

INTERSESSIONAL MEETING OF THE
WORKING GROUP ON REDUCTION OF
GHG EMISSIONS FROM SHIPS
18th session
Agenda item 5

ISWG-GHG 18/WP.1/Rev.1
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ENGLISH ONLY

DISCLAIMER

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CONSIDERATION OF THE REPORT TO MEPC 83¹

**Draft report of the eighteenth meeting of the Intersessional Working Group on
Reduction of GHG Emissions from Ships (ISWG-GHG 18)**

Introduction

1 The eighteenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 18) was held from 17 to 21 February 2025 and was chaired by Mr. S. Oftedal (Norway).

2 The Group was attended by delegates from the following Member Governments:

ALGERIA	COSTA RICA
ANGOLA	CYPRUS
ANTIGUA AND BARBUDA	DENMARK
ARGENTINA	DOMINICA
AUSTRALIA	DOMINICAN REPUBLIC
BAHAMAS	ECUADOR
BANGLADESH	EGYPT
BELGIUM	EL SALVADOR
BELIZE	ESTONIA
BRAZIL	ETHIOPIA
CAMBODIA	FIJI
CANADA	FINLAND
CHILE	FRANCE
CHINA	GAMBIA
COLOMBIA	GEORGIA
COOK ISLANDS	GERMANY

¹ Delegations wishing to comment on this draft report should submit their comments to ghg@imo.org, no later than Tuesday, 4 March 2025, 23.59 (UTC). Comments should only address editorial corrections and improvements, including finalizing individual statements, and should not reopen discussion on decisions taken during the session. Comments should also state the specific paragraphs of the draft report to which they relate and, where possible, proposed alternative wording should be provided. If a delegation has no comments on the draft report (ISWG-GHG 18/WP.1/Rev.1), for reasons of economy, there is no need to provide a response. After review, the Chair will provide a summary of how comments received, if any, have been addressed.

GHANA	REPUBLIC OF KOREA
GREECE	ROMANIA
GRENADA	RUSSIAN FEDERATION
GUATEMALA	SAINT KITTS AND NEVIS
INDIA	SAINT LUCIA
INDONESIA	SAINT VINCENT AND THE
IRAN (ISLAMIC REPUBLIC OF)	GRENADINES
IRELAND	SAMOA
ITALY	SAN MARINO
JAMAICA	SAUDI ARABIA
JAPAN	SENEGAL
KENYA	SEYCHELLES
KIRIBATI	SEIRRA LEONE
KUWAIT	SINGAPORE
LATVIA	SLOVENIA
LIBERIA	SOLOMON ISLANDS
LIBYA	SOMALIA
LUXEMBOURG	SOUTH AFRICA
MALAWI	SPAIN
MALAYSIA	SURINAME
MALTA	SWEDEN
MARSHALL ISLANDS	SWITZERLAND
MAURITIUS	THAILAND
MEXICO	TOGO
MONGOLIA	TONGA
MYANMAR	TRINIDAD AND TOBAGO
NAMIBIA	TÜRKİYE
NAURU	TUVALU
NETHERLANDS (KINGDOM OF	UGANDA
THE)	UKRAINE
NEW ZEALAND	UNITED ARAB EMIRATES
NIGERIA	UNITED KINGDOM
NORWAY	UNITED REPUBLIC OF
OMAN	TANZANIA
PAKISTAN	UNITED STATES
PALAU	URUGUAY
PANAMA	VANUATU
PAPUA NEW GUINEA	VENEZUELA (BOLIVARIAN
PARAGUAY	REPUBLIC OF)
PERU	YEMEN
PHILIPPINES	ZAMBIA
POLAND	
PORTUGAL	
QATAR	

by representatives from the following Associate Member of IMO:

HONG KONG, CHINA

by representatives from the following United Nations and Specialized Agency:

WORLD BANK GROUP (WB)

by observers from the following intergovernmental organizations:

EUROPEAN COMMISSION (EC)
ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)
PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP)
INDIAN OCEAN MEMORANDUM OF UNDERSTANDING ON PORT STATE
CONTROL (IO MOU)

by observers from the following non-governmental organizations in consultative status:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)
INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH)
BIMCO
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
CESA
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS
(INTERTANKO)
ADVISORY COMMITTEE ON PROTECTION OF THE SEA (ACOPS)
SOCIETY OF INTERNATIONAL GAS TANKER AND TERMINAL OPERATORS
LIMITED (SIGTTO)
CRUISE LINES INTERNATIONAL ASSOCIATION (CLIA)
INTERNATIONAL ASSOCIATION OF DRY CARGO SHIPOWNERS
(INTERCARGO)
WORLD WIDE FUND FOR NATURE (WWF)
EUROPEAN ASSOCIATION OF INTERNAL COMBUSTION ENGINE AND
ALTERNATIVE POWERTRAIN MANUFACTURERS (EUROMOT)
IPIECA
THE INSTITUTE OF MARINE ENGINEERING, SCIENCE AND TECHNOLOGY
(IMarEST)
INTERNATIONAL SHIP MANAGERS' ASSOCIATION (INTERMANAGER)
INTERNATIONAL PARCEL TANKERS ASSOCIATION (IPTA)
INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA)
WORLD NUCLEAR TRANSPORT INSTITUTE (WNTI)
THE ROYAL INSTITUTION OF NAVAL ARCHITECTS (RINA)
INTERFERRY
INTERNATIONAL BUNKER INDUSTRY ASSOCIATION (IBIA)
INTERNATIONAL TRANSPORT WORKERS' FEDERATION (ITF)
WORLD SHIPPING COUNCIL (WSC)
THE NAUTICAL INSTITUTE
SUPERYACHT BUILDERS ASSOCIATION (SYBAss)
PACIFIC ENVIRONMENT
CLEAN SHIPPING COALITION (CSC)
WOMEN'S INTERNATIONAL SHIPPING AND TRADING ASSOCIATION (WISTA
INTERNATIONAL)

SOCIETY FOR GAS AS A MARINE FUEL LIMITED (SGMF)
INTERNATIONAL WINDSHIP ASSOCIATION (IWSA)
ENVIRONMENTAL DEFENSE FUND (EDF)
ZERO EMISSIONS SHIP TECHNOLOGY ASSOCIATION (ZESTAs)
INTERNATIONAL FERTILIZER ASSOCIATION LIMITED (IFA)*
METHANOL INSTITUTE (MI)*

And by observers from the following IMO training institute:

WORLD MARITIME UNIVERSITY (WMU)

Terms of reference

3 The terms of reference for the Working Group, as approved by MEPC 82 (MEPC 82/17, paragraph 7.56), were as follows:

“The Intersessional Working Group on Reduction of GHG Emissions from Ships is instructed, taking into account relevant documents, including documents submitted to ISWG-GHG 18, the outcomes of the comprehensive impact assessment of the basket of candidate mid-term measures as appropriate, the discussions of the Expert Workshop (GHG-EW 6) on the Further Development of the Basket of Mid-term Measures, and relevant documents submitted to MEPC 83 as well as to previous sessions, to:

- .1 further consider the development of the basket of candidate mid-term GHG reduction measure(s), using annex 1 to document MEPC 82/WP.9 as the basis; and
- .2 further consider the development of the IMO Life Cycle GHG Assessment (LCA) framework.”

Update on the Voluntary Multi-Donor Trust Fund

4 The Group noted an update provided by the Secretariat concerning the use of Voluntary Multi-Donor Trust Fund to facilitate the participation of developing countries, especially SIDS and LDCs, to attend MEPC and ISWG-GHG meetings, in particular that, for ISWG-GHG 18, ISWG-GHG 19 and MEPC 83, the Trust Fund financed the participation of 59 delegates from Angola, Bangladesh, Belize, Cambodia, Cook Islands, Cuba, Democratic Republic of Congo, Dominica, Egypt, Ethiopia, Fiji, Gambia, Grenada, Honduras, Jamaica, Kenya, Kiribati, Liberia, Madagascar, Malawi, Maldives, Marshall Islands, Mauritius, Mongolia, Namibia, Nauru, Nepal, Paraguay, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, St Kitts and Nevis, Suriname, Tanzania, Togo, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu and Viet Nam.

5 The Group also noted that with the increasing number of GHG meetings taking place, all available funds in the Trust Fund had been used. The Group invited Member States and international organizations to consider making financial contributions to the Trust Fund to allow for future participation at IMO’s GHG meetings.

6 In this context, the Group noted with appreciation the contributions by the Governments of France and of the United Kingdom to the IMO GHG TC Trust Fund of 100,000

* Pending A 34 approval

€ and 100,000 £, respectively, and to the Voluntary Multi-Donor Trust Fund of 110.000€ and 150.000£, respectively.

Adoption of the agenda

7 The Group adopted the agenda for the meeting, as set out in document ISWG-GHG 18/1.

8 The Group agreed to be guided in its work by document ISWG-GHG 18/1/1 (Secretariat), containing annotations to the agenda, the provisional list of documents submitted to this session and the provisional timetable. The Group noted that, following the consultation between the Chairs of the Committee and this Group, relevant documents submitted under the agenda item “Reduction of GHG emissions from ships” of MEPC (up until the 9-week submission deadline of 31 January 2025 had been referred to this meeting for consideration. The Group further noted that relevant document submitted to MEPC by the 7-week deadline (14 February 2025) may be referred to ISWG-GHG 19 for consideration, following further consultation between the two Chairs.

9 The Group agreed to aim at developing a short report reflecting only the outcomes of the main discussions and any unresolved matters.

Further consideration of the development of the basket of candidate mid-term GHG reduction measure(s), using annex 1 to document MEPC 82/WP.9 as the basis

10 The Group recalled that MEPC 82 had agreed to use the text set out in annex 1 to document MEPC 82/WP.9 as the basis to further consider the development of the basket of candidate mid-term measure(s), referred to as the “IMO net-zero framework”, and had invited Member States and international organizations to continue work towards further convergence on the development of the basket of candidate mid-term measures.

11 The Group had for its consideration 23 documents submitted under this agenda item, namely:

- .1 ISWG-GHG 18/2 (Secretariat), providing, in the annex, a draft consolidated version of MARPOL Annex VI including all amendments adopted or approved up until MEPC 83; and aiming to facilitate the further consideration of the development of candidate mid-term measures and the inclusion of the related draft amendments to MARPOL Annex VI (the “IMO net-zero framework”);
- .2 ISWG-GHG 18/2/1 (Japan), proposing possible Z-factor values for the GFI to be included in MARPOL Annex VI as well as indicating the possible fuel mix resulting from the fuel transition facilitated by the regulations to be adopted, in order to give predictability to stakeholders; providing possible Z-factor reduction trajectories considering only the effects of a GFS; and stressing the need to promote the uptake of ZNZ from an early stage to achieve the goals of the 2023 IMO GHG Strategy;
- .3 ISWG-GHG 18/2/2 (Japan), commenting on the remaining issues regarding the proposed equation on the calculation methodology for the attained annual GHG Fuel Intensity (attained GFI); supporting the inclusion of the effects of zero-emission energy sources such as wind and solar, in the calculation for the attained annual GFI, applying a methodology comparable

to the proposed method to include the effects of alternative fuels; proposing to include these methodologies in the Guidelines for the calculation of the attained GFI or other related guidelines; and outlining the potential undermining effect of the inclusion of a correction factor (f_{voy}) that would relax the application of the regulations on some shipping routes;

- .4 ISWG-GHG 18/2/3 (Republic of Korea), providing further considerations on the technical and economic elements to support the timely completion of the amendments to MARPOL Annex VI; proposing to complete the development of SEEMP Part IV by the end of 2027, to initiate data collection for GFI calculation in 2028, and to submit the first annual attained GFI report in early 2029; expressing concerns regarding the inclusion of a correction factor (f_{voy}) in the calculation of the attained GFI and preference for a well-to-wake (WtW) based annual attained GFI calculation method; proposing a pathway for the GFI reduction targets; and providing recommendations for potential levy levels based on calculation examples and inviting a cautious approach, such as a minimal levy based on a pilot operation;
- .5 ISWG-GHG 18/2/4 (Austria et al.), setting out priorities, timelines and recommendations for the development of core provisions regarding operational and governance aspects of a fund to be included in MARPOL Annex VI; stressing the need to develop these core provisions as well as complementing operational provisions in a timely manner, in order for the fund to be established in time to support the IMO net-zero framework, expected to enter into force in 2027; and recommending the adoption of the proposed timelines by MEPC 83;
- .6 ISWG-GHG 18/2/5 (Austria et al.), providing, in annex, consolidated and updated previous proposals from the co-sponsors of draft amendments to MARPOL Annex VI for an economic element built around a GHG levy/contribution; and inviting the working group to use the proposed draft amendments as the base document to continue integrating proposals for an economic element of the basket of candidate mid-term GHG reduction measures;
- .7 ISWG-GHG 18/2/6 (Belize et al.), elaborating on the rationale behind the proposed draft amendments on "distribution of revenue", as set out in annex to document ISWG-GHG 18/2/5; stressing why revenue disbursement purposes are required to achieve goals and objectives of the 2023 IMO GHG Strategy, including a just and equitable transition (JET) that leaves no Member State and no seafarer behind; proposing to allocate some of the revenue collected to existing funding entities to address broader climate and ocean health impacts; and incorporating a definition in MARPOL Annex VI of "disproportionate negative impacts" to improve on the current language ambiguity;
- .8 ISWG-GHG 18/2/7 (ICS), presenting an updated prototype for a web-based and fully automated maritime GHG emissions pricing mechanism, to be administered by the proposed IMO GHG Strategy Implementation Fund, for calculating and collecting annual GHG levy/contributions from ships per tonne of CO₂ equivalent (CO₂eq) emitted and for calculating and disbursing rewards to ships for CO₂eq emissions prevented by the use of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs);

- .9 ISWG-GHG 18/2/8 (CSC), examining the implications of incorporating a f_{voy} correction factor in the GFI-attained equation, and on how adopting the "adjusted tank-to-wake" methodology, as both proposed in document ISWG-GHG 17/2/7, would lead to significantly higher final emissions from international shipping; stressing the need for Remedial Unit (RU) prices to incentivize the switch to alternative fuels and proposing a calculation methodology of RU prices as well as minimum values; and recommending to agree on a date to eventually include emissions from ships below 5,000 GT;
- .10 ISWG-GHG 18/2/9 (Republic of Korea), proposing to rename the IMO Net-Zero Fund the "International Maritime Climate Fund" and suggesting a possible operational structure of the Fund for the management and disbursement of revenue generated from the economic element of the GHG reduction mid-term measures; developing potential revenue streams and recommending adopting a digital central management system to streamline the processes of issuing Remedial Compliance Units (RCUs) and receiving GHG levy payments; and providing, in annex, revised draft amendments to MARPOL Annex VI;
- .11 ISWG-GHG 18/2/10 (India), outlining a possible bridging proposal for the economic measure, to ensure availability of adequate funds to incentivize the fuel transition of international shipping at the lowest possible cost and burden; proposing to mandate under-compliant ships to transfer a fixed monetary amount, the "Sustainable Shipping Fund Contribution" (SSFC), to the "Sustainable Shipping Fund" for each Surplus Unit (SU), to remedy a Deficit Unit (DU) with the quantum for the SSFC determined by the Committee before each reporting period; recommending received revenues be used in priority to satisfy reward claims for the uptake of eligible zero or near-zero (ZNZ) GHG emission technologies and allocating remaining revenues for research and development purposes, capacity building and infrastructure initiatives, and mitigating negative impacts; and providing, in annex, proposed draft amendments to MARPOL Annex VI;
- .12 ISWG-GHG 18/2/11 (China et al.), proposing modifications, set out in annex, to the draft amendments to MARPOL Annex VI regarding the IMO net-zero framework aiming to bridge differences among various proposals and explore potential landing zones; outlining proposed changes to the International Maritime Sustainable Fuels and Fund (IMSF&F) mechanism, inter alia including proposed GFI reference value, adding two options for reduction factors (Z factors), permitting transfers of Surplus Units (SUs) through the IMO GFI Registry outside a compliance pool, applying a handling fee to any Surplus Unit transfer, introducing a "Reference Unit Price" to clarify the pricing methods, clarifying the monetary contributions processes and proposing a review clause;
- .13 ISWG-GHG 18/2/12 (China et al.), developing the key elements of the IMSF&F mechanism, including proposed modifications in document ISWG-GHG 18/2/11, and demonstrating their potential to address both technical and economic objectives and goals of the 2023 IMO GHG Strategy without requiring a separate flat GHG levy; and providing, in annex, detailed explanations on the proposed methods to, inter alia, determine the 2008 baseline GHG emissions from international shipping, setting GFI targets and

Z factors, determining Remedial Unit (RU) price and ZNZ fuel reward price, and collecting handling fees for SU transactions;

- .14 ISWG-GHG 18/2/13 (China), presenting excerpts from a study led by Shenzhen International Maritime Sustainable Development Centre of Dalian Maritime University in China, analysing areas of consensus, points of contention and potential landing zones for the candidate mid-term measures; outlining in annex 1, the IMO net-zero framework's overall structure whilst stressing convergences and divergences between candidate proposals; and providing summaries in annexes 2 and 3 of the key components of candidate proposals;
- .15 ISWG-GHG 18/2/14 (China), suggesting suspending, until the review of the mid-term GHG reduction measures, the implementation of chapter 5 on "Regulations on the IMO net-zero framework" for semi-submersible vessels due to the technical challenges for these ships to apply zero or near-zero (ZNZ) GHG emission technologies; and providing, in annex, the corresponding draft amendments;
- .16 ISWG-GHG 18/2/15 (IMarEST), developing and suggesting needed specifications in the design of the mid-term measures to effectively promote the energy transition of shipping as envisioned by the 2023 IMO GHG Strategy; and stressing the need for targeted and explicit rewards to effectively incentivize and support the uptake of zero and near-zero GHG emissions fuels (ZNZs), in particular for e-fuels, based on production pathways to allow all ZNZs to compete on a level playing field;
- .17 ISWG-GHG 18/2/16 (EDF), providing background information and specific examples from existing multilateral climate funds to support the development of a GHG pricing mechanism which meets the goals of the 2023 IMO GHG Strategy; stressing how lengthy establishing and operationalizing an entirely new fund can be, as well as the low initial disbursement rates; and proposing a hybrid approach where the Organization retains strategic oversight whilst channelling revenues through existing funds to fulfil some of the objectives of the 2023 IMO GHG Strategy, including contributing to a just and equitable transition (JET), whilst streamlining processes, reducing timescales for revenue distribution and administrative burdens;
- .18 ISWG-GHG 18/2/17 (Brazil et al.), providing an updated proposal on the development of an IMO sustainable fuels certification framework to allow certification schemes/standards to operate under the purview of the IMO LCA Guidelines and support the implementation of the IMO net-zero framework; providing, in annexes, draft amendments to MARPOL Annex VI as well as supporting guidelines with criteria and procedures for the recognition of sustainability certification schemes/standards and on the reporting of certification activities to the Organization; and proposing tentative timelines for the development of the certification framework apace with the development of the IMO net-zero framework;
- .19 ISWG-GHG 18/2/18 (Indonesia et al.), stressing the need to establish a dedicated and centralized IMO GFI Registry for the effective implementation of the GHG reduction mid-term measures; proposing that the key principles of integrity, interoperability and integration guide the design and development of the IMO GFI Registry; proposing that the primary function of the IMO GFI

- Registry be to serve as a centralized and trusted repository of GFI data; and recommending establishing pilot programs to develop, test and refine the IMO GFI Registry well in advance of the full implementation of the mid-term measures;
- .20 ISWG-GHG 18/2/19 (Antigua and Barbuda et al.), stressing the need for the mid-term measures to deliver on the full scope of the vision set out in the 2023 IMO GHG Strategy; and providing draft text to serve as the "Goal" regulation in the new chapter 5 of the proposed amendments to MARPOL Annex VI;
 - .21 ISWG-GHG 18/2/20 (Belize et al.), highlighting that establishing a fund is a functional necessity for implementing and operationalizing the 2023 IMO GHG Strategy and proposing work arrangements/timelines for the development of the necessary provisions (MARPOL Annex VI amendments, guidelines/charter, etc.); and suggesting which revenue distribution objectives should be specified across MARPOL Annex VI amendments and the relevant guidelines/charter;
 - .22 ISWG-GHG 18/2/21 (CSC), developing sustainability issues stemming from the production of food and feed crop-based biofuels, such as impacts on food security and uncertainty on GHG emission savings, as well as waste-based biofuels; recommending reducing incentives for such biofuels by introducing a cap or exclusion of certain biofuels under the GFS compliance mechanism; and providing, in annex, GHG emission values for first-generation biodiesel based on feed- and food crops; and
 - .23 ISWG-GHG 18/2/22 (China), providing considerations on the structure of the verification framework on marine fuel sustainability in the context of the verification of the attained annual GHG fuel intensity (GFI) of ships within the scope of the IMO net-zero framework; suggesting Member States be the main entities responsible for the verification and certification of the attained GFI; and recommending to consider the verification and certification framework of marine fuel sustainability in conjunction with the verification of the Fuel Lifecycle Label (FLL).
- 12 The Group also considered 21 documents submitted to MEPC 83 as follows:
- .1 MEPC 83/7 (Secretariat), providing initial preliminary, indicative information on possible resource implications of the establishment of an IMO GFI registry and/or fund/facility, as requested by the Committee; laying out different registries already in operation within the UN system as well as using registry software solution providers to complement registries; highlighting the need for Secretariat management and oversight of the IMO GFI registry; pointing out that establishment of an IMO net-zero fund/facility would need to adhere to the Organization's Financial Regulations and Rules; and suggesting that minimum legal provisions in the IMO net-zero framework would also need to be considered as well, accounting for possible resource implications;
 - .2 MEPC 83/7/4 (OCIMF et al.), emphasizing different aspects of the co-sponsor's existing and future activities of significant importance for the decision making processes targeting the finalization and the approval of the midterm GHG candidate measure(s) at MEPC 83; providing insights on the importance of fuel producers and suppliers in implementing the 2023 IMO

GHG Strategy; stressing that future measures should take into account cross-sectoral competition; pointing out that the deployment of alternative fuels at scale requires time and funds; and highlighting that bunkering and carriage of marine fuels face a unique challenge in setting up new operations;

- .3 MEPC 83/7/5 (Bahamas et al.), providing, in annex, draft "Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG/levy contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies", to support uniform and effective implementation of the IMO GHG Strategy Implementation fund, established to manage, inter alia, the required annual GHG levy/contribution to be made by ships per tonne of CO₂eq emitted, as proposed in document ISWG-GHG 18/2/5 (Austria et al.); and suggesting adopting these Guidelines at MEPC/ES.2 concurrently with the amendments to MARPOL Annex VI;
- .4 MEPC 83/7/6 (Bahamas et al.), suggesting a way forward for the development of the proposed Guidelines provided in annex to document MEPC 83/7/5; inviting the Committee to finalize the text of draft amendments to MARPOL Annex VI for approval at MEPC 83 and finalize the Guidelines at MEPC/ES.2, to support and expedite the adoption of the basket of candidate GHG reduction measures at MEPC/ES.2; and providing a list of key elements to be decided by the Committee regarding the content of the proposed Guidelines;
- .5 MEPC 83/7/7 (Bahamas et al.), inviting the Committee to explore an updated prototype of a web based GHG levy/contribution and reward system, demonstrating the potential implementation of the Guidelines provided in document MEPC 83/7/5; providing additional information on the calculation methodology of the annual GHG levy/contributions and rewards for the use of zero or near-zero (ZNZ) fuels and overall administration of the maritime GHG pricing mechanism; stressing the importance of permitting GHG levies/contributions to be made in advance instalments;
- .6 MEPC 83/7/8 (Bahamas et al.), providing additional information, in support of the actions requested of the Committee regarding the decision to be made on the content of the proposed draft Guidelines provided in document MEPC 83/7/5, concerning the treatment of life cycle emissions, treatment of biofuel blends when calculating annual GHG levy contributions and rewards, and use of carbon capture and other ZNZ technologies;
- .7 MEPC 83/7/12 (Brazil and China), proposing definition criteria for zero or near-zero (ZNZ) GHG emission technologies, fuels and/or energy sources; recommending that ZNZ be feedstock and technology agnostic, prioritizing availability, sustainability and life cycle GHG emission reductions; and suggesting the definition of ZNZ fuels be based on recognized GHG emissions reduction occasioned by each fuel type, in line with the 2024 LCA Guidelines, and gradually made more stringent over time;
- .8 MEPC 83/7/15 (IACS), highlighting concerns related to the practical implementation of the regulations under consideration, in particular regarding implementation dates for the new requirements, feasibility of proposed timelines and potential duplication of verification and certification activities; suggesting that the starting year for the calculation of the attained annual GFI

be 2029, based on data collected in 2028, and the first annual reduction factor (Z factor) for the target/required annual GFI compared to the GFI reference value be 2028 rather than 2027;

- .9 MEPC 83/7/16 (Brazil), proposing the introduction of an Energy Consumption Index (ECI) as a complementary tool to accurately measure and validate the quantities of fuel effectively used by ships in various operating modes and providing a formula; stressing the need to ensure the accuracy of fuel consumption reported to the IMO DCS in the context of economic compensation, and therefore to base Deficit Units (DUs) on reliable data; and underlining the synergies with existing requirements;
- .10 MEPC 83/7/18 (Malaysia and InterManager), highlighting concerns expressed by third-party ship managers regarding the current possible draft amendments assigning liability for compliance fees only to ship managers; and providing alternative text to paragraph 12 of "Regulation X – Economic mechanism(s) to incentivize the transition to net-zero", set out in annex to document ISWG GHG 18/2/5, in order that other entities can be held responsible for penalties related to GHG emissions;
- .11 MEPC 83/7/19 (Japan), proposing to amend Appendix V (Information to be included in the bunker delivery note (BDN)) of MARPOL Annex VI to appropriately calculate GHG intensity and share the information among relevant parties, in the implementation of the goal-based marine fuel standard regulating the phased reduction of the marine fuel's GHG intensity; and developing on the information to be included and providing, in annex, draft amendments;
- .12 MEPC 83/7/20 (Secretariat), reporting on the outcomes of the further work on assessing the potential impacts of the policy combinations of a basket of candidate mid-term measures on food security, as requested by MEPC 82; and providing, in annexes, the report on the review of relevant literature assessing the potential impacts of increased maritime transport costs resulting from GHG reduction measures in international shipping on food security (annex 1), carried out by WMU, a summary of the liaison work carried out by the Secretariat with relevant UN Agencies and international organizations to identify the potential impacts of an increase in maritime transport costs on food security (annex 2), and a summary of information abstracted from relevant publications, referred to by a number of UN agencies and international organizations (annex 3);
- .13 MEPC 83/7/21 (CLIA and WSC), emphasizing the critical and complementary role of binding regulatory requirements and supporting guidelines to support the Committee's work in further defining the forthcoming GHG instruments; and stressing the need to address core substantive issues of the IMO net-zero framework in regulations and develop more detailed implementation recommendations in guidelines;
- .14 MEPC 83/7/22 (Pacific Environment), outlining key recommendations for fuel transitions in achieving net-zero GHG emission in the international shipping sector by 2050, and emphasizing cost-effective strategies and evidence-based policymaking based on a model developed to evaluate abatement costs; and recommending implementing financial support measures to incentivize early consumption of e-fuels, internalizing the price of carbon

within the fuel price of conventional fuels, and setting higher interim targets to ensure that the international shipping sector achieves the net-zero emissions goal by 2050;

- .15 MEPC 83/7/25 (Canada and United Kingdom), explaining common practices of environmental credit registries and presenting key elements defined in governing documents; providing corresponding draft amendments on basic functions, management of ships' accounts, administrative costs, unit-level information and other elements to be considered in the development of the regulations for the IMO GFI Registry; and recommending operationalizing the IMO GFI Registry as soon as possible, regardless of the starting implementation date, in order for potential users to familiarize themselves with Registry operations before the first compliance deadlines come due;
- .16 MEPC 83/7/26 (Singapore), offering additional options to amendments to MARPOL Annex VI providing other resourcing mechanisms for the development of the basket of candidate mid-term GHG reduction measures, such as adjusting the price difference between the buying price of the surplus units (SUs) and the selling price of the remedial units (RUs) by subjecting each transaction of SUs to a transaction fee/surcharge, or adjusting the selling price of RUs through the use of tiered ranges, with payments/contributions made in proportion to the emissions within each tiered range, or adopting complementary regulatory levers not directly related to price; and stressing the necessity to ensure the accuracy of default emission factors, certification schemes, and resulting emissions reductions profiles of fuel production pathways, in line with the 2024 LCA Guidelines;
- .17 MEPC 83/7/29 (EDF), highlighting the importance of participatory justice in shaping the mid-term GHG reduction measures, particularly in designing a fair and transparent revenue distribution mechanism; and elaborating on a shared definition of participatory justice and identifying opportunities for strengthening mid-term measures objectives through participatory justice, to create more durable climate solutions for the maritime sector;
- .18 MEPC 83/7/30 (Angola et al.), presenting the reasons and listing the underlining concerns justifying the co-sponsors' opposition to the adoption by the Committee of measures including an independent universal levy on all emissions, and their preference on prioritizing other economic measures in the context of the development of the basket of candidate mid-term measures;
- .19 MEPC 83/7/33 (IWSA), presenting a possible methodological approach for the inclusion of wind propulsion systems in the initial GFI formula by the introduction of a "fuel-equivalent-energy" equation; providing a proposed formula and developing the background assessment methodology proposed as well as the proposed tiered approach; and identifying areas requiring further work;
- .20 MEPC 83/INF.32 (Angola et al.), detailing the list of concerns presented in document MEPC 83/7/30 regarding the possible adoption of an independent universal levy on all emissions; and providing further details and explanations on the related potential negative effects and stressing that a levy is not needed for the fleet to meet the levels of ambitions in the 2023 IMO GHG Strategy; and

- .21 MEPC 83/INF.33 (IWSA), providing, in annex, the "proposed assessment methodology tiers to measure wind propulsion in the attained GFI" referred to in document MEPC 83/7/33.

Conduct of the discussion on this agenda item

13 The Group noted that the Chair, in consultation with the Secretariat, had prepared a draft updated legal text based on annex 1 to document MEPC 82/WP.9, complemented with new proposals for amendments submitted to ISWG-GHG 18 and MEPC 83.

14 The Group agreed to focus its attention on further developing and streamlining draft amendments to MARPOL Annex VI on the 'IMO net-zero framework', using the text presented by the Chair as a basis, with the understanding that the Chair and the Secretariat could further streamline sections of the text on which the Group's discussions during the session indicated convergence. The Group further agreed that it would only consider proposals for amendments relevant to the IMO net-zero framework, while noting that the first session of the Intersessional Working Group on Air Pollution and Energy Efficiency (ISWG-APEE 1), would consider additional amendments to MARPOL Annex VI relevant to the review of the short-term GHG reduction measure.

15 The Group noted document MEPC 83/7/29 (EDF), providing general comments on the further development of the "IMO net-zero framework".

'Application', 'Goal' and 'Functional requirements' regulations

16 Regarding the "application" provision, the Group noted that there were several options in the draft legal text with regard to the possible expansion of the application of chapter 5 to ships of 400 GT and above. The Group also considered document ISWG-GHG 18/2/8 (CSC) proposing to expand the application of the new chapter 5 to ships of 400 GT and above by 2030. The Group recalled that currently all reporting obligations and associated reporting databases, such as the IMO Ship Fuel Consumption Database (DCS), were designed for ships of 5,000 GT and above, and noted that the possible expansion of the application scope may also have a considerable impact on the work of Administrations and recognized organizations. Following consideration, during which several delegations underlined the importance of expanding the scope to ships of 400 GT and above to effectively deliver on achieving net-zero shipping, the Group agreed that this issue would be included as part of the general review regulation in chapter 5, and that this could also be further considered in more detail in the context of the next planned review of the GHG Strategy whilst the impact in terms of emission reductions could also be addressed in the context of the Fifth IMO GHG Study.

17 Several delegations, in noting the placeholder for developing possible provisions regarding non-Party ships in the application regulation, and referring, in particular to documents ISWG-GHG 17/2/2 (Austria et al.) and ISWG-GHG 17/2/5 (Bahamas), highlighted that text on the treatment of non-Parties' ships should be included in the legal text rather than in guidelines, not only with regard to the 'No More Favourable Treatment' principle for port State control purposes, but to enable non-Party ships to transfer any required contributions to the Fund and to be issued with Statements of Compliance by other Administrations as is the case, for example, under the IMO liability Conventions with regards to certificates of insurance. Some delegations also noted that provisions for non-Party ships should be included under relevant regulations rather than in the general provisions for this chapter. Following the discussion, the Group agreed to keep a placeholder for possible text in legal terms to be considered at the next session.

18 The Group also considered a proposal in document ISWG-GHG 18/2/14 (China) to suspend the application of chapter 5 to semi-submersible vessels until further review. The Group agreed to include this proposal as an option, for further consideration along with possible provisions related to domestic shipping, FPSOs and FSUs and drilling rigs under the regulation on “application”.

19 Regarding the draft “goal” provision, the Group recalled that the draft legal text contained draft text on the “goal” referring to GHG emission reductions in accordance with the 2023 Strategy as well as a placeholder for further text to be developed. In this context, the Group considered the proposal in document ISWG-GHG 18/2/19 (Antigua and Barbuda et al.) to use the text from section 4.5 of the Strategy defining the purpose of the mid-term measures for the “goal” provision. In the ensuing discussion, several delegations supported, in principle, to merge the proposed text in document ISWG-GHG 18/2/19 with the existing text under the regulation on “goal”. Several delegations expressed a preference for keeping the text in square brackets. Following consideration, the Group agreed to merge the text on the goal.

20 Regarding the draft regulation on “functional requirements”, the Group noted that no new proposals had been submitted to this session. The Group noted, in general, that the functional requirements could mirror the text in the GHG Strategy on the technical and economic measures of the basket since this was already agreed text. The Group agreed to further consider the functional requirements once it would have finalized its consideration of the measures, also noting that it could mirror the functional requirements for chapter 4 contained in MARPOL Annex VI.

GFI application date

21 In considering possible dates for application of the GFI regulations, the Group noted that the draft legal text contained several options and that a new proposal had been submitted in document ISWG-GHG 18/2/3 (Republic of Korea).

22 Several delegations expressed the view that in accordance with the timelines set out in the 2023 Strategy the effective implementation of the regulations in chapter 5 should be aligned with their entry into force, i.e.: 1 March 2027, emphasizing the importance of immediately starting the collection of data and reducing the GHG intensity of marine fuels, providing an incentive for ships to undertake rapid-action and receive rewards for the use of zero, near-zero fuels, technologies and energy sources, also in view of the limited time available to achieve the 2030 targets set out in the 2023 IMO GHG Strategy.

23 Several other delegations, in referring in particular to documents ISWG-GHG 18/2/3 (Republic of Korea) and MEPC 83/7/15 (IACS), and concurring with the entry into force date of 1 March 2027, stated that for practical reasons the first effective application year of GFI data collection had to be 2028 since SEEMPs may only be updated after entry into force of the amendments, and the attained GFI could only be calculated using data from the full preceding calendar year (1 January to 31 December). Some of these delegations suggested that 2027 could be a ‘trial period’ of collecting relevant information for calculating the attained GFI, but with soft enforcement.

24 Several delegations further stressed that the regulations would enter into force on 1 March 2027, leaving only 10 months for SEEMPs to be updated and approved, and that mandatory GFI data collection should start on 1 January 2028, for calculation of attained GFI in 2029.

25 Following consideration, the Group left the reference to the 2028 calendar year in square brackets for further consideration at the next session. The Group further noted that an early implementation clause should be included in the cover MEPC resolution on the adoption of the amendments.

Attained GFI calculation methodology

26 The Group noted that the main differences in the draft legal text concerning the GFI calculation methodology related to:

- .1 how to take into account the well-to-wake (WtW) GHG emissions of marine fuels as addressed in the LCA guidelines; and
- .2 the possible inclusion of a correction factor relaxing the applications of the regulations for some shipping routes (f_{voy}).

27 On the first issue, many delegations, in stressing the similarities between the “full WtW approach” and the “adjusted tank-to-wake (TtW) approach”, expressed willingness to work constructively on finding a common solution. Some delegations, in expressing the view that the full WtW approach was easier to understand and would help sending a clear signal outside the Organization. Some delegations also stressed the importance of alignment with the IPCC Guidelines on national GHG inventories, and that even with a full WtW approach IMO would not be regulating emissions taking place on land. Several other delegations highlighted that the “adjusted TtW” approach allowed to reflect all WtW emissions and sustainability aspects, while maintaining consistency with the wider emissions accounting principles of IPCC.

28 On the second issue, the Group expressed divergent views. Several delegations, in referring in particular to document ISWG-GHG 18/2/8 (CSC), opposed the inclusion of this correction factor, which was in their view not sufficiently mature and would cause unnecessary administrative burden, create possible perverse incentives, and undermine the level playing field and ambition of the measure.

29 Several other delegations highlighted the importance to keep the f_{voy} factor in the design of the framework as a possible solution to mitigate disproportionately negative impacts on developing countries, notably for those already served with limited services, older vessels and having limited access to alternative fuels because of their remoteness. .

30 Several other delegations, in acknowledging the concerns raised in terms of potential impact on developing States, in particular SIDS and LDCs, expressed the view that such negative impacts would be better addressed through targeted capacity-building and technical cooperation, disbursement of revenue, or other possible ways in the legal framework to recognize the unique circumstances of developing countries, instead of using a correction factor.

31 Following consideration, the Group agreed to consolidate the equations for the “full WtW approach” and the “adjusted tank-to-wake (TtW) approach” into one option albeit with some remaining square brackets for further consideration at the next session.

32 On the f_{voy} factor, the Group noted that views were split at this stage and that the IMO Net Zero Framework should find a balance between maintaining integrity (i.e.: avoiding to undermine ambition) and the need to avoid creating disproportionately negative impacts on some countries, and agreed to keep the equation including the f_{voy} correction factor in square brackets.

Target/required annual GFI and GFI reference value

33 With regard to the target/required annual GFI and the GFI reference value, the Group discussed how to identify a way forward on matters considered at the previous session, as follows: whether there should be a Z-factor for each year or for multiple years; whether there should be Z-factors reflecting the ‘strive for scenario’; and whether Z-factors should be included up until 2050 or be subject to review. The Group had for its consideration newly proposed Z-factors set out in documents ISWG-GHG 18/2/1 (Japan) and ISWG-GHG 18/2/11 (China et al.).

34 Several delegations highlighted that the Z-factors should cover WtW emissions and be set up to 2050 to provide the required regulatory clarity, that annual Z-factors should be identified to avoid shocks to the industry and provide predictability, that Z-factors should not be reviewed too early, and that any review should be subject to a “no backsliding” clause. Some delegations stressed that Z-factors should be set at least for the next 10 years, and should be based on high energy demand projections, to accommodate for the “at least” element of the levels of ambition of the 2023 GHG Strategy.

35 Several delegations suggested that whilst target annual Z-factors may be set until 2030 or 2035, only indicative values should be set for 2040 and beyond, subject to a review of the global availability of alternative compliant fuels, notably in developing countries, and that in order to be credible these Z-factors should be set on the “base” levels of ambition of the 2023 GHG Strategy reflecting IMO’s commitment, while the “strive” ambition was an aspirational goal and would impose unrealistic compliance burden on ships, further noting that shipping industry should not be made responsible for GHG reduction efforts in other sectors.

36 Several delegations, in referring to document MEPC 83/7/26 (Singapore), saw merit in a tiered approach to Z-factors as a possible way to converge views, and expressed an openness to further consider concrete text proposals in that regard.

37 Following consideration, the Group, in expressing a willingness to continue to work on defining the target/required GFI, converged on a number of issues, including the need for the Z-factors to ensuring achieving the GHG reduction targets in the 2023 IMO GHG Strategy, the preference to set annual reduction factors until a year to be defined, and further define reduction factors towards 2050 to provide predictability to the industry, the possible inclusion of a review clause for Z-factors after some years of implementation of the measures, and the recognition that defining the Z-factors is to be done in conjunction with the development of the economic element in the IMO net-zero framework. Consequently, the Group agreed to further consolidate the various options in the legal text for further consideration at the next session.

Sustainable fuels certification framework

38 The Group considered new proposed amendments on a possible sustainable fuels certification framework set out in documents ISWG-GHG 18/2/17 (Brazil et al.) and ISWG-GHG 18/2/22 (China) to be included in the draft legal text.

39 In the ensuing discussions, all delegations that spoke supported, in principle, the inclusion of a sustainable fuels certification framework as set out in document ISWG-GHG 18/2/17, whereby the Organization would recognize Sustainable Fuel Certification Schemes (SFCSS) to certify the life cycle GHG intensity and/or sustainability performance of marine fuels in accordance with the LCA Guidelines, while also noting the relevant points raised in document ISWG-GHG 18/2/22.

40 Several delegations highlighted the importance of developing a robust framework for certification, ensuring uniform application at global level to facilitate the energy transition. Several delegations stressed the importance of the Fuel Lifecycle Label (FLL) and the development of procedures for mutual recognition of schemes, noting that recognized schemes by the Organization should be acceptable by all Parties.

41 Some delegations, in acknowledging the importance of setting a framework for the certification of sustainable fuels, noted that not all types of fuels should be subject to the same certification requirements and that some emission values would not have to be verified by schemes but may be verified in accordance with IMO guidelines, and that the details of the criteria and procedure for recognition of SFCS might be moved to guidelines.

42 Some other delegations in recognizing that the legal text should be concise, emphasized the importance of including the criteria for schemes to be recognized into MARPOL Annex VI for legal certainty.

43 Some delegations noted the importance of a sustainable fuels certification framework which would consider chain of custody and accounting models such as “Mass Balance” and “Book-and-Claim”.

44 Several delegates highlighted the need for a phased implementation strategy that would allow for pilot testing of metrics across diverse fuel pathways, ensuring practical applicability.

45 One delegation noted that, as certification schemes may also apply to other measures, these provisions may be lifted to a distinct chapter of MARPOL Annex VI.

46 Following consideration, the Group agreed that draft regulations on recognition of certification schemes should be included in the IMO net-zero Framework and that the draft amendments proposed in document ISWG-GHG 18/2/17 provided a solid basis for further consideration. The Group in noting that the proposed amendments were rather lengthy for inclusion in MARPOL Annex VI, notably with respect to some of the more procedural aspects and their level of detail, such as on the process for renewal and periodic review of the certification schemes that some of the provisions may be moved and included in relevant guidelines to be developed. Subsequently, the Chair suggested a consolidated set of draft amendments to be further considered at the next session.

GFI alternative compliance approaches

47 The Group noted that the draft legal text contained text on alternative compliance mechanisms building on the use and transfer of Surplus [Compliance] Units and Remedial [Compliance] Units facilitated by the GFI Registry allowing the industry the necessary flexibility to comply with an ambitious GFI reduction curve.

48 The Group noted that documents ISWG-GHG 18/2/8 (CSC), ISWG-GHG 18/2/12 (China et al.) and ISWG-GHG 18/2/15 (IMarEST) provided detailed reflections on how to determine the Remedial Unit (RU) price. Several delegations supported the further development of flexible GFI compliance approaches to ensure implementation of the measure at a lower cost. Several delegations highlighted that the RU price should be sufficiently high to incentivize the use of compliant fuels and therefore should be set at a level that would close the price-gap between conventional and zero or near-zero fuels, technologies and energy sources. Several delegations expressed the view that the methodology for setting the RU price should be developed in guidelines, but that overarching principles should be included in the legal text.

49 Several delegations expressed concerns over the possible establishment of a unit trading scheme which would exacerbate existing inequalities between countries, in particular countries served by fewer and older ships which would have less possibilities to benefit of possible overcompliance trading mechanisms. Instead, these delegations favored developing a surcharge mechanism for under-compliant ships or reward system as proposed in documents ISWG-GHG 17/2/5 (Bahamas et al.) and ISWG-GHG 17/2/13 (Fiji et al.), which, in their view, would disincentivize non-compliance in a more equitable manner.

50 Several delegations expressed the view that a surcharge would excessively penalize under-compliant ships and add unnecessary complexity, compared to the flexibility mechanisms.

51 Several delegations noted that GFI alternative compliance approaches could not be separated from the economic element and would have to be discussed and agreed upon as a package.

52 Some delegations pointed out that the current text in this section mixed compliance approaches with registry functions, and therefore suggested that some provisions would be better addressed in guidelines instead of regulations.

53 The Group, having noted the remaining diverging views on the issue, agreed to keep all options in the draft legal text at this stage for further consideration at the next session.

Basic functionalities of the GFI registry

54 The Group noted that the draft legal text contained two main options for the regulation on the GFI registry, including a 'no GFI registry' option in combination with a surcharge fee for non-compliance. The Group noted discussing the key elements to establish and operationalize, in a timely manner, the GFI Registry, would not prejudge the final content of the measures. The Group also noted document MEPC 83/7 (Secretariat) providing information on the possible resource implications of the establishment of an IMO GFI registry.

55 Several delegations emphasized that regulations on the GFI Registry should primarily address the establishment and management issues of the GFI Registry, as well as its main roles and functions in facilitating the GFI implementation, therefore core principles should be briefly described in the legal text, while detailed implementation issues should be left to the development of supporting guidelines.

56 Several delegations suggested that the legal text should include the establishment of the Registry, the description of basic information that should be maintained by the Registry, including attained GFI, compliance surpluses and deficits for each reporting period, transaction of units, amount of Surplus Units cancelled, consumption of zero- and near-zero emission fuels, information related to compliance pools, information to be transmitted between ships (or companies), the Administration and the Registry, clarification that the company should open an account in the Registry and pay for administration fees and SU handling fees, verified data transmitted to the Registry, and confirmation by the Registry that a ship has achieved zero final compliance balance.

57 Regarding access to the GFI Registry, several delegations highlighted that one account should be created in the GFI Registry for each ship to which the new provisions apply and that access to GFI Registry data should be provided to the flag Administration and to port State control officers for effective enforcement purposes.

58 Several delegations, in referring in particular to document MEPC 83/7/25, expressed the view that the GFI Registry should not handle financial transactions and that the service fees and any regulatory charges should be calculated separately. More specifically, the delegation of Canada clarified that payments for the purchase of surplus units would go from company to company through banking system, rather than through the GFI Registry. Service fees designed to cover the administrative cost to the Secretariat should be charged at the time that the service is performed. The unit surcharge concept or “handling fee” would be charged at the time the unit is used or transferred, or may even be provided in kind to the Secretariat, for subsequent re-sale to other ships at a profit.

59 Several delegations, in noting that there were close interlinkages between discussions on the IMO GFI Registry and on the data quality and integrity of the IMO Data Collection System, invited interested delegations to join on a voluntary basis the study that would be conducted by the World Maritime University on this matter, the results of which would be submitted to MEPC 84.

60 Several delegations, in referring in particular to document ISWG-GHG 18/2/18 (Indonesia et al.), stressed the importance of cyber security, transparency and accurate data collection. In this regard, several delegations proposed that the key principles of integrity, interoperability and integration should guide the design and development of the GFI Registry, and recommended that the Organization should develop pilot programs to develop and refine the GFI Registry, as well as test its functionality well in advance of the full implementation of the IMO Net-Zero Framework.

61 Several delegations opposed the further development of a “Sustainable Shipping Fund contribution” or “handling fee” on SU transfer, as proposed by documents ISWG-GHG 18/2/10 (India), ISWG-GHG 18/2/11 (China et al.) and ISWG-GHG 18/2/12 (China et al.), since this would effectively consist in taxing SUs, which were designed to be a reward for over-compliance, thereby dis-incentivizing first movers using cleaner fuels, technologies and energy sources, and going against the objectives of the 2023 GHG Strategy.

62 Several delegations, in supporting the development of a GHG Surcharge Fee for non-compliance with the GFI limit rather than a flexibility compliance mechanism, expressed the view that the development of a GFI Registry was not needed.

63 Following consideration, the Group agreed that it was premature to conclude the discussion on the GFI registry and this should be further considered in the broader discussions on the IMO net-zero framework. Notwithstanding, the Group noted some consolidated key elements developed by the Chair, which could be used as the basis for a possible concise regulation on the GFI Registry.

Uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources

64 Regarding the regulation on the uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZ), the Group noted that no new amendments had been submitted at this session, but that document MEPC 83/7/12 (Brazil and China) proposed a definition for ZNZ to be included in the relevant instruments. The Group also noted in relation to this regulation document MEPC 83/7/4 (OCIMF et al.) providing considerations on the production, distribution and bunkering of future marine fuels, as well as document MEPC 83/7/22 (Pacific Environment) providing information on cost-effective pathways to reach net-zero by 2050 including a fuel transition outlook and policy implications.

65 The Group agreed on the text of this regulation in general, with the understanding that the definition of ZNZs should be further considered in regulation 2 and thereto inserted a placeholder in the draft legal text.

Synergies with existing measures

66 The Group noted that the draft legal text contained a placeholder for text to be developed on “Synergies with existing measures”. In this context, the Group also noted that document MEPC 83/7/16 (Brazil) proposed the so-called Energy Consumption Index (ECI) as a validation tool to assess the accuracy and reliability of fuel consumption data while further noting that this proposal may be more relevant for discussions under regulation 27 on the IMO DCS, appendix V on information to be included in the bunker delivery note, or in relation to the GFI calculation guidelines.

67 The Group agreed to park this regulation for now, as further clarity on the measures to be developed under chapter 5 was needed before identifying their link with existing energy efficiency measures.

Economic mechanism

68 The Group noted that the draft legal text contained various options for the regulations on the “economic mechanism to incentivize the transition to net-zero” and on the “maritime GHG emissions pricing system”, and that various new amendments on the economic mechanism¹ had been submitted, namely in documents ISWG-GHG 18/2/5 (Austria et al.), ISWG-GHG 18/2/9 (Republic of Korea), ISWG-GHG 18/2/10 (India), ISWG-GHG 18/2/11 (China et al.) and MEPC 83/7/18 (Malaysia and InterManager). The Group also noted that various other documents provided additional information and views on the economic mechanism and on possible guidelines to be developed, but no concrete amendments on the economic mechanism, namely documents ISWG-GHG 18/2/3 (Republic of Korea), ISWG-GHG 18/2/7 (ICS), ISWG-GHG 18/2/12 (China et al.), ISWG-GHG 18/2/13 (China), ISWG-GHG 18/2/15 (IMarEST), MEPC 83/7/5 (Bahamas et al.), MEPC 83/7/7 (Bahamas et al.), MEPC 83/7/26 (Singapore), MEPC 83/7/30 (Angola et al.) and MEPC 83/INF.32 (Angola et al.).

69 In the ensuing discussion where a large number of delegations took the floor to express their preferred way forward, all delegations that spoke expressed support for the further development of an economic element in the IMO Net-Zero Framework, but the Group expressed divergent views on which GHG pricing approach to follow.

70 Several delegations expressed preference for the development of a simple levy mechanism, as in their view, this mechanism would stimulate energy efficiency, bridge the price gap between conventional and cleaner fuels, and would provide a predictable revenue stream to support a just and equitable transition for international shipping, simple to administer, and would have the lowest overall costs to achieve the goals in the Strategy according to the comprehensive impact assessment of the basket of candidate mid-term measures. These delegations supported various levels of levy quantum, ranging from USD 18.75 to USD 150 per tonne of CO₂eq. Some of these delegations stressed that the main goal would not be to raise revenue, but by setting the quantum at an appropriate level its impacts would be kept minimal while effectively pricing all GHG emissions. In this context, several delegations further expressed the view that from a legal point of view, it was possible to adopt a GHG levy or a contribution within MARPOL Annex VI, without needing a separate Convention.

71 Several other delegations opposed the further development of a flat levy approach, as in their view, this approach would effectively be a tax on distance, would excessively penalize developing countries, including SIDS and LDCs, would undermine food security, would restrict global trade, would require the development of a new Convention as it could not be accommodated in MARPOL Annex VI which is a technical instrument, should not be used as a substitute for the financial obligations of developed countries under the international climate change regime, would not be needed to achieve the GHG emission reductions in the Strategy, and expressed preference for the further development of the IMO net-zero framework using the flexibility compliance mechanism of the GFI as the economic element.

72 Several delegations emphasized that the flexibility compliance mechanism would enable the collection of significant amounts of revenue from payments for RUs from under-compliant ships which could be used to reward ships using alternative fuels, technologies or energy sources while also leaving sufficient revenue to support other purposes in line with the Strategy. These delegations stressed in particular that IMSF&F was the most concrete, mature and simple economic element proposal aligned with the 2023 IMO GHG Strategy, with the least impact on global trade.

73 Several other delegations expressed the view that the flexibility compliance mechanism was not a GHG pricing system and would not raise sufficient and stable revenue to enable a just and equitable transition, to incentivize the energy transition of shipping, including the early uptake of ZNZ fuels, and stressed that irrespective of the measure adopted, shipping decarbonization would generate extra costs, not specifically the levy as a policy instrument.

74 The Group noted that all delegations that spoke expressed their willingness to work together to find a possible compromise solution. Several delegations expressed their appreciation to those delegations which had submitted possible bridging proposals, such as in documents ISWG-GHG 18/2/10 (India) and MEPC 83/7/26 (Singapore), trying to bring the Group closer. In noting the interest for the concepts set out in their document, the delegation of Singapore offered to circulate, for information, to the Group a more detailed description of their proposals as further detailed in the form of draft amendments to MARPOL Annex VI, as set out in annex 3 to this document.

75 Following consideration, the Group agreed that all proposals for an economic element would remain on the table, and further noting the possible bridging options, the Group agreed to continue to work towards defining amendments to MARPOL Annex VI on an economic element delivering on the 2023 IMO GHG Strategy which could be approved by consensus during MEPC 83.

Organizational and operational aspects of the IMO Net-Zero Fund

76 The Group noted that various submissions proposing new amendments with regard to the fund and disbursement provisions had been submitted to this session, namely documents ISWG-GHG 18/2/5 (Austria et al.), ISWG-GHG 18/2/9 (Republic of Korea) and ISWG-GHG 18/2/11 (China et al), and also noted that that other submitted documents provided more general views and considerations with respect to an IMO net-zero fund, namely documents ISWG-GHG 18/2/4 (Austria et al.), ISWG-GHG 18/2/16 (EDF), ISWG-GHG 18/2/20 (Belize et al.) and MEPC 83/7 (Secretariat).

77 Without wanting to prejudge the outcome of the further discussions on the economic element, the Group agreed to consider operational aspects of the Fund with a view to further consolidating the text by identifying which minimum provisions should remain in MARPOL

Annex VI regulations and what could be further developed in guidelines, regardless of what kind of economic instrument the revenue originates from.

78 In the ensuing discussion, several delegations stressed that the governing provisions of the Fund should be carefully considered in order to identify an adequate balance of elements which should be included in the legal text and what could be developed at a later stage in supporting instruments. In this regard, many delegations stressed that whilst a governing board could oversee the daily management of the fund, the Committee should determine and decide on the fund's governing provisions.

79 In considering the possible composition of the board, several delegations stressed that it should ensure adequate and equitable representation of developing countries, in particular SIDS and LDCs. In this context reference was made to document MEPC 77/7/31 (Türkiye). Several delegations highlighted that more clarity would be needed on the selection/election process of board members. Some delegations indicated that the composition of the Steering Committee of the two comprehensive impact assessments was the most adequate way of proceeding in order to ensure the IMO parameters of representation.

80 Several delegations stressed that, depending on the magnitude of the revenue raised and how it would be managed, MEPC might not have sufficient time to conduct the full oversight of the board. In this regard, also the role of the Secretariat would need to be further considered. Several delegations, in referring in particular to document ISWG-GHG 18/2/16 (EDF), invited the Organization to avoid replicating other existing funds structures and instead to consider using existing funds to complement the IMO Net-Zero Fund.

81 Several delegations stressed that the Fund should be audited by independent external auditors and that the Secretary-General should initiate preparatory work to enable the establishment and operation of the Fund as soon as possible.

82 The Group noted an intervention by the Head, Finance and Budget Services of the Administrative Division of the Secretariat providing relevant background information on the possible establishment of the Fund under the IMO Financial Regulations and Financial Rules. The Secretariat clarified that, under the IMO Financial Regulations, the Secretary-General could undertake the necessary steps to establish a new fund upon request from MEPC to achieve the identified purposes. For a Fund established in that way, all relevant Financial Regulations and Financial Rules would apply, including, inter alia, those relating to internal oversight, external audit, and procurement arrangements. A simple reference to the Fund in MARPOL Annex VI would be sufficient to establish the fund, with detailed guidance to be developed in 'Terms of Reference' or governing provisions to be agreed by MEPC. While the establishment and general management principles of the Fund would be possible under the existing Financial Regulations, it is possible that the more detailed Financial Rules would require revision to meet the requirements of the new Fund – this would require further analysis once the overall mechanism has been finalized. The Secretariat further clarified that once established, the Fund could be self-funded – that is, with operating and administrative costs to be borne by the resources of the Fund itself, rather than by the IMO regular budget. However, some initial ("transitional") costs may be expected before any revenue flows in. Therefore when the IMO Net-Zero Framework is approved, the Secretariat would review the implications and advise on possible options to cover these transitional costs.

83 Following consideration, the Group noted considerable convergence towards the name "IMO Net-Zero Fund", but several delegations preferred the name "IMO GHG Strategy Implementation Fund". All delegations that spoke expressed support for the establishment of a 'board' to advise on the day-to-day operations of the Fund, and that board should be geographically and gender balanced, adequately representing developing countries, in

particular SIDS and LDCs. The Group also converged on that the board should report to MEPC, which would have the final oversight of the Fund. The Group further converged on that MEPC should decide on the governing provisions of the Fund, but that the more detailed provisions would not need to be laid down in the legal text. The Group also expressed a preference that the full functioning of the Fund, including the Secretariat support, should have no extra cost to the Organization.

84 The delegation of the United Arab Emirates expressed the view that the establishment of a governing board for the Fund, whether permanently or temporary, should be established within the remit and the function of the Assembly as stated in Article 15 (c) of IMO Convention that “To establish any temporary or, upon recommendation of the Council, permanent subsidiary bodies it may consider to be necessary”.

85 The Group noted the information provided in document MEPC 83/7 and invited the Secretariat to provide further analysis and information to a future session of the Committee on the possible resource implications of the establishment of an IMO net-zero GFI registry and an IMO Net-Zero Fund, including how to cover transitional costs, Secretariat support and expertise needs in the establishment phase.

86 Following consideration, the Group agreed that all proposals in the draft legal text for a Fund would remain on the table for further consideration at the next session. The Group noted the Chair’s efforts to consolidate the different proposals for a fund into a single regulation reflecting his assessment of the Group’s discussions.

87 In having noted the Group’s discussions on draft amendments to MARPOL Annex VI on the fund, several delegations expressed the view that depending on the nature of the economic measure, MARPOL Annex VI might not be the suitable vehicle for regulations related to the fund. These delegations further expressed the view that MARPOL Annex VI, being a technical mandatory instrument would fit a technical element such as the IMSF&F. However, when it comes to an economic element, MARPOL provisions were not designed for the purpose of a levy. Therefore, any form of a levy, which would not be related to the technical measure, would entail the development of an independent convention, rather than making amendment to MARPOL.

Disbursement of revenue

88 The Group noted that one submission proposing new amendments with regard to the disbursement of revenue regulation had been submitted to this session, namely document ISWG-GHG 18/2/5 (Austria et al.), and also noted that other submitted documents provided more general information in that respect, namely documents ISWG-GHG 18/2/6 (Belize et al.), ISWG-GHG 18/2/9 (Republic of Korea), ISWG-GHG 18/2/12 (China et al.), ISWG-GHG 18/2/13 (China), ISWG-GHG 18/2/15 (IMarEST), ISWG-GHG 18/2/21 (CSC) and MEPC 83/7/4 (OCIMF et al.).

Necessary provisions in the legal text

89 The Chair invited delegations to indicate whether the text in MARPOL Annex VI on revenue disbursement should remain relatively short allowing the Committee and the future fund governing board to further develop details on disbursement.

90 In the ensuing discussion, several delegations expressed their preference for relatively short provisions to be included in MARPOL Annex VI with references to guidelines to be developed in order to provide sufficient operational flexibility to the Fund and minimize administrative burden. In this regard, several delegations stressed the importance of providing

clear governing principles and objectives in the legal text, focusing on the role of the Committee, transparency, ethical use of the funds and accountability, and specifying in dedicated guidelines how revenues should be used. Several delegations expressed the view that while the provisions in MARPOL Annex VI could be kept relatively short, the Committee should keep full control over deciding on the disbursement categories, while the fund would execute the tasks attributed to it by the Committee in this regard.

91 Several other delegations expressed preference for setting specific and detailed provisions in the legal text to provide certainty on the disbursement categories, stressing the importance of establishing an adequate revenue disbursement mechanism to ensure that the IMO Net-Zero Framework achieves the goals of the 2023 IMO GHG Strategy, and requested the organization of a dedicated workshop to further develop these provisions.

92 Several other delegations, while agreeing in principle on the need for relatively short legal text on this issue, stated it was too premature to confirm that MARPOL Annex VI was the adequate legal instrument to develop operational provisions on the fund and disbursement of revenue, stressing the discrepancies between the technical nature of the Convention and the financial character of the new regulations, and underlining that this issue might only be clarified when the content of the IMO Net-Zero Framework had been finalized.

Use of funds for rewards and to support the goal of chapter 5

93 Delegations were invited to indicate whether revenue should be used to reward the use of zero and near-zero GHG emission technologies, fuels and/or energy sources and to support the goal of the new chapter 5 on the "IMO net-zero Framework".

94 While all delegations that spoke on this issue agreed on the principle that revenue should be used to reward over-compliant ships using zero and near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) and other purposes, divergent views were expressed regarding which ZNZs fuels and/or technologies should be eligible for reward claims, therefore recalling the close link between the disbursement/reward mechanism and the definition of ZNZs, and which additional disbursement categories should be identified.

95 Regarding which ZNZs should be eligible for rewards, several delegation proposed to limit the reward claim eligibility to fuels that should be part of a net-zero fuel mix in 2050, in order to provide a strong incentive for the development and deployment of net-zero solutions, and therefore onboard carbon capture and storage (OCCS) should not receive financial support from the Fund. Several other delegations called for the adoption of a technology neutral approach, rewarding all technologies with a given GHG emission reduction potential, including OCCS. Some delegations proposed adopting a phase-out approach, whereby the need for rewarding ZNZ would apply only in the first years of implementation of the measures.

96 Several delegations stressed that all potential areas of disbursement should be considered on an equal footing and recalled that the disbursement of revenue should not be limited to reward ZNZs, but should also contribute to increasing the availability and accessibility of alternative solutions on a global scale to ensure no one is left behind. Regarding other disbursement categories, a large range of proposals were expressed, with reference made to categories identified in sections 4 and 5 of the 2023 IMO GHG Strategy, in particular the need to allocate revenues to research, development and deployment (RD&D) programs and in-sector projects supporting the energy transition within the boundaries of the energy system of international shipping, support the maritime force transition through capacity building and technology transfer, and to mitigate potential disproportionate negative impacts, in the context of the implementation of the measures, paying particular attention to the needs of developing countries, in particular SIDS and LDCs.

97 Several delegations in referring to the "polluter payer" principle and emphasizing how ship emissions had contributed to damage caused by climate change also stressed that revenue disbursement should effectively support and ensure a just and equitable transition, thus supporting States which are not at the source of the global climate change crisis but being the most affected, and therefore called for the allocation of revenue to broader climate adaptation and mitigations projects, including food security, as proposed in document ISWG-GHG 18/2/5. In that respect, several other delegations stressed that this Organization was not the appropriate forum to discuss and allocate revenue for broader climate issues, as those were addressed in other dedicated UN forums, such as UNFCCC, and recalled that the shipping sector was responsible for less than 3% of global GHG emissions while around 80% of the world's goods are transported by sea, emphasizing the responsibility of the shipping sector with its crucial role in the global trade supply chain, in particular for the supply of agricultural goods.

Administrative costs recovery

98 Delegations were invited to indicate whether costs for the administrative operations and any Secretariat support shall be covered/paid by the received revenue.

99 On this point, all delegations that spoke agreed that the administrative and related costs of the fund should be covered by collected revenues, and therefore that the fund should be operated on a self-funded basis. Some delegations mentioned in this regard the possibility of including dedicated administrative fees in the regulation and others stressed that operational costs should be kept to a minimum.

Cooperation of the fund with other existing entities

100 Delegations were invited to indicate whether the IMO Net-Zero Fund may cooperate with other existing entities on the disbursement of revenue, during the initial set-up phase of the Fund as well as in the future implementation or revenue disbursement.

101 On this point, several delegations expressed support towards potential cooperation with established entities to leverage existing expertise, reduce administrative burden and timescales for revenue distribution reaching projects in Member States, and therefore calling for a hybrid approach mobilizing well-established and functioning structures to support the management and disbursement of revenues and start the fund's operation as soon as possible. Several other delegations expressed preference for a cooperation restricted to exchanges of best practices during the initial set-up phase of the fund and a limited supporting role in the longer term, and stressed the need to maintain revenue allocation decisions, oversight and control within the remit of the Organization. Several other delegations reserved their positions based on further in-depth discussion on the potential scope of cooperation, including the legal implications and articulation with existing procedure within the Organization, particularly Article 25(a) of the IMO Convention.

Way forward on this issue

102 Following consideration, the Group converged, in general, that the regulations in MARPOL Annex VI on revenue disbursement should be kept as concise as possible, with further details on operational aspects provided in dedicated guidelines; that the control and use of revenue should be kept under the responsibilities of the Organization and be aligned with the goals of the 2023 IMO GHG Strategy, notably those referred to in the proposed goal of chapter 5; that the collected funds should cover administrative and related costs of the Fund; and that possible cooperation with existing entities should be further discussed and explored,

as the Organization may benefit from liaising with other UN bodies which have more experience in disbursing revenue.

103 Following consideration, the Group agreed that all proposals in the draft legal text on disbursement revenue would remain on the table for further consideration at the next session. The Group noted the Chair's efforts to consolidate the different proposals for revenue into a single regulation reflecting his assessment of the Group's discussions (also see paragraph 124).

Review provision

104 Regarding the review provisions for chapter 5, the Group noted that concrete proposals for text had been provided in documents ISWG-GHG 18/2/5 (Austria et al.) and ISWG-GHG 18/2/11 (China et al.), and that both submissions referred to the need to review both the effectiveness of the chapter in achieving its goal, but also to address the need to review the rates of contributions and rewards under an economic instrument.

105 The Group noted that the review regulation was important for the overall cohesion of the entire chapter 5, but that setting a general review clause for the whole chapter at a date too close from the entry into force of the amendments had its limitations, such as insufficient feedback to effectively improve the overall regulatory framework. The Group agreed to consider this regulation at a later stage when there would be more convergence on the various key issues and noted that the Chair had proposed some elements that could potentially be considered as part of the review consequential from the Group's discussions on some other elements.

Further work on food security

106 The Group recalled that MEPC 82 had agreed to carry out further work assessing the potential impacts of the possible policy scenarios assessed under the comprehensive impact assessment (CIA) of the basket of candidate mid-term measures on food security, in particular on essential food commodities and critical agricultural input, as one of the factors influencing food security, and notably in net food importing developing countries (MEPC 82/17, paragraph 7.58).

107 The Group noted that in accordance with the terms of reference agreed by MEPC 82, document MEPC 83/7/20 (Secretariat) contained the report on the review of relevant literature assessing the potential impacts of increased maritime transport costs resulting from GHG reduction measures in international shipping on food security carried out by WMU, a summary of the relevant liaison work carried out by the Secretariat with relevant UN Agencies and international organizations, as well as a summary of relevant information abstracted from relevant publications, referred to by a number of UN agencies and international organizations.

108 The Group also noted that the Secretariat had organized an Expert Workshop on the further development of the basket of candidate measures to facilitate the understanding of the possible impacts of the basket of candidate measures on food security (EW-GHG 6), held at IMO Headquarters on 13 February 2025, and that the report of Expert Workshop was set out in document MEPC 83/INF.34 (Secretariat).

109 The Group expressed its appreciation to the Secretariat for carrying out the further work on food assessment in the limited time available, and recalled that in accordance with the terms of reference no additional/specific modelling of possible impacts on food security had been carried out.

110 In considering document MEPC 83/7/20, several delegations recalled that in accordance with MEPC.1/Circ.885/Rev.1 possible impacts of a candidate measure on food security, as one of the impact criteria, should be assessed as part of the comprehensive impact assessment, emphasized that access to food was a basic human right, and that an increase in food prices resulting from IMO's GHG reduction measures would risk exacerbating food insecurity for millions of people, in developing countries, in particular in LDCs, SIDS, net food importing developing countries, as well as those countries more vulnerable to price increases due to imports.

111 The delegation of Egypt, supported by several other delegations, underlined the critical role of international shipping in global agrifood systems, essential food commodities and critical agricultural input, in particularly for net food importing developing countries. These delegations further stated that the decarbonization of international shipping would have far-reaching implications on global food security, through the complexity and intensity of the negative impacts of the measures, notably for most African countries (of which already 43 were net food importing developing countries), as well as LDCs, countries in South and Central America, and Asian, as well as SIDS, which were mostly highly dependent on the imports for stable food commodities via international shipping.

112 The delegation of Egypt proposed a way forward to address impacts on food security in line with the Strategy and MEPC.1/Circ.885/Rev.1, while maintaining the stated timelines set out in the Strategy, as follow:

- .1 Endorse before adopting the measure(s) that the negative impacts on states in terms of food security are to be addressed (e.g. avoided, remedied, mitigated), as appropriate;
- .2 Following the agreement on addressing food security negative impacts, and in the period between the adoption of the measure and its entry into force, a detailed qualitative and quantitative assessment of the negative impacts of the adopted measure should be conducted taking into consideration analysing the extent (quantifying) of the impacts on food security; and
- .3 Take into consideration the essential need to keep the measure(s) implementation and its impacts on food security under continuous review due to the interacting nature of the measures with this purely humanitarian issue in nature, so that any necessary adjustments may be made, when needed.

113 As requested, the statement by the delegation of Egypt is set out in annex 4.

114 Several delegations highlighted that while shipping decarbonization was likely to have an impact on maritime transport costs of essential food commodities, several other factors were impacting the determination of food prices more substantially, e.g. climate change, geopolitical tensions, currency exchange, etc.

115 Several delegations emphasized the limited academic literature specifically addressing the direct link and the potential impacts of an increase of maritime transport costs, in particular from GHG emissions mitigation measures, on food security, and further stressed that possible impacts on critical agricultural input had not been sufficiently covered in the study.

116 Several delegations expressed concerns regarding the disproportionate focus, in their view, put in the literature review on the risks associated to biofuel production on food security. Some delegations expressed the view that biofuels played an essential role in the energy transition, that evidence had shown that the production of biofuels had, in certain

circumstances, a positive effect on food production, food prices and the sustainability of the agricultural sector, and that more research was needed to evaluate the impacts of biofuels on food security. Some other delegations expressed concerns that the production of first-generation biofuels would compete with land use for food production, thus undermining food security.

117 Some delegations expressed the view that the potential availability and competing uses for ammonia as a marine fuel and as a critical agricultural input, namely as fertilizer, as highlighted by FAO during GHG-EW 6, had not been properly considered in the literature review.

118 Several delegations, in recalling the findings of a study by the University of São Paulo, Brazil, presented during EW-GHG 6, expressed concerns that a flat GHG levy would increase global food insecurity. Several other delegations, in recalling the findings of a study on assessing the impact of the IMO Mid-Term GHG mitigation measures on food security in Caribbean nations conducted by the University of the West Indies et al., also presented during EW-GHG 6, expressed the view that potential revenues from a GHG levy might be used to implement food security-related measures such as subsidizing food imports and strengthening local food systems, in particular in most vulnerable countries such as LDCs and SIDS.

119 In considering how the further work on food security could be reflected in the legal framework, several delegations, mindful of the current knowledge gaps and the importance to avoid undue delays to the adoption of the IMO Net-Zero Framework, suggested to monitor the impact of measures on food security during the regulatory review process. Some delegations suggested to incorporate food security-related provisions in the fuel sustainability certification provisions and in the potential revenue disbursement framework, e.g. through targeted capacity-building or resilience programs. Some delegations suggested to introduce an exemption for essential food commodities in the IMO Net-Zero Framework, especially for countries highly dependent on shipping for food supply.

120 The delegation of Malta, supported by some others, stressed the need to take into account all impacts on States, including small island States dependent on shipping, without attributing to general categorizations as far as revenues disbursement and food security issues are concerned.

121 Following consideration, the Group agreed that food security remained an important issue to be addressed in the further development of the IMO Net-Zero Framework, without delaying the adoption of the amendments to MARPOL Annex VI.

122 The Group recommended that the Committee:

- .1 thank the Secretariat, WMU, and other involved consultants for carrying out the further work on food security; further extends its thanks to the Secretariat, FAO, relevant UN (regional) agencies and international organizations involved in GHG-EW 6, organized in accordance with the terms of reference agreed by MEPC 82;
- .2 recognize the outcomes of the further work on food security, in particular on essential food commodities and critical agricultural input, notably in net-food importing developing countries, and agrees that the impacts of the measures on food security were to be taken into account and addressed, as appropriate, in the further development of the IMO net-zero framework, in accordance with the *Revised procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885/Rev.1); and

- .3 agree that in the period between the adoption of the IMO Net-Zero Framework and its entry into force, further assessment (qualitative and quantitative, as appropriate) of the potential impacts of an increase in maritime transport costs on food security resulting from the adopted framework should be conducted; and keep the potential impacts on food security under continuous review so that any necessary adjustments may be made, as appropriate, in accordance with the 2023 IMO GHG Strategy.

Definitions, survey, certification and data collection (amendments to chapters 1 to 4 of MARPOL Annex VI)

123 With regard to definitions in chapter 1, the Group noted that document ISWG-GHG 18/2/17 (Brazil et al.) proposed some new definitions with regard to the certification framework, document ISWG-GHG 18/2/11 (China et al.) proposed a new definition for the Reference Unit Price, document ISWG-GHG 18/2/14 (China) proposed a definition for semi-submersible vessel. The Group also noted that the draft legal text contained a placeholder for a definition on zero- and near-zero GHG emission fuels and technologies and the FLL.

124 The Group agreed to consider the regulation on definitions at a later stage, with the understanding that most of the proposed definitions related to broader discussions which were not concluded yet.

125 With regard to draft amendments to chapters 2 to 4 of MARPOL Annex VI, the Group noted that a few new proposals for amendments had been submitted, namely in document MEPC 83/7/19 (Japan) on details of low flashpoint fuel or gas fuel delivered, document ISWG-GHG 18/2/17 (Brazil et al.) on the SEEMP and the data collection system in relation to the proposed amendments on the certification framework, and that document MEPC 83/7/15 (IACS) provided comments on the necessary verification of data and issuance of statements of compliance.

126 With regard to the proposed amendments in document MEPC 83/7/19, several delegations, in seeing merit in the proposed draft amendments to appendix V on the Bunker Delivery Note, emphasized the need to ensure that the additional information to be provided is consistent with certified data in the Fuel Lifecycle Label. Some delegations highlighted the intrinsic link between the BDN provisions and the fuel certification framework.

127 The Group agreed to consider the proposed and consequential amendments to chapters 2 to 4 at its next session, with the understanding that these matters also related to broader issues to be resolved.

Further development of new and existing guidelines and appendixes to MARPOL Annex VI

128 The Group noted that the Secretariat had prepared a list of proposed new Guidelines and existing Guidelines to be amended to support the implementation of the IMO net-zero framework, as well as a list of proposed new appendixes to MARPOL Annex VI and those that require amendments.

129 In this context, the Group also noted document MEPC 83/7/21 (CLIA and WSC) on the complementary role of regulations and guidelines.

130 Following consideration, the Group agreed to attach the list of guidelines to be amended/developed to this report, as set out in annex 2, with a view to further guiding the

discussions. The Group also invited the Secretariat to identify, after MEPC 83, which guidelines would need to be ready for adoption by MEPC ES/2. The Group further agreed to insert the list of annexes to MARPOL Annex VI to be amended/developed into the draft legal framework.

Way forward on the development of the IMO net-zero framework

131 Following consideration of all sections of the draft IMO net-zero framework, during which all delegations that had taken the floor had identified their willingness to continue to explore possible ways to converge, the Chair prepared, in consultation with the Secretariat, an updated version of the possible draft amendments to MARPOL Annex VI, providing more consolidated text for sections where there was convergence within the Group as well as new consolidated options for some regulations reflecting the Chair's views on tentative bridging proposals and without deleting any of the other options in the text.

132 While the Group welcomed, in general, the efforts made by the Chair in providing new consolidated text, several delegations were of the view that some of the consolidated text or the new options by the Chair did not accurately capture all views expressed.

133 In particular with regards the Chair's new consolidated option for the regulation on 'Disbursement of revenue', several delegations highlighted that the new option did not adequately reflect proposals on the disbursement of revenue to support a just and equitable transition, and therefore requested the deletion of the proposed text provided by the Chair.

134 Several other delegations also expressed concerns about some of the newly consolidated text and the Chair's consolidated options, however, in recognizing that 'nothing would be agreed until everything had been agreed' and that all other options were still on the table, these delegations were of the view that the text provided a good basis for further work.

135 Following consideration, the Group agreed to use the text set out in annex 1 to this document as the basis for its further work, noting that it should be considered as 'work in progress' to support further discussions on the draft IMO net-zero framework, and with the understanding that it would not prejudice any further changes to its contents.

136 The Group also requested the Secretariat to carry out an editorial review of the whole text to check on consistency and adequate use of terminology throughout.

137 As requested, the statement by the delegation of Tuvalu is set out in annex 4 to this document.

Further consideration of the development of the IMO Life Cycle GHG assessment (LCA) framework

138 The Group recalled that MEPC 81, having adopted the *2024 Guidelines on life cycle GHG intensity of marine fuels* (2024 LCA Guidelines) (resolution MEPC.391(81)) had agreed, inter alia, to:

- .1 the establishment of a GESAMP Working Group on Life Cycle GHG Intensity of Marine Fuels (GESAMP-LCA WG) to review scientific and technical issues, on the basis of terms of reference set out in annex 2 to document MEPC 81/WP.8; and
- .2 the establishment of two correspondence groups dealing with LCA matters, to report to MEPC 83, as follows:

- .1 a Correspondence Group on measurement and verification of non-CO₂ GHG emissions and onboard carbon capture, under the coordination of Norway; and
- .2 a Correspondence Group on the Further Development of the LCA Framework, under the coordination of the United States.

139 Under this agenda item, the Group had for its consideration document ISWG-GHG 18/3 (RINA), outlining metrics and indicators tailored to the operationalization of the Organization's sustainability criteria with a view to supporting the 2024 LCA Guidelines which could result in a more robust and inclusive approach to fuel certification; highlighting the importance of collaborating with stakeholders in refining metrics and indicators; stressing that pilot testing across various fuel pathways should be conducted; emphasizing the need for continuous reviews of the sustainability criteria metrics and indicators; and suggesting a phased implementation strategy for the development of fuel sustainability metrics and indicators.

140 The Group also had for its consideration 17 documents related to LCA matters submitted to MEPC 83, as follows:

- .1 MEPC 83/7/1 (Secretariat), providing the report of the first meeting of the GESAMP Working Group on Life Cycle GHG Intensity of Marine Fuels (GESAMP-LCA WG);
- .2 MEPC 83/7/3 (Brazil), presenting recent findings from the International Energy Agency (IEA) and from the G20 Energy Transition Working Group Carbon Accounting Workshop on Sustainable Biofuels, including considerations on indirect land use change (ILUC); informing that these recent findings offer recommendations for addressing ILUC in a risk-based approach in the carbon accounting of sustainable biofuels; and proposing that this document along with document ISWG-GHG 16/3/6 (Angola et al.) be forwarded to GESAMP-LCA WG, to be used as a basis in refining the 2024 LCA Guidelines;
- .3 MEPC 83/7/9 (United States), providing the report of the Correspondence Group on Further Development of the LCA Framework established by MEPC 81;
- .4 MEPC 83/7/10 (Malaysia et al.), evaluating the well-to-tank (WtT) and tank-to-wake (TtW) default emission factor and GHG intensity calculation for methanol fuel pathway "MeOH_fCO₂_rH₂_MS_gm" referencing appendix 1 of the 2024 LCA Guidelines; and seeking consensus that pre-combustion captured CO₂ from point source fossil fuels be recognized as carbon neutral feedstock, and WtT and TtW default emission factor for methanol fuel pathway, "MeOH_fCO₂_rH₂_MS_gm" accounts for e_{CCU} parameters, and be calculated with SF_{CCU} value of "1";
- .5 MEPC 83/7/11 (Brazil), presenting suggestions for further refinement of the 2024 LCA Guidelines by complementing the methodology for calculating well-to-wake (WtW) GHG emissions; highlighting that the biofuels' pathway codes in appendix 1 are inadequate and lack precision; suggesting that appendix 2 be disaggregated to allow the use of regional default values for all fuel pathways leading to a more precise carbon footprint; stressing that

the 2024 LCA Guidelines are vital for defining zero or near-zero-emission (ZNZ) fuels with classification based on emission reduction levels, agnostic feedstocks and a robust and internationally recognized certification scheme; and proposing that GESAMP-LCA WG refine the 2024 LCA Guidelines to better align with the 2023 IMO GHG Strategy, improving the emission calculation and updating it to include diverse fuel pathway codes;

- .6 MEPC 83/7/13 (Liberia and SGMF), presenting proposals for GHG default emission factors, based on the conservative results of well-to-wake (WtW) LCA studies conducted according to ISO 14040:2006 and ISO 14044:2006 standards and in accordance with appendices 4 and 5 of the 2024 LCA Guidelines, for LNG and ammonia as marine fuel production pathways and technologies for advancing the work of GESAMP-LCA WG; and proposing the consideration of this document in conjunction with the proposed GHG default emission factors for ammonia and LNG set out in document MEPC 83/INF.11;
- .7 MEPC 83/7/14 (Brazil), presenting the key sources of fugitive methane emissions related to the use of LNG in the maritime sector as a mitigation strategy; describing the challenges in directly measuring these emissions at various stages of the natural gas supply chain; highlighting the need for rigorous methods to account for and mitigate fugitive emissions; proposing this document to be forwarded for consideration by GESAMP-LCA WG and requesting the accounting of fugitive methane emissions throughout the LNG value chain within the scope of the Fifth IMO GHG Study;
- .8 MEPC 83/7/17 (Brazil and IBIA), highlighting the potential role of ethanol fuel to achieve the goals of the 2023 IMO GHG Strategy; requesting GESAMP-LCA WG to revise the 2024 LCA Guidelines to comprehensively include distinct and relevant pathways for ethanol as a marine fuel; inviting ISO to consider the preparation of an ISO standard for ethanol as a marine fuel; and noting the need for the IGF Code to properly differentiate between methanol and ethanol as a marine fuel;
- .9 MEPC 83/7/23 (CSC et al.), presenting information on the current literature regarding tank-to-wake (TtW) nitrous oxide (N₂O) emissions from ammonia dual-fuel engines; compiling emission data and findings from the most up-to-date laboratory tests and modelling efforts; presenting the summarized results in g N₂O/g NH₃ units without normalization of scenario parameters across studies; and proposing these results to be forwarded to GESAMP-LCA WG for the consideration of inclusion in appendix 2 of the 2024 LCA Guidelines to enhance the robustness of GHG accounting for ammonia-fueled ships;
- .10 MEPC 83/7/27 (United States), presenting the well-to-tank (WtT) and tank-to-wake (TtW) default GHG emission factors for the United States soybean-based renewable diesel production pathway; considering multiple analysis cases with life cycle (or WtW) GHG emission factors developed; proposing the cases presented to be reviewed and adopted as default GHG emission factors of the United States soybean-based renewable diesel pathway for incorporation into the table of default GHG emission factors of the 2024 LCA Guidelines;

- .11 MEPC 83/7/28 (CSC et al.), building on document ISWG-GHG 17/3 (CSC) to complement the extensive literature review on the well-to-tank (WtT) GHG intensity of liquified natural gas (LNG) imports in the European Union; suggesting two possible approaches to use measurement-based data and measurements for LNG upstream impacts, including methane emissions, complemented with a conservative default emission factor; stressing that accurate, scientifically robust and transparent default emission factors are essential to help IMO achieve its goals and promote the energy transition of the international shipping sector; and proposing that these proposals be forwarded to GESAMP-LCA WG for the consideration of inclusion in appendix 2 of the 2024 LCA Guidelines;
- .12 MEPC 83/7/31 (United States), presenting the well-to-tank (WtT) and tank-to-wake (TtW) default GHG emission factors for the United States corn-based ethanol production pathway; considering multiple analysis cases with life cycle (or WtW) GHG emission factors developed; proposing the adoption of default GHG emission factors of the United States corn-based ethanol pathway for incorporation into the table of default GHG emission factors of the 2024 LCA Guidelines;
- .13 MEPC 83/7/32 (United States), presenting the well-to-tank (WtT) and tank-to-wake (TtW) default GHG emission factors for the United States soybean-based biodiesel production pathway; considering multiple analysis cases with life cycle (or WtW) GHG emission factors developed; proposing that the cases presented be reviewed and adopted as default GHG emission factors of the United States soybean-based biodiesel pathway for incorporation into the table of default GHG emission factors of the 2024 LCA Guidelines;
- .14 MEPC 83/INF.5 (United States), providing the comments submitted by the group members to the Correspondence Group on Further Development of the LCA Framework, established by MEPC 81, on consultation rounds 1, 2 and 3;
- .15 MEPC 83/INF.11 (Liberia and SGMF), providing the template forms for the well-to-tank (WtT) and tank-to-wake (TtW) GHG default emission factors for LNG and ammonia as marine fuels to be considered by GESAMP-LCA WG to further develop and complete the table in appendix 2 of the 2024 LCA Guidelines;
- .16 MEPC 83/INF. 12 (ISO), presenting information on the first edition of the international standard for methanol as a fuel for marine applications (ISO 6583:2024); and
- .17 MEPC 83/INF.13 (China), presenting a reference case of the development, use and operation of an onboard carbon capture system (OCCS), and the offloading of captured CO₂, demonstrating the system's feasibility for use on board ships, for discussion by the Committee and for development of the regulatory framework for OCCS.

Conduct of the discussion on this agenda item

141 The Group agreed that the most urgent issue on this agenda item was to consider the report of the first meeting of the GESAMP-LCA Working Group (MEPC 83/7/1), with a view to providing a recommended way forward to the Committee.

142 Several delegations, in stressing the importance of the matter, acknowledged the positive progress made by GESAMP-LCA WG while also noting that there was a lot of remaining work to fully operationalize the IMO LCA framework by the entry into effect of the IMO Net-Zero Framework.

143 The Group expressed its appreciation to the members of the GESAMP-LCA WG and the Secretariat for the detailed report of their first meeting, which showed positive progress in their work to address each of the items listed in their terms of reference.

Consideration of the scientific review of the LCA methodology by GESAMP-LCA WG

144 The Group considered the discussion of the GESAMP-LCA WG on the scientific review of the LCA methodology.

145 In the ensuing discussion, one delegation expressed the view that it would be premature to expand the GHGs inventory in the LCA Guidelines and that embodied emissions resulting from the production of the infrastructures related to fuels including electricity should not be considered in the IMO LCA framework at this stage. One delegation highlighted that the assessment of emissions should be fair and not biased towards certain pathways and include assessments of elements such as the use of critical of critical minerals, embodied emissions and impacts on jobs.

146 Several delegations expressed the view that the inclusion of a footnote in paragraph 3.13 of the 2024 LCA Guidelines as proposed by GESAMP-LCA WG could introduce additional complexity to the process, noting that the current method for calculating the weight of blended fuels was applicable only to the upstream section (well-to-tank) but might not be suitable for the downstream part (tank-to-wake). Some delegations also suggested that the emission factors for blend sustainable fuels be established using a mass-balance approach.

147 Regarding the consideration of representative and conservative assumptions for the assessment of default emission factors (paragraph 9.2 of the 2024 LCA Guidelines), the delegation of Brazil, while stressing the need to consider the precise emission values of sustainable fuels, suggested that the text in paragraph 6.8.13 of the annex to document MEPC 83/7/1 should be adopted as an interim guidance until further refinement could be implemented.

148 The statement by the observer from IPIECA on this issue is set out in annex 4.

149 Following consideration, the Group agreed to recommend that the Committee:

- .1 note the discussion of the GESAMP-LCA WG on the scientific review of the LCA methodology (MEPC 83/7/1, annex, paragraphs 6.4 to 6.8) and that it may provide further guidance in due course on how to conduct the scientific review of the methodology in future sessions of the GESAMP-LCA WG;
- .2 invite GESAMP-LCA WG to develop a uniform understanding of "representativeness" and "conservativeness" for the assessment of default emission factors and report to MEPC 84 accordingly;

- .3 refer documents MEPC 83/7/11 and MEPC 83/7/17 to the GESAMP-LCA WG for further consideration and advise MEPC 84 accordingly; and
- .4 note that the possible adjustments to the LCA Guidelines identified by the GESAMP-LCA WG may be considered during a future revision of the LCA Guidelines.

Scientific review of the WtT and TtW GHG default emission factors and consideration of the draft methodology for submission, scientific review and recommendation of proposed default emission factors by GESAMP-LCA WG

150 In considering the draft methodology for submission, scientific review and recommendation of proposed default emission factors by GESAMP-LCA WG, the observer from EDF noted that, given the volume of data, work and analysis required for the submission of default emission factors for all fuel pathways, GESAMP-LCA WG would benefit from the support of observer organizations, and proposed that both Member States and international organizations should be allowed to submit proposals for default emission factors.

151 In the ensuing discussion, while several delegations expressed their support for the proposal, several other delegations recommended to exercise caution and to limit submissions to Member States only at this stage, as suggested by the GESAMP-LCA WG, to ensure the quality of the data while recognizing that this might be reviewed in the future.

152 Several delegations also suggested that more detail was required on a rigorous way of assessing submitted values, which should include at minimum ensuring that the three sources were scientifically credible and robust, and stated this would help prevent, for example, the displacement of a rigorously attained lower value by a poorly obtained higher value.

153 Following consideration, the Group agreed to recommend that the Committee:

- .1 note the GESAMP-LCA WG's discussion on the scientific review of the well-to-tank (WtT) GHG default emission factors of fuel production pathways and technologies and the tank-to-wake (TtW) GHG default emission factors of fuel usage and onboard technologies; and
- .2 approve the draft *Methodology for submission, scientific review and recommendation of proposed default emission factors by GESAMP-LCA WG* set out in annex 3 to document MEPC 83/7/1, with a view to issuance as an MEPC Circular.

Development of standardized emission reporting tool

154 The Group agreed to recommend that the Committee note that GESAMP-LCA WG had developed an Excel tool to standardize the reporting of parameters and the calculation of proposed default emission factors, based on the templates in appendices 4 and 5 of the 2024 LCA Guidelines, and that the Secretariat would upload the editable Excel file on the IMO website.

155 In this connection, the Group agreed to recommend that the Committee refer documents MEPC 83/7/10, MEPC 83/7/13 and MEPC 83/INF.11, MEPC 83/7/27, MEPC 83/7/31 and MEPC 83/7/32 to the GESAMP-LCA WG for review and to invite the proponents to submit the proposed default emission factors to the Technical Secretary of GESAMP-LCA WG in digital format using the Excel tool for the standardized reporting of parameters.

156 The Group also agreed to recommend that the Committee refer documents MEPC 83/7/14, MEPC 83/7/23 and MEPC 83/7/28, MEPC 83/INF.12 and MEPC 83/INF.13 to GESAMP-LCA WG for information.

Clarification of default emission factors in appendix 2 of the 2024 LCA Guidelines

157 The Group agreed to recommend that the Committee note that until further default emission factors are reviewed and recommended by the GESAMP-LCA WG for approval by the Committee, current default emission factors may be used for LCA calculations, but that these values should not be considered as approved by the Committee and should be resubmitted in accordance with the methodology developed by GESAMP-LCA WG.

Discussion on sustainability themes/aspects and indirect land use change (ILUC)

158 The Group noted the work of GESAMP-LCA WG in refining and further exploring indicators and metrics under the sustainability themes/aspects in the LCA Guidelines, as well as their approaches to ILUC risk classification.

159 Regarding the metric/indicator for sustainability theme 3 (source of electricity/energy), one delegation expressed the view that regions already disposing of highly renewable electricity grids should not be over penalized through requirements such as additionality, temporal matching and geographical correlation, which could however be applicable in countries currently undergoing an energy transition.

160 In this context, the Group also preliminarily considered the report of the Correspondence Group on the Further Development of the LCA framework (MEPC 83/7/9 and MEPC 83/INF.5).

161 The delegation of China expressed the view that any themes/aspects must be objective and well-balanced, that social and economic themes/aspects reflected in paragraph 28 of document MEPC 83/7/9 were highly political and sensitive and closely related to social and economic development status in different countries, and that therefore these aspects could only be assessed in a qualitative way and should respect the national legislation and be assessed only by the competent authorities of the Member States, taking into account each country's unique background, priorities, and resources in terms of social and economic development, and suggested that these social and economic themes/aspects may be merged into one.

162 Several delegations, in referring in particular to document ISWG-GHG 18/3 (RINA), expressed their general support for the pilot testing of sustainability metrics and indicators across various fuel pathways. Several other delegations could not support the proposal for a phased implementation strategy for the development of fuel sustainability metrics and indicators based on high vs low-impact metrics, as no definition was provided for 'high' and 'low' and no objective approach was proposed to clear such attributes.

163 With regard to ILUC several delegations expressed cautiousness in relation to the tiered approach for low-ILUC risk classification presented in document MEPC 83/7/3, as such approach would in their view leave important doubts and gaps with respect to environmental integrity, verification possibilities and level playing field. Several delegations emphasized the importance of a careful consideration of ILUC assessment, and that the possible quantitative assessment of ILUC should be further explored. Other delegations, while emphasizing the importance of careful ILUC assessment, supported the qualitative approach to ILUC risk

classification, pointing out that quantitative assessments of ILUC may lead to imprecise values and significant distortions.

164 One delegation, in supporting the continuous refinement of the fuel sustainability criteria, emphasized that the Organization should enhance capacity building and technical cooperation efforts related to sustainable marine fuel certification aspects in developing countries.

165 The observer from WWF, in acknowledging the potential role that might be played by sustainable biofuels in the decarbonization of shipping, stressed the need for a rigorous sustainability assessment and certification regime, and, in referring to document ISWG-GHG 7/5/7 (WWF) emphasized that the sustainability risks associated to biofuel production should be addressed with the use of quantitative assessment metrics.

166 The delegation of Argentina expressed that the 2030 Agenda for Sustainable Development is composed of legally non-binding aspirations that each State, in the exercise of its sovereignty, has the right to freely interpret and pursue; many of which Argentina complies with regardless of their enunciation and privileging the national interest.

167 The statement made by the delegation of Brazil regarding fuel sustainability safeguards and indicators is set out in annex 4.

168 The Group agreed to recommend that the Committee note the GESAMP-LCA WG's discussion on sustainability themes/aspects and indirect land use change (ILUC). In this connection, the Group also agreed to recommend that the Committee:

- .1 note the discussion in the Correspondence Group on the Further development of the LCA framework (MEPC 83/7/9 and MEPC 83/INF.5) and the general consensus in the Correspondence Group to continue developing the five social and economic sustainability themes/aspects (MEPC 83/7/9, paragraph 28);
- .2 note that the Correspondence Group had identified that further work would be needed in regard to the 2024 LCA Guidelines metrics/indicators, and the possible refinement and further development of themes/aspects;
- .3 consider the re-establishment of the Correspondence Group to further consider possible ways to refine metrics/indicators, based on those highest rated possible indicators considered during the Group's work (MEPC 83/7/9, paragraphs 28 to 33), taking into account the overall intersessional workload on GHG issues; and
- .4 refer to the GESAMP-LCA WG document ISWG-GHG 18/3 for further refinement and exploration of indicators and metrics under the sustainability themes/aspects in the 2024 LCA Guidelines and document MEPC 83/7/3 for the consideration of approaches to ILUC risk classification, and advise the Committee accordingly.

Provisional dates for the next meetings of the GESAMP-LCA WG

169 The Group agreed to recommend that the Committee note that the GESAMP-LCA WG provisionally agreed to hold two in-person meetings in 2025, tentatively scheduled to take place in June/July and October.

Ongoing work on pending issues by the GESAMP-LCA WG

170 The Group agreed to recommend that the Committee note that interested members of the GESAMP-LCA WG would continue to work by correspondence on pending issues.

Areas for expert support in the GESAMP-LCA WG's future work

171 The Group noted that the GESAMP-LCA WG had identified several areas in which additional expert support would benefit their future work.

172 In considering the existing composition of the GESAMP-LCA WG, one delegation stressed that the continental geographical distribution could be further improved by giving priority to new members and additional experts from regions that are currently underrepresented, and that currently GESAMP-LCA WG did not comprise of any experts from Africa, the Pacific and the Caribbean region.

173 The Group agreed to recommend that the Committee note the areas where additional experts could support the GESAMP-LCA WG's future work and invite interested Member States and international organizations to consider sharing with the Secretariat expressions of interest and CVs of experts, taking into account the areas where additional experts would benefit the GESAMP-LCA WG's future work as identified in the report and reiterate the importance of a geographical and gender balance composition of the GESAMP-LCA WG, taking into account the current geographical representation of the Group, the need to keep the group of manageable size, and that experts need to be independent expert acting in their individual capacity.

Financial contributions to the GHG-TC Trust Fund

174 The Group agreed to recommend that the Committee:

- .1 encourage Member States and international organizations to make financial voluntary contributions to the GHG-TC Trust Fund to support the work of the GESAMP-LCA WG; and
- .2 invite Member States submitting proposed default emission factors to make a voluntary financial contribution to the GHG-TC Trust Fund of at least US\$10,000 per submission, based on the recovery of costs incurred by the Organization in respect of the services provided by the GESAMP-LCA WG.

175 One delegation emphasized that this should not constitute a barrier for interested countries to submitting proposed default values.

Timeline for the preparation, conduct and reporting of the GESAMP-LCA WG's meetings

176 The Group agreed to recommend that the Committee note that the Secretariat, in consultation with GESAMP and the GESAMP-LCA WG, will review the timeline for the preparation, conduct and reporting of the meetings, so as to allow for the timely review of the submission of proposals for default emission factors.

Deadlines for submission of proposals for default emission factors for review by the GESAMP-LCA WG

177 The Group agreed to recommend that the Committee endorse in principle the deadlines for submission of proposals for default emission factors for review by the GESAMP-LCA WG at its second meeting (2 May 2025) and third meetings (29 August 2025).

178 The Group noted that the Secretariat would review the submission deadlines and provide detailed information about the meeting dates and submission deadlines in Circular Letters to be issued in due course.

Recommendation for concurrent submission of default emission factors and summaries

179 The Group agreed to recommend that the Committee invite Member States submitting proposed default emission factors for review by GESAMP-LCA WG to simultaneously submit to the Committee a short document summarizing the non-confidential description of their proposal(s).

Development of an ISO standard for ethanol as a marine fuel

180 Several delegations, in referring in particular to document MEPC 83/7/17, stressed the importance of ISO fuels standards for marine engine Original Equipment Manufacturers (OEMs) and value chain actors, and recommended that the Organization invite ISO to develop a standard for ethanol as a fuel for marine applications, including general specifications and requirements, in the same vein as the ISO 6583:2024 standard for methanol as a marine fuel.

181 Following consideration, the Group agreed to recommend that the Committee invite ISO to consider the development of an ISO standard for ethanol as marine fuel.

General statements

182 The delegation of the United States that the United States was under a new Administration and was reviewing their policies to ensure any outcomes related to these issues did not unduly or unfairly burden the United States; thus reserving their position on some matters discussed at this meeting. The United States' silence did not necessarily imply tacit agreement on the matters being discussed.

183 The delegation of Poland, on behalf of the Member States of the European Union and the European Commission, made a statement during the consideration of the Group's draft report. As requested, the statement by the delegation of Poland is set out in annex 4 to this document.

Action requested of the Committee

184 The Committee is invited to approve the report of the Group in general, and in particular to:

- .1 note the progress made by the Group on the further development of the IMO net-zero framework and agree to use the text set out in annex 1 to this document as the basis for its further work, noting that it should be considered as 'work in progress' to support further discussions on the draft IMO net-zero framework, with the understanding that it would not prejudice any further changes to its contents (paragraphs 10 to 137 and annexes 1, 2 and 3);
- .2 endorse the Group's recommendations with regard to further work on food security (paragraphs 106 to 122); and

- .3 note the Group's discussion and endorse the recommended way forward on the further consideration of the development of the IMO Life Cycle GHG assessment (LCA) framework (paragraphs 138 to 181).

ANNEX 1

POSSIBLE DRAFT AMENDMENTS TO MARPOL ANNEX VI ON THE IMO NET-ZERO FRAMEWORK FOLLOWING CONSIDERATION BY ISWG-GHG 18

Using annex 1 to document MEPC 82/WP.9, complemented with new proposals for amendments submitted to ISWG-GHG 18 and to MEPC 83 (up to the 9-week submission deadline (31 January 2025)) as a basis, ISWG-GHG 18 considered possible draft amendments to MARPOL Annex VI on the IMO net-zero framework.

Following consideration during ISWG-GHG 18, the Group developed the text set out in this document to continue discussions during the next session.

Proposals for amendments originating from documents submitted to ISWG-GHG 18 and MEPC 83 appear in blue in this document to facilitate the identification of new proposals, as well as the new related footnotes. New text options developed by the Chair appear in purple. This document is to be considered as 'work in progress' to support further discussions with the understanding that it would not prejudice any possible future changes to its contents and/or structure as deliberations progress.

'Options' identified in this document do not represent any particular order or preference, but reflect different text proposals as follows, where applicable: 'a non-amendment option'; 'text combining more than one proposal'; or 'in the order of original document symbol'.

Moreover, the inclusion of elements in this document is without prejudice to which elements might ultimately be included in a Framework proposal and how such elements might be framed for purposes of acceptance under Article 16 of the MARPOL Convention, and without prejudice to whether some elements might be more appropriate for consideration in the context of a separate convention from MARPOL Annex VI.

[Chapter 1 – General]

Regulation 2

Definitions

[...]

3 [For the purpose of chapters 4 and 5] [For the purpose of chapter 5]:

- [.1] [Annual GHG fuel contribution] [Universal Flat Rate Levy] means [the amount of [US\$] contribution made by ships to the IMO [XX] Fund/Facility in accordance with regulations [X] and [X] of this Annex] [a mandatory standard economic levy applied to all ships according to their GHG emission levels;]
- [.2] [Annual fuel] reward [means the amount of monetary reward made by the IMO [XX] Fund/Facility to ships in accordance with regulation [X] of this Annex] [refers to an economic measure that provides a reward subsidy for use of Eligible Fuels and Technologies;]
- [.3] Anthropogenic GHG removals refer to the withdrawal of GHG from the atmosphere as a result of deliberate human activities. These include enhancing biological sinks of CO₂ (nature-based solutions and natural

climate solutions) and using technical methods to achieve long-term removal and storage. Carbon capture and storage (CCS) from industrial and energy-related sources, which alone does not remove CO₂ in the atmosphere, can reduce atmospheric CO₂ if it is combined with bioenergy with carbon capture and storage (BECCS).]

- [.4 Attained annual GHG intensity (attained annual GFI), expressed in grams of CO₂eq per unit of energy (gCO₂eq/MJ), means the average GHG intensity of all fuels used on board a ship in a given calendar year on a tank-to-wake (Value 2) basis and after adjustment taking into account the well-to-wake GHG emissions;]
- .5 CO₂ equivalent (CO₂eq) means the metric measure used to [compare] [compute] the emissions [of] [from] CO₂, CH₄ and N₂O on the basis of their 100 year global-warming potential (GWP), by converting the amounts of CH₄ and N₂O to the equivalent amount of CO₂ [with the same global warming potential;]
- .6 Company means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention, as amended;
- [.7 Compliance balance, expressed in CO₂eq, is the measurement of a ship's compliance status with regard to the GHG emissions corresponding to the required annual GHG fuel intensity;]
- [.8 Compliance deficit means the amount of under-compliance by a ship with the required annual GFI mentioned in regulation [X] of this Annex, expressed in tonnes of CO₂eq on a well-to-wake basis, taking into account the guidelines to be developed by the Organization¹;
- [.9 Compliance pool means a pool participated by more than one ship for compliance purposes;]
- [.10 Compliance surplus means the amount of over-compliance by a ship with the required annual GFI mentioned in regulation [X] of this Annex, expressed in tonnes of CO₂eq on a well-to-wake basis, in accordance with the guidelines to be developed by the Organization²;
- [.11 Compliance Unit is a general reference to Surplus [Compliance] Unit, [Deficit Unit] or Remedial [Compliance] Unit;

¹ Refer to the 2024 Guidelines on *Lifecycle GHG intensity of marine fuels* (resolution MEPC.391(81)), as may be amended, and see draft Guidelines for the calculation of the attained Greenhouse Gas Fuel Intensity, as may be amended.

² Refer to the 2024 Guidelines on *Lifecycle GHG intensity of marine fuels* (resolution MEPC.391(81)), as may be amended, and see draft Guidelines for the calculation of the attained Greenhouse Gas Fuel Intensity, as may be amended.

- [.12] Deficit Unit (DU), expressed in CO₂eq, means a deficit representing one tonne of GHGs over-emitted by the use of fuels with an average GFI value higher than the required annual GFI for that year;]
- [.13] Eligible fuel [and Technologies] means the [type of fuel] [long-run fuel/energy and technologies] that qualifies for the annual fuel reward [set out in regulation [X] of chapter 5 of this Annex], determined in accordance with the guidelines to be developed by the Organization³. [Eligibility is limited to fuels that are only produced from renewable energy and renewable feedstocks, and are capable of being produced at a scale similar to international shipping's total energy demand;]
- [.14] Final compliance balance means the compliance balance of ship after all transactions and cancellations of compliant units have been completed for the reporting period;]
- [.15] Fuel means any energy [source or energy carrier] used [onboard a ship] for propulsion or for the operation of any equipment on board a ship, [including wind and solar power] whose greenhouse gas intensity and sustainability attributes can be measured and certified using the guidelines on life cycle GHG intensity of marine fuels;
- [.15bis] Fuel Lifecycle Label (FLL) means a technical tool to collect and convey information relevant for the life cycle assessment of a fuel;
- [.16] GHG fuel intensity (GFI) [means the mass] [generally refers to the amount] of GHG emissions per unit of energy used on board a ship [on a well-to-wake basis, in accordance with the 2024 Guidelines on Lifecycle GHG intensity of marine fuels⁴.] [established on a tank-to-wake (Value 2) basis] expressed in [terms] of grams of CO₂eq per unit of energy (gCO₂eq/MJ);
- [.17] Global Fuel Standard (GFS) means the technical measure established to regulate the phased reduction of the greenhouse gas (GHG) intensity (GFI) of marine fuels;]
- [.18] Greenhouse gas (GHG) emissions means any release of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) into the atmosphere;
- [.19] Initial compliance balance means the compliance balance of a ship before any transfer of compliant units from or to other ships for the reporting period;]
- [.20] International voyage means a voyage from a country to which the present Convention applies to a port outside such country, or conversely;]
- [.21] Net-zero emissions is achieved when anthropogenic GHG emissions to the atmosphere are balanced by anthropogenic removals. Where multiple GHGs are involved, the quantification of net-zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential and others, as well

³ Refer to guidelines to be developed by the Organization on the determination of eligible fuels under the annual fuel reward.

⁴ Refer to the 2024 Guidelines on Lifecycle GHG intensity of marine fuels (resolution MEPC.391(81)), as may be amended.

as the chosen time-horizon). This state (net zero emissions) can be achieved at the global, national or company level;]

[.22 *Pool compliance balance* means the sum of the compliance balances of all ships included in the pool;]

[.23 *Pooling* means the transfer of Surplus Units from over-compliant ships to under-compliant ships in the same compliance pool, including through agreement between them duly communicated and recorded, with a view to collectively achieving a final pooling compliance balance of zero;]

[.23bis *Reference Unit Price* means the basic equilibrium price (in US\$/t CO₂eq) determined by the Organization to set the Remedial Unit price, Surplus Unit handling fee, and reward level for eligible zero- or near-zero GHG emission technologies, fuels, and/or energy sources.]⁵

[.24 *Remedial [Compliance] Unit (R[C]U)*, expressed in CO₂eq, means a credit [obtained] [issued] by [the IMO GFI Registry established under regulation [X]] [a ship through making economic contributions to the IMO [XX] Fund/Facility], for use by the ship to remedy a [a Deficit Unit] [compliance deficit of one tonne of GHG emissions, produced by fuel with an average GFI above the required annual GFI for that year, used on board] during a reporting period;]

[.25 *[Target]/[Required] annual GHG Fuel Intensity ([target]/[required] annual GFI)*, expressed in grams of CO₂eq per unit of energy (gCO₂eq/MJ), means the [target]/[required] value of the average GHG intensity of all fuels used by international shipping as a whole for a given calendar year on a tank-to-wake (Value 2) basis;]

[.26 *Surplus [Compliance] Unit (S[C]U)*, expressed in CO₂eq, means a credit representing [a compliance surplus of] one tonne of GHG emissions [and generated] [saved] by the use of fuels with an average GFI [below] [value lower than] the [target]/[required] annual GFI for [the calendar] [that] year, [used on board during a reporting period], [issued by the IMO GFI Registry established under regulation [X]] for use by the ship in accordance with regulation [X];]

[.27 *Unit of account* means the Special Drawing Right as defined by the International Monetary Fund;]

[.28 *Semi-submersible vessel* is a type of ship that is designed to carry ships, marine facilities and large loads, generally installed with high superstructure or deck room or floating tank at tow or stern, and is able to partially submerge in cargo handling.]⁶

[.X *Zero and near-zero GHG emission fuels and technologies* [possible text to be further developed]]⁷

⁵ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

⁶ New proposal originates from document ISWG-GHG 18/2/14 (China).

⁷ Place holder following proposals in documents ISWG-GHG 18/2/6 (Bahamas et al.), ISWG 18/2/12 (Brazil) and ISWG-GHG 17/2/2 (Austria et al.).

Chapter 2 - Survey, certification and means of control

Regulation 5 **Surveys**

[...]

[Option 1]: no amendments to regulation 5]

[Option 2⁸:

4 Ships to which ~~chapter 4~~ both or either chapters 4 and 5 of this Annex applies shall also be subject to the surveys specified below, taking into account the guidelines adopted by the Organization:

[...]

.6bis The Administration shall ensure that, for each ship to which regulations [X] applies, the SEEMP complies with regulation 26.4 of this Annex. This shall be done prior to 1 January [2027]. Confirmation of compliance shall be provided to, and retained on board, the ship;]

[Option 3⁹:

4bis Ships to which chapter 5 of this Annex applies shall also be subject to the surveys specified below:

- .1 An initial survey carried out before a new ship¹⁰ is put in service and before the Confirmation of compliance is issued. The survey shall verify that GHG fuel intensity data collection and report plan required by regulation 26 of this Annex is on board;
- .2 For existing ships, the Administration shall ensure that the GHG fuel intensity data collection and report plan comply with regulation 26 of this Annex. This shall be done prior to 1 January [2028]; and
- .3 Confirmation of compliance shall be provided to, and retained on board, the ship.]

[Option 4¹¹

X Issue or endorsement of Certificates and Statements of Compliance related to fuel oil consumption reporting, operational carbon intensity rating and the Fund dues.

X Duration and validity of Certificates and Statements of Compliance related to fuel oil consumption reporting, operational carbon intensity rating and the Fund dues.]

⁸ Option 2 originates from documents ISWG-GHG 17/2/2 (Austria et al.).

⁹ Option 3 originates from document ISWG-GHG 17/2/7 (Angola et al.).

¹⁰ A unified interpretation will be needed to clarify the scope of the new ships in this context.

¹¹ Option 4 originates from document ISWG-GHG 17/2/13 (Fiji et al.).

Regulation 6

Issue or endorsement of Certificates and Statements of Compliance related to fuel oil consumption [and GFI data] reporting, ~~and~~ operational carbon intensity rating, and [the GHG Fuel Intensity] [the annual GHG fuel intensity and the annual GHG fuel contribution] [maritime GHG emissions pricing mechanism]

[...]

[Option 1¹²]**Statement of Compliance related to fuel oil consumption [and GFI data] reporting and operational carbon intensity rating**

6 Upon receipt of reported data pursuant to regulation 27.3 of this Annex ~~[and attained annual operational CII pursuant to regulation 28.2 of this Annex¹³]~~, the Administration or any organization duly authorized by it shall:

- .1 determine whether the data has been reported in accordance with regulation 27 of this Annex;
- .2 verify that the attained annual operational CII, [the attained annual GFI, the initial compliance balance, and the amount of GHGs reduction achieved by the uptake of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs)] is based on the data submitted in accordance with regulation 27 of this Annex;
- .3 based on the verified attained annual operational CII, determine the operational carbon intensity rating of the ship in accordance with regulation 28.6 of this Annex; and
- .4 issue a Statement of Compliance related to fuel oil consumption [and GFI data] reporting and operational carbon intensity rating to the ship no later than five months from the beginning of the calendar year, upon determination and verification pursuant to regulations 6.6.1 to 6.6.3 of this Annex. In every case, the Administration assumes full responsibility for this Statement of Compliance.

[...]

Statement of Compliance related to the annual GHG fuel intensity

9 Upon receipt of the [verified data for the reporting period pursuant to regulations 6.6 of this Annex and the Confirmation of Clearance issued by the IMO GFI Registry pursuant to regulations [X]] [attained annual GFI pursuant to regulation [X]] of this Annex, the Administration, or any organization duly authorized by it¹⁴, shall:

¹² Option 1 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.) and ISWG-GHG 17/2/7 (Angola et al.).

¹³ Amendments to MARPOL Annex VI related to Appendix IX have been adopted at MEPC 81 by resolution MEPC.385(81), where all CII-related data have been included. Therefore, a reference to regulation 28.2 would be redundant.

¹⁴ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

- .1 verify that the [final compliance balance of the ship has achieved zero in accordance] [attained annual GFI reported is based on the data submitted in accordance] with regulation [X] of this Annex;
- [.2 determine whether the attained annual GFI of each ship is equal to, higher or lower than the [target][required] annual GFI in accordance with regulation [X] of this Annex;]
- [.3 verify that the annual administration fee according to regulation [X] of this Annex has been paid;]
- [.4 for ships to which regulation [X] applies, verify that an adequate amount of Surplus [Compliance] Units or Remedial [Compliance] Units, as applicable, has been cancelled by the IMO GFI Registry in accordance with regulation [X] of this Annex to remedy the compliance deficit of that reporting period;]
- [.5 verify that the annual administration fee according to regulation [X] of this Annex has been paid; and]
- [.6 issue a Statement of Compliance related to the [annual] GHG fuel intensity no later than [ten][six] months from the beginning of the calendar year upon determination and verification pursuant to paragraphs 1 to [3][4] of this regulation. In every case, the Administration assumes full responsibility for this Statement of Compliance.]

[10 In the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6 completed after 1 January 2028, the Administration or any organization duly authorized by it¹⁵ shall endorse the valid Statement of Compliance issued pursuant to paragraph 9 of this regulation without further verification.]

[Statement of Compliance related to the annual GHG fuel contribution]

[11 Upon receipt of the electronic confirmation of receipt of the annual GHG fuel contribution pursuant to regulation [X], including in cases where the annual GHG fuel contribution is made pursuant to regulations [X] and [X], the Administration or any organization duly authorized by it¹⁶ shall:

- .1 verify that the annual GHG fuel contribution is based on the data verified in accordance with regulation [X] of this Annex;
- .2 determine that the annual GHG fuel contribution corresponds to the well-to-wake GHG emissions produced by the fuel used on board the ship; and
- .3 issue a Statement of Compliance related to the annual GHG fuel contribution no later than eight months from the beginning of the calendar year upon verification pursuant to paragraph [X] of this regulation. In every case, the Administration assumes full responsibility for this Statement of Compliance.]]

¹⁵ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

¹⁶ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

[Option 2¹⁷:

[...]

Statement of Compliance – Maritime GHG Emissions Pricing

9 Pursuant to regulation [X] of this Annex, upon receipt of the Annual Account Statement the Administration, or any organization duly authorized by it¹⁸, shall determine whether the annual GHG fee has been made via the maritime GHG emission pricing mechanism in accordance with regulation [X] of this Annex by verifying whether the information provided in the Annual Account Statement is consistent with the ship's fuel oil consumption data pursuant to regulation 27.3 of this Annex and, if so, issue a Statement of Compliance related to the maritime GHG emission pricing mechanism no later than [seven] months from the beginning of the calendar year. In every case, the Administration assumes full responsibility for this Statement of Compliance.

10 With respect to a ship not registered in a Party to this Annex, the Statement of Compliance related to the maritime GHG emission pricing mechanism may be issued by the appropriate Administration of any Party to this Annex, if satisfied that the GHG fee required under regulation [X] of this Annex has been made via the maritime GHG emission pricing mechanism for the previous calendar year for that ship. A Statement of Compliance so issued shall have the same force and receive the same recognition as a Statement of Compliance issued under paragraph [X] of this regulation.]

[Option 3¹⁹:

X Upon receiving the [Annual] Account Statement from the Fund, the Administration, or any organization authorized by it²⁰, shall verify the dues. After satisfactory verification, a Statement of Compliance shall be issued within [six] months.

X Administrations of parties to this Annex can issue statements of compliance to ships not registered with them as long as all requirements of this Annex and proper verification has taken place.]

Regulation 8

Form of Certificates and Statements of Compliance ~~[related to fuel oil consumption reporting, and operational carbon intensity rating.]~~ [related to fuel oil consumption reporting, and operational carbon intensity rating [, the annual GHG fuel intensity and the annual GHG fuel contribution] [and the maritime GHG emissions pricing mechanism]]

[...]

[Option 1: no amendments to regulation 8]

¹⁷ Option 2 originates from document ISWG-GHG 17/2/5 (Bahamas et al.).

¹⁸ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

¹⁹ Option 3 originates from document ISWG-GHG 17/2/13 (Fiji et al.).

²⁰ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

[Option 2²¹:

[Statement of Compliance related to fuel oil consumption [and GFI data] reporting and operational carbon intensity rating]

[...]

Statement of Compliance related to the annual GHG Fuel Intensity

3bis The Statement of Compliance pursuant to regulation 6.9 of this Annex shall be drawn up in a form corresponding to the model given in appendix [Xbis] to this Annex and shall be at least in English, French or Spanish. If an official language of the issuing Party is also used, this shall prevail in case of a dispute or discrepancy.

[Statement of Compliance related to the annual GHG fuel contribution]

[3ter The Statement of Compliance pursuant to regulation 6.10 of this Annex shall be drawn up in a form corresponding to the model given in appendix [Xbis] to this Annex and shall be at least in English, French or Spanish. If an official language of the issuing Party is also used, this shall prevail in case of a dispute or discrepancy.]

[...]

[Option 3²²:

Statement of Compliance – Maritime GHG Emissions Pricing Mechanism

5 The Statement of Compliance pursuant to regulations [X] and [X] of this Annex shall be drawn up in a form corresponding to the model given in appendix [XII] to this Annex and shall at least be written in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.

Feebate Eligibility Confirmation Statement – Maritime GHG Emissions Pricing Mechanism

6 Pursuant to regulation 41.4 of this Annex, the Feebate Eligibility Confirmation Statement shall be drawn up in a form corresponding to the model given in appendix [XIII] to this Annex and shall at least be written in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.]

Regulation 9

Duration and validity of Certificates and Statements of Compliance ~~[related to fuel oil consumption reporting, and operational carbon intensity rating]~~ [related to fuel oil consumption reporting, and operational carbon intensity rating, [the annual GHG fuel intensity and the annual GHG fuel contribution] [and maritime GHG emissions pricing mechanism]]

[...]

²¹ Option 2 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.) and ISWG-GHG 17/2/7 (Angola et al.).

²² Option 3 originates from document ISWG-GHG 17/2/5 (Bahamas et al.).

[Option 1²³:

Statement of Compliance related to fuel oil consumption [and GHG Fuel Intensity] reporting and operational carbon intensity rating

[...]

Statement of Compliance [related to the annual GHG fuel intensity] [- Maritime GHG Emissions Pricing Mechanism]

13 The Statement of Compliance issued pursuant to regulation[s] [X] [and X] of this Annex shall be valid for the calendar year in which it is issued and for the first [six] [seven] [ten] months of the following calendar year. [The duration and validity of the Statement of Compliance endorsed pursuant to regulation [X] of this Annex shall be kept unchanged.] All Statements of Compliance shall be kept on board for at least five years.

[Statement of Compliance related to the annual GHG fuel contribution]

[14 The Statement of Compliance issued pursuant to regulation [X] of this Annex shall be valid for the calendar year in which it is issued and for the first eight months of the following calendar year. All Statements of Compliance shall be kept on board for at least five years.]

[Option 2: no amendments to regulation 9]

Regulation 10

Port State Control on operational requirements

[Option 1²⁴:

5 In relation to chapter[s] [4 and 5] of this Annex, any port State inspection may verify, when appropriate, that there is a valid Statement of Compliance related to [fuel oil consumption [and GFI data] reporting and operational carbon intensity rating[, a valid Statement of Compliance related to GHG Fuel Intensity,] an International Energy Efficiency Certificate and a Ship Energy Efficiency Management Plan on board, in accordance with article 5 of the present Convention.

[5bis In relation to chapter 5 of this Annex, any port State inspection may verify, when appropriate, that there is a valid Statement of Compliance related to the annual GHG fuel intensity and a valid Statement of Compliance related to the annual GHG fuel contribution in accordance with article 5 of the present Convention. In the event where it is found that the Statements above are not in order, the Party shall ensure that the ship does not sail until the situation has been brought to order in accordance with the requirements of chapter 5. Each Party to this Annex shall ensure that the above Statements are in force in respect of any ship, irrespective of its flag, entering or leaving a port in its territory, or arriving at or leaving an off-shore terminal in its territorial sea.]

²³ Option 1 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.), ISWG-GHG 17/2/5 and ISWG-GHG 17/2/7 (Angola et al.).

²⁴ Option 1 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.), ISWG-GHG 17/2/5 (Bahamas et al.) and ISWG-GHG 17/2/7 (Angola et al.).

6 Notwithstanding the requirements in paragraph 5 of this regulation, any port State inspection may inspect whether the Ship Energy Efficiency Management Plan is duly implemented by the ship in accordance with regulation[s] 28[, X and X] of this Annex.

[7 In relation to chapter 5 of this Annex, any port State inspection shall be limited to verifying, when appropriate, that there is a valid Statement of Compliance related to the maritime GHG emissions pricing mechanism on board, in accordance with article 5 of the present Convention.]]

[Option 2²⁵:

X Port State Control officers shall verify whether the ship has valid certificates and Statements of Compliance, including receipt for payment of the levy and the surcharge in accordance with Regulation 5.1.5, and when appropriate, that there is a valid Statement of Compliance related to the Fund onboard, in accordance with Article 5 of the Convention.

X A ship without valid documentation, including receipt for payment of the levy and the surcharge, may be subject to additional charges by the Port State and may be detained until compliance is demonstrated in accordance with the requirements of this Annex.]

Chapter 3 – Requirements for control of emissions from ships

Regulation 18

Fuel oil availability and quality

[...]

[Option 1²⁶: no amendments]

[(new) Option 2²⁷:

[5.2 For each ship subject to regulations 5 and 6 of this Annex, details of low-flashpoint fuel or gas fuel delivered to and used on board that ship shall be recorded by means of a bunker delivery note that shall include at least the information specified in items 1 to 6 of appendix V to this Annex, the density as determined by a test method appropriate to the fuel type together with the associated temperature, the well-to-tank GHG intensity, the low calorific value, the information necessary for the calculation of the GHG intensity and a declaration signed and certified by the fuel oil supplier's representative that the fuel oil is in conformity with paragraph 3 of this regulation. In addition the sulphur content of a low-flashpoint fuel or a gas fuel delivered to a ship specifically for use on board that ship shall be documented on the bunker delivery note by the supplier in terms of either the actual value as determined by a test method appropriate to the fuel type or, with the agreement of the appropriate authority at the port of supply, a statement that the sulphur content, when tested by such a method, is less than 0.001% m/m.]

²⁵ Option 2 originates from document ISWG-GHG 17/2/2 (Fiji et al.).

²⁶ In annex 1 to document MEPC 82/WP.9 no proposed amendment to regulation 18.

²⁷ New option 2 originates from document MEPC 83/7/19 (Japan).

Chapter 4 - Regulations on the carbon intensity of international shipping

Regulation 26

Ship Energy Efficiency Management Plan (SEEMP)

[...]

[Option 1²⁸

4 In the case of a ship to which chapter 5 applies:

.1 On or before 1 January [2027], the SEEMP shall include:

.1 a description of the methodology that will be used to collect the data required by regulation 27 and to calculate the ship's attained annual GFI required by regulation X4 of this Annex; and

.2 the processes that will be used to report the data required by regulation 27 to the ship's Administration.]

[additional information to be included as necessary]

[Option 2²⁹:

4 From calendar year [2028], each ship to which chapter 5 applies, shall keep on board a ship specific GHG fuel intensity data collection and report plan (the GFI Plan). This shall form part of the ship's SEEMP. The GFI Plan shall be developed and reviewed, taking into account the guidelines³⁰ to be developed by the Organization.

5 The GFI Plan shall include a description of the methodology that will be used to collect the data required by regulation [X] of this Annex and the processes that will be used to report the data to the ship's Administration. It shall additionally include an implementation plan documenting how the target annual GFI pursuant to regulation [X] of chapter 5 will be achieved.]

[Option 3³¹ – text to be further developed:

[reference to the IMO sustainable fuels certification framework]]

Regulation 27

Collection and reporting of ship fuel ~~[use oil consumption]~~ [oil consumption and GFI related] data

[Option 1: no amendments to regulation 27]

²⁸ Option 1 originates from document ISWG-GHG 17/2/2 (Austria et al.).

²⁹ Option 2 originates from document ISWG-GHG 17/2/7 (Angola et al.).

³⁰ Refer to the 2022 Guidelines for the development of a ship energy efficiency management plan (SEEMP) (resolution MEPC.346(78), as amended by resolution MEPC.388(81).

³¹ Proposal in option 3 originates from annex 3 to document ISWG-GHG 18/2/17 (Brazil et al.).

[Option 2³²:

[1 From calendar year ~~[2027 2019]~~, each ship ~~[to which both or either chapters 4 and 5 apply]~~ ~~[of 5,000 gross tonnage and above]~~ shall collect the data specified in ~~[Part A of]~~ appendix IX to this Annex, for that and each subsequent calendar year or portion thereof, as appropriate according to the methodology included in the SEEMP.

[1bis Notwithstanding the requirements in paragraph 1 of this regulation, from calendar year [2028], each ship to which chapter 5 applies shall additionally collect the data specified in Part [X] and Part [X] of appendix IX to this Annex, for that and each subsequent calendar year or portion thereof, as appropriate according to the methodology included in the GHG fuel intensity data collection and report plan.]

2 Except as provided for in paragraphs 4, 5, ~~[and]~~ 6 ~~[and 6bis]~~ of this regulation, at the end of each calendar year, the ship shall aggregate the data collected in that calendar year or portion thereof, as appropriate.

3 Except as provided for in paragraphs 4, 5, ~~[and]~~ 6 ~~[and 6bis]~~ of this regulation, within ~~[three]~~ months after the end of each calendar year, the ship shall report to its Administration or any organization duly authorized by it, the aggregated value for each datum specified in appendix IX to this Annex, via electronic communication and using a standardized format to be developed by the Organization.

[...]

[6bis For the purposes of chapter 5 of this Annex, data on fuel used on board collected pursuant to paragraphs 3, 4, 5 and 6 of this regulation shall be reported to the Administration, or any organization duly authorized by it³³, in a disaggregated format that will allow the verification of compliance of the ship pursuant to regulations [X] of this Annex, taking into account the guidelines to be developed by the Organization³⁴. The disaggregated data that underlies the reported data noted in appendix IX to this Annex shall be readily accessible for a period of not less than 10 years from the end of that calendar year and be made available to the Administration and the IMO [XX] Fund/Facility upon request.]

[...]

9 The Administration shall ensure that the reported data noted in appendix IX to this Annex by its registered ships ~~[to which this regulation applies]~~ are transferred to the IMO Ship Fuel ~~[Use Oil Consumption]~~ Database via electronic communication and using a standardized format to be developed by the Organization not later than one month after issuing the Statements of Compliance of these ships.

[9bis For the purposes of chapter 5.2 of this Annex, the Secretary General of the Organization shall ensure that the data reported to the IMO Ship Fuel [Use] Database pursuant to regulation 27.9 are transferred automatically to the IMO [XX] Fund/Facility established by the Organization [under regulation X].

³² Option 1 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.), ISWG-GHG 17/2/5 and ISWG-GHG 17/2/7 (Angola et al.).

³³ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

³⁴ Refer to guidelines to be developed by the Organization on methods for determining, collecting, and storing. [ship fuel use] data under regulation 27 of Annex VI for the purposes of compliance with chapter 5 of Annex VI.

[...]

[11 The Secretary-General of the Organization shall grant the Administration of a ship to which regulation[s] 28 [and chapter 5] of this Annex applies access to all the reported data for all the preceding calendar years in the IMO Ship Fuel [Use] Database for that ship.]]

[Option 3³⁵ - (alternative text to be added related to data collection and reporting):

X The DCS process shall [be amended to] include all necessary data to calculate the GFI of the ship and the emissions status of the ship. The Fund shall access the amended DCS, in order to establish the GFI compliance and emissions status of the ship. Additionally, the Fund shall maintain a database of all payments made by the ship for GFI non-compliance or as contributions under the GHG levy.

X The ship shall collect and report data on their fuel GHG intensity, the surcharges and the levy they had to pay to the Fund annually.]

[(new) Option 4³⁶ – text to be further developed:

[add a reference to the need of reporting the GHG intensity and sustainability performance of fuels to the Organization]]

³⁵ Option 3 originates from document ISWG-GHG 17/2/13 (Fiji et al.).

³⁶ Proposal in option 4 originates from annex 3 of document ISWG-GHG 18/2/17 (Brazil et al.).

[New chapter 5 - Regulations on the IMO net-zero framework]

Regulation X

Application

- 1 This chapter shall apply to all ships of 5,000 gross tonnage and above.
- 2 The provisions of this chapter shall not apply to:
 - .1 ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly. However, each Party should ensure, by the adoption of appropriate measures, that such ships act in a manner consistent with the requirements of chapter 5 of this Annex, so far as is reasonable and practicable;
 - .2 ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion; and
 - [.3 semi-submersible vessels until further review of the application of this chapter.]

[3 The Organization shall develop guidelines regarding the application of this chapter to States which are not a Party to this Annex.]

Regulation X

Goal

The goal of this chapter is to reduce GHG emissions from international shipping as soon as possible, delivering on the reduction targets set out in the *2023 IMO Strategy on Reduction of GHG emissions from ships*³⁷, effectively promoting the energy transition of shipping and providing the world fleet with a needed incentive while contributing to a level playing field and a just and equitable transition.

Regulation X

Functional requirements

In order to achieve the goal set out in regulation [X] of this Annex, a ship to which this chapter applies shall comply with the following functional requirement[s]:

[text to be developed]

Regulation X

Attained annual GHG fuel intensity (attained annual GFI)

- 1 After the end of calendar year [2028] and after the end of each calendar year thereafter, each ship to which this chapter applies, shall calculate the attained annual GFI over a 12-month period from 1 January to 31 December for the preceding calendar year (reporting period), using the data collected in accordance with regulation 27 of this Annex, taking into account the guidelines adopted by the Organization³⁸.

³⁷ Refer to the *2023 IMO Strategy on Reduction of GHG Emissions from Ships* (resolution MEPC.377(80)).

³⁸ Refer to the guidelines to be developed on the calculation of the attained annual greenhouse gas fuel intensity (GFI Calculation Guidelines).

2 Within three months after the end of each reporting period, the ship shall report to its Administration, or any organization duly authorized by it³⁹, the attained GFI for that reporting period together with the data specified in [Part B and Part C of] appendix IX of this Annex via electronic communication and using the standardized format to be developed by the Organization⁴⁰ for the purpose of verifying the compliance of each ship with regulation [X] on the required GFI.

3 The attained annual GFI of a ship in a given year (denoted as $GFI_{attained}$) shall be as follows [, taking into account the guidelines to be developed by the Organization⁴¹]:

$$GFI_{attained} = \frac{\sum_{j=1}^J EI_j \times Energy_j}{Energy_{total}}$$

where:

- .1 j is the fuel or energy source type;
- .2 J is the total number of fuels or energy sources used during the reporting period, as reported to the IMO Ship Fuel Oil Consumption Database;
- .3 EI_j , expressed in gCO₂eq/MJ, is the [GHG intensity, expressed on a well-to-wake basis, of fuel or energy source type j][adjusted tank-to-wake GFI of fuel type j], calculated taking into account the guidelines developed by the Organization⁴²;
- .4 $Energy_j$, expressed in MJ, [is the amount of energy used from energy source type j . For fuel oil, this shall be based on the Lower Calorific Value of fuel oil type j (in MJ/tonne) multiplied by the amount of fuel oil (in tonnes) consumed by the ship. For electricity, it shall be the amount of electrical energy (in MJ) used by the ship. For zero-emission energy sources, such as wind and solar, it shall be the amount of effective energy (in MJ) delivered to the ship] [refers to the energy consumption of fuel type j by the ship in the reporting period]; and
- .5 $Energy_{total}$ [expressed in MJ.] [is] [refers to] the total [amount of] energy used by the ship [in the reporting period], including [, in particular,] [but not limited to] fuel oil, electricity delivered from the shore [power], and zero-emission energy sources, [wind assisted propulsion, and solar power].

³⁹ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended).

⁴⁰ Refer to the *2022 Guidelines for the development of a ship energy efficiency management plan (SEEMP)* (resolution MEPC.346(78), as amended by resolution MEPC.388(81).

⁴¹ Refer to the guidelines to be developed on the calculation of the attained annual greenhouse gas fuel intensity (GFI Calculation Guidelines).

⁴² Refer to the *2024 Guidelines on Lifecycle GHG intensity of marine fuels* (resolution MEPC.391(81)), as may be amended.

[3bis Ships serving eligible ports of developing countries that are expected to be negatively impacted by the measures, may apply the following correction factor (f_{voy}) to the formula in paragraph [3] of this regulation for:

$$GFI_{attained} = \frac{\sum_{j=1}^J EI_j * Energy_j}{Energy_{total}} \cdot (1 - f_{voy})$$

where,

- .1 f_{voy} is calculated as $f_{voy} = [50\%] \cdot Z\% \cdot d\%$, where $Z\%$ is the reduction factor in calculating the target GFI and $d\%$ indicates the share of energy consumed during the voyages that serve the eligible ports.

3ter The Organization shall develop a list of eligible ports located in developing countries that are expected to be negatively impacted by the measures, according to the list to be drawn up on the basis of proposals made by interested Parties.]

4 [Notwithstanding paragraphs 1 and 2 of this regulation,] In the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6 of this Annex completed after 1 January [2027] [2028], a ship shall, after the end of the calendar year in which the transfer takes place, calculate and report the attained annual GFI for the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, in accordance with paragraphs 1 and 2 of this regulation, [for verification in accordance with regulation [X] of this Annex,] taking into account the guidelines to be developed by the Organization⁴³. Nothing in this regulation relieves any ship of its reporting obligations under [this regulation or] regulation[s] 27, [X] and [X] of this Annex [and any company of its responsibility for a ship for the part of the reporting period corresponding to that company, taking into account guidelines to be developed by the Organization.]

Regulation X

[Target][Required] annual GHG fuel intensity ([target][required] annual GFI)

[1 Each ship shall have an attained annual GFI which is equal to or lower than the required GFI in accordance with this regulation.]

2 The required GFI for each ship to which this regulation applies shall be determined as follows:

$$[Target][Required] \text{ annual GFI} = (1 - Z/100) \cdot GFI_R,$$

where,

- .1 GFI_R is the GFI reference value [representing the attained annual GFI of ships to which this regulation applies at the end of calendar year [2025], determined on the basis of the annual reports produced in accordance with regulation 27.10 of this Annex for the calendar years [2023, 2024 and 2025], taking into account the guidelines developed by the

⁴³ Refer to the guidelines to be developed on the calculation of the attained annual greenhouse gas fuel intensity (GFI Calculation Guidelines).

Organization⁴⁴][equivalent to 77.7 gCO₂eq/MJ, representing the average TtW GHG fuel intensity of international shipping in year 2008]; and

- .2 Z is the annual reduction factor specified in Table X1 for the [target][required] annual GFI compared to the GFI reference value:

[Option 1 (individual Z factors for a ‘base’ and ‘strive’ scenario):

Table X1 – Reduction factors for the [target][required] annual GFI relative to the GFI reference value⁴⁵		
Year	[Z factor-base]	[Z factor- strive]
2028	[6.5]	[13]
2029	[8.5]	[19.5]
2030	[12]	[24.5]
2031	[17]	[30]
2032	[22.5]	[35.5]
2033	[28]	[41]
2034	[33.5]	[46]
2035	[38.5]	[51.5]
2036		
2037		
2038		
2039		
2040	[67.5]	[78.5]
2041		
2042		
2043		
2044		
2045	[83]	[89]
2046		
2047		
2048		
2049		
2050	[98]	[98]

Annual reduction factors for individual years in the periods 2036-2039, 2041-2044 and 2046-2049 shall be decided not later than 2 years before the beginning of each period.]

[Option 2 (compilation of proposed Z-factors):

Table X1 - Reduction factors (in percentage) for the [target][required] annual GFI relative to the GFI reference value			
Year	Reduction factors for the Required GFI	Z factor (applied to adjusted TtW Value 2)	Z factor (applied to adjusted TtW Value 2)
2028	[2.7–5.0]	[2.6]	[1.90 to 3.20]
2029	[4.1–7.4]	[4.0]	[2.70 to 5.30]

⁴⁴ Refer to the 2024 Guidelines on Lifecycle GHG intensity of marine fuels (resolution MEPC.391(81)).

⁴⁵ The figures reflect the suggested Z-values in connection with a US\$ 100 GHG contribution.

2030	[5.8–10]	[7.0]	[5.00 to 8.90]
2031	[7.9–15]		
2032	[11–20]		
2033	[14–25]		
2034	[19–31]		
2035	[27–36]	[23]	[21.00 to 25.60]
2036			
2037			
2038			
2039			
2040	[65–68]	[60]	[58.40 to 61.60]
2041			
2042			
2043			
2044			
2045	[89–90]	[80]	[79.00 to 81.70]
2046			
2047			
2048			
2049			
2050	[97–98]	[94]	[92.90 to 95.40]

1

[3 Within [one] month after the reporting of the attained annual GFI in accordance with regulation [X], including in cases where the reporting takes place pursuant to regulation [X] the Administration, or any organization duly authorized by it⁴⁶, shall determine, on the basis of the data reported pursuant to regulation 27, whether the attained GFI of each ship is equal to, higher or lower than the [target][required] annual GFI set for that reporting period in accordance with paragraph 1, and verify the compliance surplus or compliance deficit, if any, taking into account the guidelines to be developed by the Organization⁴⁷.]

[(new) Chair's consolidated version of the amendments on the Sustainable fuels certification schemes/standards:]

Regulation X1

Sustainable fuels certification schemes/standards

1 Information on the Fuel Lifecycle Label (FLL), including the GHG intensity of a fuel used by a ship, shall be calculated, verified and certified taking into account guidelines developed by the Organization⁴⁸.

2 The GHG intensity shall be calculated by using default emission factors approved by the Committee or by using actual emission factors demonstrating superior GHG performance compared to the default emission factors. Actual emission factors and sustainability

⁴⁶ Refer to the *Code for Recognized Organizations (RO Code)* (resolution MEPC.237(65), as may be amended)

⁴⁷ Refer to guidelines to be developed by the Organization on the flexibility compliance mechanism and method of calculation of compliance surpluses and compliance deficits for ships.

⁴⁸ Refer to the *2024 Guidelines on Lifecycle GHG intensity of marine fuels* (resolution MEPC.391(81)).

performance of fuels shall be certified by a recognized Sustainable Fuels Certification Scheme/Standard (SFCS).

3 A recognized SFCS shall be approved by the Committee taking into account guidelines to be developed by the Organization⁴⁹.

4 By 31 December 2027 the Secretary-General of the Organization shall publish a list of recognized SFCSs, to be updated periodically thereafter.

5 Within three months after the end of calendar year 2027, and within three months after the end of each following calendar year, recognized SFCSs shall report relevant data [for that calendar year or portion thereof] to the IMO GFI Registry, taking into guidelines to be developed by the Organization⁵⁰. On the basis of the reported data, the Secretary-General of the Organization shall produce an annual report to the Committee summarizing the data collected, the status of missing data, and such other relevant information as may be requested by the Committee.

6 The recognition of a SFCS shall be subject to renewal every five years and periodic audits, taking into account guidelines to be developed by the Organization⁵¹.

[Regulation X

[[Alternative] compliance approaches]

[Option 1⁵²:

1 [A ship shall be considered compliant if its attained annual GFI is equal to or lower than the [target][required] annual GFI.]

2 [Notwithstanding paragraph 1 of this regulation, ships may comply with the [target][required] annual GFI through the flexible compliance approaches as set out in [paragraphs [X] and [X]] of this regulation, taking into account the guidelines to be developed by the Organization⁵³, provided its final compliance balance is zero][[Where the verified attained annual GFI is higher or lower than the [target][required] annual GFI, paragraphs [X] of this regulation shall apply]. [The aggregate effect of alternative compliance approaches shall not undermine the achievement of the reduction targets].

3 A ship with [the attained annual GFI lower than the [target][required] annual GFI] [a verified compliance surplus] may [generate] [receive] Surplus [Compliance] Units [issued by the IMO GFI Registry and credited to the ship's account in the IMO GFI Registry in accordance with regulation [X]].

4 The amount of Surplus [Compliance] Units to be issued and credited shall [be calculated taking into account the guidelines to be developed by the Organization],[and] [be

⁴⁹ Guidelines to be developed.

⁵⁰ Guidelines to be developed.

⁵¹ Guidelines to be developed.

⁵² Option 1 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.) and ISWG-GHG 17/2/7 (Angola et al.).

⁵³ Refer to the guidelines to be developed on the flexible compliance approaches related to GHG fuel intensity (GFI Compliance Guidelines).

equal to the amount requested by that ship and, in any case, not surpassing the verified compliance surplus of that ship for that reporting period, communicated to the IMO GFI Registry [in accordance with regulation [X] on compliance verification between the attained annual GFI and the [target][required] annual GFI].

5 A Surplus [Compliance] Unit [credited to the account] of a ship [in the IMO GFI Registry] can be used for one of the following purposes [thereby being cancelled in the IMO GFI Registry]:

- .1 [transfer to other ships in the same compliance pool [\[or via the IMO GFI Registry\]⁵⁴](#), including through direct agreement duly communicated and recorded] [transferred, at the request of the ship in whose account they are credited, to any other ship's account that they designate];
- .2 bank for use in the [following] [future] reporting period[s], [subject to the conditions of paragraph [X]]; or
- .3 [voluntary cancellation as a mitigation contribution] [cancelled by the IMO GFI Registry in accordance with paragraph [X]].

[6 Each Surplus [Compliance] Unit can only be transferred or cancelled once, but different Surplus [Compliance] Units of a ship can be used for different purposes.]

[7 The total amount of the Surplus [Compliance] Units of an over-compliant ship used for the purposes specified in paragraph [X] shall be equivalent to original amount of the Surplus [Compliance] Units and then be subtracted from the original amount.]

[8 Surplus [Compliance] Units not assigned for specific use will be automatically banked if they [are valid, in accordance with paragraph [X], and] have not been transferred or cancelled taking into account the guidelines established by the Organization, [or cancelled as mitigation contributions, if in their last year of validity,] so that the final compliance balance of the ship is zero.]

[9 Each Surplus [Compliance] Units shall have a validity of 2 years after the date of their issuance from the IMO GFI Registry. Surplus [Compliance] Units not used by the ship in whose account they are credited by the date of expiry of their validity will be cancelled as expired and cannot be used by any ship for any purpose under this chapter.]

10 [A ship with the attained annual GFI higher than the [target][required] annual GFI will generate Deficit Units.] [By 31 May each calendar year, a ship with a verified compliance deficit, communicated to the IMO GFI Registry in accordance with regulation [X], shall comply with regulation [X] on the [target][required] annual GFI through the use of Surplus [Compliance] Units or Remedial [Compliance] Units, concurrently or alternatively, in an amount determined in accordance with paragraph [X].]

11 The total amount of Surplus [Compliance] Unit or Remedial [Compliance] Units needed for an under-compliant ship to comply with regulation [X], shall be determined as follows, [taking into account the guidelines developed by the Organization]:

⁵⁴ [New proposal originates from document ISWG-GHG 18/2/11 \(China et al.\).](#)

[Option 1⁵⁵: (verified attained annual GFI– [target][required] annual GFI) * total amount of energy generated by the fuel used on board during the reporting period]

[Option 2⁵⁶: The total amount of the Deficit Units generated by an under-compliant ship is calculated as follows:

$$DU_j = (GFI_{attained,j} - GFI_{target,j}) \cdot \sum_i (Energy_{i,j}) \quad (\text{Equation 3})$$

where:

- .1 DU_j refers to the total amount of Deficit Units generated by the ship, expressed in tonne CO₂eq, based on the actual fuel consumption;
- .2 $GFI_{attained,j}$ is the same as defined in Equation 1 while $GFI_{target,j}$ is the same as defined in Equation 2, both expressed in tonne CO₂eq/TJ (equivalent to gCO₂eq/MJ); and
- .3 $\sum_i (Energy_{i,j})$ refers to the total amount of energy used by the ship in year j , analogue to Equation 1, expressed in TJ (10⁶MJ);]

12 [A Deficit Unit] [The compliance deficit] of a ship can be balanced through one of the following approaches and then cancelled in the IMO GFI Registry [through the use of:

[Option 1⁵⁷:

- .1 through the use of Surplus [Compliance] Units, whereby the IMO GFI Registry cancels Surplus [Compliance] Units credited to a ship's account in accordance with paragraph [X], equal to the amount of Surplus [Compliance] Units requested by that ship and subject to the conditions of paragraph [X].]
- .2 through the use of Remedial [Compliance] Units, whereby:
 - .1 The IMO GFI Registry issues and credits Remedial [Compliance] Units to a ship's account upon its request, equal to the amount of Remedial [Compliance] Units requested by that ship;
 - .2 Each Remedial [Compliance] Units is [compensated][acquired] for through the IMO [XX] Fund/Facility established under regulation [X]] in accordance with paragraph [X];
 - .3 The IMO GFI Registry cancels Remedial [Compliance] Units credited to a ship's account, equal to the amount of Remedial [Compliance] Units requested by that ship, only after proof of compensation.]

[Option 2⁵⁸:

⁵⁵ Option 1 originates from document ISWG-GHG 17/2/2 (Austria et al.).

⁵⁶ Option 2 originates from document ISWG-GHG 17/2/7 (Angola et al.).

⁵⁷ Option 1 originates from document ISWG-GHG 17/2/2 (Austria et al.).

⁵⁸ Option 2 originates from document ISWG-GHG 17/2/7 (Angola et al.).

- .1 a Surplus [Compliance] Units obtained from other ships in the same compliance pool [\[or via the IMO GFI Registry\]⁵⁹](#);
- .2 a Surplus [Compliance] Units banked from [the last] [previous] reporting period[s]; or
- .3 a Remedial [Compliance] Unit obtained through making contributions to the IMO [XX] Fund/Facility.]

[13 Each Deficit Unit can only be balanced through one single approach, but different Deficit Units of a ship can be balanced through different approaches. The total Deficit Units of an under-compliant ship balanced through the approaches specified in paragraph [X] shall be equivalent to the original amount of the Deficit Units, so that the final compliance balance of the ship is zero.]

[14 Before the start of each reporting period, the compensation for one Remedial [Compliance] Unit shall be annually determined by the Secretary General taking into account guidelines to be developed by the Organization⁶⁰.]

[15 Each Remedial [Compliance] Unit shall be valid for compliance only for the reporting period for which it is issued. For each Remedial [Compliance] Unit [compensated for][acquired] by a ship, the IMO [XX] Fund/Facility shall issue proof of compensation to that ship. The IMO GFI Registry shall cancel expired Remedial [Compliance] Units where no proof of compensation is made available in the account where the Remedial [Compliance] Unit is credited within the period mentioned in paragraph [X].]

[16 The entity responsible for compliance with paragraph [X] shall be the company at the time mentioned in that paragraph. The company shall be entitled to reimbursement, in accordance with national law, from any other entity that has assumed control of the ship from that company on matters that affect achieving compliance with paragraph [X].⁶¹]

[\[\(new\) text to be further adjusted on the penalty price calculation methodology from document ISWG-GHG 18/2/8 \(CSC\):](#)

The Remedial Unit (RU) price is calculated to make the baseline fuel (LNG or VLSFO) as expensive as a fuel mix compliant with the required GFI target for a given year t . The fuel mix is composed of the baseline fuel and a fuel with a WTW emission factor inferior to the GFI target for a given year t (thereafter the compliant fuel). Compliant fuels are included in the calculations if their prices are higher than the baseline fuel. CSC calculates the RU price for each of the listed fuels in five-yearly intervals from 2030 to 2050.

The calculation of the RU price is a three-steps process:

- .1 first, the proportion of the compliant fuel to include in the mix is calculated. This is done by solving $P = \frac{(GFI_{target,t} - ef_{baseline})}{ef_{compliant,t} - ef_{baseline}}$, with ef the WTW emission factor for a fuel and all variables expressed in gCO₂eq/MJ;

⁵⁹ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

⁶⁰ Refer to the guidelines to be developed by the Organization on the determination of the price of [Deficit Units] [Remedial Compliance Units] under the flexibility compliance mechanism.

⁶¹ 'Control of the ship' in this context means the actions of the ship related to its commercial activities such as determining the cargo or the route and speed of the ship.

- .2 second, CSC estimates the price of the fuel mix, calculated as $P_{fuelmix,t} = P * P_{compliant,t} + (1 - P) * P_{baseline}$, with all prices expressed in \$/GJ; and
- .3 Finally, CSC estimates the price of the RU as $P_{RU} = 10^3 * \frac{P_{fuelmix,t} - P_{baseline,t}}{ef_{baseline} - GFI_{target,t}}$, to express the price in \$/tCO₂eq.

Production costs/prices of compliant fuels were taken from the report of the Task 2 of the comprehensive impact assessment of the basket of candidate GHG reduction mid-term measures by DNV (MEPC 82/INF.8/Add.1), while WtW values for LNG, LPG and biofuels were calculated based on the annexes of the FuelEU Maritime Regulation (Regulation 2023/1805) and Renewable Energy Directive (Directives 2018/2001 and 2023/2413) of the EU.]

[Option 2⁶²:

[1. Dues for the surcharge for non-compliance with the GFI limit (Attained GFI exceeds the required annual GFI):

A surcharge shall be paid for non-compliance with the GFI limit. The surcharge shall be set at a sufficiently high rate to disincentivize non-compliance.]

[1bis From 1 January 2028, for each ship which uses fuel oil which has a GHG Fuel Intensity (attained annual GFI) that exceeds the required annual GFI stipulated by regulation [X] of this Annex:

- .1 for each tonne of CO₂eq emitted due to attained annual GFI exceeding required annual GFI, the ship shall pay to the Organization, in accordance with the maritime GHG emissions pricing mechanism, a GHG Surcharge Fee (GSF) that shall be determined as follows:

$$GSF = ((\text{tonnes CO}_2\text{eq Attained GFI}) - (\text{tonnes CO}_2\text{eq Required GFI})) \cdot ([X\%]^{63} \text{ of } [US\$18.75]^{64} \text{ per tonne of CO}_2\text{eq})$$

Where,

- .1 tonnes of CO₂eq = Y . M . LCV;
- .2 Y = GHG intensity of the fuel used (gCO₂eq/MJ);
- .3 M = mass of fuel used in metric tonnes (MT); and
- .4 LCV = Lower Calorific Value of fuel used (MJ/g);
- .2 from 1 January 2030, subject to the review required by regulation [X] of this Annex, the GHG Surcharge Fee shall be [X%] of the GHG fee specified by regulation [X] of this Annex;

⁶² Option 2 is a combination of text originating from documents ISWG-GHG 17/2/5 (Bahamas et al.) and ISWG-GHG 17/2/13 (Fiji et al.).

⁶³ The GHG Surcharge Fee is a product of the CO₂eq emissions in excess of the Required GFI and a percentage of the "GHG fee", the "GHG fee" being required to be paid for all CO₂eq emissions by the ship.

⁶⁴ "GHG fee" as may be specified in regulation 40.4 of this Annex. US\$ 18.75 is an illustrative example only.

- .3 from 1 January 2040, subject to the review required by regulation [X] of this Annex, the GHG Surcharge Fee shall be [X%] of the GHG fee specified by regulation [X] of this Annex; and
- .4 pursuant to regulation 27 of this Annex, fuel oil data used to determine the additional tonnes of CO₂eq emitted due to attained annual GFI exceeding the required annual GFI, shall be reported by the ship to the Administration⁶⁵. Pursuant to regulation [X] of this Annex, data shall be submitted to the Organization in accordance with the maritime GHG emissions pricing mechanism.

2 From 1 January 2032, and at intervals to be agreed thereafter, the GHG Surcharge Fee which shall be due if the ship is unable to comply with regulation [X] of this Annex shall be based on the GHG Fuel Intensity (required annual GFI) determined following the review required by regulation [X] of this Annex.]

[Regulation X

IMO GFI Registry]

[Option 1:

No regulations on IMO GFI Registry]

[(new) Chair's consolidated elements for a draft regulation on the IMO GFI Registry following discussions during ISWG-GHG 18:

Establishment of the IMO GFI Registry

1 The Secretary-General of the Organization shall establish and administer the IMO GFI Registry to facilitate the implementation of regulation [x] on GFI compliance approaches, taking into account the guidelines to be developed by the Organization.

Functionalities of the IMO GFI Registry

2 [Text to be developed]

Obligations for a ship/company under the IMO GFI Registry

3 [Text to be developed]

[Administrative fee(s) for IMO GFI Registry services]

4 [Text to be developed]

Reporting to the Marine Environment Protection Committee

5 [Text to be developed]

1

⁶⁵ Resolution MEPC.348(78) on the 2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity, as amended by resolution MEPC.389(81)

[Option 2⁶⁶:

1 From calendar year [2027] [2028], the [Secretary-General of the] Organization shall establish [, maintain and manage a platform, i.e.] [\[and maintain\]⁶⁷](#) the IMO GFI Registry to facilitate the implementation of regulations [X] [, taking into account the guidelines to be developed by the Organization.⁶⁸]

[\[1bis⁶⁹ The IMO GFI Registry shall \[record\]\[track\], in accordance with this chapter:](#)

- [.1 the issuance of compliance units;](#)
- [.2 the holding of compliance units in an account;](#)
- [.3 the transfer of compliance units between accounts, where applicable;](#)
- [.4 the expiry \[and banking\] of compliance units between reporting periods;](#)
- [.5 the use of compliance units to satisfy a ship's obligations under regulation X;](#)
- [.6 the cancellation of compliance units, including, where applicable, cancellation for use under regulation X, voluntary cancellation, expiry or revocation; and](#)
- [.7 any other information as may be required to demonstrate a ship's compliance with this chapter, taking into account the Guidelines developed by the Organization.](#)

[1ter The Secretary-General of the Organization shall have responsibility for administering the GFI Registry, based on the Guidelines \[to be\] developed by the Organization⁷⁰.\]⁷¹](#)

2 **[Option 1⁷²:**

Each [company responsible for one or more ships to which this chapter applies] [ship] shall maintain an account [for each ship] with the IMO GFI Registry. [The company] [Each ship] shall by [30 June][31 May] each year [pay][submit] an annual administration fee of [X US\$] [per ship] [to the IMO [XX] Fund/Facility] to compensate the administration cost of the IMO GFI Registry [and the IMO [XX] Fund/Facility Governing Board]. [The entity responsible for compliance with this paragraph shall be the company at the time mentioned in this paragraph.]]

⁶⁶ Option 2 is a combination of text originating from documents ISWG-GHG 17/2/2 (Austria et al.) and ISWG-GHG 17/2/7 (Angola et al.).

⁶⁷ [New proposal originates from document MEPC 83/7/25 \(Canada\).](#)

⁶⁸ Refer to the guidelines to be developed by the Organization on the development and management of the IMO GFI Registry.

⁶⁹ [New proposal originates from document MEPC 83/7/25 \(Canada\).](#)

⁷⁰ For further clarity, the Secretary-General may delegate any of the powers, duties and functions conferred on the Secretary-General under this Regulation.

⁷¹ [New proposals 1bis and 1ter originate from document MEPC 83/7/25 \(Canada\).](#)

⁷² Option 1 originates from document MEPC 92/WP.9

[(new) Option 2⁷³:

Each ship to which this Chapter applies shall maintain an account in the IMO GFI Registry, in accordance with the requirements of this chapter. All accounts maintained by ships owned or operated by the same company should be accessible to a common registry user for that company.⁷⁴]

[2bis Each ship with Deficit Unit achieving compliance by obtaining Surplus Unit through pooling shall transfer US\$ [XX] per tonne of CO₂eq (\$/tCO₂eq)⁷⁵ to Sustainable Shipping Fund (SSF) as contribution for each Surplus Unit transaction to remedy Deficit Unit. The quantum of monetary amount for the contribution (expressed in US Dollars per tonne of CO₂eq) from pooling should be determined by the Committee before a reporting period begins.]⁷⁶

3 [For each ship to which this chapter applies, [the verified data as specified in Part [X] and Part [X] of Appendix IX of this Annex] [the outcome of verification of regulation [X] shall be transmitted [by the Administration] to the IMO GFI Registry within [six] [four] months after the end of each calendar year [and a zero final compliance balance shall be achieved within eight months after the end of each calendar year].

[4 For a ship that has achieved a zero final compliance balance and has duly paid [the Surplus [Compliance] Unit handling fee and]⁷⁷ the annual administration fee, a Confirmation of Clearance shall be issued by the IMO GFI Registry within nine months after the end of each calendar year.]

[4bis The Secretary-General may specify modalities and procedures for the opening, maintenance, linking and closing of accounts and for unit transactions and compliance balances, including information to be provided for those purposes, taking into account the Guidelines developed by the Organization.

4ter The Secretary-General of the Organization may charge administrative fees for the following registry services to recover its costs of administering the IMO GFI Registry, up to the following maximum amounts:

- .1 [X US\$] per ship for the opening of an account;
- .2 [X US\$] per ship per year for the maintenance of an account, payable by [30 June][31 May] each year;
- .3 [X US\$] per tCO₂eq for the issuance of a compliance unit; and
- .4 [X US\$] per tCO₂eq for the transfer of a compliance unit.

4quater All the fees referred to in paragraph X [4ter] shall be paid at the time of submission of the service request. The initiation of processing of a request shall be subject to the payment of the fee.

⁷³ New option 2 originates from document MEPC 83/7/25 (Canada).

⁷⁴ *Author's note:* The text on administrative fees is moved to the dedicated paragraph 4ter.

⁷⁵ The quantum of monetary amount for the contribution, purely as an illustrative example (expressed in US Dollars per tonne on CO₂eq) from pooling shall be in the range of US\$ 50 to US\$ 100 and the exact figure should be determined by the Committee before a reporting period begins (ISWG-GHG 18/2/10).

⁷⁶ New proposal originates from document ISWG-GHG 18/2/10 (India).

⁷⁷ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

4*quinquies* As part of the review of this chapter in accordance with [regulation X Review of the chapter], the Organization shall review the administration fees and costs of registry operations and, if proven necessary, amend the fee levels set out in this regulation.”

4*sexies* The IMO GFI Registry shall maintain the following information per unit, taking into account the Guidelines [to be] developed by the Organization:

- .1 unique serial number;
- .2 unit type;
- .3 date of issuance;
- .4 IMO number of the ship that originally requested issuance; and
- .5 any other information specified in the guidelines to be developed by the Organization.]⁷⁸

5 The IMO GFI Registry shall maintain the following information per ship [and compliance period [including those that have joined a pool]⁷⁹, taking into account the guidelines to be developed by the Organization]:

- .1 the verified attained annual GFI [of] [for] each ship;
- .2 [the verified compliance surpluses and verified compliance deficits for each reporting period and the total amount of Surplus [Compliance] Units and Remedial [Compliance] Units held by the ship in its account] [the verified initial compliance balance and the original amount of Compliance units, which may be Surplus [Compliance] Units or Deficit Units;
- [.3 the outcomes of verifications under regulation [X];]
- .4 [transactions of Surplus [Compliance] Units and Remedial [Compliance] Units [a transaction log of Surplus [Compliance] Units and Remedial [Compliance] Units used under regulation [X] and [the Surplus [Compliance] Unit handling fee and]⁸⁰ administrative fees submitted under paragraph [X];
- [.5 amount of Surplus [Compliance] Units [banked, or]⁸¹ cancelled on a voluntary basis;]
- [.5bis amount of Deficit Units balanced by Surplus [Compliance] Units and/or Remedial [Compliance] Units;]⁸²
- [.6 allocation of the ship to a compliance pool;]
- [.7 the final compliance balance;]
- [.8 total energy consumption;]

⁷⁸ New proposals 4bis to 4*sexies* originate from document MEPC 83/7/25 (Canada).

⁷⁹ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

⁸⁰ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

⁸¹ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

⁸² New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

- [.9 energy consumption of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs), as defined and identified by the Committee; and]
- [.10 GHGs emission reduced by the uptake of eligible fuels and/or energy sources (ZNZs).]

[6 The IMO GFI Registry shall maintain the following information per compliance pool and calendar year, as applicable:

- .1 the reference number of the pool;
- .2 the IMO number of each ship in the pool;
- .3 the total amount of original Compliance Units, including total Surplus [Compliance] Units and total Deficit Units; and
- .4 the final pool compliance balance.]

[7 Access shall be granted by the Secretary-General of the Organization to the Administration of a ship in respect of all ship accounts which belong to ships registered by that Administration and to all the recorded data pursuant to paragraphs [X] to [X] of this regulation for all the preceding calendar years for that ship.]

[8 On the basis of the information maintained in accordance with paragraph [X] of this regulation, the Secretary-General of the Organization shall produce an annual report to the Marine Environment Protection Committee summarizing the data collected, transaction patterns in the issuance, transferring, usage and cancellation of Surplus [Compliance] Units and Remedial [Compliance] Units and such other relevant information as may be requested by the Committee.

Regulation X

Uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs)

1 The zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) shall be defined, identified and periodically reviewed by the Committee, taking into account the guidelines to be developed by the Organization⁸³.

2 The Committee shall monitor and publish the share of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) in the yearly energy used on board by ships falling under the scope of chapter 5.]

[Regulation X]

[Synergies with existing measures]

[text to be developed]

⁸³ Refer to the guidelines to be developed on rewards for eligible zero or near-zero ghg emission technologies, fuels and/or energy sources (ZNZs Reward Guidelines).

Regulation X

[Economic mechanism(s) to incentivize the transition to net-zero]

[(new) Option 1⁸⁴]

1 The Organization shall establish the IMO GHG Strategy Implementation Fund. The IMO GHG Strategy Implementation Fund shall be tasked to administer, inter alia, the maritime GHG emissions pricing mechanism in accordance with this regulation and regulations X and X (*Central management/oversight of [collected revenue] [IMO [XX] Fund/Facility] [the IMO GHG Strategy Implementation Fund] and Distribution of revenue*).

2 From 2028, each ship shall make an annual GHG levy/contribution corresponding to the GHG emissions resulting from fuel used on board over a 12-month period from 1 January to 31 December of the preceding calendar year ("reporting period") in accordance with the provisions set forth in this regulation.

3 The annual GHG levy/contribution shall be based on the data reported and verified in accordance with regulation 27 taking into account guidelines adopted by the Organization⁸⁵. The Secretary-General of the Organization shall ensure that the data reported to the IMO Ship Fuel [Use] Database pursuant to regulation [27.9] is transferred automatically to the IMO GHG Strategy Implementation Fund established under this regulation for the purposes set out under regulation X (*Central management/oversight of [collected revenue] [IMO [XX] Fund/Facility] [the IMO GHG Strategy Implementation Fund]*).

4 The required annual GHG levy/contribution shall be set at a rate of [US\$ 18.75] [US\$ 100] [US\$ 150] per tonne of CO₂eq emitted on a life cycle basis. The means of calculation of the amount of GHG emissions under the required annual GHG levy/contribution [and the equivalent rates per tonne of fuel oil consumed⁸⁶] shall be made taking into account guidelines adopted by the Organization⁸⁷.

5 Within [six] months after the end of each calendar year, the IMO GHG Strategy Implementation Fund shall notify each ship of the required annual GHG levy/contribution.

6 In the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6 completed after [1 January] 2027, the required annual GHG levy/contribution provided by each ship after the end of the calendar year in which the transfer takes place shall cover the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, taking into account guidelines to be developed by the Organization⁸⁸. Nothing in this regulation relieves any ship of its obligations under regulation 27 of this Annex or this regulation. Nothing in this regulation relieves any company of its responsibility for a ship for the part of the reporting period corresponding to that company, taking into account guidelines to be developed by the Organization. Where the transfer takes place pursuant to regulations 27.5 and 27.6, the losing Administration shall verify the data reported by the ship for the period

⁸⁴ New option 1 originates from document ISWG-GHG 18/2/5 (Austria et al.) and proposes to replace previous options 1, 2 and 4 set out in annex 1 to document MEPC 82/WP.9 under the regulation on the 'Economic mechanism(s) to incentivize the transition to net-zero.

⁸⁵ See guidelines to be developed by the Organization on the determination of the annual GHG levy/contribution for ships.

⁸⁶ See guidelines to be developed by the Organization on the determination of the annual GHG levy/contribution for ships, to be adopted at the time of adoption of these amendments.

⁸⁷ See guidelines to be developed by the Organization on the determination of the annual GHG levy/contribution for ships, to be adopted at the time of adoption of these amendments.

⁸⁸ See guidelines to be developed by the Organization on the determination of the annual GHG reduction levy/contribution for ships.

of the calendar year corresponding to that Administration within one month after the day of completion of the transfer.

7 Within [seven] months after the end of each calendar year, each ship shall provide an annual GHG levy/contribution to the IMO GHG Strategy Implementation Fund as calculated in accordance with paragraph [4] of this regulation, taking into account guidelines adopted by the Organization⁸⁹.

8 The annual GHG levy/contribution can be provided in instalments in advance of the date specified in paragraph [7] or as a single payment, provided that the total amount of the required annual GHG levy/contribution for each reporting period is made by the date specified in paragraph [7].

9 A transfer of the annual GHG levy/contribution, including in cases where the annual GHG levy/contribution is made pursuant to paragraphs [6 and 8] of this regulation, shall be evidenced through the issuance by the IMO GHG Strategy Implementation Fund of an annual Electronic Account Statement to each ship. [The annual Electronic Account Statement shall be automatically transferred to the IMO Ship Fuel [Use] Database].

10 Access to the Annual Electronic Account Statement for each ship shall be granted to that ship, the Administration and to any organization duly authorized by the Administration. [Officers duly authorized by a Party to this Annex to perform a port State inspection under regulation 10 shall have access to the annual Electronic Account Statement of a ship for the purposes of that inspection].

[11 No later than one month after receiving the annual Electronic Account Statement, the Administration, or any organization duly authorized by it, shall issue a Statement of Compliance in accordance with regulation [6.9] [6.10] of this Annex.]⁹⁰

12 **[Option 1]**⁹¹:

The entity responsible for compliance by the ship with this regulation shall be the company at the time specified in paragraph [7]. The company shall be entitled to reimbursement, in accordance with national law, from any other entity that has assumed the control of the ship from that company on matters that affect the amount of GHG emissions resulting from fuel used on board during the reporting period⁹².]

[Option 2]⁹³:

The entity responsible for compliance by the ship shall be the registered owner of the ship at the time specified in paragraph [7] (the "shipowner"). The shipowner shall be entitled to reimbursement in accordance with national law from any other entity that has assumed the control of the ship from the shipowner on matters that affect the amount of GHG emissions resulting from fuel used on board during the reporting period. If the shipowner has delegated responsibility for ensuring compliance with the

⁸⁹ See guidelines to be developed by the Organization on the collection by the IMO GHG Strategy Implementation Fund of the annual GHG levy/contribution for ships.

⁹⁰ To be discussed in conjunction with proposals submitted for amendments to regulation 6 under chapter II of MARPOL Annex VI.

⁹¹ Option 1 originates from document ISWG-GHG 18/2/5 (Austria et al.).

⁹² "Control of the ship" in this context means the actions of the ship related to its commercial activities such as determining the cargo or the route and speed of the ship.

⁹³ Option 2 originates from document MEPC 83/7/18 (InterManager).

ISM/ISPS Code to a separate entity (the "ISM Manager"), he shall be responsible for ensuring that the shipowner is registered as such with the appropriate authorities, ensuring that the GHG emissions of the ship are measured and reported accurately and in a timely manner in accordance with the regulation.]

[Option 3⁹⁴:

Regulation X

Maritime GHG Emissions pricing system

1 The transaction of Surplus Units between ships in a compliance pool [or via the IMO GFI Registry]⁹⁵, the economic contribution made by ships to the Sustainable Shipping Fund (the SSF) [(a)] in order to acquire Remedial Units [and (b) in order to remedy Deficit Units by acquiring Surplus Units in a pool]⁹⁶, and the reward for the uptake of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources using the revenues from the Sustainable Shipping Fund (the SSF) will establish a Maritime GHG Emissions pricing system. [A Reference Unit Price (in US\$/tCO₂eq) shall be determined and announced by the Committee before the start of a new reporting period to facilitate the implementation of this system, taking into account the guidelines to be determined by the Organization.]⁹⁷
[2bis In all cases, ships with Deficit Units shall transfer US\$ [XX] per tonne of CO₂eq (\$/tCO₂eq)⁹⁸ to the Sustainable Shipping Fund (SSF) as contribution for each Surplus Unit transaction to remedy Deficit Unit, taking into account the guidelines to be developed by the Organization.]⁹⁹

2 Over-compliant ships may transfer their Surplus Units to under-compliant ships in the same compliance pool [or via the IMO GFI Registry]¹⁰⁰, including through direct agreement between them duly communicated and recorded, taking into account the guidelines to be developed by the Organization¹⁰¹. [If the transaction involves monetary transfers, the price of Surplus Units is determined by the parties involved in the transactions and may vary on a case-by-case basis.]¹⁰²

- [.1 For transactions within a compliance pool, the price of Surplus Units is determined by the parties involved in the transactions and may vary on a case-by-case basis. The compliance pool shall remit to the Sustainable Shipping Fund (SSF) a handling fee of [X%] of the Reference Unit Price per Surplus Unit transferred.
- .2 For transactions via the IMO GFI Registry, Surplus Units shall be traded at the Reference Unit Price. Purchasers shall remit to the SSF a handling fee of [Y%] of the Reference Unit Price per Surplus Unit transferred.

⁹⁴ Option 3 originates from document ISWG-GHG 17/2/7 (Angola et al.).

⁹⁵ New proposal originating from document ISWG-GHG 18/2/11 (China et al.).

⁹⁶ New proposal originating from document ISWG-GHG 18/2/10 (India).

⁹⁷ New proposal originating from document ISWG-GHG 18/2/11 (China et al.).

⁹⁸ The quantum of monetary amount for the contribution, purely as an illustrative example (expressed in US Dollars per tonne on CO₂eq) from pooling shall be in the range of US\$50 to US\$100 and the exact figure should be determined by the Committee before a reporting period begins (ISWG-GHG 18/2/10).

⁹⁹ 2bis originates from document ISWG-GHG 18/2/10 (India).

¹⁰⁰ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

¹⁰¹ Refer to guidelines to be developed on flexible compliance approaches related to GHG fuel intensity (GFI Compliance Guidelines).

¹⁰² New brackets originate from document ISWG-GHG 18/2/11 (China et al.).

- .3 Over-compliant ships banking Surplus Units shall remit to the SSF a handling fee of [Z%] of the Reference Unit Price per Surplus Unit banked.]¹⁰³

3 Under-compliant ships holding remaining Deficit Units that are not balanced by Surplus Units shall make an economic contribution to the SSF in order to acquire a corresponding amount of Remedial Units for compliance purpose, taking into account the guidelines to be developed by the Organization¹⁰⁴.

- .1 The price of Remedial Units shall be [higher than the cost difference between the reference conventional fuel and compliant fuels] [[P%] higher than the Reference Unit Price]¹⁰⁵, which shall be determined and announced by the Committee before the starting of a new reporting period; and
- .2 The amount of the economic contribution made by an under-compliant ship to the SSF in order to acquire Remedial Units shall be determined as follows, taking into account guidelines to be developed by the Organization:

$$Contribution_j = Price_{RU,j} \times DU_{r,j}$$

where,

- .1 $Contribution_j$, expressed in US dollars (\$), is the amount of economic contribution made by a ship to the SSF for year j ;
- .2 $Price_{RU,j}$, expressed in US dollars per tonne of CO₂eq (\$/tCO₂eq), refers to the price of Remedial Units for year j determined by the Committee;
- .3 $DU_{r,j}$, expressed in tonnes of CO₂eq (tCO₂eq), refers to the remaining amount of Deficit Units for year j that are not balanced by Surplus Units through pooling.

4 Over-compliant ships that have used a certain amount of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) can claim rewards from the SSF, taking into account the guidelines to be developed by the Organization¹⁰⁶.

- .1 The share of revenues from the SSF for the ZNZs reward purpose shall be determined by the Committee, following the principles and guidelines to be established by the Organization;
- .2 The maximum amount for ZNZs reward up to which a ship can claim for year j , referred to as $Reward_j$ and expressed in US dollars, shall be determined as follows:

$$Reward_j = Price_{ZNZ,j} \times Base_{ZNZ,j}$$

where,

¹⁰³ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

¹⁰⁴ Refer to guidelines to be developed on flexible compliance approaches related to GHG fuel intensity (GFI Compliance Guidelines).

¹⁰⁵ New proposal originating from document ISWG-GHG 18/2/11 (China et al.).

¹⁰⁶ Refer to the guidelines to be developed on rewards for eligible zero or near-zero ghg emission technologies, fuels and/or energy sources (ZNZs Reward Guidelines).

- .1 $Price_{ZNZ,j}$, expressed in US dollars per tonne of CO₂eq (\$/tCO₂eq), refers to reward price for eligible ZNZ for year j , which is determined by the Committee, taking into account the available amount of revenues for this purpose and the price gap between eligible ZNZs and other compliant fuels;
- .2 $Base_{ZNZ,j}$, expressed in tonnes of CO₂eq (tCO₂eq), is the amount of GHGs reduced by the uptake of eligible ZNZs, which is used as a basis to calculate the reward. It shall be calculated as follows:

$$Base_{ZNZ,j} = \sum_Z (GFI_{target,j} - GFI_{Z,j}) \times Energy_{Z,j}$$

where

- .1 $GFI_{target,j}$ is the same as defined in Equation 2, expressed in tonne CO₂eq/TJ.
- .2 $GFI_{Z,j}$ is the adjusted tank-to-wake GFI of specific type Z of eligible ZNZs in year j , taking into account the guidelines to be developed by the Organization¹⁰⁷; and
- .3 $Energy_{Z,j}$, expressed in TJ (10⁶MJ), refers to the energy consumption of specific type Z of eligible ZNZs used by the ship in year j .]

[(new) Option 5¹⁰⁸:

Regulation X

[Economic mechanism(s) to incentivize the transition to net-zero]

1 The Organization shall establish the International Maritime Climate Fund (IMCF) as the operational body of the financial mechanism to encourage the transition to net-zero in international shipping and to achieve the IMO GHG reduction strategy. The Fund shall manage the revenue generated from the issuance of RCUs in accordance with Regulation X and from the GHG levy/Contribution in accordance with Regulation X. The Fund will provide financial resources to compensate for the price gap for eligible fuels as defined in Regulation X, as well as for the decarbonization R&D in international shipping, and to support GHG reduction projects, programs, policies, and other activities within the shipping sector of developing countries, including Small Island Developing States (SIDS) and Least Developed Countries (LDCs).]

¹⁰⁷ Refer to guidelines to be developed on the calculation of the attained annual GHG fuel intensity (GFI Calculation Guidelines).

¹⁰⁸ New option 5 originates from document ISWG-GHG 18/2/9 (Republic of Korea).

Regulation X

[Central management/oversight of [collected revenue]][the IMO [XX] Fund/Facility]]

[Chair's consolidated version of the draft regulations on the IMO [Net-Zero] Fund and the Disbursement of revenue following discussions during ISWG-GHG 18):

Regulation X

The IMO [Net-Zero] Fund

1 The Secretary-General of the Organization shall establish the IMO [Net-Zero] Fund to support the implementation of this chapter and achieve its goal as set out in regulation [x] of this Annex. Any costs associated with the operation of the Fund and its Governing Board shall be borne by the Fund.

2 The IMO [Net-Zero] Fund shall receive and manage contributions made by ships pursuant to regulations [X, Y, Z], and disburse collected revenue in accordance with regulation [X on the Distribution of revenue].

3 The Marine Environment Protection Committee shall adopt the governing provisions for the IMO [Net-Zero] Fund and appoint a Governing Board to oversee the day-to-day operations of the Fund on its behalf.

4 The Governing Board shall have a gender and geographically balanced composition, ensuring adequate representation of developing countries, in particular of Small Island Developing States (SIDS) and Least Developed Countries (LDCs).

5 The Governing Board shall produce an annual report to the Marine Environment Protection Committee containing an overview of its operations, including total contributions received, commitments and disbursement of revenue, and other relevant information as may be requested by the Committee.

6 The Fund shall be subject to audits at the request of the Marine Environment Protection Committee.

Regulation X

Disbursement of revenue

1 The IMO Net-Zero Fund shall disburse collected revenue for the following purposes, as may be specified in its governing provisions:

- .1 annual rewards for the use of eligible [zero or near-zero GHG emission technologies, fuels and sources], in accordance with regulation [X] on the Maritime GHG Emissions pricing system;
- .2 researching, developing and making globally available zero and near-zero GHG emission technologies, fuels and/or energy sources, and developing the necessary associated port infrastructure, within the boundaries of the energy system of international shipping;
- .3 promoting a just transition for seafarers and other maritime workforce;

- .4 facilitating information sharing, technology transfer, capacity-building and technical cooperation supporting the implementation of the regulations in this chapter;
- .5 addressing, as appropriate, disproportionately negative impacts resulting from the implementation of the regulations in this chapter, paying particular attention to the needs of developing countries, in particular LDCs and SIDS; and
- .6 covering the administration costs of the Fund and its Governing Board.

2 The Governing Board shall periodically review the allocation of revenue to the different purposes in paragraph 1 of this regulation.

]

[(new) Option 1¹⁰⁹:

Regulation X

[Central management/oversight of [collected revenue] [the IMO [XX] Fund/Facility] [the IMO GHG Strategy Implementation Fund]]

1 The IMO GHG Strategy Implementation Fund established under regulation [X.1] (*Economic mechanism(s) to incentivize the transition to net-zero*) shall support the implementation of the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, as it may be revised, and the objectives set out in this chapter, including regulation X (*Goal*). To this end, the IMO GHG Strategy Implementation Fund shall have the following functions:

- .1 receive and manage transfers from ships made pursuant to regulations [X, Y, Z¹¹⁰] and disburse revenue thereby collected in accordance with the provisions set out in this regulation and regulation X (*Distribution of revenue*);
- .2 maintain a database of transfers made under paragraph [1.1] of this regulation and an account for each ship¹¹¹, accessible to each ship making a transfer, its Administration and to any organization duly authorized by that Administration [and to the officers duly authorized by a Party to this Annex to perform a port State inspection under regulation 10, for the purposes of that inspection]; and
- .3 take any actions necessary to implement the functions under paragraphs [1.1 and 1.2] above, in accordance with guidelines adopted by the Organization¹¹².

¹⁰⁹ New option 1 originates from document ISWG-GHG 18/2/5 (Austria et al.) and replaces options 1 and 3 set out in annex 1 to document MEPC 82/WP.9 under the regulation on Central management/oversight of [collected revenue] [the IMO [XX] Fund/Facility].

¹¹⁰ Cross-referencing to regulations in new chapter 5 of MARPOL Annex VI setting out obligations for ships that require the receipt and management of transfers by the IMO GHG Strategy Implementation Fund, irrespective whether they are part of the technical or economic element of the basket of candidate mid-term GHG reduction measures.

¹¹¹ Based on the consideration of, inter alia, the *IMO Ship Identification Number Scheme* (resolution A.1078(28)).

¹¹² Guidelines to be developed on the operation of the IMO GHG Strategy Implementation Fund.

2 The Marine Environment Protection Committee shall oversee the operation of the IMO GHG Strategy Implementation Fund.

3 The IMO GHG Strategy Implementation Fund shall have a Board of Governors. The members of the Board shall be appointed by the Marine Environment Protection Committee and be balanced in terms of geographical and gender-related representation, and with dedicated seats for SIDS and dedicated seats for LDCs.

4 The Organization shall decide on the [Terms of Reference/Governing Instrument/Charter/operative provisions] of the IMO GHG Strategy Implementation Fund [including with regard to the implementation of regulation X (*Distribution of revenue*) and its monitoring].

5 The Administration of the IMO GHG Strategy Implementation Fund shall carry no cost to the Organization and shall not constitute a service to the ship by the Organization¹¹³. The operating costs shall be adequately covered by revenue received.]

[Option 2¹¹⁴:

Regulation X

Sustainable Shipping Fund (SSF)

1 From calendar year [2028], the Organization shall set up and operate the Sustainable Shipping Fund (SSF), taking into account the guidelines to be developed by the Organization¹¹⁵.

2 The SSF shall receive [the following]¹¹⁶ contributions made by ships and furnish proof of the contribution effectively received, [taking into account the guidelines to be developed by the Organization:

- .1 payments from under-compliant ships requiring Remedial Units; and
- .2 handling fees from under-compliant ships for Surplus Unit purchases and from over-compliant ships for Surplus Units banking.]¹¹⁷

3 The SSF may also receive contributions from other sources, such as voluntary donations.

¹¹³ This provision is to ensure that the GHG fee would not be subject to UK VAT as no service is provided by IMO.

¹¹⁴ Option 2 originates from document ISWG-GHG 17/2/7 (Angola et al.).

¹¹⁵ Refer to guidelines to be developed on the establishment and operation of the Sustainable Shipping Fund (SSF Guidelines).

¹¹⁶ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

¹¹⁷ New proposal originates from document ISWG-GHG 18/2/11 (China et al.).

Regulation X*Sustainable Shipping Fund Governing Board (SSB)*

1 From calendar year [2028], the Organization shall establish the Sustainable Shipping Fund Governing Board (the SSB), taking into account the guidelines¹¹⁸ to be developed by the Organization.

2 The SSB, the members of which are appointed by the Parties, shall have a geographically balanced composition and safeguard that the SSF and the GFI Registry is established and operated, and that funds are managed and used in accordance with regulations in this Annex.

3 The SSB shall produce an annual report to the Committee summarizing:

- .1 its annual activities;
- .2 the information collected through the GFI Registry, including the information related to the GFI data, transactions of Compliance Units, compliance pools, share of ZNZs in terms of energy consumption, and the status of missing data;
- .3 the information related to the operation of the SSF, including total revenues generated by the SSF and the allocations made; and
- .4 other relevant information as may be requested by the Committee.]

[(new) Option 4¹¹⁹]**Regulation X***[International Maritime Climate Fund]*

1 The International Maritime Climate Fund (IMCF), entrusted with the operation of the financial mechanism, shall implement activities in accordance with Regulation X.1 based on the guidance to be developed by the Organization. These activities shall include compensation for the price gap for eligible fuels, decarbonization R&D in international shipping, and the implementation of GHG reduction projects within the shipping sector of developing countries, in particular LDCs and SIDS.]

Regulation X*[Distribution of revenue]***[(new) Option 1¹²⁰]**

1 The IMO GHG Strategy Implementation Fund shall disburse the revenues as set out in paragraphs [2] to [10] of this regulation.

¹¹⁸ Refer to guidelines to be developed for the establishment and operation of the Sustainable Shipping Fund Governing Board (SSB Guidelines).

¹¹⁹ New option 4 originates from document ISWG-GHG 18/2/9 (Republic of Korea).

¹²⁰ New option 1 originates from document ISWG-GHG 18/2/5 (Austria et al.) and replaces option 1, 2 and 4 set out in annex 1 to document MEPC 82/WP.9 under the regulation on 'Distribution of revenue'.

2 From [August] 2028 and within [eight] months after the end of each subsequent calendar year until the uptake of eligible [ZNZ fuels] [ZNZs]¹²¹ in international shipping reaches [30%] and, at the latest, by 2040, each ship using eligible [ZNZ fuels] [ZNZs], considered on a lifecycle basis, shall receive, upon request, an annual financial reward ("annual reward").

3 The purpose of the annual reward shall be to bridge the price gap of eligible [ZNZ fuels] [ZNZs] with other fuels, to incentivize the uptake of eligible [ZNZ fuels] [ZNZs] in line with the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, as it may be revised. The modalities and amount of the annual reward shall be determined taking into account guidelines adopted by the Organization¹²².

4 The request for an annual reward shall be made to the IMO GHG Strategy Implementation Fund via electronic communication and using a standardized format to be developed by the Organization.

5 The annual reward shall be based on the data collected and verified pursuant to regulation 27 of this Annex. For the purposes of this regulation, the Administration or any organization duly authorized by it will verify the use of eligible [ZNZ fuels] [ZNZs] by each ship for each calendar year, in accordance with regulation 27. After receipt of the data transferred to it pursuant to regulation [27.9bis] of this Annex, the IMO GHG Strategy Implementation Fund shall calculate the amount of annual reward for each ship, taking into account the guidelines developed by the Organization¹²³.

6 In the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6 completed after 1 January 2027, the reward after the end of the calendar year in which the transfer takes place shall be based on the eligible [ZNZ fuels] [ZNZs] used for the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, taking into account guidelines to be developed by the Organization.

7 **[Option 1]:**

The IMO GHG Strategy Implementation Fund shall promote the energy transition of shipping through research [,] [and] development [and innovation] [and deployment], including through support for novel, efficient technologies for fuel production, bunkering technologies, use of zero or near zero energies, use and installation of zero- and near-zero technologies with proven efficiency improvement or GHG emissions reduction, cutting-edge energy efficiency improvements in shipping and the development of GHG reduction solutions for ships navigating in difficult conditions, and applied R&D programmes of alternative fuels and innovative technologies, deployed equitably on a global basis.]

[Option 2]:

The Research, Development and Deployment Sub-Committee of the IMO GHG Strategy Implementation Fund shall support the research, development and deployment (RD&D) of mitigation projects and initiatives in developing countries, especially SIDS and LDCs, including:

¹²¹ Working terminology [ZNZ fuels] [ZNZs] to be discussed in conjunction with proposals submitted for amendments to regulation 2 under chapter I of Annex VI.

¹²² See guidelines to be developed by the Organization on the determination by the IMO GHG Strategy Implementation Fund of the annual reward, to be adopted at the time of adoption of these amendments.

¹²³ See guidelines to be developed by the Organization on the determination by the IMO GHG Strategy Implementation Fund of the annual reward, to be adopted at the time of adoption of these amendments.

- .1 projects directly related to the activities of the shipping sector, including the use of ZNZ fuels and other energy;
- .2 applied R&D programmes of alternative fuels and innovative technologies; and
- .3 related out-of-sector activities, including those relating to ports and coastal infrastructure needed to expedite reduction of GHG emissions.]

8 **[Option 1:**

Revenues received pursuant to regulation [X7.3.2.2] shall be disbursed by the IMO GHG Strategy Implementation Fund exclusively on initiatives that reduce the GHG emissions within the boundaries of the energy system of international shipping, in accordance with guidelines to be developed by the Organization¹²⁴.]

[Option 2: no text.]

9 The IMO GHG Strategy Implementation Fund shall disburse revenues towards:

[Option 1:

- .1 supporting the energy transition in developing countries, in particular SIDS and LDCs, including through deployment of zero or near-zero GHG maritime fuel production facilities and new infrastructure that may be required in ports to expedite the energy transition and adaptation to climate change;
- .2 promoting a just transition for the maritime workforce in developing countries, including training for seafarers;
- .3 supporting capacity-building in developing countries, especially SIDS and LDCs;
- .4 addressing disproportionately negative impacts (DNI) on States, of this chapter, on the basis of regular monitoring and evaluation of DNI, taking into account the results of wider revenue distribution and taking account of guidelines adopted by the Organization. DNI shall be defined as [text to be developed]; and
- .5 addressing environmental protection, adaptation and resilience building, and climate response to the impacts of pollution from international shipping, with differentiated priority to climate vulnerable developing states.]

¹²⁴ See guidelines to be developed by the Organization on the distribution of revenues sourced from the [Alternative compliance approaches] to the Goal-based marine fuel standard.

[Option 2:

- .1 supporting the energy transition in all countries, in particular SIDS and LDCs, within the value chain of energy for shipping, including through capacity-building and deployment of zero or near-zero GHG maritime fuel production facilities and new infrastructure that may be required in ports to expedite the energy transition and adaptation to climate change; and
- .2 addressing disproportionately negative impacts of the IMO reduction measures on international shipping, on the basis of their review, guided by the framework of impacts established by the Organization¹²⁵.]

10 The IMO GHG Strategy Implementation Fund shall disburse revenues referred to in this regulation as set out in the [Terms of Reference/Governing Instrument/Charter/operative provisions to be adopted by the Organization in accordance with regulation X (*Central management/oversight of [collected revenue] [IMO [XX] Fund/Facility] [the IMO GHG Strategy Implementation Fund]*). Disbursement of revenues in accordance with paragraph [9] may be made through competent international funding entities with competencies relevant to the goal under regulation X (*Goal*) of this chapter.]

[Option 3¹²⁶:**Regulation X***Distribution of revenue*

1 The revenues received shall be used as a priority to satisfy reward claims for eligible zero or near-zero GHG emission technologies, fuels and energy sources, as specified in Regulation X9.

2 The remaining revenues after the disbursement for purposes specified in paragraph 1 shall be allocated for the following purposes, taking into account of the guidelines to be developed by the Organization¹²⁷:

- .1 programmes and projects to promote applied research and development (R&D) and technology transfer regarding alternative fuels and innovative technologies;
- .2 in-sector capacity building and investment in port and bunkering infrastructure in developing countries, as well as promoting a just and equitable transition, in the context of the implementation of chapter 5; and
- .3 Mitigation of negative impacts, in the context of the implementation of the measures, on developing countries, including SIDS and LDCs.

3 The Committee can at any given point in time request an audit of the SSF.]

¹²⁵ MEPC.1/Circ.885/Rev.1.

¹²⁶ Option 3 originates from document ISWG-GHG 17/2/7 (Angola et al.).

¹²⁷ Refer to guidelines to be developed on the establishment and operation of the Sustainable Shipping Fund (SSF Guidelines).

Regulation X

Review of the chapter

[(new) Option 1¹²⁸]:

Regulation X

Review processes

1 By January 1 20XX, and in any case after the revision of the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, the Organization shall complete the review of this chapter to assess its effectiveness in promoting the goal under regulation X (*Goal*) of this chapter and amend the relevant provisions if necessary [, taking into account the technological and market developments on the uptake of fuels delivered and used on board ships].

2 Every [five] [two] years, the Marine Environment Protection Committee shall review the rate per tonne of CO₂eq emitted under the GHG levy/contribution referred to in regulation [X.4] (*Economic mechanism(s) to incentivize the transition to net-zero*) [and the surcharge for non-compliance with the GFI set out in regulation X, subjecting them both to an upwards ratchet, in accordance with the guidelines adopted by the Organization].

[text to be further developed]

]

[(new) Option 2¹²⁹]:

- 1 A review shall be completed by 1 January 2030 by the Organization to assess:
- .1 the effectiveness of chapter 5 regulations in reducing GHG fuel intensity and increasing ZNZ uptake;
 - .2 the need to adjust Z factors;
 - .3 the need to adjust compliance approaches;
 - .4 the adequacy of ZNZ rewards; and
 - .5 the need to adjust the SSF, GFI Registry, and SSB.

]

Option 3 (Chair's consequential amendment following discussions on regulation on application):

- [1 A review shall be completed by [XX] by the Organization to assess:
- .1 the application of this chapter to ships of 400 gross tonnage and above;
 - .2 the Z-factor in regulation [X] on the required GFI
- [x]]

¹²⁸ New option 1 originates from document ISWG-GHG 18/2/5 (Austria et al.).

¹²⁹ New option 2 originates from document ISWG-GHG 18/2/11 (China et al.).

[Regulation X]

[Dates for implementation]

[text to be developed]]

Appendix V

[Part A -]¹³⁰ Information to be included in the bunker delivery note (regulation 18.5)

- 1 Name and IMO number of receiving ship
- 2 Port
- 3 Date of commencement of delivery
- 4 Name, address and telephone number of marine fuel oil supplier
- 5 Product name(s)
- 6 Quantity in metric tonnes

[6bis]¹³¹ Fuel type(s)^{132]}

[6ter Blend ratio (mass%), in case of blended fuel oil]

- 7 Density(s) at 15°C (kg/m³)¹³³

[7bis Viscosity at 50°C (cSt)]

- 8 Sulphur content (% m/m)¹³⁴
- 9 The flashpoint (°C) specified in accordance with standards acceptable to the Organization¹³⁵, or a statement that the flashpoint has been measured at or above 70°C;

[9bis Well-to-Tank GHG intensity (gCO₂eq/MJ)

[9ter Low calorific value(s) (MJ/kg), for each fuel oil in case of blended fuel oil]

[9quaterThe information necessary for the calculation of the GHG intensity¹³⁶ (e.g. C_{sfx}, C_{fCO2}, e_G, e_{ccu} and certification number(s)), if applicable;]

- 10 A declaration signed and certified by the fuel oil supplier's representative that the fuel oil supplied is in conformity with regulation 18.3 of this Annex and that the sulphur content of the fuel oil supplied does not exceed:
☐ the limit value given by regulation 14.1 of this Annex;

¹³⁰ Proposal to add "Part A" originates from document ISWG-GHG 17/2/7 (Angola et al.)

¹³¹ New draft paragraphs 6bis, 6ter, 7bis, 9bis, 9ter, 9quater and amendment to paragraph 7 originate from document MEPC 83/7/19 (Japan)

¹³² Refer to the 2024 Guidelines on life cycle GHG intensity of marine fuels (resolution MEPC.391(81)).

¹³³ Fuel oil shall be tested in accordance with ISO 3675:1998 or ISO 12185:1996.

¹³⁴ Fuel oil shall be tested in accordance with ISO 8754:2003.

¹³⁵ ISO 2719:2016, Determination of flash point – Pensky-Martens closed cup method, Procedure A (for Distillate Fuels) or Procedure B (for Residual Fuels).

¹³⁶ Refer to the 2024 Guidelines on life cycle GHG intensity of marine fuels (resolution MEPC.391(81)).

- ☐ the limit value given by regulation 14.4 of this Annex; or
- ☐ the purchaser's specified limit value of _____ (% m/m), as completed by the fuel oil supplier's representative and on the basis of the purchaser's notification that the fuel oil:
 - .1 is intended to be used in combination with an equivalent means of compliance in accordance with regulation 4 of this Annex; or
 - .2 is subject to a relevant exemption for a ship to conduct trials for sulphur oxides emission reduction and control technology research in accordance with regulation 3.2 of this Annex.

The declaration shall be completed by the fuel oil supplier's representative by marking the applicable box(es) with a cross (x).

[11¹³⁷ [reference to the Fuel Lifecycle Label (FLL) in accordance with the LCA Guidelines to be inserted.]

12 In case of blending different products, information under points 5 to 11 shall be included in the bunker delivery note in for each product delivered.]

[Part B – Information pursuant to chapter 5:

*Further text to be developed on information in Part A, Part B and Part E of the Fuel Lifecycle Label in the LCA Guidelines to be added]*¹³⁸

¹³⁷ New draft paragraphs 11 and 12 originate from document ISWG-GHG 17/2/2 (Austria et al.)

¹³⁸ Proposal to add "Part B" originates from document ISWG-GHG 17/2/7 (Angola et al.)

Appendix IX¹³⁹

Information to be submitted to the IMO Ship Fuel Oil Consumption Database (regulation 27)

[New proposed title in document ISWG-GHG 17/2/2 (Austria et al.):

Information to be submitted to the IMO Ship Fuel [Use] Database (regulation 27)]

Identity of the ship

IMO Number

Period of calendar year for which the data is submitted

Start date (dd/mm/yyyy)

End date (dd/mm/yyyy).....

Technical characteristics of the ship

Year of delivery.....

Ship type, as defined in regulation 2 of this Annex or other (to be stated)

Gross tonnage (GT)¹
.....

Net tonnage (NT)²

Deadweight tonnage (DWT)³
.....

Power output (rated power)⁴ of main and auxiliary reciprocating internal combustion engines
over 130 kW (to be stated in kW)

Attained EEDI⁵ (if
applicable).....

Attained EEXI⁶ (if
applicable).....

Ice class ⁷.....

[Part A – Information related to fuel oil consumption and CII]¹⁴⁰

¹³⁹ Appendix IX provided in this document does not take into account amendments adopted by resolution MEPC.385 (81), expected to enter into force on 1 August 2025 as set out in document ISWG-GHG 18/2 (Secretariat).

¹⁴⁰ Proposed amendment originates from document ISWG-GHG 17/2/7 (Angola et al.).

Fuel oil consumption, by fuel oil type in metric tonnes and methods used for collecting fuel oil consumption data

[\[Proposed amendments originating from document ISWG-GHG 17/2/2 \(Austria et al.\):](#)

[Fuel use oil consumption, by fuel oil type in metric tonnes on a per voyage basis and methods used for collecting fuel use oil consumption data\]](#)

Distance travelled

Hours under way

For ships to which regulation 28 of MARPOL Annex VI applies:

Applicable CII:⁸ ☐AER ☐cgDIST

Required annual operational CII⁹

Attained annual operational CII before any correction¹⁰

Attained annual operational
CII¹¹

Operational carbon intensity rating:¹² ☐A ☐B ☐C ☐D ☐E

CII for trial purpose (none, one or more on voluntary basis):¹³

☐ EEPI (gCO₂/t•nm):

☐ cbDIST (gCO₂/berth•nm):

☐ cDIST (gCO₂/m•nm):

☐ EEOI (gCO₂/t•nm or others)¹⁴:

⁸ Refer to the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)).

¹⁰ As calculated in accordance with the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)) before any correction using Interim guidelines on correction factors and voyage adjustments for CII calculations (G5) (resolution MEPC.355(78)).

¹¹ As calculated in accordance with the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)) and having been corrected taking into account Interim guidelines on correction factors and voyage adjustments for CII calculations (G5) (resolution MEPC.355(78)).

¹² Refer to the 2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4) (resolution MEPC.354(78)).

¹³ Refer to the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)).

¹⁴ Refer to the Guidelines for voluntary use of the ship energy efficiency operational indicator (EEOI) (MEPC.1/Circ.684).

[Option 1 – insertion of the following new parameters:¹⁴¹

For ships to which Chapter 5 of MARPOL Annex VI apply:

company name and contact details

Port of registry

attained annual greenhouse gas fuel intensity (attained annual GFI) (g CO₂eq /MJ) ¹⁴²
.....

Number of Surplus Compliance Units already credited in the account of the ship with the GFI Registry :

Number of Surplus Compliance Units or Remedial Compliance Units needed for compliance with the required greenhouse gas fuel intensity (required annual GFI):
.....

Voyages within the period for which the data is reported per voyage completed, as follows:

port of origin date and time of departure

port of destination..... date and time of arrival

Power capacity of other energy conversion systems installed onboard (to be stated in MW).....

Standards and characteristics of equipment to allow on shore power supply

Other on board power sources, not listed above, by energy carrier type (to be stated in MW) and methods used for collecting relevant data

Well-to-Wake emission factors covering all GHG emissions, split in Well-to-Tank, Tank-to-Wake and fugitive emissions, of fuels used on board per fuel type and amount, including fuel oil

annual Greenhouse gas emissions resulting from fuel used on board (to be stated in tonnes of CO₂eq)

Annual Greenhouse gas emissions to be taken into account in the GHG fuel contribution calculated according to the guidelines to be developed by the Organization (to be stated in tonnes of CO₂eq)

[other data to be inserted as necessary.]_____]

[Option 2 - insertion of new Part B and Part C:¹⁴³

Part B - Information related to GHG fuel intensity (GFI)

For ships to which Chapter 5 of MARPOL Annex VI applies:

¹⁴¹ Proposed amendments originate from document ISWG-GHG 17/2/2 (Austria et al.).

¹⁴² Not applicable in the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6.

¹⁴³ Proposed amendments originate from document ISWG-GHG 17/2/7 (Angola et al.).

1 attained annual GHG fuel intensity g CO₂eq /MJ¹⁴⁴.

2 [correction factors, to be updated]

3 original amount of compliance units:

- ☐ Zero Surplus/Deficit Units;
- ☐ Surplus Units: tonnes CO₂eq; or
- ☐ Deficit Units: tonnes CO₂eq.

4 amount of Surplus Units banked from [the last] [previous] reporting period[s]:.....
tonnes CO₂eq.

5 initial compliance balance:.....tonnes CO₂eq.

Part C - Information related to the uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs)

For ships to which Chapter 5 of MARPOL Annex VI applies:

1 Total energy consumption..... 10⁶MJ

2 Total energy consumption of ZNZs10⁶MJ

<u>Pathway code:; Eligible ZNZs: <input type="checkbox"/>YES; <input type="checkbox"/>NO</u>	<u>Value</u>
<u>Energy consumption (in 10⁶MJ)</u>	<u>XXX</u>
<u>WtW GF (in tonne CO₂eq/TJ)</u>	<u>XXX</u>
<u>Adjusted TtW GFI (in tonne CO₂eq /TJ)</u>	<u>XXX</u>

<u>Pathway code:; Eligible ZNZs: <input type="checkbox"/>YES; <input type="checkbox"/>NO</u>	<u>Value</u>
<u>Energy consumption (in 10⁶MJ)</u>	<u>XXX</u>
<u>WtW GF (in tonne CO₂eq /TJ)</u>	<u>XXX</u>
<u>Adjusted TtW GFI (in tonne CO₂eq /TJ)</u>	<u>XXX</u>

3
Amount of GHGs reduction achieved by the uptake of eligible ZNZs..... tonne
CO₂eq]

¹⁴⁴ Not applicable in the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6.

Appendix X¹⁴⁵

Form of Statement of Compliance – Fuel Oil Consumption [and GFI data](#) Reporting and Operational Carbon Intensity rating (regulation 8.3)

STATEMENT OF COMPLIANCE – FUEL OIL CONSUMPTION REPORTING AND OPERATIONAL CARBON INTENSITY RATING

Issued under the provisions of the Protocol of 1997, as amended, to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:

.....
(full designation of the country)

by.....
(full designation of the competent person or organization authorized under the provisions of the Convention)

Particulars of ship¹

Name of ship.....

Distinctive number or letters.....

IMO number².....

Port of registry.....

Gross tonnage.....

Deadweight.....

Type of ship.....

THIS IS TO DECLARE THAT:

- 1 the ship has submitted to this Administration the data required by regulation 27 of Annex VI to the Convention, covering ship operations from (dd/mm/yyyy) to (dd/mm/yyyy);
- 2 the data [specified in Part A of Appendix IX of Annex VI to the Convention](#) was collected and reported in accordance with the methodology and processes set out in the ship's SEEMP that was in effect over the period from (dd/mm/yyyy) to (dd/mm/yyyy);

¹⁴⁵ [Proposed amendments to Appendix X originate from document ISWG-GHG 17/2/7 \(Angola et al\).](#)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² In accordance with the *IMO ship identification number scheme* (resolution A.1117(30)).

3 the attained annual operational CII of the ship from (dd/mm/yyyy) through (dd/mm/yyyy) was: pursuant to regulations 28.1 and 28.2 of Annex VI of the Convention, for ships to which regulation 28 applies;³

4 the annual operational carbon intensity of the ship in this period is rated as

☐A ☐B ☐C ☐D ☐E

in accordance with regulation 28 of Annex VI to the Convention, for a ship to which regulation 28 applies;⁴ and

5 a corrective action plan has been developed and included in the SEEMP (for a ship to which regulation 28 applies, rated as D for three consecutive years or rated as E)⁴

6 the data specified in Part B and Part C of Appendix IX of Annex VI to the Convention was collected and reported in accordance with the methodology and processes set out in the ship's GHG fuel intensity data collection and management plan that was in effect over the period from (dd/mm/yyyy) to (dd/mm/yyyy);

7 the attained annual GHG fuel intensity of the ship from (dd/mm/yyyy) through (dd/mm/yyyy) was: gCO_{2eq}/MJ, pursuant to chapter 5 of Annex VI of the Convention, for ships to which chapter 5 applies.

8 the original amount of compliance units of the ship in this period is:

☐ Zero Surplus/Deficit Units;

☐ Surplus Units: tonnes CO_{2eq}; or

☐ Deficit Units: tonnes CO_{2eq}.

9 the amount of Surplus Units banked from [the last][previous] reporting period[s] is..... tonnes CO_{2eq}.

10 the initial compliance balance is tonnes CO_{2eq}.

11 the total energy consumption is..... 10⁶MJ

12 the total energy consumption of ZNZs is 10⁶MJ

13 the amount of GHGs reduced by the uptake of eligible ZNZs is tonnes CO_{2eq}

This Statement of Compliance is valid until (dd/mm/yyyy)

Issued at.....

(place of issue of the Statement)

(dd/mm/yyyy):

³ In the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6, these sections should be completed consistent with regulation 28.3 of MARPOL Annex VI.

⁴ Ice class should be consistent with the definition set out in the International Code for Ships Operating in Polar Waters (Polar Code) (resolutions MEPC.264(68) and MSC.385(94)). If not applicable, note "N/A".

(date of issue)

*(signature of duly authorized official
issuing the Statement)*

(seal or stamp of the authority, as appropriate)

PROPOSED NEW APPENDICES

New "Appendix Xbis – Form of Statement of Compliance – GHG Fuel Intensity (chapter 5) originates from document ISWG-GHG 17/2/7 (Angola et al.):

[Appendix Xbis**Form of Statement of Compliance – GHG Fuel Intensity (chapter 5)****STATEMENT OF COMPLIANCE – GHG FUEL INTENSITY**

Issued under the provisions of the Protocol of 1997, as amended, to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention") under the authority of the Government of:

.....
(full designation of the country)

by.....
(full designation of the competent person or organization authorized
under the provisions of the Convention)

Reporting period:

from (dd/mm/yyyy) through (dd/mm/yyyy)

Particulars of ship

Name of ship.....
.....

Distinctive number or letters.....
.....

IMO number¹⁴⁶.....
.....

Port of registry.....
.....

Gross tonnage.....

THIS IS TO DECLARE THAT:

1 the attained annual GHG fuel intensity of the ship from (dd/mm/yyyy) through (dd/mm/yyyy) was: g CO_{2eq} /MJ, pursuant to chapter 5 of Annex VI of the Convention, for ships to which chapter 5 applies.

2 the original amount of compliance units of the ship is in this period

☐ Zero Surplus/Deficit Units;

¹⁴⁶ In accordance with the IMO ship identification number scheme (resolution A.1117(30)).

☐ Surplus Units: tonnes CO_{2eq}; or

☐ Deficit Units: tonnes CO_{2eq}.

3 the amount of Surplus Units banked from [the last] [previous] reporting period[s] is..... tonnes CO_{2eq}.

4 the initial compliance balance is tonnes CO_{2eq}.

5 for a ship with Surplus Units in its initial compliance balance, the following flexible compliance approach(es) have been applied:

☐ transfer Surplus Units (in tonne CO_{2eq}) to other ships in the same compliance pool (reference pool number.....);

☐ bank Surplus Units (in tonne CO_{2eq}) for use in [the following] [future] reporting period[s]; and/or

☐ cancel..... Surplus Units on a voluntary basis (in tonne CO_{2eq}) .

6 for a ship with Deficit Units in its initial compliance balance, the following flexible compliance approach(es) have been applied:

☐ obtain..... Surplus Units (in tonne CO_{2eq}) from other ships in the same compliance pool (reference pool number.....); and/or

☐ obtain Remedial Units (in tonne CO_{2eq}) through making contributions to the Sustainable Shipping Fund (SSF).

7 for a ship eligible for rewards, the total amount of GHGs reduced by the uptake of eligible ZNZs is tonnes CO_{2eq}; and

8 the final compliance balance is zero tonnes CO_{2eq}.

This Statement of Compliance is valid until (dd/mm/yyyy)

Issued at
(place of issue of the Statement)

(dd/mm/yyyy)
(date of issue) (signature of duly authorized official issuing the Statement)

(seal or stamp of the authority, as appropriate)]

New "Appendix XII – Form of the Statement of Compliance – Maritime GHG Emissions Pricing Mechanism" originates from document ISWG-GHG 17/2/5 (Bahamas et al.):

[Appendix [XII]]

Form of the Statement of Compliance – Maritime GHG Emissions Pricing Mechanism

STATEMENT OF COMPLIANCE – MARITIME GHG EMISSIONS PRICING MECHANISM

Issued under the provisions of the Protocol of 1997, as amended, to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 related thereto (hereinafter referred to as "the Convention") under the authority of the Government of:

.....
(full designation of the Party)

by
(full designation of the competent person or organization authorized under the provisions of the Convention)

Particulars of ship¹⁴⁷

Name of ship

Distinctive number or letters.

IMO Number¹⁴⁸

Port of registry

Gross tonnage.

THIS IS TO DECLARE:

1. That the ship has submitted to this Administration an Annual Account Statement required by regulation 40.9 of Annex VI of the Convention, which is consistent with the ship's fuel consumption data pursuant to regulation 27.3 of Annex VI of the Convention, covering ship operations from (01/01/yyyy) through (31/12/yyyy).

This Statement of Compliance is valid until (dd/mm/yyyy)

Issued at:
(place of issue of Statement)

Date (dd/mm/yyyy)
(date of issue) (signature of duly authorized official issuing the Statement)

(seal or stamp of the authority, as appropriate)]

¹⁴⁷ Alternatively, the particulars of the ship may be placed horizontally in boxes.

¹⁴⁸ In accordance with the IMO ship identification number scheme (resolution A.1078(28)).

ANNEX 2

INDICATIVE LISTS OF PROPOSED NEW GUIDELINES TO BE DEVELOPED AND EXISTING GUIDELINES TO BE AMENDED TO SUPPORT THE IMPLEMENTATION OF THE IMO NET-ZERO FRAMEWORK FOLLOWING DISCUSSIONS DURING ISWG-GHG 18

This document prepared by the Chair, in consultation with the Secretariat, provides a draft updated indicative collation of proposed new guidelines to be developed and existing guidelines to be amended to support the implementation of possible amendments to MARPOL Annex VI on the 'IMO net-zero framework'. The lists provided in this document are based on annex 4 to document MEPC 82/WP.9, completed with new proposals submitted to ISWG-GHG 18 in documents ISWG-GHG 18/2/5 (Austria et al.) and ISWG-GHG 18/2/17 (Brazil), and to MEPC 83 (up-to the 9 week submission deadline (31 January 2025)) in document MEPC 83/7/5 (Bahamas et al.).

All new proposals originating from documents submitted to ISWG-GHG 18 and MEPC 83 are in blue in the document to facilitate their identification.

This overview is to be considered as 'work in progress', and indicates the guidelines for which draft text or key elements have already been developed and those for which no text has been submitted yet.

Proposed new guidelines for which draft proposed text/key elements have already been developed by co-sponsor(s)

- 1 ***Guidelines [for] [on] the calculation of the attained Greenhouse Gas Fuel Intensity (GFI)***
 - .1 *Developed draft text provided in annex 1 of document ISWG-GHG 16/2/7 (Austria et al.), and proposed amendments in annex 1 of document ISWG-GHG 17/2/20 (CSC);*
 - .2 *Developed draft text provided in annex 1 of document ISWG-GHG 17/2/8 (Angola et al.)*
 - .3 *Key elements on calculation and validation mechanisms for OEI provided in document ISWG-GHG 17/2/10 (Brazil)*
- 2 **Guidelines on the Flexibility Compliance [Mechanism] [approaches] [related to GHG fuel intensity (GFI Compliance Guidelines)] [and method of calculation of compliance surpluses and compliance deficits for ships].**
 - .1 *Developed draft text provided in annex 2 of document ISWG-GHG 17/2/8 (Angola et al.)*
- 3 **Guidelines [for] [on] the [development] [administration] and management of the GHG Fuel Intensity Registry (GFI Registry Guidelines)**
 - .1 *Developed draft text provided in annex 2 of document ISWG-GHG 16/2/7 (Austria et al.), and proposed amendments in annex 2 of document ISWG-GHG 17/2/20 (CSC); and*

- .2 *Key elements provided in annex 4 of document ISWG-GHG 17/2/8 (Angola et al.)*
- 4 **Guidelines on [the determination by the IMO Net Zero Fund of the annual fuel reward] [rewards for eligible zero or near-zero ghg emission technologies, fuels and/or energy sources (ZNZs Reward Guidelines)]**
- .1 *Developed draft text provided in annex 3 of document ISWG-GHG 17/2/8 (Angola et al.)*
- 5 **Guidelines [for] [on] the establishment and [governance] [operation] of the [Sustainable Shipping Fund (SSF Guidelines)]**
- .1 *Key elements are provided in annex 4 of document ISWG-GHG 17/2/8 (Angola et al.)*
- 6 **Guidelines for the establishment and operation of the Sustainable Shipping Fund Governing Board (SSB Guidelines)**
- .1 *Developed draft text provided in annex 4 of document ISWG-GHG 14/3 (ICS)*
- .2 *Key elements provided in annex 4 of document ISWG-GHG 17/2/8 (Angola et al.)*
- 7 **Guidelines for the establishment of an International Maritime Research and Development Board and an IMO Maritime Research Fund**
- .1 *Key elements and principles are provided in documents MEPC 77/7/6 (Japan et al.) and MEPC 76/7/31 (Türkiye)*
- 8 **Guidelines on requirements and procedures for recognition of certification schemes/standards**
- .1 *Key elements and proposed structure are provided in annex 4 to document ISWG-GHG 18/2/17 (Brazil et al.)*
- 9 **Guidelines on the reporting of certification activities to the organization by certification schemes/standards**
- .1 *Key elements and proposed structure are provided in annex 6 to document ISWG-GHG 18/2/17 (Brazil et al.)*
- 10 **Guidelines for the administration of the maritime GHG emissions pricing mechanism by the IMO GHG Strategy Implementation Fund, and for determining the annual GHG levy/contribution and rewards for the use of eligible ZNZ fuels, energy sources and technologies**
- .1 *Developed draft text provided in document MEPC 83/7/5 (Bahamas et al.)*

Proposed new guidelines for which no text/key elements have been developed:

- 1 **Guidelines on methods for determining, collecting and storing [ship fuel use] data under regulation 27 of Annex VI for the purposes of compliance with Chapter 5 of Annex VI – document 17/2/2 (Austria et al.)**
- 2 **Guidelines on Administration verification of the attained annual GHG intensity - document 17/2/2 (Austria et al.)**
- 3 **Guidelines on the operation of the GHG Fuel Register - document 17/2/2 (Austria et al.)**
- 4 **Guidelines on the determination of the price of Remedial Compliance Units under the Flexibility Compliance Mechanism - document 17/2/2 (Austria et al.)**
- 5 **Guidelines on the determination of the annual GHG fuel contribution for ships document 17/2/2 (Austria et al.) / Guidelines on the determination of the annual GHG levy/contribution for ships – document ISWG-GHG 18/2/5 (Austria et al.)**
- 6 **Guidelines on the collection by the IMO Net Zero Fund of the annual GHG fuel contribution for ships - document 17/2/2 (Austria et al.) / Guidelines on the collection by the IMO GHG Strategy Implementation Fund of the annual GHG levy/contribution for ships - document ISWG-GHG 18/2/5 (Austria et al.)**
- 7 **Guidelines on the determination of eligible fuels under the annual fuel reward - document 17/2/2 (Austria et al.) / Guidelines on the determination by the IMO GHG Strategy Implementation Fund of the annual reward – document ISWG-GHG 18/2/5 (Austria et al.)**
- 8 **Guidelines on the distribution of revenues sourced from the [Alternative compliance approaches] to the Goal-based marine fuel standard document 17/2/2 (Austria et al.) / Guidelines on the distribution of revenue sourced from the [Alternative compliance approaches] to the goal-based marine fuel standard - document ISWG-GHG 18/2/5 (Austria et al.)**
- 9 **Guidelines to be developed based on the 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI (resolution MEPC.320(74)), including pro-forma fuel oil non availability report (FONAR) – document ISWG-GHG 17/2/5 (Bahamas et al.)**
- 10 **Guidelines on the operation of the IMO GHG Strategy Implementation Fund - document ISWG-GHG 18/2/5 (Austria et al.)**
- 11 **Guidelines on the application procedures and continuous review of certification schemes/standards – annex 5 document ISWG-GHG 18/2/17 (Brazil et al.)**

List of existing guidelines proposed to be amended:

- 1 ***2024 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP), adopted by resolution MEPC.388(81)*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.) and *key elements provided in annex 3 to document ISWG-GHG 18/2/17 (Brazil et al.)*
- 2 ***2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity, adopted by resolution MEPC.348(78), as amended*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.)
- 3 ***2024 Guidelines on life cycle GHG intensity of marine fuels (LCA Guidelines), adopted by resolution MEPC.391(81)*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.) *and listed in annex 3 to document ISWG-GHG 18/2/17 (Brazil et al.)*
- 4 ***2022 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database, adopted by resolution MEPC.349(78)*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.)
- 5 ***Guidance for submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI, circulated through MEPC.1/Circ.871/Rev.1*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.)
- 6 ***Procedures for port State control, 2023, adopted by resolution A.1185(33)*** – key elements provided in annex 5 to document ISWG-GHG 17/2/8 (Angola et al.)
- 7 ***Interim Guidance on the use of biofuels under regulations 26, 27 and 28 of MARPOL Annex VI (DCS and CII)*** – listed in annex 3 to document ISWG-GHG 18/2/17 (Brazil et al.)

ANNEX 3

POSSIBLE BUILDING BLOCKS FOR A BRIDGING PROPOSAL ON THE IMO NET ZERO FRAMEWORK BY SINGAPORE¹

POSSIBLE DRAFT AMENDMENTS TO MARPOL ANNEX VI ON THE NET-ZERO FRAMEWORK – BRIDGING PROPOSALS

Note: This paper presents a "Two-tier Z factors" design of the Net-Zero Framework, using Annex 1 to MEPC 82/WP.9 as its basis and focusing on the new Chapter 5 "Regulations on the IMO Net-Zero Framework." Other sections of the Net-Zero Framework may require updates accordingly after Chapter 5 is finalized.

[New Chapter 5 - Regulations on the IMO net-zero framework

Regulation X

Application

{Note: subject to further discussion}

Regulation X

Goal

{Note: subject to further discussion}

Regulation X

Functional requirements

{Note: subject to further discussion}

Regulation X

Attained annual GHG fuel intensity (attained annual GFI)

{Note: subject to further discussion}

Regulation X

Target annual GHG fuel intensity

1 Target annual GHG fuel intensity (GFI) consists of two tiers: a Base Target annual GFI ("Base Target") and Direct Compliance Target annual GFI ("Direct Compliance Target").

2 The target annual GFI for each ship to which this regulation applies shall be determined as follows:

$$\text{Target annual GFI}_T = (1 - Z_T/100) \cdot \text{GFI}_{2008},$$

where

GFI₂₀₀₈ is the GFI reference value equivalent to [X] gCO₂eq/MJ, representing the average GHG fuel intensity of international shipping in year 2008; and

Z_T is the annual reduction factor specified in Table X1, in column "Z factor - Base Target" referring to the Base Target annual GFI, and in column "Z factor - Direct

¹ Text prepared based on the concept in document MEPC 83/7/26 (Singapore)

compliance target” referring to the Direct Compliance target annual GFI, compared to the GFI reference value.

4 Table X1 specifies the reduction factors (in percent) for the target annual GFI relative to the GFI reference value.

Table X1 Reduction factors (in percent) for the target annual GFI relative to the GFI reference value

Year	Z factor - Base target	Z factor - Direct compliance target
.....

Regulation X

GFI data collection and reporting

{Note: subject to further discussion}

Regulation X

[Compliance approaches]

1 At the end of each compliance period, each ship shall determine its compliance balance, as follows:

$$\text{Compliance Balance} = (\text{Direct Compliance Target annual GFI} - \text{Attained annual GFI}) \times \text{Total energy consumption}$$

2 If the Compliance Balance is equal to or greater than zero, the ship is considered in direct compliance.

3 If the Compliance Balance is lesser than zero, ships will be in provisional negative compliance balance. Such a ship shall achieve compliance through alternative compliance approaches specified in paragraphs 4 through 6 herein, taking into account the guidelines to be developed by the Organization.

Assessing the compliance deficit

4 Ships in provisional negative compliance balance shall assess their compliance deficit.

5 The compliance deficit is comprised of the quantification of emissions in excess of each tier of Target annual GHG fuel intensity (GFI). It shall be calculated as follows:

.1 For ships whose attained annual GFI is equal or lesser than the Base Target but exceeds the Direct Compliance Target:

Tier 1 Compliance Deficit =
 (Direct Compliance Target annual GFI – Attained annual GFI) × Total
 energy consumption

.2 For ships whose attained annual GFI exceeds the Base Target:

Tier 1 Compliance Deficit =
 (Direct Compliance Target annual GFI – Base Target annual GFI) × Total
 energy consumption

Tier 2 Compliance Deficit =
 (Base Target annual GFI – Attained annual GFI) × Total energy
 consumption

Balancing the compliance deficit

6 The compliance deficit of ships not in direct compliance status shall be resolved through one or more of the alternative compliance approaches below, taking into account the guidelines to be developed by the Organization:

.1 The Tier 1 Compliance Deficit shall be balanced through Compliance Units from one or more of the following sources:

- .1 Surplus Units transferred from other ships [in the same compliance pool];
- .2 Surplus Units banked from [the last] [previous] reporting period[s]; and/or
- .3 Remedial [Compliance] Units acquired through contributions to the IMO [XXX] Fund Fund/Facility [, priced at Tier 2 benchmark rates] [, which shall have an initial price of USD [XXX] per tonne of CO₂e [on a WtW basis]].

.2 The Tier 2 Compliance Deficit shall be balanced through Compliance Units from one or more of the following sources:

- [.1 Surplus Units transferred from other ships [in the same compliance pool];]
- .2 Surplus Units banked from [the last] [previous] reporting period[s]; and/or
- .3 Remedial Units acquired through contributions to the IMO [XXX] Fund Fund/Facility [, priced at Tier 1 benchmark rates] [, which shall have an initial price of USD [XXX] per tonne of CO₂e [on a WtW basis]].

[7 The entity responsible for compliance with this regulation shall be the company at the time specified in paragraph [X]. The company shall be entitled to reimbursement, in accordance with national law, from any other entity that has assumed control of the ship from

that company on matters that affect the amount of GHG emissions resulting from fuel used on board during the reporting period.]

8 A ship that has fully balanced its compliance deficit by any of the actions mentioned in paragraphs 4 and 5 herein, will no longer be in negative compliance balance, and thereby be considered in compliance.

Surplus Units

9 Ships in direct compliance status are eligible to receive Surplus Units, taking into account the guidelines to be developed by the Organization. The amount of Surplus Units shall be equal to the positive compliance balance and expressed in tonne CO₂e.

10 Taking into account the guidelines to be developed by the Organization, Surplus Units can be used for one of the following purposes:

- .1 be transferred to other ships;
- .2 be banked for use in [the following] [future] reporting period[s]; or
- .3 be voluntarily cancelled as a mitigation contribution.

11 Surplus Units shall only be transferred or cancelled once, but different Surplus Units of a ship can be used for different purposes.

12 Any unassigned Surplus Units shall be automatically banked, provided they remain [valid and] unused, [and units reaching their validity expiration shall be deemed cancelled as mitigation contributions].

[Regulation X IMO GFI Registry]

{Note: subject to further discussion}

Regulation X

Uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs)

1 The zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) shall be defined, identified and periodically reviewed by the Committee, taking into account the guidelines to be developed by the Organization.

2 The definition shall be agnostic as to origin and feedstock, and based on a threshold of WtW GHG emissions per energy unit, as defined in the guidelines to be developed by the Organization and the LCA Guidelines.

[Option 1:

3 The threshold for ZNZ fuels shall be set at [10%] [25%] of average of the WTW GHG emissions from energy used by vessels in [2008] for an [initial] period [of 2 years after the beginning of disbursement of rewards] [until 2034].]

[Option 2:

3 ZNZs should include technologies, fuels and energy sources. Due to their different natures, their definitions may vary. We propose the following criteria for each category of ZNZs:

- .1 For fuels, the WtW GFI thresholds need to gradually decrease from 25% to 3% of baseline WtW GFI, as shown in Table X.

Table.X GFI thresholds for ZNZ fuels (in gCO_{2e}/MJ)

Year	2027-2034	2035-2040	2041-2044	2045-2050
WtW GFI	23.7	18.9	9.5	8.5-2.8
(baseline: 94.7)	(25% of baseline)	(20% of baseline)	(10% of baseline)	(9-3% of baseline)

- .2 For energy sources, sustainable electricity (including batteries), wind, solar and nuclear power should be considered ZNZs, taking into account the guidelines to be developed by the Organization.
- .3 For technologies, GHG reduction technologies, including onboard carbon capture and storage (OCCS), may qualify as ZNZs, pending guidelines from the Organization.]

4 The Committee shall monitor and publish the share of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) in the yearly energy used on board by ships falling under the scope of chapter 5.

[Regulation X]

[Synergies with existing measures]

{Note: subject to further discussion}

Regulation X

[Economic mechanism(s) to incentivize the transition to net-zero]

Regulation X

Maritime GHG emissions pricing mechanism

1 The transaction of Surplus Units between ships [in a compliance pool], the economic contribution made by ships to the IMO [XXX] Fund (the Fund) in order to acquire Remedial Units, and the reward for the uptake of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources using the revenues from the IMO [XXX] Fund will establish a Maritime GHG Emissions pricing system.

2 Ships with a positive compliance balance may transfer their Surplus [Compliance] Units to ships with a provisional negative Compliance Balance [in the same compliance pool], including through direct agreement between them duly communicated and recorded, taking into account the guidelines to be developed by the Organization. If the transaction involves monetary transfers, the price of Surplus Units is determined by the parties involved in the transactions and may vary on a case-by-case basis.

3 The Tier 1 and Tier 2 benchmark rates for Remedial [Compliance] Units shall be determined prior to the beginning of a reporting period by the Secretary General taking into account guidelines to be developed by the Organization. [The initial prices shall be USD [XXX] per tonne of CO_{2e} for Tier 1 Remedial [Compliance] Unit and USD [XXX] per tonne of CO_{2e} for Tier 2 Remedial [Compliance] Unit].

4 Ships [with a positive compliance balance] that have used a certain amount of eligible zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs) can claim rewards from the Fund, taking into account the guidelines to be developed by the Organization.

Regulation X

[Central management/oversight of [collected revenue]][the IMO [XX] Fund/Facility]]

{Note: subject to further discussion}

Regulation X

Distribution of revenue

1 Revenue distribution will observe the criteria defined in this regulation and the decisions made by the Board.

2 Revenues distribution shall reward claims for eligible zero or near-zero GHG emission technologies, fuels and energy sources, as specified in Regulation X, for an initial period of five years. The initial minimum allocation for that end will be 60% of the revenue collected during the period.

3 Rewards should start to be phased out as soon as possible as markets become [more] self-sustaining or economically viable, without jeopardizing the development of the market for ZNZ fuels.

4 The remaining revenues after the disbursement for purposes specified in paragraph 2 shall be allocated for the following purposes:

- .1 Not less than 30% of the total revenues for projects in States, with particular attention paid to the need of developing countries, in particular LDCs and SIDS, supporting the goals of the Strategy, including:
 - .1 promotion of applied research and development (R&D) and technology transfer regarding alternative fuels and innovative technologies;
 - .2 capacity building and investment in port and bunkering infrastructure, as well as promoting a just and equitable transition, in the context of the Strategy; and
 - .3 alleviation of [disproportionately] negative impacts, in the context of the implementation of the measures.
- .2 Not more than 10% of the total revenues received shall be allocated for administration and other expenses of the Fund and the Board.

5 The Board shall periodically review the allocation of funds.

6 The Committee can request an audit of the Fund or the Board at any time.

Regulation X

Review of the chapter

{Note: only the review clauses relevant for the dual Z factor approach are introduced here. These clauses may need to be supplemented by clauses referring to the review of other elements of the IMO Net Zero Framework}

1 The target annual GFI (“Tier 1” and “Tier 2”) values [shall] [may] be reviewed every five years, with a view to ensuring that the levels of ambition set in the 2023 Strategy are met.

2 The prices of Remedial Units (Tier 1 and Tier 2) [shall] [may] be reviewed every five years, with a view to ensuring that the levels of ambition set in the 2023 Strategy are met.

3 The Committee may review the definition of ZNZ [fuels] [downwards] after the initial period established in paragraph X.3 above.

[Regulation X]

[Dates for implementation]

{Note: subject to further discussion}

ANNEX 4

STATEMENTS BY DELEGATIONS

Agenda item 2: Further consideration of the development of the basket of candidate mid-term GHG reduction measure(s), using annex 1 to document MEPC 82/WP.9 as the basis

Statement made by the delegation of Egypt

"Mr. Chair,

At the outset, we would like to express our appreciation for the tireless efforts exerted by the Secretariat to carry out the further work on food security, while its important to mention here that though there is an extensive literature review it provides, it remains lacking the needed modelling or assessment on the impacts of the measures on food security particularly on essential food commodities and critical agricultural input, especially Net Food Importing Developing Countries, which we understand it comes due to the fact that none of the UN relevant agencies was in a position to conduct specific work /modelling in the intersessional period between MEPC 82 and MEPC 83, a reality we have to deal with.

It's very important to underline here that since international shipping plays a critical role in global agrifood systems, in particularly for NFIDCs. Therefore, the decarbonization of international shipping would have far-reaching implications on the global food security and under any of the proposed policies under negotiations, In other words, the negative impacts on food security is a fact in either proposed measures for GHG reduction.

In order to understand the complexity and intensity of the negative impacts of measures on Food Security globally, it's important to point out that there is a long list for the most affected developing countries; this includes most of the African countries (already 43 African countries are NFIDCs), as well as LDCs, countries in South & Central America, Asian countries, and SIDS whom are mostly highly dependent on the imports for stable food commodities and via international shipping .

Mr Chair, in this context, it remains important to agree on a way forward where there is a pressing need to address impacts on food security prior to the approval and adoption of the measure(s) as per the Strategy and Circ.885/Rev.1 and of course with no intention to delay the adoption of the measure(s) in accordance with the timelines set out in the Strategy.

Saying I would to bring to the attention of ISWG that Egypt has already submitted a document to MEPC 83 proposing the following way forward of three points:

- .1 endorse before adopting the measure(s) that the negative impacts on states in terms of food security are to be addressed (e.g. avoided, remedied, mitigated), as appropriate regardless of the different proposed measures subject to negotiations;
- .2 following the agreement on addressing food security negative impacts, and in the period between the adoption of the measure and its entry into force, a detailed qualitative and quantitative assessment of the negative impacts of the adopted measure should be conducted taking into consideration analysing the extent of the impacts on food security (e.g. by quantifying them and relating them to normal variations in transport costs, trade or GDP), so

the appropriate address of the impact can be quantified before the entry of the measure into force; and

- .3 addressing the impacts of the adopted measure(s) on food security should take into consideration the essential need to keep the measure(s) implementation and its impacts on food security under continuous review due to the interacting nature of the measures with this purely humanitarian issue in nature, so that any necessary adjustments may be made, when needed.

Thank you Chair."

Statement made by the delegation of Poland, on behalf of the Member States of the European Union and of the European Commission¹

"Thank you Chair,

We welcome the efforts by Singapore to find a bridging proposal. We need more time to further analyse and assess this complex text to fully realise its implications.

We want to make it clear that we are not taking a position on the proposal.

We are open to consider any alternative proposals if they meet the four criteria:

- fully deliver on the emission reduction goals and objectives of the 2023 IMO GHG Strategy;
- generate a stable revenue stream to reward the use of ZNZ fuels in line with the fuel uptake goal of the 2023 IMO GHG Strategy;
- allow companies to pass on costs to the commercial operator; and
- without categorically excluding any countries from revenue disbursement, including for just and equitable transition

We accept the inclusion of the text as a separate annex to the report. At the same time, we underline the importance that this text does not replace any of the options in ISWG-GHG 18/J/4; in particular, we request that the levy proposal, as formulated in document ISWG-GHG 18/2/5 and included in ISWG-GHG 18/J/4, is reported by ISWG-GHG 18 for further consideration.

We request to append this statement to the report of this session."

Statement made by the delegation of Tuvalu

"Thank you Chair,

Before we close off this section, please allow me to make some remarks here.

Yesterday, we and many other delegations asked you to consider removing your proposed text in the consolidated MARPOL text on page 35 of annex 1 and without opening this issue again on the floor, we seek your indulgence to hear us again on this as a matter as we would like to achieve a balanced approach to the discussion.

¹ Statement made during the consideration of the Group's draft report

Despite our representations, the text still remains. We feel very concerned that you continue to ignore the views of some developing countries, especially SIDS and LDCs, who are some of the most vulnerable countries in this room. We have expressed repeatedly that our views be taken onboard, but frankly Chair, we feel ignored.

Chair, in saying this, we would be very happy to continue to work with all who have made efforts to propose a solution to the problem of the impacts of GHG emissions from international shipping. We are the one of the most climate vulnerable in this room, and we request that our voice be heard and not left behind.

This is a critical matter for us, and we are concerned with the potential precedent being set here and we think that this will need to be addressed before it creates more difficulties. We request that our intervention is appended to the report.

Thank you Chair"

Statement made by the delegation of Vanuatu

"Thank you Chair. A very good morning to you and all delegates. Also, I wish to thank the United Kingdom for hosting the reception yesterday evening.

In the view of this delegation, revenue distribution is one of the most critical issues for ensuring a just and equitable transition, and we are glad to have the opportunity to discuss it.

Before turning to our specific response to your four questions in J8, our delegation wishes to first point out our concern over the framing of this part of our negotiations. We appear to be going into specific detail of different aspects of the revenue disbursement debate before we have agreement on the overall Management and Disbursement Framework needed.

We also recall that the 6PAC+ had repeatedly asked for dedicated Expert Workshop space to be created well prior to this juncture so we didn't end up in this pressurised situation on such an important part of the overall solution we are now all striving positively for.

In terms of the overall Framework needed, we note that some parties have already put significant work into addressing this and suggesting practical pathways forward. The Secretariat's document MEPC 83/7 is a very useful discussion on their views on this matter, the EU document ISWG-GHG 17/2/7 likewise provides valuable opinions. And of course, there are the various papers we have co-sponsored over several sessions and are referenced in our proposed text now included in J4 and in document ISWG 18/2/5 and in the summary of our rationale on revenue disbursement purposes in 18/2/6. The World Bank's previous submissions over several sessions are also important to consider.

All experts have advised that the right revenue disbursement is critical to achieving the Strategy objectives and providing the certainty we have repeatedly heard industry asking for. It is so important we get this Framework right and we need to suggest that starting the debate by cherry picking out some aspects in the manner we are doing is not the most constructive pathway forward.

Turning to the four questions in document ISWG-GHG 18/J/8,

In reply to Question 1. The Annex VI text needs to be specific and detailed, we have provided substantive arguments on this in our current and previous submissions and so I will take them as read rather than absorb more time repeating them here.

In response to Question 2. The Principle of Polluter Pays - which of course applies at Law whether it is explicitly referenced in the Strategy - is clear.

- Some revenue should be used to reward the use of zero and near-zero GHG emission technologies, fuels and/or energy sources - that is to say, invested in incentivising the industry's transition and mitigating Shipping's pollution at source.
- Some revenues are also required for promoting the energy transition and we have made extensive comment in our submission to the need for an RD&D Fund within the main Fund for ensuring this happens equitably.
- Some revenues are needed for making fair reparation for the damage caused by that pollution to people and communities. This includes fair compensation for any DNI created by the measures on climate vulnerable developing states, particularly SIDS and LDCs, ensuring a just and equitable translation for all seafarers and all States and contributing to the broader adaptation and resilience building of those developing States that did not cause this crisis, are least endowed to withstand it and are first and hardest hit. The issue of the industry's liability for its pollution (past, current and future) is an entirely legitimate concern and can not just be ignored in the discussion over revenues.

In regard to Question 3. Yes, the IMO's costs should be drawn from the revenues.

And finally in regard to Question 4. Yes, it is essential that the GHG Strategy Implementation Fund works closely with existing Fund managers in both the management and disbursement of revenues, especially given the IMO's limited experience.

Turning to the text of document ISWG-GHG 18/J/4 Chair, in relation to the revenue distribution proposals my delegation strongly supports the inclusion of Option 1, starting on page 47.

In relation to paragraph 7 on page 48, we support Option 2.

In relation to paragraph 8, we support Option 2.

In relation to paragraph 9, we support Option 1.

Finally, for clarity, we also support the inclusion of paragraph 10 on page 49.

Chair, we are happy to note the significant overlaps between the options just listed, and the revenue distribution priorities set out in Option 3 on page 54, taken from document ISWG-GHG 17/2/7 by Angola et al. We hope we can look forward to further discussions to find mutually acceptable language with the cosponsors of Angola et al., as well as all others, including this week. We would ask that you dedicate adequate time to allow this to happen, Chair.

Thank you."

Agenda item 3: Further consideration of the development of the IMO Life Cycle GHG Assessment (LCA) framework**Statement made by the delegation of Brazil**

"Brazil is very conscious of the need and importance of having in place adequate, just and credible safeguards and indicators related to sustainability. By no means policy designed in the IMO shall directly or indirectly incentivize or aggravate existing environmental or social problems, such as deforestation, hunger and poverty. In designing such safeguards and indicators, however, we must not treat unfairly the solutions provided by developing countries, among which are the sustainable biofuels.

We must not create a filter that further concentrates wealth in already developed and technologically advanced regions. In this sense, we are very concerned with misinformation campaigns, that wrongfully assume, for instance, that all biofuels are one and the same, as well as with the possibility of adopting indicators that will in reality work as arbitrary technical barriers, for reasons not related to the emissions reductions. These safeguards and indicators need to be developed in a way that promotes inclusion and improvement of least favorable communities, and their participations in the value chains of the future must not be restricted.

For Brazil, principles and criteria must be assessed considering local circumstances. Information on pertinent national legislation and relevant international agreements should be taken into consideration, as applicable. The assessment must remain qualitative, avoiding the imposition of methodologies or quantitative metrics that could create distortions or trade barriers, as have been observed in other fora. It must be fair and not biased towards certain pathways, and include assessments of elements such as the use of critical minerals, embodied emissions or impacts on jobs. On this note, following up on work already promoted by Brazil in its presidency of the G20, last year, we understand that a greater international collaboration and a more unified approach are important to address sustainability aspects and land use changes issues."

Statement made by the delegation of China

"Thank you, Chair,

We appreciate the hard work by the Correspondence Group and have no objection to the re-establishment of it and related working arrangement.

Since the significant role of the LCA Guidelines for the implementation of mid-term measures, China is of the view that any themes/aspects must be objective and well-balanced.

China has several comments in our submission to MEPC83 on the document MEPC 83/7/9.

The issue of sustainability themes is stemmed from UN Sustainable Development Goals (SDGs), which covers a wide range of sustainability issues. Identifying the social and economic sustainability themes/aspects for lifecycle assessment of marine fuels requires scientific and comprehensive process, in order to make sure they are closely related to and sound representing maritime industry, taking into consideration of the nature of this industry.

China would like to reiterate that, social and economic themes/aspects reflected in paragraph 28 of document MEPC 83/7/9 are highly political and sensitive. They are closely related to social and economic development status in different countries, which are distinctive across different countries and under the different national jurisdictions. In this respect, China submitted a commenting document and proposed to integrate the five themes into one without

leaving other possible sustainability aspects In the UN Sustainable Development Goals behind unintentionally. We also suggest that the social and economic sustainability theme/aspects can only be assessed in a qualitative way and should respect the national legislation and be assessed only by the competent authorities of the Member States, taking into account each country's unique background, priorities, and resources in terms of social and economic development.

In conclusion, China requests the comments to be included in the report of this Working Group and fully considered when we discuss this issue in the coming MEPC and future Correspondence Group."

Statement made by the observer from EDF

"Thank you, Chair – for giving us the floor:

EDF would first like to thank all Member States and organizations that submitted documents on this agenda item. The development of a robust LCA Framework continues to be an essential task for the Committee and this Working Group. A robust LCA framework will play a crucial role in the implementation of the mid-term measures, in particular with regard to the GHG Fuel Standard.

EDF also would like to thank all the experts of the GESAMP-LCA WG and the IMO Secretariat for the detailed report of their first meeting, found in document MEPC 83/7/1. The report from this first meeting already shows positive progress in their work to address each of the items listed in their terms of reference, and we commend the group for their hard work. However, and without going into the details, in the interest of time, this report clearly emphasizes that there is still a lot of work still ahead of us. On this point we would like to underline that EDF stands ready to assist the GESAMP-LCA and all Member States with this important part of our work.

EDF supports and welcomes the GESAMP-LCA WG report in general. However, we would like to make one small but significant suggestion for consideration by the Member States as they review the report and recommend a way forward to MEPC 83.

Possibly the most important update from this report can be found on action item 5: the consideration with a view to approving, GESAMP-LCA WG's draft methodology for submission, scientific review, and recommendation of proposed default emission factors (paragraph 6.15 and annex 3 of the report). Recognizing the need to ensure the proper assessment of default emission factors and the need to clarify a methodology for their submission and scientific review, GESAMP-LCA has provided a robust, standardized, and transparent draft methodology.

We support this draft methodology; however, we are curious as to why the proposed methodology limits submission of default emission factors to only Member States.

Considering the importance of determining default emission factors for all fuel production pathways as a steppingstone for a robust LCA framework, we strongly believe that GESAMP-LCA and Member States would benefit from the ongoing work, data, and analysis currently being undertaken by many observer organizations. The multiple documents on default emission factors submitted for this session (documents MEPC 83/7/23 and MEPC 83/7/28 both by Pacific Environment, CSC and EDF) are a clear example of the positive and substantial contribution that non-governmental international organizations have to offer on this matter.

At EDF, we have an independent team of over 70 scientists, who dedicate their work to learning and understanding more about the climate impact of a wide variety of alternative fuels and technologies – with expertise that ranges from environmental impact of energy systems, methane emissions, oil and gas industry operations and emissions, volatile organic compounds, climate modelling, carbon sequestration, alternative fuels (namely e-fuels, electrofuels, biofuels, hydrogen and ammonia) – unfortunately, EDF cannot give the full list of the expertise that our scientists have but what EDF meant to say is that all of it is extremely relevant to this work.

In this sense, EDF strongly recommends that as Member States consider this action item proposed by GESAMP, the Group should consider including a minor edit to the methodology that allows Member States and international organizations to submit proposals for default emission factors for scientific review and recommendation. EDF is ready to contribute from day one.

This way, GESAMP-LCA would be able to have a more complete list of proposals of proposed default emission factors, with the latest available science, and as required by the LCA Guidelines, are provided with the minimum of three individual analyses/studies, in order to make their recommendation for an approved default emission factor. Otherwise, we might find ourselves with an incomplete list of default emission factors by the time the Organization implements a GHG Fuel Standard.

Thank you, Chair."

Statement made by the observer from IPIECA

"While IPIECA supports large majority of GESAMP-LCA Working Group recommendations aiming to further clarify the LCA Guidelines, this intervention covers the proposal related to the potential creation of new pathways for the sole reason the WtT emissions level deviates by at least 9.5 g CO₂eq/Mj from pathways already included in the LCA Guidelines, as explained in paragraph 6.8.13.

Our viewpoint is that the use of actual carbon intensity, when recognized by the Organization, will be more appropriate to value the lower GHG emissions pathways than different default factors, and would prevent the multiplication of pathways adding more complexity to the guidelines without reducing the ultimate need for fuel certification.

When actual carbon intensity is not recognized by the Organization, which is the case for fossil fuel pathways without CCS, IPIECA views the GESAMP approach would not be effective as the 9.5 gCO₂eq/Mj threshold is too high value to differentiate pathways. For instance, 9.5 is more than 50% of the WtT emissions applied by the European Union to the LNG production in FuelEu Maritime regulation.

Instead of creating a subjective threshold to differentiate default emission values, IPIECA recommends that all pathways are certified with methodology that values technologies enabling emissions reduction along pathways, and remove from paragraph 10.4 from the LCA Guidelines the fossil fuel exception that restricts credits to the CCS, ignoring other solutions that can be implemented by companies, such as the purchase of renewable electricity, energy efficiency measures, the reduction of flaring or methane emissions, that may not reach double digit GHG emissions reductions but would prevent significant volumes of GHG being emitted cumulatively given the scale of operations using these pathways."