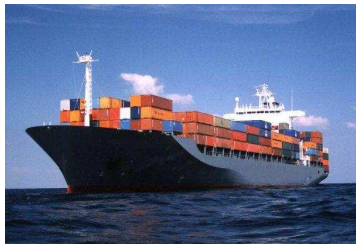


# How to Tackle GHG Emissions from International Maritime Navigation and Aviation

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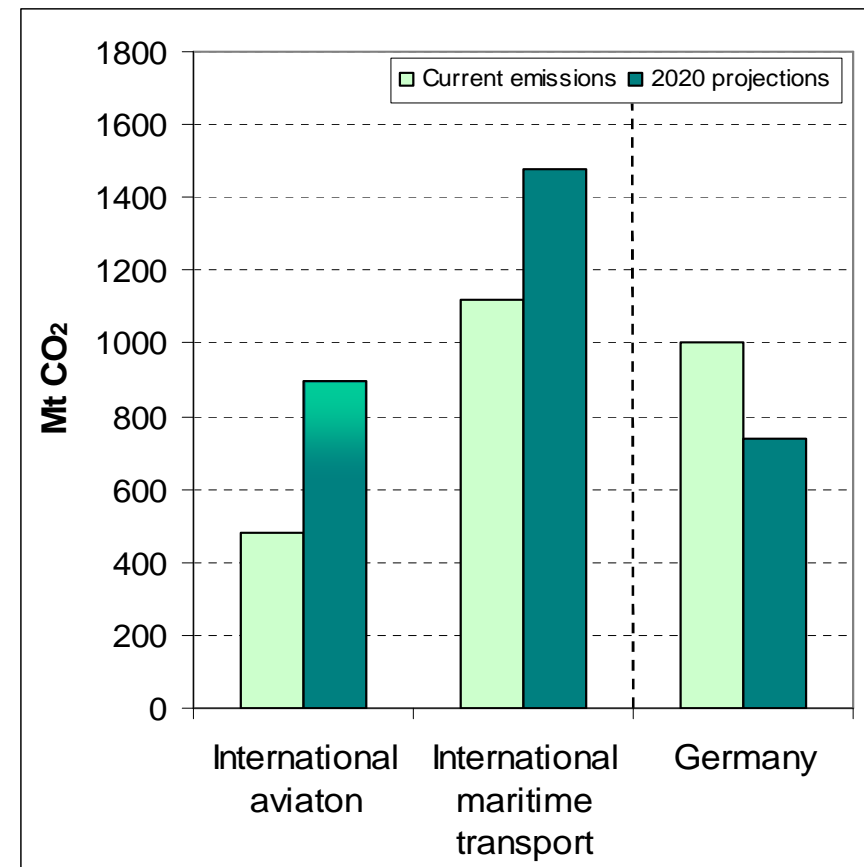
## ***Kyoto Protocol, Art. 2.2***

*“The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.”*

- **Only Annex I Parties?**
- **Emissions are not included in the quantified targets and only reported**
- **Working through ICAO/IMO**
- **ICAO**
  - Has endorsed emissions trading in 2004
  - GIACC: possible global aspirational goals (fuel efficiency, no cap)
- **IMO**
  - MEPC 57
    - Develop a scheme to address GHG emissions by June 2009
    - Overwhelming majority: covering all ships independently of flag
  - MEPC 59: study and debate on market based measures

# Why does it matter?

- Aviation and maritime emissions are comparable to large Annex I countries.
- International transport is one of the fastest growing sources of GHG emissions
- Growth in emissions in these sectors would significantly impair global reduction effort



- **Assignment of emissions**
  - Route, fuel sales, cargo
  - 4 other options
- **Approach**
  - Inclusion in national totals: requires assignment of emissions
  - Sectoral approach: would cover all parties, no assignment needed, regional approach possible
- **Coverage**
  - Only Annex I: distortion in competition & leakage (flagging out)
  - All parties: How to reflect  
“common but differentiated responsibilities (CBDR)”?
- **Responsibilities**
  - UNFCCC: setting the target
  - ICAO/IMO: establishing policies and measures
- **Targets**
  - National totals: implicitly
  - Sectoral approach: comparable to average of Annex I Parties

- **Inclusion of Aviation into the EU ETS**
- **Coverage**
  - all flights to and from EU airports
  - All airlines are treated equally, i.e. not distortion in competition
- **Allocation of allowances for 2012 and 2013 to 2020**
  - 2012: 97% of average annual emissions 2004 to 2006
  - 2013 to 2015: 95% of average annual emissions 2004 to 2006
  - 15% of allowances to be auctioned in 2012
  - Auctioning in later periods may be increased via EU ETS review
  - 3% of allowances reserved for new or fast-growing operators
  - Remaining allowances to be allocated free of charge by benchmarking based on tonne-kilometres
- **Auctioning revenues**
  - Decision by Member States, among other things ...
  - adaptation to climate change in the EU and third countries
- **Reduction in 2020: -190 Mt CO<sub>2</sub> compared to business as usual**

# Demand for air transport



- **Debate under IMO (MEPC)**
  - Emissions trading (Norway, France, Germany, EU)
  - CO<sub>2</sub> charge (Denmark, Norway)
- **Maritime emissions trading scheme (METS)**
  - Coverage: CO<sub>2</sub> emissions of ships in international trade
  - System: open, i.e. units from CDM/JI can be used
  - Allocation: auctioning (avoid windfall profits, less complex)
  - Revenues
    - Research, development & deployment programs in the shipping sector
    - Funding measures to avoid deforestation or facilitate adaptation in developing countries to reflect CBDR
- **Unilateral action of the EU in preparation**

- **International aviation and maritime transport are important sectors**
- **They need to be included in post 2012 regime with clear and meaningful targets**
- **Different features of aviation and maritime transport need to be reflected**
- **Negotiations are – as for the Kyoto Protocol – rather difficult**
  - Need for stronger UNFCCC leadership and enhanced cooperation between UNFCCC and IMO/ICAO
  - How to address CBDR while avoiding leakage?
- **Including international maritime transport and aviation post 2012 could contribute to necessary financial resources**



# Thanks for your attention



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