

HKSOA Association – Marine Sub Committee Report - Updated to April 2024

The 2023 GHG Strategy on reduction of GHG emissions from ships – progress to date

The major achievement of MEPC80, held in July, after long and at times achromatic discussions, was the adoption of a new 2023 IMO GHG strategy, for the reduction of GHG emissions from ships which included revised levels of ambition and a timeline for a comprehensive impact assessment for the selection of mid-term measures.

The new levels of ambitions agreed within the revised strategy, encapsulated in *MEPC.377(80)*, are:-

- To peak GHG emissions as soon as possible and to reach net-zero by, or around, 2050, mindful of different national circumstances.
- A reduction in CO₂ emissions per transport work (carbon intensity) by 2030 to be at least 40% as an average across international shipping compared to 2008 levels.
- Indicative checkpoints to reach net-zero GHG emissions from international shipping of 20% striving for 30% by 2030, and 70% striving for 80% by 2040, compared to 2008.
- Low-carbon and zero-carbon fuels/energy source uptake for international shipping to be at least 5%, striving for 10%, by 2030.
- To reduce GHG emissions on a well-to-wake basis, as addressed in the LCA Guidelines.
- To reduce GHG emissions within the boundaries of the energy system of international shipping and prevent a shift of emissions to other sectors.
- Recognition of the need for a broad approach to regulating the safety of using zero or near-zero GHG emission technologies, fuels and/or energy sources, including addressing the human element, to ensure a safe implementation of the Strategy.
- Review, with the aim of strengthening, the energy efficiency design requirements for ships.

The GHG Strategy was discussed extensively at an IMO Intersessional Working Group (ISWG-GHG 16) which met the week before MEPC81 (18-22nd March) .

The main purpose of the discussions was to make progress on developing a ‘basket’ of mid-term GHG reduction measures to deliver on the GHG reduction goals agreed as part of the 2023 IMO GHG Strategy, adopted by MEPC 80.

In particular, this includes a technical Goal-based Marine Fuel Standard (GFS) to reduce the GHG intensity of marine fuels (GFS), and a Maritime GHG Emissions Pricing Mechanism – the final basket of measures needing to be approved at MEPC 83 in Spring 2025, for adoption in Autumn in 2025 and global entry into force by 2027.

After further discussions at MEPC 81, the key areas of difference between IMO Member States is whether:-

The technical and economic elements should be integrated into a single measure, i.e. a GFS with economic elements whereby ships are either rewarded or penalised financially for under or over-compliance with the fuel standard, with the price for under or over-compliance being determined by the market and the availability of compliant fuels. The economic element being **variable**. This is the approach supported, among others, by a group led by China, Norway, Brazil, Argentina and UAE; or

The GHG pricing mechanism should be a separate economic measure, with **fixed flat** rate contributions being made by ships per tonne of GHG emitted. This is the approach promoted by ICS (with the support of Bahamas and Liberia) with its Zero Emission Shipping Fund (ZESF) Fund and Reward (Feebate) Mechanism, and which is generally supported, among others, by Japan, the EU 27 and the Pacific Island and Caribbean States.

However, this issue is further complicated due to the position of the EU 27 which – while supporting a separate **fixed flat rate** “levy-based” contribution system – also support a more complex GFS with **variable economic** ‘trading’ elements, rather than the simplified GFS proposed by ICS (and IBIA) – i.e. an absolute fuel standard similar to the approach used for the IMO 2020 sulphur cap regulation with a simple Energy Pooling Compliance Mechanism to provide flexibility to ships should compliant fuels not be available, without the need for the trading of “compliance/remedial” units between ships using a central IMO registry.

Member States will have more consultations at ISWG-GHG 17, held the week before MEPC82, to try to find a consensus to developing base regulatory text for consideration at MEPC 82 (30/9 -4/10/2024).

Development of a Global Fuel Standard (GFS)

Developing a Fuel Standard to promote the use of cleaner and more sustainable fuels is expected to drive the transition towards low-carbon and zero-emission fuels. The measure targets, *Well to Wake, (WtW)*, fuel emissions sets requirements for ships to use fuels that have *WtW* intensity at or below certain limits. The standard is expressed as the “*mass of GHG emissions per unit of energy used on-board a ship*”, and the limits are expected to be increased over time based on the goals of the IMO strategy.

Green House Gas Issues – Short Term Measures

The EEXI, CII and SEEMP Part III, all came into force on 1-1-2023 for ships of 5000 GT or greater, after being adopted at MEPC78 in June 2022. However, the CII is proving to be a poorly designed rule that was intended to reward efficient ships but in effect penalizes ships according to voyage patterns rather than efficiency. This is particularly noticeable in the Bulk and Tanker trades. At MEPC80 the International Chamber of Shipping, (ICS), tabled a motion stating that, *the CII was currently not fit for purpose* and requested that the issue be resolved as soon as possible. The issue was discussed again at MEPC81 but without any conclusion,

although it was agreed that it would be discussed fully at MEPC82 with the aim to approve a solution for ratification at MEPC83.

However, there is some urgency as the last date for papers to be submitted to MEPC82 is 30th June 2024. The main issue at the moment is a lack of in service performance data of ships for the IMO to consider in its review. HKSOA members have been requested to supply sister ship data to the ICS that shows some ships with ratings of A or B, while others, on different voyage patterns, are shown to have poor ratings of D or E. The ICS have provided an easy to use web based survey for members to use to input the ships data, see below. This will be anonymised by the ICS before submission to the IMO. Members are urged to submit relevant data, if they have it, so the ICS can submit it in time for it to be considered at MEPC82.

www.ics-shipping.org/supporting-shipping/ics-cii-data-collection-system/

Regarding EEXI, it was anticipated that the date and amount of any 4th phase increase would have been discussed at MEPC80 but there was no time, so this was deferred to MEPC81 where it was deferred again.

The SEEMP was reviewed at MEPC81 and new amendments were adopted to Resolution MEPC388(81) covering the guidelines for collection of fuel oil consumption per consumer type and laden distance which should be calculated as the distance sailed when the ship is loaded. Also, included is guidance on the calculation of the total amount of in port onshore power, when supplied.

Another item that was agreed at MEPC81 was the adoption of the ShaPoLi shaft power limitation system for use on mechanical propulsion engines in place of mechanical fuel rack blockers. A 5-minute delay was agreed before alarms are initiated.

Onboard CO₂ Capture and Storage

Brazil and Class RINA both produced papers for MEPC80 promoting Carbon Capture (CCS) to reduce CO₂ emissions. RINA sought to enshrine carbon capture onboard ships as a way to reduce CO₂. Brazil proposed that carbon capture systems should be used ashore to reduce CO₂ which should be taken into consideration in the life cycle of fuel from *well to wake*. Both are sensible measures but due to differences in opinion by IMO delegates at MEPC80 and 81 over the allocation of the captured CO₂ and where and how it should be disposed and whether it should be considered as part of the fuel life-cycle analysis framework, or as a separate workstream, the carbon capture proposals were not agreed to. However, after MEPC81 there is a general belief that CCS could possibly be a good solution for shipping if it can be made to work efficiently and safely and regulations covering the transportation, storage and safe disposal can be agreed. These matters will be further discussed at MEPC 82.

Interim guidelines for the use of biofuels and blends of biofuels as fuels

India submitted a paper to MEPC80 proposing interim guidelines for the use of biofuels and blends of biofuels to reduce GHG, with a blend of not more than 30% by volume. If higher blends are used the NOx technical code of the diesel engine needs to be revised. As the use of biofuel blends is increasing the industry needs guidance related to procurement, storage and the use of biofuel blends including the lifecycle analysis of different types of biofuels. MEPC80 approved MEPC 1/Circ 907- *Interim guidance on use of biofuels under regulations 26,27 and 28 of MARPOL Annex VI* which came into effect on 1 October 2023. MEPC81 endorsed the use of Bio Fuels for shipping as an interim measure to reduce GHG.

EU Fit for 55 Package Status

a) EU ETS

The EU ETS scheme has been in operation since 1/1/2024. A seminar was held for members on 13th December 2023, in advance of implementation, to provide information on how to register with the EU countries and how to buy the EUS's, EU carbon credits per tonne of GHG produced.

The EU published the shipping company identities on 1st February 2024 as promised but some members found that some of their companies were not listed. HKSOA provided guidance to help resolve the issue but this has not always been successful due to bureaucratic delays in some EU countries.

BIMCO helped members by developing three new ETS clauses for charter parties. Members have commented that most charterers are being responsible and seem willing to pay for the EUA's incurred under their charter. Some members even reported that their charterers were pushing members to produce the GHG emissions at the end of each voyage.

b) FuelEU Maritime

The EU continues to work on the regulations to enable the scheme to start on 1/1/2025 and will be applicable to ships of 5,000 gross tonnage and above, calling at ports in the European Economic Area (EEA). It will apply to the energy used on board a ship and covers emissions from "Well to Wake" and includes Methane CH₄, Nitrous Oxide, N₂O and CO₂. It will apply to the following situations: -

- 100% of the energy used by a ship calling at an EU/EEA port for voyages within the EU/EEA (intra-EU)
- 50% of the energy used by a ship from voyages to or from EU ports (extra-EU/EEA)
- 100% of the energy used by a ship when at berth in EU/EEA ports.

FuelEU have advised that:-

1. By 31 August 2024, companies shall submit to the verifiers a monitoring plan for each of their ships indicating the method chosen for monitoring and reporting the amount, type and emission factor of energy used on board by ships and other relevant information.

2. For ships falling under the scope of this Regulation for the first time after 31 August 2024, companies shall submit a monitoring plan to the verifier without undue delay and no later than two months after each ship's first call at a port under the jurisdiction of a Member State.
3. A standard reporting template is under development. It can be viewed at:-

[Template for standard monitoring plans \(Article 8\(4\) FuelEU Maritime Regulation\)](#)

The amount of paperwork required for each ship calling at EU ports appears likely to be very burdensome.

There is an additional requirement for Container and Passenger ships calling at EU ports from 1/1/2030 to plug into shore power, where it is available.

Ballast Water Management Convention Review

The Ballast Water Convention, BWC, is still in an experience building phase. It is expected that any amendments to the Convention should be ready for adoption at MEPC 85 (autumn 2026) with entry into force in 2027. An interim report will be submitted to MEPC 83 in 2025. MEPC81 approved a number of important issues, the most important being challenging water quality, CWQ, when water in port has a very high sediment content which prevents the ballast water treatment system, BWTS, from working due to clogging of the filters. The BWC didn't consider the quality of the water, except to mention it was to be able to work in water with sediment of only 50mg/ltr. Muddy rivers and ports have sediment levels of 200 - 300mg/ltr. BWTS with standard filters cannot work with such high sediment and frequently clog up rendering the BWTS inoperable. MEPC81 provides guidance on the application of the BWM Convention to ships operating in CWQ. It is designed to guide ships and Administrations in planning for operations in CWQ by including principles, and a process for managing CWQ that includes a BWTS bypass as a last resort, as well as recommended procedures for decontaminating ballast tanks and guidance on record-keeping and communication. It also includes guidance for BWMS manufacturers in supporting this planning, and guidance for port State control in assessing compliance with the Convention after operations in CWQ. MEPC81 also provided guidance on an approval process to modify the BWTS, without the need for recertification, to improve CWQ performance. There was also discussion on how to test BWTS in service but without any conclusion.

For existing ships, without black and grey water holding tanks, MEPC81 also provided guidance on the temporary storage of grey water or treated sewage in ballast tanks and how to discharge them and clean the temporary ballast tanks while addressing potential environmental impacts.

Implementation of the Hong Kong Convention

The entry-into-force conditions of the Hong Kong Convention were met on 26 June 2023 and, therefore, the Convention will enter into force on 26 June 2025. However, there is some concern about the BASEL Convention, which prevents transboundary transfers of waste products across countries, taking precedence over the HK convention. It was agreed at MPC81 that the IMO Secretary General would seek legal advice and write to the Basel Convention informing them that the Hong Kong Convention should take precedence for ship recycling.