

EU Aviation Policy and Climate Change

Roberto Salvarani

Unit F3 - Environment & Air Safety

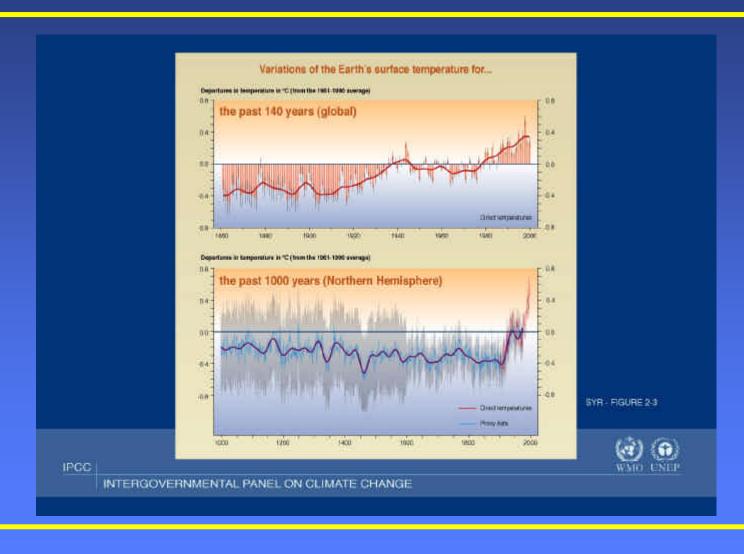
DG Energy & Transport
European Commission



- The challenge of climate change
- Aviation's contribution to climate change
- Action in other sectors
- Implications for aviation
- Options for aviation
- Summary and next steps

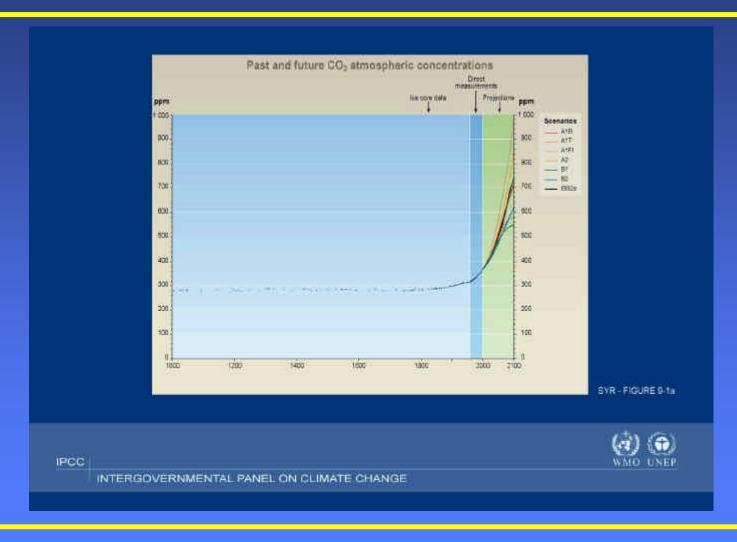


The Climate Change challenge





The Climate Change challenge





The Climate Change challenge

What science expects

- Rising sea level, risk of flooding, erosion and wetland loss will increase
- Extreme weather events (eg. heat waves) will occur more often
- ✓ Increase of water shortage
- Health risks
- **%** ...

The overall objectives

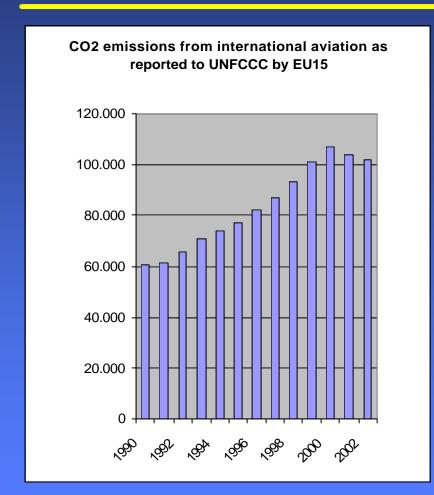
- **EXECUTED '-8%'** (2008-2012)
- 6th Community
 Environment Action Plan:
 - \mathbb{Z} T: max +2°C
 - ≥ CO₂: <550 ppm
 - **∠** GHG: 70% reduction likely to be needed in the long term

Ultimate objective

Realise the UNFCCC aim



Aviation's contribution



CO₂ from international aviation as reported by EU-15

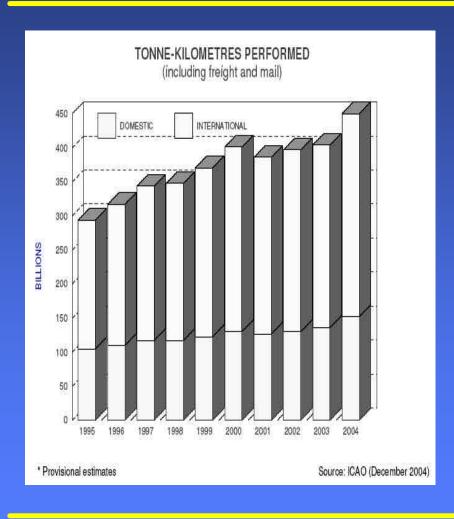
- increased by ? 67% 1990-2002
- ? +4.4%/year
- ? +3.2% of EU15 CO₂ in 2002

NB! CO₂ only part of total impact: IPCC estimated the total radiative forcing to be 2-4 times greater

Source: European Environment Agency: Analysis of greenhouse gas emission trends and projections in Europe 2004 – Draft. Tech. Report no 7/2004



Aviation's contribution

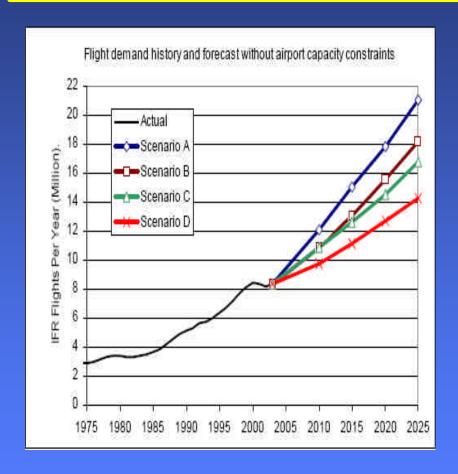


ICAO in December:

- ✓ "STRONG RECOVERY
 FOR AIR TRAFFIC IN
 2004":
- ∠ World passenger traffic
 (in p-km) increased by
 about 14 %
- For freight (t-km), the figure was 13%



Aviation's contribution



- ∠ Air traffic demand in Europe likely to double by 2025: Eurocontrol scenarios* operate with 2.5-4.3% annual increase in no. of flights
- ∠ ICAO CAEP/6 forecast suggests doubling of world passenger fleet from 2002 to 2020
- Tehcnological improvements at current pace will continue to be outstripped by growth

*Source: Eurocontrol Challenges to Growth 2004 Report (CTG04), December 2004



Other sectors' contribution

- **EU-15 GHG emissions** *decreased* by 2.9% from 1990 to 2002
- From 1 January 2005, broadly half of EU emissions became subject to caps under the EU Emissions Trading Scheme



Implications for aviation

- **Aviation's climate change impact likely to grow, in absolute and relative terms, for decades to come if nothing is done**
- Currently the sector has no incentive to take account of climate costs (ie. to internalise its external costs)
- **Commission's 1999 Communication on Air Transport and Environment proposed long term policy target:**
 - to achieve improvements to the environmental performance of air transport that outweigh the environmental impact of growth
 - *∠ Use of market-based measures*
- ∠ Political pressure: EP, Council, UK Presidency
- So far the EU has been waiting for ICAO, but
- 6th Environment Action Programme:
 - "...identifying and undertaking specific actions to reduce greenhouse gas emissions from aviation if no such action is agreed within the International Civil Aviation Organisation by 2002"



Options for aviation

- **∠** To date 2 main options for economic instruments have been considered in Commisssion studies:
 - **Fuel taxes**
 - **Emissions charges**
- **∠** Incorporation of aviation in the EU ETS another possibility
- Study launched in November 2004
- ∠ Draft final report by 8 May agreed final report 2 months later
- Contract awarded to consortium of
 - CE Delft
 - Oeko-Institute
 - **∠** Center for Aviation, Transport and the Environment, MMU
 - **∠** International Institute for Air and Space Law



Economic incentives can help....

- to encourage the sector to adopt in-service technology and operational practices that are better environmentally
- z to generate more resources and/or more efficient use of resources



Summary and Next Steps

- Climate change is happening and the EU is doing something about it
- **∠** Aviation is not contributing to climate change mitigation on the contrary
- ∠ Commission intends this Summer to draw policy conclusions on the use of economic instruments and suggest a way forward:
 - **∠** Stakeholder consultation 1st half of 2005
 - **∠** Communication scheduled for July 2005
 - **Z** Debate in EU institutions (EP & Council)...
 - **∠** ...probably followed by legislative proposals



Possible points for discussion

- pros and cons of alternative incentives (taxes, charges, emissions trading)
- possible improvements to the way that resources for achieving a better environment are targeted
- improving public awareness and perhaps changing attitudes to the use of air passenger and air freight services