**MEPC 76**

The seventy-sixth session of the Marine Environment Protection Committee (MEPC 76) was held remotely from 10 to 17 June 2021.

***Amendments to MARPOL Annex VI – EEXI and CII***

MEPC 76 has adopted Resolution MEPC.328(76) amending MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping (EEXI and CII).

These amendments shall be deemed to have been accepted on 1 May 2022 and shall enter into force on 1 November 2022.

MEPC 76 had for its consideration proposal for an exclusion for ice-classed ships in the draft amendments to MARPOL Annex VI.

The operational reasons are related to the fact that ice-classed ships consume much more fuel when sailing in ice covered waters compared to sailing in the same area in open water conditions, which may have a big impact on their attained CII.

MEPC 76 decided that this matter should be considered as part of the ongoing discussion with regard to correction factors/voyage exclusions taking place in the dedicated Correspondence Group.

In accordance with draft regulation 22B.3, in an event of a flag/company change, the attained CII of the ship for the period of the calendar year immediately preceding the transfer shall be reported and verified, based on which an operational carbon intensity rating shall be assigned for use by this ship as the annual operational carbon intensity rating after transfer and until the next annual verification.

To avoid increasing unnecessary administrative burden and to ensure consistent compliance, MEPC 76 agreed that the attained CII as well as the CII rating will always be based on the data for a complete calendar year.

Although this matter would be addressed in greater detail within the guidelines on the CII calculation in the case of a transfer of Administration or company that are to be developed, MEPC 76 agreed that some modifications were needed within the current amendments in order to address some of the identified aspects, and in particular to clarify that each ship calculates an attained annual operational carbon intensity indicator (CII) for a full calendar year, even in instances where the ship transfers Administrations or companies mid-year.

The text of regulations 6.6 to 6.8 regarding the Statement of Compliance has been revised to bring it in line with the agreed changes to regulation 28.3.

MEPC 76 agreed also on a number of modifications to regulation 26 to align the text related to the SEEMP with the agreed modifications to regulation 28.3.

The Committee noted the concerns with regard to the calculation of the CII, notably for a new ship delivered after 1 January in a year; or a ship purchased at a judiciary sale, where no information follows the ship; or a ship where the Administration responsible to calculate the CII after 31 December did not verify the data submitted for the entirety of the previous year and did not receive a copy of that data at the time of transfer from the previous Administration.

To solve this question, MEPC 76 adopted a new paragraph 10bis in regulation 27 to clarify that the Secretary-General of IMO shall grant access to an Administration of a ship, to which regulation 28 applies, to all reported data for the preceding calendar year required for the CII calculation of that ship.

***Amendments to MARPOL Annex VI – exemption of UNSP barges***

MEPC 76 has adopted Resolution MEPC.330(76) amending MARPOL Annex VI exemption of UNSP barges from certain survey and certification requirements.

These amendments shall be deemed to have been accepted on 1 May 2022 and shall enter into force on 1 November 2022.

In complement, MEPC 76 approved the final text of the Guidelines MEPC.1/Circ.892 for exemption of UNSP barges from the survey and certification requirements.

***Amendments to MARPOL Annex I – Prohibition on use and carriage of HFO in the Arctic***

MEPC 76 has adopted Resolution MEPC.329(76) amending MARPOL Annex I regarding the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters.

These amendments shall be deemed to have been accepted on 1 May 2022 and shall enter into force on 1 November 2022.

 Some delegates raised concerns with regard to provisions for exemptions and waivers set out in paragraphs 2 and 4 of the proposed amendment and proposed that these be deleted from the text of the amendments to ensure adequate protection of the Arctic marine environment, but this point had been already arbitrated at a previous session.

***Amendments to the AFS Convention***

MEPC 76 adopted Resolution MEPC.331(76) amending annex I and IV of the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention) concerning controls on cybutryne and the form of the IAFSC.

These amendments shall be deemed to have been accepted on 1 May 2022 and shall enter into force on 1 January 2023.

The ruling to prohibit anti-fouling systems containing cybutryne (also known under its industry name Irgarol-1051) would apply to ships from 1 January 2023 or, for ships already bearing such an anti-fouling system, at the next scheduled renewal of the anti-fouling system after 1 January 2023, but no later than 60 months following the last application to the ship of such an anti-fouling system.

***Indicative example of a license for fuel oil supply***

MEPC 76 approved draft amendments to the Guidance for best practice for Member State/coastal State, which contains the indicative example of a license for fuel oil supply in its annex.

It must be recalled that this is a non-mandatory guidance.

***Proxies for offshore and marine contracting vessels as well as cruise passenger ships under the IMO DCS***

The Correspondence Group (CG) on Air Pollution and Energy Efficiency considered the possible carbon intensity proxies for offshore and marine contracting vessels as well as cruise passenger ships under the IMO DCS.

***Offshore and marine contracting vessels***

The CG did not decide one proxy for offshore and marine contracting vessels at this stage, and instead considered the following possible way forward before determining the proxy:

* offshore and marine contracting vessels are encouraged to collect "engine running hours and installed power, for each engine" in addition to the IMO DCS data, if applicable, for trial on a voluntary basis;
* based on the above data, offshore and marine contracting vessels are encouraged to calculate both proxies A and B and report them to the IMO;
* the IMO will develop an anonymized dataset of proxies A and B for analysis and consideration by the Parties, with a view to amending MARPOL Annex VI, if necessary, following the aforementioned data analysis.

***Cruise passenger ships***

The CG came to the same proposal concerning passenger vessels.

***Revision of the minimum power guidelines***

MEPC 76 adopted amendments to 2013 Interim guidelines for determining minimum propulsion power to maintain the maneuverability of ships in adverse conditions (resolution MEPC.232(65), as amended by resolution MEPC.255(67)) contained in circular MEPC.1/Circ.850/Rev.2, but decided to keep them under review.

Adverse weather conditions - noting that the revised adverse weather conditions are more stringent than the current conditions provided in circular MEPC.1/Circ.850/Rev.2, inclusion of the "Minimum power assessment" as a new assessment procedure was supported to be included in the draft revised guidelines.

Inclusion of the Minimum power assessment - the current simplified assessment (the current level 2 method) is replaced with the Minimum power assessment.

***Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships***

MEPC 76 adopted amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships.

Amendments were developed in order to reflect the amendment to MARPOL Annex VI for the mandatory reporting of the attained EEDI values and related information, as adopted at MEPC 75.

***Unified interpretation to clarify the dates related to EEDI Phase 2 and 3 for "new ships"***

MEPC 76 approved draft unified interpretation to clarify the dates related to EEDI Phase 2 and 3 for "new ships", as draft amendments to circular MEPC.1/Circ.795/Rev.4.

***Energy efficiency of ships***

MEPC 76 noted the 2020 industry guidelines on calculation and verification of Energy Efficiency Design Index (EEDI).

The first version of the industry guidelines, which provided the agreed procedures for the computation and verification of the EEDI to be used by the verifiers as well as the submitters when verifying and computing the EEDI have been made part of IACS procedural requirement PR 38 "Procedure for calculation and verification of the Energy Efficiency Design Index (EEDI)".

The industry guidelines contain substantial items of the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73)) and the 2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI) (resolution MEPC.254(67)), as amended by resolutions MEPC.261(68) and MEPC.309(73)). Therefore, it became imperative to keep the industry guidelines updated each time the IMO guidelines are revised to maintain alignment of the former with the latter.

The 2020 industry guidelines introduce the following changes:

.1 deletion of items covered by the IMO guidelines and instead adding references to those IMO guidelines, as necessary;

.2 updates based on the latest IMO guidelines and references;

.3 clarification of the application of Electric Power Table (EPT) for passenger ships and ro-ro passenger ships, in particular, in order to facilitate the consistent implementation of the IMO guidelines contained in resolution MEPC.308(73), as amended, in aspects of calculation of PAE value and the use of EPT, as reflecting the industry practice.

***Reduction of GHG emissions from ships. Comprehensive impact assessment of the short-term measure***

During MEPC 75 many delegations highlighted that, before adopting the short-term measure, it was essential to undertake a comprehensive assessment of its impacts on States, paying particular attention to the needs of developing countries, especially Small Island Developing States (SIDS) and least developed countries (LDCs), in accordance with the Initial IMO Strategy, the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885).

IMO established the Steering Committee on the conduct of the comprehensive impact assessment. The following tasks were identified:

* Task 1 Literature review (World Maritime University);
* Task 2 Assessment of the impact of the measure on the fleet;
* Task 3 Assessment of the impact of the measure on States (UNCTAD);
* Task 4 Stakeholder analysis (Starcrest);
* Task 5 Identification of areas of missing data (Starcrest);
* Task 6 COVID-19 considerations (Secretariat);
* Task 7 Disproportionately negative impacts (Secretariat/Steering Committee).

Many delegations supported the proposal that impacts of the short-term measure should be kept under review in the period up to 2026 so that any necessary adjustments could be made.

Many delegations also supported the conduct of a lessons-learned exercise on the basis of the comprehensive impact assessment of the short-term measure.

MEPC 76:

* reaffirmed, in line with the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885), keeping the implementation and impacts of the short-term measure under review, so that any necessary adjustments may be made.
* agreed that a lessons-learned exercise should be undertaken to draw lessons from the comprehensive impact assessment of the short-term measure for the conduct of future impact assessments, including how disproportionately negative impacts can be identified
* agreed to modify the text of the MEPC resolution so as to reflect the concerns of certain delegations regarding assessment of impact on States :

*“7. AGREES to undertake a lessons-learned exercise from the comprehensive impact assessment of the amendments to MARPOL Annex VI, with a view to improving the procedure for conducting future impact assessments taking into account the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885) and the terms of reference for the impact assessment of the short-term measure;”*

MEPC 76 invited Member States and international organizations to submit concrete proposals on how to keep the impacts of the short-term measure under review and how to undertake a lessons-learned exercise to MEPC 77.

***Finalization of the draft technical guidelines supporting the EEXI framework***

MEPC 76 has adopted without further discussion:

* Resolution MEPC.332(76) - 2021 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI);
* Resolution MEPC.333(76) - 2021 Guidelines on survey and certification of the Energy Efficiency Existing Ship Index (EEXI);
* Resolution MEPC.334(76) - 2021 Guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve

as finalized by ISWG GHG 8.

***Finalization of the draft technical guidelines supporting the CII framework***

MEPC 76 has adopted resolution MEPC.335(76) - 2021 guidelines on operational carbon intensity indicators and the calculation methods (CII Guidelines, G1), as finalized by ISWG GHG 8.

***CII reference lines***

MEPC 76 has adopted resolution MEPC.336(76) - 2021 guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2), as finalized by ISWG GHG 8.

***CII reduction factors***

MEPC 76 has adopted resolution MEPC.337(76) - 2021 guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factor guidelines, G3), following a long and lively debate between the delegates.

A majority of delegations supported the compromise proposal forwarded by ISWG-GHG 8, stating that the proposal represented a prudent and realistic target for international shipping.

Some delegations, while expressing general support for the outcome of the Group on G3 in a spirit of compromise, highlighted that more ambitious GHG reduction efforts would be needed in order to achieve the levels of ambition set out in the Initial IMO Strategy.

Many other delegations expressed disappointment with regard to CII reduction rates, stating that the reduction rates set for phases 1 and 2 were insufficient to incentivize behavioral change and that keeping phase 3 blank until the review stage would generate significant uncertainties for the industry and could therefore not be supported.

***CII rating***

MEPC 76 has adopted resolution MEPC.338(76) - 2021 guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4).

***Revised proposal of an International Maritime Research and Development Board***

MEPC 75 considered a proposal co-sponsored by several industry associations for the development of a research and development (R&D) programme to accelerate the introduction of low-carbon and zero-carbon technologies and fuels.

The proposed R&D programme would rely on the establishment by the Organization of an International Maritime Research and Development Board (IMRB) with responsibility for commissioning, coordinating and administering specific R&D projects, to be financed by a fund (IMO Maritime Research Fund, IMRF) to be established by the Organization.

This would be expected to raise approximately $5 billion over the 10 to 15 year life of the programme via a proposed mandatory R&D contribution equivalent to $2 per ton of fuel oil consumed.

MEPC 75 acknowledged the proposal by the industry and noted diverging views and concerns on the proposal, in particular with regard to various operational, administrative, legal and governance aspects.

Due to lack of time, MEPC 76 could not finish the full consideration of the revised IMRB proposal and agreed that the discussion would be resumed at its next session.

***Proposal for a work plan work plan for the development of mid and long-term measures***

22 Member States representing both developed and developing States and various geographical regions have put forward a concrete process on how to structure the IMO’s discussion on mid- and long-term measures, including the consideration of impacts on States of candidate measures in three distinct phases:

Phase I – Collation and initial consideration of proposals for measures;

Phase II – Assessment and selection of measures(s) to further develop; and

Phase III – Development of (a) measure(s) to be finalized within (an) agreed target date(s).

To make the collation and initial consideration of proposals for measures possible, the work plan should identify key issues to be considered for each proposed mid- and long-term measure.

The key issues should include, but not be limited to, the following elements:

* main characteristics and features of the measure;
* identification of emissions reduction potential;
* potential implications on the shipping industry;
* implementation and enforcement aspects;
* legal aspects;
* indication of the total workload for the Organization.

Phase I should run until spring 2022, Phase II should at the latest be completed in conjunction with the adoption of the Revised Strategy, and Phase III should progress and reach a target date to be agreed in conjunction with the adoption of the Revised Strategy and the accompanying implementation schedules.

This proposal met a broad support, several delegations highlighting the importance for IMO to start immediately the consideration of concrete mid-term measures, with a view to agreeing on ambitious measures, as soon as possible but no later than 2025. In that sense, many delegates expressed the view that the work plan should be approved at this session so as to initiate concrete work on phase I immediately.

Several other delegations, while expressing support to organize future work on the basis of the work plan, proposed amendments to the work plan such that the assessment of impacts on States should be more prominent under phase II of the work plan and to also include a new phase IV to follow up on impacts on States.

MEPC 76 approved the work plan, and requested ISWG-GHG 9 to use the work plan as a basis and a guidance for its further work on the consideration of concrete proposals for mid- and long-term measures.

***Proposal on the establishment of a universal mandatory greenhouse gas levy***

MEPC 76 had for its consideration a proposal for mandatory levy on GHG emissions from international shipping as an immediate priority measure with a view to incentivizing a rapid shift away from fossil fuel.

The co-sponsors propose an entry level by 2025 of $100 per tonne carbon dioxide equivalent on heavy fuel oil with upward ratchets in a 5-yearly review cycle.

The co-sponsors have reviewed all available work on the efficacy of international MBMs published since the last IMO debate on this matter was abandoned in 2013 and an ambitious, mandatory and universal levy is considered by experts, on available evidence, to be the best economic tool available to control GHG emissions from the international shipping sector.

There are two principal purposes for such a levy:

* to send the market an unequivocal signal that a transition to fully decarbonized shipping, leaving none behind, commensurate with the Paris Agreement temperature goals and science, is irrevocable and inescapable;
* to address the price differential between business-as-usual (BAU) emission-based technology options, including fuels, and decarbonized alternatives.

The levy could either be levied at point of bunker or emissions but the co-sponsors note that most evidence reviewed suggests efficiency and ease of a levy on bunker.

The co-sponsors propose that revenue collected be divided into:

1) a fund to support climate change mitigation and adaptation efforts in vulnerable countries, administered under the mandate of the UN Framework Convention on Climate Change (UNFCCC), for which a potential candidate could be the existing Green Climate Fund (GCF),

2) a separate fund to subsidize RD&D of new technologies and fuels administrated under the mandate of IMO. Support for the transaction costs incurred would take up the final portion of the revenue, both for port and flag States, in administering collection of revenues and administration of the disbursement.

The principle of CBDR-RC is addressed through the transfer of a significant portion of revenue generated to fund climate change projects in countries that are most vulnerable to the effects of climate change.

Several delegations welcomed the proposal and expressed support in principle for it, also recognizing the urgency of initiating discussions on concrete proposals for an MBM.

On the opposite, several other delegations expressed the view that the proposal was premature and would have considerable negative impacts on the maritime trade serving developing States; that the universal nature of the levy was incompatible with the implementation of CBDR-RC; that there were no sufficient alternative low- or zero-carbon fuels available at this stage that ships could revert to; that possible impacts on States of the proposal would have to be assessed in more detail

MEPC 76 noted the proposal for a market-based measure based on a mandatory carbon levy and the diverging views expressed regarding the proposal, and agreed to further consider it, together with other future proposals for mid-term measures, at ISWG-GHG 9 and MEPC 77, in the context of phase I of the work plan.

***Correspondence Group on Carbon Intensity Reduction***

MEPC 76 agreed to re-establish the Correspondence Group on Carbon Intensity Reduction and its draft terms of reference as well as the holding of the ninth and tenth meetings of the Intersessional Working Group on Reduction of GHG Emissions of Ships (ISWG GHG 9 and ISWG GHG 10).

***Actions to address marine plastic litter from ships***

MEPC 76 approved:

* MEPC.1/Circ.893 on Provision of adequate facilities at ports and terminals for the reception of plastic waste from ships
* MEPC.1/Circ.894 on Sharing of results from research on marine litter and encouraging studies to better understand microplastics from ships

***Unified interpretations to the NOX Technical Code 2008***

MEPC 76 approved MEPC.1/Circ.895 on Unified interpretations to the NOX Technical Code 2008, as Amended.

This circular revokes MEPC.1/Circ.865.

***New outputs***

MEPC 76 has agreed to the following new output for the Committee:

* Review of the 2014 Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833) (2014 Guidelines) and identify next steps

***Date of next MEPC***

MEPC 77 should be held from 22 to 26 Nov 2021

MEPC 78 should be held in the first half of 2022

***Deferred matters***

The Committee agreed to defer to MEPC 77 consideration of the following matters:

* Application of the BWM Convention to specific ship types;
* Application of the BWM Convention to ships operating at ports with challenging water quality;
* Review of the ballast water record book;
* Approval of amendments to MARPOL Annex I and to the IBC Code, regarding watertight doors on cargo ships, and of the related amendments to the 1988 Load Lines Protocol and the IGC Code;
* Process of updating the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC);
* Draft 2020 guidelines for exhaust gas cleaning systems;
* Discharge water from exhaust gas cleaning systems;
* Reduction of the impact on the Arctic of Black Carbon emissions from international shipping;
* Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book.

***Terms of reference of working groups***

Correspondence Group on carbon intensity reduction is instructed to:

1. further consider and finalize the draft updated Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP),

2. further consider and update existing guidelines, procedures or guidance, taking into account comments and decisions made at ISWG-GHG 8 and MEPC 76, including:

a. 2017 Guidelines for administration verification of ship fuel oil consumption data (resolution MEPC.292(71));

b. 2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database (resolution MEPC.293(71));

c. Procedure on Submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI (MEPC.1/Circ.871);

d. Procedures for port State control, 2019 (resolution A.1138(31));

3. develop draft guidelines on correction factors for certain ship types, operational profiles and/or voyages for the CII framework (new G5);

4. develop in new or existing guidelines specific guidance on:

a. the audit and verification processes of SEEMP including verification of revised SEEMP for ships required to develop a plan of corrective actions (PCA);

b. report, verification and submission of data for trial CIIs on voluntary basis;

c. aggregation and reporting of ship’s fuel consumption data to the new Administration and/or company in the event of change from one Administration to another and/or from one Company to another;

5. submit an interim report to MEPC 77, and a final report to MEPC 78 in 2022, to be first considered by ISWG-GHG 10.

The ISWG-GHG 9 (15-17 September 2021) is instructed to:

1. 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;

2. further consider concrete proposals to reduce methane slip and emissions of Volatile Organic Compounds (VOCs).

The ISWG-GHG 10 (18-22 October 2021) is instructed to:

1. consider any issue arising from the interim report of the Correspondence Group on Carbon Intensity Reduction;

2. further consider the scope of and timeline for development of a mandatory Carbon Intensity Code;

3. consider concrete proposals on how to keep the impacts of the short-term measure under review and how to undertake a lessons-learned exercise of the comprehensive impact assessment of the short-term measure; and

4. consider mid-term GHG reduction measures in the context of Phase I of the work plan for the development of mid- and long-term measures

5. submit a written report to MEPC 77.

***MEPC 76 adopted:***

* Resolution MEPC.328(76) amending MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping (EEXI and CII);
* Resolution MEPC.329(76) amending MARPOL Annex I regarding the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters;
* Resolution MEPC.330(76) amending MARPOL Annex VI exemption of UNSP barges from certain survey and certification requirements;
* Resolution MEPC.331(76) amending annex I and IV of the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention) concerning controls on cybutryne and the form of the IAFS.
* Resolution MEPC.332(76) - 2021 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI);
* Resolution MEPC.333(76) - 2021 Guidelines on survey and certification of the Energy Efficiency Existing Ship Index (EEXI);
* Resolution MEPC.334(76) - 2021 Guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve.
* Resolution MEPC.335(76) - 2021 guidelines on operational carbon intensity indicators and the calculation methods (CII Guidelines, G1);
* Resolution MEPC.336(76) - 2021 guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2);
* Resolution MEPC.337(76) - 2021 guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factor guidelines, G3);
* Resolution MEPC.338(76) - 2021 guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4).

***MEPC 76 approved:***

* the final text of the Guidelines MEPC.1/Circ.892 for exemption of UNSP barges from the survey and certification requirements, in complement of amendments to Annex VI;
* MEPC.1/Circ.893 on Provision of adequate facilities at ports and terminals for the reception of plastic waste from ships;
* MEPC.1/Circ.894 on Sharing of results from research on marine litter and encouraging studies to better understand microplastics from ships;
* MEPC.1/Circ.895 on Unified interpretations to the NOX Technical Code 2008.