



IAPH's quick-read guide to technical and economic measures under discussion at the IMO HQ in London to meet the new IMO decarbonisation targets



During the 80th meeting of the IMO's Marine Environment Protection Committee (MEPC 80), Member States agreed to peak Greenhouse Gas (GHG) emissions from international shipping as soon as possible and set a target to reach net-zero GHG emissions "by or around" i.e. close to 2050.

This is supported by indicative targets for 2030 and 2040, together with a fuel target of at least 5%, striving for 10%, zero or near-zero emission fuel uptake by 2030. These targets are on a Well-to-Wake (WtW) basis, which takes into account the full lifespan of fuels from when they are produced to when combustion takes place in the ship's engine.

Member States must now work together to develop a comprehensive framework of measures that will achieve these reductions. The 2030 IMO GHG Strategy stipulates that delegations must agree on a 'basket of mid-term measures' comprised of technical and economic elements in the form of 1) a fuel standard and 2) a GHG pricing mechanism, respectively, to incentivise industry to commit and invest in zero or near-zero technologies and fuels.

1. A Global Fuel Standard (GFS)

A GFS will control the greenhouse gas (GHG) intensity of fuel by prescribing a maximum intensity and gradually lowering the limit at predetermined intervals.

The primary goal of the GFS is to convey a clear, predictable and unequivocal message to both shipowners and fuel suppliers, emphasizing the urgency of swiftly increasing the adoption of near-zero and zero-emission fuels before 2040.

However, the GFS alone will only promote a gradual transition by setting a minimum requirement for the annual average GHG intensity of fuels. So, it requires an accompanying global pricing mechanism to accelerate maritime decarbonisation.

2. Global GHG pricing mechanism

A GHG pricing mechanism will provide an economic incentive for the sector to reduce its fuel consumption and invest in more energy efficient technologies and fuels.

This will narrow the competitiveness (mainly pricing) gap between fossil fuels and alternatives, whilst generating revenues that can encourage early adoption of zero-emission fuels. A mechanism could also guarantee a just and equitable transition by directing funds to support developing countries, in particular, Small Island Developing Countries (SIDCs) as well as Least Developed Countries (LDCs). It aims at stimulating uptake, in combination with creating certainty from mandated progressive reductions in fuel or energy GHG intensity.

Enabling a just and equitable transition

The term a 'just and equitable transition' has been a key theme throughout discussions at recent MEPC meetings and refers to the need to ensure that the policy measures put in place do not result in disproportionately negative impacts on States. The energy transition will have different social and economic implications on different nations, and it is the role of the IMO to ensure a level playing field and that not one single country is left behind.

Another key component in the development of the measures is the distribution of revenues generated to unlock opportunities for fuel production, allow for technology transfer and equal access to the necessary infrastructure, together with minimising additional impacts on the countries and regions most vulnerable to climate change.

To support this, a comprehensive impact assessment (CIA) is being conducted by UNCTAD and other partners in 2024 to evaluate the impact of the proposed measures on the global fleet and on states. The outcomes of this assessment will likely be finalised in Autumn 2024 ahead of agreement in 2025, before entry into force in 2027.

Summary brief 1:

A flexibility-based approach towards a Global Fuel Standard (GFS)

A key component of the candidate mid-term measures that remain under consideration, is the need for a flexibility mechanism which allows for multiple ways to comply with regulations to deliver the required environmental outcomes, whilst ensuring a fair transition.

Whilst Member States agree on a GFS as a catalyst for fuel GHG intensity reductions, some have proposed different methodologies for incorporating a flexibility mechanism:

One which allows: (a) under- and over compliance with the set Global Fuel Intensity (GFI) limit with the application of Flexible Compliance Units (FCUs) (submitted by EU countries), or Remedial Units (submitted by Argentina and others.)

Another which (b) is a voluntary compliance mechanism where compliance is measured across a pool of ships (submitted by International Chamber of Shipping)

And others which (c) involves an alternative method through paying a fee.

All proposals currently allow ships that overperform to trade credits with ships that underperform, albeit in different ways.

A key factor in the decision making will, therefore, be agreeing on what methodology will reduce complexity and administrative burden, whilst providing certainty on how much revenue can be generated at a given point/GFI limit.



Summary brief 2: Agreeing on a global GHG pricing mechanism

The proposals that remain on the table can generally be grouped into three categories: a feebate mechanism, a mandatory GHG levy approach or a combination of measures. The ability of each of these variants to trigger significant reductions in GHG emissions and uptake in new technologies, will depend on the price level set for contributions from ships and how the revenue generated will be distributed.

Option A: Feebate Mechanism

A feebate sets a flat rate contribution per tonne of CO2, or CO2-equivalent, emitted and later returns a portion (rebate) as a subsidy dependent on the quantity of eligible zero or near-zero fuels being used by a ship. There are two proposals for a feebate mechanism due to be debated at the forthcoming meetings:

- The Bahamas, Liberia and the International Chamber of Shipping (ICS) propose a "Fund and Reward" (Feebate) mechanism which would see contributions made to a Zero Emission Shipping Fund (ZESF), with a significant proportion of this being transferred to a separate IMO (GHG) Maritime Sustainability Fund (IMSF) to support developing countries. It argues that through this method, the reward ("feebate") will multiply the effect of the contribution quantum on reducing the cost gap between conventional and new fuels, allowing the contributing price to be set at a level that will avoid disproportionately negative impacts on States.
- Japan also propose a feebate mechanism with a fixed contribution rate of 20 US
 dollars per tonne of GHG emissions. It proposes that fixing the contribution rate
 and minimum reward rate for multiple years (e.g. 5 years), will increase the
 predictability for ships as to how much payment would be required according
 to their GHG emissions.

One of the key differences between these proposals is that ICS propose a 'pooling compliance mechanism' for the GFS, whilst Japan are in support of the 'Flexibility Compliance Mechanism' as set out by numerous EU countries (see Summary brief 1, above)

Option B: Global mandatory levy

This mechanism would apply a cost to all GHG emissions associated with the energy used by international shipping. There are two proposals which clearly outline their preference for a levy to achieve significant emissions reductions:

Proposal one: In their submission, **EU countries** state that such an approach can be administered in a simple manner and send a predictable signal to fuel suppliers and traders, ship operators and investors which would help de-risk investments and result in a sustained transition.

Proposal two: Belize and others propose that a universal mandatory levy should be set at a price of no less than 150 US Dollars per tonne of CO2-equivalent, subject to a 5-yearly review and ratchet clause. In contrast to those proposing a flexibility-based approach and/or partial or conditional coverage when it comes to complying with a Global Fuel Intensity Limit (GFI), the paper outlines the shortcomings of such an approach and argues that the most effective method is a mandatory and global price paid on all GHG emissions.

Option C Other, combined approaches

Other proposals that consider a mixture of methodologies include:

- The International Maritime Sustainable Fuels and Fund (IMSF&F) by China and others applies three flexible compliance approaches, namely pooling, banking and fund contribution/reward for both over-compliant and under-compliant ships with the aim of ensuring overall compliance of the world fleet at the lowest possible cost.Revenues would be raised through the purchase of Remedial Units (RUs) from non-compliant ships which can be obtained through making monetary contributions to a Sustainable Shipping Fund. The price of remedial units would be set 20% higher than the price gap to encourage compliance. China and others also continue to argue that the Well-to-Tank (WtT) emissions are beyond the control of the shipping industry, and, in order to address the Well-to-Wake (WtW) emissions of marine fuels, they have provided a sustainability framework as an integral technical element.
- For the World Shipping Council (WSC), their "Green Balance Mechanism" would see fees applied to ships burning fossil fuels and allocated to ships using green fuels so that the average cost of fuel used is equal. The greater the GHG reductions a fuel delivers, the greater the financial allocation received. The fees and allocation of funds are calculated based on market conditions to balance out the cost across ships, with the minimum fee to offset price differences collected and allocated to ships using green fuels that meet a specific GHG fuel intensity. This would encourage the investment in the production and uptake of new fuels.

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Conclusion and next steps

The intersessional working group lasts until 15 March 2024, after which the proposals will be presented for review and further discussions at MEPC 81 between 18 and 22 March. In the meantime, work on the comprehensive impact assessment is underway, with both IAPH, ICS and other stakeholders actively involved in the formulation and the study.

A guide to terminology - making sense of all the technical lingo

CIA Comprehensive Impact Assessment (report on economic impact of the measures)

CO2 Carbon dioxide
EU European Union

FCU Flexible Compliance Units (proposed mechanism allowing operators to exchange over- and

under- compliance across ships, both within the same fleet or with other ship operators)

GFI Global Fuel Intensity (proposal – measurement of Greenhouse Gas intensity)

GFS Global Fuel Standard (proposal)

GHG Greenhouse Gas

IAPH International Association of Ports and Harbors

IMSF&F International Maritime Sustainable Fuels and Fund (proposal)

ICS International Chamber of ShippingIMO International Maritime Organization

ISWG Intersessional Working Group

LDCs Least Developed Countries (UN list here)

MEPC Marine Environment Protection Committee of the IMO

RU Remedial units (proposed mechanism used for operators to acquire units by contributing

to a sustainable shipping fund)

SIDs Small Island Developing States (UN list here)

UNCTAD United Nations Conference on Trade and Development

WSC World Shipping Council

WtT Well-to-Tank (energy consumed and GHG emitted during the partial lifespan of fuels from

when they are produced to when it is supplied, i.e. in this case bunkered on board a ship's tank)

WtW Well-to-Wake (energy consumed and GHG emitted during the full lifespan of fuels from

when they are produced to when combustion takes place in the ship's engine)

If you would like more information on this IAPH member briefing, please contact IAPH Policy and IMO Liaison Officer, Rhona Macdonald:

