

'Maritime Cyprus 2017' Conference

Panel Discussion: 'The cost of smoke'
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Limassol, 10 October 2017







Shipping – Air Emissions

About 90% of world trade is carried by the international shipping industry

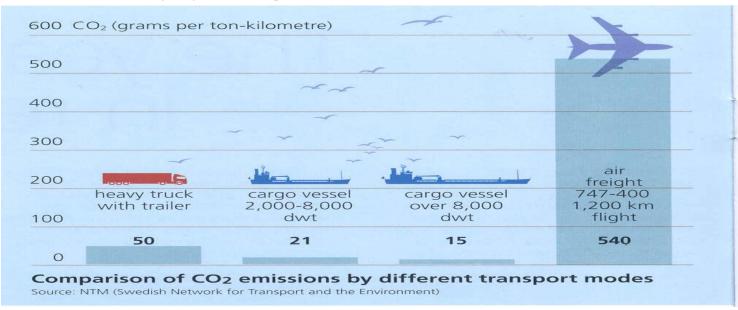
Maritime transport, an environmentally sustainable and energy efficient mode of transport







Shipping – Air Emissions



More need to be done (?)







Regulatory Regime

Global Action

Marpol Annex VI (SOx, NOx, ODS, VOC, EEDI, EEOI, SEEMP)

EU Action

Sulphur Directive, MRV regulation





Key environmental issues (I)

GHG Emissions (CO₂)

- 2.2% (3rd IMO GHG study 2014)
- Data Collection System
- IMO strategy on reduction of GHG emissions from ships
- Market based measure (ETS, Levy, etc)

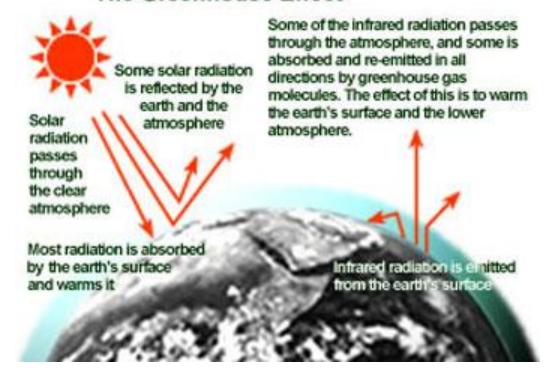






Key environmental issues (I) GHG Emissions

The Greenhouse Effect







Key environmental issues (I) GHG Emissions

Impacts of GHG Emissions

- 1. Environmental (global warming)
 - Desertification
 - Increased melting of snow and ice
 - Sea level rise, Ocean Acidification
 - Stronger storms and extreme events
- 2. Human health
- 3. Economic







Key environmental issues (I)

The United Nations Framework Convention on Climate Change (UNFCCC) in 1992. Aimed at stabilizing atmospheric concentrations of greenhouse gases to avoid "dangerous anthropogenic interference" with the climate system.

The Kyoto Protocol in 1997 Commits developed countries (Annex I Parties) to reduce their overall emissions

Paris Agreement: A long term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels and to aim to limit the increase to 1.5°C





Key environmental issues (I)

Commission's 2011 White Paper on transport suggests CO_2 emissions from maritime transport should be cut by **at** least 40% from 2005 levels by 2050, and if feasible by 50%.

Commission 2013 strategy consists of **3 consecutive steps**:

- Monitoring, reporting and verification of CO₂ emissions from large ships using EU ports
- Greenhouse gas reduction targets for the maritime transport sector
- Further measures, including market-based measures, in the medium to long term





Key environmental issues (II)

Sulphur Dioxide, SO₂

- 0.50% sulphur limit
- Fuel oil availability







What next?