

Greenhouse gas emissions from shipping: waiting for concrete progress at IMO level

KEY FINDINGS

At the 72th session of the Marine Environment Protection Committee (MEPC) the initial International Maritime Organisation (IMO) strategy was agreed, which aims for emissions from international shipping to peak as soon as possible and to reduce the total annual greenhouse gas (GHG) emissions by at least 50% by 2050 compared to 2008 levels and in line with the temperature goals of the Paris Agreement. A revised IMO strategy is scheduled to be approved by 2023 at MEPC80. A list of candidate short, medium and long-term measures are included within the initial IMO strategy in order to achieve the 2050 GHG emissions reduction target. However it will only be decided up until 2023 which candidate short-term measures will be adopted (based on timeframe agreed at MEPC73) with the medium and long-term candidate measures to be adopted only after 2023 and 2030 respectively.

The candidate measures were streamlined further at MEPC74 with the terms of reference defined for the subsequent inter-sessional working groups prior to MEPC75. Key issues at stake with regards to the reduction of GHG emissions include:

- Further consideration of concrete proposals to improve the operational energy efficiency of existing ships.
- Approval of a draft text of a resolution that would urge IMO Member States to develop and update a voluntary National Action Plan with a view to contributing to reducing GHG emissions from international shipping.
- Development of lifecycle GHG/carbon intensity guidelines for all relevant types of fuels and incentive schemes to promote the uptake of alternative low carbon or fossil free fuels.

Prior to the postponement of MEPC75 due to the Covid-19 crisis, criticism regarding the slow rate of progress under the IMO process was increasing, especially amongst more ambitious IMO Member States and prominent NGOs. In particular, key decisions on short-term measures often appear to be further delayed and it remains to be seen if the IMO is the most appropriate platform to bring about the scale of change in the timeframe required. As a consequence, the EU is following a two track approach of continuing to support the IMO process and advocate higher levels of ambition on GHG reductions, but to now also prepare for unilateral policies if an IMO decision on concrete short-term actions fails to materialise.



Introduction

According to the Fourth IMO GHG study¹, GHG emissions – including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), expressed in CO₂e – of total shipping (international, domestic and fishing) have increased from 977 million tonnes in 2012 to 1,076 million tonnes in 2018 (9.6% increase). The share of shipping emissions in global anthropogenic emissions has increased from 2.76% in 2012 to 2.8% in 2018. This increase in GHG emissions occurred despite improvements in the carbon intensity of international shipping that varied between being 21% to 32% better than in 2008 depending upon the methodology applied. Significantly, methane emissions increased by around 150% between 2012-2018 due to the increase in use of LNG as a fuel. GHG emissions are projected to increase from about 90% of 2008 emissions in 2018 to 90-130% of 2008 emissions by 2050 for a range of plausible long-term economic and energy scenarios. It was deemed too early by the IMO to assess the impact of Covid-19 on emission projections, but depending upon the recovery trajectory, emissions may be a few percent lower than projected over the next decades.



The initial IMO strategy, which was adopted at the MEPC72 in 2018, affirms that GHG emissions from international shipping should peak as soon as possible and fall by at least 50% by 2050 relative to 2008 levels with continuing efforts to phase them out entirely. The initial IMO strategy envisages a strengthening of the energy design requirements for new ships and also by reducing the carbon intensity of international shipping (average CO₂ emissions per unit of transport work) by at least 40% by 2030 and aiming at 70% by 2050, relative to 2008. The strategy, which is to be revised in 2023 and further reviewed in 2028, also identifies a list of candidate short-, mid- and long-term measures to achieve these targets, as well as likely barriers and support action.

The IMO strategy is a "balancing act" with emerging economies such as Saudi Arabia and Brazil, supported by the United States, requesting a weaker target. In contrast, a more ambitious reduction target (ranging from a 70% to 100%) was advocated by the European Union (EU) along with Canada, Australia, New Zealand and a group of island states. The outcome of the negotiation at the IMO level was acknowledged as a

promising first step, however the setting of a minimum GHG reduction target of 50% below 2008 levels by 2050, as proposed in the IMO initial strategy, is still insufficient as it is not yet aligned with the goals of the Paris Agreement as it is estimated by the International Council on Clean Transportation that the emission trajectory for maritime shipping will overshoot a 1.75°C pathway by between 65% and 150%. This compromise was nevertheless accepted by the more ambitious countries as the term "at least" allows for GHG emission reductions beyond the 50% target.

The EU continues to advocate higher levels of ambition for GHG reductions in international shipping and the European Commission (EC) is now mandated under Directive (EU) 2018/410² to "report at least once a year to the European Parliament and to the Council on the progress achieved in the IMO towards an ambitious emission reduction objective, and on accompanying measures to ensure that the sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement". If insufficient progress is deemed to have been made then the EU will unilaterally act from 2023 onwards, which may result in the implementation of proposals such as an extension of the EU ETS to new sectors as was recently announced by the EC in the European Green Deal.

This policy briefing will firstly provide an overview of the progress made in subsequent MEPC meetings following the agreement of the initial IMO strategy at MEPC72, focusing primarily on the reductions of GHG emissions from ships. Key issues that remain unresolved will then be further outlined with reference to recent IMO submissions from several Member States before finally summarising the views of both environmental NGOs and the EU on the overall progress achieved so far in the IMO negotiations.

Progress made since MEPC72

Following on from the agreement of the initial IMO strategy, a series of subsequent decisions have taken place to move the process forward that are outlined in the sub-sections below.

1. ISWG-GHG 4th Meeting / MEPC73

In October 2018, the 4th GHG Working Group (ISWG-GHG 4th Meeting) proposed eight "follow up" programs:

- 1) Short-term Candidate Actions (Group A): Actions already in place and Short-term Candidate Actions currently regulated by the IMO;
- 2) Short-term Candidate Actions (Group B): Actions that are not in place and Short-term Candidate Actions that require data analysis;
- 3) Short-term Candidate Actions (Group C): Actions that are not in place and Short-term Candidate Actions that do not require data analysis;
- 4) Activities to deal with Medium-, Long-term Candidate Actions and identified barriers;
- 5) Impacts on States;
- 6) The Fourth IMO GHG Study;
- 7) Capacity building, technical support, R & D; and
- 8) Additional actions to develop the Final Strategy.

Figure 1 provides an illustration of the timeline, which was proposed at the 4th GHG Working Group for the eight "follow up" programmes to the IMO Initial Strategy³. A revised IMO Strategy is scheduled to be approved by 2023 based upon the inputs from the "follow up" programmes (including information from the Data Collection System that already commenced in 2019). The consideration of which candidate short-term measures to adopt will take place between 2018 and 2023. The candidate short-term measures have been

categorised into three groups to reflect the extent to which further data analysis is required before a certain measure could be adopted. Candidate medium and long-term measures are expected to be finalised and agreed between 2023 and 2030 and beyond 2030 respectively, however due to the complexity and potential impact of certain measures (i.e. such as a market based mechanism or the development of low carbon or fossil fuel fuels) work should commence prior to 2023³.

The follow-up actions of the initial IMO strategy on the reduction of GHG emissions from ships, summarised in Figure 1, were approved by the MEPC73. In addition, MEPC73 invited concrete proposals on candidate short-term measures and the procedure for assing the impact on States to be further considered at MEPC74⁴.

Figure 1: Follow-up actions and the timeline for achieving the IMO Initial Strategy

Streams of activity	2018	2019	2020		2021	2022		2023
	MEPC 73	MEPC 74	MEPC 75	MEPC 76	MEPC 77	MEPC 78	MEPC 79	MEPC 80
<i>Candidate short-term measures (Group A) that can be considered and addressed under existing IMO instruments²</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that can be considered and addressed under existing IMO instruments e.g. further improvement of the existing energy efficiency framework with a focus on EEDI and SEEMP, ITC ³					
<i>Candidate short-term measures (Group B) that are not work in progress and are subject to data analysis</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that are not work in progress and are subject to data analysis, consistent with the Roadmap ³					
<i>Candidate short-term measures (Group C) that are not work in progress and are not subject to data analysis</i>	Invite concrete proposals	Consideration of proposals	Data analysis, in particular from IMO Fuel Oil Consumption DCS					
<i>Candidate short-term measures (Group C) that are not work in progress and are not subject to data analysis</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that are not work in progress and are not subject to data analysis e.g. National Action Plans guidelines, lifecycle GHG/carbon intensity guidelines for fuels, research and development ³					
<i>Candidate mid-/long-term measures and action to address the identified barriers</i>	Invite concrete proposals	Consideration of proposals including identification of barriers and action to address	Progress made and timelines agreed on the development of mid- and long-term measures					
<i>Impacts on States⁴</i>	Invite concrete proposals	Finalization of procedure	Measure-specific impact assessment, as appropriate, consistent with the Initial Strategy, in particular paragraphs 4.10 to 4.13					
<i>Fourth IMO GHG Study</i>	Scope	Initiation of the Study	Progress report	Final report				
<i>Capacity-building, technical cooperation, research and development</i>	Development and implementation of actions including support for assessment of impacts and support for implementation of measures							
<i>Follow-up actions towards the development of the revised Strategy</i>		Ship fuel oil consumption data collection pursuant to regulation 22A of MARPOL Annex VI (DCS)			Initiation of revision of the Initial Strategy taking into account IMO DCS data and other relevant information			Adoption of revised Strategy

Source: MEPC, 2018b, Reduction of GHG emissions from ships, IMO.

2. ISWG-GHG 5th Meeting / MEPC74

An important outcome from the MEPC74 was the approval of amendments to MARPOL Annex VI (to then be adopted at MEPC75) to "significantly strengthen the Energy Efficiency Design Index (EEDI) "phase 3" requirements by bringing forward, for several ship types (i.e. including gas carriers, general cargo ships and LNG carriers), the starting year to 2022 (previously 2025). As a result, from 2022 onwards new ships will be required to be considerably more energy efficient than the baseline⁵. For container ships, the EEDI reduction rate is enhanced for larger ship sizes, as follows:

- For a containership of 200,000 DWT and above, the EEDI reduction rate is 50% from 2022;
- For a containership of 120,000 DWT and above but less than 200,000 DWT, 45% from 2022;
- For a containership of 80,000 DWT and above but less than 120,000 DWT, 40% from 2022;
- For a containership of 40,000 DWT and above but less than 80,000 DWT, 35% from 2022;
- For a containership of 15,000 DWT and above but less than 40,000 DWT, 30% from 2022.

The MEPC74 also reached agreement on the terms of reference for further work into the potential

introduction of "phase 4" EEDI requirements.

With regards to the timing of any approved amendment to MARPOL Annex VI entering into force, it was further noted by the 5th GHG Working Group and MEPC74 that a minimum of 22 months would be necessary⁶. Different timings for the development of an amendment to MARPOL Annex VI (IMO(MARPOL), Annex VI, Regulation 22A) were discussed at the 5th GHG Working Group so that it could enter into force on the 1st of January 2023 at the latest. If amendments to MARPOL Annex VI are approved at MEPC75 it is possible that it could be adopted at MEPC76 and enter into force in the middle of 2022 under the more optimistic time-frame option⁶.

MEPC74 also adopted resolution MEPC.323(74) entitled "Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships"⁷. The resolution suggests that appropriate actions of voluntary cooperation may include Onshore Power Supply (i.e. renewable power to ship solutions); efficient and safe handling and bunkering of alternative low-carbon and zero-carbon fuels; incentives promoting sustainable low-carbon and zero-carbon shipping and support (i.e. via improvements to the quality and availability of data) for the optimisation of port calls including facilitation of just-in-time arrival of ships.

The procedure for assessing the impacts on States of candidate measures for the reduction of GHG emissions from ships was also approved by the MEPC74. The agreed procedure includes four steps:

- Initial impact assessment, to be submitted as part of the initial proposal to the Committee for candidate measures;
- Submission of commenting document(s), if any;
- Comprehensive response, if requested by commenting document(s);
- Comprehensive impact assessment, if required by the MEPC; and
- It was further agreed that impact assessments should be evidence-based and should take into account, as appropriate, a range of analysis tools and models⁵.

Prior to MEPC74, the 5th GHG Working Group (ISWG-GHG 5^h Meeting) collated all of the information regarding candidate short-, medium- and long-term measures into the following 14 approaches based upon the documents submitted to ISWG and MEPC74⁸:

- 1) Improve the energy efficiency of existing ships building on the EEDI framework;
- 2) Further develop the EEDI framework for new ships;
- 3) Improve the energy efficiency of existing ships building on the SEEMP framework;
- 4) Identify appropriate operational energy efficiency indicators;
- 5) Develop a speed optimisation and speed reduction mechanism;
- 6) Develop regulatory measures to reduce methane slip;
- 7) Develop regulatory measures to reduce emissions of Volatile Organic Compounds (VOCs);
- 8) Encourage the development of National Action Plans (NAPs);
- 9) Encourage port developments and activities to facilitate reduction of GHG emissions from shipping;
- 10) Initiate and support research and development activities;
- 11) Encourage incentive schemes for first movers;
- 12) Develop lifecycle GHG/carbon intensity guidelines for all types of fuels;

- 13) Implementation programme for the effective uptake of alternative low-carbon and zero-carbon fuels;
- 14) New/innovative emission.

The 5th GHG Working Group noted that further streamlining and consolidation was, however, necessary due to interlinkages between some of the 14 approaches⁹. Various candidate short-term measures, including "strengthening the energy efficiency requirements for existing ships, speed and other technical and operational measures"⁵ were discussed at MEPC74 and the terms of reference for the 6th GHG Working Group was agreed based on the following consolidated approaches^{10,11}:

- "further consider concrete proposals to improve the operational energy efficiency of existing ships, with a view to developing draft amendments to chapter 4 of MARPOL Annex VI and associated guidelines, as appropriate";
- "further consider concrete proposals to reduce methane slip and emissions of VOCs"; and
- "further consider concrete proposals to encourage the uptake of alternative low-carbon and zero carbon fuels, including the development of lifecycle GHG/carbon intensity guidelines for all relevant types of fuels and incentive schemes, as appropriate".

In addition, the terms of reference for the 6th GHG Working Group (ISWG-GHG 6th Meeting) requested the consideration of a draft MEPC resolution urging Member States to develop and update a voluntary NAP with a view to contributing to reducing GHG emissions from international shipping, and develop associated guidelines, as appropriate¹¹. The consideration of other concrete proposals for candidate measures was also included within the draft terms of reference.

Key issues at stake for further progress

The agenda adopted for MEPC75 (refer to MEPC75/1/1), before it was subsequently postponed due to the Covid-19 crisis, includes item 7 that focuses specifically on the reduction of GHG emissions from ships and includes the following topics:

- Outcome of UN Climate Action Summit 2019 and relevant UNFCCC meetings;
- Progress report on the Fourth IMO GHG Study;
- Information on the establishment and operation of the GHG TC-Trust Fund;
- Proposals on candidate short-term and mid-/long-term measures; and
- Proposals to reduce methane slip and emissions of VOCs; draft MEPC resolution urging Member States to develop and update a voluntary NAP; proposals to encourage uptake of alternative low-carbon and zero-carbon fuels; and development of further actions on capacity-building, technical cooperation, research and development.

The following sub-sections discuss the progress made on several key issues relating to the reduction of GHG emissions from ships at the ISWG-GHG 6th meeting in November 2019 and provides an overview of the submissions prepared ahead of the postponed ISWG-GHG 7th meeting.

1. Candidate measures to further reduce GHG emissions

During the 6th GHG Working Group, various proposals were considered. The proposals were deemed to fall into the following two goal-based approaches:

- Technical approach: "Proposals for a technical approach which were discussed included an Energy Efficiency Existing Ship Index (EEXI), which could require ships to meet set energy efficiency

requirements after the measure taking effect;

- Operational approach: "Operational approaches would include focusing on strengthening the ship energy efficiency management plan, as required in SEEMP¹². This includes proposals for mandatory carbon intensity reduction targets. Operational proposals also include measures to optimise speed for the voyage. Proposals to limit ship speed were also discussed¹³".

There was general agreement at the 6th GHG Working Group that "a mandatory goal-based approach for both the technical and operational approaches would provide the needed flexibility and incentive for innovation (a goal-based approach would set the objective to be achieved, while leaving room for a range of methods or innovation to achieve the set goal)"¹³. It was agreed that further discussions were necessary on this issue at the next intersessional meeting.

The agenda adopted for the ISWG-GHG 7th Meeting (refer to ISWG-GHG 7/1) includes item 2 that provides "further consideration of concrete proposals to improve the operational energy efficiency of existing ships, with a view to developing draft amendments to chapter 4 of MARPOL Annex VI and associated guidelines, as appropriate". In preparation for the agenda item, the Chair submitted document ISWG-GHG 7/2, which provides a possible regulatory framework for a mandatory goal-based measure to reduce the carbon intensity of international shipping, drafted as a new regulation 22B of MARPOL Annex VI. The intention of the draft regulatory framework is to reflect the general agreement of the Group to accommodate both technical and operational approaches¹⁴. However, the draft regulation framework leaves the text open with regards to the use of operational carbon intensity indicator(s) (CII), operational carbon intensity targets and survey and verification under the operational approach and the required EEXI requirements and guidelines on survey and verification under the technical approach that will eventually be based upon proposals submitted to ISWG-GHG 6 and ISWG-GHG 7.

An important benefit of the mandatory operational goal-based approach, according to an ISWG-GHG 7 submission by Germany, Netherlands and Spain, is that ships can select from a range of different measures in order to reduce their carbon intensity and directly achieve a carbon intensity target¹⁵. While the advantage of the technical goal-based approach is that it allows for pre-certification "allowing for compliance to be checked at any point in time without requiring data collection and processing". However, they argue that it will be very difficult for the indicators associated with the operational and technical approach (i.e. CII and EEXI) to be equivalent to one another due to the fact that they are very different in nature and therefore propose that both approaches should be made mandatory in the regulatory framework.

Denmark, France and Germany propose "a mandatory operational goal-based short-term measure where an individual target is assigned to each ship and where shipowners and crews are free to choose the means to reach it"¹⁶. This approach allows to "take into account operational means such as speed or trim optimisation, voyage routing, hull cleaning, etc.; but also technical means such as power limitation, energy optimisation [and] use of alternative fuels". Argentina and Chile note, however, with concern the detrimental effects that short-term measures based on speed reduction or power limitation may have for States geographically distant from main commercial harbours¹⁷.

The United States¹⁸ shared the concerns expressed by Denmark, France and Germany over the extent to which the metrics selected under the technical and operational approaches would be comparable with one another and that until this issue is resolved they advise to progress cautiously with the implementation of a hybrid system and it should be based on "real-world" data.

Concerns by the United States regarding the technical approach includes the following:

- "Unless combined with a data collection system for fuel use, it would be difficult to assess the real-

world GHG reductions from a technical approach because it is based on up-front design instead of actual measured annual GHG emissions"; and

- "How the attained EEXI is proposed to be calculated. The United States has expressed significant concern with the Shaft Power Limitation (ShaPoLi) approach to calculating Overridable Power Limit (OPL)".

The United States also highlighted the following concerns regarding the operational approach proposed in ISWG-GHG 7/2:

- Work metric should incorporate hours underway (i.e. "calculating energy efficiency using the hours underway metric would provide a ship with additional operational flexibility to enhance its energy efficiency");
- Multi-year targets/compliance periods should be used (i.e. "an approach that relies on rigid annual targets is not necessary to achieve overall reductions over time and would introduce complexity in the administration of the system"); and
- Any operational measure should use a phased compliance approach (i.e. "the operational approach includes a provision that would withdraw a ship's IEEC in certain cases of non-compliance after only one or two years. The United States does not consider this an appropriate approach, particularly in the early years of implementing the measure").

Brazil and China proposes an operational carbon intensity rating mechanism as a mandatory goal-based measure, which is designed to achieve the levels of ambition of the Initial Strategy. "By setting ship-type specific reference lines and reduction factors, the levels of ambition are transformed into the specific targets for different ship types, therefore contributing to the achievement of levels of ambition of the Initial Strategy, especially the 2030 target"¹⁹. According to Brazil and China "the results of the third and fourth IMO GHG studies and the data collected through the IMO Data Collection System in 2019 and 2020 will provide sufficient data for use in the development of the rating mechanism". It is proposed by Brazil and China that the amendments related to the operational carbon intensity of international shipping will come into force in 2023.

Further consideration of how best to incorporate both technical and operational approaches is expected to be further discussed at MEPC75 in order to reach further consensus on some of the more technical issues arising from the draft regulatory framework.

2. National Action Plans (NAPs)

Draft text of a resolution that would urge Member States to develop and update a voluntary NAP with a view to contributing to reducing GHG emissions from international shipping was agreed at the 6th GHG Working Group. Within the draft text, NAPs could include the following measures¹³:

- 1) Improving domestic institutional and legislative arrangements for the effective implementation of existing IMO instruments;
- 2) Developing activities to further enhance the energy efficiency of ships;
- 3) Initiating research and advancing the uptake of alternative low carbon and zero-carbon fuels;
- 4) Accelerating port emission reduction activities, consistent with resolution MEPC.323(74);
- 5) Fostering capacity-building, awareness-raising and regional cooperation; and
- 6) Facilitating the development of infrastructure for green shipping.

The draft resolution invites Member States to outline what legal, policy or institutional arrangements have or will be put in place to facilitate emission reductions from ships whilst taking into account national circumstances. The draft resolution will be submitted to MEPC75 for adoption. The agenda adopted for the forthcoming ISWG-GHG 7th Meeting (refer to ISWG-GHG 7/1) includes item 4 that provides "consideration of a draft MEPC resolution urging Member States to develop and update a voluntary NAP with a view to contributing to reducing GHG emissions from international shipping, and develop associated guidelines, as appropriate". The OECD proposes to "include in the draft MEPC resolution on encouragement of Member States to develop and submit voluntary NAPs to address GHG emissions from ships the greening of national fiscal measures as one of the elements that could be included in the NAPs"²⁰.

3. Uptake of alternative low carbon and zero-carbon fuels

The 6th GHG Working Group agreed on the establishment of a dedicated workstream to develop lifecycle GHG/carbon intensity guidelines for all relevant types of fuels (i.e. biofuels, electro-/synthetic fuels such as hydrogen or ammonia)¹³.

The agenda adopted for the forthcoming ISWG-GHG 7th Meeting (refer to ISWG-GHG 7/1) includes item 5 that considers concrete proposals to encourage the uptake of alternative low-carbon and zero-carbon fuels, including the development of life cycle GHG/carbon intensity guidelines for all relevant types of fuels and incentive schemes, as appropriate. According to Australia, Japan, Norway and the Republic of Korea the purpose of such guidelines would be to provide carbon and GHG emission factors to be used in "the current fuel Data Collection System (DCS), the EEDI scheme, and other instruments under discussion such as the Carbon Intensity Indicators (CII) and EEXI"²¹. Given the emergence of alternative fuels for shipping, the establishment of clear guidelines on life cycle emissions is of increasing importance.

The position of the EU regarding the development of life cycle GHG/carbon intensity guidelines is that they should include "a methodology that would allow ship operators to compare the well-to-wake²² performance of various alternative fuels"²³. If only tank-to-propeller emissions are considered, it is argued by the EU that upstream emissions from the production of fuels would not be fully taken into account. The EU advocates that well-to-tank emissions should therefore be taken into account to complement existing IMO instruments that already refer to the tank-to-propeller approach so that the impact of IMO regulation on fuel production and supply are fully acknowledged.

The EU advocates that the guidelines with sustainability and GHG emissions saving criteria should apply to all relevant marine fuels, especially:

- "Biofuels, bioliquids or gas, and biomass-derived fuels should fulfil a set of sustainability and GHG emissions saving criteria. This reflects already existing regulatory standards and agreed practices. Note that in the European Union, Directive (EU) 2018/2001²⁴ promotes renewable energy and sets a target for its overall share. It defines the sustainability and GHG emissions savings criteria as well as GHG methodology that such bio-based renewable fuels need to fulfil to count towards the renewable targets"²³; and
- "For synthetic, electricity-based fuels (power-to-x) similar sustainability and GHG emissions saving criteria should be developed. Directive (EU) 2018/2001²⁴ sets a GHG saving threshold that such fuels have to meet as well as conditions on additionality of renewable power used in the production of such fuels. A specific GHG methodology for the calculation of the emission savings of such fuels as well as a methodology to provide evidence of additionality will be adopted into law by 2021"²³.

Australia, Japan, Norway and the Republic of Korea have submitted a draft life cycle GHG and carbon intensity guidelines for maritime fuels, based on the documents previously submitted to and discussions during ISWG-GHG 6. To enable reporting according to the IPCC inventory guidelines, they are in favour of

introducing a fuel life cycle label (FLL) which broadly "categorises a fuel based on carbon source and other sustainability aspects and determines if the CO₂ emissions should be accounted for by international shipping"²⁵. The submission needs, however to be further developed following discussions at the ISWG-GHG 7th meeting in March, 2020. In order to structure the work, Australia, Japan, Norway and the Republic of Korea propose to agree on a Work Plan for the further development of the guidelines. The first version of the guidelines is expected under the proposal to be finalised for adoption at MEPC76.

Views on the overall progress at the IMO

1. View of NGOs

According to the Clean Shipping Coalition (CSC), progress at the IMO level to reduce GHG emissions from shipping has been slow and lacking in ambition stating that "two years after agreeing its initial greenhouse gas strategy, a meeting of the UN maritime agency, the IMO, did little more than review options already on the table and gave far too much time to technical measures that will deliver too little too late"²⁶. Although, there is a growing consensus by IMO member states and industry that ship speed is one of the most important factors influencing GHG emissions and this is reflected by the fact that the reduction of ship speed is included in many of short-term measures under consideration. However, the challenge is to implement this short-term measure so that it is effective in reducing GHG emissions. Indeed, Japan and Norway's proposed measure on the EEXI to certify ships that limit their engine power – though the limit can easily be reversed – was assessed to be "unambitious, opaque, and susceptible to cheating" by the CSC as it is unlikely to achieve the "urgent and deep cuts in emissions that are necessary if shipping is to respond appropriately to the climate emergency"²⁶.

2. Current EU position

On the 4th of February 2019, a proposal to revise the EU system for monitoring, reporting and verification (MRV) of CO₂ emissions from maritime transport (Regulation (EU) 2015/757) was adopted by the European Commission so that it can be aligned with the global data collection system for the fuel oil consumption of ships set out by the IMO²⁷. In a legislative report adopted on the 7th of July 2020, the Environment, Public Health and Food Safety (ENVI) committee welcomed the proposal from the European Commission, but advocated the need for more ambitious measures to reduce GHG emissions from shipping such as:

- The inclusion of ships of 5,000 gross tonnage and above in the EU Emissions Trading System (ETS);
- Binding requirements for shipping companies to reduce their annual average CO₂ emissions per transport work, for all their ships, by at least 40% by 2030; and
- A Maritime Transport Decarbonisation Fund (funded via ETS revenues) to improve the energy efficiency of ships and invest in the decarbonisation of marine transport.

On the 16th of September 2020, the European Parliament adopted the proposal to amend the regulation on monitoring CO₂ emissions from Maritime transport. The Rapporteur Jutta Paulus (Greens/EFA) declared after the successful plenary vote that the measures proposed "will bring us much closer to achieving the EU climate target. For far too long, maritime shipping has not been subject to any measures to reduce emissions. The polluter-pays principle must finally apply here too"²⁸. Parliament is therefore now ready to start negotiations with Member States in order to finalise the legislation²⁹.

The EU advocates a short-term measure that can achieve the IMO target of at least -40% by 2030 and ideally to reduce emissions considerably beyond this 2030 target. This could be achieved by the operational goal approach by Denmark as a stand alone measure (other operational proposals on the table are not ambitious enough – refer to Brazil etc.) or in combination with the Japanese-Norwegian proposal on the EEXI (easy

implementation but the level of ambition is not high and the review clause is problematic and also the rules on compliance). The EU believes that there is increasing pressure on the IMO to soon have an outcome on a short-term measure as there is still time for negotiation, but the "window of opportunity" is starting to close. In all negotiations there are always certain countries that attempt to slow down the process, which are not the most ambitious so it is always difficult for ambitious countries to get agreement as other countries block attempts and have a far easier negotiation tactic. It is expected that the EU will continue to wait for signs of further progress on a short-term measure but preparatory work is now underway if the level of ambition is insufficient to act unilaterally.

Conclusions

Progress in the IMO negotiations has been slow with no agreement yet reached on the short-term measures to implement in order to achieve a GHG reduction of "at least" 40% below 2008 levels by 2030. Based upon the timeline outlined in the initial IMO strategy, an agreement on the short-term measures to apply will need to be reached by MEPC75 or 76 at the latest as it requires at least 22 months to enter into force. Given the current lack of agreement, and the disruption to the negotiating process caused by Covid-19, the prospect of agreeing upon short-term measures that are sufficiently ambitious remains uncertain. Although there does appear to be a growing consensus on the importance of regulating speed to achieve short-term emission reductions, there remains diverging views on how best to implement such a policy measure. The ability to overcome these disagreements is made even more difficult by the logistical challenges presented by the Covid-19 crisis and it remains to be seen how effective virtual meetings can be in persuading the different parties to make significant concessions to reach a more ambitious outcome. The window of opportunity is now certainly beginning to close and this may help to concentrate minds to reach an agreement on the short-term measures to implement, however, if not, work is underway for unilateral action from the EU in order to regulate their shipping emissions.

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- ¹ Fourth IMO Greenhouse Gas Study, available at: <https://www.cedelft.eu/en/publications/2488/fourth-imo-greenhouse-gas-study>.
 - ² Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018L0410>.
 - ³ MEPC, 2018b, Reduction of GHG emissions from ships, IMO.
 - ⁴ IMO Meeting Summary: Marine Environment Protection Committee (MEPC), 73rd session, 22-26 October 2018, available at: <http://www.imo.org/en/MediaCentre/MeetingSummaries/MEPC/Pages/MEPC-73rd-session.aspx>.
 - ⁵ IMO press briefing of 20/05/2019, available at: <http://www.imo.org/en/MediaCentre/PressBriefings/Pages/11-MEPC-74-GHG.aspx>.
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IP/A/ENVI/2020-22; Manuscript completed: September 2020; Date of publication: September 2020

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This document is available on the internet at: www.europarl.europa.eu/supporting-analyses

Print ISBN 978-92-846-7169-4 | doi:10.2861/857375 | QA-04-20-552-EN-C

PDF ISBN 978-92-846-7170-0 | doi:10.2861/6092 | QA-04-20-552-EN-N