



IMO News Final

The 84th session of Marine Environment Protection Committee
Korean Register



Executive Summary

The Marine Environment Protection Committee (MEPC), at its 84th session, considered a broad range of issues relating to the reduction of greenhouse gas (GHG) emissions from ships, energy efficiency, prevention of air pollution, ballast water management and protection of the marine environment. The session delivered significant regulatory outcomes, including amendments to mandatory instruments, the adoption and approval of new guidelines, and further improvements to existing regulatory frameworks.

As part of these efforts, amendments to MARPOL Annex VI and the BWM Convention, together with a wide range of technical guidelines, were adopted or approved. Key outcomes include:

- Amendments to MARPOL Annex VI to accommodate Multiple Engine Operational Profiles (MEOPs)
- Designation of the North-East Atlantic Ocean as an Emission Control Area (ECA) for NO_x, SO_x and particulate matter
- Expanded accessibility to IMO DCS and CII rating data
- Amendments to the SEEMP and CII calculation guidelines to clarify CII calculation
- Amendments to the guidelines for EEDI calculation and survey and certification concerning dual-fuel engines
- Adoption of guidelines for the measurement and verification of methane and nitrous oxide emissions
- Approval of amendments to the BWM Convention and adoption of the 2026 Guidelines for ballast water management and development of Ballast Water Management Plans (G4)

The amendments to MARPOL Annex VI are expected to enter into force on 1 September 2027, while the 0.10% sulphur limit in the North-East Atlantic Ocean ECA will apply from 1 September 2028. The NO_x Tier III requirements will apply according to the relevant ship construction date criteria, requiring appropriate follow-up by shipowners, shipbuilders and engine manufacturers.

One of the most significant issues considered at MEPC 84 was the possible further modification of the IMO Net-Zero Framework (NZF). The Framework, combining a GHG Fuel Intensity (GFI) standard with Remedial Units (RUs), Surplus

Units (SUs) and the IMO Net-Zero Fund, was approved at MEPC 83 but was not adopted at the second extraordinary session of MEPC in 2025, which was subsequently adjourned.

At this session, differing views remained between those supporting the existing Framework and those seeking substantial modifications or alternative approaches. Liberia and other co-sponsors proposed a market-responsive approach linking GFI targets to the availability and price of lower-GHG fuels and providing greater compliance flexibility, while Japan proposed adjustments to the reduction targets and use of financial contributions while broadly retaining the existing structure.

As the Committee was unable to bridge these differences, two intersessional working group meetings will be held before MEPC 85 to consider proposed modifications and alternative mid-term measures. A tentative arrangement was also made to resume the adjourned second extraordinary session following MEPC 85. Key elements including GFI reduction targets, financial contributions, unit trading, recognition of lower-GHG fuels and Fund arrangements therefore remain subject to possible change, requiring industry stakeholders to prepare for different regulatory scenarios.

Regarding the short-term GHG reduction measures, the SEEMP and CII calculation guidelines were amended to address uncertainty arising from the introduction of “under way” and the disaggregation of IMO DCS data. Until completion of the Phase 2 review, the total distance travelled, comprising both “under way” and “not under way” distances, will continue to be used for CII calculation, together with the existing DWT- or GT-based transport work proxy.

Notably, these amendments reflect proposals submitted by the Korean Register (KR) through the Government of the Republic of Korea, addressing the potential for unreasonable deterioration of CII ratings if only distance travelled while “under way” were used. This outcome is expected to improve regulatory consistency and predictability while avoiding unnecessary burdens on the industry during the transitional period.

In the field of ballast water management, a package of draft amendments to the BWMP Convention was approved for adoption at MEPC 85. The amendments address contingency measures under challenging water quality and emergency situations, enhanced maintenance and contingency procedures in the BWMP, record-keeping, crew training and competency, and periodic biological efficacy testing and sampling for residual active substances.

The Committee also adopted the 2026 G4 Guidelines, providing detailed provisions on ship-specific sampling, challenging water quality, contingency planning and the temporary storage of treated sewage and grey water in ballast tanks. These developments place greater emphasis on actual operation, maintenance and verification of BWMS performance. In addition, KR proposals concerning clarification of the total quantity remaining on board in the Ballast Water Record Book and a unified interpretation of regulation D-3 were reflected in the relevant outcomes, helping to reduce uncertainty in implementation.

The Committee also adopted guidelines for test-bed and onboard measurement of non-CO₂ GHG emissions, Engine Load Monitoring (ELM) and Continuous Emission Monitoring Systems (CEMS), while further work will continue on the regulatory framework for Onboard Carbon Capture Systems (OCCS). Progress was also made on marine plastic litter, plastic pellet transport, underwater radiated noise, NO_x certification for non-carbon fuels, Integrated Bilge Water Treatment Systems (IBTS), and environmental requirements for Maritime Autonomous Surface Ships (MASS).

Overall, MEPC 84 delivered substantial progress in addressing practical implementation issues under existing environmental regulations while uncertainty remains over the final form of IMO’s mid-term GHG reduction measures. Its outcomes are expected to have broad implications for ship design and operation, fuel selection, GHG emissions management, ballast water treatment and environmental compliance.

It is sincerely hoped that this News Final will assist readers in understanding the key outcomes of MEPC 84 and forthcoming regulatory developments, and in taking appropriate follow-up actions in a timely and effective manner.

Reduction of GHG Emissions from Ships

Outcome of ISWG-GHG 21

The 21st meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 21), held immediately prior to MEPC 84, focused on the development of guidelines to support the implementation of the IMO Net-Zero Framework (NZF), as well as the further development of the 2024 LCA Guidelines.

Despite the adjournment of discussions on the adoption of the NZF at MEPC ES.2, the meeting proceeded based on the agreed work plan aimed at preparing implementation guidelines for the future regulatory framework. Some Member States expressed the view that it was premature to develop guidelines based on the existing NZF, particularly in light of alternative proposals submitted to MEPC 84. However, given that the terms of reference (ToR) had already been agreed at MEPC 83, the Group proceeded in accordance with its mandate, focusing on the development and refinement of relevant guidelines.

As a result, draft documents were developed to serve as the basis for further work on key elements, including GFI calculation and verification, ZNZ definition and reward mechanisms, the IMO GFI Registry, the IMO Net-Zero Fund, and the Sustainable Fuel Certification Scheme (SFCS).

Development of NZF Implementation Guidelines

With regard to the GFI calculation guidelines, certain elements, including the definition of shore power and zero-emission energy sources, as well as wind-assisted propulsion, were incorporated into the draft. In contrast, key issues such as the treatment of onboard carbon capture (OCCS) and ice-class correction factors remained unresolved for further consideration.

For GFI verification, there was broad agreement to build upon the existing IMO DCS and CII verification frameworks, with discussions focusing on integrating GFI-related elements through amendments to the existing guidelines. In addition, a separate verification framework for wind-assisted propulsion systems is being developed based on a tiered methodology for energy estimation.

Regarding ZNZ definition and the associated reward mechanism, there was broad support for an approach whereby the IMO would pre-determine the level of reward¹. However, it was also agreed to consider alternative approaches in parallel, including a reverse auction² mechanism, while the introduction of energy multipliers for specific alternative fuels was not taken forward at this stage.

Discussions on the IMO GFI Registry focused on the fee structure and operational arrangements, and it was agreed that the Secretariat would provide further information on functional requirements, cost structure, and alignment with existing IMO systems prior to developing detailed design. Meanwhile, with regard to the IMO Net-Zero Fund, clear divergences were observed among Member States on the need to establish the fund, and various views were noted without reaching a concrete conclusion, with further discussions to continue. In addition, work on the Sustainable Fuel Certification Scheme (SFCS) will proceed based on the draft guidelines developed intersessionally, with further refinement envisaged with a view to adoption at MEPC 85.

Further Development of the LCA Framework

The further development of the LCA Guidelines focused on key issues including methodologies for default emission factors and the development of fuel supply chain traceability through Chain of Custody (CoC) models.

With respect to default emission factors, there was broad support for exploring statistical approaches, such as weighted averages, to complement the existing conservative approach based on maximum values. These approaches will be further

¹ Upfront reward: a mechanism whereby the IMO agrees on the level of reward and publishes it prior to the start of the applicable calendar year.

² Reverse auction: a mechanism whereby ships participate in competitive bidding to secure reward contracts.

examined by the GESAMP LCA Task Force and reported to MEPC 85. Regarding CoC models, there was general agreement on the need to consider a range of approaches, including mass balance³. To support further technical development, the Secretariat was invited to explore the possibility of organizing expert workshops or technical seminars prior to MEPC 85.

Further Consideration of Amendments to the IMO Net-Zero Framework

Discussions on the development of mid-term measures have been underway to achieve the goal of “net-zero GHG emissions from international shipping by or around 2050”, as set out in the 2023 IMO Strategy on Reduction of GHG Emissions from Ships (Res.MEPC.377(80)). In line with the milestones under this Strategy, MEPC 83 approved, by vote, the draft amendments to MARPOL Annex VI incorporating the IMO Net-Zero Framework (IMO NZF).

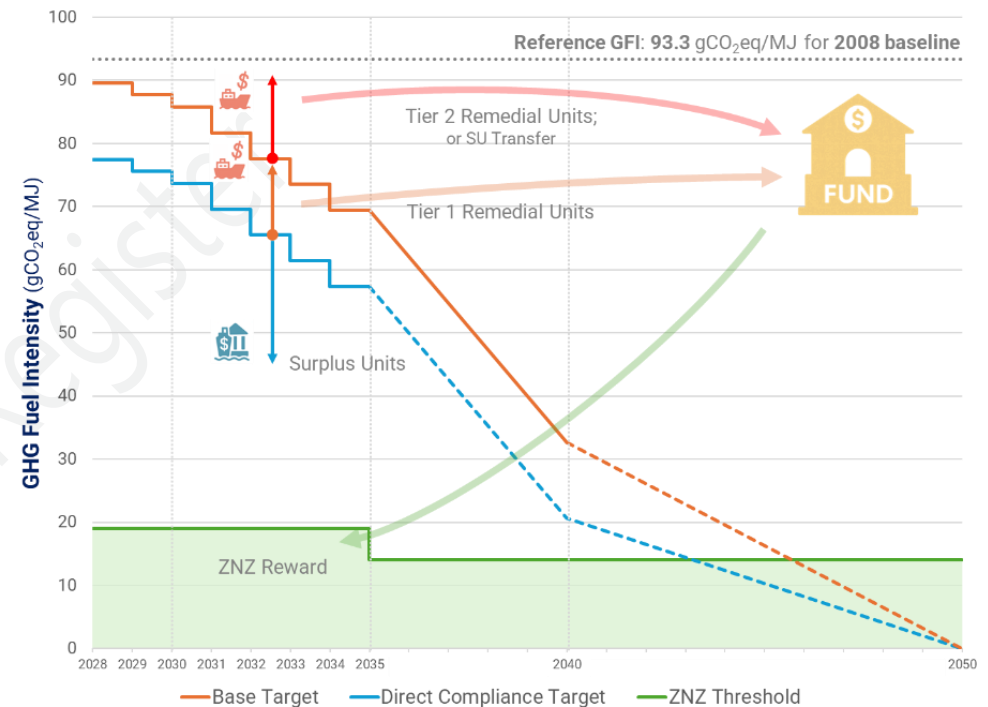
At MEPC ES.2, the Committee considered the adoption of the MARPOL Annex VI amendments reflecting the IMO NZF. However, following a procedural motion to adjourn the session, a vote was taken in accordance with Rules 31 and 38 of the Rules of Procedure. As a result, it was decided, by majority, to adjourn the session for one year.

The IMO NZF approved at MEPC 83 is structured as a basket measure of the following elements:

- Technical element: a goal-based marine fuel standard based on GHG fuel intensity (GFI)
- Economic element: a compliance balancing mechanism using remedial units (RUs) and surplus units (SUs), together with the IMO Net-Zero Fund

※ For further details of NZF, please refer to the MEPC ES.2 News Brief (Link: [IMO News Flash – MEPC ES.2](#))

At MEPC 84, the Committee considered alternative approaches to the possible revision of the IMO Net-Zero Framework (NZF), including a co-sponsored proposal by Liberia and others (MEPC 84/7/38) and a proposal by Japan (MEPC 84/7/49). Despite extensive and intensive discussions and negotiations involving more than 100 Member States, no consensus was reached, as divergences remained on whether to maintain the existing NZF and on the direction of possible revisions.



During the discussions, Member States were broadly divided between those supporting the retention of the existing NZF with a view to its early implementation, and those calling for fundamental revisions or alternative approaches. A number of delegations also expressed support for maintaining the overall structure while introducing adjustments to enhance feasibility.

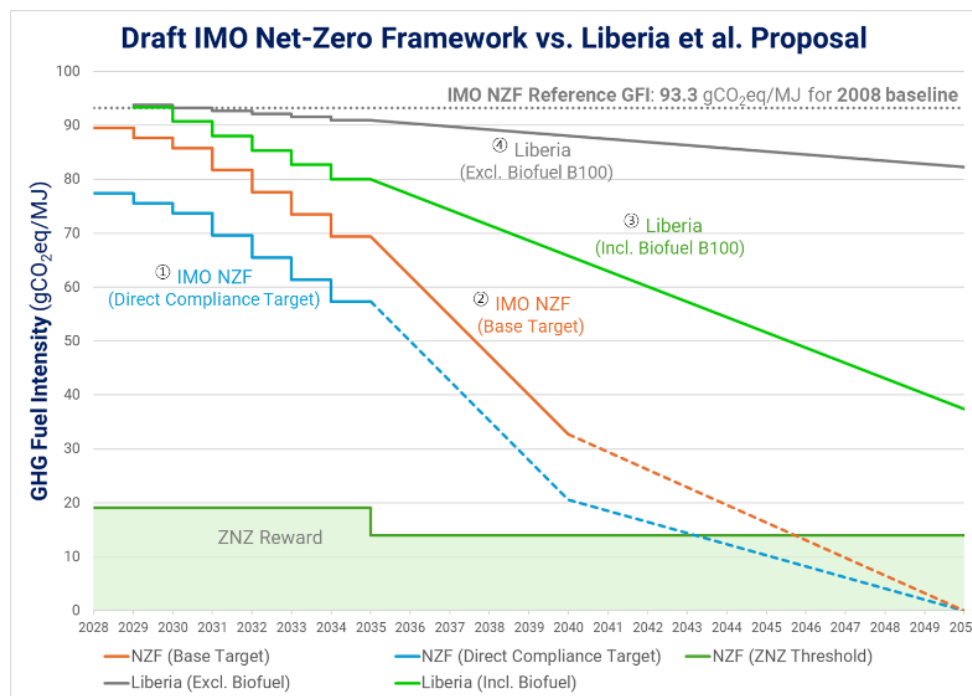
³ Mass balance: a method whereby fuels are physically mixed, and the proportion of sustainable fuel

relative to the total input is calculated and allocated on a bookkeeping basis.

Group	Key Position
EU and SIDS, etc.	Strongly supported maintaining the existing NZF, emphasising that it represents a balanced framework resulting from extensive negotiations. In particular, SIDS stressed that maintaining financial mechanisms, including the Net-Zero Fund, is essential given the cost burden of the decarbonisation transition and uncertainties in fuel supply.
United States and oil-producing countries, etc.	Highlighted structural limitations of the current NZF, including economic burden, technological immaturity, and limited fuel availability, and emphasised the need for a fundamental review centred on technology neutrality and feasibility.
Japan, Singapore, China, etc.	Expressed general support for the overall direction of the NZF, while calling for adjustments and refinements to address Member States' concerns, emphasising the need for a compromise solution that takes into account feasibility, cost implications, and fuel supply conditions.

The proposal submitted by Liberia et al. presented a more market-based and pragmatic alternative to the existing NZF. Its key elements include:

- (5%) and infrastructure readiness.
- opposing the introduction of financial mechanisms such as the IMO Net-Zero Fund and promoting regulatory simplification.
- enhancing flexibility through market-based mechanisms, including banking, trading and borrowing of surplus units (SU).
- establishing a linear decarbonization pathway over approximately 30 years to improve predictability.



- aligning GFI targets with the actual market availability of low-carbon fuels, taking into account price, supply and scalability.
- determining regulatory eligibility of fuels based on criteria such as cost competitiveness (within +15% of conventional fuels), minimum global market share

Category	Existing IMO NZF (Draft)	Alternative Proposal (Liberia et al.)
Target setting (GFI)	Pre-defined annual reduction targets	Reduction pathway determined based on market-based assessment of commercially available fuels
Fuel eligibility criteria	LCA-based recognition of low-carbon fuels	Only fuels meeting affordability, availability and scalability criteria are considered
Economic measures	Establishment of the IMO Net-Zero Fund through remedial units (RUs)	Opposition to the IMO Net-Zero Fund and RU-based mechanisms
Flexibility mechanism	Compliance through purchase of RUs or use/purchase of SUs	SU banking, trading and borrowing as the primary mechanism (no RU application)
Regulatory review (5-year cycle)	Periodic review of reduction pathway and regulatory stringency	Adjustment of fuel criteria and GFI trajectory based on market developments

Especially, if a reduction pathway based on the assessment of commercially available fuels is adopted, the GFI target can be projected as illustrated in the graph above. Overall, this proposal aims to shift the NZF from a regulation-driven framework towards a market-readiness-based, gradual transition approach.

The Japanese proposal, by contrast, seeks to retain the overall structure of the NZF while improving its practicality and acceptability. Its key elements include:

- reducing or removing mandatory contributions to the IMO Net-Zero Fund.
- expanding the use of surplus units (SU) within the Tier 1/Tier 2 compliance framework to enhance flexibility.
- adjusting GFI targets to better accommodate transition fuels such as LNG.
- establishing more realistic decarbonization pathways reflecting future transport demand and efficiency improvements.
- maintaining technology neutrality based on LCA principles and better reflecting actual fuel performance.

This approach can be characterized as an option aimed at reducing compliance costs while preserving the core architecture of the NZF.



Figure 3: Idea of revising direct compliance target

(Source: Document MEPC 84/7/49 (Japan))

The existing NZF combines technical elements (GFI standards) and economic elements (fund and unit mechanisms), providing a clear signal for decarbonization. However, some Member States highlighted concerns regarding cost implications, regulatory complexity and misalignment with fuel supply realities. While alternative proposals aim to enhance flexibility and feasibility, concerns were also raised that they may weaken the environmental ambition of the framework.

Given the persistent divergence of views, MEPC 84 was unable to reach agreement. Further negotiations are expected to continue in the upcoming ISWG-GHG sessions, where both the existing NZF and alternative mid-term measures will be considered in greater depth.

Additional ISWG-GHG meetings and agreed terms of reference, and resumption of MEPC ES.2

MEPC 84 agreed to hold ISWG-GHG to facilitate further discussions. Accordingly, the Committee agreed to convene two intersessional meetings prior to MEPC 85 and to continue discussions aimed at addressing outstanding issues related to the NZF and supporting the implementation of mid-term measures. The agreed terms of reference include: consideration of concerns related to the draft amendments to MARPOL Annex VI on the IMO NZF, development of guidelines for the implementation of mid-term measures, and further development of the IMO Life Cycle GHG Assessment (LCA) framework.

In particular, the terms of reference (ToR) were formulated to take into account documents submitted to MEPC 84 and 85, previous ISWG-GHG sessions, as well as submissions to ISWG-GHG 22 and 23. The ToR were adjusted so as not to limit the scope of discussions to specific proposals. As clarified by the Chair, the agreed ToR do not prevent Member States from submitting and considering additional or alternative proposals related to IMO mid-term measures.

During the discussion, differing views were expressed between those supporting the NZF as the basis for further work and those advocating for a broader consideration of alternative approaches. As a result, the ToR were refined to ensure that all relevant proposals could be considered in a comprehensive manner. The agreed schedule is as follows:

- **ISWG-GHG 22:** 1–4 September 2026 (4 days)
- **ISWG-GHG 23:** 23–27 November 2026 (week immediately preceding MEPC 85)
- **MEPC 85:** 30 November–3 December 2026 (tentative)
- **Resumption of MEPC ES.2:** one-day meeting immediately following MEPC 85, on 4 December 2026 (tentative, subject to confirmation at MEPC 85)

Implications

At MEPC 84, Member States were unable to reach agreement on the direction for modifying the IMO Net-Zero Framework (NZF). ISWG-GHG 22 is therefore expected to consider possible adjustments focusing on the GFI reduction trajectory, compliance mechanisms, economic elements such as the Fund/Facility, and incentives for zero- and near-zero (ZNZ) GHG emission fuels and technologies. As the outcomes could affect regulatory compliance costs, the relative economics of different fuels, and investment decisions for existing fleets and newbuildings, the industry should maintain a flexible approach based on a range of possible regulatory scenarios rather than relying on any single proposal.

In particular, key issues will include whether to adjust the GFI reduction trajectory in consideration of the availability, affordability and scalability of alternative fuels, and whether to retain the current two-tier structure comprising the Base Target and Direct Compliance Target. Nevertheless, the major alternative proposals generally retain the fundamental approach of assessing and reducing GHG emissions through a Well-to-Wake GFI framework. Therefore, even if the specific reduction levels or economic measures are modified, the use of lower-GHG fuels and the reduction of fuel consumption through improved energy efficiency are expected to remain important over the medium and long term.

Greater compliance flexibility is also expected to be considered, including the use of Surplus Units (SUs), pooling of compliance performance within fleets, contributions to a Fund/Facility or IMO-approved projects, and the possible granting of additional SUs for operational and technical energy-efficiency improvements. If such approaches are introduced, shipowners may be able to combine fuel transition, energy-efficiency improvements and fleet-level compliance options. Reducing fuel consumption and GHG emissions from existing ships could therefore remain an important means of reducing future regulatory costs and achieving GFI compliance.

Accordingly, shipowners should consider medium- and long-term fleet strategies encompassing energy-efficiency improvements to existing ships, the introduction of alternative fuels and investment in newbuildings, taking into account ship-specific GFI and energy efficiency, alternative fuel prices and availability, and the compliance options that may become available under the final framework.

Shipbuilders and engine and equipment manufacturers should take into account the continuing uncertainty over market demand for particular fuels and technologies. Maintaining design and technical flexibility to accommodate different lower-GHG fuels, future fuel conversion and energy-efficiency improvements will therefore be increasingly relevant. It would also be advisable to establish the data and verification arrangements necessary to demonstrate the performance and GHG reduction benefits of relevant technologies.

For refiners and fuel producers and suppliers, particular attention should be given to potential changes in fuel demand and economics resulting from the GFI reduction trajectory and ZNZ incentives. They should also prepare for Well-to-Wake assessment of fuel GHG intensity and sustainability by securing the LCA emissions information, sustainability certification, supply-chain data and certification arrangements necessary for the application of Sustainable Fuel Certification Schemes (SFCS).

Overall, while considerable uncertainty remains over the specific GFI reduction levels and economic compliance mechanisms under the NZF following MEPC 84, ISWG-GHG 22 is expected to explore possible convergence between the existing NZF and alternative proposals, particularly through adjustments to the initial compliance burden, greater compliance flexibility and measures to facilitate the uptake of ZNZ fuels and technologies. As the major proposals continue to share the fundamental direction of reducing Well-to-Wake GFI, industry stakeholders should continue preparing for the transition to lower-GHG fuels and improved energy efficiency, while progressively refining the timing and priorities of investment and technology development in line with the outcomes of the forthcoming discussions.

- ✧ For further information on alternative fuels, including hydrogen, ammonia, biofuels and methanol, please refer to KR's technical information and publications on their characteristics, technologies and maritime applications. ([Link](#))
- ✧ To support GHG regulatory compliance and decarbonization, KR provides PILOT for regulatory cost analysis and decarbonization strategy development, and POWER for ship performance and energy-efficiency analysis. These services are available to support your decarbonization planning and decision-making. ([Link – KR DAON](#))

Decision on the Terms of Reference for the Fifth IMO GHG Study

MEPC 84 approved the Terms of Reference (ToR) for the Fifth IMO GHG Study and agreed to initiate the follow-up process for its implementation.

“*ToR: the agreed scope of work and mandate established by the Committee for conducting the Fifth IMO GHG Study, setting out, inter alia, the study period (2018–2025), the scope of emission inventories and projections, the applicable methodology (LCA-based WtW/TtW), data use and access provisions, expected outputs, and the implementation framework (including the Steering Committee and research consortium)*”

The ToR were developed based on discussions at ISWG-GHG and cover key elements of the study design, including the study period, data scope and granularity, emission coverage and linkage to the LCA framework, data accessibility and reproducibility, as well as the implementation arrangements.

The study period was set from 2018 to 2025. The potential use of 2026 emissions data is reflected in a footnote, allowing bidders to indicate data availability, with the Steering Committee to determine whether and how such data will be incorporated. The level of data granularity was agreed to remain consistent with that of the Fourth IMO GHG Study, taking into account comparability and data quality considerations.

With regard to the scope of the study, the existing approach of covering shipping as a whole, including both international and domestic shipping, was maintained. Regional analysis was excluded from emission projections due to data uncertainties and methodological limitations. The scope of emission substances was aligned with that of the Fourth Study, while embedded emissions were excluded owing to methodological constraints.

In terms of methodology, it was agreed to maintain consistency with the Life Cycle Assessment (LCA) Guidelines, including the treatment of TtW emissions, while ensuring methodological clarity and consistency. In addition, provisions were included to enhance transparency and reproducibility of modelling, and data access will be allowed within the constraints of the existing IMO DCS framework and contractual limitations.

Furthermore, the definition and scope of ZNZ were excluded from the ToR, given that these are subject to future policy decisions by the Committee. The study will be conducted through a consortium-based approach, with the Steering Committee responsible for the selection and oversight of the research entity. The Secretariat is expected to initiate the process for establishing the Steering Committee, including the issuance of a circular inviting nominations of experts, and to commence the procurement process for the study.

Air Pollution and Energy Efficiency

Phase 2 Review of Short-term Measures (CII)

The Committee agreed to undertake a comprehensive review of the short-term GHG reduction measures, including the CII, and decided to carry out this work in two phases, namely Phase 1 and Phase 2. At MEPC 83, Phase 1 was completed as below.



(Source: IMO)

In addition, measures were taken to enhance regulatory consistency and the reliability of the data-driven framework. In particular, access to IMO DCS data was expanded to clarify the scope of data use by flag Administrations and recognized organizations (ROs), while strengthening

anonymization to minimize the risk of ship identification. Furthermore, amendments to the SEEMP Guidelines were adopted to introduce a definition of “under way”, with a view to facilitating the collection of relevant data and addressing the adverse impact of port waiting time on CII calculations.

MEPC 83 also approved the work plan for Phase 2, which includes key elements for the fundamental improvement of the CII framework, namely: the development of an enhanced SEEMP framework; the development of a cgHRS metric for cruise passenger ships; the consideration of alternative CII metrics; the review of correction factors and reference lines; and the consideration of synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework.

Date	Meeting	Objectives
Spring 2026	MEPC 84	1. Finalize enhanced SEEMP framework 2. Finalize cgHRS metric for cruise ships 3. Advance synergies between CII/energy efficiency framework and IMO Net-Zero Framework (NZF) and promote efficiency incentives for better operations
Autumn 2026	MEPC 85	1. Further develop other CII metrics 2. Continue work on synergies between CII/energy efficiency framework and IMO NZF and related incentives
Spring 2027	MEPC 86	1. Further develop other CII metrics 2. Consider proposals on correction factors and reference line adjustments 3. Continue work on synergies between CII/energy efficiency framework and IMO NZF and incentives
Spring 2028	MEPC 87	1. Conclude other CII metrics 2. Finalize revised reference lines 3. Further consider proposals on correction factors and reference line 4. Complete Phase 2 review 5. Define post-2030 direction of CII/energy efficiency framework and IMO NZF

Enhanced SEEMP-Based Management Framework

At MEPC 84, discussions focused on enhancing energy efficiency through an improved SEEMP framework. These discussions were driven by the recognition that the current CII-based, performance indicator approach does not sufficiently reflect ships' actual operational characteristics and improvement efforts. Accordingly, the focus shifted towards strengthening a management and implementation framework centred on SEEMP.

In particular, there was broad agreement on transforming SEEMP from a simple planning document into a comprehensive management cycle covering planning, implementation, monitoring, self-evaluation, and continuous improvement. This approach aims to promote ongoing energy efficiency improvements at the individual ship level. In addition, consensus emerged on the need to move away from the existing reactive approach targeting low-rated ships (D/E) towards a proactive and continuous management framework applicable to all ships.

The key proposed modifications to the SEEMP framework are as follows:

Category	Key Content
Introduction of a continuous improvement approach	- Transition from D/E-rated ship-focused measures to an all-ship management framework - Establishment of realistic, performance-based improvement targets for each ship
Mandatory internal review	- Regular reviews conducted at least once per year - Monitoring fuel consumption and implementation of improvement measures
Introduction of EEIL (Energy Efficiency Implementation Log)	- Establishment of a system to record and verify implementation of improvement measures - Enhancement of accountability through electronic record-keeping
Enhancement of verification and audit framework	- SEEMP periodic verification: up to every 3 years - Annual verification for ships rated E or rated D for three consecutive years - Annual verification of EEIL for all ships - Company audits: every 3 years (general) / annually for companies with D/E-rated ships - Linking audit results to the SoC or CoC

Integration of corrective action framework	- Removal of a separate corrective action plan - Integration into the SEEMP implementation plan
Shift in regulatory approach	- Strengthening process- and management-based (indirect) enforcement rather than direct enforcement - Consideration of leveraging market-based mechanisms

As a result of the discussions at MEPC 84, there was broad agreement among Member States on the need to strengthen the SEEMP-based management framework. However, it was also recognized that further consideration is required regarding specific implementation measures. In particular, concerns were raised over increased administrative burden, lack of clarity in implementation criteria, and practical feasibility in relation to proposals such as expanded annual verification and audits, and enhanced management of implementation records. Accordingly, the related proposal (MEPC 84/6/15) was not taken forward for immediate implementation, and it was agreed to continue further discussions under the Phase 2 review process.

Discussion on cgHRS Metric for Cruise Passenger Ships

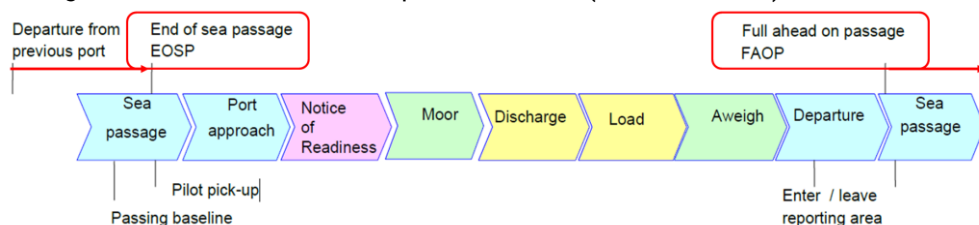
With regard to the introduction of the cgHRS metric, intended to better reflect the operational characteristics of cruise passenger ships by replacing distance travelled with operating time as the denominator, MEPC 84 discussed the need to address limitations of the existing AER-based CII framework. However, concerns were raised that applying a separate metric to a specific ship type could undermine regulatory consistency, and the proposal was therefore not accepted and will be reconsidered under the Phase 2 review.

Enhancing Synergies with the IMO Net-Zero Framework

With regard to enhancing synergies between the IMO Net-Zero Framework (NZF) and the CII regime, the Committee discussed whether the review of the CII framework should be undertaken in conjunction with the development of mid-term measures. However, noting that the adoption and detailed design of the NZF have yet to be finalised, it was agreed that discussions on potential revisions to CII metrics would be premature. The Committee therefore agreed to monitor progress on the development of mid-term measures and to consider possible revisions to the CII framework at a later stage.

Clarification of CII Calculation in relation to Under-way Definition, Distance Travelled and Transport Work

With regard to the introduction of the “Under way” definition for the purpose of collecting data to analyse port waiting time impacts, and the collection of actual transport work under the enhanced granularity of the IMO DCS (from 2026) to support the CII Phase 2 review, MEPC 84 **adopted** amendments to the **SEEMP Guidelines** and the **CII calculation Guidelines (G1)** to clarify the relevant aspects. These amendments were based on a proposal submitted by the Korean Register (KR), through the Government of the Republic of Korea (MEPC 84/6/17).



Definition of “Under Way” (Source: FAL.5/Circ.42/Rev.3)

Table 1: Comparison of attained CII values using total distance travelled and distance travelled excluding “not under way” periods

Ship type	Ship's capacity	Distance travelled (nm)			Attained CII value (AER or cgDIST)		
		Total distance	Excl. not under way	Diff. (%)	Total distance	Excl. not under way	Diff. (%)
Tanker	319,547 DWT	200,160	199,116	-0.52%	2.241 (Rated as C)	2.253 (Rated as C)	0.54%
Tanker	299,546 DWT	75,280	74,302	-1.30%	2.15 (Rated as B)	2.186 (Rated as C)	1.34%
Container	229,039 DWT	176,806	174,945	-1.05%	4.154 (Rated as B)	4.198 (Rated as B)	1.06%
Container	160,927 DWT	124,141	121,018	-2.52%	4.831 (Rated as B)	4.956 (Rated as B)	2.59%
Bulk carrier	179,407 DWT	73,847	69,815	-5.46%	2.438 (Rated as C)	2.579 (Rated as C)	5.78%
Bulk carrier	179,407 DWT	72,486	70,755	-2.39%	2.497 (Rated as C)	2.558 (Rated as C)	2.44%
General cargo ship	30,136 DWT	70,819	69,115	-2.41%	10.860 (Rated as E)	11.128 (Rated as E)	2.47%
General cargo ship	30,066 DWT	78,233	76,645	-2.03%	10.490 (Rated as D)	10.707 (Rated as E)	2.07%
Ro-ro cargo ship	72,408 GT	209,862	205,987	-1.85%	5.652 (Rated as C)	5.759 (Rated as D)	1.89%

(Source: Document MEPC 84/6/17 (Republic of Korea et al.))

In particular, concerns were raised that, following the introduction of the “Under way” definition, distance travelled could be interpreted as being limited to “Under way” periods only, and that the introduction of actual transport work data might be misunderstood as requiring its immediate application in CII calculation. This could undermine the consistency of the existing CII framework and lead to unreasonable changes in ratings depending on ship type and operational patterns. Accordingly, the Committee agreed on the need to maintain the current CII calculation methodology until the completion of the Phase 2 review and clarified this through amendments to the relevant Guidelines.

1 Distance travelled (amendments to the SEEMP Guidelines, resolution MEPC.413(84))

- Data are to be collected separately for “under way” and “not under way” periods, while the total aggregated distance, combining both, continues to be applied for CII calculation purposes.

2 Transport work (amendments to the CII Guidelines (G1), resolution MEPC.412(84))

- Actual transport work data are to be used solely for analytical purposes in the Phase 2 review, while the existing supply-based transport work (e.g. based on DWT or GT) continues to be used as a proxy for CII calculation.

Implications

The comprehensive Phase 2 review of the short-term GHG reduction measures, including CII, is underway for completion in 2028. Possible improvements to the CII metrics and reference lines, correction and voyage adjustment factors, and the SEEMP management and verification framework will be considered. Further discussions are expected on CII assessments for different ship types and operational characteristics and on promoting actual energy-efficiency improvements. Shipping companies should therefore continue managing CII performance while closely following the review. Under the revised IMO DCS and SEEMP-related guidelines, distance travelled must be reported separately for “under way” and “not under way” periods, while the combined distance will continue to apply to CII calculation pending the Phase 2 review. The disaggregated data will support further assessment of operational impacts on CII.

Measurements and Verification of Non-CO₂ GHG Emissions and Onboard Carbon Capture

With regard to the measurement and verification framework for actual Tank-to-Wake (TtW) emissions of methane (CH₄), nitrous oxide (N₂O) and other greenhouse gases, as well as the regulatory framework for onboard carbon capture and storage (OCCS), MEPC 84 considered the following matters based on the outcomes of the Correspondence Group:

Measurement and verification of Non-CO₂ GHG emissions

At MEPC 84, the regulatory framework for the measurement, reporting and verification of non-CO₂ greenhouse gases (CH₄ and N₂O) was further developed through the revision of existing guidelines and the adoption of new guidelines, based on the outcomes of the intersessional correspondence group.

In particular, the test-bed and onboard measurement guidelines adopted at MEPC 83 (resolution MEPC.402(83)) were revised and superseded by the **2026 Guidelines for test-bed and onboard measurements of methane (CH₄) and/or nitrous oxide (N₂O) emissions from marine diesel engines (resolution MEPC.414(84))**. These updated guidelines provide greater clarity on measurement methods, test conditions and data processing, while enhancing consistency between test-bed and onboard measurements and improving practical applicability.

In addition, recognizing the need for multiple complementary approaches, the following new guidelines were adopted:

- **ELM Guidelines** (Engine Load Monitoring): establishing procedures for estimating and calculating emissions based on engine load (**resolution MEPC.415(84)**)
- **CEMS Guidelines** (Continuous Emission Monitoring Systems): establishing monitoring frameworks using continuous emission measurement systems (**resolution MEPC.416(84)**)

In this context, the intersessional discussions reaffirmed several key technical issues:

- The use of total hydrocarbons (THC) as a proxy for CH₄ and the inclusion of crankcase emissions were addressed to a certain extent based on previous discussions
- The need to clarify the roles and scope of application between ELM and CEMS

guidelines

- The need for further consideration of the relationship and prioritization between measurement-based approaches (test-bed/onboard) and estimation-based approaches (ELM)
- The need to ensure consistency with the 2024 LCA Guidelines

Furthermore, the scope of fuels subject to methane emission calculation was clarified to include natural gas, biomethane, e-methane and blended fuels. Additional refinements were made, including the exclusion of pilot fuel in methane slip calculations for dual-fuel engines and the application of a conservative approach using THC as a proxy for CH₄.

Implications

Non-CO₂ GHG emissions may vary depending on fuel and engine technologies and may also affect Well-to-Wake GHG intensity under the LCA framework. Accordingly, reliable and verifiable measurement data will become increasingly important in demonstrating the GHG reduction performance of lower-GHG fuels and related technologies. Engine and equipment manufacturers should therefore review relevant testing, measurement and data requirements, while shipbuilders and shipping companies should assess their implications for applicable engines, fuels and associated systems.

Meanwhile, the guidelines adopted at this session will be further reviewed and refined through an intersessional correspondence group, particularly regarding their scope, the relationship between measurement methods, and consistency with the 2024 LCA Guidelines. The industry should therefore follow subsequent developments and reflect relevant revisions in technology development and verification.

Development of a regulatory framework for onboard carbon capture and storage (OCCS)

At MEPC 84, the Committee considered the outcomes of the intersessional correspondence group on the development of a regulatory framework for onboard carbon capture and storage (OCCS), noted the key issues identified, and further clarified the direction of future work.

As a result of the discussions, the following key technical issues were reaffirmed:

- Handling and disposal of CO₂ captured on board, particularly the potential for discharge into the marine environment
- Whether to include OCCS in LCA calculations (*ecc*)
- Maintaining the technology-neutral nature of *e*OCCS as defined in the 2024 LCA Guidelines
- Impacts on the SO₂/CO₂ ratio when EGCS and OCCS are applied in combination
- Safety and environmental implications throughout the entire chain of CO₂ storage, transfer, and offloading

In particular, with regard to the concept of ocean discharge of CO₂ captured on board ships, the need to ensure alignment with the framework of the London Convention and Protocol (LC/LP) was emphasised. As OCCS is a post-combustion approach, unlike conventional fuel-switching-based mitigation measures, ensuring consistency with existing emissions measurement and verification systems as well as the 2024 LCA Guidelines was identified as a key challenge.

In this context, initial work on the development of an OCCS regulatory framework has commenced, and the Committee approved the relevant work plan⁴ and agreed to continue further consideration and the development of guidelines at future sessions.

MEPC 84 also agreed to re-establish the Correspondence Group to continue work on the further development of measurement and verification frameworks for non-

CO₂ GHG emissions (including TtW CH₄ and N₂O emission factors and Cslip values), consideration of how such frameworks can support the application of the 2024 LCA Guidelines, and the phased development of a regulatory framework for onboard carbon capture and storage (OCCS), excluding accounting treatment of captured CO₂.

Implications

As the regulatory framework for OCCS is progressively developed, shipping companies considering its adoption, as well as shipbuilders and relevant equipment manufacturers, should assess not only onboard CO₂ capture performance but also the technical and operational requirements covering the storage, transfer and offloading of captured CO₂, measurement and verification, and subsequent onshore treatment and permanent storage. In particular, shipping companies should consider the energy consumption and operational impacts of OCCS together with the availability of suitable CO₂ handling and storage pathways, while shipbuilders and equipment manufacturers should closely follow how requirements for onboard storage and transfer systems, safety, measurement and verification may affect future ship design and product development. As further discussions are expected on the measurement and verification of captured CO₂, demonstration of permanent storage, accounting of GHG emission reductions, and discharge of captured CO₂ at sea, IMO OCCS guidelines and discussions under the LC/LP framework are expected to significantly affect the practical application and commercial viability of OCCS.

Meanwhile, in July 2026, GCMD announced that Project CAPTURED had demonstrated the permanent storage of CO₂ captured onboard through carbon mineralisation following ship-to-ship transfer and land transportation, with the verified amount deducted from emissions subject to allowance surrender under the EU ETS. This case demonstrates that, for OCCS to serve as a regulatory compliance option, traceability and verification from onboard capture to permanent storage, together with appropriate CO₂ handling pathways, are essential. Further development of IMO measurement, verification and GHG accounting requirements could significantly affect OCCS deployment and related infrastructure.

⁴ The work plan for the development of the OCCS regulatory framework includes the assessment of safety and environmental impacts across the entire CO₂ capture, storage and transfer chain, the

establishment of monitoring, reporting and verification (MRV) frameworks, and the review of consistency with existing IMO instruments and the LC/LP framework.

Amendments to the 「2022 EEDI Calculation Guidelines (Res. MEPC.410(84))」 and the 「2026 EEDI Survey and Certification Guidelines (Res. MEPC.411(84))」

MEPC 84 adopted amendments to the **2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI)** (Res. MEPC.410(84)) and the **2026 Guidelines on survey and certification of the EEDI** (Res. MEPC.411(84)).

The amendments primarily aim to clarify the calculation method⁵ for EEDI in relation to dual-fuel engines using liquid fuels. In particular, for engines capable of operating on more than one liquid fuel, the main engine power is to be determined based on the maximum continuous rating (MCR) as certified in accordance with the NOx Technical Code, thereby enhancing consistency and regulatory alignment in EEDI calculations.

In addition, the need for further updates to the guidelines to accommodate emerging fuels such as ammonia and hydrogen was noted. With regard to the definition of hybrid propulsion, while its necessity was acknowledged, further consideration was deemed necessary due to the lack of sufficient technical basis for establishing applicable criteria and thresholds.

Implications

The revised EEDI Calculation Guidelines clarify the determination of the primary fuel and EEDI calculation for dual-fuel ships using alternative liquid fuels, such as methanol and ethanol, in a manner similar to that for conventional LNG dual-fuel ships. For newbuildings using such fuels, the revised calculation criteria should therefore be taken into account in ship design and EEDI calculation and verification.

⁵ Previously, for dual-fuel engines with multiple fuel modes, there was flexibility to interpret that the highest MCR among the available fuel modes could be used for EEDI calculation. The amendments clarify that the MCR certified under the NOx Technical Code should be applied as the basis for determining

Approval of the Revised Interim Guidance on the Use of Biofuels (MEPC.1/Circ.905/Rev.1)

MEPC 84 approved the Revised Interim Guidance on the Use of Biofuels under regulations 26, 27 and 28 of MARPOL Annex VI (MEPC.1/Circ.905/Rev.1) to clarify the application of the CO₂ conversion factor (Cf) for biofuels in IMO DCS reporting and CII calculations.

Under the previous Guidance (MEPC.1/Circ.905), the Cf for a biofuel blend was calculated as an energy-based weighted average of the respective fuel components. However, concerns were raised regarding its inconsistency with the IMO DCS, under which fuel consumption is reported by mass. MEPC 84 therefore revised the calculation method to apply a mass-based weighted average of the respective fuel components.

The revised Guidance also clarifies that, where a biofuel component in a blend is not certified as sustainable under an international certification scheme or does not meet the applicable Well-to-Wake GHG emission-saving threshold, the Cf of the equivalent fossil fuel should be applied to the entire uncertified or non-compliant biofuel component. The revised Guidance will apply from 1 January 2027, in alignment with the IMO DCS reporting year.

Implications

From the 2027 reporting year, ships using biofuel blends will calculate the Cf for IMO DCS reporting and CII calculations using a mass-based weighted average of each fuel component. Shipping companies should therefore obtain and maintain the necessary information from fuel suppliers, including blend composition and sustainability certification of each biofuel component. Biofuel components that do not meet the sustainability requirements or lack verified certification will be assigned the same Cf as the equivalent fossil fuel, limiting their CII benefits.

main engine power (P_{ME}) and specific fuel consumption (SFC), ensuring consistency across different fuel modes.

Ballast Water Management Convention

Final Approval was granted

- Blue Ocean Shield Electrolytic Chlorination (EC) BWMS (Denmark)

Type approved BWMSs reported to MEPC 84 (total 7 unit)

- OceanGuard® Sim BWMS (Denmark)
- Optimarin Ballast System (OBS) BWMS (Norway)
- PureBallast 3.5 Ultra BWMS (Norway)
- BlueBallast II NK-O3 BWMS (Liberia)
- Senza BWMS TG2 (Norway)
- Cyeco BWMS (Norway)
- inTank BWTS (Norway)

Experience Building Phase (EBP) and Convention Review Plan (CRP) under the BWM Convention

Approval of draft amendments to the BWM Convention

At previous sessions, the need to amend the Ballast Water Management Convention was discussed based on the outcomes of the Experience-Building Phase (EBP) and the Convention Review Plan. Accordingly, draft amendments were developed by a Correspondence Group (CG).

At MEPC 84, the Committee further considered these draft amendments and approved them. The main elements are as follows (with a view to adoption at MEPC 85):

BWM Convention provision	Key amendments to the BWM Convention (Objective No.)
Regulation A-3 (Exceptions)	1) Allows discharge of unmanaged or partially managed ballast water and sediments to the high seas under specific circumstances: - Poor water quality conditions causing BWMS bypass during uptake - Emergency measures due to BWMS failure - Need to comply with port State requirements for ballast water exchange plus treatment 2) Establishes a legal basis for the use of emergency measures and contingency water quality (CWQ) guidance, taking into account IMO-developed guidelines
Regulation B-1 (BWMP)	3) Identifies ships equipped with BWMS type-approved under the BWMS Code (mandatory requirements), rather than the previous G8 Guidelines 4) Reflects key improvements to the standardized BWMP format (appendix to G4) to enhance consistency and standardization 5) Requires detailed maintenance procedures necessary to keep the BWMS in good working condition to be included in the BWMP 6) Requires inclusion of a maintenance plan in the BWMP, reflecting the operational manual and maintenance schedule 7) Requires inclusion of a safe ballast water exchange plan in the BWMP, including cases involving partially treated and/or non-neutralized ballast water 8) Introduces a new requirement for ships to plan emergency measures, taking into account BWM.2/Circ.62 9) Includes the practice of temporary storage of treated sewage and/or grey water in ballast water tanks
Regulation B-2 (Ballast Water Record Book)	10) Introduces a new requirement to include a BWMS maintenance log in the Ballast Water Record Book (BWRB), aligned with the operational manual and maintenance schedule, to be continuously updated and signed by responsible personnel

Regulation B-6 (Duties of officers and crew)	11) Introduces new requirements on crew familiarization/training for BWMS and methods for documentation and verification
Regulation D-2 (Performance standard)	12) Establishes Maximum Allowable Discharge Concentration (MADC) for BWMS using active substances, ensuring that effectively neutralized ballast water is discharged in accordance with system approval limits
Regulation E-1 (Surveys)	20) Includes additional information based on the approach used for the IOPP Certificate
Appendix I (IBWM Certificate)	83) Includes a standardized BWMS maintenance record form for use by ships that do not maintain separate maintenance records or lack an existing record-keeping system

The draft amendments aim to enhance clarity and consistency in the implementation of the Convention and its Annex by addressing operational and implementation issues identified during the EBP.

In addition, MEPC 84 agreed to amend and approve the Ballast Water Record Book (BWRB) format (Appendix II to the Ballast Water Management Convention) in order to clarify the definition and recording scope of “Final Total Quantity Retained On Board.” The amendment, proposed by Korean Register (KR) through Korean Government to enhance clarity in industry implementation, defines the term as referring to the total quantity of ballast water remaining across all ballast water tanks on board, rather than only those tanks involved in a specific ballast water operation.

“*“Final total quantity retained on board” means the aggregated volume of ballast water remaining in all ballast water tanks on board upon completion of the relevant operation.*”

”

Adoption of the revised G4 Guidelines (Res.MEPC.409(84))

In addition, MEPC 84 adopted the 2026 Guidelines for Ballast Water Management and the Development of Ballast Water Management Plans (G4) (resolution MEPC.409(84)). The revised G4 Guidelines strengthen requirements for the preparation and management of BWMPs and further elaborate operational, maintenance, and contingency procedures, with a view to enhancing the effective implementation of the Convention.

Objective No.	Key amendments to the Guidelines G4
37)	Introduces a new requirement to update the BWMP when the BWMS is upgraded or newly installed
38)	Introduces a requirement to develop detailed, ship-specific onboard sampling guidance to prevent improper sampling (i.e. considering ship- and BWMS-specific factors that may affect the quality of collected discharge samples)
39)	Requires inclusion of ship-specific measures and procedures addressing challenging water quality conditions
40)	Requires inclusion of an appropriate contingency plan as part of the approved BWMP
41)	Encourages the use of standardized templates to promote consistency and uniform implementation of the BWMP across ships
43)	In principle, ensures that the Guidelines remain up to date and adequately address issues such as:

-
- challenging water quality conditions, emergency measures, and the temporary storage of grey water and/or treated sewage in ballast water tanks
-

Implications

Following the entry into force of the amended Convention, two samplings for indicative analysis will be conducted within each five-year certificate cycle. From an application date to be determined, the BWMPs of existing ships will also need to be updated in accordance with the revised G4 Guidelines to incorporate operational, maintenance and contingency procedures. Shipping companies should therefore prepare for the additional sampling and survey requirements, review the consistency between existing BWMPs and actual onboard procedures, and plan BWMP updates in line with the finalization and application of the G4 Guidelines.

For BWMS manufacturers, systems installed after a date to be determined are expected to require type approval under the revised BWMS Code, subject to the applicable transitional arrangements. As the revised Code may directly affect BWMS design, testing and type approval, manufacturers should assess its impact on individual products, including existing approved systems, allow sufficient time for any necessary testing and approval, and reflect the application dates and transitional arrangements to be decided at MEPC 85 and MEPC 86 in their product development and type-approval plans.

Approval of Unified Interpretation to Regulation D-3 (BWM.2/Circ.66/Rev.6)

MEPC 84 approved a Unified Interpretation of regulation D-3 of the Ballast Water Management Convention and incorporated it into BWM.2/Circ.66/Rev.6. Submitted by the Republic of Korea at the initiative of Korean Register (KR), the interpretation is intended to provide greater clarity and consistency in industry implementation and received broad support from Member States and industry stakeholders.

The Unified Interpretation clarifies the installation date and continued validity of a BWMS approved taking into account the 2016 G8 Guidelines (resolution MEPC.279(70)). It confirms that, since such a system is deemed to comply with the BWMS Code pursuant to paragraph 1.13 of the Code (resolution MEPC.300(72)), the system may remain installed on board after 28 October 2020.



The Unified Interpretation clarifies that, in accordance with paragraph 1.13 of the BWMS Code (resolution MEPC.300(72)), ballast water management systems (BWMS) approved taking into account the 2016 G8 Guidelines (resolution MEPC.279(70)) are deemed to comply with the BWMS Code. Accordingly, such systems may remain installed on board ships on or after 28 October 2020



Adoption of Amendments to Mandatory IMO Instruments

MEPC 84 adopted the amendments to MARPOL Annex VI set out below (Res.MEPC.407(84) and MEPC.408(84)). These amendments had been submitted for adoption at MEPC ES.2 but were not adopted due to the decision to adjourn the session, and were therefore adopted separately at MEPC 84. Accordingly, the date of entry into force has been revised from 1 March 2027 to 1 September 2027.

Amendments to MARPOL Annex VI concerning the use of multiple engine operational profile for a marine diesel engine

Amendments	MARPOL Annex VI Regulation 2, Appendix I, Appendix II
Concerned Parties	☒ Ship Owners ☒ Shipbuilders ☒ Manufacturers ☐ Others
Entry-Into-Force Date	1 September 2027
Application	New individual or parent engine: no later than 1 January 2028 New member engine of existing family/group: no later than 1 January 2030 Substantial modification/replacement engine: no later than 1 January 2028
Implication	☒ Designs ☐ Operation ☐ Negligible
IMO documents	Resolution MEPC.408(84)
Source	See MEPC 84/14/Annex 4

MEPC 83 adopted Res.MEPC.397(83) providing amendments to NOx Technical Code 2008 concerning the use of Multiple Engine Operational Profile (MEOP⁶) for a marine diesel engine, and these amendments will enter into force on 1 March 2027.

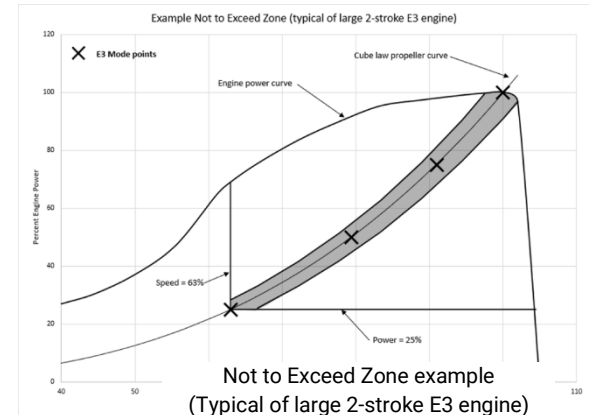
These amendments, including clarifying the engine test cycles, were prepared to allow for multi-operational profiles for marine diesel engine and will apply to individual marine diesel engine or an engine group/family on or after the date of entry into force of the amendments. The emissions at additional load points (beyond the current four load points according to NOx Code test cycles) will be required to be demonstrated, as the emissions in “not-to-exceed zones” need to be verified. The

engine designer clearly needs to document “auxiliary control devices”, which are functions or control strategies to protect the engine and/or its ancillary equipment against operating conditions that could result in damage or failure.

For the amendments above, the detailed application date for individual marine diesel engines is as follows:

1. 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.

2. 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.



⁶ Engine Operational Profile means a particular set of NOx influencing settings applied in the base emission control strategy which influences the NOx emission performance. Those settings may relate to, but are not limited to, fuel injection, inlet and exhaust valve operation, charge air management, exhaust bypass/wastegate or exhaust after treatment controls and auxiliary control devices.

⁷ Not-to-exceed zone means the power or torque and speed area of a marine diesel engine within the limit area of the not to exceed zone as declared by the applicant that the engine is certificated to operate within under steady state conditions.

3. 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.

In accordance with the amendments to the NOx Technical Code, the MEPC 84 adopted corresponding amendments to MARPOL Annex VI reflecting the following, which are scheduled to enter into force on 1 September 2027:

- Regulation 2: Addition of a definition for "Irrational Emission Control Strategy";
- Appendix I: Inclusion of check items in the IAPP Certificate indicating the applicability of Chapter 8 (MEOP) of the NTC for each Tier I, II and III;
- Appendix II: Amendment to the test cycle provisions under the "Test cycles and weighting factors" section of Regulation 13.

Implications

Shipping companies should verify in advance the applicable NOx certification criteria and MEOP requirements when replacing or substantially modifying engines, and reflect them in engine selection and modification plans. Shipbuilders should also confirm the applicable requirements and certification compliance of engines at the design stage to avoid design changes or certification delays.

Engine manufacturers should consider that the revised requirements may have different application dates for Parent and Member engines within each Engine

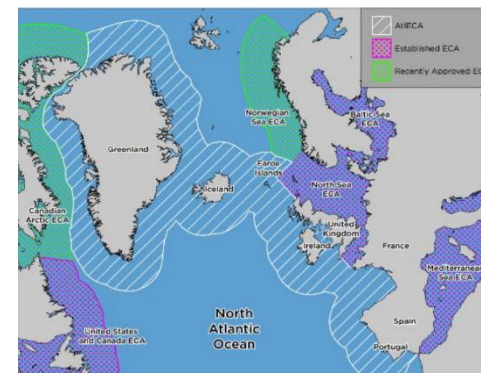
⁸ 'Ship constructed on or after 1 January 2027' means:
 • for which the building contract is placed on or after 1 January 2027; or

Family/Group. Relevant application dates and transitional arrangements should therefore be reviewed, together with the impact of revised testing and certification requirements, including MEOP, on existing and new engine certification plans.

Designation of the North-East Atlantic Ocean as an Emission Control Area for sulphur oxides, particulate matter and nitrogen oxides

Amendments	MARPOL Annex VI Regulation 13, 14 Appendix VII
Concerned Parties	☒ Ship Owners ☒ Shipbuilders ☐ Manufacturers ☐ Others
Entry-Into-Force Date	1 September 2027
Application	NOx ECA: ships constructed on or after 1 January 2027 SOx & PM ECA: ships operating in this area on or after 1 September 2028
Implication	☒ Designs ☒ Operation ☐ Negligible
IMO documents	Resolution MEPC.407(84)
Source	See MEPC 84/14/Annex 3

For the North-East Atlantic Ocean, which has over 1,500 marine protected areas, 17 key marine mammal habitats, and 148 UNESCO sites, MEPC 83 agreed to designate the area as an emission control area for nitrogen oxides, sulphur oxides, and particulate matter, and approved draft amendments to regulations 13, 14, and Appendix VII of MARPOL Annex VI. Finally, MEPC 84 adopted the above amendment accordingly.



Proposed North-East Atlantic ECA alongside the other established and proposed ECAs

Tier III NOx requirement will apply to ships constructed on or after 1 January 2027⁸ (with 3-date criteria) and operating in this area, while 0.1% SOx requirement will apply to ships operating in this area on or after 1 September 2028.

- in the absence of a building contract, the keels of which are laid or which are at the similar stage of construction on or after 1 July 2027; or
- The delivery date of which on or after 1 January 2031.

Implications

Shipbuilders should determine at the design stage whether the Tier III NOx requirements apply to new ships intended to operate in the North-East Atlantic Ocean ECA, taking into account the applicable construction and delivery date criteria. Where applicable, these requirements should be reflected in the selection and design of engines and NOx reduction systems.

Shipping companies should note that, from 1 September 2028, ships operating in the North-East Atlantic Ocean ECA will be required to use fuel oil with a sulphur content not exceeding 0.10% m/m or an approved equivalent arrangement, such as an EGCS. Accordingly, the availability and changeover of compliant fuel oil and the operation of relevant systems should be reviewed in advance of operating in the area.

Accessibility of data under the IMO Data Collection System CII ratings

Amendments	MARPOL Annex VI Regulation 27, Appendix IX
Concerned Parties	☒ Ship Owners ☐ Shipbuilders ☐ Manufacturers ☐ Others
Entry-Into-Force Date	1 September 2027
Application	Administrations, Recognised Organisations and ship-owners/operators from 1 September 2027
Implication	☐ Designs ☒ Operation ☐ Negligible
IMO documents	Resolution MEPC.407(84)
Source	See MEPC 84/14/Annex 3

It has been raised that the lack of access to the IMO DCS and CII rating data makes it difficult for members to analyse the accuracy of the indicators in assessing the operational efficiency of ships. Thus, it has been agreed to differentiate access right to IMO DCS data, either anonymously or with identification, based on whether the entity is a Party to MARPOL Annex VI, non-Party to MARPOL Annex VI, shipping company, general public, or a RO authorized by the flag Administration, as follows:

Administrations	RO	Company	General Public
As-is	Anonymized data	(not disclosed)	(not disclosed)
To-be	Non-anonymized data for all ships ⁹	Non-anonymized data for verified ships	Non-anonymized data for their ships

The amendments to MARPOL Annex VI related to the differentiation of access rights to IMO DCS data has been approved at MEPC 83 and subsequently adopted at MEPC 84, which will be entered into force on 1 September 2027.

⁹ Following an additional proposal, the text of regulation 27.12 was revised to include a provision allowing a flag State to require its explicit approval before granting access to non-anonymized data of its

ships.

Marine Plastic Litter from Ships

Adoption of the 2026 Strategy and Action Plan to Address Marine Plastic Litter (Res.MEPC.417(84))

MEPC 84 adopted the 2026 Strategy and Action Plan¹⁰ to address marine plastic litter from ships (resolution MEPC.417(84)).

The Strategy represents an updated and consolidated framework of existing measures, providing a comprehensive approach across key areas including waste management, management of fishing gear, control of plastic leakage pathways, improvement of port reception facilities, education and awareness, data collection and research, and international cooperation.

Outcome	Key measures
Reduction of marine plastic inputs from ships	• Improvement of shipboard waste management plans and procedures • Strengthening of waste minimization, segregation, storage and treatment onboard • Enhanced implementation of MARPOL Annex V
Reduction and management of ALDFG	• Development and implementation of fishing gear marking measures • Establishment of data collection and reporting systems on fishing gear loss and discharge
Reduction of plastic inputs from ship operations	• Development of measures to prevent plastic pellet loss during container transport • Identification and management of pathways of plastic inputs from ship operations

¹⁰ It consolidates and updates the 2021 Action Plan to Address Marine Plastic Litter from Ships (Res.MEPC.310(73)) and its subsequent revisions, establishing a comprehensive framework that includes short-, mid- and long-term as well as continuous measures, with the objective of reducing marine plastic litter from ships by 2030.

Improvement of port reception facilities	• Enhancement of adequacy and accessibility of port reception facilities • Strengthening of waste delivery and treatment arrangements ashore
Awareness-raising and capacity-building	• Strengthening of training and education programmes • Promotion of awareness among seafarers and stakeholders
Data collection and research	• Establishment of data collection frameworks on marine plastic litter • Conduct of IMO-led studies and analyses
International cooperation	• Strengthening cooperation with international organizations and Member States

Approval of Fishing Gear Marking Guidance and Management of ALDFG (MEPC.1/Circ.923)

MEPC 84 approved guidance (MEPC.1/Circ.923¹¹) to enhance the identification and traceability of fishing gear. The guidance provides a framework for marking fishing gear with unique identifiers to enable the tracking of ownership and usage history, with the aim of reducing marine pollution from lost fishing gear and strengthening its management.

During this session, proposals were made to introduce voluntary reporting through the MARPOL reporting framework to improve data collection on lost and discharged fishing gear, as well as to conduct PSC-based surveys to gather information on ship-generated waste and marine plastic. It was also discussed that data collection and management systems should be developed in a phased manner in conjunction with the fishing gear marking guidance,

¹¹ MEPC.1/Circ.923: Guidance based on the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG), providing measures to support the implementation of marking systems for improved identification and traceability of fishing gear, thereby contributing to the reduction of marine plastic pollution from abandoned, lost or otherwise discarded fishing gear (ALDFG)

and some Member States and organizations suggested further consideration of mandatory reporting and marking requirements.

FAO introduced the Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) and related technical materials, and indicated that alignment with IMO work could support Member States in the implementation of relevant systems.

As a result, MEPC 84 agreed to continue work on improving data collection and management systems for ALDFG (Abandoned, Lost or otherwise Discarded Fishing Gear), and to further consider the introduction of a voluntary reporting system at PPR 14.



(Source: Jordi Chias / naturepl.com)

Development of Regulatory Approaches for the Maritime Transport of Plastic Pellets

MEPC 84 considered the need to introduce mandatory measures (a Code) to reduce environmental risks associated with the maritime transport of plastic pellets, and expressed broad support for the development of such a Code. In this context, the need for a more structured regulatory framework based on the existing Recommendations for the carriage of plastic pellets by sea (MEPC.1/Circ.909)¹² was emphasized, and it was agreed that future development of the Code would build upon this guidance.

The proposed Code is expected to establish technical and operational requirements covering packaging, marking, handling, stowage, transport and spill prevention measures, with the aim of minimizing environmental risks during maritime transport.

¹² MEPC.1/Circ.909: Guidance providing recommendations on packaging, marking, handling, stowage and spill prevention for the carriage of plastic pellets by sea.

With regard to the legal basis of the regulation, possible instruments including MARPOL Annex III, SOLAS, or a combination of both were considered; however, no policy decision was reached due to differing views among Member States.

It was agreed that the detailed development of the regulatory requirements would be progressed at the PPR Sub-Committee, while the final decision on the applicable instrument¹³ would be taken at a future MEPC session. In addition, differing views were expressed regarding the need for an impact assessment, and it was agreed that this aspect would be further considered during the development of the Code.

¹³ Different approaches, including application under MARPOL Annex III, SOLAS, or a combined framework, were discussed, reflecting divergent views on regulatory scope and implementation.

Reduction of Underwater Radiated Noise from Commercial Shipping

Agreement on the Extension of the Experience-Building Phase

MEPC 84 recognized the need for further data collection and to address remaining technical gaps in reducing underwater radiated noise (URN), and agreed in principle to extend the Experience-Building Phase (EBP¹⁴) by two years until 2028, taking into account its linkage with energy efficiency.

Discussion on the Development of an IMO Policy Roadmap

While many Member States supported the need to develop an IMO policy roadmap¹⁵ for URN reduction, agreement on the specific direction was deferred to MEPC 85 due to differing views on scope and approach.

Some Member States emphasized the need for timely global policy development, including phased targets, while others highlighted the need for a gradual and regionally tailored approach, taking into account regional characteristics, data reliability, measurement infrastructure and cost implications.

Approval of Technical Guidance and IMO Study (MEPC.1/Circ.924)

MEPC 84 approved technical guidance (MEPC.1/Circ.924¹⁶) on co-optimizing energy efficiency and underwater radiated noise (URN) at the design and retrofit stage. The guidance provides approaches to achieve both improved energy efficiency and reduced URN through the integrated consideration of key design parameters such as propeller characteristics, hull form and operational profiles.



MEPC 84 also agreed in principle to conduct an IMO-commissioned study on URN emissions and the associated terms of reference, with a view to final consideration at MEPC 85 based on the Secretariat's analysis of resource and cost implications.

¹⁴ Experience-Building Phase (EBP): A phase aimed at collecting and analysing data, best practices and technical limitations related to URN reduction through the application of the Revised URN Guidelines (MEPC.1/Circ.906/Rev.1), serving as a foundation for future policy development.

¹⁵ Policy roadmap: A comprehensive plan outlining the long-term policy direction, targets, implementation timelines and phased measures (from voluntary to semi-mandatory to mandatory) for reducing underwater radiated noise from shipping.

¹⁶ Technical guidance for co-optimizing energy efficiency and underwater radiated noise (URN) at the design and retrofit stage, including consideration of propeller design, hull characteristics and operational measures to balance efficiency improvements and noise reduction.

Report of PPR Sub-Committee

Update of Noxious Liquid Substance Classification and Re-evaluation (MEPC.2/Circ.31)

MEPC 84 agreed to the issuance of MEPC.2/Circ.31, reflecting the results of the GESAMP evaluations and re-evaluations conducted in 2025. The circular incorporates the outcomes of the resubmission review of Lists 2 and 3 substances under PPR.1/Circ.10, and reflects approximately 60 products and cleaning additives in Lists 1, 2, 3, 5 and 10. It also includes amendments¹⁷ to certain carriage requirements in chapter 17 of the IBC Code.

MEPC 84 also noted the completion of the review of Lists 2 and 3 substances and approved PPR.1/Circ.10/Rev.1, including the list of substances to be deleted, thereby improving the re-evaluation procedure for noxious liquid substances.

In addition, where the re-evaluation of certain substances could not be completed due to administrative and logistical constraints, MEPC 84 agreed to allow the conditional reapplication of expired tripartite agreements under the conditions set out by ESPH 31. This measure is applied as a temporary and exceptional arrangement to support the continued carriage of such substances in the short term.

Approval of Work on Amendments to the IBC Code

MEPC 84 agreed to initiate amendments¹⁸ to the IBC Code to incorporate substances listed in the MEPC.2/Circular (List 1). The work aims to reflect GESAMP-evaluated substances in the IBC Code, updating the classification and carriage requirements of noxious liquid substances in line with the latest evaluation results,

¹⁷ The update revises pollution categories (Categories X, Y, Z, etc.) and carriage requirements based on GESAMP evaluation results, and confirms or adjusts the status of provisionally categorized substances through re-evaluation.

and ensuring internationally harmonized carriage standards. The amendments will be progressed in conjunction with the relevant decisions of MSC 111.

Development of NOx Certification for Engines Using Non-Carbon and Mixed Fuels

MEPC 84 approved draft amendments to the NOx Technical Code 2008 for the certification of engines using non-carbon fuels and carbon/non-carbon fuel mixtures, and agreed to circulate them with a view to adoption at a future session.

The amendments aim to enable NOx certification of engines using non-carbon fuels, such as ammonia and hydrogen, by improving the methodology for determining exhaust gas flow to account for fuel characteristics that are not adequately addressed by the existing certification framework. They also facilitate certification for engines operating on various fuel combinations, including dual-fuel engines. In addition, technical and editorial improvements were introduced, including clarification of the procedures for determining exhaust gas flow (u_{gas}) reflecting fuel properties, as well as revisions to definitions (symbols), calculation formulas and flow diagrams. Further refinements include clarification of analyser interference test requirements and the scope of application.

Implications

Engine manufacturers should review the new testing and certification requirements for engines using non-carbon fuels, such as ammonia, and blends of carbon and

¹⁸ Amendments: The proposed amendments will incorporate new and revised substances listed in the MEPC.2/Circular into chapter 17 (carriage requirements) and related sections of the IBC Code, including updates to pollution categories (Categories X, Y, Z, etc.) and carriage conditions (e.g. tank requirements, ventilation and handling provisions) based on the latest evaluation results.

non-carbon fuels, including exhaust gas flow calculation, emission component measurement and analyser interference testing, taking into account the application date following the expected adoption of the revised NOx Technical Code at MEPC 85. Accordingly, the revised requirements should be considered in advance in engine development and testing arrangements, NOx certification procedures, and future product development and certification schedules.

Approval of Amendments to MARPOL Annex I and IBTS-related Guidelines

MEPC 84 approved draft amendments to MARPOL Annex I and agreed to circulate them with a view to adoption at a future session. The amendments introduce a new regulation 12B to address ships fitted with integrated bilge treatment systems (IBTS), including provisions on system configuration covering holding and service tanks, and the treatment of oily bilge water through heating coils (forced evaporation). The amendments also include revisions to the form of the IOPP Certificate and the Oil Record Book.

In addition, MEPC 84 agreed in principle to the draft 2026 guidelines¹⁹, including IBTS-related guidance notes and revised Oil Record Book recording guidance, with final approval to be considered at a future session in conjunction with the adoption of the MARPOL Annex I amendments.

Implications

For ships incorporating a forced evaporation system for oily bilge water following the entry into force of the amendments to be adopted at MEPC 85, shipbuilders should ensure that the associated tanks, piping and heating arrangements comply with the design and arrangement requirements of the IBTS Guidelines. Shipping companies should also review relevant onboard procedures to ensure that the

operation of such systems and evaporation of oily bilge water are properly recorded and managed in accordance with the revised Oil Record Book format and recording guidelines.

Approval of Unified Interpretations of MARPOL Annex VI (MEPC.1/Circ.795/Rev.10)

MEPC 84 approved unified interpretations²⁰ related to regulation 16.9 of MARPOL Annex VI and agreed to incorporate them into the revised MEPC.1/Circ.795/Rev.10. The interpretation clarifies that the 600°C requirement for shipboard incinerators is a design and performance criterion verified during type approval testing.

MEPC 84 also approved unified interpretations related to regulations 13.2.2 and 13.2.3 of MARPOL Annex VI and agreed to incorporate them into MEPC.1/Circ.795/Rev.10. These interpretations clarify the timing of the application of NOx emission standards for engine replacement and major conversion, as well as the applicability of emission control area (ECA) requirements. They also clarify the application of the so-called “three dates” criterion, whereby the applicable reference date is determined based on the date of contract, keel laying, or delivery of the ship.

Approval of Amendments to MARPOL Annex VI on Installation of P/V Valves on Crude Oil Tankers

MEPC 84 approved draft amendments to regulation 15 of MARPOL Annex VI and the IAPP Certificate, requiring a minimum opening pressure of 0.20 bar (gauge) for pressure-vacuum (P/V) valves installed on crude oil tankers constructed on or after the date of entry into force, with a view to reducing emissions of volatile organic compounds (VOC). The Committee also agreed to circulate the amendments with a view to adoption at a future session.

¹⁹ Provide guidance on the design, operation and verification of integrated bilge treatment systems, including handling of oily wastes in machinery spaces, and revised guidance for recording operations in the Oil Record Book Part I, aligned with the new regulatory requirements.

²⁰ The requirement for an incinerator combustion temperature of 600°C is not a condition that must be continuously maintained during operation, but a design and performance standard to be verified during the type approval test, thereby ensuring consistency in inspection and application.

The requirement applies to P/V valves installed in accordance with regulation II-2/11.6.1 of SOLAS, and is intended to maintain cargo tank pressure above a certain level in order to reduce the release of volatile vapours into the atmosphere during cargo loading and unloading operations.

Implications

Shipbuilders should ensure that applicable crude oil tankers constructed on or after the entry-into-force date of the amendments are fitted with P/V valves having a minimum opening pressure of 0.20 bar (gauge), and reflect this requirement in the selection of relevant valves and the design of cargo tank venting systems.

Approval of the Development Direction for a Biofouling Regulatory Framework

MEPC 84 agreed that a legally binding framework for the control and management of ships' biofouling should be developed as a standalone instrument, rather than through amendments to existing conventions, and approved the associated new output and terms of reference (ToR). This decision aims to establish a global regulatory framework to minimize the transfer of invasive aquatic species.

“

ToR: The work will aim to develop a legally binding framework for the control and management of ships' biofouling, taking into account technical, verification and enforcement requirements, as well as relevant international legal and environmental considerations, and will proceed through the phased development of draft regulatory provisions.

”

Report of Other Sub-Committees

MEPC 84 considered the outcome of the Sub-Committee on Implementation of IMO Instruments (III 11) and approved two sets of guidance, in conjunction with MSC, to enhance consistency in survey, audit and certification practices

Approval of Guidance on Remote Surveys and Audits (MSC-MEPC.5/Circ.17)

MEPC 84 approved, subject to concurrent approval by MSC, MSC-MEPC.5/Circ.17²¹ (Guidance on assessments and applications of remote surveys, ISM Code audits and ISPS Code verifications), as developed by III 11. The guidance provides criteria, procedures and key considerations for the application of remote surveys and audits, supporting the consistent implementation of digital and remote inspection practices.

Approval of Unified Interpretation on Survey Completion Date (MSC-MEPC.5/Circ.3/Rev.1)

MEPC 84 approved, subject to concurrent approval by MSC, MSC-MEPC.5/Circ.3/Rev.1²² (Unified interpretation of the date of completion of the survey and verification on which the certificates are based), as proposed by III 11. The unified interpretation clarifies the definition of the survey and verification completion date used for certification, ensuring consistent application among Administrations and recognized organizations

²¹ Provides criteria and procedures for the application of remote surveys, ISM audits and ISPS verifications, including requirements for ICT-based evidence, execution processes and roles and responsibilities, while ensuring a level of compliance verification equivalent to in-person attendance. It also limits the use of remote methods for critical surveys such as initial and renewal surveys, clarifying that remote techniques should complement, rather than replace, physical attendance.

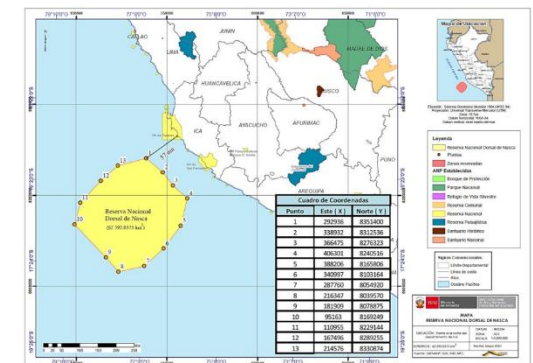
Identification and Protection of Special Areas, ECAs and PSSAs

Review of Associated Protective Measures for the Designation of the Nasca Ridge National Reserve as a PSSA

MEPC 84 considered the associated protective measures (APMs) proposed by Peru in connection with the designation of the Nasca Ridge National Reserve as a Particularly Sensitive Sea Area (PSSA).

With regard to the proposed APMs related to ballast water exchange and discharge, the Committee acknowledged the intent of the proposal; however, it was agreed that further refinement is required, particularly in relation to technical and procedural aspects. In this regard, Peru was invited to liaise with the Secretariat intersessionally with a view to submitting a revised proposal to a future session.

The proposal to designate the area as a Special Area under MARPOL Annexes I, II, IV and V was also considered. While the proposal was reviewed against the criteria applicable to each Annex, the need for further technical consideration was identified for certain Annexes. Accordingly, the proposal was referred to PPR 14 for further detailed consideration.



Nasca Ridge National Reserve

²² Clarifies that the completion date indicated on certificates should correspond to the date of the final initial or renewal survey/verification at which all required items have been completed, thereby ensuring consistent certification practices among Administrations and recognized organizations.

New Work Programme

New Work Programme on Prohibition of Recharging Ozone-Depleting Substances (ODS)

MEPC 84 approved a new output to amend Regulation 12 of MARPOL Annex VI with a view to explicitly prohibiting the reintroduction of ozone-depleting substances (ODS) on board ships. The work aims to address a regulatory gap whereby the recharging of ODS refrigerants, such as HCFCs, into equipment originally using non-ODS refrigerants is not considered as “installation” under the current framework. The proposed amendment will clarify relevant definitions and the scope of application to ensure effective enforcement. The work has been referred to the PPR Sub-Committee, with a target completion at PPR 14.

New Work Programme on Maritime Autonomous Surface Ships (MASS)

MEPC 84 approved, in principle, a new output to assess the applicability of IMO instruments under its remit to Maritime Autonomous Surface Ships (MASS, Maritime Autonomous Surface Ship), in light of the anticipated adoption of the non-mandatory MASS Code and the increasing deployment of such ships. The work will follow a Regulatory Scoping Exercise (RSE) approach to systematically review relevant conventions, including MARPOL and the BWM Convention, in order to identify potential regulatory gaps, inconsistencies, and areas requiring clarification or amendment when applied to MASS operations.

In particular, the first phase of the work will focus on conducting a gap analysis of MEPC instruments, taking into account developments under the non-mandatory MASS Code and the ongoing work in other IMO bodies, with a view to establishing a roadmap for subsequent phases, including the development of necessary amendments or interpretations.

The work is expected to be carried out under the PPR Sub-Committee over two sessions, with further details on scope and timelines to be determined in accordance with the MEPC work plan.

In-principle Approval of New Work Programme to Support the Implementation of the BBNJ Agreement

MEPC 84 agreed, in principle, to a new output to support the implementation of the BBNJ (Marine Biodiversity of Areas Beyond National Jurisdiction) Agreement on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction.

The work will aim to ensure consistency between the IMO environmental regulatory framework and the BBNJ Agreement by reviewing relevant IMO instruments, guidelines and procedures, including those under MARPOL and the BWM Convention. It will also consider potential linkages with BBNJ mechanisms such as marine protected areas (MPAs) and environmental impact assessments (EIAs), as well as the establishment of cooperation and information-sharing arrangements. The final approval of the new output, including its detailed terms of reference and work plan, will be decided at MEPC 85, taking into account the Secretariat’s analysis of the technical, administrative and financial implications.

New Work Programme approved by MEPC 84		Documents	Responsible bodies and work plans	
Amendments to regulation 12 of MARPOL Annex VI to prohibit the reintroduction of ozone-depleting substances on ships		MEPC 84/14	PPR	Biennial
Measures to address maritime autonomous surface ships (MASS) in the instruments under the purview of MEPC		MEPC 84/14/1	PPR	Post-biennial

MEPC 84 deliberated on the new work program proposals submitted to this session and approved them as listed below. The new work programs categorized as “Biennial” will be initiated with urgency by the Committee or responsible Sub-Committees within the period of the year 2026-2027, and the one categorized as “Post-biennial” will get started at an appropriate point after the period of the year 2026-2027.

Decisions of Other IMO Bodies and Consideration of Urgent Matters

MEPC 84 considered the outcomes of other IMO bodies and took action on the approval of guidelines, as well as discussed the response to urgent matters.

Discussion on the Strait of Hormuz and Adoption of a Resolution (Res.MEPC.406(84))

MEPC 84 considered the impact of the situation in and around the Strait of Hormuz on shipping safety, maritime traffic and the marine environment, based on the outcome of the IMO Council extraordinary session (C/ES.36).

The United Arab Emirates proposed the adoption of an MEPC resolution to strengthen marine environmental protection and pollution response, citing attacks on commercial vessels and risks of marine pollution. The Islamic Republic of Iran opposed the proposal, arguing that it was political in nature and beyond the technical mandate of MEPC, and proposed an alternative approach based on neutrality and technical considerations.

Following discussions, a roll-call vote was conducted in accordance with the Rules of Procedure, and the resolution²³ proposed by the United Arab Emirates was adopted by a majority vote (59 in favour, 3 against, 32 abstentions, 38 absent) (Res.MEPC.406(84)). MEPC 84 also requested the Secretary-General to continue monitoring the situation and to provide updates on its impact on shipping safety, the marine environment and seafarer welfare.

²³ The resolution condemns attacks against commercial vessels and interference with navigation in and around the Strait of Hormuz, emphasizes the importance of freedom of navigation and the safety and welfare of seafarers, and calls for enhanced international cooperation on marine environmental protection, pollution preparedness and response, information-sharing, and continued monitoring by IMO bodies.

Approval of Guidelines on Electronic Certificates (FAL-LEG-MEPC-MS.C.1/Circ.1)

At the request of FAL 49, LEG 112 and MSC 110, MEPC 84 approved the joint Guidelines for the use of electronic certificates (FAL-LEG-MEPC-MS.C.1/Circ.1)²⁴. The guidelines establish common criteria for the issuance, management and verification of electronic certificates, supporting the international harmonization of digital certification systems.

Approval of Revised Guidelines on Model Courses (MSC.MEPC.2/Circ.15/Rev.3)

Following the outcome of MSC 110, MEPC 84 approved the revised Guidelines for the development, review and validation of model courses (MSC-MEPC.2/Circ.15/Rev.3)²⁵. The revision aims to modernize the procedures for developing and validating IMO education and training model courses.

²⁴ They provide functional requirements and management frameworks to ensure authenticity, integrity and security of electronic certificates, as well as accessibility and verifiability.

²⁵ The guidelines standardize procedures for development, review and validation, and incorporate updated requirements on quality assurance, stakeholder engagement and periodic review.

List of Documents adopted or approved at MEPC 84

List of Documents adopted or approved at MEPC 84	
Res.MEPC.406(84)	Actions to Ensure the Protection of the Marine Environment in the Arabian Sea, Sea of Oman and the Gulf Region, Particularly in and Around the Strait of Hormuz, Resulting from the Unlawful Activities of the Islamic Republic of Iran
Res.MEPC.407(84)	Amendments to MARPOL Annex VI (Related to ECA, IMO DCS, etc.)
Res.MEPC.408(84)	Amendments to MARPOL Annex VI (Related to MEOP)
Res.MEPC.409(84)	2026 Guidelines for Ballast Water Management and Development of Ballast Water Management Plans (G4)
Res.MEPC.410(84)	Amendments to the 2022 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships
Res.MEPC.411(84)	2026 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI)
Res.MEPC.412(84)	Amendments to the 2022 Guidelines on Operational Carbon Intensity Indicators and the Calculation Methods (CII Guidelines, G1)
Res.MEPC.413(84)	Amendments to the 2024 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)
Res.MEPC.414(84)	2026 Guidelines for Test-Bed and Onboard Measurements of Methane (CH ₄) and/or Nitrous Oxide (N ₂ O) Emissions from Marine Diesel Engines
Res.MEPC.415(84)	Guidelines for Engine Load Monitoring (ELM) and Calculation of Emission Values
Res.MEPC.416(84)	Guidelines for Continuous Emission Monitoring Systems (CEMS) Used to Quantify Methane (CH ₄) and/or Nitrous Oxide (N ₂ O) Emissions from Marine Diesel Engines
Res.MEPC.417(84)	2026 Strategy and the Action Plan to Address Marine Plastic Litter from Ships
FAL-LEG-MEPC-MSC.1/Circ.1	Joint Guidelines for the Use of Electronic Certificates
MSC-MEPC.2/Circ.15/Rev.3	Guidelines for the Development, Review and Validation of Model Courses
BWM.2/Circ.66/Rev.6	Unified Interpretations to the BWM Convention
MEPC.1/Circ.795/Rev.10	Unified Interpretations to MARPOL Annex VI
MEPC.1/Circ.905/Rev.1	Revised Interim Guidance on the Use of Biofuels under Regulations 26, 27 and 28 of MARPOL Annex VI
MEPC.1/Circ.923	Implementation of Fishing Gear Marking Systems
MEPC.1/Circ.924	Technical Guidance on Co-Optimizing Energy Efficiency and Underwater Radiated Noise at the Design and Retrofit Stage
MEPC.1/Circ.925	2024 Guidelines for the Development of a Ship Energy Efficiency Management Plan (2024 SEEMP Guidelines)
MSC-MEPC.5/Circ.17	Guidance on Assessments and Applications of Remote Surveys, ISM Code Audits and ISPS Code Verifications
MSC-MEPC.5/Circ.3/Rev.1	Unified Interpretation of the Date of Completion of the Survey and Verification on Which the Certificates Are Based



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