

CII (CARBON INTENSITY INDICATOR) REGULATIONS

CII and EEXI (Energy Efficiency Existing Ships Index) are global in nature and imposed by MARPOL in accordance with Marine Environment Protection Committee (MEPC) 328(76).

For more information on the key features of CII and EEXI and a discussion of key considerations for CII and EEXI clauses for physical transport contracts (time charter and voyage charter) as well as the contractual disputes that may arise, please see [MAIN ARTICLE](#).

1. Scope

(a) CII Regulations

- (i) **Application:** Mandatory from 1 January 2023
- (ii) **Type of Ship:** All ships above 5,000 gt
- (iii) **Geographical Scope:** Ports of call at and voyages to / from states that are parties to Revised MARPOL Annex VI and application to the ship by virtue of flag (e.g. all voyages carried out by a MARPOL flagged ship).

2. Compliance and Reporting Obligations:

(a) **What?** An ongoing operational tool used to measure the carbon intensity generated by the operational performance / commercial activities of individual ships (e.g. CO2 emissions per deadweight ton miles in accordance with the Annual Efficiency Ratio (AER) Metric).

(b) When?

- (i) A ship is required to develop, and keep updated, an enhanced Ship Energy Efficiency Management Plan (SEEMP).
- (ii) Ships collect and report fuel consumption data during a reporting period.
- (iii) By 31 March in the verification period, the consumption data is verified.
- (iv) After 30 April in the verification period, the verified consumption data is compared to the required baseline carbon intensity for the ship and an annual CII Rating of "A" to "E" will be allocated to ships.
- (v) The benchmark for carbon intensity (required CII) reduces by 2% each year until 2026, after which the IMO will consider revisions to the benchmark and the AER Metric.

(c) **How?** Ships can implement operational changes to improve carbon intensity. These changes include: consumption of low carbon fuels, technical energy efficiency measures, ship speed optimisation, weather routing, route planning, and just in time arrival.

3. Penalties and Sanctions:

- (a) A ship with a CII Rating of "D" for three reporting periods, or CII Rating of "E" for one reporting period, will be required to develop a plan of corrective actions to improve the ship's carbon intensity.
- (b) At present, there are no formal penalties or sanctions imposed, but port authorities can introduce incentives for ships with a CII Rating of "A" or "B" and there may also be commercial / contractual consequences.

EEXI REGULATIONS

1. Scope

- (a) **Application:** Mandatory from 1 November 2022
- (b) **Type of Ship:** All ships above 400 gt

2. Compliance and Reporting Obligations:

- (a) **What?** A technical measure which requires ships to meet a target energy efficiency design parameter.
- (b) **When?** EEXI is a singular obligation, where ships need to certify that they meet the target design parameters. This had to be certified at the first annual, intermediate or renewal survey or the initial survey, whichever is the first, on or after 1 January 2023.
- (c) **How?** Where ships do not meet the benchmark, measures to enhance energy efficiency are required. These are not prescribed by EEXI but could be achieved by way of an engine / shaft power limitation. Although ships should now be compliant with EEXI, revisions to EEXI could materialise after 2026, which would make the target energy efficiency design parameter more stringent.

EU EMISSIONS TRADING SYSTEM (EU ETS) DIRECTIVE

The EU has expanded its Emission Trading System to maritime services and introduced the Monitoring, Reporting and Verification (MRV) Regulation for emissions from ships.

For more information on the key features of EU ETS and a discussion of key considerations for EU ETS clauses for physical transport contracts (time charter and voyage charter), and ship management agreements as well as the contractual disputes that may arise, please see [MAIN ARTICLE](#).

1. Scope

- (a) **EU ETS Directive**
 - (i) **Application:** Mandatory from 1 January 2024, but subject to a phase in period for emissions within scope (40% for 2024, 70% for 2025 and 100% for 2026 reporting periods).
 - (ii) **Type of Ship:** All ships above 5,000 gt that transport cargo or passengers (with limited exceptions).
 - (iii) **Geographical scope:** Ports of call at and voyages to / from European Economic Area (EEA) ports. The obligation to surrender EU Allowances (EUAs) applies differently depending on the voyage type:
 - (A) for intra-EEA voyages and stays at EEA ports, it covers 100% of emissions, and
 - (B) or voyages from EEA ports and non-EEA ports, it covers 50% of the emissions.
- (b) **Type of Ship:** All ships above 400 gt

2. Compliance and Reporting Obligations:

- (a) **What?** One EUA permits a company to emit one tonne of greenhouse gases (GHG) (at present only CO₂) and EEA and non-EEA shipping companies calling at EEA ports must pay for and surrender a sufficient quantity of EUAs to meet all of that shipping company's verified emissions. EU ETS has extra-territorial effect applying to voyages from ports of call outside of the EEA.
- (b) **When?** In the reporting period, shipping companies must monitor the ship's emissions for a full calendar year in accordance with an approved monitoring plan.
- (c) From 1 January of the year following the reporting period, the verification period begins, and shipping companies must prepare an emissions report, which must be verified by an accredited verifier by 31 March.

- (d) By 30 September in the verification period, shipping companies must surrender sufficient EUAs to cover the verified emissions for all ships in their fleet.
- (e) **Who is responsible?** The default compliance entity for both EU ETS and MRV Regulation is the registered shipowner. However, responsibility for compliance can be shifted to the ISM Doc Holder (if not also the owner) by filing a document mandate with the applicable EU Member State Administering Authority.
- (f) **Costs Recovery?** EU ETS adopts the polluter pays principle and imposes obligations on EU Member States to introduce legal rights for the shipping company to recover the costs of surrendering EUAs from commercial operators.

3. Penalties and Sanctions:

- (a) Where a shipping company fails to surrender sufficient EUAs to meet its emissions liability for a reporting period, a penalty is imposed for each EUA that is not surrendered (at present, it is EUR100 per EUA, an index linked value) plus the EUA shortfall that was due to be surrendered.
- (b) Where a shipping company fails to surrender sufficient EUAs for two consecutive reporting periods, expulsion orders may be ordered in respect of their entire fleet.
- (c) Member States may publish names of non-compliant entities and may impose their own specific sanctions for non-compliance, provided these are *"effective, proportionate and dissuasive"*.

FUELEU REGULATION

As part of the EU's Fit for 55 legislative package, the EU has introduced FuelEU a new regulation on maritime emissions and fuel and energy used on board ships.

For more information on the key features of FuelEU, please see [FuelEU Maritime Regulations | Reduce greenhouse gas emissions](#).

For an overview of the key compliance issues for the GHG intensity limit, compliance strategies for owners and charterers and a discussion of key contractual considerations for FuelEU clauses for physical transport contracts (time charter and voyage charter), ship management agreements and agreements for the sale and purchase of FuelEU Compliance Balances as well as contractual disputes that may arise, please see [MAIN ARTICLE](#).

4. Key Obligations:

- (a) The objective of FuelEU is to bridge the price gap between fossil fuel (high GHG intensity energy) and low GHG intensity alternative fuels.
- (b) FuelEU establishes two target requirements. From 1 January 2025, FuelEU sets a maximum GHG Intensity Limit (which is reduced every five years from 2025) for energy used on board ships. From 1 January 2030, a further target is introduced for containerships and passenger ships, which must use onshore power supply for some EEA port calls.
- (c) In future, a further target may be applied, where energy used on board ships must come from Renewable Fuels of Non Biological Origin (RFNBOs).

The scope and key features outlined below relate to the GHG Intensity Limit only.

5. Scope:

- (a) **FuelEU Maritime Regulation**
 - (i) **Application:** Mandatory from 1 January 2025
 - (ii) **Type of Ship:** Ships above 5,000 gt transporting passengers or cargo for commercial purposes (with limited exceptions).
 - (iii) **Geographical scope:** Ports of call at and voyages to / from EU/ EEA ports. The GHG Intensity target applies to:
 - (A) 100% of the energy used on board at EEA ports and on voyages between EEA ports; and
 - (B) 50% of the energy used on board on voyages between EEA ports and non-EEA ports.

5.2 Compliance and Reporting Obligations:

- (a) **What?** The fuel and energy used on board ships during qualifying voyages and port calls must fall below the GHG Intensity Limit each year. Where the ship's annual GHG Intensity is above the limit, this generates a negative Compliance Balance, a deficit. Where it is below the limit, this generates a positive Compliance Balance, a surplus. Ships with a surplus will be compliant, whereas ships with a deficit must take further steps to comply, either to pay a FuelEU penalty or adopt a flexibility mechanism (borrowing or pooling) permitted under FuelEU to reduce their deficit.
- (b) **When?** During the reporting period, ships must monitor fuel/energy consumption on qualifying voyages and port calls.
- (c) The year following the reporting period is the verification period. By 31 January in the verification period, the shipping company must prepare a FuelEU report and submit it to be verified.
- (d) By 31 March in the verification period, the verifier will verify the FuelEU Report and record on the FuelEU Database the ship's compliance balance.
- (e) From 1 April to 30 April in the verification period, shipping companies can adopt a regulatory flexibility mechanism (banking, borrowing or pooling). This means ships with a Deficit can borrow or pool in order to reduce their deficit and ships with a surplus can bank or pool.
- (f) By 1 May in the verification period, updated compliance balances will be recorded on the FuelEU Database to account for the use of a flexibility mechanism. Any ships with a deficit after 1 May in the verification period must pay a FuelEU Penalty.
- (g) By 30 June in the verification period, ships with a surplus or deficit (only where the FuelEU Penalty is paid) will receive a FuelEU Document of Compliance (DOC).
- (h) **How?** Compliance may be achieved by switching to more energy efficient fuels with reduced GHG Intensity for their ships or adoption of one of the flexibility mechanisms described above.
- (i) **Who is responsible?** The compliance entity is the International Safety Management (ISM) DOC Holder (so generally this will be the ship manager) and, unlike for EU ETS, there is no way of changing compliance responsibility to another entity.

5.3 Penalties and Sanctions:

- (a) FuelEU Penalties are payable by ships with deficits after 1 May in the verification period and calculated by reference to a formula provided in FuelEU.
- (b) If a ship fails to present a valid FuelEU DOC for two or more consecutive reporting periods, Member States may issue expulsion orders.
- (c) Member States may also issue flag detentions until the shipping company fulfils its obligations, if they are also the ship's flag state, and may impose their own specific sanctions for non-compliance, provided these are *"effective, proportionate and dissuasive"*.