



Social impacts of a HFO spill

The loss of access to natural resources has direct economic consequences, with communities having to import food stuff at high costs (and increasing shipping in the region).

It also represents a loss of food security and way of life.



A rich cultural heritage of ancestral traditions such as the right to **access the land and the sea**, which in turn provides communities with food security and a nutritious local diet.



"The Oceans are the life force and source of life for us as Inuit of the Arctic."

Sheila Watt-Cloutier Environmental, Cultural and Human Rights Advocate "...food security is very important for those living in our communities."

Lisa Koperqualuk Inuit Circumpolar Council, ICC Canada



The 2021 IMO's Arctic HFO Ban Regulation

Exemptions and waivers to the proposed ban will allow:

- 74 % of HFO-fuelled ships to keep using HFO in the global Arctic beyond July 2024
- > Only 30% of HFO carriage will be stopped 25% in Canada
- > Only 16% of HFO use will be stopped 20% in Canada
- Reduction in black carbon emissions by just 5%...if HFO use remains at 2019 levels (which it will probably not)
- Further reductions are not likely until exemptions and waivers to the ban expires in July 2029



Projected growth in Arctic shipping based on 2015 – 2019 increase in

Black Carbon emissions from Arctic shipping

- IPCC 6th Assessment Report (WG-1): Arctic amplification through local & remote aerosol forcing; BC deposition enhances snow darkening & melt -> more melting & warming;
- ➤ 2% of BC in the Arctic comes from shipping, BUT it has a much greater heating impact other BC sources are high in the atmosphere with less chance of depositing onto ice and snow + most BC from Arctic shipping deposits in the Arctic so the impact is disproportionally large
- ➢ BC emissions from Arctic shipping increased 85% between 2015-2019 (2019: 356 tonnes) vs 12% increase globally between 2012-2018
- ≻ As Arctic shipping increases:
 - \succ The current shipping fleet, often using low quality fuels such as HFO, will increase its operations
 - ➤ Continued use of HFOs that emit higher levels of BC will accelerate the disintegration and collapse of Arctic ice and permafrost

Reducing shipping black carbon emissions is effective and achievable

- Black carbon (BC) emissions reductions could be achieved rapidly if ships currently using HFO switched to distillate by up to 79% in 2-stroke engines and 48% in four-stroke engines
- ICCT's analysis of the IMO's Arctic HFO ban: switching from HFO to distillate could reduce BC emissions from the Arctic HFO-fuelled fleet by 44% (cf. 25-33% current Arctic Council BC reduction target for 2025)
- Switching to distillate means particulate filters could be installed which would further reduce BC emissions by over 90%.
- In addition alternative cleaner forms of propulsion can also dramatically reduce or remove BC emissions synergy with decarbonisation

Thank you

WWF is a member of the Clean Arctic Alliance, composed of 21 environmental organisations, including Arctic Council observer organisations and organisations with consultative status in IMO)

