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LESSONS-LEARNED EXERCISE OF THE COMPREHENSIVE IMPACT ASSESSMENT OF THE SHORT-TERM MEASURE

Assessment of positive impacts as part of impact assessments conducted under international environmental agreements

Submitted by CSC

SUMMARY

Executive summary: This document includes a new analysis of the inclusion of positive impacts in relevant international and regional instruments, and its implications for IMO's own impact assessments procedure

Strategic direction, if applicable: 3

Output: 3.2

Action to be taken: Paragraph 11

Related documents: MEPC.1-Circ.885; MEPC 72/17/Add.1; ISWG-GHG 10/4, ISWG-GHG 10/4/1; MEPC 77/WP.7; resolution MEPC.67(37) and MEPC.304(72)

Introduction

1 This document presents a new legal assessment conducted by Leigh Day Solicitors of London and Kate Cook at Matrix Chambers of the use of positive impacts within the impact assessment procedure, and analyses it alongside the use or inclusion of positive impacts in other international environmental and regional instruments, as well as in the context of international law and practice. CSC believes these findings will be informative as the Organization conducts its lessons learned exercise and the revision of the impact assessment procedure, and raise the importance of including additional impacts beyond the scope of economic ones in the consideration of the regulatory impact assessment procedure.

2 MEPC 74 approved MEPC.1/Circ.885 on the *Procedure for Assessing Impacts on States of Candidate Measures*, in order to assess the impacts on States from proposed measures to reduce greenhouse gas (GHG) emissions from ships. The first step in the Procedure calls for proponents of a measure to submit an initial impact assessment as part of the candidate measure proposal which should pay particular attention to, inter alia, "indicate both positive and negative potential impacts".

3 The inclusion of positive impacts has become a topic of considerable debate and divergent views in recent discussions. In the initial impact assessments accompanying proposals on short-term measure, the list of positive impacts varied considerably between proposals, often split between measures that positively affected ships or the environment. Subsequently, some delegations have questioned whether positive impacts on the environment especially should be included within the impact assessment procedure at all.

4 ISWG-GHG 10 identified possible areas proposed by different delegations for clarification or improvement which may require further work, including, inter alia, with regard to methodologies: "positive impacts", as referenced in MEPC.1/Circ.885 (MEPC 77/WP.7, paragraph 41.2.1).

5 CSC believes that the inclusion of positive impacts, including those on the environment such as GHG reduction potential, is not only necessary within the impact assessment procedure, but is an obligation for proponents of measures and key to the overall success of decarbonizing the shipping industry. Any description of a measure's positive impacts should include its quantitative contribution towards this overall goal, allowing States to further compare which measures are the most effective in terms of GHG reduction and on what timeline.

6 In order to provide additional information to inform the discussion on positive impacts and to provide expert advice on their inclusion in related procedures, CSC presents a new legal analysis entitled "Assessment of positive impacts as part of impact assessments conducted under international environmental agreements"; the full report is annexed to this document. Key findings and potential areas for the Group's consideration are summarized below.

Key findings

7 The assessment examines the use of positive impacts within other international and regional instruments; how these instruments used positive impacts and what areas were considered in the assessment of positive (e.g. environmental, economic, or social) impacts; the international legal context and principles relevant to impact assessments; and finally what positive impacts should be considered within the Organization. The key findings of the assessment are as follows:

- .1 In light of the Initial IMO Strategy and its references to the Paris Agreement, positive environmental impacts as identified in the impact assessment procedure will inform Member States of the extent to which proposed measures contribute to or undermine international climate goals (section A, paragraph 24 and section B, paragraph 27).
- .2 Environmental impacts are included in a number of other international or regional instruments,¹ especially those touching on environment-related issues such as climate change. Their assessment is considered essential to meeting the objectives of these instruments. In many cases, this explicitly includes positive impacts (Kiev Protocol, the CBD Guidelines, MP Decisions, UNEP guidance and the EU EIA and SEA Directives) (section B, paragraph 29).

¹ The agreements reviewed by this assessment are: the United Nations Framework Convention on Climate Change (UNFCCC) with a focus on the Paris Agreement, the Kiev Protocol on Strategic Environmental Assessments, the Convention on Biological Diversity (CBD), the Cartagena Protocol on Biosafety, the Montreal Protocol, UNEP Guidance on Environmental Impact Assessment and Strategic Environmental Assessment, IFC Performance Standards, and the EU EIA and SEA Directives.

- .3 The principle of integration requires that environmental considerations be considered in other relevant social, economic and environmental policies and actions. This includes impact assessments, as reflected in article 4(1)(f) of the UNFCCC. Without their inclusion alongside other social or economic impacts positive or negative, it is difficult to see how a measure can be fully evaluated (section B, paragraph 38).
- .4 The key components of part XII of the United Nations Convention on the Law of the Sea (UNCLOS) and supporting rulings, also make it clear that the inclusion of environmental impacts from GHG emissions, as well as positive measures, are key to meeting their obligations under article 194 of UNCLOS² (section C, paragraph 88). This does not preclude assessing and, if necessary, addressing disproportionate impacts, with particular consideration for SIDS and LDCs.
- .5 Some potential positive impacts that could be included are: reduction of GHG emissions consistent with the Paris Agreement temperature goals, associated public health impacts from the adoption of energy efficient or fuel saving measures, and the associated economic benefits and cost savings associated with the reduction of emissions. Again, the inclusion of these measures must take into account the principles of equity and CBDR-RC as laid down in the UNFCCC and the Paris Agreement which form the broader context for taking these measures (section D, paragraph 98).

Discussion

8 This assessment raises several key issues to the fore of IMO's discussions. The first is that IMO's use of a regulatory impact assessment to evaluate the measures proposed to meet the goals of the Initial Strategy is out of alignment with the established use of environmental impact assessments. As demonstrated in the short-term measure proposals, this does not allow for a best fit comparison of a measure's potential reductions in GHG emissions in line with the Initial Strategy or the temperature goals of the Paris Agreement which remains the overall guiding light for this process. Their inclusion is, at a minimum, of key importance to States in meeting their general obligations under international instruments and the principles of international law.

9 CSC also notes that IMO's impact assessment procedure does not align at present with the best practices demonstrated in other forums' use of environmental impact assessments, and breaches the principle of integration with relevant agreements, including the UNFCCC/Paris Agreement and UNCLOS. Instead, it has more narrowly focused solely on economic implications associated with the regulatory proposal under discussion. This is not only contrary to the overall goals of the Initial Strategy, but as this assessment indicates, omits many potential factors that are considered part of an integrated environmental assessment by the United Nations Environmental Program (UNEP) (section B, paragraph 69).

10 Finally, while the inclusion of positive impacts within a proposal is key to the evaluation of a proposal's effectiveness, this should not be used to preclude other obligations identified in the assessment in addressing the impacts on States, especially SIDS and LDCs. Indeed, this assessment also raises key questions about the best approach the Expert Workshop and the Working Group may wish to incorporate on ensuring SIDS and LDCs are ensured an equitable pathway to decarbonization and supported in this transition.

² https://www.un.org/depts/los/convention_agreements/texts/unclos/part12.htm

Action requested of the Working Group

11 The Group is invited to consider the information provided in this document and its annex, and take action as appropriate.

ANNEX

ASSESSMENT OF POSITIVE IMPACTS AS PART OF IMPACT ASSESSMENTS CONDUCTED UNDER INTERNATIONAL ENVIRONMENTAL AGREEMENTS

Introduction

1 In the context of the Initial IMO Strategy on the reduction of GHG emissions from ships adopted by the International Maritime Organization (IMO) in 2018 and the provision for initial impact assessment of short-term measure to reduce emissions adopted by the Marine Environment Protection Committee (MEPC), this document considers the implications, for IMO assessment, of the assessment of positive impacts under impact assessments provided for in certain international and regional agreements relating to the environment and/or impact assessment more generally.

2 The document considers specific requirements under international and regional agreements (section B below) in the light of general rules and principles of international law (see section C below) including the principle of integration, the principle of good faith interpretation and the principle of effectiveness. The document also examines the types of positive impacts indicated in the various instruments, including impacts on the reduction of emissions, on public health and on the costs of inaction.

3 In light of the provision for consideration of positive impacts under these international instruments and principles, the document concludes with examination of the types of positive impacts which should be included in the impact assessment of short-term measures for the reduction of GHG emissions from ships under MEPC.

4 The document is structured as follows:

- .1 Section A addresses the Initial IMO Strategy and steps taken in relation to the impact assessment of short-term measure by MEPC including under MEPC.1Circ.885.
- .2 Section B considers international and regional instruments which provide for the inclusion of positive impacts as part of impact assessment under those agreements including:
 - The UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement on climate Change (PA);
 - The UNECE Kiev Protocol on Strategic Environmental Assessment (Kiev Protocol);
 - The Convention on Biological Diversity (CBD) and Cartagena Protocol;
 - The Montreal Protocol on Substances that deplete the Ozone Layer (MP);
 - UNEP Guidance on Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA);
 - The Performance Standards of the International Finance Corporation (IFC); and

- The European Union (EU) Directives on EIA and SEA.
- .3 Section C sets out relevant legal considerations for considering the scope of impact assessment requirements of emission reduction measures taken under IMO by reference to:
- Part XII of UNCLOS as legal context for the impact assessment of short-term measure by members of IMO; and
 - Principles of international law including the principles of integration, good faith interpretation and performance and effectiveness.
- .4 Section D sets out proposed types of positive impacts that could be considered in light of the legal considerations set out in sections B and C, including reductions of emissions, impacts on public health and fuel efficiencies, taking into account the need for an integrated assessment which takes into account principles of equity and CBDRRC under the international climate regime.

A IMO Strategy and MEPC.1/Circ.885

5 IMO Strategy: International shipping accounts for approximately 2.89% of global greenhouse gas emissions.¹ In October 2016, MEPC 70 approved a Roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions from ships. To progress the work on the Roadmap, MEPC 70 agreed to the establishment of an Intersessional Working Group on Reduction of GHG Emissions from Ships.

6 In 2018, IMO addressed the reduction of greenhouse gas (GHG) emissions from ships through the adoption of resolution MEPC.304(72) on the Initial IMO Strategy on reduction of GHG emissions from ships (the Initial Strategy).² The Strategy represents the continuation of work of IMO as the appropriate international body to address GHG emissions from international shipping (paragraph 1.2).

7 Importantly (see further section C below), it is stated in paragraph 1.5 of the Strategy that:

The Initial Strategy falls within a broader context including:

- .1 other existing instruments related to the law of the sea, including UNCLOS, and to climate change, including the UNFCCC and its related legal instruments, including the Paris Agreement;

Paragraph 1.5 of the Strategy then goes to refer to:

¹ See *Fourth IMO GHG study 2020*: <https://www.imo.org/en/OurWork/Environment/Pages/Fourth-IMO-Greenhouse-Gas-Study-2020.aspx>. The 2020 UNEP Emissions Gap report states: *GHG emissions from shipping, principally carbon dioxide (CO₂), totalled approximately 1 GtCO₂ in 2018, the latest year for which detailed data are available (IMO 2020), with small additional emissions of methane (CH₄) and nitrous oxide (N₂O), section 5.2.1 at p.52.*

² Resolution MEPC.304(72). The Initial Strategy, and its adopting resolution, is set out in annex 1 to the Note by the International Maritime Organization to the UNFCCC Talanoa Dialogue *ADOPTION OF THE INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS AND EXISTING IMO ACTIVITY RELATED TO REDUCING GHG EMISSIONS IN THE SHIPPING SECTOR.*

- .2 the leading role of the Organization for the development, adoption and assistance in implementation of environmental regulations applicable to international shipping;
- .3 the decision of the thirtieth session of the Assembly in December 2017 that adopted for the Organization a Strategic Direction entitled "Respond to climate change"; and
- .4 the United Nations 2030 Agenda for Sustainable Development.

8 Paragraph 1.7 of the Strategy provides that:

The Initial Strategy is aimed at:

- .1 enhancing IMO's contribution to global efforts by addressing GHG emissions from international shipping. International efforts in addressing GHG emissions include the Paris Agreement and its goals and the United Nations 2030 Agenda for Sustainable Development and its SDG 13: "Take urgent action to combat climate change and its impacts";
- .2 identifying actions to be implemented by the international shipping sector, as appropriate, while addressing impacts on States and recognizing the critical role of international shipping in supporting the continued development of global trade and maritime transport services; and
- .3 identifying actions and measures, as appropriate, to help achieve the above objectives, including incentives for research and development and monitoring of GHG emissions from international shipping (emphasis added).

9 The actions and measures taken pursuant to the IMO Strategy therefore are to help achieve all the stated objectives, including enhancing IMO's contribution to address GHG emissions from shipping by reference to the UNFCCC and Paris Agreement goals (and those set under the SDG), as well as addressing impacts on States and recognizing the critical role of shipping in supporting continued development of global trade and maritime transport.

10 The Initial Strategy envisages a reduction in total GHG emissions from international shipping as follows:

- .1 to peak GHG emissions from international shipping as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 while pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO₂ emissions reduction consistent with the Paris Agreement temperature goals (see paragraph 3.1.3, emphasis added).

11 Paragraph 3.2 sets out guiding principles which include: the need to be cognizant of the principles enshrined in instruments already developed, including CBDRRC under the UNFCCC, the Kyoto Protocol and the [PA]; the need to consider the impacts of measures on States, including developing countries, in particular, on least developed countries (LDCs) and small island developing States (SIDS); and the need for evidence-based decision-making balanced with the precautionary approach, as set out in resolution MEPC.67(37).

12 As a component of the IMO Strategy, countries agreed to initiate work on short-term measure that could be implemented by 2023 (paragraph 4.1). The impact of measures on States is addressed in paragraphs 4.10 to 4.13:

4.10 The impacts on States of a measure should be assessed and taken into account as appropriate before adoption of the measure. Particular attention should be paid to the needs of developing countries, especially small island developing States (SIDS) and least developed countries (LDCs).

4.11 When assessing impacts on States the impact of a measure should be considered, as appropriate, inter alia, in the following:

- .1 geographic remoteness of and connectivity to main markets;
- .2 cargo value and type;
- .3 transport dependency;
- .4 transport costs;
- .5 food security;
- .6 disaster response;
- .7 cost-effectiveness; and
- .8 socio-economic progress and development.

4.12 The specification for and agreement on the procedure for assessing and taking into account the impacts of measures related to international shipping on States should be undertaken as a matter of urgency as part of the follow up actions.

4.13 Disproportionately negative impacts should be assessed and addressed, as appropriate.

13 On 21 May 2019, MEPC 72 approved the *Procedure for assessing impacts on States of candidate measures*, as set out in the annex to Circular MEPC.1/Circ.885. Member States and international organizations are invited to apply the procedure set out in the annex. Any measures adopted would be subject to an initial impact assessment procedure which, among other steps requires that, "the initial impact assessment should...identify which impacts should be assessed...[and] indicate both positive and negative potential impacts".³

14 The procedure provides that: Impact assessment should be simple, inclusive, transparent, flexible, evidence-based and measure-specific. The comprehensiveness of any impact assessment should be commensurate to the complexity and nature of the proposed measure. Impact assessment should be undertaken in parallel with the consideration and development of a candidate measure. There are up to four steps in the procedure:

- Step 1: initial impact assessment, to be submitted as part of the initial proposal to the Committee for candidate measures;
- Step 2: submission of commenting document(s), if any;
- Step 3: comprehensive response, if requested by commenting document(s); and
- Step 4: comprehensive impact assessment, if required by the Committee.

15 In relation to the initial impact assessment, paragraph 8 of the procedure states that:

The initial impact assessment should pay particular attention to the needs of developing countries, especially SIDS and LDCs and, inter alia:

³ IMO (2019), *Procedure for assessing impacts on States of candidate measures*. MEPC.1/Circ.885.

- .1 indicate if the proposal for the measure provides a description of impacts on ships and emissions;
- .2 identify which impacts should be assessed, taking into account, as appropriate, inter alia, (1) geographic remoteness of and connectivity to main markets; (2) cargo value and type; (3) transport dependency; (4) transport costs; (5) food security; (6) disaster response; (7) cost-effectiveness; and (8) socio-economic progress and development;
- .3 indicate both positive and negative potential impacts;
- .4 analyse the extent of the impacts (e.g. by quantifying them and relating them to normal variations in transport costs, trade or GDP); and
- .5 assess whether the measure is likely to result in disproportionately negative impacts and, if so, how they could be addressed (e.g. avoided, remedied, mitigated), as appropriate (emphasis added).

16 Following opportunities for responses and comment from other members, and if the Committee so decides, a comprehensive impact assessment should be initiated, taking into account the issues identified in previous steps, including the commenting documents (paragraph 14).

17 If the proposal is subject to a more comprehensive Impact Assessment, this should pay particular attention to the needs of developing countries, especially SIDS and LDCs, and would include "an assessment of whether the measure is likely to result in disproportionately negative impacts and, if so, recommendations on how they could be addressed (e.g. avoided, remedied, mitigated), as appropriate" (paragraph 15(3)).

18 The procedure does not set out a definition of the scope of positive or negative impacts or the term "disproportionate". Different views on the meaning of positive impacts have been expressed by members. Some have argued that their inclusion is "not a part of the impact assessment...all provisions...related to impact assessment deal with impacts "on States".⁴ Others have argued that the inclusion of positive impacts refers to impacts on the environment, such as "impacts on emissions and impacts of inaction" and that this information will better inform IMO. As some delegations have noted, the inclusion of positive environmental impacts is explicitly considered in any reasonable cost-benefit analysis methodology, and omitting them will only further complicate analysis of what constitutes a "disproportionately negative" impact.

19 Once the impact assessment is completed, and disproportionately negative impacts assessed and addressed, as appropriate, the measure may be considered for adoption (paragraph 17).

20 As explained in the submission by Denmark, France, Germany Spain and the United States,⁵ due to the exceptional circumstances of the COVID-19 pandemic, MEPC 75 decided to assess the impacts on States of the short-term measure but the actual procedure followed diverged from MEPC.1/Cir.885. MEPC 76 then "to undertake a lessons-learned exercise from the comprehensive impact assessment of the amendments to MARPOL Annex VI, with a view

⁴ Argentina, Brazil, Chile, China, Saudi Arabia, United Arab Emirates (2021), Lessons learned from the impact assessment of the short-term measure on States, ISWG-GHG 10/4/1.

⁵ ISWG-GHG 10/4, 3 September 2021.

to improving the procedure for conducting future impact assessments taking into account the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885) and the terms of reference for the impact assessment of the short-term measure."

21 ISWG-GHG 10 in October 2021 identified "possible areas proposed by different delegations for clarification or improvement which may require further work, inter alia: [...]

.2 with regard to methodologies:

.1 "positive impacts", as referenced in MEPC.1/Circ. 885, and cost-effectiveness, as referenced in the Initial IMO GHG Strategy;"⁶

22 Document ISWG-GHG 10/1 (Argentina et al.) refers to paragraphs 4.10 and 4.13 of the Initial Strategy and go on to submit that:

"[...] the question of "disproportionately negative impacts" on States has high political implications, in particular in light of the fact that developing countries, including LDCs and SIDs, do not have the strength in their economies to cope with the negative impacts of a measure" (paragraph 37).

[...] Also, when the question of "disproportionately negative impacts" was discussed, some delegations put forward the idea of assessing also the "positive" impacts of a candidate measure, i.e. on the environment (paragraph 39).

[...] The proponents would like to stress that the possible positive impact of a candidate measure on the environment is an essential part of its presentation and consideration. But, conceptually, it is not a part of the impact assessment of the measure. All provisions of the Organization related to impact assessment deal with impacts "on States" and provide the need "to address, as appropriate" the disproportionately "negative" impacts (paragraph 40, emphasis added).

23 In document ISWG-GHG 10/4, Denmark and others suggest that the lessons learned exercise could address "the inclusion of positive impacts and impacts on emissions and impacts of inaction" (paragraph 10.5).

24 The references to the UNFCCC and Paris Agreement in the IMO Strategy, which provides the background and objectives for MEPC.1/Circ. 885, encompass the climate change goals of those agreements and, as discussed below, in sections B and C, provide further context for addressing any negative impacts on States through finance flows, technology transfer and capacity building, as well as through the principles of CBDR-RC and equity. In light of the IMO Strategy and the international obligations of States under the UNFCCC and PA, the reference to disproportionately negative impacts should be viewed in the context of the climate goals of those agreements, together with the associated provision for support for developing countries, particularly SIDs and LDCs, and the principles of CBDR-RC and equity. An intrinsic part of that assessment includes the positive climate related gains of the proposed measures (see further below) otherwise the proportionality, or otherwise, of impacts cannot be assessed.

25 In relation to international standards and practice for impact assessment, examples of international and regional instruments which include positive environmental impacts, as well as other positive impacts, in an impact assessment are set out in section B below. The implications of UNCLOS Part XII in this regard are considered in section C, together with the

⁶ IMO (2021), Report of the Tenth Intersessional Working Group on Greenhouse Gases, MEPC.1/Circ.885.

implications of general principles of international law relating to integration, good faith interpretation of treaties and effectiveness.

B Assessment of Positive Environmental Impacts under International and Regional Agreements

26 This section sets out the provisions for assessment of positive environmental impacts under a number of international and regional agreements and instruments: the UNFCCC/PA; the Kiev Protocol on SEA; the Convention on Biological Diversity (CBD) and Cartagena Protocol on Biosafety; the Montreal Protocol; UNEP Guidance on EIA and SEA; IFC Performance Standards and EU EIA and SEA Directives. Before considering specific provisions under these regimes, there are some general comments on their relevance overall.

General issues

27 Positive impacts: The relevance of measuring positive environmental impacts in this context, in light of the Initial IMO Strategy and the references to the UNFCCC and PA, is to inform members as to the extent to which the adopted short-term and other measures are likely to promote or undermine the achievement of the international climate goals (the objective set in the Initial Strategy).

28 Parties have agreed in MEPC.1/Circ.885 to assess both positive and negative impacts on States and assess and address disproportionately negative impacts, as appropriate.

29 The question which has arisen is whether assessment of impacts on States should include measurement of positive impacts in terms of the reduction of GHG emissions and/or whether these should also be included in any assessment of disproportionate impact. This issue is addressed further in section C. In relation to the regimes and provisions considered below it is clear that, in order to meet a range of environmental objectives set under those instruments, environmental impacts must be assessed and many cases this explicitly includes positive impacts (see the Kiev Protocol, the CBD Guidelines, MP Decisions, UNEP guidance and the EU EIA and SEA Directives).

30 These positive environmental impacts can be characterized as impacts on States in that:

- .1 States have adopted environmental goals and legal responsibilities under relevant instruments, including under the UNFCCC and Paris Agreement, which they have a legal duty to meet;
- .2 States are impacted by the environmental, social and economic impacts which result from the urgent threat of climate change and by the lessening or mitigation of those impacts through positive impacts;
- .3 States may be impacted by the response to climate change as recognized under the UNFCCC and PA; and
- .4 States may be entitled to seek support in taking measure to reduce emissions from ships including under the UNFCCC and PA, as well as under IMO.

31 Under international environmental agreements, the objective of impact assessment will be informed by the environmental objectives of the agreement in question (as well as

broader objectives in some cases such as the protection of public health, sustainable development and so on). The relevance of the instruments and guidance outlined in this section is two-fold:

- .1 the climate objectives which underpin the Initial IMO Strategy are themselves informed by general duties of impact assessment and integration reflected in not only the UNFCCC and Paris Agreement but also in other international instruments, and in UNCLOS and customary international law (the latter two are addressed in section C); and
- .2 the practice of including positive impacts as part of impact assessment is relevant to the practice of impact assessment more widely, including regulatory impact assessment, and to consideration of proportionality/disproportionality, as discussed below.

32 Environmental impact assessment: In general terms, provision for EIA addresses the potential adverse impacts of specific projects on the environment which means that the positive impacts of the project are generally more relevant to any justification of the project in the public interest.

33 Strategic environmental assessment: SEA arguably provides a more relevant analogy to the assessment of the impacts of IMO/MEPC short-term measure as it provides a basis for assessing the impact of regulatory measures.

34 Instruments concerned with SEA are generally framed to consider the extent to which measures address environmental objectives (Kiev Protocol). The Resource Manual to support the implementation of the Kiev Protocol, in discussing the purpose of SEA, states that the SEA process assists authorities responsible for plans and programmes, as well as decision makers, to take into account, inter alia, "Measures to avoid, reduce or mitigate adverse effects and to enhance positive effects."⁷ (see further discussion of the Protocol below).

35 As indicated in a note by the Executive Secretary of the CBD to the parties to the CBD in preparation for the Eighth Conference of the Parties (COP) (see further below), SEA is a tool to address environmental consequences and their interrelated social and economic aspects:

[...] the Netherlands Commission for Environmental Impact Assessment describes SEA as a tool to:

- .1 structure the public and government debate in the preparation of policies, plans and programmes;
- .2 feed this debate through a robust assessment of the environmental consequences and their interrelationships with social and economic aspects; and
- .3 ensure that the results of assessment and debate are taken into account during decision making and implementation.⁸

⁷ *Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment* UNITED NATIONS, 2012 ECE/MP.EIA/17, see A1.2.1 at p. 11.

⁸ Note on the *Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment* UNEP/CBD/COP/8/27/Add.2 9 January 2006, Annex II at paragraph 9.

36 Integration: In order to ensure that the environmental objectives which have informed the adoption of IMO measures are met, it is important to consider the positive environmental impacts of the measures alongside any negative social or economic impacts. The principle of integration is important in this regard and is reflected in international environmental instruments, including in Part XII of UNCLOS and in the UNFCCC/PA. Section C below considers the general international legal framework for assessing proportionality in the light of the objectives set under UNCLOS and UNFCCC/PA, taking into account principles of international law relating to the performance and interpretation of treaties.

37 The concept of disproportionate impacts is not defined or expanded but by implication requires an assessment of proportionality. The concept of disproportionate impacts is not defined or expanded but by implication requires an assessment of proportionality. It is difficult to see how it is possible to assess the proportionality of any measure without considering the positive environmental impacts of the measure alongside any negative impacts, given that the positive impacts provide the underlying rationale for the measures.

Specific agreements and other instruments

38 UNFCCC/PA: The implications of the goals and general framework for mitigation laid down under the UNFCCC and the Paris Agreement are considered in section C below. Clearly the goals and requirements of these climate agreements inform the actions of parties in addressing GHG emissions under IMO, as is reflected in the Initial Strategy. In this section a number of specific provisions of direct relevance to the assessment of short-term measure are highlighted.

39 The principle of integration is reflected in the UNFCCC. Article 4(1)(f) provides:
All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:...

...(f) Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change; (emphasis added).

40 This obligation is relevant to the scope of the impact assessment to be conducted by MEPC, in that climate considerations are expressly related to impact assessment of policies and actions and to minimizing adverse effects on the economy, on public health and the quality of the environment. The minimization of adverse effects in the context of climate change is clearly related to achievement of the international commitment to reducing GHG emissions and of the Paris Agreement goals.

41 In relation to impact assessment therefore an integrated approach would of necessity and by implication (see above) encompass assessing the positive impact of measures on the reduction of GHG emissions together with other impacts on States in the light of the relevant provisions of the UNFCCC including Article 4(8)-(10) of the UNFCCC, addressing the needs and concerns of developing countries, SIDs, LDCs and those with economies that are highly dependent on the use of fossil fuels, taking into account the provisions of the Paris Agreement (see further below). An integrated approach precludes omitting the positive environmental impacts of a measure from the assessment process.

42 The Preamble to the Paris Agreement also reflects an integrated approach to the threat of climate change, emphasizing the urgency of that threat and the need to address the impacts of measures taken in response to climate change:

"Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge,

Also recognizing the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, as provided for in the Convention,

Taking full account of the specific needs and special situations of the least developed countries with regard to funding and transfer of technology,

Recognizing that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it,

Emphasizing the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and eradication of poverty."

43 The urgency of the threat posed by climate change is reflected in the strengthened response enshrined in article 2 of the Paris Agreement and the timeframe for mitigation laid down in article 4(1) of the Paris Agreement which calls for peaking emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and rapid reductions thereafter and reaching net zero by the second half of the century.⁹ This framework reflects the concern expressed by the Parties in adopting the PA:

"Recognizing that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions,

Also recognizing that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and emphasizing the need for urgency in addressing climate change...

[...] *Emphasizing with serious concern the urgent need to address the significant gap* between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels [...]"¹⁰ (emphasis added).

⁹ Article 4(1) applies to all emissions and does not exclude emissions from shipping, see UNEP Emissions Gap Report at 5.1, p52: "Although international emissions are not covered under the nationally determined contributions (NDCs) of most signatories to the Paris Agreement, article 4 commits its signatories to reducing all anthropogenic greenhouse gas (GHG) emissions. No sector is exempt from this commitment" (emphasis added).

¹⁰ Preamble to Decision 1/CP.21 adopting the Paris Agreement, FCCC/CP/2015/L.9/Rev.1.

44 Of further importance in this context is Article 2(1)(c) of the PA¹¹ by which Parties aim to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". Taken together with articles 9 (financial resources), 10 (technology transfer and development) and 11 (capacity building) PA, States may wish to assess the extent to which current finance flows are consistent with a pathway towards low GHG emissions and climate resilient development in the context of shipping emissions and the adoption of a short-term measure under the Initial Strategy. This is critical in ensuring that developing countries including LDCs and SIDs are able to make the transition towards low GHG emissions and climate resilient development.

45 The provision for specific support is a reflection of general principles of equity and CDRRC that underpin the UNFCCC (articles 3(1) and 4(1)) and the Paris Agreement (articles 2(2), 4(1) and 14(1)) and of the principle that developed country Parties should take the lead in combating climate change and the adverse effects thereof (article 3(1) UNFCCC and see preamble, article 4(4) and 9(3) of the PA). As the Initial Strategy acknowledges (paragraph 1.5.1) IMO's actions in addressing GHG emissions from international shipping fall within the context of the UNFCCC and PA, as well as UNCLOS (as to which see section C). This means that the principles of equity and CDRRC and the provision for support which reflect those principles should inform the work of IMO (the Initial Strategy also refers to the United Nations 2030 Agenda for Sustainable Development at paragraph 1.5.4).

46 In summary therefore, the UNFCCC and the Paris Agreement confirm that the urgent threat of climate change is to be addressed having regard to an integrated approach to relevant actions and policies so that social and economic impacts on States should be considered alongside the impacts of actions and measures on the reduction of GHG emissions, given the need for accelerated and deep reductions and the need to address the significant emissions gap as recognized by the Parties in adopting the PA. States also need to assess and address the social and economic impacts on States of a failure to reduce greenhouse gas emissions sufficient to meet the international climate goals (see further in section C).

47 The Kiev Protocol on Strategic Environmental Assessment: The objective of the Kiev Protocol¹² is set out in article 1 which provides:

"The objective of this Protocol is to provide for a high level of protection of the environment, including health, by:

- .1 ensuring that environmental, including health, considerations are thoroughly taken into account in the development of plans and programmes;
- .2 contributing to the consideration of environmental, including health, concerns in the preparation of policies and legislation;
- .3 establishing clear, transparent and effective procedures for strategic environmental assessment;

¹¹ Article 2(2) importantly provides: "This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."

¹² The Protocol was adopted on 21 May 2003 and entered into force on 11 July 2010; by 2021 it had 33 Parties, including the EU, see Third review of implementation of the Protocol on Strategic Environmental Assessment (2016-2018) ECE/MP.EIA/SEA/14 p.iii.

- .4 providing for public participation in strategic environmental assessment; and
- .5 integrating by these means environmental, including health, concerns into measures and instruments designed to further sustainable development."

48 The Protocol then makes provision for SEA for certain plans and programmes which are likely to have significant environment effects, including on health (article 4). The Protocol makes provisions for screening and scoping and for public participation and consultations including, under article 10, transboundary consultation for relevant projects. Under article 13 of the Protocol, each Party shall endeavour to ensure that environmental, including health, concerns are considered and integrated to the extent appropriate in the preparation of its proposals for policies and legislation that are likely to have significant effects on the environment, including health. In doing so, each Party is required to consider the appropriate principles and elements of the Protocol.

49 Appendix III to the Protocol sets out the criteria for determining of the likely significant environmental, including health, effects referred to in article 5, paragraph 1 (screening of projects¹³) and includes:

- ".1 The relevance of the plan or programme to the integration of environmental, including health, considerations in particular with a view to promoting sustainable development [...]"

Appendix IV sets out the information referred to in article 7(2)¹⁴ (to be included in the environmental report) which includes:

- ".1 The contents and the main objectives of the plan or programme and its link with other plans or programmes [...].
- .2 The relevant aspects of the current state of the environment, including health, and the likely evolution thereof should the plan or programme not be implemented [...].
- .5 The environmental, including health, objectives established at international, national and other levels which are relevant to the plan or programme, and the ways in which these objectives and other environmental, including health, considerations have been taken into account during its preparation.
- .6 The likely significant environmental, including health, effects*/ as defined in article 2, paragraph 7[...].

¹³ Article 5(1) provides: "Each Party shall determine whether plans and programmes referred to in article 4, paragraphs 3 and 4, are likely to have significant environmental, including health, effects either through a case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose, each Party shall in all cases take into account the criteria set out in annex III".

¹⁴ Article 7(2) provides: "The environmental report shall, in accordance with the determination under article 6, identify, describe and evaluate the likely significant environmental, including health, effects of implementing the plan or programme and its reasonable alternatives. The report shall contain such information specified in annex IV as may reasonably be required, taking into account: (a) Current knowledge and methods of assessment; (b) The contents and the level of detail of the plan or programme and its stage in the decision-making process; (c) The interests of the public; and (d) The information needs of the decision-making body."

*/ These effects should include secondary, cumulative, synergistic, short-, medium- and long-term, permanent and temporary, positive and negative effects." (emphasis added).

50 In relation to this reference to positive effects, the SEA Resource Manual states that:

"A description of positive effects is essential to show the contribution of the plan or programme to environmental protection and sustainable development." (paragraph 5.26) (emphasis added).¹⁵

51 The quality assurance check list for the environmental report set out in the SEA Resource Manual also states that:

"Both positive and negative effects are considered, and the duration of effects (short, medium or long term) is addressed."¹⁶

52 The issue of positive impacts also arises under the consideration of alternatives in the environmental report (article 7) as indicated in the UN Resource Manual to support the implementation of the Protocol, which states:

"An important feature of the environmental report is that it should deal in the same way with the draft plan or programme and its reasonable alternatives [...] The preparation of plans and programmes usually involves the consideration of the following options.

[...] Alternative conditions for implementation of proposed actions. These options define measures to be taken to ensure that the intended positive effects of the proposed plan or programme are maximized and that its adverse side effects are minimized (prevented, mitigated or offset). They may be defined, for example, in criteria for decision-making on proposed activities or in general terms of reference for subsequent environmental assessments of future plans, programmes or projects that are initiated by the plan or programme."¹⁷ (emphasis added).

53 This clearly indicates the need to have regard, for the purposes of SEA, to the maximization of positive impacts as well as the minimization of adverse side effects.

54 Therefore, under the Kiev Protocol, the positive effects (as well as the synergistic effects) of plans and programmes (and where relevant, policies and legislation) are considered as part of the information required to be included in the environmental report. In addition, when screening plans and programmes for SEA, the relevance of the plan or programme to the integration of environmental considerations is considered as part of that process. Furthermore, the consideration of intended positive effects of a plan or programme (or, where relevant, policy or legislation) is relevant to consideration of alternative means of implementation.

55 The CBD/Cartagena Protocol: Article 14(1) of the CBD provides for impact assessment and provides:

¹⁵ SEA Resource Manual Table A4.2 at p.71.

¹⁶ SEA Resource Manual Table A4.4 at p.78. See also reference to consideration of positive effects at p.99, 102, 110, 145 and 156.

¹⁷ *Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment* UNITED NATIONS, 2012 ECE/MP.EIA/17, see A4.2.2 at p. 62.

- ".1 Each Contracting Party, as far as possible and as appropriate, shall:
- .1 introduce appropriate procedures requiring [EIA] of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures;
 - .2 introduce appropriate arrangements to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account; and
 - .3 promote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate; [...]."

56 In implementation of article 14, parties have adopted Voluntary Guidelines on biodiversity inclusive EIA and also on biodiversity inclusive SEA.¹⁸ In adopting those guidelines, the parties invited "other multilateral environmental agreements" to take note of and if appropriate apply the voluntary guidelines on biodiversity-inclusive EIA and also to take note of the draft guidance on biodiversity-inclusive SEA and to consider its application within their respective mandates.¹⁹

57 The EIA Voluntary Guidelines refer to monitoring of projects and provide that:

"Management plans, programmes and systems, including clear management targets, responsibilities and appropriate monitoring should be established to ensure that mitigation is effectively implemented, unforeseen negative effects or trends are detected and addressed, and expected benefits (or positive developments) are achieved as the project proceeds. Sound baseline information and/or pre implementation monitoring is essential to provide a reliable benchmark against which changes caused by the project can be measured." (paragraph 46) (emphasis added).

58 The SEA Voluntary Guidelines refer to cumulative effects on biodiversity and state that:

"(e) Cumulative effects on biodiversity are best anticipated at a strategic level. By applying the principles of the ecosystem approach the cumulative effects of activities on those ecosystem services which support human well-being can be addressed. At the same time, it is appropriate to define levels of acceptable change or desired levels of environmental quality at the strategic (ecosystem or catchment) level." (paragraph 16).

¹⁸ See COP Decision VIII/28, in particular paragraphs 3 (endorsing EIA Guidelines) and 9 (endorsing SEA Guidelines) and the annex setting out the EIA Voluntary Guidelines. The SEA Voluntary Guidelines are set out at annex II to the note by the Executive Secretary on voluntary guidelines on biodiversity inclusive impact assessment (UNEP/CBD/COP/8/27/Add.2).

¹⁹ COP Decision VIII/28 paragraphs 7 and 11, respectively.

This might indicate that cumulative impacts of measures on climate change are also best addressed by means of SEA which includes definition of the levels of acceptable change or desired environmental quality. The guidance also calls on parties to address benefits to society as whole through SEA: "By promoting/facilitating sustainable solutions to development needs SEA is benefiting society as a whole." (paragraph 16).

59 The SEA Voluntary Guidelines also address the need for integration of environmental and social and economic concerns and goals. In relation to biodiversity for social and economic well-being, they state that "Such integrated approaches reflect a broad perspective on biodiversity in accordance with the Convention and the Millennium Development Goals." (paragraph 20).

60 The Cartagena Protocol on biosafety²⁰ makes provision in relation to the transboundary movement of living modified organisms, including providing for an advance informed agreement procedure and risk assessment. The Protocol also addresses socio-economic considerations arising from the impact of living modified organisms on biodiversity, article 26 of the Cartagena Protocol provides:

- .1 The Parties, in reaching a decision on import under this Protocol or under its domestic measures implementing the Protocol, may take into account, consistent with their international obligations, socio-economic considerations arising from the impact of living modified organisms on the conservation and sustainable use of biological diversity, especially with regard to the value of biological diversity to indigenous and local communities.
- .2 The Parties are encouraged to cooperate on research and information exchange on any socio-economic impacts of living modified organisms, especially on indigenous and local communities."

61 Both the CBD and the Cartagena Protocol refer to the relationship between environmental concerns and socio-economic considerations. The SEA Voluntary Guidelines address the need for integration between these concerns. The EIA Voluntary Guidelines call for monitoring of expected benefits or positive developments from projects. The SEA Voluntary Guidelines indicate that cumulative impacts (on biodiversity) are best addressed through SEA.

62 The Montreal Protocol: The parties to the Montreal Protocol assess environmental and social impacts of measures taken under the Protocol by covering the assessment of scientific and environmental effects as well as social and economic impacts under the guidance to bodies conducting assessment. By way of example, Decision XXXI/2 on Potential areas of focus for the 2022 quadrennial reports of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel (2020) requests the Scientific Assessment Panel to include in its 2022 assessment, among other items:

"An evaluation of trends in the top-down derived emissions, abundances and fate in the atmosphere of trace gases of relevance to the Montreal Protocol, in particular controlled substances and other substances of importance to the ozone layer, which

²⁰ The objective of the Cartagena Protocol is set out in article 1 which provides: "In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements".

should include a comparison of bottom-up and top-down estimations of such emissions with a view to addressing unidentified emission sources and discrepancies between reported emissions and observed atmospheric concentrations (paragraph 5(c));"

The Environment Effects Panel is requested to:

"[...] pay particular attention to the most recent scientific information together with future projections and scenarios to assess the effect from changes in the ozone layer and ultraviolet radiation, and their interaction with the climate system, as well as the effects of breakdown products from controlled substances and their alternatives on: The biosphere, biodiversity and ecosystem health, including on biogeochemical processes and global cycles; Human health; Ecosystem services, agriculture and materials, including for construction, transport, photovoltaic use and microplastics;"

The Technology and Economic Assessment Panel is then requested to include an assessment and evaluation of the following topics:

"Technical progress in the production and consumption sectors in the transition to technically and economically feasible and sustainable alternatives and practices that minimize or eliminate the use of controlled substances in all sectors;

The status of banks and stocks of controlled substances and the options available for managing them so as to avoid emissions to the atmosphere;

Challenges facing all parties to the Montreal Protocol in implementing Montreal Protocol obligations and maintaining the phase-outs already achieved, especially those on substitutes and substitution technologies, including challenges for parties related to feedstock uses and by-production to prevent emissions, and potential technically and economically feasible options to face those challenges;

The impact of the phase-out of controlled ozone-depleting substances and the phase-down of HFCs on sustainable development;

Technical advancements in developing alternatives to HFCs suitable for usage in countries with high ambient temperatures, particularly with regard to energy efficiency and safety."

63 Parties have also agreed to address positive and negative impacts in one assessment. In Decision XX/7 on Environmentally sound management of banks of ozone-depleting substances (2008), parties requested the Technology and Economic Assessment Panel to conduct "a comprehensive cost-benefit analysis of destroying banks of ozone-depleting substances taking into consideration the relative economic costs and environmental benefits, to the ozone layer and the climate, of destruction versus recycling, reclaiming and reusing such substances. In particular, the report should cover the following elements: [...] Consideration of the positive and negative impacts of recovery and destruction of ozone-depleting substances, including direct and indirect climate effects [...]" (paragraph 7) (emphasis added).

64 It is clear that in order to assess the progress made under the MP therefore, parties consider positive environmental impacts of the measures taken, as well as assessing the challenges faced by parties in implementing their obligations, including direct and indirect climate effects and including by reference to cost-effectiveness.

65 UNEP: UNEP has produced recent guidance and reports on the conduct of environmental assessment, both EIA and SEA, as well as on integrated environmental assessment of policies. Set out below are some extracts from the guidance referring to the assessment of positive effects and/or integration of environmental, economic and social impacts.

66 UNEP Report on Assessing Environmental Impacts-A Global Review of Legislation:²¹ The Executive Summary states in relation to EIA and SEA:

"The objective of these tools is to make sure that all critical information to predict future impact on the environment is supplied and considered in the decision-making process. While EIAs assess planned physical developments, SEAs target the strategic planning level, such as government plans, programmes or policies. Both aim to avoid the implementation of any activity or strategic planning document with significant negative impacts on the environment, as well as an enhancement of positive impacts." (emphasis added).

67 In relation to EIA and consideration of positive impacts, the Report states:

"Environmental impacts do not only include negative impacts. Not only should positive impacts of a project be taken into account in the assessment, but ideally the assessment should also be aimed at enhancing positive benefits through project design and implementation. Consequently, EIAs have also been termed a "proactive management tool with technical input" [1,7]²² (emphasis added).

"[...] some laws explicitly require the taking into account of direct and indirect significant effects (e.g. in the European Union, Kenya and Bhutan), as well as negative and positive impacts (e.g. in Bhutan and India)" (page 44).

68 In relation to consideration of social, economic and environmental impacts during the assessment process, the Report points out that:

"As well as the economic pillar, the principle of sustainable development however also includes the environmental and social pillars. While the economic pillar of sustainable development is already an inherent part of any project proposal, EIAs and SEAs make sure that the environmental pillar is adequately considered. With regard to the social pillar, many systems explicitly do include social considerations in the assessments, mainly through the definition of "the environment" in national laws. These are often called Environmental and Social Impact Assessments (ESIAs). This takes account of the strong linkages between these two pillars of sustainable development which often risk being overridden by the third economic pillar. In the context of developing countries, EIAs and/or SEAs are therefore also considered tools for poverty alleviation [7,9]" (page 4, emphasis added).

²¹ UN Environment (2018). Assessing Environmental Impacts- A Global Review of Legislation, Nairobi, Kenya.

²² Page 3 of the Report.

69 UNEP Guidelines on Integrated Environmental Assessment: The 2019 UNEP Guide considers aspects of integrated environmental assessment.²³ The Guide defines integrated environmental assessment as follows:

"[...] an assessment that includes environmental, social and economic aspects in an analysis of environmental state and trends linked with policy analysis. It usually covers a broad spectrum of issues and policies and all aspects of the environment including habitats, species and ecological, physical and chemical processes. It may incorporate global, sub-global and national perspectives as well as historical and future perspectives in an integrated analysis of environmental change and human and societal well-being." (page 8, emphasis added).

70 In relation to policy effectiveness, the Guide states:

"When formulating conclusions on policy effectiveness, regional, political, economic and cultural sensitivities should be considered. This may require the balancing of positive and negative findings but the ultimate goal should be to nudge or recalibrate the policies that are assessed in order to make them as effective as possible and with the least negative impact." (page 57).

71 The Guide also states in relation to the assessment of policy effectiveness that this may include:

- .1 The environmental themes of air, water, land and biota, in a way which mirrors the state of the environment assessment;
- .2 Progress towards achievement of the Sustainable Environment Goals
- .3 Impacts on livelihoods and well-being;
- .4 Gender and age differentiated impacts;
- .5 Changes in administrative burden of stakeholders;
- .6 Performance of affected economic sectors;
- .7 Geographic scale of effectiveness;
- .8 Adverse or unintended impacts;
- .9 Co benefits on other environmental issues and socio economic issues;
- .10 Effects on public finances, where relevant;
- .11 The cost benefit of policy;
- .12 The effects on competing and conflicting policies; and
- .13 Communication strategy and feedback loops for influencing new policies/new studies." (page 56).

This list indicates the importance of integrating environmental, social and economic concerns in the assessment of policy effectiveness.

72 IFC Performance Standards:²⁴ The eight Performance Standards (PS) of the International Finance Corporation (IFC) establish standards that the client is to meet throughout the life of an investment by IFC. PS 1 on Assessment and Management of

²³ The Foreword to the Guide states that this document is the result of UN Environment Member State requests in both Governing Council and the UN Environment Assembly and is meant to provide guidance for a wide range of different types of Integrated Environmental Assessments. These can range from global to regional to rapid response assessments and emerging issues assessments. The Guidelines should be considered a "living document" since they will be used and improved throughout ongoing assessment processes. Available at:
https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

Environmental and Social Risks and Impacts establishes the importance of integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects.

73 PS3 on Resource Efficiency and Pollution Prevention (2012) refers to: "a growing global consensus that the current and projected atmospheric concentration of [(GHG) threatens the public health and welfare of current and future generations. At the same time, more efficient and effective resource use and pollution prevention and GHG emission avoidance and mitigation technologies and practices have become more accessible and achievable in virtually all parts of the world."

74 In relation to greenhouse gases, PS 3 provides: In addition to the resource efficiency measures described above, the client will consider alternatives and implement technically and financially feasible and cost-effective options to reduce project-related GHG emissions during the design and operation of the project. These options may include, but are not limited to, alternative project locations, adoption of renewable or low carbon energy sources, sustainable agricultural, forestry and livestock management practices, the reduction of fugitive emissions and the reduction of gas flaring (paragraph 7).

75 The framing of the IFC's PS 1 and 3 in particular indicates the importance of integrated assessment of environmental and social risks, albeit in a different but relevant context.

76 European Union EIA and SEA Directives: Both EU Directive 2011/92 on the assessment of the effects of certain public and private projects on the environment²⁵ as amended (the EIA Directive) and the EU Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment²⁶ (the SEA Directive) require information on positive effects on the environment to be included in the environmental report as likely significant effects on the environment.²⁷

77 The EIA Directive provides:

"The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project."

78 As stated in guidance on the SEA Directive: "A description of positive effects is essential in order to show the contribution of the plan and programme to environmental protection and sustainable development."²⁸ (emphasis added).

²⁵ OJ L 26, 28.1.2012, p. 1 as amended by Directive 2014/ 52 of the European Parliament and of the Council of 16 April 2014 OJ L 124, 25.4.2014, p. 1.

²⁶ OJ L 197/30 of 21.7.2001.

²⁷ See EIA Directive Annex IV at paragraph 5, as amended, and see SEA Directive Annex I, note to paragraph (f).

²⁸ Guidance on the Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment, paragraph 5.26 at p.30, available at: <https://ec.europa.eu/environment/eia/sea-support.htm>

79 The guidance also makes clear that an environmental report falling within the scope of the SEA Directive may form part of a wider sustainability assessment:

"The environmental report might in many cases be a part of a wider assessment of the plan or programme. It could, for example, be part of a document on sustainability assessment covering also social and economic effects, or a sustainability assessment could be integrated in the plan or programme."²⁹

80 The EU EIA and SEA Directives include positive environmental effects on the environment as an essential part of the information required for assessment. This can form part of a wider assessment (in the case of SEA) of the contribution of the plan or programme to sustainable development.

C General Legal Context for Impact Assessment

81 Part XII of UNCLOS: Under Part XII, States "have the obligation to protect and preserve the marine environment" (article 192) as well as "the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment." (article 193).

82 Article 194 of UNCLOS provides:

- .1 States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.
- .2 States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.
- .3 The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:

[...]

(b) pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels; [...]"

83 The scope of the obligations laid down by articles 192 and 194 was considered by the Arbitral Tribunal in the South China Seas case.³⁰ The Tribunal held that:

"Although phrased in general terms, the Tribunal considers it well established that Article 192 does impose a duty on States Parties, the content of which is informed by

²⁹ SEA Guidance note 28 above, paragraph 5.5 at page 23.

³⁰ *In the Matter of the South China Sea Arbitration, The Philippines v People's Republic of China*, Award, 12 July 2016, PCA Case No 2013-19.

the other provisions of Part XII and other applicable rules of international law [...]. The corpus of international law relating to the environment, which informs the content of the general obligation in Article 192, requires that States ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control." (paragraph 941) (emphasis added).

84 The Tribunal held that article 192 entails both a positive obligation to "take active measures to protect and preserve the marine environment" and a negative obligation "not to degrade the marine environment." (paragraph 941). The Tribunal also noted that articles 192 and 194 establish obligations, not only in relation to the activities of States and their organs, but also in relation to ensuring that activities undertaken by non-State actors within the State's jurisdiction do not harm the marine environment (paragraph 944).

85 Section 4 of part XII deals with monitoring and environmental assessment. Article 204 UNCLOS addresses the monitoring of the risks or effects of pollution and provides:

- .1 States shall, consistent with the rights of other States, endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyze, by recognized scientific methods, the risks or effects of pollution of the marine environment.
- .2 In particular, States shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment."

86 Article 205 requires States to publish reports of the results obtained pursuant to article 204 "or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States."

87 Article 206 addresses the assessment of potential effects of activities, stating:

"When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205."

88 Taken together, these requirements of part XII of UNCLOS indicate the importance of States assessing the environmental impacts of GHG emissions from shipping, including as to the positive benefit of measures to be taken to reduce such emissions, in order to meet their general obligations under article 194 and in the light of their obligations under other relevant rules of international law including the UNFCCC/PA. The adverse impacts of climate change will be exacerbated by a failure to meet the long-term temperature goals and the risks increase, as is clear from the reports of the IPCC and UNEP, according to the extent to which those goals are missed and the delay in reaching them. Accordingly, understanding a measure's potential to achieve meaningful climate reductions is essential to understanding its full impact. Disproportionate impacts on nations will still need to be assessed, and if necessary, addressed with particular consideration given to SIDs and LDCs.

89 Paragraph 3.1 of the Initial Strategy states that reviews of IMO Strategy:

"[...] should take into account updated emission estimates, emissions reduction options for international shipping, and the reports of the Intergovernmental Panel on Climate Change (IPCC), as relevant [...]."

90 The 2020 UNEP Emissions Gap Report (EGR) states:

"The emissions trajectories from the [IPCC] Special Report on Global Warming of 1.5°C (SR1.5) (2018) indicate that global temperature increase can only be limited to no more than 1.5°C if CO₂ emissions reach net zero by 2050 (interquartile range: 2045-2055), with active permanent removal of CO₂ from the atmosphere thereafter. To limit global warming to below 2°C, CO₂ emissions need to reach net zero by 2070 (66% probability). Based on these pathways, it is clear that international shipping and aviation must be completely decarbonized by around 2050 for 1.5°C and by 2070 for 2°C" (emphasis added).³¹

91 It should be noted in this context that Seabed Disputes Chamber of ITLOS held in its 2011 Advisory Opinion that the due diligence obligation of States can vary over time:

"[...] as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge."³²

92 Article 237 addresses the relationship between Part XII and other international agreements and provides:

".1 The provisions of this Part are without prejudice to the specific obligations assumed by States under special conventions and agreements concluded previously which relate to the protection and preservation of the marine environment and to agreements which may be concluded in furtherance of the general principles set forth in this Convention.

.2 Specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention." (emphasis added).

93 This is reinforced by the principle of treaty interpretation that: "There shall be taken into account, together with the context: [...] (c) Any relevant rules of international law applicable in the relations between the parties" (article 31(3)(c) of the Vienna Convention on the Law of Treaties (VCLT). Both the rules of UNCLOS and this general rule of treaty interpretation reinforce the need for integration as discussed in sections A and B above.

94 Impact assessment: Both the International Court of Justice (ICJ) and the Tribunal on the Law of the Sea (ITLOS) have confirmed the importance of State obligations to conduct environmental impact assessment and act with due diligence in protecting the environment, including the marine environment. In the Pulp Mills case the ICJ held that:

"it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource."³³

³¹ UNEP EGR 2020 at 5.2.3 at p.55.

³² *Responsibilities and obligations of States with respect to activities in the Area*, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, paragraph 117.

³³ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Reports 2010, paragraph 204.

95 As the ITLOS Seabed Disputes Chamber affirmed in the 2011 Advisory Opinion on Responsibilities and Obligations in the Area, the obligation to conduct an environmental impact assessment is a "direct obligation under the Convention and a general obligation under customary international law".³⁴ The Chamber also referred to Article 206 UNCLOS and to the ICJ's judgement in Pulp Mills (paragraph's 146-149).

96 This framework reinforces the duty of States to conduct environmental impact assessment under UNCLOS Part XII as well as other relevant international agreements including the UNFCCC and PA.

97 Disproportionate impacts: Any assessment of whether or not measures taken pursuant to the Initial Strategy can be said to have a disproportionate impact on States should take into account the environmental impacts of the measures, including positive environmental impacts arising from the reduction of GHG emissions, taking into account each State's positive duties under part XII of UNCLOS together with the international goals and obligations set under the UNFCCC and PA.

98 It will also be important to have regard to provision for assistance to SIDs and LDCs in taking measures to reduce emissions from shipping under both IMO and under UNFCCC/PA, including by ensuring that finance flows are consistent with a low emissions pathway and climate resilient development and that appropriate support is provided in terms of technology transfer and capacity building.

99 The international principle of effectiveness is also relevant to the issue of how disproportionate impact should be assessed, bearing in mind the need to interpret relevant treaty obligations as effective (a principle reinforced by explicit language in the PA³⁵). The proportionality or otherwise of measures taken to reduce emissions should have regard to the object and purpose of the UNFCCC, the prevention of dangerous anthropogenic interference with the climate system (article 2) and of the Paris Agreement as a strengthened response to that threat, including the long-term temperature goals and the mitigation framework (see above) and to Part XII of UNCLOS. This means that the positive impact of the measures in environmental terms must be taken into account in order to sure that there is an effective response to the urgent threat of climate change in the light of the international climate goals, having regard to the provisions relating to the position of developing countries under the UNFCCC and Paris Agreement as well as UNCLOS and MARPOL.

D Potential Types of Positive Impacts that could be included

100 In view of the objectives of the Initial Strategy and of the UNFCCC and Paris Agreement, as well as UNCLOS and in view of international legal provision and best practice as discussed above, the following types of positive impacts appear to be relevant to an assessment of the measures to be adopted under the auspices of IMO/MEPC:

- .1 the reduction of GHG emissions consistent with the Paris Agreement goals and in the light of IPCC findings. Taking into account the UNEP EGR 2020, progress towards decarbonization in the shipping sector could be measured on an annual basis and this progress can be incorporated into impact assessments for proposed measures to be adopted by MEPC;

³⁴ *Responsibilities and obligations of States with respect to activities in the Area*, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p.10, see paragraph 145.

³⁵ The preamble to the Paris Agreement recognizes "the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge". References to effectiveness are then repeated in the language of articles 3, 6, 7, 10, 11, 13 and 16.

- .2 associated public health impacts of reducing GHG emissions and adopting energy efficient and fuel saving measures; and
- .3 associated economic benefits and costs savings associated with the reduction of emissions including the reduction of fuel costs, taking into account the principles of equity and CDDRRC as laid down in the UNFCCC and Paris Agreement which form the broader context for taking these measures.

101 Reduction of GHG emissions: The current Initial IMO Strategy provides for reducing the total annual GHG emissions of international shipping by at least 50% by 2050 compared with 2008 and this can be used as the (minimum) standard against which to measure overall reductions pending the adoption of a revised Strategy in 2023.

102 The UNEP EGR 2020 sets out a range of mitigation options for the shipping sector, drawing on steps taken or proposed under IMO: these include logistic and supply chain improvements, reducing speed and improving ship design and operation.³⁶

103 Parties can encourage the private sector to use methodologies laid down in the GHG Protocol Standard to measure and report shipping emissions.³⁷

104 The need to address positive environmental impacts in the assessment of proposed and ongoing measures is critical in circumstances where, as indicated by UNEP:

"If left unabated, the international shipping and aviation sectors are projected to emit increasing amounts of CO₂ and other GHG emissions in the coming decades. BAU scenarios indicate that international emissions from these sectors will consume between 60-220 per cent of allowable CO₂ emissions under the IPCC SR1.5 illustrative scenarios by 2050 [...]

Current policy frameworks are insufficient and additional policies are therefore required to bridge the gap between the sectors' current BAU trajectories and GHG pathways consistent with the Paris Agreement temperature goals."³⁸

³⁶ See EGR 2020 section 5.3 at pp. 55-56.

³⁷ The GHG Standard on Scope 3 Emissions includes Category 4 on Upstream Transportation and Distribution relates to transport including marine transport, available at: https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf

³⁸ EGR 2020 section 5.5 at p.60.