

Aviation & climate change

Fast facts

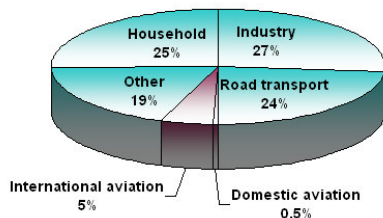
CO₂ Emissions – aviation context

- The UK generates 2% of global man made CO₂¹
- UK domestic & international aviation accounted for 6% of the UK total in 2004²
- UK aviation accounts for just 0.1% of global CO₂.
- Aviation's global contribution to climate change is estimated to grow to around 5-6% by 2050.³

CO₂ emissions from selected countries in 2002



UK CO₂ emissions by end user in 2003

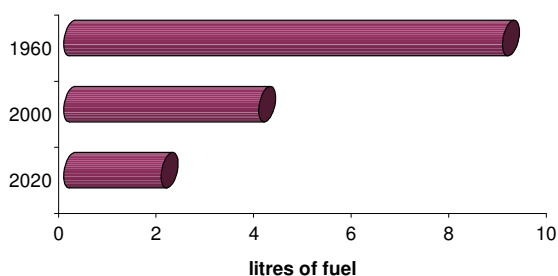


Note: Assumes international bunkers are included in the UK inventory.

Technology will play a key role

- Aircraft fuel efficiency has more than doubled in the past 40 years.⁴
- Research target for new aircraft in 2020 is for a further 50% improvement on the 2000 level, including up to 10% from ATM system efficiencies.⁵
- Technology will only partly contribute to limiting emissions growth and cost-effective policy measures should also be developed.

Litres of fuel required to fly one passenger 100 kilometres



Global issue requires a global solution

- Aviation should be included in a comprehensive global policy framework.
- Unilateral action would seriously damage UK competitiveness with negligible impact on emissions.
- A positive and deliverable step towards a global solution is the simple and equitable inclusion of aviation in the EU emissions trading scheme.
- Non-CO₂ atmospheric effects may also be important. Further research is needed and other mitigating actions may be required.



Aviation must play its part in addressing society's great challenge

- The government has set an ambitious target to reduce total UK CO₂ by 60% in 2050⁶.
Society as a whole will need to make tough choices to meet this aspiration.
- The government recognises that some activities will reduce emissions more than others.
Emissions trading allows all industries to contribute to the overall emissions reduction.
- With emissions trading, airlines and their passengers will have to cut emissions or pay to offset growth.

References & notes

¹ United Nations Statistics Division, CDIAC, Data last updated on 22 April 2005.

² UK report to the United Nations Framework Convention on Climate Change. Data assumes international bunker fuel emissions are included in the UK emissions inventory. In this context UK aviation is defined as all domestic services plus all international departures from the UK.

³ Intergovernmental Panel on Climate Change, Aviation and the global atmosphere, Cambridge University Press, 1999.

⁴ Air Transport Action Group, last facts, 2003.

⁵ Advisory Council for Aeronautical Research in Europe (ACARE).

⁶ Department for Trade & Industry, Energy White Paper, 'Our energy, our future – creating a low carbon economy', Cm 5761, February 2003.