





Potential BC control policy

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Clean Arctic Alliance



Members: 18 international NGOs.

Goal: An IMO ban on HFO as marine fuel in the Arctic.

Impact: Reduction of BC emissions and the long-term consequences of oil spills/discharges in the Arctic.

More info: www.hfofreearctic.org

Arctic BC control technologies



Short run (could be done tomorrow):

Distillate fuel (+ slow steaming): Reduces BC 30 %? (40 %?). Would reduce consequences (and risk) of oil spills/discharges.

Medium run (could be done within 3-5 years):

Distillate with filter, methanol with filter, etc.: Reduces BC 80-95 %.

Long run (more than 10 years from now):

H₂ or NH₃: Reduces BC 100 % (acute effects of spills?). (No future for LNG. LBG and biofuels will be used elsewhere).

Arctic BC control policies



Short run:

An IMO ban on the use of HFO in the Arctic.

Will increase living costs about 2,2 € per citizen in Greenland per year and will mainly be payed by rich people in the cities.

Medium run (from 2025):

BCECA (Black Carbon Emission Control Area) in the Arctic. Requiring distillate/methanol with filter, (LNG/LBG temporarily) etc.

Impact of Arctic control policies



Will a switch to distillate stop global warming in the Arctic? **No**

Will a switch to distillate significantly reduce BC in the Arctic? **No**

Will a switch to distillate be possible here and now: **Yes !**

Will a switch to distillate be cost-efficient to reduce BC-deposition in the Arctic (\$ per avoided kg BC deposition): **Yes !** (High deposition rate for emissions in the Arctic)

Impact of Arctic control policies



HFO versus distillate (Greenland versus Iceland)

Greenland HFO: https://www.dropbox.com/s/xvwov3sm8x6fhak/HFO%2C%20Greenland%202018.mov?dl=0

Iceland distillate:

https://www.dropbox.com/s/6co1tcmr0uhrbvz/Video%2004-08-2019%2018.54.47.mov?dl=0

Personal view



Using HFO in the Arctic is like burning down rain forest in South America ... it is complete disrespect of the few unspoiled ecosystem left on this planet.



Hurtigruten don't use HFO in the Arctic.

Questions

Conference on shore power for cruise ships. The Danish Parliament. Sep. 24th from 10-15.30.







