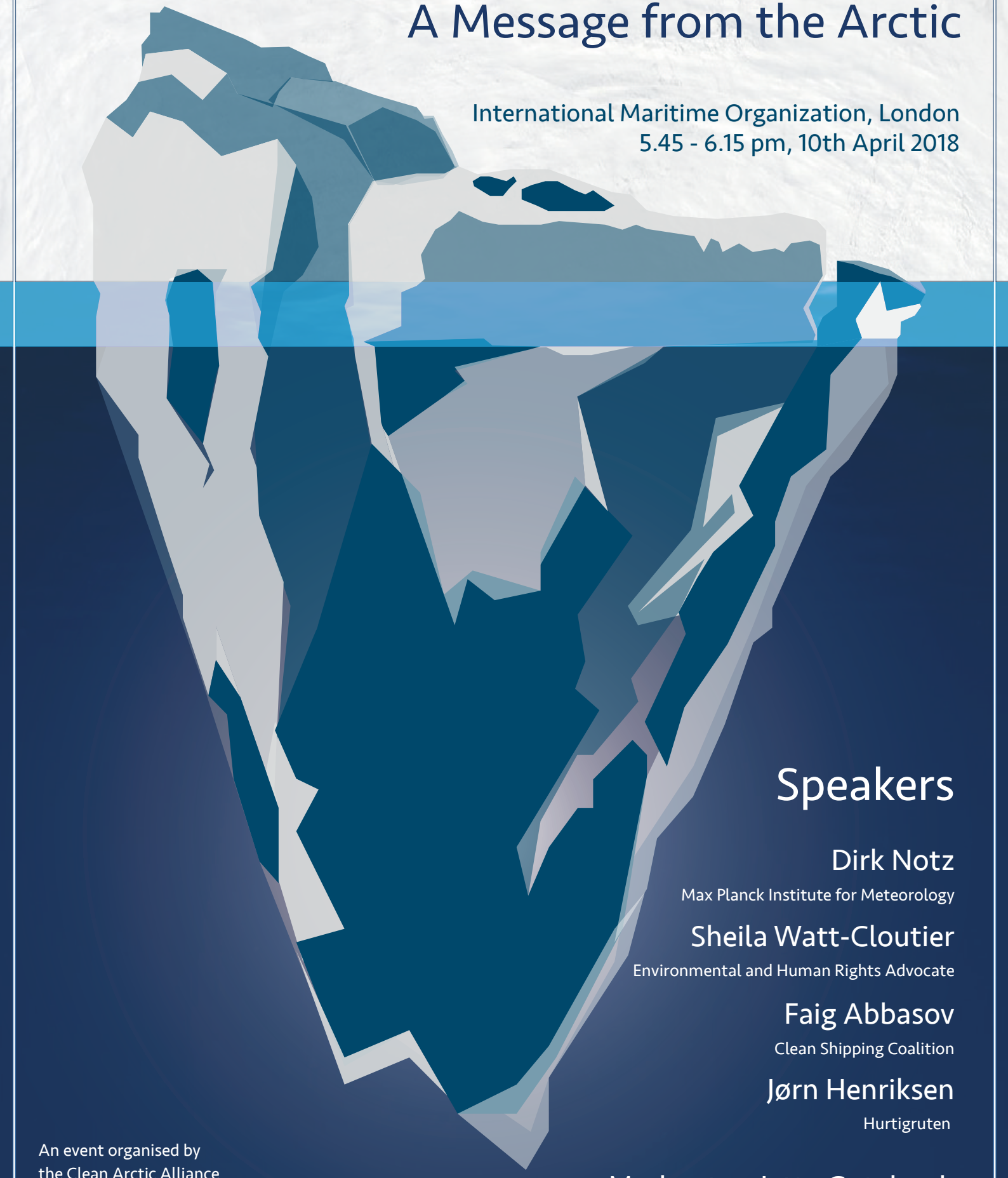
The Climate Crisis

A Message from the Arctic

International Maritime Organization, London
5.45 - 6.15 pm, 10th April 2018



Speakers

Dirk Notz
Max Planck Institute for Meteorology

Sheila Watt-Cloutier
Environmental and Human Rights Advocate

Faig Abbasov
Clean Shipping Coalition

Jørn Henriksen
Hurtigruten

Moderator: Jytte Guteland
Member of the European Parliament

An event organised by
the Clean Arctic Alliance
and sponsored by the Clean Shipping Coalition
followed by a reception in the delegates' lounge

Arctic Climate Change

"The observed changes in the Arctic can be clearly linked to human activities. In a recent study, we showed that about three square metres of Arctic summer sea ice disappear for each metric ton of anthropogenic CO_2 emissions. It is therefore possible to calculate the impact of reducing CO_2 emissions from shipping on the disappearing sea ice cover.

Dr Dirk Notz, Max Planck Institute for Meteorology

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The Arctic is warming at an alarming rate, at least **twice as fast** as the rest of the globe.

Three quarters of Arctic summer sea ice has disappeared since the 1970s, with the remainder projected to disappear before 2050.

In February 2018, the Bering Sea lost roughly **half of its sea ice cover** in just 2 weeks – villages typically surrounded by thick ice were pounded by surf.

By the end of February 2018, the northernmost weather station in the world in Greenland experienced **more than 60 hours** of temperatures above freezing.

Arctic Impacts

"The Arctic has been subjected to the most dramatic environmental effects of globalization. From persistent organic pollutants to our weakened ozone, and most recently, to the huge changes to our lands and ice from climate change, we have borne the brunt of development far from home, and have been compelled to reach out to the world.

Sheila Watt-Cloutier, Environmental, Cultural and Human Rights Advocate

Climatic changes are rapidly affecting Arctic **communities, livelihoods and wildlife**.

In August 2017, the Chukchi Sea was **11°C warmer** than average. Warmer seas delay winter ice formation, increasing the vulnerability of coasts to flooding and erosion.

Thinner ice and prolonged open water have changed distribution patterns and **food availability** for Arctic wildlife. Warmer conditions affect the ability of local people to travel and hunt safely.

Responding to **oil spills** will be difficult and often impossible due to extreme conditions, remoteness, and limited access to spill response equipment.

Global Consequences

> We tend to think of climate change in isolation from the Arctic. The Arctic is both the first victim of global temperature increase and a major contributor to the rise of sea levels caused by these temperature changes. What happens in the Arctic doesn't stay in the Arctic but affects us all.
>
> *Faig Abbasov, Clean Shipping Coalition*

Profound changes within the Arctic affect **global climate systems** including atmospheric circulation, extreme weather events, and sea level rise.

Melting of the Greenland ice sheet is the largest contributor to sea level rise, adding **300km³ of water** to the ocean per year.

Sea level rise threatens hundreds of **millions of people** in low lying areas, putting them at risk of losing their land or entire countries.

The cost of sea level rise, estimated at **over a trillion dollars**, will be felt globally from small island states to coastal cities and ports - the keystones of international trade.

The Challenge for Shipping

> Black carbon on white snow, polar bears denied sea ice to hunt on and seabirds that find inedible warm water species in the High Arctic are consequences we are seeing every day during our travels. This is why we'd like to see international and domestic regulations banning the use and carriage of heavy fuel, not only in the Arctic, but also on the Norwegian Coast.
>
> *Jørn Henriksen, Director of Environment, Hurtigruten*

Left unregulated, shipping could be responsible for **17% of global CO_2** emissions by 2050, and continued use of HFO will produce higher black carbon emissions than other marine fuels.

Failure to reduce shipping emissions could undermine other efforts to meet the **Paris Agreement**'s goal.

To meet the 1.5˚C target, **Zero-Emission Vessels** (ZEVs) need to enter the global fleet by 2030, and be a significant share of newbuilds from then on.

By the end of 2021, Hurtigruten is committed to reducing its own **CO_2-footprint** for the Norwegian coastal route by 25% compared with 2015-emissions.

Time for Action

Immediate action from the IMO is essential if Arctic climate change is to be slowed, halted or even reversed.

Greenhouse Gases — **GHG**

The **International Maritime Organization** (IMO) must adopt an **ambitious GHG strategy**, compatible with the **Paris Agreement's 1.5 degree limit**.

Immediate measures to reduce emissions **before 2023** to keep the **1.5 degree goal** achievable.

An **action plan** is needed which prioritises the immediate measures, and includes work to develop **mid- and long-term measures** ahead of adoption of a revised strategy in 2023.

- **Shipping emissions reduction goal:**
  100% by 2050

- **Immediately**
  Operational efficiency measures including speed reduction and more stringent design standards.
- **Followed by**
  Measures including development of new fuels, propulsion technologies, market-based measures (MBMs).

Heavy Fuel Oil — **HFO**

A **ban on** the use and carriage as fuel of **HFO in the Arctic by 2021** will eliminate the risks associated with spills and also reduce black carbon emissions.

- **33%* reduction** in BC emissions due to **HFO ban**.
  **on average*

Black Carbon — **BC**

Further **measures to reduce BC emissions** throughout the Arctic and sub-Arctic include the use of particulate filters with distillate fuels.

- **> 99% reduction** in BC emissions due to **HFO ban plus particulate filters**.

Decision opportunities at IMO

April 2018
IMO to adopt an initial GHG Strategy including emission reduction targets, an action plan to implement immediate measures before 2023 and support an HFO ban in the Arctic

2019
IMO to identify black carbon abatement measures and commence work to adopt a ban on HFO in the Arctic

2019-2022
IMO to approve and adopt black carbon abatement measures and the Arctic HFO ban

2023
IMO to adopt a final GHG Strategy

Adopting an ambitious GHG Strategy in 2018 is the most important climate decision of the year.

www.hfofreearctic.org – @HFOFreeArctic