America Region

1701 City Plaza Dr.  
Spring, Texas 77389, USA  
Tel: +1-281-877-6000  
Email: [ABS-Amer@eagle.org](mailto:ABS-Amer@eagle.org)

## South America Region

Rua Acre, nº 15 - 11º floor, Centro  
Rio de Janeiro 20081-000, Brazil  
Tel: +55 21 2276-3535  
Email: [absrio@eagle.org](mailto:absrio@eagle.org)

## Europe Region

111 Old Broad Street  
London EC2N 1AP, UK  
Tel: +44-20-7247-3255  
Email: [ABS-Eur@eagle.org](mailto:ABS-Eur@eagle.org)

## Africa and Middle East Region

Al Joud Center, 1st floor, Suite # 111  
Sheikh Zayed Road  
P.O. Box 24860, Dubai, UAE  
Tel: +971 4 330 6000  
Email: [ABSDubai@eagle.org](mailto:ABSDubai@eagle.org)

## Greater China Region

World Trade Tower, 29F, Room 2906  
500 Guangdong Road, Huangpu District,  
Shanghai, China 200000  
Tel: +86 21 23270888  
Email: [ABSGreaterChina@eagle.org](mailto:ABSGreaterChina@eagle.org)

## North Pacific Region

11th Floor, Kyobo Life Insurance Bldg.  
7, Chungjang-daero, Jung-Gu  
Busan 48939, Republic of Korea  
Tel: +82 51 460 4197  
Email: [ABSNorthPacific@eagle.org](mailto:ABSNorthPacific@eagle.org)

## South Pacific Region

7 Science Park Drive  
#09-21/32 Geneo, Singapore 119316  
Tel: +65 6276 8700  
Email: [ABS-Pac@eagle.org](mailto:ABS-Pac@eagle.org)

© 2025 American Bureau of Shipping. All rights reserved.

