



MARPOL CONVENTION



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Spring 2026

Annex VI: North-East Atlantic Emission Control Area

MEPC 84 adopted amendments to MARPOL Annex VI designating the **North-East Atlantic Ocean** as an Emission Control Area for NO_x, SO_x and PM.

The ECA covers the Exclusive Economic Zones (EEZs) and territorial seas of Greenland, Iceland, the Faroe Islands, Ireland, the United Kingdom, France, Spain and Portugal.

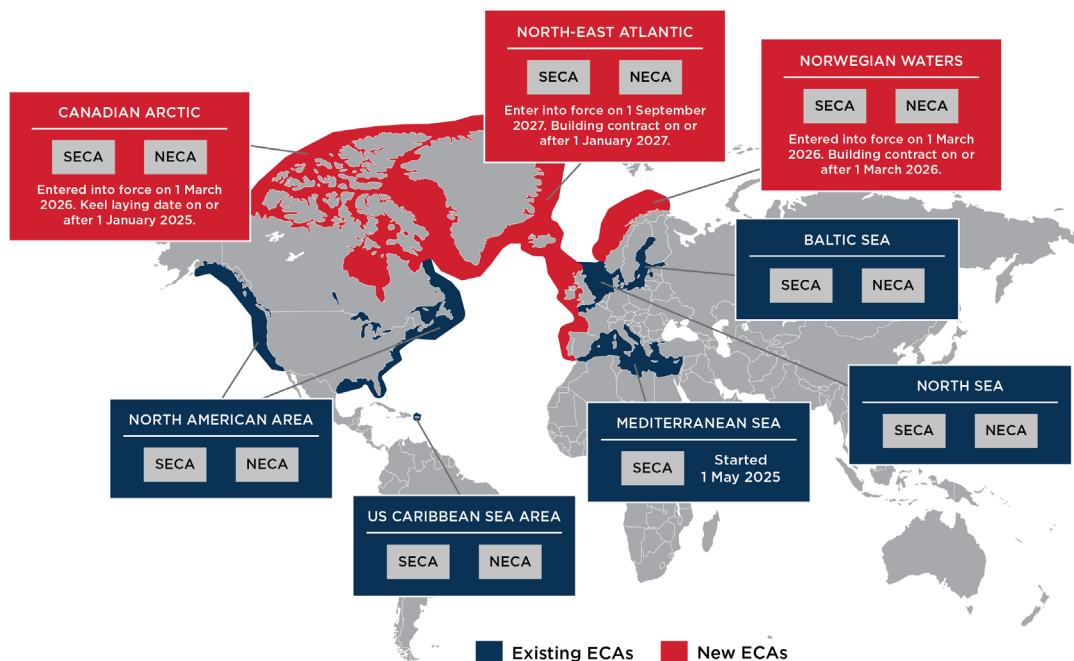
The 0.10% sulphur content requirement takes effect **12 months after entry into force** of the amendments (i.e. from 1 September 2028).

NO_x Tier III engine certification applies to ships:

- for which the building contract is placed on or after **1 January 2027**; or
- in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after **1 July 2027**; or
- the delivery of which is on or after **1 January 2031**.

Effective Date: 1 September 2027

Sources: MEPC.407(84) and MEPC.408(84)



Annex VI: IMO DCS Access, Data Reporting and Short-Term Measure Review Clause

MEPC 84 adopted amendments to MARPOL Annex VI addressing several data collection and reporting matters that had been separated from the Net-Zero Framework package following the adjournment at MEPC/ES.2.

The amendments include:

- **Regulation 27 (IMO DCS accessibility):** Parties now have access to a non-anonymised database containing data for all ships. The Secretary-General shall also maintain an anonymised public database. On an ad hoc basis, data may be shared with analytical consultancies and research entities under strict confidentiality rules. Companies may also request non-anonymised access for the general public to their own ships' fuel oil consumption reports.
- **Regulations 27 and 28 / Appendix IX:** clarification of entries in data reporting, supporting uniform implementation of the enhanced granularity provisions adopted at MEPC 81.
- **Regulations 20, 25 and 28 (review clauses):** updated references to confirm that the EEXI, EEDI and CII frameworks shall be kept under review in light of the 2023 IMO Strategy on Reduction of GHG Emissions from Ships.

Effective Date: 1 September 2027

Sources: MEPC.407(84)



Annex VI: Methane and Nitrous Oxide Emission Measurement Guidelines

MEPC 84 adopted three sets of guidelines addressing the measurement of methane (CH_4) and nitrous oxide (N_2O) emissions from marine diesel engines:

- **2026 Guidelines for test-bed and onboard measurements** of methane and/or nitrous oxide emissions from marine diesel engines;
- **Guidelines for engine load monitoring (ELM)** and calculation of emission values (ELM Guidelines);
- **Guidelines for continuous emission monitoring systems (CEMS)** used to quantify methane and/or nitrous oxide emissions from marine diesel engines.

These guidelines support the broader effort to account for non- CO_2 greenhouse gas emissions from shipping, particularly as the use of LNG and other gaseous fuels increases.

Effective Date: 1 May 2026

Source: Resolution MEPC.413(84), Resolution MEPC.414(84) & Resolution MEPC.415(84)



Annex VI: Revised Interim Guidance on Use of Biofuels for CII/DCS

MEPC 84 approved revised interim guidance on the use of biofuels under regulations 26, 27 and 28 of MARPOL Annex VI.

The revised guidance updates the application of biofuel emission factors for CII calculation and IMO DCS reporting purposes, with an application date of **1 January 2027**.

Effective Date: Application from 1 January 2027

Source: MEPC 84 approved revised interim guidance



Spring 2025

Annex VI: Energy Efficiency Design Index (EEDI), SEEMP and Carbon Intensity Indication (CII) Guideline Amendments

MEPC 83 adopted several Annex VI-related guideline updates to support the short-term GHG reduction framework:

- **MEPC.400(83)**: amendments to the 2021 CII Reduction Factors Guidelines (G3);
- **MEPC.401(83)**: amendments to the 2024 SEEMP Guidelines;
- **MEPC.403(83)**: amendments to the 2022 Guidelines on survey and certification of the EEDI.

These amendments support updated data collection, improved consistency in reporting, and further development of the efficiency framework.

Effective Date: 11 April 2025

Sources: MEPC.400(83), MEPC.401(83), and MEPC.403(83)



Annex VI/NOx Technical Code: Multiple Engine Operational Profiles

MEPC 83 adopted NOx Technical Code amendments concerning:

- use of **multiple engine operational profiles** for a marine diesel engine, including clarification of engine test cycles; and
- certification of an engine subject to substantial modification or being certified to a NOx tier different from that applied at installation.

These NOx Technical Code amendments were accompanied by related MARPOL Annex VI work, with consequential Annex VI amendments later adopted at MEPC 84.

Entry Into Force: 1 March 2027 (MEPC.397(83)); 1 September 2026 (MEPC.398(83))

Sources: MEPC.397(83) and MEPC.398(83)



Annex I Cargoes: Interim Guidance on Biofuel Blends by Conventional Bunker Ships

MEPC 83 approved interim guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships.

The guidance consolidates relevant IMO instruments concerning the carriage of Annex I cargoes **versus** Annex II products..." or "...carriage of Annex I cargoes **rather than** Annex II products and responds to the industry need for greater clarity on carriage of biofuel blends by bunker vessels.

Effective Date: 2025 guidance issuance

Source: MEPC.1/Circ.917



Fall 2024

Annex VI: Canadian Arctic and Norwegian Sea Emission Control Areas

MARPOL Annex VI was amended to designate the **Canadian Arctic** and the **Norwegian Sea** as Emission Control Areas for nitrogen oxides (NO_x), sulphur oxides (SO_x), and particulate matter (PM).

For both ECAs, the 0.10% sulphur content requirement applies from **1 March 2027**.

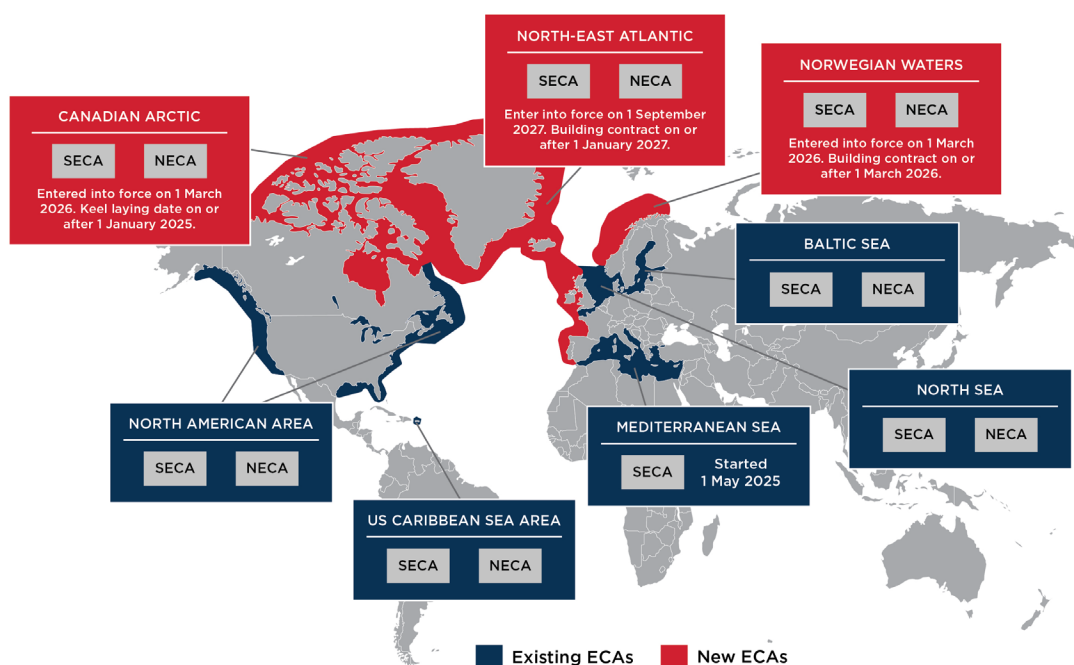
For NO_x Tier III application:

- **Canadian Arctic:** applies to ships constructed on or after **1 January 2025**.
- **Norwegian Sea:** applies under a **three-date criterion** based on building contract, keel laying, or delivery date.

The format of the Supplement to the IAPP Certificate was updated to accommodate the additional application date logic for the Norwegian Sea ECA.

Effective Date: 1 March 2026

Source: MEPC.392(82)



Spring 2024

Protocol I/Article V: Reporting Procedures for the Loss of Containers

MARPOL Protocol I was amended to update the reporting procedures for the loss of freight containers. The amendments align MARPOL reporting with the associated SOLAS danger message requirements and confirm that, in the event of a loss of containers, reporting is to be carried out in accordance with the SOLAS framework.

These amendments are intended to improve navigational safety and environmental awareness following container losses at sea.

Effective Date: 1 January 2026

Source: MEPC.384(81)



Annex VI: Low-Flashpoint Fuels, Steam-System Engine Replacement and IMO DCS

A package of amendments to MARPOL Annex VI was adopted covering low-flashpoint fuels and other fuel oil related issues, marine diesel engines replacing steam systems, and accessibility and granularity of IMO Data Collection System (IMO DCS) reporting.

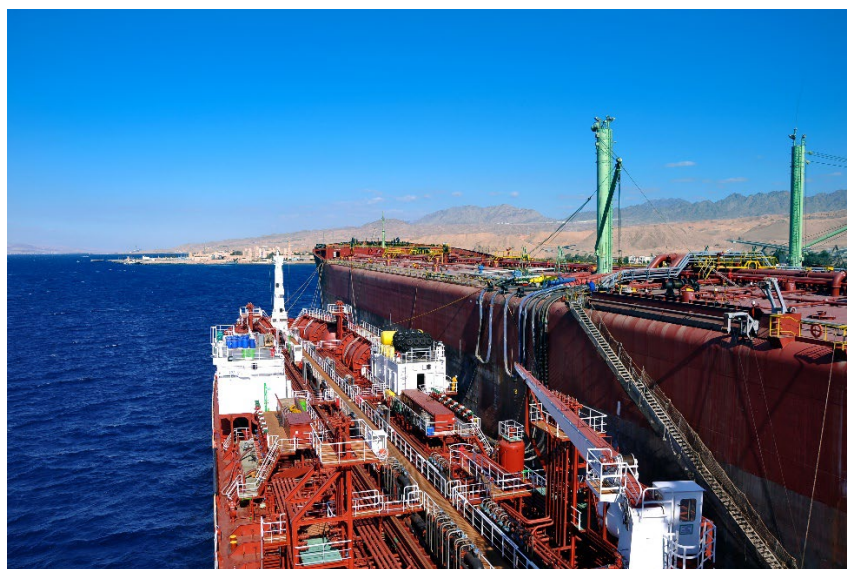
The amendments include:

- New or revised definitions of **fuel oil** and **gas fuel** in regulation 2.
- Clarification that in-use/onboard fuel oil sampling point requirements do not apply to **low-flashpoint fuels** or **gas fuels**.
- New bunker delivery note provisions for low-flashpoint fuels and gas fuels, including density, associated temperature, and sulphur content declarations appropriate to the fuel type.
- Amendments to regulation 13.2.2 concerning conditions under which a marine diesel engine replacing a steam system may be accepted without meeting Tier III requirements.
- Amendments to regulation 27 and Appendix IX introducing **transport work data, enhanced granularity of fuel consumption reporting, optional laden distance travelled, fuel consumption by consumer type, shore power supplied**, and improved IMO DCS data accessibility.

The amendments also invite early application of the new Appendix IX data reporting from 1 January 2025.

Effective Date: 1 August 2025

Source: MEPC.385(81)



Annex VI/Regulation 13.2.2: 2024 Guidelines for Non-Identical Replacement Engines

In conjunction with the amendments to regulation 13.2.2, MEPC adopted revised 2024 Guidelines for non-identical replacement engines not required to meet the Tier III limit.

The guidelines provide updated criteria and procedures for cases where a marine diesel engine is installed as a replacement and cannot be treated as an identical replacement engine.

Effective Date: 22 March 2024

Source: MEPC.386(81)



Annex VI: 2024 Ship Energy Efficiency Management Plan (SEEMP), DCS Verification and Environmental Protection Law (EPL) Guidelines

MEPC 81 adopted a number of consequential guideline updates supporting Annex VI implementation:

- **MEPC.388(81)**: amendments to the 2022 SEEMP Guidelines to reflect the expanded IMO DCS reporting framework;
- **MEPC.389(81)**: amendments to the 2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity;
- **MEPC.390(81)**: amendments to the 2021 Guidelines on the shaft/engine power limitation system to comply with EEXI requirements and use of a power reserve.

These updates support implementation of the new reporting and efficiency requirements adopted under Annex VI.

Effective Date: 22 March 2024

Sources: MEPC.388(81), MEPC.389(81), and MEPC.390(81)



Annex VI: 2024 LCA Guidelines

MEPC adopted the **2024 Guidelines on Life Cycle GHG Intensity of Marine Fuels**, updating the earlier LCA Guidelines adopted at MEPC 80.

The revised guidance updates default emission factors, revises calculation provisions, and adds new templates for well-to-tank and tank-to-wake emission factor submissions. These guidelines are part of the technical foundation supporting future GHG fuel intensity regulation under MARPOL Annex VI.

Effective Date: 22 March 2024

Source: MEPC.391(81)



Fall 2023

Annex I, II, IV, V and VI: Regional Reception Facilities Within Arctic Waters

Acknowledging the infrastructure limitations faced by ports in arctic regions, several amendments to MARPOL were adopted, allowing states with coastlines bordering arctic waters an alternative method to meet their obligations for providing adequate port reception facilities for the disposal of ship waste.

These amendments provide the option for states in these regions to provide adequate reception facilities by means of agreed regional arrangements that ports in the region can collectively meet the needs of waste disposal for ships operating in the region, rather than by providing such facilities at each port.

The implementation of such regional arrangements will require the development of a regional reception facility plan (RRFP) based on the Guidelines for Development of a Regional Reception Facility Plan (MEPC.221(63), as amended).

Effective Date: 1 May 2024

Sources: MEPC.359(79), MEPC.360(79), and MEPC.362(79)



Annex I, II, IV, V and VI: Regional Reception Facilities Within Arctic Waters

This option for the RRFP has been amended into these regulations:

- Annex I/Regulation 38 – Oil and Oily Substances
- Annex II/Regulation 18 – Cargo Residues
- Annex IV/Regulation 12 – Sewage
- Annex V/Regulation 8 – Garbage
- Annex VI/Regulation 17 – Ozone-Depleting Substances and Exhaust Gas Cleaning Residues

Additionally, it was recognized that some arctic states may also have coastlines that do not border arctic waters. The amended regulations would allow such states to enter into regional arrangement agreements but only to support the needs of their ports in arctic waters. The concept of the regional arrangement cannot be applied to any ports outside of arctic waters. Such states will be obligated to provide adequate reception facilities for wastes at non-arctic ports.

Effective Date: 1 May 2024

Sources: MEPC.359(79), MEPC.360(79), and MEPC.362(79)



Annex I, II, IV, V and VI: Guidelines for Use of Regional Reception Facility Plans

In relation to the MARPOL amendments permitting establishment of regional reception facilities within arctic waters, updates to the 2012 Guidelines for Development of a Regional Reception Facility Plan (MEPC.221(63)) were also adopted.

Whereas these guidelines previously only addressed small island developing states (SIDS), the amendments extend the guidelines to also apply to states with coastlines bordering arctic waters. The revised guidelines will become applicable upon entry into force of the noted amendments to MARPOL Annexes I, II, IV, V and VI.

Effective Date: 16 December 2022

Source: MEPC.363(79)



Annex V/Regulation 10: Garbage Management Plans and Record-Keeping

To expand the tracking and reporting of accidental discharges to the sea that may involve plastics, amendments to MARPOL Annex V were adopted to expand the requirement for a garbage record book by lowering the threshold down to ships of 100 gt and above (from the current threshold of 400 gt and above).

In addition, in the event of any discharge or accidental loss referred to in regulation 7 of Annex V, an entry shall be made in the ship's official logbook of the date and time of occurrence, port or position of the ship at the time of occurrence.

Effective Date: 1 May 2024

Source: MEPC.360(79)



Annex VI/Regulation 14: Mediterranean Sea Emission Control Area (ECA)

In the latest regional effort to limit the emission of sulfur oxides and particulate matter from ships, a new ECA has been established for the Mediterranean Sea as a whole. The approval of this new ECA requires vessels to use fuel oil of 0.10% by mass sulfur content when operating anywhere within the Mediterranean Sea. The amendments will acknowledge the Mediterranean Sea alongside other existing ECAs, provide a formal description of the ECA by coordinates and confirm the requirement to use fuel oil of 0.10% by mass sulfur content when operating in this area.

These amendments will enter into force on 1 May 2024, but ships operating in this ECA will be exempt from compliance with the 0.10% by mass sulfur content standard for fuel oil during the first 12 months immediately following entry into force of the amendment (in accordance with MARPOL Annex VI/Regulation 14.7).

Effective Date: 1 May 2024

Source: MEPC.361(79)



Annex VI/Appendix V: Flashpoint Information on the Bunker Delivery Note

An amendment to Appendix V (“Information to be included in the bunker delivery note”) of MARPOL Annex VI was adopted to enhance the safety of ships related to the use of fuel oil by addressing concerns regarding the verification of the flashpoint of bunkered fuel oil.

Information on the flashpoint of bunkered fuel must now be included in the bunker delivery note. The flashpoint (in degrees Celsius) shall be specified in accordance with standards acceptable to the organization or a statement included that the flashpoint has been measured above 70° C.

Effective Date: 1 May 2024

Source: MEPC.362(79)



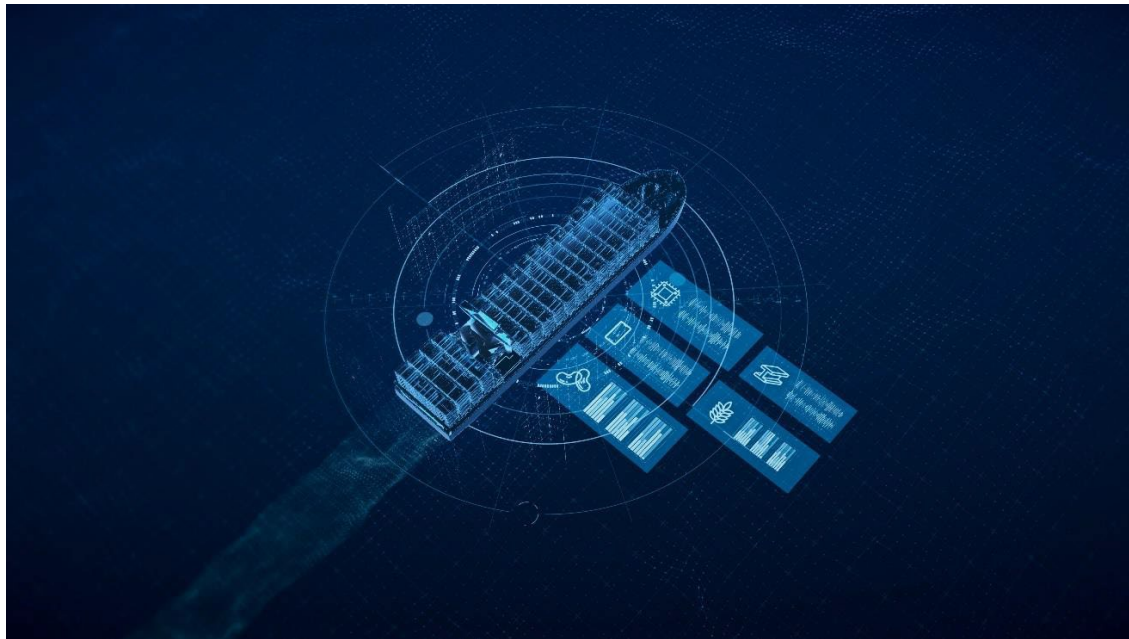
Annex VI/Appendix IX: Information to be Submitted to the IMO Data Collection System

An amendment to Appendix IX (“Information to be Submitted to the IMO Ship Fuel Oil Consumption Database”) of MARPOL Annex VI was adopted to provide a more complete reporting of information to the IMO for future assessment of global trends in ship fuel efficiency. Information related to Energy Efficiency Existing Ship Index (EEXI) and carbon intensity indicator (CII) and their associated guidelines must now be included in reports made to the IMO Ship Fuel Oil Consumption Database. New entries to be submitted are:

- Attained EEXI (if applicable) and for ships which Regulation 28 of MARPOL Annex VI applies.
- Applicable CII (either annual emissions ratio (AER) or cgDIST) and required annual operational CII.
- Attained annual operational CII before and after any corrections.
- Optional reporting of operational carbon intensity rating and CII by alternative calculations (for trial purposes).

Effective Date: 1 January 2024

Source: MEPC.362(79)



Annex VI/Regulation 22: 2022 Guidelines on Calculation of Attained EEDI

To improve the application of the attained energy efficiency design index (EEDI) calculation, the 2022 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index for New Ships have been adopted, superseding the 2018 edition. Updates to the guidelines include:

- The table in paragraph 2.2.1 being amended to include ethane fuel, providing a default value for lower calorific value, carbon content and carbon factor.
- The maximum allowable PPTO deduction changing from PAE to $PAE/0.75$ under paragraph 2.2.5.2
- An additional paragraph under section 2.2.15 (ds; summer load line draught) is added, which states that for new ships with multiple load line certificates or with a load line certificate containing multiple summer load lines, the maximum summer draught shall be used to calculate and verify the required and attained EEDI.

Effective Date: 16 December 2022

Source: MEPC.364(79)



Annex VI/Regulation 5.4: 2022 Guidelines on EEDI Survey and Certification

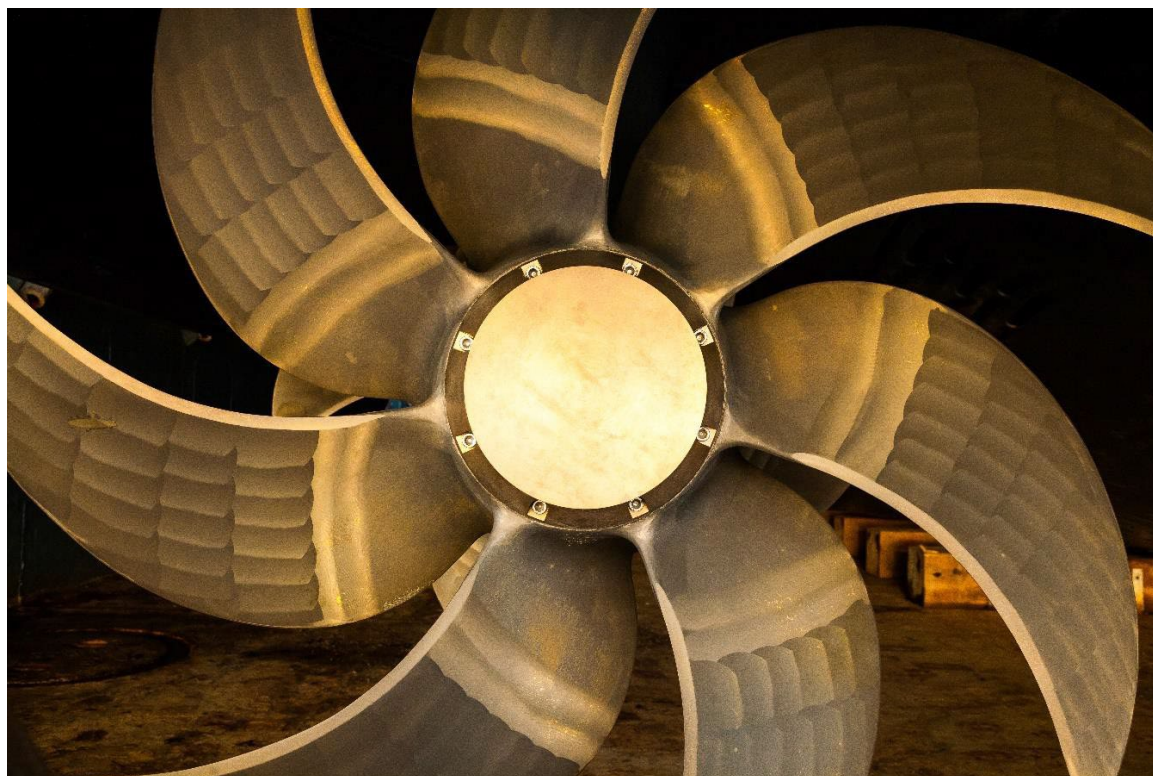
To improve survey guidance related to EEDI, the 2022 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI) have been adopted, superseding the previous version of these guidelines.

Updates to the guidelines were made to reference the latest version of the international towing tank conference (ITTC) Recommended Procedure regarding the preparation, conduct and analysis of speed/power trials. Specifically, in paragraphs 4.3.5, 4.3.6 and 4.3.8, the reference to this ITTC Recommended Procedure is revised to allow for the use of the 2017, 2021 or 2022 versions of the procedure, whichever may be applicable at the time of sea trials.

It is noted that the most current version of this standard at the time of sea trials is what will be applicable for each vessel.

Effective Date: 16 December 2022

Source: MEPC.365(79)



Annex VI/Regulation 16: Standards for Shipboard Incinerators

In recognition of discrepancies between resolution MEPC.244(66) and SOLAS Chapter II-2 on fire protection requirements for incinerators and waste stowage spaces, amendments to the 2014 Standard Specification for Shipboard Incinerators were adopted to remove Annex 2 of MEPC.244(66) ("Fire Protection Requirements for Incinerators and Waste Stowage Space") from the standard.

It was agreed that Annex 2 should be removed from the resolution as the content of this annex was not necessarily a part of the technical specifications of the incinerator itself. The fire safety requirements of SOLAS Chapter II-2 are considered sufficient for incinerator and waste stowage spaces and should be applied accordingly.

Effective Date: 16 December 2022

Source: MEPC.368(79)



Annex VI/Regulation 18.3: Unified Interpretation – Use of Synthetic Fuels

An interpretation in the IMO unified interpretations to MARPOL Annex VI related to fuel oil blends containing biofuel was revised to extend this interpretation to cover synthetic fuel as well. As with biofuels, the revised interpretation clarifies that a fuel oil that is a blend of:

- No more than 30% by volume of synthetic fuel should meet the requirements of regulation 18.3.1 of MARPOL Annex VI.
- More than 30% by volume of synthetic fuel should meet the requirements of regulation 18.3.2 of MARPOL Annex VI.

The bunker delivery note must also indicate the identity and amount of synthetic fuel present in a delivered product. For the purposes of this interpretation, a synthetic fuel is a fuel oil from synthetic or renewable sources similar in composition to petroleum distillate fuels.

Effective Date: 16 December 2022

Source: MEPC.1/Circular 795/Revision 7



Annex VI/Regulations 2, 27 and Appendix IX: Boil-off Gas and IMO DCS

An interpretation in the IMO unified interpretations to MARPOL Annex VI related to onboard consumption of boil-off gas (BOG) was revised to clarify that all BOG consumed on board for propulsion or operational needs is to be reported as fuel consumption in the IMO data collection system for fuel oil consumption of ships.

Effective Date: 16 December 2022

Source: MEPC.1/Circular 795/Revision 7



Annex VI/Regulation 22.3: Unified Interpretation – Reporting of Attained EEDI

A new unified interpretation was added to the IMO Unified Interpretations to MARPOL Annex VI to address different scenarios for the date upon which ships complete the initial International Energy Efficiency Certificate survey under MARPOL Annex VI and clarify the date by which EEDI data and relevant information must be submitted to the IMO.

Effective Date: 16 December 2022

Source: MEPC.1/Circular 795/Revision 7



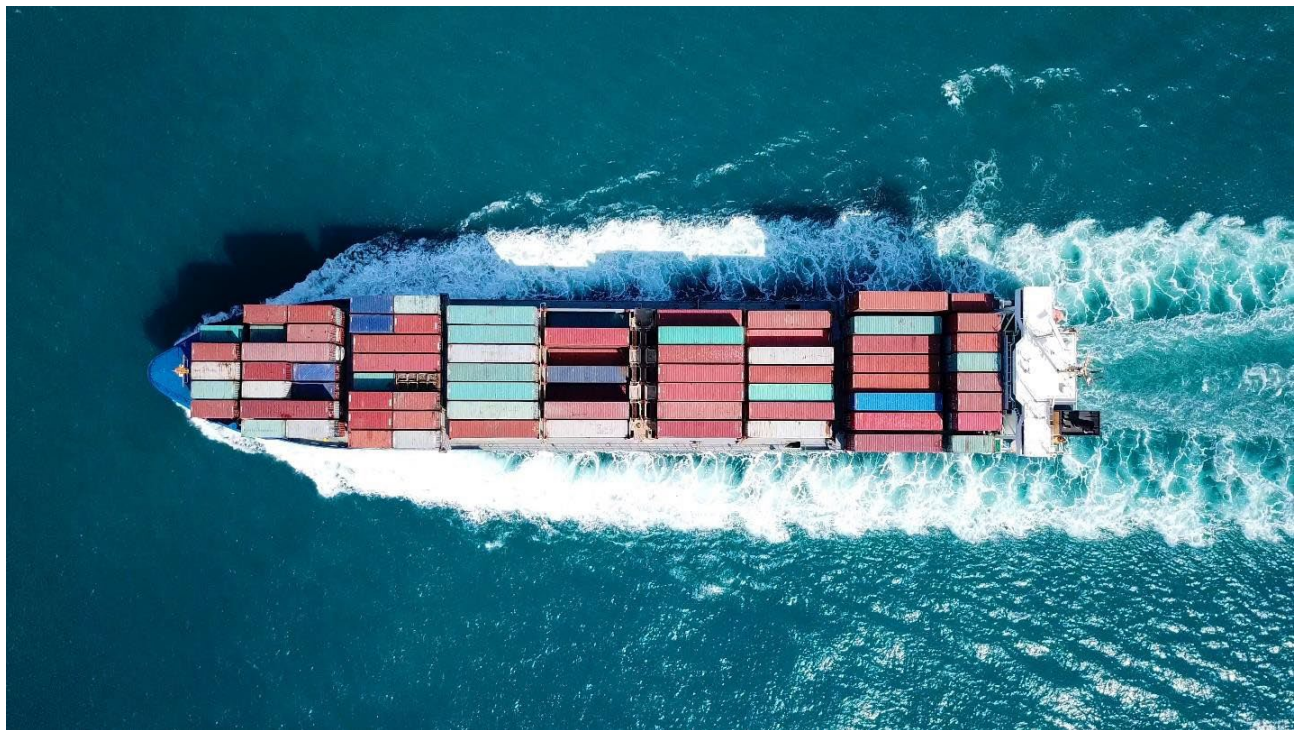
Annex VI/Regulation 8.3: Unified Interpretation – Inclusion of Annual Operational CII

A new unified interpretation was added to the IMO Unified Interpretations to MARPOL Annex VI to address questions regarding the addition of the attained annual operational CII and the rating of ships to the form of the Statement of Compliance given in Appendix X of MARPOL Annex VI.

This interpretation clarifies that the new form should be used from the entry into force date of the CII regulations (1 November 2022), but the new parts for the attained CII and rating will not be populated until 2024 when the relevant values are available.

Effective Date: 16 December 2022

Source: MEPC.1/Circular 795/Revision 7



Spring 2023

Annex VI/Regulations 23 and 25: Energy Efficiency Existing Ship Index (EEXI)

New requirements have been adopted to support the IMO's aim of greenhouse gas (GHG) reduction in shipping. The IMO introduced the EEXI, similar to the energy efficiency design index (EEDI) requirements for new ships. Specific existing ship types must establish a required EEXI value and demonstrate an attained EEXI value of equal or lesser value.

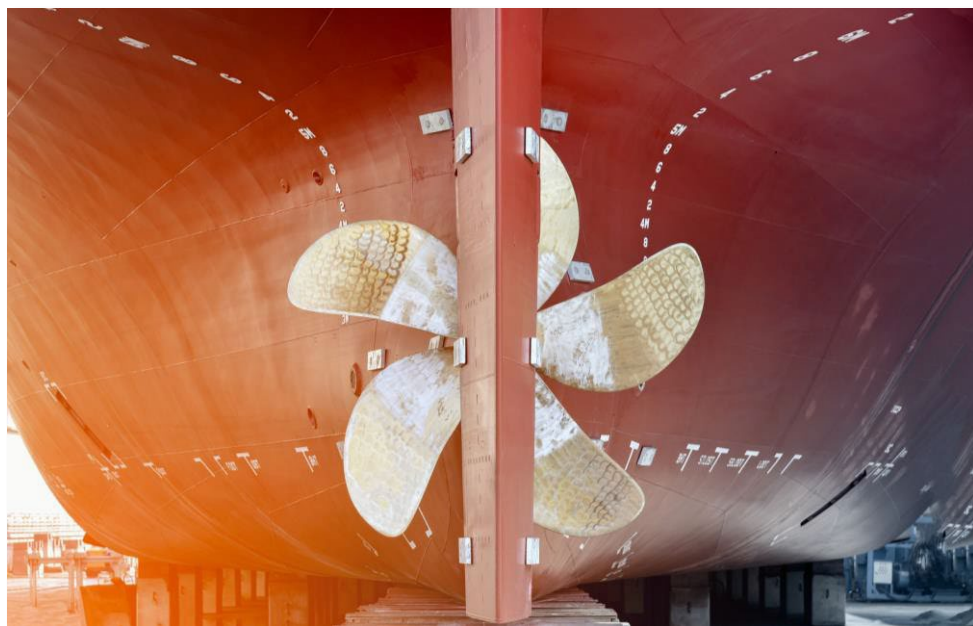
Verification of a ship's attained EEXI should occur at the first international air pollution prevention (IAPP) annual, intermediate, or renewal survey or at the first IAPP initial survey, whichever occurs first, on or after 1 January 2023. Guidance documents have been revised to provide a method for in-service performance measurements for EEXI attained value, calculation and verification:

- 2022 Guidelines on the Method of Calculation of the Attained EEXI (Resolution MEPC.350(78))
- 2022 Guidelines on Survey and Certification of the Attained EEXI (Resolution MEPC.351(78))

These resolutions revoke MEPC.333(76) and MEPC.334(76), the 2021 versions of these guidelines, respectively

Effective Date: 1 January 2024

Sources: MSC.496(105) and MSC.497(105)



Annex VI/Regulations 23 and 25: EEXI Calculation

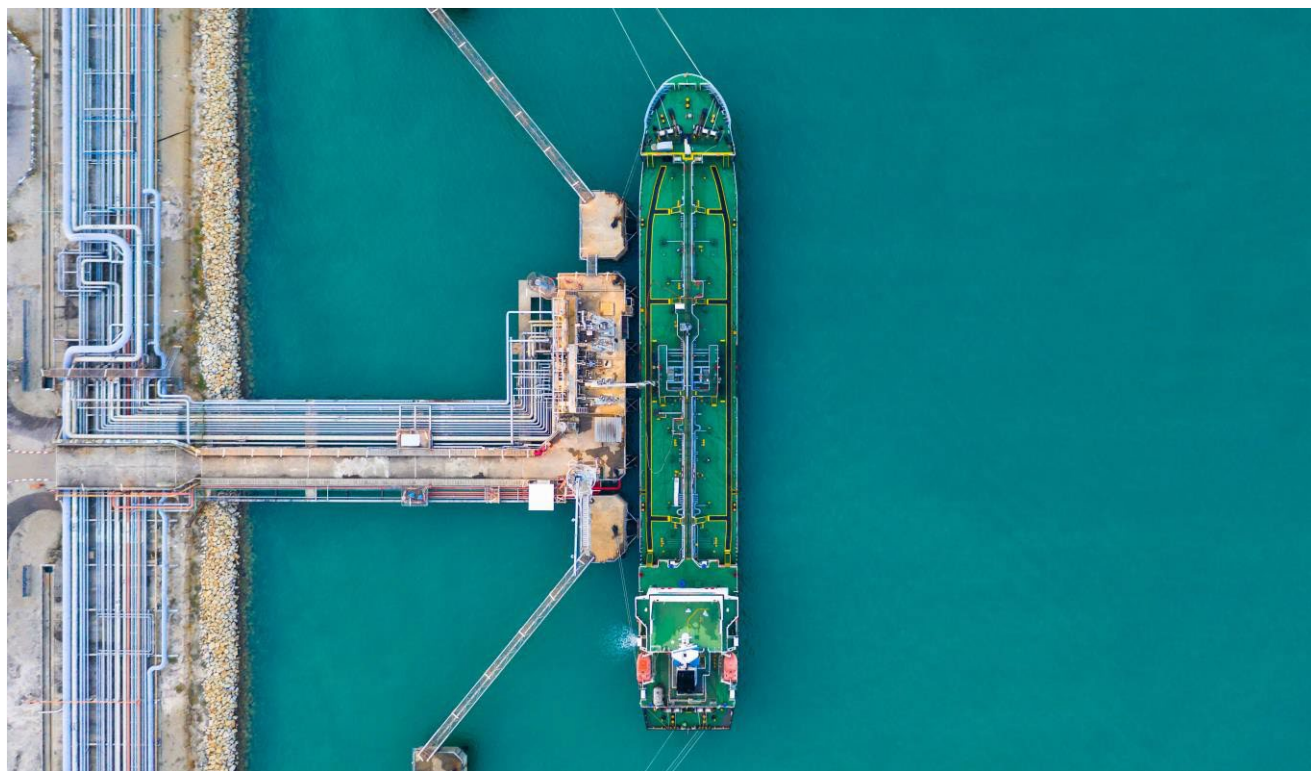
To obtain the EEXI calculation in cases where the speed-power curve is not available or the sea trial report does not contain the EEDI or design load draft condition, the ship speed V_{ref} can be obtained from the in-service performance measurement method.

Detailed guidance is provided in the guidance on methods, procedures and verification of in-service performance measurements. This document provides setup, testing and documentation requirements for a sea trial method by which an existing ship can determine the parameters needed for the calculation of its attained EEXI.

This guidance provides an alternative method of obtaining information needed to determine a ship's attained EEXI, thereby supporting the reduction of greenhouse gases in shipping.

Effective Date: 1 November 2022

Source: MEPC.1 Circular.901



Annex VI/Regulations 23 and 25: New Technologies for Attained EEDI and EEXI

The IMO's aim is to support new technologies that will improve the energy efficiency of ships. The IMO has updated the 2021 Guidance on Treatment of Innovative Energy Efficiency Technologies for Calculation and Verification of the Attained EEDI and EEXI, (MEPC.1 Circular.896) to now be applicable to the calculation of attained EEXI for ships.

Energy efficiency technologies are divided into three types. Category A are technologies that shift the power curve, category B are technologies that reduce the propulsion power but do not generate electricity and category C are technologies that generate electricity.

Technologies currently addressed in this guidance include air lubrication systems, wind-assisted propulsion systems, waste head recovery systems for generating electricity and photovoltaic power generation systems.

Effective Date: 14 December 2021

Sources: MEPC.1/Circular.896



Annex VI/Regulations 26 and 28: Carbon Intensity Indicator Rating

New requirements have been adopted, introducing the CII to support the IMO's aim for GHG reduction in shipping. Specific types of new and existing ships will be required to establish a required annual operational CII value for the ship.

At the end of each calendar year, starting with 2023, affected ships must calculate an attained annual operational CII value. These values will be used each year to assign a CII rating of A (highest) through E (lowest). Revised guidance documents related to CII:

- 2022 Guidelines on Operational Carbon Intensity Indicators and the Calculation Methods (CII Guidelines, G1) (Resolution MEPC.352(78))
- 2022 Guidelines on the Reference Lines for Use with Operational Carbon Intensity Indicators (CII Reference Lines Guidelines, G2) (Resolution MEPC.353(78))
- 2022 Guidelines on the Operational Carbon Intensity Rating of Ships (CII Rating Guidelines, G4) (Resolution MEPC.354(78))

The 2022 Interim Guidelines on Correction Factors and Voyage Adjustments for CII Calculations (CII Guidelines, G5) (Resolution MEPC.355(78)) related to CII has been issued.

Effective Date: 1 November 2022

Sources: MEPC. 352(78), MEPC.353(78), MEPC.354(78), and MEPC.355(78)



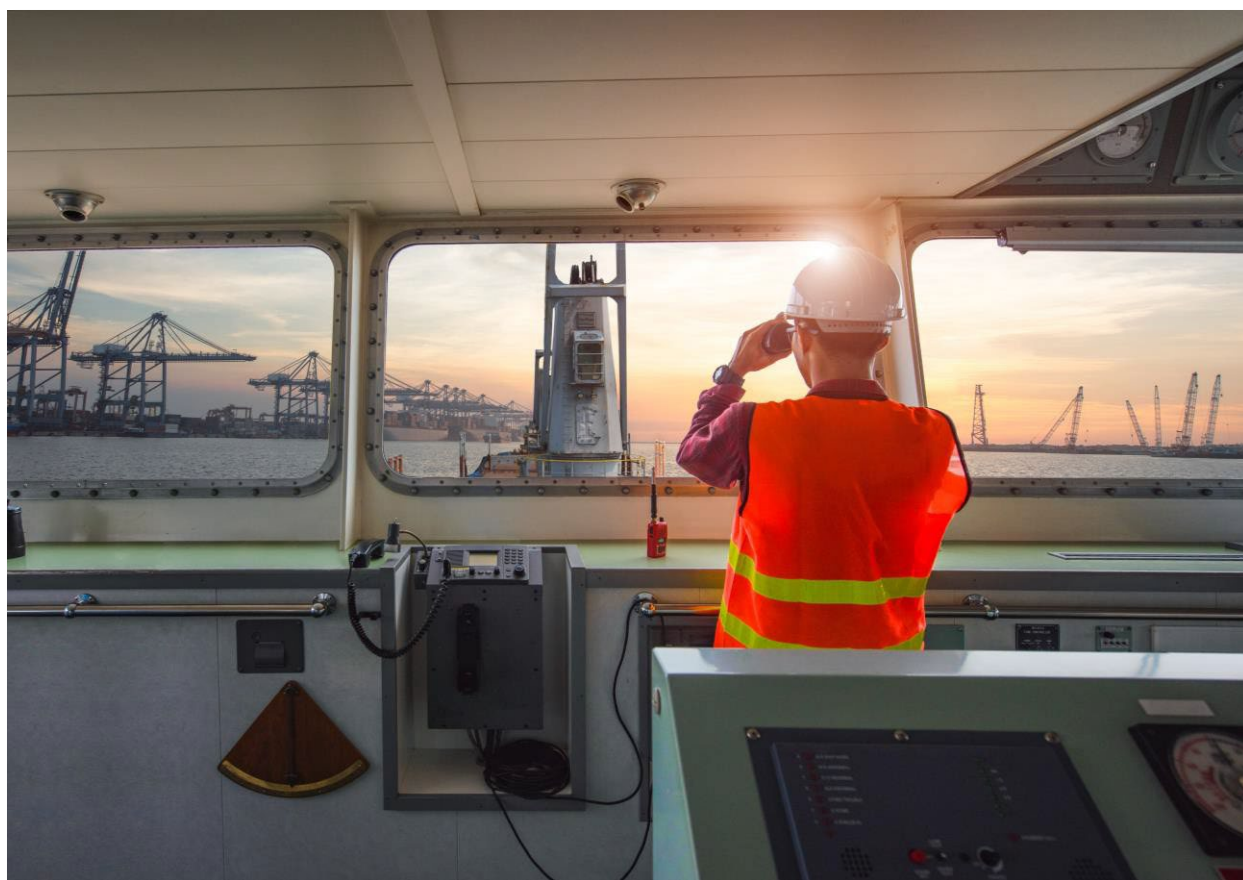
Annex VI/Regulations 26 and 28: Development of SEEMP Part III

As part of the implementation of the CII regulations, affected ships must develop a new Part III of the ship energy efficiency management plan (SEEMP). This section of the SEEMP will establish, the required annual operational CII for the next three years and the data collection practices for determining the attained annual operational CII each year. Guidance documents related to the development and auditing of the SEEMP Part III have been issued:

- 2022 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP), (Resolution MEPC.346(78)), which replaces the 2016 version of the guidance.
- Guidelines for the Verification and Company Audits by the Administration of Part III of the Ship Energy Efficiency Management Plan (SEEMP), (Resolution MEPC.347(78))

Effective Date: 10 June 2022

Sources: MEPC.346(78) and MEPC.347(78)



Annex VI/Regulations 26 and 28: Carbon Intensity Indicator — FO Consumption Data

As part of the implementation of the CII regulations, the annual collection of data must be reported to the IMO through its designated web portal. This reporting is done by Administrations or may be delegated to organizations such as ABS. The guidance documents related to this data reporting have been issued and must be followed when acting on behalf of a flag Administration:

- 2022 Guidelines for Administration Verification of Ship Fuel Oil Consumption Data and Operational Carbon Intensity (Resolution MEPC.348(78)), which replaces the 2017 version of the guidance.
- 2022 Guidelines for the Development and Management of the IMO Ship Fuel Oil Consumption Database (Resolution MEPC.349(78)), which replaces the 2017 version of the guidance.
- Guidance for Submission of Data to the IMO Data Collection System of Fuel Oil Consumption of Ships from a State Not Party to MARPOL Annex VI (MEPC.1/Circular.871/Revision.1)

Effective Date: 10 June 2022

Sources: MEPC. 348(78), MEPC.349(78), and MEPC.1/Circular.871/Revision.1



Annex VI/Regulation 14: Exhaust Gas Cleaning Systems (EGCS)

The 2021 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC.340(77)), were developed to supersede the 2015 edition of the Guidelines to provide improved guidance on technology types that reduces sulfur emissions in shipping. Updates to the Guidelines clarify several parameters to provide consistent terminology and enhance the uniform application of the EGCS standards. Taking experience gathered from the operation of such systems into consideration.

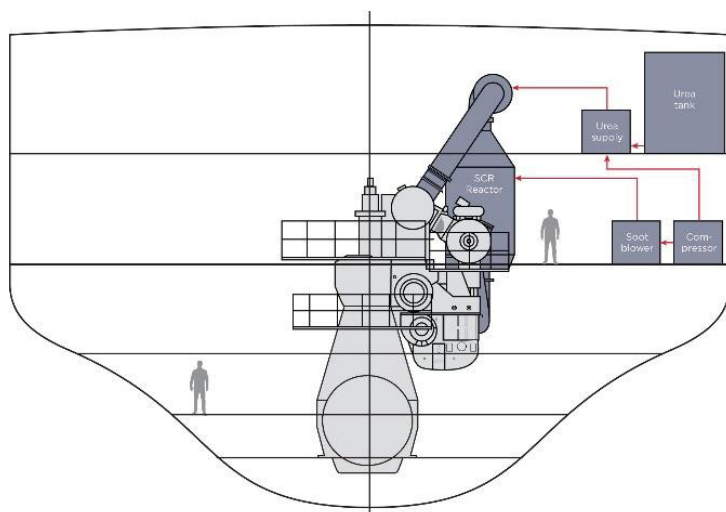
The updated guidelines are applicable for:

- EGCSs installed on ships on which the keels are laid or are at a similar stage of construction on or after 1 June 2022
- EGCSs installed on ships on which the keels are laid or are at a similar stage of construction before 1 June 2022, that have a contractual delivery date of EGCS to the ship is on or after 1 June 2022 or, in the absence of a contractual delivery date, the actual delivery of the EGCS to the ship is on or after 1 June 2022

The revised guidelines also apply to amendments to the EGCS technical manual Scheme A or Scheme B that affect the performance of the EGCS regarding emissions to air and or water undertaken on or after 1 June 2022.

Effective Date: 1 June 2022

Source: MEPC.340(77)



Annex VI/Regulation 14: Exhaust Gas Cleaning Systems (EGCS)

Several guidance documents have been created to clarify the use of exhaust gas cleaning systems:

- 2022 Guidelines for Risk and Impact Assessments of the Discharge Water from EGCSs (MEPC.1/Circular.899) provide a means of assessing impacts and risks associated with the discharge water from exhaust gas cleaning systems. Member States should follow these guidelines when setting local or regional regulations to protect sensitive environments.
- 2022 Guidance Regarding the Delivery of EGCS Residues to Port Reception Facilities (MEPC.1/Circular.900) provides guidance to define various waste types related to EGCS use. This guideline describes circumstances in which EGCS waste should be disposed of at port reception facilities and when it may be acceptable to discharge to the sea.

The Guidance on Indication on Ongoing Compliance in the Case of the Failure of a Single Monitoring Instrument and Recommended Actions to Take if the EGCS Fails to Meet the Provisions of the EGCS Guidelines, (MEPC.1/Circular.883/Revision.1), provides guidance on necessary steps to take in the event of EGCS system malfunctions or sensor failures. This guidance was updated to provide guidance regarding the unique situation where a ship must continue on its intended voyage in a non-compliant condition.

Effective Date: 10 June 2022

Source: MEPC.1/Circular. 900, MEPC.1/Circular. 899 and MEPC.1/Circular. 883/Revision



Annex VI/Regulation 13: Unified Interpretations to the 2008 NOx Technical Code

The unified interpretation of paragraph 5.10.1 of the 2008 NOx Technical Code has been adopted. This update was made to clarify that resolution MEPC.291(71) has been amended by resolution MEPC.313(74).

These amendments are to be taken into account when the parameters listed in the sub-paragraphs 5.2.2 of resolution MEPC.291(71) are measured and recorded in the engine test report for an engine fitted with SCR under Scheme A.

Effective Date: 10 June 2022

Source: MEPC.1/Circular. 895/Revision 1



Annex I: Watertight Doors

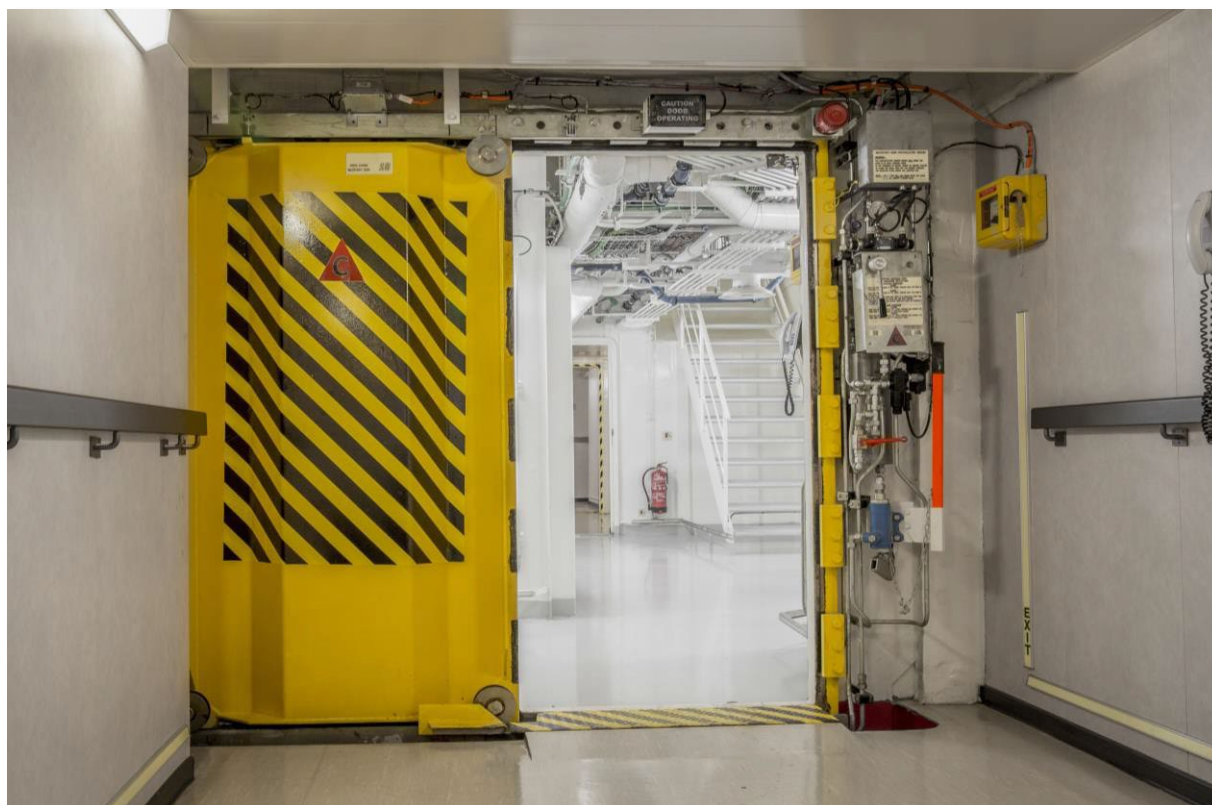
An amendment to MARPOL Annex I provides new considerations for placement of watertight openings regarding the final damaged water line, which is critical to determine a satisfactory equilibrium after flooding. This amendment specifies additional opening types fitted with watertight closures that may be excluded from the requirement of being located above the final water line after flooding:

- Quick acting or single action type hinged watertight access doors with open/closed indication locally and at the navigation bridge and that are normally closed at sea
- Hinged watertight doors permanently closed at sea

This change was also made to correlate with related amendments made to the SOLAS Convention and several other IMO standards.

Effective Date: 1 January 2024

Source: MEPC.343(78)



Annex II/Appendix I: Categorization of Noxious Liquid Substances

Amendments to Appendix I of MARPOL Annex II, Guidelines for the Categorization of Noxious Liquid Substances, were adopted to reflect updates to the Group of Experts on The Scientific Aspect of Marine Environmental Protection (GESAMP) hazard profile table.

As a result, tables under the title “Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure” have been replaced.

Effective Date: 1 November 2023

Source: MEPC.344(78)



Annex II: IBC Code — Watertight Doors

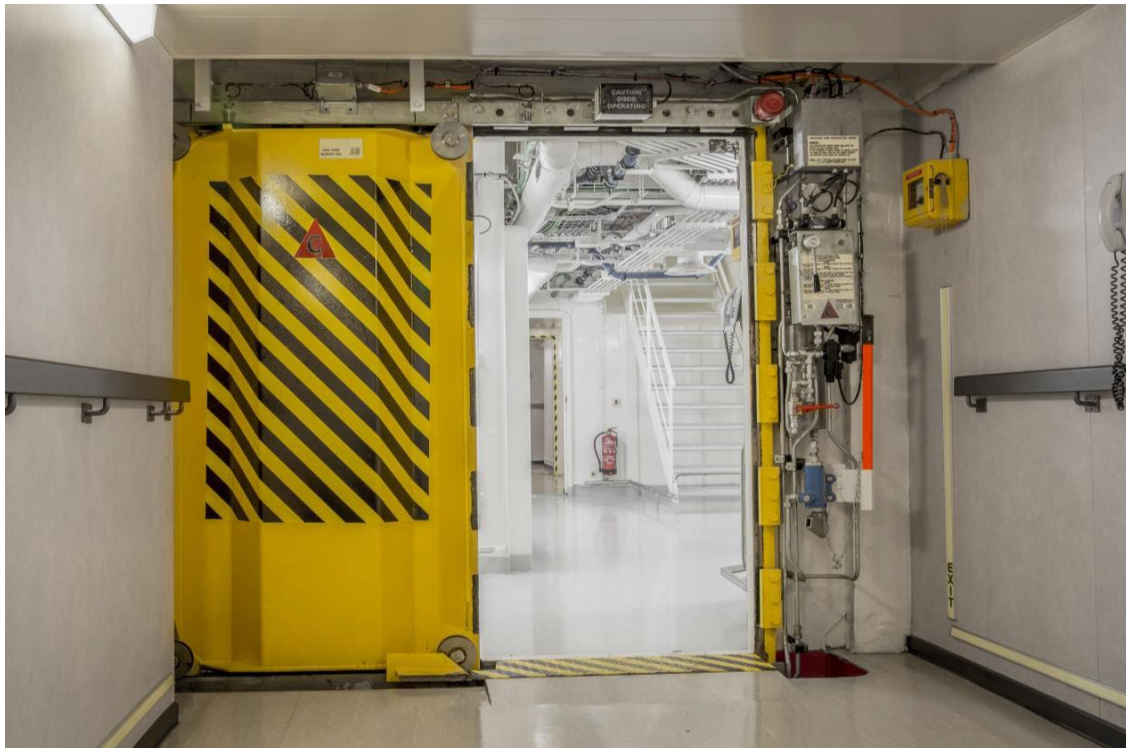
An amendment to The International Convention for the Prevention of Pollution from Ships (IBC) Code provides new considerations for the placement of watertight openings regarding the final damaged water line, which is critical to determine satisfactory equilibrium after flooding. This amendment specifies additional opening types fitted with watertight closures that may be excluded from the requirement of being located above the final water line after flooding:

- Quick acting or single action type hinged watertight access doors with open/closed indication locally and at the navigation bridge, and that are normally closed at sea
- Hinged watertight doors permanently closed at sea

This change was also made to correlate with related amendments made to the SOLAS Convention and several other IMO standards.

Effective Date: 1 July 2024

Source: MEPC.345(78)



Annex VI Regulation 18: IBC Code — Unified Interpretation — Use of Biofuels

Due to the industry's need for alternative fuels to reduce greenhouse gas emissions, clarity is needed regarding the use of biofuels under the MARPOL Annex VI.

A new unified interpretation was approved to clarify the use of biofuels on board ships and possible implications on NOx emissions.

Effective Date: 10 June 2022

Source: MEPC.1/Circular.795/Revision.6



Annex VI Regulation 18: IBC Code — Unified Interpretation — Use of Biofuels

The new unified interpretation provides a definition for the term biofuel and indicates:

- Fuel oil that is a blend of less than 30% by volume of biofuel should meet the requirements of Regulation 18.3.1 of MARPOL Annex VI. It is therefore considered to be fuel oil of blends of hydrocarbons derived from petroleum refining, and verification of the NO_x impacts is not required.
- Fuel oil that is a blend of more than 30% by volume of biofuel should meet the requirements of Regulation 18.3.2 of MARPOL Annex VI. It may also be used without verification of the NO_x impacts where the engine is already certified to Annex VI Regulation 13 on a DM or RM grade fuel, and biofuels can be burnt without changes to the NO_x critical components or settings/operating values outside those as given by that engine's approved NO_x technical file.

Effective Date: 10 June 2022

Source: MEPC.1/Circular.795/Revision.6



Fall 2022

Annex I, IV and VI: Exemption of Unmanned Non-Self-Propelled Barges

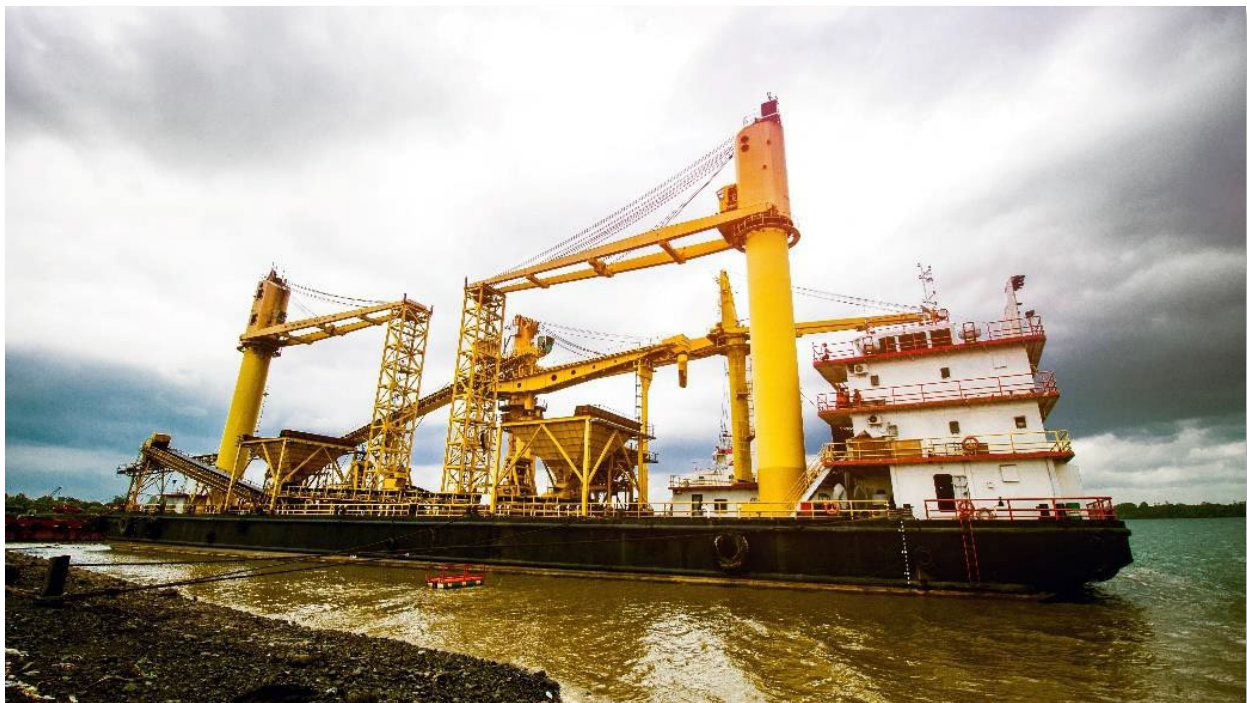
Several amendments were adopted to formalize the waiver of requirements for Annexes I, IV, and VI to acknowledge that some aspects of the MARPOL Convention may not be appropriate for application to unmanned non-self-propelled (UNSP) barges. For vessels that qualify for this exemption, a dedicated exemption certificate for UNSP barges will be issued with a validity period of 5 years.

It is important to note that the definition of a UNSP barge is unique for each of these three MARPOL annexes and an individual exemption certificate would be issued for each annex if the vessel qualifies.

MEPC.1/Circular 892 was issued to provide guidance about the documentation and survey requirements needed to confirm that a vessel qualifies as a UNSP barge and may be exempted from survey and certification requirements of these MARPOL annexes.

Effective Date: 1 November 2022

Sources: MEPC.328(76), MEPC.330(776), and MEPC.1, Circular 892



Annex I/Regulation 43A: Ban on Heavy Fuel Oil in Arctic Waters

To address concerns of the potential impact of a heavy fuel oil (HFO) spill on the Arctic environment, amendments to MARPOL Annex I were adopted to incorporate a prohibition on the use and carriage for use as fuel of HFO by ships in Arctic waters. Under the new Regulation 43A in MARPOL Annex I, the prohibited fuel oils are described as “oils, other than crude oils, having a density at 15°C higher than 900 kg/m³ or a kinematic viscosity at 50°C higher than 180 mm²/s.”

The use and carriage for use as a fuel of HFO would be prohibited in Arctic waters on and after 1 July 2024. For ships to which Regulation 12A of MARPOL Annex I (oil fuel tank protection) is applicable, this prohibition would be effective on and after 1 July 2029. Administrations with coastlines that border.

Arctic waters would have leeway to temporarily waive the requirements of this prohibition for vessels under their registry while operating in waters under the jurisdiction of that Administration, up until 1 July 2029, after which no such waivers may be issued.

Effective Date: 1 November 2022

Source: MEPC.329(76)



Annex VI/Regulation 14: Sulfur Content of Fuel Oil

To support enforcement of the IMO's global limit on sulfur content in fuel oil use or carried for use on board vessels, several amendments to MARPOL Annex VI were adopted to facilitate fuel oil sampling and testing by port State authorities. The amendments will require the installation of dedicated sampling points on all new vessels and existing vessels must install these sampling points by their first IAPP certificate renewal survey on or after 1 April 2023.

This requirement will not apply to a fuel oil service system for a low-flashpoint fuel for combustion purposes for propulsion or operation on board the ship.

Effective Date: 1 April 2022

Sources: MEPC.324(75), MEPC.1/Circular 889, and MEPC.1/Circular 864, Revision 1



Annex VI/Regulation 20 and 21: EEDI Phase 3 Updates and EEDI Reporting

In further developing the regulations related to the Energy Efficiency Design Index (EEDI), the IMO deemed it appropriate to accelerate Phase 3 of the development from 2025 to 2022. As a result, several amendments to the EEDI reduction factors tables were made to increase the reduction factors for specific ship types and sizes.

Additionally, the IMO adopted a new regulation requiring Administrations and their recognized organizations to report the required and attained EEDI values for new and existing ships to the IMO. For existing ships, this reporting must be done by 1 November 2022.

Amendments to the 2018 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships were also adopted. The amendments clarify the information about attained and required EEDI to be reported to the IMO for each ship and provide a standard format for reporting this information.

Effective Date: 1 April 2022

Sources: MEPC.324(75) and MEPC.332(76)



Annex VI/Regulation 23 and 25: Energy Efficiency Existing Ship Index

New requirements have been adopted to introduce the Energy Efficiency Existing Ship Index (EEXI) to support the IMO's goals for reducing greenhouse gases in shipping. Similar to the EEDI requirements for new vessels, specific types of existing vessels must establish a required EEXI value and demonstrate an attained EEXI value of equal or lesser value.

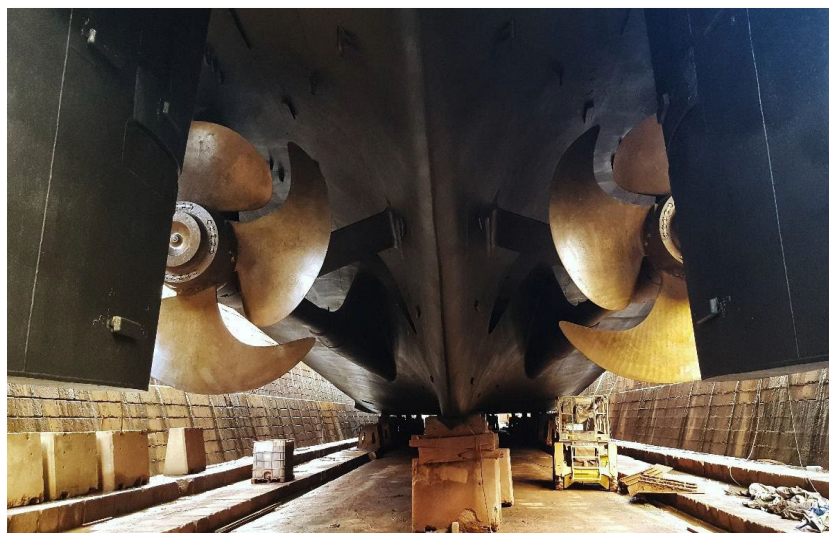
An EEXI technical file must be approved for each vessel. Verification of a ship's attained EEXI shall occur at the first IAPP annual, intermediate, or renewal survey, or at the first IAPP initial survey, whichever occurs first, on or after 1 January 2023. For ships subject to EEDI regulations, the attained EEDI may be taken as the attained EEXI if the value of the attained EEDI is equal to or less than the required EEXI.

The IMO has adopted these guidance documents related to EEXI:

- 2021 Guidelines on the Method of Calculation of the Attained Energy Efficiency Existing Ship Index (Resolution MEPC.333(76))
- 2021 Guidelines on Survey and Certification of the Attained Energy Efficiency Existing Ship Index (Resolution MEPC.334(76))
- 2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve (Resolution MEPC.335(76))

Effective Date: 1 November 2022

Source: MEPC.328(76), MEPC.333(76), MEPC.334(76), and MEPC.335(76)



Annex VI/Regulation 26 and 28: Carbon Intensity Indicator Rating

New requirements have also been adopted to introduce the Carbon Intensity Indicator (CII) to support the IMO's goals for reducing greenhouse gases in shipping. Specific types of new and existing vessels will be required to establish a required annual operational CII value for the vessel, and after the end of each calendar year (beginning with 2023), calculate an attained annual operational CII value.

These values will be used each year to assign a CII rating of A (highest) through E (lowest). A ship rated as D for three consecutive years or rated as E must develop a plan of corrective actions to achieve the required annual operational CII.

The IMO has adopted these guidance documents related to CII (identified as CII Guidelines G1 through G4):

- G1: 2021 Guidelines on Operational Carbon Intensity Indicators and the Calculation Methods (Resolution MEPC.336(76))
- G2: 2021 Guidelines on the Reference Lines for Use with Operational Carbon Intensity Indicators (Resolution MEPC.337(76))
- G3: 2021 Guidelines on the Operational Carbon Intensity Reduction Factors Relative to Reference Lines (Resolution MEPC.338(76))
- G4: 2021 Guidelines on the Operational Carbon Intensity Rating of Ships (Resolution MEPC.339(76))

Effective Date: 1 November 2022

Source: MEPC.328(76), MEPC.336(76), MEPC.337(76), MEPC.338(76), and MEPC.339(76)



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