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## REDUCTION OF GHG EMISSIONS FROM SHIPS

### Synthesis Report of the IPCC Sixth Assessment Report and its implications for the levels of ambition and follow-up action that must be included in the IMO's revised GHG Strategy

Submitted by CSC, Pacific Environment and Inuit Circumpolar Council

#### SUMMARY

*Executive summary:* This document draws attention to the IPCC AR 6 *Synthesis Report: Climate Change 2023*, which was released on 20 March 2023. The Committee is invited to note the findings from the report, together with the views of the co-sponsors, and is urged to support the urgent action outlined below.

*Strategic direction, if applicable:* 3

*Output:* 3.2

*Action to be taken:* Paragraph 12

*Related documents:* MEPC 77/7/18, MEPC 78/7/18, MEPC 78/7/27; MEPC 79/7/20 and ISWG-GHG 14/2/12

1 The United Nations body responsible for assessing the science related to climate change – the Intergovernmental Panel on Climate Change (IPCC) – has released the Synthesis Report of the Sixth Assessment Report entitled *AR 6 Synthesis Report: Climate Change 2023* (hereinafter referred to as "the AR6 report"), which summarizes the state of knowledge of climate change, its widespread impacts and risks, and climate change mitigation and adaptation, based on the peer-reviewed scientific, technical and socio-economic literature.\* The report recognizes the interdependence of climate, ecosystems and biodiversity, and human societies; the value of diverse forms of knowledge, including Indigenous Knowledge; and the close linkages between the recognition for the inherent rights of Indigenous Peoples, climate change adaptation, mitigation, ecosystem health, human well-being and sustainable development.

\* Intergovernmental Panel on Climate Change Synthesis Report of the Sixth Assessment Report, [https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_LongerReport.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf)

2 This document draws attention to the results of the AR6 report and urges further action to reduce the impacts of catastrophic global heating. With this in mind, this submission will highlight areas identified by the AR6 report that are particularly pertinent to the Organization including (1) impacts and risks of a heating climate; (2) timing and urgency of climate action; and (3) governance and policy for near-term climate action.

### **Impacts and risks of climate heating**

3 The report finds that human activities, principally through emissions of greenhouse gases, have unequivocally caused global heating. Global greenhouse gas emissions have continued to increase over 2010-2019, with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries, and between individuals. Human-caused climate heating is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts on food and water security, human health and on economies and society and related losses and damages to nature and people. Vulnerable communities, which include Indigenous Peoples, who have historically contributed the least to current climate heating are disproportionately affected.

4 Climate heating has already caused widespread adverse impacts and related losses and damages to nature and people. These losses and damages are unequally distributed across systems, regions and sectors. Cultural losses, related to tangible and intangible heritage, threaten adaptive capacity and may result in irrevocable losses of sense of belonging, valued cultural practices, identity and home, particularly for Indigenous Peoples and those more directly reliant on the environment for subsistence. For example, changes in snow cover, lake and river ice, and permafrost in many Arctic regions are harming the livelihoods and cultural identity of Arctic residents including Indigenous communities. Housing and infrastructure, including transportation, water, sanitation and energy systems have been compromised by extreme and slow-onset events, with resulting economic losses, disruptions of services, and impacts to wellbeing.

5 The report goes on to state that the likelihood and impacts of abrupt and/or irreversible changes in the climate system, including changes triggered when tipping points are reached, are increasing with further global heating. As warming levels increase, so do the risks of species extinction and irreversible loss of biodiversity in ecosystems in all regions of the world, including the Arctic region. At sustained warming levels between 2°C and 3°C, the Greenland and West Antarctic ice sheets will be lost almost completely and irreversibly over multiple millennia, causing several meters of sea level rise. The probability and rate of ice mass loss increase with higher global surface temperatures.

### **Timing and urgency of climate action**

6 The magnitude and rate of climate heating and associated risks depend strongly on near-term mitigation and adaptation actions. According to the AR6 report, global heating is more likely than not to reach 1.5°C between 2021 and 2040 even under the very low GHG emission scenarios and likely or very likely to exceed 1.5°C under higher emissions scenarios. Societal choices and actions implemented in this decade will determine the extent to which medium- and long-term pathways will deliver higher or lower climate-resilient development.

7 The report also notes that changes in short-lived climate forcers, such as Black Carbon, lead to an additional net global heating in the near and long term. A simultaneous adoption of stringent climate heating mitigation and air pollution control policies has the potential to limit additional heating and lead to strong benefits for air quality.

8 Importantly, the report notes that delayed mitigation actions will further increase global heating, losses and damages will rise, and additional human and natural systems will reach adaptation limits. Challenges from delayed adaptation and mitigation actions include the risk of cost escalation, lock-in of infrastructure, stranded assets, and reduced feasibility and effectiveness of adaptation and mitigation options. Without rapid, deep and sustained mitigation and accelerated adaptation actions, losses and damages will continue to increase, including projected adverse impacts in Africa, LDCs, SIDS, Central and South America, Asia and the Arctic, and will disproportionately affect and undermine the inherent rights of the most vulnerable populations, including Indigenous Peoples.

### **Governance and policy for near-term climate action**

9 The transboundary nature of many climate-heating risks increases the need for climate-informed transboundary management, cooperation, responses and solutions through multinational or regional governance processes. Multilateral governance efforts can help reconcile contested interests, world views and values about how to address climate heating. Improvements to national and international governance structures would further enable the decarbonization of shipping and aviation through deployment of low-emissions fuels, for example through stricter efficiency and carbon intensity standards. Transnational partnerships can also stimulate policy development, low-emissions technology diffusion, emission reductions and adaptation, by linking sub-national and other actors, including cities, regions, non-governmental organizations and private sector entities, and by enhancing interactions between State and non-State actors, though uncertainties remain over their costs, feasibility, and effectiveness. International environmental and sectoral agreements, institutions, and initiatives are helping, and in some cases may help, to stimulate low-GHG emissions investment and reduce emissions.

10 Engaging Indigenous Peoples and local communities using just-transition and rights-based decision-making approaches, implemented through collective and participatory decision-making processes, has enabled deeper ambition and accelerated action in different ways, and at all scales, depending on national circumstances. Meaningful participation and inclusive planning, informed by cultural values, Indigenous Knowledge, local knowledge and scientific knowledge can help address adaptation gaps and avoid maladaptation.

### **Follow-up action**

11 It is, in particular, the potential of delayed adaptation and mitigation action that concerns the co-sponsors, and to this end, the co-sponsors urge the Organization and its Members to agree to the following as a matter of urgency:

- .1 bring the levels of ambition in the Initial IMO GHG Strategy unambiguously into line with the Paris Agreement's goal of keeping heating below 1.5°C, including a target of halving ship climate impacts by 2030 and full decarbonization of shipping close to 2040;

- .2 make deep cuts to Black Carbon emissions from shipping in and near the Arctic, e.g. via an immediate mandatory switch to distillates; urgently develop mandatory targets and measures to reduce Black Carbon emissions from international shipping; and include BC in CO<sub>2</sub>e metrics;
- .3 raise the level of ambition in the recently agreed carbon intensity indicator (CII) to at least 6% to 7% per annum to ensure a 1.5°C-compatible improvement in the carbon intensity of ships;
- .4 ensure that climate vulnerable nations and Indigenous Peoples are ethically and equitably involved and enabled to participate in all aspects of the shipping industry's just and equitable green transition; and
- .5 enhance collaboration between UN agencies and between the UN and other national and international agencies (polycentric governance) to speed up climate action and make it more effective.

#### **Action requested of the Committee**

12 The Committee is invited to consider the information contained in this document, including the information provided in paragraphs 1 to 10 from the *IPCC AR 6 Synthesis Report: Climate Change 2023*, and in particular the necessary urgent follow-up actions detailed in paragraph 11 and to take action as appropriate.

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