



Possibilities for the Implementation of Aviation Emissions Reduction Measures in the EU

Niels LADEFOGED
Policy Officer

Directorate C – Air and Chemicals
DG Environment
European Commission



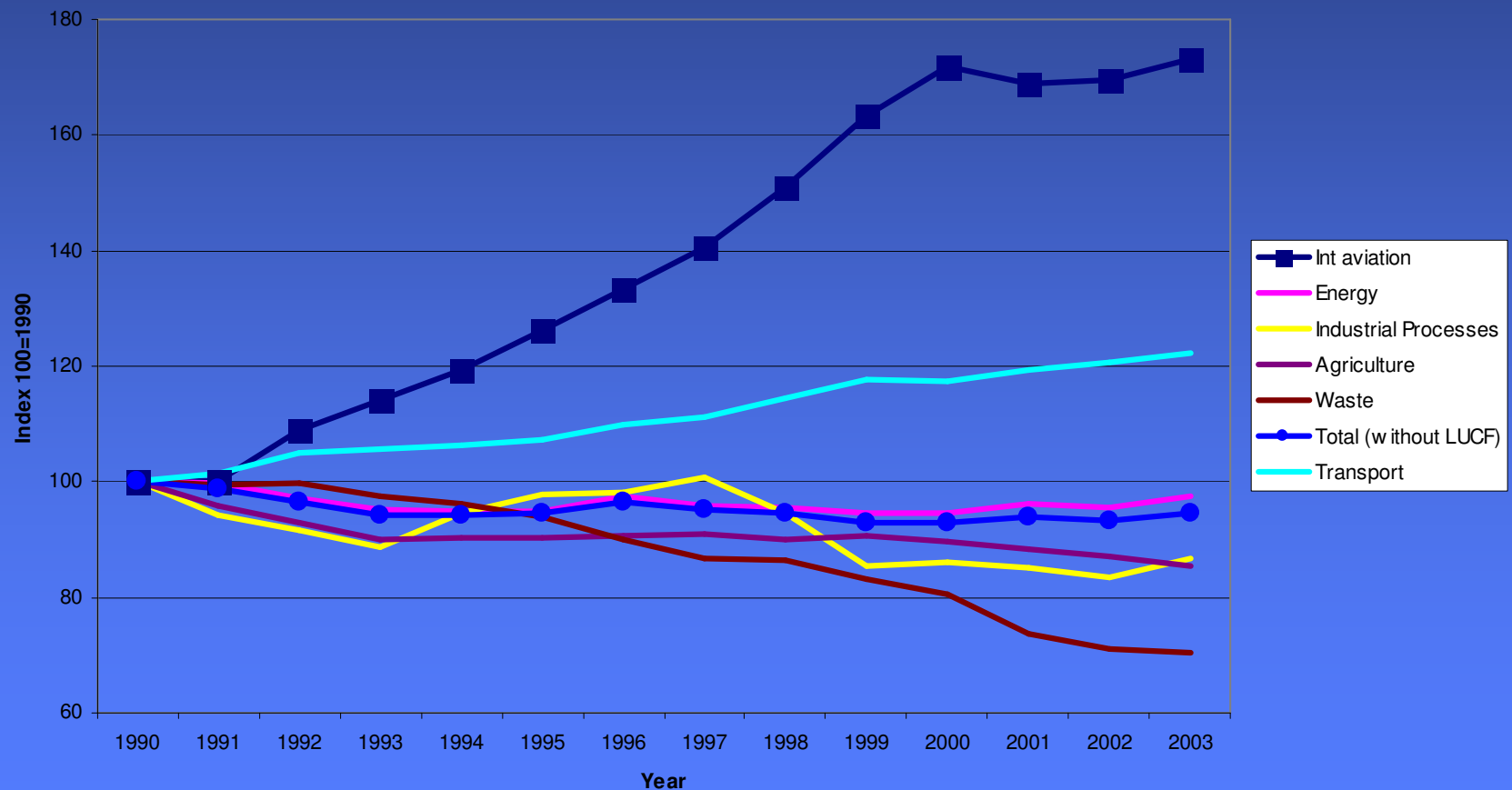
Overview

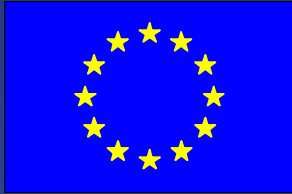
- **Why do aviation emissions matter?**
 - **Policy objectives**
 - **Options rejected**
 - **Existing actions to be strengthened**
 - **Charges v Emissions Trading**
 - **Policy conclusions**
 - **Key design parameters**
 - **Next steps**
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Why do aviation emissions matter?

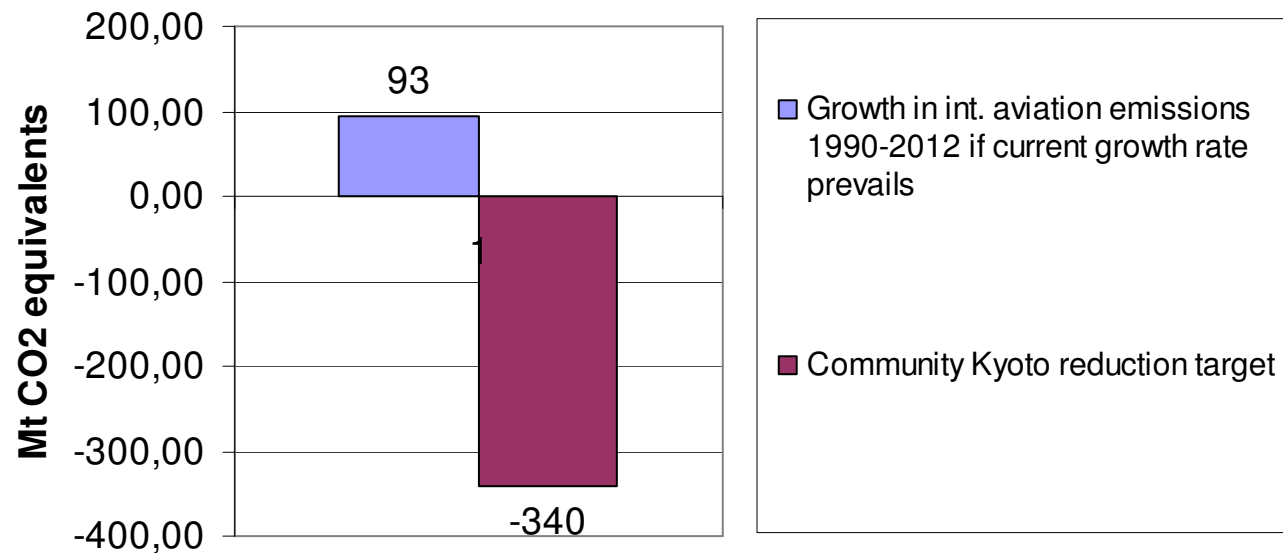
EU GHG emissions by sector as an index of 1990 levels





Why do aviation emissions matter?

Comparison between growth in international aviation GHG emissions and the Community's Kyoto target ("EU15 bubble")



By 2012, aviation GHG emissions could offset more than 25% of the cuts required to meet the European Community's targets under the Kyoto Protocol.



Why do aviation emissions matter?

- **GHG is only part of aviation's impact**
- **Indirect impacts are also significant (NO_x)**
- **Impacts through effects on cloud coverage uncertain and difficult to determine but potentially significant**

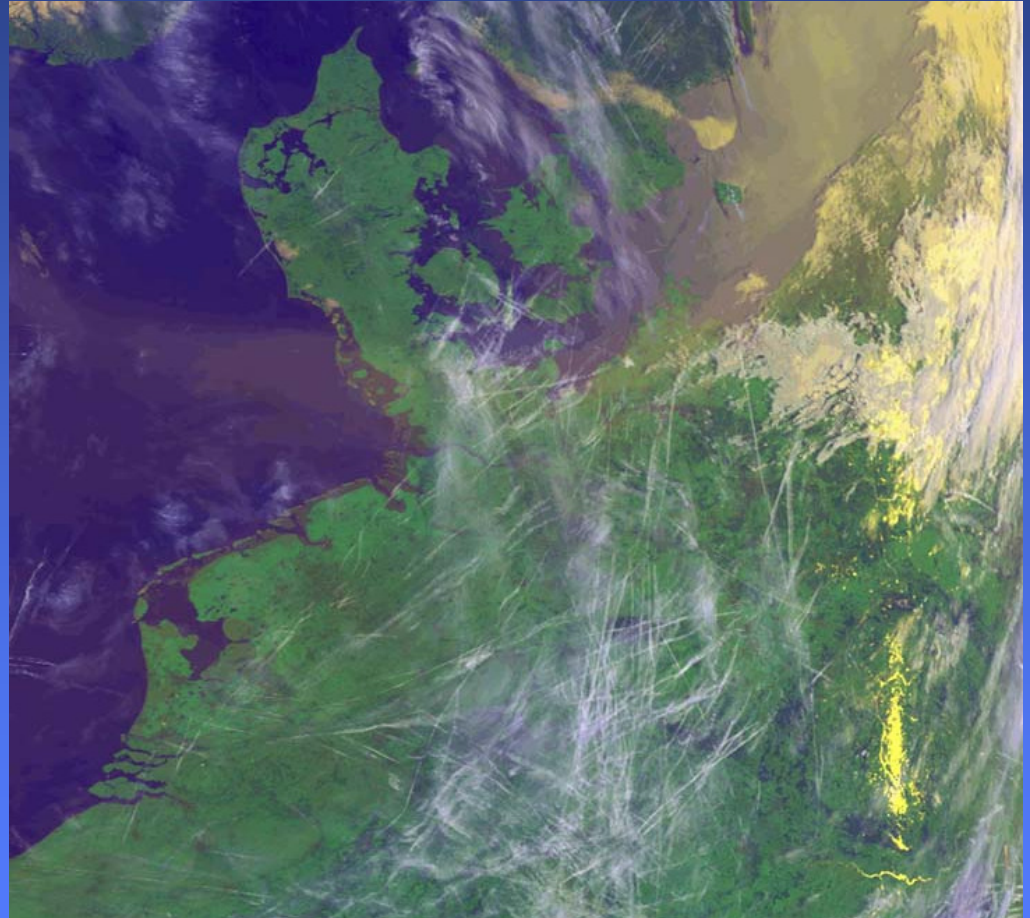


Photo: Hermann Mannstein, DLR



Policy objectives

- **Ensuring that aviation contributes to efforts to mitigate climate change through:**
 - **Better internalisation of external costs of climate change**
 - **Stronger incentives for air transport operators to reduce their impact on the climate**

NOT to collect money for general budgets



Options rejected for EU implementation at this stage

- **Restrictions on air traffic volumes**
 - **Regulatory standards**
 - **Restrictions on access to EU airports**
 - **Voluntary agreements with airlines**
 - **Departure/Arrival taxes**
 - **VAT on air transport**
 - **Removal of public subsidies**
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Existing actions to be strengthened

- **Raising awareness of air transport users**
- **Improving the competitiveness of rail transport**
- **Improving air traffic management (SESAR)**
- **Research into greener aircraft (FP7)**
- **Applying energy taxation to commercial aviation**



Options considered in detail

- **En-route charges**
- **Emissions trading**

Informed by two studies:

- **2002 Study on economic incentives to mitigate GHG emissions from air transport in Europe**
- **2005 Study on inclusion of aviation in the EU ETS**



Charges v Emissions Trading: Environmental impact

- **Charges and ET in principle equivalent**

BUT with Emissions trading

- **level of emissions reduction known in advance**



Charges v Emissions Trading: Economic efficiency

- **Charges and ET equivalent**

BUT with emissions trading

- **Interplay with other sectors increases
overall economic efficiency**



Charges v Emissions Trading: potential for wider application

- **long-term aim = global participation**
- **Concept of emissions charges remains contentious at international level**
- **In contrast emissions trading for international aviation has been endorsed by ICAO**



Charges v Emissions Trading: Legal certainty

- **Commission view that en-route emissions charges are compatible with international law but this remains contentious outside Europe**
- **Emissions Trading is conceptually different from a charge and a tax and therefore the risk of challenge is lower.**



Policy conclusions

- **Comprehensive approach**
- **Proposes to take steps towards including aviation in the EU ETS as soon as feasible**
- **Alongside continuing work on:**
 - research into greener air transport
 - improvements in air traffic management
 - removing legal barriers for taxing aircraft fuel
 - improvements in technical design standards



Key design parameters

- **ENTITY:** Aircraft operators
- **EMISSIONS COVERAGE:** CO₂ and non-CO₂ impacts should be addressed to the extent possible
- **SCOPE:** In environmental terms, the preferred option is to cover all flights departing from EU airports
- **ALLOCATION:** Harmonised allocation methodology



Next steps

- **Aviation WG under the ECCCP start working in late Autumn 2005**
- **Council conclusions in December**
- **Report from WG by 30 April 2006**
- **Report on review of ETS by 30 June 2006**
- **Legislative proposal end of 2006**