

POSITION ON SCRUBBERS

Stop the dumping of hazardous waste from ships

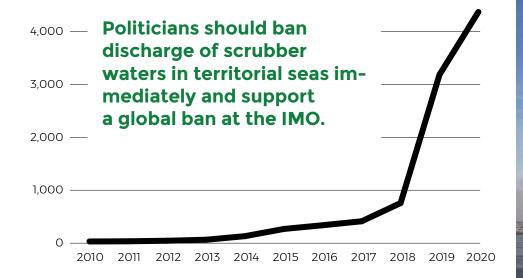
Background

Larger ships have traditionally been fuelled by heavy bunker oil, which is one of the most polluting fuels. In addition to toxic air pollution, spills and illegal discharges of heavy bunker oil lead to long-lasting adverse impacts on the marine environment. In sensitive seas, emission control areas have been established to reduce pollution by forcing ships to switch to cleaner fuels. Cleaner fuels reduce emissions of sulphur as well as hazardous health and climate damaging soot particles (black carbon). Consequently, damage caused by oil spills is also reduced.

Ships can however continue to sail on heavy bunker oil in emission control areas if they install a scrubber that "washes out" some pollutants in the flue gas. This results in ships discharging the polluted scrubber water directly into the sea. The number of ships with scrubbers has exponentially grown in the last decade, as it is much cheaper for ships to buy heavy bunker oil and dump the polluted wash water into the sea than it is to buy cleaner fuel and pollute less. Thirteen years ago, only three ships had scrubbers installed - today there are more than 4,300 ships with scrubbers.

Scrubbers allow ships to legally dump pollution directly into the sea. Thereby ships can continue to use heavy bunker oil, a waste product from refineries that is one of the most polluting fuels in use today.

> Several countries (Sweden, Norway, Germany, US) have restrictions on the discharge of scrubber water and still more countries (Bermuda, China, Egypt, Malaysia, France, Qatar, etc.) forbid the discharge of scrubber water.



Ships with scrubbers

It is not just the number of scrubbers, but also the discharge of polluted scrubber water at sea, that has increased by more than a x1000 factor over just thirteen years.

Scrubbers are no green transition

The use of scrubbers causes serious adverse effects to the climate, public health and the marine environment:

- The scrubber water contains polycyclic aromatic hydrocarbon and heavy metals that are discharged directly to the sea and accumulate in sediments and the food chain thereby increasing the risk of longterm adverse effects in the marine environment (e.g. cancer in whales and dolphins).
- 2. Scrubbers cause much higher emissions of the hazardous health and climate damaging soot particles than cleaner fuels, and do not reduce the risks of long-lasting marine damages from oil spills. Scrubbers are there-

by not an equivalent alternative to cleaner fuels.

- 3. Scrubbers increase the energy consumption of ships and thereby the associated climate impact and air pollution. Additionally, there is also climate impact and resource consumption from the production scrubbers.
- Scrubbers allow ships to exploit a loophole and continue to use heavy bunker oil - one of the most polluting fuels in the world - even in sensitive seas.
- 5. Sulphur can be utilised as a resource when removed at the refinery during production of light bunker oil, whereas it is a lost resource once discharged with the scrubber water into the sea.



Green Transition Denmark position:

- 1. 2023: Nations should ban the discharge of scrubber waters in all territorial seas.
- 2. 2024: EU and US should ban the discharge of scrubber waters in all territorial seas.
- 3. 2025: IMO should introduce a global ban on the discharge of scrubber water.



Green Transition Denmark receives funding from the Velux Foundation for our work on creating a cleaner marine environment to the benefit of humans and all the animals and plants that share the seas.

More information

Global scrubber wash water discharges under IMO's 2020 fuel sulfur limit: https://theicct.org/publications/global-scrubber-discharges-Apr2021

Air emissions and water pollution discharges from ships with scrubbers: https://theicct.org/publications/air-water-pollution-scrubbers-2020

Cleaner Shipping: https://rgo.dk/ wp-content/uploads/RGO_Cleaner_shipping_2021_Final.pdf

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