



KIMO RESOLUTION 19/01

Air pollution from ships in port

Introduction

Ports are gateways to international trade. Critical to economies across the world, they facilitate the global movement of goods and passengers. The demand for global trade is driving huge growth in ship traffic, with four times as many ships at sea now as in 1992. Maritime shipping supports about 90% of global trade and, in comparison to others forms of transportation, is the most energy-efficient way to move large volumes of cargo. However, like other forms of transportation that burn hydrocarbon fuels, ships create air pollution that causes climate change, degrades air quality, affects ecosystems, negatively impacts regional economies and adversely affects human health.

Commercial ships burn hydrocarbon fuels (heavy fuel oil) containing high concentrations of sulphur and toxic fuels banned from use in most other industrial and consumer applications. A lack of emission control regulation has allowed them to become major dischargers of carbon dioxide (CO₂), nitrogen oxides (NO_x), sulphur oxides (SO_x) and particulate matter. These pollutants contribute significantly to climate change and ocean acidification, cause acid rain and smog, and create damaging health issues for communities, especially those near major ports.

The cruise industry is the fastest-growing category in the leisure travel market. Demand for cruising has increased by 21% in the last 5 years, with around 30 million travellers expected to cruise this year. The increase in both the numbers and the size of passenger cruise ships puts pressure on port facilities, often requiring ships to moor away from the quayside and to keep their engines running continuously to power their vessels, causing a sharp drop in air quality in the port area.

Background

The Port of Bergen (Norway) is a major northern European cruise port, receiving around 335 cruise ships per year. A study by the Nansen Environmental and Remote Sensing Centre in Bergen has illustrated that under certain meteorological conditions, pollution from ships in the port is the primary contributor to air pollution in the city centre, largely caused by the much higher emissions from cruise liners compared to (for example) offshore platform supply vessels.

In 2016, the European Commission published EU Directive 2016/802 relating to a reduction in the sulphur content of certain liquid fuels, which introduced a 0.5% limit on sulphur content in marine fuels in the North Sea, English Channel and Baltic Sea, and a 0.1% limit in SO_x Emission Control Areas.

In 2018, the International Maritime Organisation agreed to require the shipping sector to reduce its emissions by at least 50% by 2050 compared to 2008. From 1 January 2020, under the IMOs MARPOL Convention for the prevention of pollution from ships, it also agreed that the sulphur content of fuel oil used by ships operating outside designated emission control areas must not exceed 0.5%, representing an 80% cut from the 3.5% limit.



Position

KIMO welcomes the European Commission and International Maritime Organisation decisions to reduce emissions from the shipping sector but recognises that:

- according to recent research in the journal *Nature*, ship pollution can be linked to 400,000 premature deaths and 14 million asthma cases in children.
- the 50% reduction target falls short of the 70-100% cut that is needed to align shipping emissions to the goals of the Paris Agreement
- a plan of action and robust short-term measures need also to be in place if the target is to be met
- there is a need for strong monitoring and enforcement to ensure proper implementation and compliance with the legislation.

KIMO believes that reductions in emissions could be taken further by introducing means of control that encourage that encourage ship owners to switch to low-sulphur fuel and invest in equipment that reduces nitrogen oxides and particulate matter in exhaust gases, at reasonable economic cost.

The Port of Bergen has achieved this for cruise ships through differentiated port fees. Cruise ships are rated using an Environmental Port Index (EPI) that delivers an environmental score according to how well the ship operates according to minimum legal requirements of SO_x and NO_x emissions. A portion of the port fee is then differentiated according to the EPI score. Ships that have taken measures to limit their emissions will be charged less than those that have not (the 'polluter pays' principle). A similar system is in operation in a number of Swedish ports.

The Port of Bergen has also built 15 shore-side power installations, allowing other vessels in port to connect to shore power and turn off their diesel engines. Increasing numbers of ports, including Ålesund and Copenhagen-Malmö, are also developing shore power facilities.

KIMO:

Recognising the need for a clean environment in and around the Northern seas and the threat posed to human health and marine ecosystems by emissions from ships

Urges;

- **European Governments, the European Commission and International Maritime Organisation to take vigorous action to significantly decrease emissions of oxides from sulphur and nitrogen and diesel particulate matter from ships;**
- **The European Commission and International Maritime Organisation to introduce measures and endorse best practices to reduce emissions from shipping;**
- **The European Commission and IMO to mandate a reduction in air pollution from ships in port;**



- **European Governments to take unilateral action to reduce emissions of pollutants from ships in port by introducing measures that encourage ship owners to switch to low-sulphur fuels and by promoting and supporting investment in shore-side power provision.**

KIMO members:

- **Agree to submit this Resolution to all National Governments, the European Commission, the International Maritime Organisation and other relevant organisations.**

This resolution was agreed unanimously by delegates at the 29th KIMO International Annual General Meeting in Velsen, the Netherlands on 13th October 2019 and became KIMO policy upon that date.