

ABS REGULATORY NEWS

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CARBON INTENSITY INDICATOR (CII) ACTIONS TO TAKE

This Regulatory News provides guidance on global implementation of the Carbon Intensity Indicator (CII). Vessel owners are advised to plan for compliance.

PREPARE NOW FOR CII COMPLIANCE

On 1 November 2022, [amendments to MARPOL Annex VI](#) will enter into force and set the stage for the implementation of the Carbon Intensity Indicator (CII) beginning 1 January 2023. There is limited time remaining to prepare for compliance with this new regulatory scheme aimed at limiting and reducing the operational carbon intensity of specific vessel types, and pushing operators to make choices that optimize fuel efficiency.

ACTIONS FOR COMPLIANCE

Step 1: Submissions for Technical Review

- Submit SEEMP Part III for review and verification. A verified SEEMP Part III and its corresponding Confirmation of Compliance must be provided onboard prior to 1 January 2023.

Step 2: Preparation for Company Audits

- Prepare for company audits in accordance with [MEPC.347\(78\)](#). These periodical company audits may include annual audits of the company (company audits) and verifications on board the ship (shipboard audits) which may coincide with ISM Code audits.

Step 3: Maintaining Compliance

- If future vessel modifications affect the SEEMP Part III, then re-verification is required.
- Regardless of the above, re-verification of the SEEMP Part III will be required every 3 years due to the update of the 3-year CII implementation plan.

DETERMINING CII

Applicable Regulations in MARPOL Annex VI

Regulation 26 of the revised MARPOL Annex VI ([MEPC.328\(76\)](#)) expands the requirements which are to be addressed through a vessel's Ship Energy Efficiency Management Plan (SEEMP). A new "Part III" is to be created to address calculation and implementation of the Annual Operational CII.

KEY NOTES

- **Applicable Vessel Types:** Vessel types as defined in regulations 2.2.5, 2.2.7, 2.2.9, 2.2.11, 2.2.14 to 2.2.16, 2.2.22, and 2.2.26 to 2.2.29 of MARPOL Annex VI of 5,000 GT and above
- **Required Actions:** Approval of SEEMP Part III, prior to 31 December 2022
- **References:** MARPOL Annex VI Regulations 26 to 28
IMO Resolutions as referenced below

Regulation 28 of the revised MARPOL Annex VI defines the application and requirements of the CII on specific vessel types of 5,000 GT and above. This regulation establishes the need for calculation of a Required Annual Operational CII, which will serve as the baseline for the Operational Carbon Intensity Rating. This rating will be assigned annually for each vessel as a ranking label from among the five grades (A, B, C, D and E) based on the calculated Attained Annual Operational CII, indicating a major superior, minor superior, moderate, minor inferior, or inferior performance level.

SEEMP Part III Requirements

The SEEMP Part III must include:

- 1) a description of the methodology that will be used to calculate the ship's Attained Annual Operational CII and the processes that will be used to report this value to the ship's Administration;
- 2) the Required Annual Operational CII for the next three years;
- 3) an implementation plan documenting how the Required Annual Operational CII will be achieved during the next three years; and
- 4) a procedure for self-evaluation and improvement.

The following guidance documents are available detailing the development and verification of the SEEMP Part III:

Resolution	Title
MEPC.346(78)	<i>2022 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)</i>
MEPC.347(78)	<i>Guidelines for the Verification and Company Audits by the Administration of Part III of the Ship Energy Efficiency Management Plan (SEEMP)</i>

Three-Year Implementation Plan

The three-year implementation plan should be SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) to the extent feasible and it should include:

- List of measures with time and method of implementation for achieving the required operational CII
- How the required operational CII will be achieved considering the combined effect of the measures
- The personnel responsible for:
 - the three-year implementation plan
 - monitoring and recording performance throughout the year
 - reviewing the effectiveness of the implementation plan
- Identification of possible impediments to the effectiveness of the measures, including possible contingency measures.

Confirmation for Compliance

The SEEMP Part III must receive verification and be placed onboard each ship prior to 1 January 2023. Upon successful completion of the technical review, the vessel will be issued a new Confirmation of Compliance (CoC) to document the verification. This will be issued separate from the SEEMP Part II Confirmation of Compliance (related to the IMO Data Collection System on fuel oils). The SEEMP Part III CoC is to be retained onboard and will remain valid until any revisions are necessary for the SEEMP Part III, in which case the document must be resubmitted for verification.

Attained and Required Annual Operational CII

There are several supporting guidelines related to determining the Attained and Required Annual Operational CII. Guidance is also available for determining the Operational Carbon Intensity Rating that will be assigned to

vessels annually based on reported fuel oil consumption information and distance travelled in a given calendar year:

Resolution	Title
MEPC.352(78)	2022 Guidelines on Operational Carbon Intensity Indicators and the Calculation Methods (CII Guidelines, G1)
MEPC.353(78)	2022 Guidelines on the Reference Lines for Use with Operational Carbon Intensity Indicators (CII Reference Lines Guidelines, G2)
MEPC.338(76)	2021 Guidelines on the Operational Carbon Intensity Reduction Factors Relative to Reference Lines (CII Reduction Factors Guidelines, G3)
MEPC.354(78)	2022 Guidelines on the Operational Carbon Intensity Rating of Ships (CII Rating Guidelines, G4)
MEPC.355(78)	2022 Interim Guidelines on Correction Factors and Voyage Adjustments for CII Calculations (CII Guidelines, G5)

The *Attained Annual Operational CII* shall be calculated over a 12-month period from 1 January to 31 December for the preceding calendar year, as per the G1 CII Guidelines:

$$\text{Attained annual operational CII}_{\text{ship}} = \frac{M}{C \times D_t}$$

Where:

- M is the sum of CO₂ emissions (in grams) from all the fuel oil consumed on board the ship
- C is the ship's capacity (DWT or GT depending on the ship type).
- D_t is the total distance travelled (in nautical miles), as reported under IMO DCS.

Consideration should be given in any applicable correction factors and voyage adjustments as per G5 CII Guidelines.

The *Required Annual Operational CII* is described in MARPOL Annex VI / Regulation 28 by the following basic calculation:

$$\text{Required annual operational CII} = \left(1 - \frac{Z}{100}\right) \cdot \text{CII}_R$$

Where:

- Z is the annual reduction factor to ensure continuous improvement of the ship's operational carbon intensity within a specific rating level
- CII_R is the reference value.

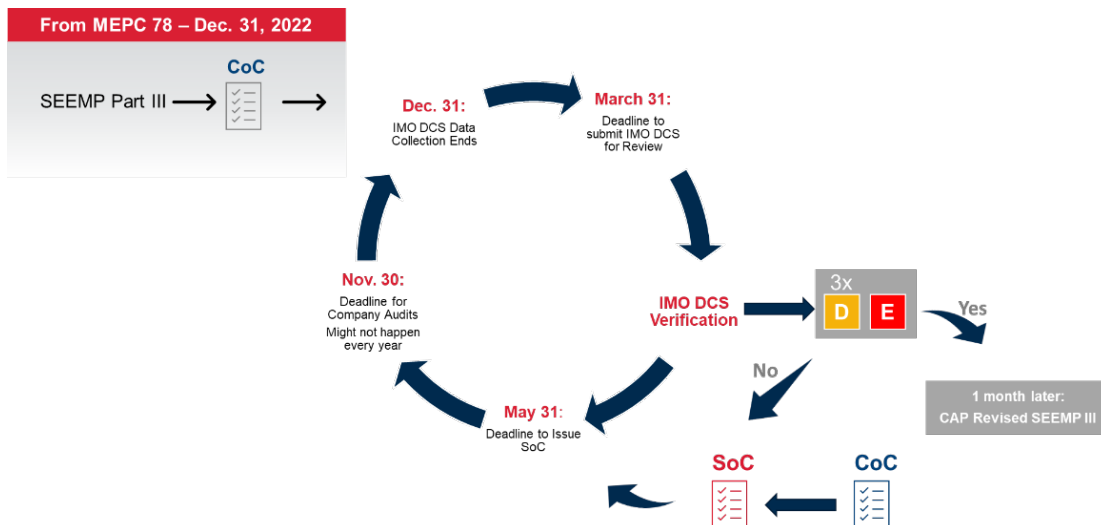
The attained and required annual operational CII, as well as the rating boundaries, should be all given with three decimal places. If the attained annual operational CII happens to land on a rating boundary, the ship should be rated as the better of the two ratings

ACTIONS IN 2023 AND BEYOND

- Data collection related to CII will take place throughout 2023.
- After the conclusion of 2023, the submission of fuel oil consumption data and attained annual operational CII must be completed by 31 March 2024 and each calendar year. Upon receipt of reported data, the verifier shall:
 - determine whether the data has been properly reported for the complete accounting of transport work and fuel oil consumed during the previous calendar year
 - verify that the attained annual operational CII reported is based on the data submitted
 - determine the operational carbon intensity rating of the ship
 - issue a Statement of Compliance (SoC) no later than 31 May of 2024 and each calendar year.

This SoC is to be retained onboard and will remain valid for the calendar year in which it is issued and for the first five months of the following calendar year.

- To maintain compliance, ships rated as D for three consecutive years or receiving a singular E rating will need to develop a Corrective Action Plan to achieve the Required Annual Operational CII (i.e. midpoint of C rating). For ships receiving an E rating based on the 2023 collected data, a Corrective Action Plan must be submitted by 30 April 2024, and is to be implemented in 2024 and 2025.
 - The SEEMP must be revised to include this Corrective Action Plan and receive technical approval within one month of receiving the actionable CII rating. The approved Corrective Action Plan is to be implemented, and the vessel assessed for CII conformance to the Corrective Action Plan in the coming cycle.
- This cycle will continue annually, with fuel consumption data and CII information for each calendar year to be submitted by 31 March of the subsequent year.



Ship's Transfer from One Administration and/or Company to Another

In the event of any transfer of a ship to another Administration or company, the attained annual operational CII should be verified by the receiving Administration using the data over an entire calendar year. In such cases, the aggregated data necessary to calculate the attained annual operational CII before transfer, which should have already been verified by the losing Administration, can be directly used by the receiving Administration without further verification.

IMO Review on the CII regulation

A review shall be completed by 1 January 2026 by IMO to assess:

1. the effectiveness of the regulation in reducing the carbon intensity of international shipping;
2. the need for reinforced corrective actions or other means of remedy, including **possible additional EEXI requirements**;
3. the need for **enhancement of the enforcement mechanism**.
4. the need for enhancement of the data collection system
5. the revision of the Z factor and CIIR values

WORLD HEADQUARTERS

1701 City Plaza Drive | Spring, TX 77389 USA

P 1-281-877-6000 | F 1-281-877-5976

ABS-WorldHQ@eagle.org

www.eagle.org

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