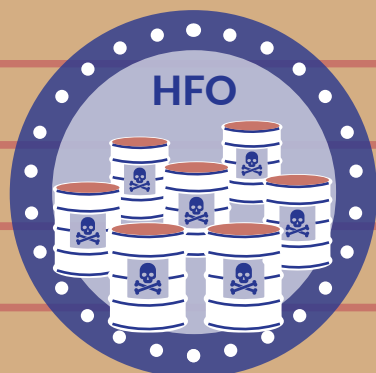
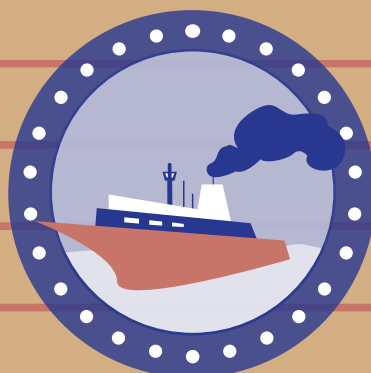


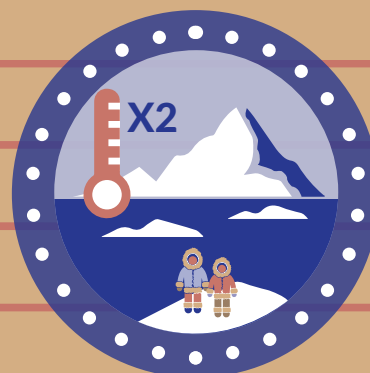
# HEAVY FUEL OIL (HFO) IN ARCTIC SHIPPING



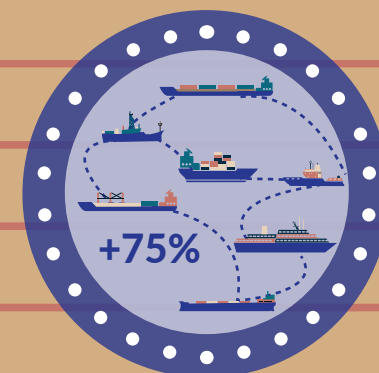
Shipping's dirtiest fuel – almost impossible to clean up following a spill...



...and it produces high levels of pollution when used by ships.



The Arctic is warming at a rate of twice the global average.



Between 2015 and 2019, HFO use in the Arctic increased 75%.<sup>1</sup>

## THE RISKS ARE TOO HIGH

### 1 Threat to Arctic

HFO is an extremely viscous fuel used by ships that breaks down very slowly if spilt particularly in polar regions.

### 2 Unmanageable spill

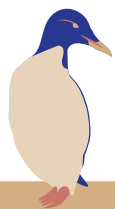
Lack of infrastructure and resources, severe weather, sea ice and uncharted waters will make spill response efforts nearly impossible.

### 3 Risk to communities and wildlife

HFO spills are a severe risk to Indigenous communities dependent on marine resources for their nutritional, cultural and economic needs and to Arctic wildlife.

**HFO HAS NO PLACE IN THE ARCTIC**

<sup>1</sup> Comer, B., Osipova, L., Georgeff, E., and Mao, X. (2020). *The International Maritime Organization's proposed Arctic heavy fuel oil Ban: Likely impacts and opportunities for improvement*. Retrieved from the ICCT at <https://theicct.org/publications/analysis-HFO-ban-IMO-2020>



## SETTING A COURSE OF ACTION

### THE RISKS ARE TOO HIGH

#### 4 Harmful pollutants

HFO use results in high emissions of particulate matter (PM) including black carbon (BC) which can increase the risk of heart and lung disease for people living near shipping routes or ports.

#### 5 Black carbon (BC)

BC is a potent climate forcer with an impact up to 5 times greater when emitted at high latitudes compared to lower latitudes; it absorbs radiation from above and radiation from below...

#### 6 Accelerated warming

...and, after settling on snow and ice, continues to absorb heat. As melting accelerates, dark rock surfaces and open ocean water are exposed, absorbing yet more heat and promoting a self-reinforcing cycle of warming.

**HFO HAS NO PLACE IN THE ARCTIC**

### BUT THERE ARE SOLUTIONS

Banning the use and carriage of HFO in Arctic waters

is the easiest and simplest way to mitigate risks.<sup>2</sup>

Switching to distillate fuel

will reduce BC emissions by 30 – 44%.

Using distillate fuel and installing particulate filters

can reduce BC emissions by over 90%.

A strong ban with no delay

is crucial to protect the Arctic.

<sup>2</sup> The Clean Arctic Alliance's campaign for a ban on the carriage of HFO by Arctic shipping is focused on the use and carriage of HFO as fuel, and does not cover the carriage of crude oil or HFO cargoes for local community use.

All stakeholders should work collaboratively to demonstrate support for a strong ban with no delay eliminating the use and carriage of HFO as fuel in Arctic waters.