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IMO MEPC 82: NEGOTIATIONS ON A NEW NET-ZERO FRAMEWORK CONTINUE

Relevant for ship owners and managers, equipment manufacturers and fuel suppliers.

October 2024

The 82nd session of the IMO's Marine Environment Protection Committee (MEPC 82) continued its negotiation of GHG fuel intensity requirements, potentially in combination with a GHG pricing mechanism, as part of a new net-zero framework addressing GHG emissions. Other important decisions include the adoption of regulations to designate the Canadian Arctic and the Norwegian Sea as NOx, SOx and PM ECAs.



Meeting highlights

- Adopted amendments designating the Norwegian Sea and the Canadian Arctic as Emission Control Areas (ECAs)
- Continued development of an IMO net-zero framework in MARPOL Annex VI addressing greenhouse gas (GHG) emissions
- Approved amendments to MARPOL Annex VI and the NOx Technical Code to allow for usage of multiple engine operational profiles (MEOP) and for re-certification of engines
- Commenced the review of the Carbon Intensity Indicator (CII), Ship Energy Efficiency Management Plan (SEEMP) and Energy Efficiency Existing Ship Index (EEXI)
- Continued the review of the Ballast Water Management (BWM) Convention

Adoption of amendments to mandatory instruments

Amendments to MARPOL Annex VI were adopted introducing the Norwegian Sea and the Canadian Arctic as ECAs for nitrogen oxides (NOx), sulphur oxides (SOx) and particulate matter (PM).

The amendments will enter into force on 1 March 2026.

For the Canadian Arctic, the requirements take effect as follows:

 The 0.10% fuel sulphur content requirement takes effect from 1 March 2027. • Tier III NOx requirements will apply to ships constructed (keel-laid) on or after 1 January 2025, although the requirements will enter into force on 1 March 2026.

For the Norwegian Sea, the requirements take effect as follows:

- The 0.10% fuel sulphur content requirement takes effect from 1 March 2027.
- Tier III NOx requirements will apply to ships contracted on or after 1 March 2026; or in the absence of a contract, keellaid on or after 1 September 2026; or delivered on or after 1 March 2030.

As a consequence of introducing contract and delivery dates as application dates for the Norwegian Sea ECA, the format of the supplement to the IAPP certificate was updated to include contract and delivery dates in addition to the keel-laid date.

Harmful aquatic organisms in ballast water

Ballast Water Management (BWM) Convention review MEPC 82 continued to discuss the topics raised in the experience-building phase (EBP) to facilitate the review of the BWM Convention. The topics discussed include:

- Exceptional discharges on the high seas or in any other designated areas
- Inclusion of maintenance instructions and schedules in mandatory Section B of the BWM Convention requiring this to be described in the BWM Plan and the Ballast Water Record Book
- BWM system testing parameters and test conditions for type approval testing
- Details of biological compliance testing for ships at intermediate and renewal surveys
- Standardization of data recordings

The review will continue in a Correspondence Group reporting to MEPC 83 in April 2025.

Modification of type-approved BWM systems
MPEC 82 updated BWM.Circ.43 "Guidance for Administrations on the Type Approval Process for BWM Systems" to include guidance of modifications to type-approved BWM systems.



Ballast water record book

Following the finalization of the "Guidance on Operation in Challenging Water Qualities (CWQ)" at MEPC 81, the "Guidance on Ballast Water Record Book", BWM.2/Circ.80, was amended to include an example of logging for ships encountering challenging water qualities.

Air pollution

NOx Technical Code

MEPC 82 approved amendments to MARPOL Annex VI and the NOx Technical code to allow for the use of multiple engine operational profiles for a marine diesel engine. The new requirements will also apply to already approved engine types retroactively, but these can be verified on the sole basis of documentation.

Furthermore, MEPC 82 approved amendments to the NOx Technical Code concerning certification of an existing engine subject to substantial modification or to a higher NOx requirement tier. The amendments describe a process to be followed to allow for re-certification of engines retrofitted on board.

The amendments are subject to adoption by MEPC 83 in April 2025.

Exhaust gas cleaning systems (EGCSs)

Proposed terms of reference for the re-establishment of a group of experts to draft guidelines for risk and impact assessments of the discharge water from EGCSs were reviewed and sent to PPR 12 in January 2025 for further consideration.

Energy efficiency

Review of the Carbon Intensity Indicator (CII)
MEPC 82 commenced the review of the short-term GHG
measures (CII, SEEMP and EEXI) by considering gaps and
challenges. No gaps were identified regarding the EEXI.

MEPC 82 agreed to consider the gaps and challenges related to CII and SEEMP in a two-stage approach.

The following gaps and challenges may be addressed in the first phase before 1 January 2026:

- CII reduction (Z) factors for the years 2027 to 2030
- Enhancement of the SEEMP framework
- Idle time and port waiting time
- Short voyages
- Improvement of the CII metric for cruise ships
- Enforcement of the CII
- Port call efficiency
- Accessibility of DCS data

The following gaps and challenges may be addressed in the second phase after 1 January 2026:

- Self-unloading and geared bulk carriers
- Adverse weather
- Use of bow thrusters

- Ballast voyages
- Inert gas generators
- Refrigerated cargo below deck
- Steam-driven LNG carriers
- Smaller LNG carriers
- Ro-ro cargo and ro-ro passenger ships
- Overlap with the mid-term GHG measures (net-zero framework)
- Life-cycle GHG emissions
- Pooling / fleet balancing

Note that the schedule and which items are assigned to which phase are indicative and subject to change. The review will continue in a Correspondence Group and an intersessional Working Group reporting to MEPC 83 in April 2025.

Data collection system (DCS)

MEPC 82 approved a circular providing guidance related to the application of amendments to Appendix IX (information to be submitted as part of the DCS) of MARPOL Annex VI, which enter into force on 1 August 2025. All data for the same calendar year are to be collected and reported with the same level of granularity, meaning that the amended data set should be reported from 1 January 2026, or from 1 January 2025 if the flag administration has agreed to an early implementation.

Reduction of GHG emissions

Mid-term measures to reduce GHG emissions
To ensure shipping achieves the ambitions of the 2023 IMO
GHG Strategy, MEPC 80 in 2023 decided to implement a
basket of measures consisting of two parts:

- A technical element, which will be a goal-based marine fuel standard regulating the phased reduction of marine fuel GHG intensity
- An economic element, which will be GHG emissions pricing mechanism, linked directly to the GHG intensity mechanism or as a stand-alone mechanism

The measures are scheduled to be adopted in 2025 and enter into force around mid-2027.

At MEPC 82, the IMO net-zero framework agreed at MEPC 81 was further developed to include consolidated legal text as the basis for future work. The text captures different design options proposed for both the technical and economic elements. While there was no agreement on this package of measures, there was further convergence between member states. A GHG fund was discussed along including distribution of potential revenues from an economic element, but with limited alignment.

The comprehensive impact assessment of the basket of candidate GHG reduction mid-term measures was completed, but due to concerns raised it was agreed to carry out additional work before MEPC 83, assessing the potential impact GHG regulations may have on food security.



As significant work remains before the envisaged adoption of the basket of measures, it was agreed that intersessional work is needed prior to MEPC 83.

Marine plastic litter

MEPC 82 approved guidelines on good practice relating to the clean-up of plastic pellets from ship-source releases. Additionally, it was decided to add a specific action to the current action plan to address marine plastic litter from ships: to introduce requirements for the transport of plastic pellets by sea in freight containers.

Identification and protection of special areas

MEPC 82 designated Nusa Penida Island and Gili Matra Island in the Lombok Strait as Particularly Sensitive Sea Areas (PSSAs).

Underwater radiated noise (URN)

MEPC 82 agreed to continue the work on reducing URN from ships by introducing an experience-building phase (EPB) and to extend the target completion year to 2026. MEPC.1/ Circ.906 "Revised Guidelines for the Reduction of Underwater Radiated Noise from Shipping to Address Adverse Impact on Marine Life" was amended by the inclusion of a URN management planning reference chart.

Any other business

Use of HFO as fuel by ships in Arctic waters MEPC 82 approved guidelines on mitigation measures to reduce risks of use and carriage for use of HFO as fuel by ships in Arctic waters.

Furthermore, it was clarified that Regulation 43A.2 of MAR-POL Annex I, which postpones the ban on using and carrying HFO as fuel in Arctic waters to 1 July 2029, applies only to ships required to have fuel oil tank protection under Regulation 12A of MARPOL Annex I or Regulation 1.2.1 of Chapter 1 of Part II-A of the Polar Code. Older ships not subject to these requirements must comply with the HFO ban from 1 July 2024 when in Arctic waters, even if the fuel oil tank protection standards are voluntarily met.

Ship recycling

To prevent potential legal ambiguity concerning the relationship between the Hong Kong Convention and the Basel Convention, with respect to the transboundary movement of ships intended for recycling, MEPC 82 decided to seek advice from the Basel Convention Secretariat on common guidelines.

Acknowledging that the Basel Convention Secretariat could not contribute to the guidelines prior to the Hong Kong Convention entering into force in June 2025, it was agreed to approve provisional guidance as a temporary measure.

Provisional list of resolutions and circulars

Please note that the list and document references below are provisional:

Resolution MEPC.392(82)

Amendments to MARPOL Annex VI (Designation of the Canadian Arctic and the Norwegian Sea as Emission Control Areas for nitrogen oxides, sulphur oxides and particulate matter, as appropriate)

Resolution MEPC.393(82)

Guidance on best practice on recommendatory goal-based control measures to reduce the impact on the Arctic of black carbon emissions from international shipping

Resolution MEPC.394(82)

Guidelines on recommendatory black carbon emission measurement, monitoring and reporting draft amendments to the NOx Technical Code 2008 (Use of multiple engine operational profiles for a marine diesel engine, including clarifying engine test cycles)

Resolution MEPC.395(82)

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

Resolution MEPC.396(82)

Designating the Nusa Penida Islands and Gili Matra Islands in Lombok Strait as a Particularly Sensitive Sea Area

AFS.3/Circ.6

2024 Guidance on best management practices for removal of anti-fouling coatings from ships

BWM.2/Circ.43/Rev.2

2024 Guidance for Administrations on the type approval process for ballast water management systems

BWM.2/Circ.80/Rev.1

2024 Guidance on ballast water record-keeping and reporting

HKSRC.2/Circ.1

Provisional guidance on the implementation of the Hong Kong and Basel Conventions regarding the transboundary movement of ships intended for recycling

MEPC.1/Circ.590/Rev.1

Revised tank cleaning additives guidance note and reporting form

MEPC.1/Circ.906/Rev.1

Revised guidelines for the reduction of underwater radiated noise from shipping to address adverse impacts on marine life



MEPC.1/Circ.913

Guidance on the application of the amendments to Appendix IX of MARPOL Annex VI (Resolution MEPC.385(81))

MEPC.1/Circ.914

Sample format for the confirmation of compliance pursuant to Regulation 5.4.5 of MARPOL Annex ${\sf VI}$

MEPC.1/Circ.915

Guidelines on mitigation measures to reduce risks of use and carriage for use of heavy fuel oil as fuel by ships in Arctic waters

Recommendations

DNV recommends that our customers take into account the work on the IMO net-zero framework on GHG emission reduction, and note that requirements are expected to enter into force around mid-2027.

Companies operating in the Canadian Arctic and Norwegian Sea are advised to note the establishment of ECAs and the attendant effective dates of the requirements. We also recommend signing up for our dedicated **webinar** discussing the outcome of MEPC 82, taking place on **8 October 2024:**

https://www.dnv.com/events/mepc-82-status-on-new-ghg-emissions-regulations-and-more/

For more information about decarbonizing shipping and about the relevant DNV services relating to GHG emissions, visit:

- www.dnv.com/decarbonize-shipping
- www.dnv.com/cii
- www.dnv.com/eexi
- www.dnv.com/seemp3

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