



Tackling ships' black carbon emissions in the Arctic through EU action



European shipping in the Arctic



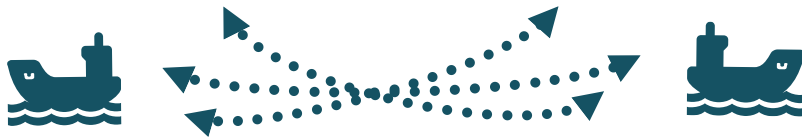
Carbon dioxide (CO₂) and black carbon (BC) emissions from ships using European Union (EU) ports contribute to global climate heating and Arctic sea ice melting.



BC is responsible for approximately 20% of ships' global warming potential.



EU's Arctic shipping BC footprint is 16.5% of total shipping BC emissions. (n.b. excludes BC emissions around Iceland and west of Norway)



Many ships operating in the Arctic are on voyages to, or from, EU ports.

- Bulk carriers collecting cargoes of ore from Arctic mines.
- Oil & gas tankers shipping crude and refined products.
- Cargo vessels transiting the Arctic from Europe to south-east Asia.
- Cargo ships operating between European and Arctic ports.



Examples of Arctic shipping routes and European port departure points and destinations © International Council on Clean Transportation

In November 2021, the IMO agreed a resolution urging its members to switch to distillate fuels to reduce black carbon emissions through domestic or regional action.

With its Arctic Policy, the EU commits to reducing black carbon emissions by 33% between 2013 - 2025 and pushing for zero-pollution of shipping in the Arctic.



EU's Fit for 55 package implements the EU Climate Law. It includes specific measures for shipping and proposes investment in ships, ports and propulsion fuels of the future, but fails to address black carbon.

How to reduce black carbon emissions?

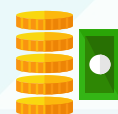
Switching to distillate / diesel fuel will reduce BC emissions from heavy fuel oil fuelled ships in the Arctic by around **44%**.



Installing a diesel particulate filter will further reduce BC emissions by over **90%**.

**>90%
reduction**

A switch to distillate/diesel can be implemented “overnight” and lead to **rapid reduction of BC emissions** impacting the Arctic...
...with a modest (<10%) ship fuel additional cost.



Action is needed now!



The EU's 'Fit for 55' package must:

1. Include black carbon in the GHG intensity standard (EU Fuel Maritime).
2. Require all ships visiting EU ports and operating in the Arctic to use distillate / diesel fuels.
3. Use a comprehensive Arctic boundary (and not only ice-covered waters).
4. Include black carbon emissions on all MRV voyages which include the Arctic.
5. Use a black carbon 20 year global warming potential.



To protect Arctic ice, the EU must include black carbon reduction measures in the European Green Deal 'Fit For 55' package to set the maritime sector on a pathway to zero Arctic pollution.

