

Current Status of IMO Actions and Perspectives

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Black carbon

- a potent short-lived climate pollutant
- over x3000 impact of CO₂ on a GWP20
- around one-fifth of international shipping's climate impact
- contributes to Arctic amplification of climate warming
- negative impact on human health

The Arctic

- Major climate regulator
- Warming 4x faster than the planet as a whole
- Supports a huge productivity of plant and animal life
- Cultural identity for Indigenous communities
- Losing around 13% Arctic sea ice per decade (since 1979)

Black carbon at the IMO

- 2007 submission to IMO recognises BC as a potent climate forcer
- 2010 proposal to examine measures to reduce BC emissions
- 2011 Air Convention urges IMO to reduce emissions BC emissions from ships
- 2013 AMAP work presented to IMO indicating that emissions of BC north of 60°N more significant than emissions at lower latitudes
- 2018 UNEP calls for fast and immediate action on short-lived climate pollutants

IMO's three-step approach

Step 1: Define black carbon

Step 2: How to measure black carbon

Step 3: How to control black carbon emissions

Other IMO measures

- Arctic HFO prohibition adopted in 2021 (MARPOL Annex I)
- Resolution MEPC.342(77) Fuel switch for ships in or near to the Arctic

Short list of BC regulatory measures (2022)

- Switch to distillate fuels
- Fuel standard based on aromatic content
- Black carbon emission control area
- Engine certification (long-term)
- Further work on Resolution MEPC 342(77)
- Mandatory installation of black carbon reduction technology

Other political commitments

- Air Convention / UNFCCC – action on short-lived climate pollutants
- Arctic Council goal on black carbon emissions
25 – 33% reduction below 2013 levels by 2025
- Nordic Council – support for emission control areas / ban use of HFOs

Where do we go from here?

IPCC 6th Assessment Report
called for

“rapid, deep and sustained mitigation and accelerated implementation of adaptation actions this decade”

CAA's options for regulating black carbon

1. Switch to distillate regulation
2. Polar aromatic fuel standard
3. Black carbon emission control area

Thank you



<https://cleanarctic.org/arctic-ocean-action/>