

Isle of Man Ship Registry Technical Advisory Notice

EEXI and CII

Ref. TAN 004-21
Issued: 16/09/2021

This Notice is to advise of new regulations within MARPOL Annex VI aimed at reducing carbon emissions from ships in line with IMO's GHG reduction strategy. There are two new concepts to consider; Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII), both of which enter into force on 1 November 2022. These are explained below.

1. Energy Efficiency Existing Ship Index (EEXI)

EEXI applies to the following ships types of 400gt or greater:

Bulk carrier; combination carrier; containership; cruise passenger ship; gas carrier; general cargo ship; LNG carrier; refrigerated cargo carrier; ro-ro cargo ship; ro-ro cargo vehicle carrier; ro-ro passenger ship; tanker.

Excluded from the regulation are ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion.

Overview

The new EEXI Regulation sets a minimum standard for energy efficiency of existing ships based upon the design parameters of the ship. It is a 'one time' calculation so does not require continuous assessment, but must be re-assessed if the vessel is subject to major conversion.

The mechanism it uses is based upon the existing EEDI Regulation which sets energy efficiency requirements for new ships. Currently, energy efficiency is not regulated for ships which were constructed prior to EEDI coming into force (i.e. ships for which the build contract was placed before 1 January 2013).

Ships that are also subject to EEDI will have to meet whichever is the more stringent of their required EEDI or required EEXI. Where a ship's attained EEDI satisfies the required EEXI, no further action is necessary, other than to update the ship's International Energy Efficiency Certificate (IEEC) when necessary. In most cases the required EEXI is equivalent to phase 2 or 3 of the required EEDI – therefore it should not be assumed that ships subject to a required EEDI will automatically comply with the required EEXI.

All other ships must calculate their 'attained EEXI' as measured by the amount of CO₂ emitted per unit of transport supply. In order to comply with the new regulation, the 'attained EEXI' must be lower than or equal to the 'required EEXI' stated in Annex VI for the type and size of ship. If this is not the case, it will be necessary for the shipowner to install certain measures to improve energy efficiency until the attained EEXI meets the required EEXI.

Such measures to improve efficiency may include engine power limitation or alternative fuels. This should be considered in consultation with your ship's Recognised Organisation

Unlike EEDI, EEXI does not have phases, although CII requires continual reduction in emissions (see next page).

Required Action

It should be noted that the steps necessary to achieve EEXI compliance will vary greatly from vessel to vessel and in some cases may require significant alterations to vessels. We



recommend that clients begin considering what steps will be necessary, in consultation with their ROs, as soon as possible.

All ships must have an approved EEXI Technical File and amended IEEC onboard by the time of their first annual survey after 1 January 2023.

2. Carbon Intensity Indicator (CII)

CII applies to the same ship types as EEXI but with a higher tonnage threshold of 5,000gt.

Overview

The CII regulation aims to reduce carbon emissions from ships by continually improving efficiency. Efficiency may be improved by consideration of factors such as slow steaming, enhanced hydrodynamics, alternative fuels or machinery improvements. Unlike EEXI, CII requires annual assessment against continually improving criteria.

Each year, an 'attained annual operational CII' must be calculated by the ship in accordance with the methodology stated in their SEEMP. The attained annual operational CII is then assigned a rating from A to E indicating superior or inferior energy efficiency in comparison to a 2019 reference line (based on average industry performance) which is subject to a reduction factor of between 2-5% each year.

A ship's rating will be recorded on the 'Statement of Compliance for Fuel Oil Consumption Reporting'. A ship that achieves a rating of D for three consecutive years or rated as E for one year must develop a plan of corrective action to be incorporated into the SEEMP.

The ship's SEEMP must also include the following:

- A description of the methodology that will be used to calculate the attained annual operational CII and how this will be reported
- The required annual operational CII for the next three years
- An implementation plan as to how the required annual operational CII will be achieved for the next 3 years
- A procedure for self-evaluation and improvement

The enhanced SEEMP must be approved by the ship's Recognised Organisation.

Required Action

The updated SEEMP must be prepared and submitted to your ship's Recognised Organisation in order to be approved before 1 January 2023. A ship shall calculate and report its first attained annual operational CII within 3 months of the first year end date i.e. by 31 March 2024.

Please note - The Isle of Man Ship Registry cannot give legal advice. Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.

