

## Maritime Shipping Air Pollution - Emissions Control Area in the Northeast Atlantic

Nowadays, and despite the ongoing COVID-19 pandemic, shipping represents an essential part of the world economy, being responsible for around 90% of the international trade. This substantial weight on economic and social spheres, does come accompanied by similarly substantial impacts on air and water quality and, consequently, on human health and marine and estuary biodiversity.

The sulphur emissions (SO<sub>x</sub>) caused by ships lead to a cumulative effect, which results in increasing air quality related problems, such as negative health effects, especially on coastal communities, and occurrence of acid rain. Similarly, nitrogen oxide emissions (NO<sub>x</sub>) cause eutrophication, which in turn might lead to the disruption of aquatic and terrestrial ecosystems.

Recognizing the magnitude of the impact of NO<sub>x</sub> and SO<sub>x</sub> emissions by ships on populations and ecosystems, the IMO has already established two full Emission Control Areas in Europe - the North and Baltic Seas including the English Channel -, within which the maximum sulphur content in naval fuels is set at 0,1% and new ships must comply with Tier III NO<sub>x</sub> emission standards set forth by MARPOL's Annex VI. The Barcelona Convention signatories have also submitted a joint proposal to establish the Mediterranean Sea as a Sulphur Emissions Control Area (SECA) by 2025, which will most likely be approved at MEPC79 in December.

In 2018, the European Commission commissioned a study by IIASA to determine the costeffectiveness of designating further Emissions Control Areas to all European Seas. Even though the focus of the study was the Mediterranean Sea, it presented valuable information for the entirety of European waters, highlighting that turning all European seas into ECAs would result in over 90% SO<sub>2</sub> emissions reductions and between 50 to 80% NO<sub>x</sub> emissions reductions by 2050. This would have significant benefits, especially for human health: when established alongside the use of fine particle filters, full ECAs in all European waters would prevent over 3000 cases of premature deaths. Now that the Mediterranean is set to become a SECA and the prospects to turn it into a NECA are on the horizon, the next logical step is to start working towards **connecting the Mediterranean SECA to the ECAs on the North and Baltic Seas through the Atlantic Northeast**.

In addition, an Atlantic Northeast ECA or ECAs will benefit efforts to reduce black carbon - a global environmental problem that has negative implications for both human health and our climate - emissions in the Arctic. The idea of emission control areas follows on the one hand the desire to reduce air pollutants and short-lived climate pollutants (SLCP) as well as the idea of pushing the industry towards the cleanest fuels offered today, which are usually also the most expensive, to diminish the price gap to future fuels.

The resuming shipping traffic post-COVID crisis is set to keep increasing and it is crucial that strict control measures are set in place to ensure we tackle the negative environmental implications resulting from this increase. In a time when the EU is engulfed by intense negotiations on its most ambitious climate initiative yet and the drastic shift in the geopolitical landscape in view of the unlawful war in Ukraine, proceeding with the establishment of ECAs can also deliver a powerful **incentive to move away from fossil fuels**, thus contributing both to the climate transition and to end EU's dependency on Russian oil and gas.

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