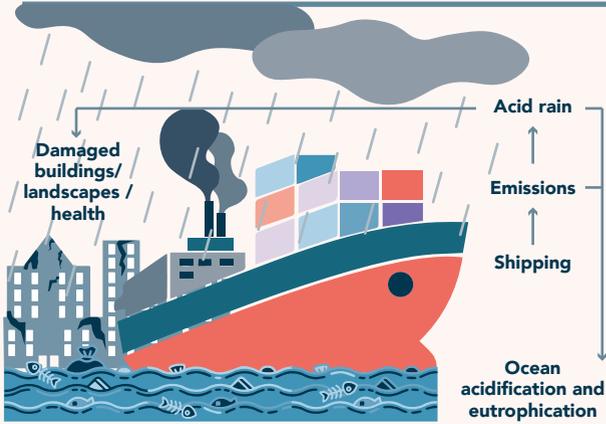


# Emission Control Areas - Reducing Air Pollution From Shipping



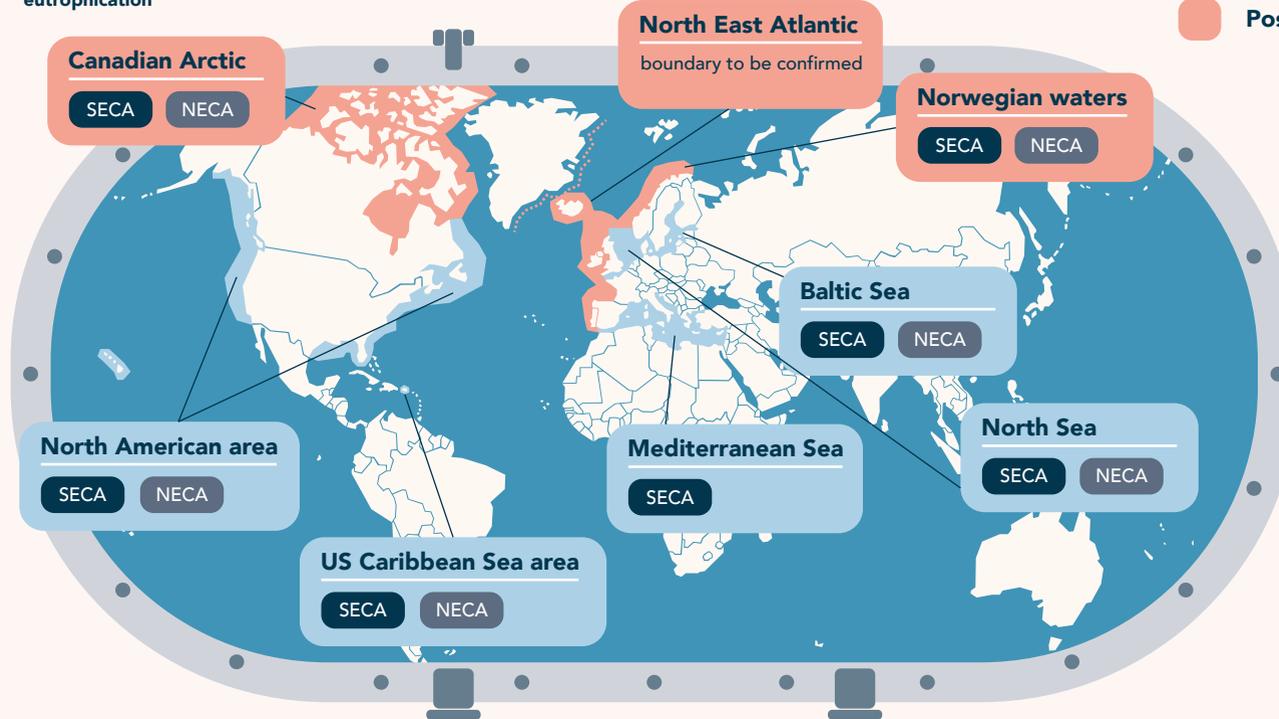
Shipping emissions significantly impact the climate, human health and ocean biodiversity

## EMISSION CONTROL AREAS (ECAs)

Emission Control Areas (ECAs) are designed to **reduce atmospheric pollutants** from ships by requiring more **stringent controls on fuels and engines** while operating in the ECA.

- Why do we need new ECAs?**
- ✓ Cleaner air
  - ✓ Cut premature deaths
  - ✓ Reduce climate impacts

- Existing ECAs
- Possible future ECAs



### Two types of ECAs

#### SECA

Reduces **SO<sub>x</sub>** and **PM** emissions, with co-benefits:

- Reduces **particulate matter (PM)** including short-lived climate pollutant - **black carbon (BC)**
- Encourages **ships to use cleaner fuels**, potentially reducing CO<sub>2</sub> emissions

#### NECA

Reduces **NO<sub>x</sub>** emissions

### SO<sub>x</sub>

**Sulphur oxide** triggers fine particulate matter (PM) emissions which leads to **health impacts**, and **acid rain** which damages buildings and landscapes.

### NO<sub>x</sub>

**Nitrogen oxide** causes health impacts, and **eutrophication and acidification** of water, which disrupts aquatic and terrestrial ecosystems.

Implementation of an ECA and the Arctic HFO ban in the **Canadian Arctic** would \*:

- reduce SO<sub>x</sub> by **80% by 2030**
- reduce PM by **73% by 2030**
- reduce BC by **58% by 2030**

The **Mediterranean SECA** requirements will \*\*:

- reduce SO<sub>x</sub> by up to **80% by 2030**
- prevent up to **3,000 premature deaths annually by 2030**
- save more than **6,000 lives annually by 2050**

\*MEPC 80/16/2 Development of a proposal to designate a Canadian Arctic Emission Control Area  
 \*\*Cofala et al., 2018. Shipping\_emissions\_reductions\_main.pdf (iiasa.ac.at)

# Emission Control Areas - Reducing Air Pollution from Shipping to Protect the Arctic

Type of ECA	Entry into effect	Benefits		
SO <sub>x</sub> PM	Year	Reduce emissions of SO <sub>x</sub> /PM	Reduce emissions of BC	Cut premature deaths
NO <sub>x</sub>	Year	Reduce emissions of NO <sub>x</sub>	Air quality improvements	Protect ecologically sensitive ecosystems



## Some positive developments:

- ✓ Designation as of May 2024 of the **Mediterranean Sea** as an Emission Control Area for SO<sub>x</sub>/PM.
- ✓ **Canadian Arctic waters** are proposed for designation as an ECA.
- ✓ Declaration of intent to designate a new ECA by **North East Atlantic Ocean** littoral states.
- ✓ The **Norwegian Sea** is proposed for designation as an ECA.

- Existing ECAs
- Possible future ECAs



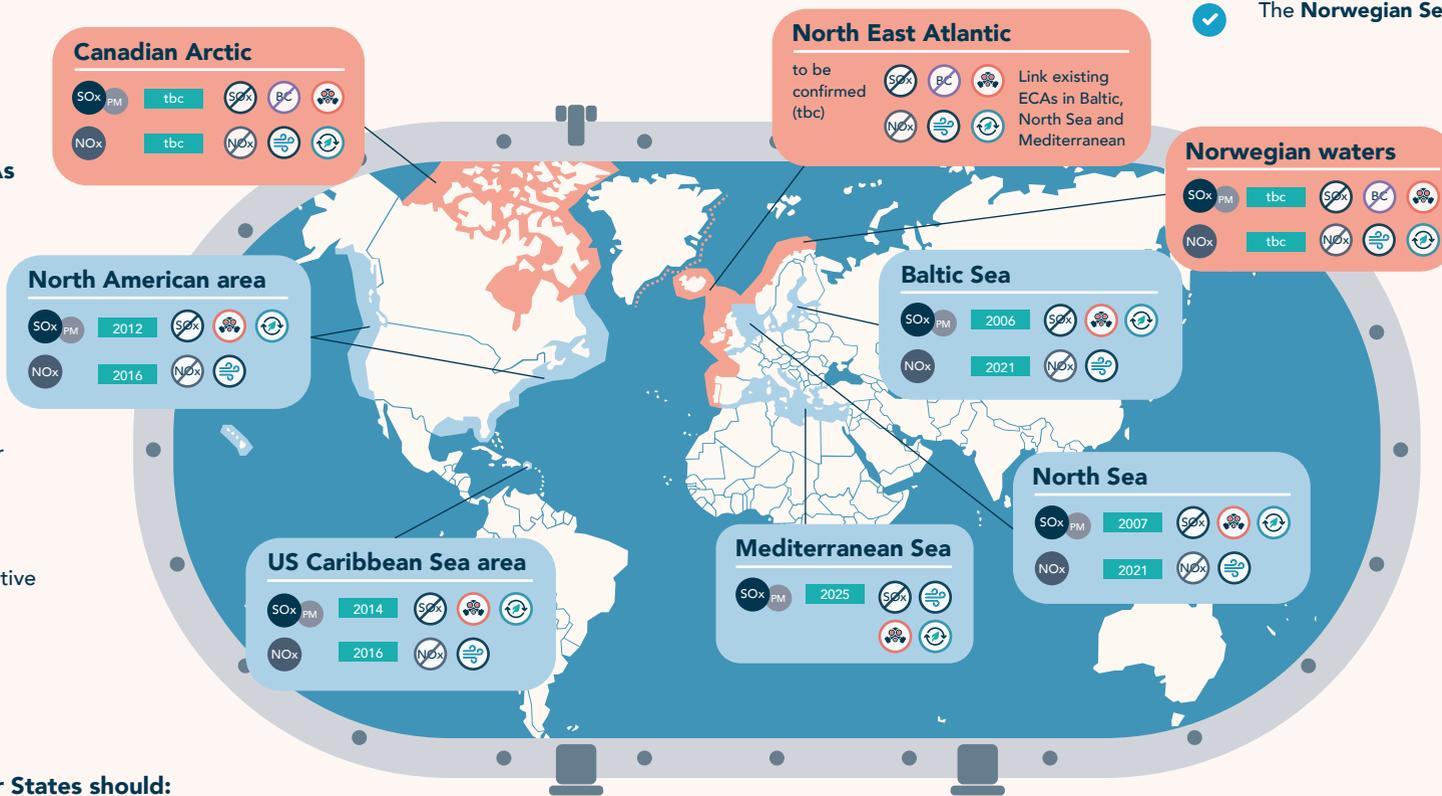
## Watch out!

Avoid **counter-productive solutions** such as:

- Use of ultra low sulphur fuel oil (ULSFO)
- Switching to liquefied natural gas (LNG)
- Scrubbers as an alternative compliance method



## IMO Member States should:



## Benefits for the Arctic

ECAs contribute to tackling impacts of SO<sub>x</sub> / PM including BC / NO<sub>x</sub> in sensitive ecosystems like the Arctic.



Establishing ECAs in the Arctic and the North East Atlantic could dramatically **cut BC emissions impacting the Arctic** if distillate or other cleaner fuels are used as the compliant fuel – not ULSFO.



It is important that ECAs build on **Indigenous perspectives and Knowledge**.



ECAs will also **reduce emissions of PAHs and heavy metals**

**1** Incorporate **Indigenous Knowledge** in Arctic ECA proposals.

**2** Establish **additional ECAs** to link the Mediterranean Sea ECA with the North Sea and Baltic Sea ECAs and extend north to the Arctic including the waters off Norway, Iceland, the Faroe Islands, Greenland and Canada.

**3** Extend the **Mediterranean Sea ECA** to cover **NO<sub>x</sub>** emissions.

**4** Develop a new type of ECA specifically designed to **reduce black carbon emissions**.

**5** By 2026, designate new ECAs that will contribute to **reducing air pollution in the Arctic** and will benefit Arctic ecosystems and Indigenous People.