Clean Arctic Alliance and Bellona Follow-Up Recommendations on Black Carbon for the Norwegian Chair of the Arctic Council

December 8, 2023

Dear Mr. Høglund,

We would like to thank you for your ongoing support for action to address black carbon and methane emissions impacting the Arctic. At the Arctic Circle Assembly in October, your efforts to raise the profile of the need to address the threat to the Arctic from black carbon emissions were very welcome.

In May of this year the CAA outlined recommendations for safeguarding the Arctic environment, and enabling sustainable development, with a special emphasis on new measures for mitigating the impacts of Arctic shipping. As the global community prepares to meet at the International Maritime Organization (IMO) in February 2024 to discuss black carbon reduction measures, it's a critical time for the Arctic Council to show leadership and significantly contribute to creating momentum for action on this important issue. After 13 years of discussion at the IMO, the need for the shipping industry to act and reduce its emissions of Black Carbon impacting the Arctic remains urgent.

Black Carbon and its impacts

As you are aware, Black Carbon is a short-lived climate pollutant (SLCP), produced by the incomplete burning of fossil fuels, with an impact over 3000x that of CO2 on a 20 year global warming potential (GWP20) basis. When released near the Arctic, Black Carbon has a disproportionately high impact. It contributes to warming in the atmosphere and accelerates melting when deposited onto snow and ice. The melting snow and ice exposes darker areas of land and water which absorb further heat from the sun. The reflective capacity of the planet's polar ice cover - the albedo effect - is severely reduced. More heat in the polar systems results in increased melting - a feedback that contributes to 'Arctic amplification' of climate warming. It is also an air pollutant that has a negative impact on human health including respiratory and cardiovascular diseases.

The impact of Black Carbon on the Arctic is critical because the Arctic is a major climate regulator and is now considered by scientists to be warming as much as four times faster than the planet as a whole. It is also an important ice habitat for wildlife – unique ecosystems supporting a huge productivity of plant and animal life in the oceans, and it is a highway and provides cultural identity for Inuit and other Indigenous Peoples. But we are losing Arctic sea ice - at a rate of around 13% per decade since 1979 and the older, multiyear ice is disappearing - with unprecedented consequences for the global biodiversity crisis and the loss of the Inuit homeland.

Urgency to act

Following the release of the IPCC (Intergovernmental Panel on Climate Change) Special Report on Global Warming (of 1.5°C) in 2018, the UN Environment Programme reiterated that "fast and immediate action on SLCPs [including black carbon] can avoid a half a degree of warming by 2050 and such action will also avoid over 50% of the predicted warming in the Arctic by 2050, thereby significantly decreasing the chances of triggering dangerous climate tipping points". The UN Economic Commission for Europe Convention on Long-Range Transboundary Air Pollution and the UN Framework Convention on Climate Change have both emphasised the threat to the Arctic and global processes from short-lived climate pollutants including black carbon.

In 2017, the Arctic Council adopted a pan-Arctic collective, aspirational goal to reduce emissions of black carbon by 25 to 33% below 2013 levels by 2025. This followed the adoption in 2015 of a framework that set

out a common vision for Arctic States to accelerate the decline in black carbon emissions and to significantly reduce methane emissions. Within the framework, Arctic States have committed to strengthening national actions, developing, and improving emissions inventories and emissions projections for black carbon and methane, and to submitting national reports to the Arctic Council Secretariat. The third progress report published in 2021, announced that the Arctic States were on track to reach the collective goal of a 25 - 33% reduction in black carbon levels by 2025, and during the Arctic Council Icelandic Ministerial in 2021, Ministers committed to possibly updating the goal at the next Arctic Council Ministerial meeting.

A basket of measures to reduce Black Carbon emissions, including updating the Arctic Council's targets

Norway's priorities and actions during its leadership of the Arctic Council between 2023 and 2025 will be critical to the future health of the Arctic Ocean. The time to act on Black Carbon emissions from shipping is now, and the Clean Arctic Alliance urges Norway, as the current chair of the Arctic Council, to:

- Promote the development of a concrete zero-emission vision for Arctic shipping and support the development of a corresponding road-map leading to zero emissions - moving from oil based fuels to cleaner alternative non-fossil fuels and the necessary on-shore infrastructure of alternative energy, to achieve the vision,
- Encourage all Arctic nations to implement the International Maritime Organization's (IMO) resolution MEPC.342(77) which calls for using distillate or cleaner alternative fuels in or near the Arctic,
- Call for mandatory measures at the IMO to reduce and eliminate Black Carbon emissions from shipping in and near the Arctic through amendment of MARPOL Annex VI to introduce a Black Carbon regulation which requires:
    - a mandatory switch to distillate or alternative cleaner non-fossil fuel,
    - introduction of an Arctic fuel standard based on a H/C (hydrogen/carbon) ratio threshold (to limit the aromatic content),
    - a Black Carbon emission control area,
    - installation of black carbon reduction technology such as diesel particulate filters.
- Call for an updated status report from Arctic states on how the implementation and fulfilment of their commitments are progressing to reduce Black Carbon emissions by 25 – 33% by 2025 (based on 2013 levels), and establish an immediate and ambitious process to update these targets beyond 2025 based on 1.5 degree warming pathways and the latest science and Indigenous Knowledge,
- Encourage all Arctic States to implement the Arctic heavy fuel oil (HFO) prohibition for ships operating in Arctic waters by 1 January 2024, by eliminating the use of any waivers or other loopholes which would allow HFO to be used beyond that date, and to extend the scope of the prohibition to the whole of the Arctic (Arctic Human Development Report - AHDR - definition),
- Call for the banning of Exhaust Gas Cleaning Systems (EGCS), 'scrubbers', and discharge of scrubber wash water in the Arctic,
- Support short-term measures to reduce greenhouse gas emissions from Arctic shipping, and in particular measures to reduce ship speed, installation of wind assisted technology, and increased energy efficiency measures such as strengthening the CII (Carbon Intensity Indicator) when it is up for review in 2025.

People in the Arctic

- Supporting Indigenous Peoples to protect their livelihoods and resources through a reduction of Black Carbon emissions, which would slow down snow and ice melt; and the implementation of a strong HFO ban which would protect subsistence resources, such as fishing and hunting, that are essential for the food security and cultural identity of Arctic Indigenous Peoples,
- Promoting efforts to ensure a just and equitable transition which directly supports Arctic Indigenous Peoples moving to cleaner alternative non-fossil fuels and making greater use of renewable energy (e.g. solar and wind power, battery storage technology) to accompany a ban on the use and carriage of HFO by ships in Arctic waters.

The Clean Arctic Alliance and Bellona believe that addressing emissions of black carbon from shipping impacting the Arctic is a cross-cutting issue within the framework of the Arctic Council. We will be attending the Arctic Frontiers Conference in Tromso and would welcome an invitation to discuss options to progress efforts within the framework of the Arctic Council and reduce black carbon emissions from shipping impacting the Arctic.