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**COMMISSION STAFF WORKING DOCUMENT**

**Union submission to the International Maritime Organization's 12th Intersessional Working Group on Reduction of GHG Emissions from Ships on the consideration of a combination of different types of global market-based measures with technical mid-and long-term measures**

## **Union submission to the International Maritime Organization's 12<sup>th</sup> Intersessional Working Group on Reduction of GHG Emissions from Ships on the consideration of a combination of different types of global market-based measures with technical mid-and long-term measures**

### **PURPOSE**

This Staff Working Document contains a draft Union submission to the International Maritime Organization's (IMO) 12<sup>th</sup> Intersessional Working Group on Reduction of GHG Emissions from Ships. The IMO has indicatively scheduled ISWG-GHG 12 from 16 to 20 May 2022.

The draft submission analyses the main features and implications of a basket of mid- and long-term measures combining a carbon pricing measure in the form of a levy-based scheme or a cap-and-trade scheme, with a technical measure like the Low GHG Fuel Standard (LGFS). It shows the potential of combining technical measures and economic incentives to facilitate a fair and equitable transition and create an effective, clear and measurable response to the climate emergency in terms of reduced GHG emissions from shipping.

### **EU COMPETENCE**

Regulation (EU) 2015/757<sup>1</sup> (EU MRV Regulation) establishes the legal framework for an EU system to monitor, report and verify (MRV) CO<sub>2</sub> emissions and energy efficiency from shipping. The regulation aims to deliver robust and verifiable CO<sub>2</sub> emissions data, inform policy makers and stimulate the market uptake of energy efficient technologies and behaviours. It does so by addressing market barriers such as the lack of information. It entered into force on 1 July 2015.

Any IMO measure on GHG matters, which will require the monitoring, verification and reporting of GHG emissions from shipping, would affect the EU MRV Regulation. Therefore, the EU has exclusive competence for GHG emissions in shipping.

In addition, on 14 July 2021, the Commission adopted the *Fit for 55* package of legislative proposals to reduce GHG emissions. *Fit for 55* includes a number of Commission's proposals that specifically target the shipping sector, such as the revision of the EU Emission Trading System (ETS) to include the maritime transport sector (and the corresponding amendments to the EU MRV Regulation)<sup>2</sup> but also the FuelEU maritime proposal<sup>3</sup>, which focuses on the use of renewable and low-carbon fuels in the maritime sector and mandates the uptake thereof by the ships calling EU ports. Under the case-law<sup>4</sup>, the risk of affectation concerns not only the rules as they stand, but also their foreseeable future development. These legislative initiatives further lead to the exclusive competence of the EU for GHG emission in shipping.<sup>5</sup>

In light of all of the above, the present draft Union submission falls under EU exclusive competence.<sup>6</sup>

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<sup>1</sup> Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC, OJ L 123, 19.5.2015, p. 55–76.

<sup>2</sup> COM(2021) 551 - Proposal for a directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757.

<sup>3</sup> COM(2021) 562 - Proposal for a regulation of the European Parliament and of the Council on the use of renewable and low-carbon fuels in maritime transport and amending Directive 2009/16/EC.

<sup>4</sup> Opinion 1/03 of the Court of Justice of 7 February 2006, Lugano Convention, point 126.

<sup>5</sup> See in particular Commission proposal COM(2021) 551 referred to in footnote 2. It introduces a reporting and review provision (Article 3 ge) into Directive 2003/87 regarding possible amendments in relation to the adoption by the International Maritime Organization of a global market-based measure to reduce greenhouse gas emissions from maritime transport. The existence of such a review provision confirms the existence of a risk of affectation of the existing and foreseeable EU acquis.

<sup>6</sup> An EU position under Article 218(9) TFEU is to be established in due time should the IMO Marine Environment Protection Committee eventually be called upon to adopt an act having legal effects as regards the subject matter of the said draft Union submission. The concept of '*acts having legal effects*' includes acts that have legal effects by virtue of the rules of international law governing the body in question. It also includes instruments that do not have a binding effect under international law, but that are '*capable of*

This Staff Working Document is presented to establish an EU position on the matter and to transmit the document to the IMO prior to the required deadline of 1 April 2022.<sup>7</sup>

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*decisively influencing the content of the legislation adopted by the EU legislature* (Case C-399/12 Germany v Council (OIV), ECLI:EU:C:2014:2258, paragraphs 61-64). The present submission, however, does not produce legal effects and thus the procedure for Article 218(9) TFEU is not applied.

<sup>7</sup> The submission of proposals or information papers to the IMO, on issues falling under external exclusive EU competence, are acts of external representation. Such submissions are to be made by an EU actor who can represent the Union externally under the Treaty, which for non-CFSP (Common Foreign and Security Policy) issues is the Commission or the EU Delegation in accordance with Article 17(1) TEU and Article 221 TFEU. IMO internal rules make such an arrangement absolutely possible as regards existing agenda and work programme items. This way of proceeding is in line with the General Arrangements for EU statements in multilateral organisations endorsed by COREPER on 24 October 2011.

## REDUCTION OF GHG EMISSIONS FROM SHIPS

### Consideration of a combination of different types of global market-based measures with technical mid-and long-term measures

Submitted by the European Commission on behalf of the European Union

#### SUMMARY

*Executive summary:* This document analyses the main features and implications of a basket of mid- and long-term measures combining a carbon pricing measure in the form of a levy-based scheme or a cap-and-trade scheme, with a technical measure like the Low GHG Fuel Standard (LGFS). It shows the potential of combining technical measures and economic incentives to facilitate a fair and equitable transition and create an effective, clear and measurable response to the climate emergency in terms of reduced GHG emissions.

*Strategic direction, if applicable:* 3

*Output:* 3.2

*Action to be taken:* Paragraph 31

*Related documents:* MEPC 76/7/12, MEPC 77/7/4, MEPC 76/7/15, ISWG-GHG 10/5/6, 77/7/16 and MEPC 77/7/12

#### Introduction

1 In order to progress effectively with the next package of mid- and long-term measures, MEPC 76 adopted a work plan for their development, which in its first phase collates and considers proposals for measures.

2 The first phase of the work plan concludes in spring 2022, and should result in understanding of the various tabled proposals for mid- and long-term measures, comparison of their main features and implications, including their scope of application and the appropriate IMO legal framework (new or existing), as well as identification of the key issues to be further considered in the second phase of the work plan.

3 The different concrete proposals for market-based measures (MBMs) made so far since the adoption of the Initial IMO GHG Strategy can be categorised as either a levy (MEPC 76/7/12 and MEPC 77/7/4), or a cap-and-trade scheme (ISWG-GHG 10/5/6 and MEPC 77/7/16).

4 At ISWG-GHG 10, several delegations have in their initial positions promoted or shown openness towards a levy-based solution. Furthermore, a large number of delegations expressed preference to consider MBMs in combination with technical measures, namely

the Low GHG Fuel Standard (LGFS), as suggested inter-alia in MEPC 76/7/15 and in ISWG-GHG 10/5/3.

5 At MEPC 77 delegations expressed a clear preference for keeping all proposals on the table for the moment, also in view of considering a possible basket of mid- and long term measures. There is a need for IMO to make progress by using the momentum of the broad-based support for emission reductions among all these proposals.

6 Therefore, in order to facilitate progress in the consideration of future mid- and long-term measures, this document further analyses the characteristics and added value of a combination of a carbon pricing measure in the form of a levy-based scheme or an emission cap-and-trade scheme, with a technical measure in the form of the LGFS.

7 The idea behind a basket of measures combining a technical fuel standard, with a GHG levy or an emission cap-and-trade scheme is to address two distinct types of market failures in the sector. An LGFS would target the coordination failure along the fuel supply chain and ensure a gradual uptake of alternative fuels and technologies, while a sufficiently ambitious carbon price instrument would establish a strong price signal to promote new technologies and operational energy efficiency and generate sufficient revenues to pave the way for a fair and equitable transition.

8 The following analysis is built upon the key issues identified in the work plan adopted at MEPC 76. It focuses on the specific features and implications related to the combination of measures and is intended to complement a more in-depth analysis of the individual measures. Where the following refers to carbon pricing, this also includes other greenhouse gases.

#### Main characteristics and features of a basket of measures

9 Clear and urgent action is necessary. On the one hand, the proposed basket of measures has to establish adequate economic incentives that reward operators investing in abatement measures and protect them from unfair competition. On the other hand, it has to facilitate shipping overcoming its dependence on fossil fuels and to address a number of barriers that currently prevents it from doing so, namely the lack of predictability of the regulatory framework (leading to the 'wait and see' attitude of market operators), high interdependency with supply and distribution (the so called chicken-and-egg situation), and considerably higher costs of low and zero-GHG fuels compared to fossil fuels (the price gap).

10 These barriers lead to considerable delays in the uptake and deployment of alternative fuels, which may be detrimental to timely building of fuel production capacity, bunkering infrastructure and building or retrofitting ships operating on new energy sources. To be effective, mid- and long-term measures must address these barriers and support both the deployment of cleaner energy in the sector as well as the deployment of more energy efficient vessels.

11 Addressing these issues through a combination of measures would generate considerable synergies. On the one hand, carbon pricing reduces the price gap between low- and zero-GHG fuels and fossil fuels, and makes energy efficiency investments and operational practices more cost effective. It also generates revenues that may be used to inter alia support R&D, incentivize the uptake and improve availability of low- and zero-GHG fuels and solutions as well as to ensure a fair and equitable transition in Small Island Developing States (SIDS) and Least Developed Countries (LDCs). On the other hand, a technical LGFS addresses the non-pricing barriers to the deployment of alternative fuels by

providing a predictable demand from the shipping sector on the use and deployment of alternative fuels that also allows for a gradual transition on both the demand and supply side.

12 Both combinations of measures, i.e. an LGFS with either a levy or a cap-and-trade scheme could be designed to be flag-neutral, transparent, effective, easy to implement, cost-effective and enforceable to prevent fraud. It could also operate in synergy with national and regional measures and schemes as appropriate.

#### Identification of emissions reduction potential

13 The mid-term measures for decarbonization of shipping should be able to work in combination to achieve the levels of ambition of the IMO GHG Strategy, as revised, in particular the ambition to 2050. Any of the two combinations put forward in this submission can be designed to do so with different pros and cons described below. Such a basket of mid- and long-term measures would also have the potential to provide a clear and measurable response to the climate emergency in a way consistent with the Paris Agreement goals.

14 In case of combining a levy-based scheme with the LGFS, the level of certainty in achieving the necessary emissions reduction would be determined by the latter. This would be especially the case if the amount of the levy was set too low to provide sufficient economic incentive for further energy efficiency improvements, in case of unexpected growth in the shipping activity or in case of carbon cost-pass through. Conversely, when combining a cap-and-trade scheme with the LGFS, the trajectory of emissions reductions would be guaranteed by the cap-and-trade scheme. In such case, the level of stringency of the LGFS can be set at a relatively lower level, sufficient to initiate the fuel transition, but initially leaving operators with more abatement choices.

#### Potential implications on the shipping industry

15 Irrespectively of whether it is combined with a levy or a cap-and-trade scheme, a LGFS would kick-start the early use and faster development of low and zero-GHG fuels and technologies that the sector needs. It would develop a market for such fuels by providing long-term certainty to the shipping sector and to fuel producers and suppliers alike by predictably quantifying the demand for these fuels. It also provides a clear signal that potential investments in production capacity can start immediately, which will promote availability of low- and zero-GHG fuels. This would solve the chicken and egg problem and minimize the risk of disruptions in fuel production or supply.

16 Furthermore, the goal-based nature of an LGFS and its gradually increasing stringency would maximize its cost-effectiveness, allowing to build up the supply of low- and zero-GHG fuels. In combination with a flexibility mechanism and additional incentives for over-achievers, it would further encourage development and availability of fuels and technologies that provide for effective emissions reduction from a life cycle perspective.

17 As regards the combination of an LGFS with a levy or a cap-and-trade scheme, both options would provide an economic incentive for the maritime industry to reduce their GHG emissions and render profitable certain measures and investments in energy efficiency. Carbon pricing would also increase the energy efficiency of the global fleet as well as the competitiveness of the best performing and less emitting vessels.

18 The revenues generated by a market based measure could also promote GHG reduction for the maritime sector by addressing technology development and the lack of commercial viability, which are the most important market failures related to zero-carbon shipping. A levy would provide certainty about the prices and thereby a more stable

investment environment. On the other hand, a levy has the disadvantage that there is no market force to establish an optimal price and a risk that its level is set too low to provide any economic incentive for long-term investments. Conversely, in a cap-and-trade scheme, prices would fluctuate, because they are determined by the supply and demand of permits (or allowances). While this leads to more price uncertainty, it allows a constant and rapid adaptation to changing market conditions and technological developments, thus ensuring the continuous presence of an appropriate carbon price. In either case, significant investments require a strong price signal.

#### Implementation and enforcement aspects

19 A basket of mid- and long term measures needs to be accompanied with framework regulation ensuring proper functioning, enforcement, consistency, etc. Important framework regulations, which need to be developed or strengthened irrespective of the measure are e.g. Life-Cycle Assessment of fuels (LCA) and Data Collection System (DCS) to monitor fuel consumption and GHG intensity. In addition, disproportionately negative impacts of measures on States need to be identified and addressed, as appropriate.

#### Legal aspects and relationship with relevant international law; and indication of the total workload for the Organization including expected time frame

20 The international legal aspects of a levy have already been investigated thoroughly in e.g. MEPC76/7/49, MEPC 76/INF21 and MEPC 76/INF22. There it is concluded that the MARPOL Convention and its Annex VI provide a solid legal basis. There is no indication that that this should not be the case also for a basket of measures.

21 Irrespective on the choice of combination, the individual measures should enter into force by 2025 at the latest so that the first zero-GHG fueled ships can enter the fleet well before the end of this decade, which together with the improvement and use of low- and zero-GHG fuels in the existing fleet, will ensure that the target in the revised Strategy can be met.

#### Further considerations on combination of MBMs with a technical LGFS

22 Despite the fact that the combination of a LGFS with a levy or a cap-and-trade scheme may fulfil all the needs of a mid- and long term measure if well-designed, they are not alike and entail differences, which may influence the preference of the combination of measures.

23 To facilitate the consideration of different options in terms of the carbon pricing measures, Table 1 in Annex 1 summarizes the pros and cons of specific market-based measures in combination with an LGFS as proposed in ISWG-GHG 10/5/3 by Austria et al. The aim of Table 1 is to provide background knowledge and to inform the discussion on different baskets of measures.

24 Important to note is the assumption in the summary table that the cap-and-trade scheme is a closed cap-and-trade scheme, therefore excluding trading credits with other sectors, and with no allocation of free allowances. This closed system would be required to ensure early and in-sector reductions. Finally, the initial basket of measures can be expanded by further measures in a revised strategy, but this is not taken into account in the summary table.

25 Another important driver of the arguments in Table 1 is the relationship between the reduction trajectory of the LGFS and the reduction trajectory of the cap-and-trade scheme. If the LGFS triggers emission reductions at a faster pace than the trajectory imposed by the

cap-and-trade system, the over-supply of allowances coming from the use of low- and zero-GHG fuels would drive carbon prices down and operators would have less choice over abatement measures. Conversely, if the LGFS requirements are too weak, the fuel transition would risk being delayed as the market for low-and zero-GHG fuels would not be ready on time to contribute to the abatement levels imposed by the cap-and-trade system and the strong price signal. This would further accentuate uncertainty on future pricing for the industry and the amount of the revenue to be collected.

26 In the case of the relationship between the reduction trajectories of the LGFS and a levy-based system, the determination of appropriate targets for the LGSF is more sensitive, since this is what ultimately delivers emission abatements. In this case, the trade-off is between a system with a stringent LGFS that delivers the necessary abatement but possibly at higher costs for operators, or a system with a weaker LGFS and a higher levy that gives greater choice to operators, but with high uncertainty in terms of achieved emission reduction.

## **Conclusions**

27 A basket of measures of mid-and long term measures combining a LGFS with either a levy or a cap-and-trade scheme is preferable to address decarbonization compared with using only one measures as it will balance out pros and cons and create, together with other possible measures, a more effective, clear and measurable response to the climate emergency in terms of reduced GHG emissions. The issue of how collected revenues should be used to support maritime climate mitigation and adaptation activities, in particular to ensure fair and equitable transition, needs to be further discussed.

28 A basket of measures combining an LGFS with a cap-and-trade scheme is the combination which can provide most certainty in terms of the trajectory for absolute level of emission reduction to be achieved in the mid- to long-term, in line with the objective of the IMO GHG Strategy to be revised. The carbon price would be driven by market forces and it would fluctuate accordingly. However, the cap-and-trade scheme entails a certain degree of complexity and it would need to be appropriately coordinated with the level of ambition of a LGFS. It has the ability to generate significant revenues, also to ensure a fair and equitable transition for SIDS and LDCs.

29 While the combination of a LGFS and a levy might not ensure emission reduction fully in line with a pre-defined pathway, it could also have the potential to achieve emissions reduction objectives if designed with a sufficiently high level of ambition reaching zero. It would provide a higher degree of certainty on pricing and revenue, which is important for the stability of the investment framework and to facilitate industry transition and in particular a fair and equitable transition for SIDS and LDCs. A levy is simpler and could also lead to less administrative cost for the sector and the administrations than other carbon pricing measures. However, a key point will be how to set, and adjust in a timely manner, a fair levy price to be agreed at IMO, which in combination with the LGFS creates a sufficient incentive to promote climate transition and collects sufficient revenue.

## **Action requested by the Committee**

31 The Committee is invited to consider the information and views put forward in this document, and take action, as appropriate.



Annex 1

**Table 1: Levy or cap-and-trade Scheme in combination with LGFS**

	<i>Pros</i>	<i>Cons</i>
<i>LGFS and levy</i>	<ul style="list-style-type: none"> <li>• Generates stable and predictable revenues that may be used for climate transition in industry and in particular in SIDS and LDCs</li> <li>• Transparent and stable emission pricing would provide a clear economic incentive for the sector</li> <li>• Can be simple to set-up and construct within the framework of MARPOL</li> <li>• Less administrative cost for companies and authorities than other carbon pricing measures</li> <li>• No off-setting outside the sector</li> <li>• Support climate objective and the uptake of fuels via economic incentive <u>and</u> the LGFS</li> <li>• Recognize first movers and energy efficiency by pricing emissions</li> <li>• Certainty on evolution of emission price over time</li> <li>• All ships treated equal - Fulfills No more favorable treatment</li> </ul>	<ul style="list-style-type: none"> <li>• A levy combined with a LGFS might not ensure a clear emission reduction trajectory, but can still ensure emission reductions and a zero emission target.</li> <li>• Need to consider coherence with other legislation</li> <li>• If both the levy and the LGFS set too low, will not create a sufficient incentive for decarbonization</li> <li>• Might be difficult to agree on the price (political decision)</li> <li>• Needs a system to increase the price gradually</li> <li>• Revision of prices will imply uncertainty for industry</li> <li>• Challenging to administer and distribute the collected funds in a fair and transparent manner</li> <li>• Acceptability for some countries</li> </ul>
<i>LGFS and cap-and-trade scheme</i>	<ul style="list-style-type: none"> <li>• Generates revenues that may be used for climate transition in industry and in particular in SIDS and LDCs</li> <li>• Ensures a reduction of GHG emission in line with the objective of the IMO GHG Strategy following a pre-established trajectory</li> <li>• Can be designed without offsetting outside the sector</li> <li>• A market based price on emissions would direct investments in climate transition towards the cheapest emission reduction solutions first</li> <li>• Support climate objective via transparent economic incentives</li> <li>• Recognize first movers and energy efficiency by pricing emissions</li> <li>• All ships treated equal - Fulfills no more favorable treatment</li> <li>• Possible to construct within the framework of MARPOL</li> </ul>	<ul style="list-style-type: none"> <li>• Uncertain and potentially volatile emission pricing and revenues if not addressed. Increased uncertainty in investment decisions.</li> <li>• Pricing of credits will be dependent on the relation between the LGFS reduction trajectory and the trajectory for the cap.</li> <li>• Requires a registry and an external market mechanism/market place</li> <li>• Administrative burden and associated cost for industry and authorities</li> <li>• Might be difficult to agree on a sufficiently ambitious trajectory (political decision)</li> </ul>