

REGULATORY OVERVIEW OF FUEL EU MARITIME

1. **Regulation (EU) 2023/1805 (FuelEU)** forms part of the EU's Fit for 55 legislative package and regulates the greenhouse gas (GHG) intensity of fuel and other energy used onboard ships. For an in depth overview of FuelEU, we refer to Britannia's previous article: [FuelEU Maritime Regulations | Reduce greenhouse gas emissions](#). In this article, we focus on the regulatory GHG intensity target which came into effect from 1 January 2025 only and other, prospective regulatory targets are not considered¹.

KEY FEATURES OF THE GHG INTENSITY LIMIT

GHG INTENSITY LIMIT

- 1.1 Fuel EU establishes an annual limit for the GHG intensity onboard ships, which is calculated on a grams of CO₂ equivalent per megajoule basis (gCO₂eq/MJ) (**GHG Intensity Limit**).
- 1.2 Each ship must measure its own GHG intensity on a gCO₂eq/MJ basis for a calendar year (**Reporting Period**) to provide its yearly average GHG intensity (**GHG Intensity**).
- 1.3 GHG intensity of fuel is a full life-cycle assessment on a well-to-wake (**WtW**) basis, accounting for GHG intensity during the fuel production phase (well-to-tank), and GHG intensity of the fuel when consumed onboard (tank-to-wake).
- 1.4 During the verification period for a Reporting Period from 1 January to 30 June (**Verification Period**), the ship's reported GHG Intensity is compared to the GHG Intensity Limit to generate a compliance balance (**Compliance Balance**). If the reported GHG Intensity is under the GHG Intensity Limit, the Compliance Balance is positive (**Surplus**). If the GHG Intensity is above the GHG Intensity Limit, the Compliance Balance is negative (**Deficit**). A ship with a Surplus is compliant with Fuel EU and, in principle, no further regulatory actions are required (although as we discuss below a ship with a Surplus may take further regulatory actions). In contrast, a ship with a Deficit must take certain steps in order to comply with Fuel EU.
- 1.5 In order to comply, a ship with a Deficit must either: (a) pay a FuelEU penalty (FuelEU Penalty) calculated according to a formulae provided in Annex IV; or (b) adopt one of the flexibility mechanisms provided in Article 20 or 21 of FuelEU to meet the Deficit (where the equivalent cost should be lower than the FuelEU Penalty dependent on market forces). A ship that has paid a FuelEU Penalty or with a Surplus after 1 May in the Verification Period will be issued a document of compliance (FuelEU DOC) for a Reporting Period by 30 June in the Verification Period.

FLEXIBILITY MECHANISMS FOR COMPLIANCE WITH FUEL EU

- 1.6 The flexibility mechanisms under Article 20 or 21 of FuelEU are available to ships with a Surplus or a Deficit. These are banking, borrowing and pooling.
- 1.6.1 **Banking**² – A ship with a Surplus can bank a Surplus, if banked before the FuelEU DOC is issued. The ship can use a banked Surplus in any future Reporting Periods, including for pooling.
- 1.6.2 **Borrowing**³ – A ship with a Deficit can borrow an advance Compliance Balance (Advance Compliance Surplus) from the next Reporting Period (n+1). A ship may only borrow for one Reporting Period in a row. Borrowing is limited to two percent more than the GHG Intensity Limit. In Reporting Period n+1,

1 In addition to the mandatory GHG Intensity Limit, FuelEU introduces a requirement for zero emissions at EU berths from 2030 and a potential renewable fuels of non-biological origin (RFNBO) sub-target from 2034.

2 Article 20.1 of FuelEU Maritime

3 Article 20.2 of FuelEU Maritime

the borrowed Advance Compliance Surplus and interest of ten percent will be added to the Compliance Balance, making compliance more difficult and potentially increasing the total cost of the FuelEU Penalty across the two Reporting Periods.

- 1.6.3 Pooling*** – Ships with either a Surplus or a Deficit can pool their Compliance Balance with other ships' Compliance Balances. Solutions are left to the market and there are limited regulatory conditions for pooling:
- (a) A ship's Compliance Balance may only be included in one pool per Reporting Period;
 - (b) After pooling, (i) the total net pooled compliance of all the ship's Compliance Balances must be positive; (ii) any ship with a Deficit must not increase their (initial) Deficit through pooling; and (iii) any ship with a Surplus cannot be in Deficit after pooling;
 - (c) The pool must use one verifier;
 - (d) Each compliance entity must register their intention to pool on the FuelEU database;
 - (e) After 30 June 2026, each ship must hold a valid FuelEU DOC;
 - (f) No ship in the pool may borrow in that Reporting Period.
- 1.6.4** It appears that, after pooling, a ship which retains a Surplus may bank that Surplus, provided it is banked in time, and a ship which retains a Deficit (equal to or less than that with which it started) may pay a FuelEU Penalty.

STRATEGIES FOR COMPLIANCE WITH FUELEU FOR OWNERS AND CHARTERERS

- 2.** In this section, we discuss the initial strategic questions owners and charterers need to answer in order to guide the solutions required for Fuel EU in their physical transport contracts.

- 2.1** The effect of FuelEU is that the existing fleet, adopting a business-as-usual approach, will not meet the GHG Intensity Limit as this requires a change to the ship's fuel mix.
- 2.2** FuelEU is a unique regulation and poses novel issues for owners and charterers. Compliance may be achieved by paying the FuelEU Penalty, or adopting flexibility mechanisms that impose commercial, rather than regulatory cost; such as, costs to join a pool or buy sustainable maritime fuel (SMF) or apply net-zero emission technology (eg wind sails). Parties will have a choice whether to treat FuelEU as a compliance cost, a risk management exercise to minimise fleet exposure, or even commercial opportunity to monetise Surplus through pooling. Consequently, contractual solutions and arrangements around FuelEU are more complex and strategic than EU ETS given the different methods for compliance and the fact that it is not simply a question of paying a Fuel EU Penalty.
- 2.3** The starting point for any physical transport contract solution will be to determine the compliance strategy. This is likely to impact the risk allocation under contracts.

Strategies for Ships Generating a Deficit

- 2.4** A party may accept operating its ship with a Deficit (and not deploying SMF). If so, there will still be a strategic decision whether to:
- (a) pay a Fuel EU Penalty;
 - (b) borrow an Advance Compliance Surplus to meet FuelEU liability (in the short term), or
 - (c) seek to pool.
- 2.5** Owners with ships generating Deficit may be agnostic where their charterers have agreed to pay the costs. If the

FuelEU liability is to be passed down, charterers are more likely to prioritise pooling.

- 2.6 Depending on market forces, pooling may offer an opportunity for the compliance entity to pay less than the FuelEU Penalty. The price of netting off a Deficit will be determined by the availability of a pooling market and market pricing of a Deficit.
- 2.7 Borrowing may also be a good short-term solution. For example, where a ship will start to stem biofuels, in a future Reporting Period, it may make sense to take the risk of borrowing and possibly increasing a future Deficit, because it is likely the ship will operate with a Surplus and net-off the borrowing "costs".
- 2.8 Long term charterers would be advised to: (a) secure the ability to direct and control the compliance entity and the Compliance Balance in the charterparty; and (b) seek pooling partners well before the Verification Period deadline of 1 May (even though the de facto period for achieve pooling is a short window of a matter of months during the Verification Period).

Strategies for Ships Generating a Surplus

- 2.9 Alternatively, ships - which generate a Surplus due to consumption of SMF, such as certain types of LNG, LPG, biofuel, or renewable fuel of non-biological origin (**RFNBO**) – may be "anchor" ships within their owned or operated fleet. Owners or charterers may decide to build a compliance strategy around their anchor ships, using the Surplus generated to net-off Deficit across the fleet in Reporting Periods.
- 2.10 Where a compliance strategy is built on an "anchor" ship, two issues bear consideration: (i) ship technology – whether the engines and auxiliaries are capable of consuming SMF – and (ii) SMF supply – whether owners or charterers can stem SMF and are willing to bear the additional costs.
- 2.11 Subsidiary questions for parties with "anchor" ships will be access to and the control of the Compliance Balance, as well as entitlement. An owner with a dual fuel ship or a charterer with a supply of SMF may both want the commercial benefit of a Compliance Balance as consideration for their respective investments. Third parties who are involved in the supply of SMF may also enter the market. Whichever camp a party is in, developing a house strategy for compliance will guide the contractual solutions, although commercial bargaining power will still play its part. For example:
 - 2.11.1 charterers with a biofuel supply may wish to control the ship's Compliance Balance directly and enter into pooling arrangements in their own name, i.e. not rely on owners, given a prospective Surplus, or
 - 2.11.2 owners of LPG or LNG ships or other dual fuel assets using SMFs may simply consider the Compliance Balance theirs to control given their investment and retain all cost and risk for FuelEU (irrespective of ownership of the fuel itself); or
 - 2.11.3 fuel suppliers may have agreed to stem bunkers at a discount in consideration for controlling a ship's Compliance Balance.

Strategies for Ships Generating a Surplus

- 2.12 Mid-term compliance strategies are likely to be built on anchor ships consuming LNG, LPG and biofuels.
- 2.13 For LNG and LPG:
 - 2.13.1 dual fuel engine technology is established in LNG and LPG carriers and being expanded to new ship types; and
 - 2.13.2 there is an existing fuel supply chain and infrastructure in place.
- 2.14 **Biofuel:** subject to class and engine manufacturer approvals, and the type and source of biofuel, this may be used as a drop-in fuel without retrofits or modifications and stemmed at major bunkering ports – Amsterdam Rotterdam Antwerp, Singapore, Zhoushan among others. However, to obtain a sustainability benefit (e.g. as an SMF under FuelEU), the biofuel must meet the sustainability and GHG emissions saving criteria prescribed by RED II and Article 10 of FuelEU, including any required documentation and certification.

- 2.15** **RFNBO:** this is an obvious way to generate surplus and manage the risk across vessels, alternatively to monetize FuelEU opportunities through pooling. However, at present, the availability of RFNBO and ships capable of deploying the same are not yet available at scale, so the CAPEX represents a significant hurdle, although this is more of a consideration for the future.
- 2.16** Decisions on all these strategic issues will vary from stakeholder to stakeholder and will guide the contractual solutions required in physical transport contracts and maritime services agreements.

NEGOTIATING CONTRACTUAL SOLUTIONS

- 3.** In this section, we consider the key contractual risks and considerations for parties negotiating Fuel EU clauses for physical transport contracts (time and voyage charterparties), maritime services agreements (ship management agreements) and agreements to buy and sell Compliance Balance (pooling agreements).

4. Time Charterparty

- 4.1** Unlike the EU ETS, there are no statutory rights for reimbursement of FuelEU Penalties in EU Member States from a third party responsible for purchasing the fuel or commercially operating a ship pursuant to a physical transport contract under FuelEU. For charterers, this may be an owners' issue and there may be resistance from charterers to accept liability for costs arising out of FuelEU. It would then be a matter of construction of the charterparty to determine how the parties have agreed to allocate such costs, whether they follow the fuel/charterers or the ship/owners. It is always preferable to avoid these kinds of disputes on construction and to agree clear allocation of risk and responsibility for costs in advance.
- 4.2** **Data Sharing / Monitoring and Verification** – as with all these clauses, consistent sharing of data during the Reporting Period and promptly during the Verification Period will enable the parties to mitigate Fuel EU Penalties, for example, notifying a charterer that they should explore pooling options early.
- 4.3** **Stemming SMF** – the charterparty will have to address the operational and safety implications of using SMF. This is a wider issue than just FuelEU. It requires agreement on quality specifications, quantity measurement, sustainability criteria, documents and certification, and sampling / testing methods and standards. The recommendation would be to make separate provision for this to allocate risk and responsibility appropriately.
- 4.4** **Payment of FuelEU Penalties** – under the BIMCO FuelEU Maritime Clause for Time Charter Parties 2024 (**BIMCO FuelEU Clause**), owners are responsible for compliance with FuelEU, but charterers are allocated responsibility for payment of Fuel EU Penalties. The "forecasted" FuelEU Penalty costs are paid monthly throughout the Reporting Period based on the ship's notional in-year GHG Intensity and the corresponding Compliance Balance (**Surcharge**). There is then reconciliation of the parties' positions and the Surcharge as the GHG Intensity/Compliance Balance changes during the Reporting Period (sub-clause (g)). This may increase administrative burden for the parties.
- 4.5** Actual FuelEU liabilities will only be known (i) when the provisional Compliance Balance for the previous Reporting Period is confirmed by the ship's verifier by 31 March in a Verification Period and (ii) after any further adjustment is made due to use of flexibility mechanisms prior to 1 May in the Verification Period. This is addressed in the BIMCO FuelEU Clause by a further reconciliation of the Surcharge should the Compliance Balance change after pooling or borrowing (sub-clause (k)).
- 4.6** There are likely to be other approaches to the allocation of risk and responsibility and payment of Fuel EU Penalties in the market – for the latter, it may be based on the verified Compliance Balance which would not require ongoing reconciliation. The mode, frequency and timing of payment may well also be adjusted to later in time and closer to the regulatory timeline for meeting the FuelEU Penalty (eg 30 June).
- 4.7** **Exclusions from FuelEU Penalty Liability** – the parties may also want to further scope their respective liability for the Compliance Balance and the Fuel EU Penalties. Charterers will want to exclude off-hire periods and charterparty breaches resulting in emissions generation. The BIMCO clause does this albeit limited to undisputed

off-hire, which is slightly narrower than the equivalent BIMCO EU ETS clause exception. A further complexity with FuelEU is that actions in one Reporting Period can affect the Compliance Balance in subsequent Reporting Periods. The parties may want to agree that (i) the benefit of any banked Surplus, or (ii) aggravated Fuel EU Penalties due to borrowing or operating a Deficit in a pre-charterparty Reporting Period, is/are for owners' account.

- 4.8 Control of the Compliance Balance** – where charterers agree to pay the Fuel EU Penalties, they will also want to direct and control the Compliance Balance. Liability should be linked to the Deficit after 1 May in the Verification Period. This enables charterers to use flexibility mechanisms to reduce the Deficit as they see fit. For example, using banked Surplus from a previous Reporting Period, borrowing an Advance Compliance Surplus (which may have benefits if charterers start to stem biofuels in future Reporting Periods), or pool the ship's Deficit with other ships' Surplus. The flexibility mechanisms are likely to reduce overall exposure. Charterers will want to satisfy themselves that no other party may control the Compliance Balance and the compliance entity will follow their instructions, logging relevant information on the FuelEU database, seeking warranties for this.
- 4.9 Surplus / Banked Surplus** – where charterers have stemmed SMF, likely at a premium to fossil fuel, charterers will want to monetise the potential regulatory benefits. Charterers will want to be paid for any Surplus generated during the charterparty, as provided in the BIMCO FuelEU Clause, if charterers cannot use or have access to and control of the Compliance Balance for pooling.
- 4.10** Charterers will also want to be paid-out for any Banked Surplus or notional in-year (not yet verified) Surplus on redelivery. The parties would need to agree a value for the Surplus which could be the FuelEU Penalty or a lower figure like any premium on fossil fuel.
- 4.11 Liquidated Damages** – If due to an owners' breach, the ship cannot consume the SMF and there are no regulatory benefits, charterers may want to recover the notional in-year Surplus generated.
- 4.12 Protections / Indemnities** – Owners may want rights to suspend performance in case of non-performance and both parties may want indemnity protection against losses arising due to one party's breach. Termination rights (or notice / anti-technicality provisions) may also be considered appropriate.
- 4.13 Delivery / Redelivery** – it is likely that a tiered system will be created for periods when charterers operate the ship for a full Reporting Period or partial Reporting Periods. Owners will want to retain control of the Compliance Balance in the latter case, although the market may well present alternative options.
- 4.14** For trip time charters, there is likely to be less common interest between the parties. Charterers may resist liability altogether on the basis that GHG Intensity is an annual average, which a trip time charterer cannot control. Equally, charterers may be reluctant to stem more expensive SMF. Ultimately, charterers are likely to pay Fuel EU Penalties or be paid for Surplus on the basis of a notional charterparty attained GHG Intensity, even if this will not in fact reflect actual end of year GHG Intensity in a Reporting Period.

5. Voyage Charterparty

- 5.1** How the market addresses FuelEU in voyage charterparties remains to be seen. Voyage charterers have no control over fuel used onboard a ship and will probably argue that they are not the polluter in any event.
- 5.2** Given the nature and short duration of voyage charterparties, it may also be challenging to assess accurately in-real time the contribution of the voyage to the ship's annual GHG Intensity. For example, the ship could start consuming biofuels after conclusion of the voyage charter, so overall GHG Intensity is under the GHG Intensity Limit. Equally, defining the length of the duration of a voyage to be counted may also be a source of contention. As there will be uncertainty, owners may simply seek to price FuelEU costs for the voyage based on a notional GHG Intensity advance or simply add a fixed EU port call surcharge or roll additional amounts into freight (similar to the approach we have seen to the EU ETS).

6. Ship Management Agreements

- 6.1** Unlike EU ETS, the registered owner is not the default compliance entity, it is the ISM DOC Holder, generally the ship manager. The manager is therefore the entity that must comply with FuelEU and will be subject to

sanctions for non-compliance. A manager that has not received payment of a FuelEU Penalty from their owners must still pay the FuelEU Penalty to the administering authority. This creates significant additional exposure for managers who traditionally act as agents for and on behalf of their principals.

- 6.2** Generally, managers will not have any direct contractual relationship with the commercial operator of the ship, where this is a time charterer. Managers can agree clauses in their ship services agreements for owners to pay Fuel EU Penalties. However, they will have no control over terms agreed in physical transport contracts and passing through costs to the time charterer. Further, managers will have no control over the fuel supplied to a ship which will have the most direct operational impact on the GHG Intensity.
- 6.3** Given the nature of this additional responsibility, managers will require significant protection. This is likely to be in the form of security - either a parent company guarantee or upfront cash payments, or payments into escrow accounts. Like BIMCO FuelEU, managers may require cash payments during a Reporting Period to reflect forecast annual Compliance Balance. They may also require contractual indemnities from owners in respect of losses that may arise due to non-compliance with FuelEU. The challenge with such indemnities is that they will only be as good as the contractual counterparty.
- 6.4** The owners will also want to build flexibility to control the Compliance Balance and direct the compliance entity to take any steps required to implement a flexibility mechanism. This may come from owners or their nominee (e.g. time charterer) where this has been delegated by way of contractual arrangement (e.g. amendment to a time charterparty). Owners will need to ensure that managers follow instructions promptly even where provided by an owners' nominee.
- 6.5** Termination provisions should also be considered. Under FuelEU, where there is a change of compliance entity, the new compliance entity as of 31 December will be responsible for the entire Reporting Period.
- 6.6** BIMCO have recently introduced a FuelEU Maritime clause for Shipman 2024 which covers most of the issues set out above, although more work is still required by the parties when it comes to agreeing security and relevant timeframes for receipt of any FuelEU Penalty and pooling arrangements which will be at the heart of a managers new role in the FuelEU era.

7. Pooling Agreements

- 7.1** Pooling agreements are likely to be a central feature of FuelEU compliance. Already, there are various different pooling options appearing on the market.
- 7.2** We discuss above the complexities of compliance strategies. One of the first questions will be whether pooling is an in-house mechanism for managing FuelEU costs within an owned or operated fleet (or both) or whether it involves third party involvement.
- 7.3** With this decision, the parties can determine an appropriate structure, the type or number of ships to be included, and the entity administering the pool. Initial pool proposals are varied: they can take the form of multiparty systems, bilateral agreements between ships, marketplaces created by third-party brokers or consultants, or customer groups administered by parties in the ship services or physical transport chain, including fuel suppliers.
- 7.4** The answers to these issues will guide the type of contractual solution required, whether it is a multiparty agreement, a master services agreement or bilateral agreement, and these are likely to be complex. Such agreements will need to address eligibility criteria for the pool (such as minimum GHG Intensity thresholds), but also strict (and time-sensitive) pooling obligations. For entities entering into a pooling arrangement, for each ship, there should be clarity on the economic operator of the ship and whether they may also control the Compliance Balance. This will ensure the party with custody over the Compliance Balance and operational control of GHG Intensity is bound by the pooling arrangement. Interested parties must also ensure that compliance entities (managers) agree to follow instructions in respect of registering pooling on the FuelEU database. This could take the form of a manager's undertaking to follow such instructions. The agreement would also need to deal with payment terms and pricing the Compliance Balance. Changes in entities' relationship to the ship should also be addressed, with termination provisions, among other terms.

NEGOTIATING CONTRACTUAL SOLUTIONS

8. We consider here the contractual disputes that may arise. FuelEU does not provide the same certainty of costs recovery for compliance entities against a commercial operator (unlike under the EU ETS). In consequence, there may be disputes as to liability for FuelEU costs or steps taken to comply with FuelEU (such as stemming SMF) in charterparties, which are unamended for FuelEU.
- 8.1 Assuming there is a FuelEU clause, charterers may default on their payment obligation. Under the BIMCO FuelEU Clause, this is a rolling monthly payment obligation, so a breach could happen at any point in the Reporting Period. However, for long term time charterparties, we expect parties will negotiate payment obligations to apply after 31 January or 1 May of the Verification Period, i.e. once the Compliance Balance is verified and liabilities have crystallised. In which case, defaults may coalesce around these deadlines.
- 8.2 There is also the prospect of owners' default. Owners may permit charterers to control the Compliance Balance for the ship. They may fail to provide this. We doubt that charterers would have any superior rights to a Compliance Balance, or that the Compliance Balance is property that can have tiered property rights, therefore, charterers would be left with a contractual claim only. Also, where charterers have stemmed SMF and the ship cannot consume this, losing regulatory benefits, such as the opportunity to generate Surplus, charterers may seek to recover these losses from owners.
- 8.3 Likewise, where compliance is reliant on a supply of SMF, there may be a charterers' default. If the SMF consumed does not meet the sustainability and GHG emissions saving criteria under Red II and FuelEU, or cannot be consumed due to its properties, this may expose the ship to an unexpected FuelEU Penalty.

NEGOTIATING CONTRACTUAL SOLUTIONS

9. The scope of and targets imposed by FuelEU are clear for the coming years. One area to monitor is reform at the IMO and the likelihood of a Global Fuel Standard being introduced which may cause the EU to adjust FuelEU; for instance, amendments to the qualifying percentage of GHG intensity onboard for voyages to third countries.