



# ARCTIC HFO BAN IS IN SIGHT

## BUT LOOPHOLES STILL TO BE NAVIGATED

Sian Prior, Lead Advisor, and Dave Walsh, Communications Advisor,  
Clean Arctic Alliance

It is widely recognised that the Arctic - the most important early warning system for climate change on our planet - is under pressure. Climate change is fuelling temperature rises double the rate occurring elsewhere, and the recently published Intergovernmental Panel on Climate Change's Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC) identifies that over several decades, there has been loss of ice sheets and glaciers and reductions in Arctic sea ice extent and thickness. Between 1979 and 2018, the areal proportion of multi-year ice at least five years old in the Arctic declined by approximately 90%. Arctic summer sea ice loss is projected to continue until the middle of this century, with what remains projected to disappear before the end of the century, if national governments and the international community fail to fulfil the Paris Climate Agreement to limit global warming, while some scientists believe it could be sooner.

### INCREASED SHIPPING

This loss of Arctic summer sea ice is already leading to increased shipping in the Arctic during the summer months and is expected to provoke dramatic increases in volumes of goods being shipped on the Northern Sea Route. As sea ice melts and opening Arctic waters further, even larger non-Arctic state-flagged vessels are likely to divert to Arctic routes in search of shorter journey times in order to save costs. Combined with an increase in Arctic States targeting previously non-accessible resources such as oil and gas, more vessels operating in Arctic waters will increase the risk of HFO spills and lead to higher emissions of black carbon into the Arctic atmosphere.

Recent figures, derived from research investigating the type of marine fuels used in the Arctic show that while the number of ships using heavy fuel oil (HFO) is less than half of all ships, the volume of HFO carried is greater than any other fuel type and is on

the increase. In the Arctic between 2015 and 2017, there was a 30% increase in the numbers of ships using HFO, with a 46% increase in the volume of HFO carried and 57% increase in HFO used.

### RISKS ASSOCIATED WITH THE USE OF HFO IN THE ARCTIC

HFO, also known as residual fuel oil, is the most viscous fuel oil used in the marine environment. The use of HFO in Arctic waters poses unacceptable risks to the marine environment in this fragile region and to the food security of Arctic Indigenous people who depend on marine resources for their subsistence and livelihoods. Already banned in Antarctic waters, if HFO is spilled in cold polar waters, it breaks down slowly, proving almost impossible to clean up. A ban on the use of HFO in the Arctic waters is the simplest and most effective way to mitigate the numerous risks associated with the use and carriage of HFO as fuel.

Due to its high viscosity, HFO breaks down slowly in the marine environment, particularly in colder areas like the Arctic. In the event of an HFO spill, lack of infrastructure, severe weather conditions, and navigational hazards such as sea ice, would make spill response efforts nearly impossible. Studies on the long-term impacts of an Arctic spill have also demonstrated that oil can remain within the affected area for more than a decade, affecting the growth and reproductive rates of various species.

Compared to other marine fuels, when HFO is burned it produces harmful and higher emissions of air pollutants including black carbon (BC), a critical contributor to human-induced climate warming, especially in the Arctic region. BC is responsible for one-fifth of global shipping's climate warming impact in the short-term. When BC falls on light-coloured surfaces, such as snow and ice, it speeds up the melting and also reduces the amount of sunlight reflected back into space. This accelerates snow and ice melt resulting in a self-reinforcing cycle of land and sea ice melting and climate warming.

In addition, emissions from shipping pose a substantial risk to human health. Studies have shown that air pollutants resulting from the combustion of HFO, such as sulphur oxide, nitrogen oxide, particulate matter, and BC, can increase the risk of heart and lung diseases, as well as premature death.

Many indigenous communities in the Arctic region depend on marine resources as a primary source of food, clothing, materials for handicrafts, and income. An HFO spill in the Arctic will have devastating consequences on these communities and the resources they depend on for their nutritional, cultural, and economic needs.

**LATEST DEVELOPMENTS TO REGULATE HFO IN THE ARCTIC**

In recognition of the risks that international shipping poses to the Arctic, in February 2020 the International Maritime Organization's (IMO) sub-committee on Pollution Prevention and Response (PPR) annual meeting considered two agenda items with an Arctic focus. Dubbed the "IMO Arctic Summit" by environmental groups, PPR 7 considered the draft language for a proposed ban on the use and carriage as fuel of HFO in the Arctic, along with measures to reduce the impact of BC emissions from shipping on the Arctic. As the week-long meeting came to a close, environmental non-governmental organisations and Indigenous groups cautiously acknowledged progress by the IMO and its Member States in agreeing the text of a draft Arctic HFO regulation, but



denounced the inclusion of exemptions and waivers that meant a ban will not come into effect until 2029, leaving the Arctic exposed to the growing threat of HFO spills for close to another decade.

The draft Arctic HFO regulation proposes that there will be no change in the use and carriage of HFO in the Arctic before the middle of 2024, when the regulation first starts to take effect, and the Arctic will not be rid of HFO until July 2029. Although the carriage and use of HFO in the Arctic will be restricted from mid-2024, there are two "loopholes" - the first a provision which allows vessels with protected fuel tanks and built after 1 August 2010 to delay the implementation of the ban until 2029. The second loophole allows Arctic countries whose coastline borders Arctic waters to be able to issue waivers to ships that are both flying their flag and operating in waters under their jurisdiction. An initial examination of the draft regulation by the Clean Arctic Alliance found that, based on current Arctic shipping levels, these loopholes could mean that over three-quarters of the HFO use in the Arctic continues beyond 2024, which equates to more than two-thirds of the HFO carried on board vessels as fuel.

Of further concern is that these loopholes will result in an increase in HFO use and carriage in the Arctic between 2024 and 2029. With HFO use already increasing, and likely to carry on rising, the loopholes will mean that as older ships (covered by the regulation) are replaced with new ships with double-hulls or protected fuel tanks (exempt from the regulation until 2029), the amount of HFO used and carried in the Arctic will increase. In order to protect Arctic coastal communities and the Arctic ecosystem from the risk of HFO spills and higher levels of air pollution, the Clean Arctic Alliance is calling on IMO Member States to invest further effort to strengthen the implementation timelines, and tighten

- or better still remove - the loopholes which delay the implementation of the draft regulation for double-hull vessels and vessels with protected fuel tanks and which allow waivers.

Due its dissatisfaction with the lack of ambition in the IMO draft Arctic HFO regulation, particularly at a time when the climate crisis is already having significant impacts across the Arctic, and when Arctic traffic is increasing year or year, the Clean Arctic Alliance is seeking a stronger commitment to protecting the Arctic from the impacts of shipping.

The draft Arctic HFO regulation will now be forwarded for approval to the 76th session of the IMO's Marine Environment Protection Committee which will meet in October 2020. In the interim, the Clean Arctic Alliance will be calling on the shipping sector to voluntarily switch to distillate or cleaner, alternative fuels while operating in the Arctic.

**ABOUT THE AUTHORS**

Dr Sian Prior has over 25 years of experience of contributing to a variety of international marine management and conservation campaigns and intergovernmental frameworks including the International Maritime Organization. Dave Walsh has spent two decades helping shape the communications strategies of non-profit environmental organisations, supporting campaigns to protect the Arctic, Antarctica, and fisheries worldwide.

**ABOUT THE ORGANIZATION**

The Clean Arctic Alliance is a coalition of 19 non-profit groups, based in Arctic or Arctic-observer countries, that are campaigning to prohibit the use and carriage of heavy fuel oil (HFO) as fuel in the Arctic. <http://www.hfofreearctic.org/>