

SUB-COMMITTEE ON POLLUTION  
PREVENTION AND RESPONSE  
11th session  
Agenda item 6

PPR 11/6/4  
15 December 2023  
ORIGINAL: ENGLISH  
Pre-session public release:

## REDUCTION OF THE IMPACT ON THE ARCTIC OF BLACK CARBON EMISSIONS FROM INTERNATIONAL SHIPPING

Comments on PPR 11/6, PPR 11/6/1 and PPR 11/6/3

Submitted by Inuit Circumpolar Council (ICC)

### SUMMARY

*Executive summary:* In this document the Inuit Circumpolar Council (ICC) supports the approach in document PPR 11/6/1 to develop a marine fuel H/C ratio to inform a Black Carbon (BC) threshold and recommends that in document PPR 11/6 (report of the Correspondence Group) the engagement of Indigenous Peoples, communities and organizations be included in the development of BC mitigation measures to urgently reduce BC emissions from shipping in the Arctic and Inuit Nunaat.

*Strategic direction, if applicable:* 3

*Output:* 3.3

*Action to be taken:* Paragraph 15

*Related documents:* Resolution MEPC.342/77; PPR 7/8/2, PPR 7/22; PPR 8/5, PPR 8/INF.3; PPR 10/6/5; MEPC 75/7/15, MEPC 75/10/6; MEPC 77/16, MEPC 77/16/Add.1; MEPC 78/7/18 and MEPC 78/7/27

### Introduction

1 This document comments on document PPR 11/6 (United States) and PPR 11/6/1 (Canada, Germany and Iceland).

### Black Carbon emission impacts in Inuit Nunaat

2 Arctic shipping is on the rise. During the six-year period between 2013 and 2019, the number of ships entering the Arctic Polar Code area grew by 25%. The total distance sailed by ships in this area grew by 75%, from 6.51 million nautical miles in 2013 to 9.5 million nautical miles in 2019<sup>1</sup>. BC emissions from shipping have doubled from 2015-2021.<sup>2</sup>

<sup>1</sup> <https://arctic-council.org/news/first-arctic-shipping-status-report-increase-shipping-traffic/>

<sup>2</sup> <https://cleanarctic.org/wp-content/uploads/2023/04/ICCT-BC-2021-briefing-for-CAA.pdf>

3 BC has more than three thousand times<sup>3</sup> the warming impact of CO<sub>2</sub> over a 20-year period, has five times the impact on local warming and snow/ice melt if emitted in the Arctic, and makes up around one-fifth<sup>4</sup> of international shipping's climate impact. Each year, approximately 4 million deaths<sup>5</sup> globally are associated with long-term exposure to black carbon (PM<sub>2.5</sub>) air pollution.

4 Indigenous Knowledge (see definition in the revised underwater radiated noise guidelines<sup>6</sup> and document SDC 9/WP.3) from the Arctic region has also documented<sup>7</sup> major changes to weather, wildlife migration, snow and sea ice, as well as the introduction of invasive species. These changes have unprecedented and significant impacts on people in the Arctic, especially Indigenous Peoples who are on the frontlines and experience impacts of severe weather changes, and whose cultural foundation and livelihoods thrive on the very nature of the Arctic environment of cold, snow and ice. Every day, Arctic communities are witnessing a climate in crisis.

### **Inuit Nunaat**

5 Inuit are international Arctic People sharing common language, culture, and land along the Arctic coast of the Russian Federation, Alaska (United States), Canada, and Greenland (Denmark). The Inuit homeland, called Inuit Nunaat, has a unique environment, geography, culture, and political context. Adverse impacts to marine wildlife and ecosystems in this area from climate and health pollutants may significantly increase as a result.

6 Inuit Nunaat is warming three to four times faster than other parts of the planet. These changes have unprecedented and significant impacts on people in the Arctic, especially Inuit who depend on the marine and terrestrial plants and animals supported by the coastal zones of the Arctic Ocean, the tundra, and the sea ice. Changes in Arctic ecosystems brought on by the climate crisis also impact global weather and climate systems. What occurs in the Arctic does not stay in the Arctic.<sup>8</sup>

7 The Arctic is home to Inuit. The Arctic Ocean and its coastal seas not only serve as highways for Inuit over the ice in winter and in the open water season, but also are essential for transmission of culture and Inuit Knowledge, harvesting, and livelihoods. These values are put at risk by black carbon emissions in areas that are essential for community health and well-being.

8 Shipping is an integral part of the Inuit communities in all the circumpolar regions. Inuit way of life is intricately tied to the Arctic ecosystem, and Inuit culture, knowledge systems and the region's biodiversity are bound together. Inuit rely on marine transportation for the delivery of necessary goods and services. In many diverse ways, shipping and the ocean are the lifelines for Inuit remote communities. It is urgent and imperative to mandate the reduction of BC emissions from shipping in and near the Arctic and Inuit homeland of Inuit Nunaat for all these reasons.

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<sup>3</sup> [The Short-Term Cooling but Long-Term Global Warming Due to Biomass Burning in: Journal of Climate Volume 17 Issue 15 \(2004\) \(ametsoc.org\)](#)

<sup>4</sup> <https://theicct.org/publication/black-carbon-emissions-and-fuel-use-in-global-shipping-2015/>

<sup>5</sup> <https://www.stateofglobalair.org/health/pm#:~:text=Learn%20More%20major%20impacts,all%20air%20pollution%20attributable%20deaths>

<sup>6</sup> <https://www.imo.org/en/MediaCentre/Pages/WhatsNew-1818.aspx>

<sup>7</sup> <https://cdsciencepub.com/doi/full/10.1139/as-2022-0044>

<sup>8</sup> <https://nsidc.org/learn/parts-cryosphere/arctic-weather-and-climate>

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## Action needed to reduce BC emissions in Inuit Nunaat

9 As a first and immediate step to reducing BC emissions in the Arctic and Inuit Nunaat, resolution MEPC.342(77) which urges Member States and ship operators to voluntarily use distillate or other cleaner alternative fuels, should be implemented without delay. Switching away from heavy fuel oils to alternatives like distillate fuel can reduce BC emissions by between 50%-80%<sup>9</sup>, which would have an immediate effect on local climate warming and snow/ice melt, and the health of people living in the Arctic.

10 As a second step, ICC supports the approach in document PPR 11/6/1 (Canada, Germany and Iceland) to develop a marine fuel H/C (hydrogen/carbon) ratio for a BC threshold, and for the H/C ratio to be included in the ISO 8217 marine fuel standard. An alternate approach, as described in document PPR 11/6/1, could be the development by ISO of a Polar Fuel Standard which includes the H/C ratio. A BC threshold will allow for broad application across numerous marine fuel blends and for reduction targets to be set within existing regulatory frameworks. The development of the H/C ratio and BC thresholds should not be a barrier to the immediate switch to distillate fuels and implementation of resolution MEPC.342(77).

11 ICC also supports the recommendations in document PPR 11/6/3 (FOEI et al.) to develop Black Carbon Emission Controls Areas. As quantified in documents MEPC 81/11 (Canada), MEPC 81/11/1 (Norway) and PPR 11/INF.4 (United States), ECAs currently, and have the potential to, dramatically reduce particulate matter and BC emissions. Developing a standard within the ECA regulatory tool for BC will formalize this reduction and allow for thresholds to be incorporated which reflect climate and health impacts.

## Engagement of Indigenous Peoples and a just and equitable transition

12 ICC would like to reiterate the suggested addition to the draft Guidance on Best Practices on Recommendatory Goal-Based Control Measures to Reduce the Impact on the Arctic of Black Carbon Emissions from International Shipping in document PPR 11/6 (annex 1, page 2, paragraph 4.1) to include in paragraph 4.1: 'Engage Arctic Indigenous People and the inclusion of Indigenous Knowledge in research and determining mitigation measures'. Including and considering Inuit and Indigenous Knowledge will create more resilient solutions for those most affected, and support shipping owners and operators with developing a decarbonized equitable transition for shipping in the Arctic.

13 An accompanying just and equitable transition framework needs to be in place for measures to mitigate climate impacts from shipping. Inuit did not cause the climate crisis but are being the most impacted. Preventing economic hardship and infringement of Indigenous rights is essential. A just and equitable transition must align with and build on UNDRIP (United Nations Declaration on the Rights of Indigenous Peoples), recognizing and implementing Indigenous rights and considering Indigenous self-determination and self-governance.

## Geographic scope

14 In the recent circular MEPC.1/Circ.907, *Guidelines for underwater radiated noise reduction in Inuit Nunaat and the Arctic*, ICC has encouraged the use of a wider definition of the Arctic to ensure all of Inuit homeland (Inuit Nunaat) is included in any potential mitigation measures and to capture a more expansive ecosystem approach wider than the Polar Code. ICC encourages the continued use of the terms 'In or near the Arctic' to align with this approach and more comprehensively tackle the issue of BC from international shipping.

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<sup>9</sup> <https://theicct.org/fit-for-55-black-carbon-from-ships-aug22/>

**Action requested of the Sub-Committee**

15 The Sub-Committee is invited to consider the information provided in this document, specifically in paragraphs 9 to 12, and take action as appropriate.

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