



The way forward on aviation CO₂ emissions

Brian Pearce
Chief Economist, IATA



The way forward



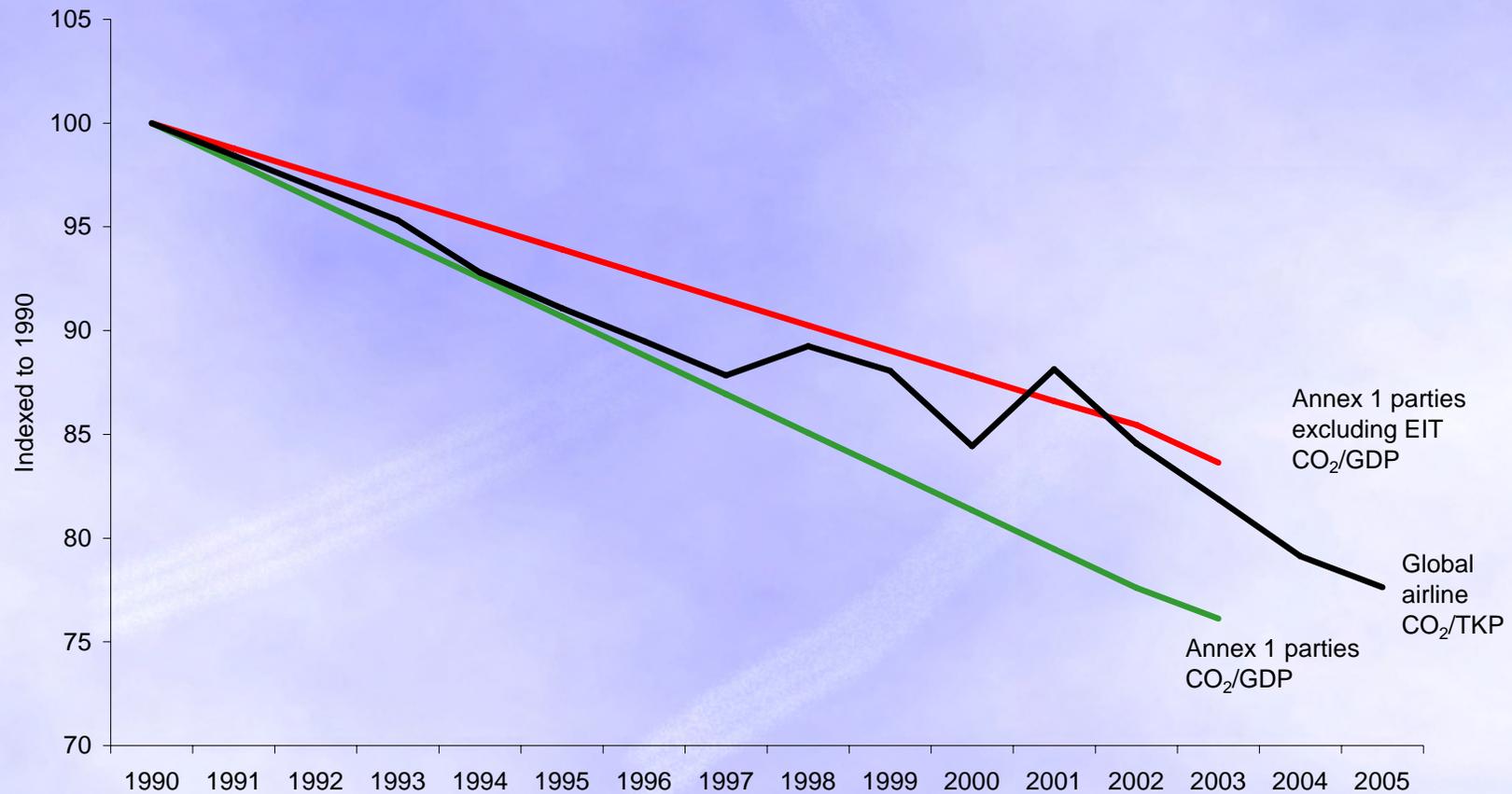
- Clarify the facts
- Eliminate 'wasteful' emissions
- Recognise the limits of a 'price for carbon'
- Recognise the high cost of abatement
- Support a global approach to tradable caps
- Incentivise and support clean technology



Clarify the facts – Good emissions performance



CO₂ emissions per unit of output

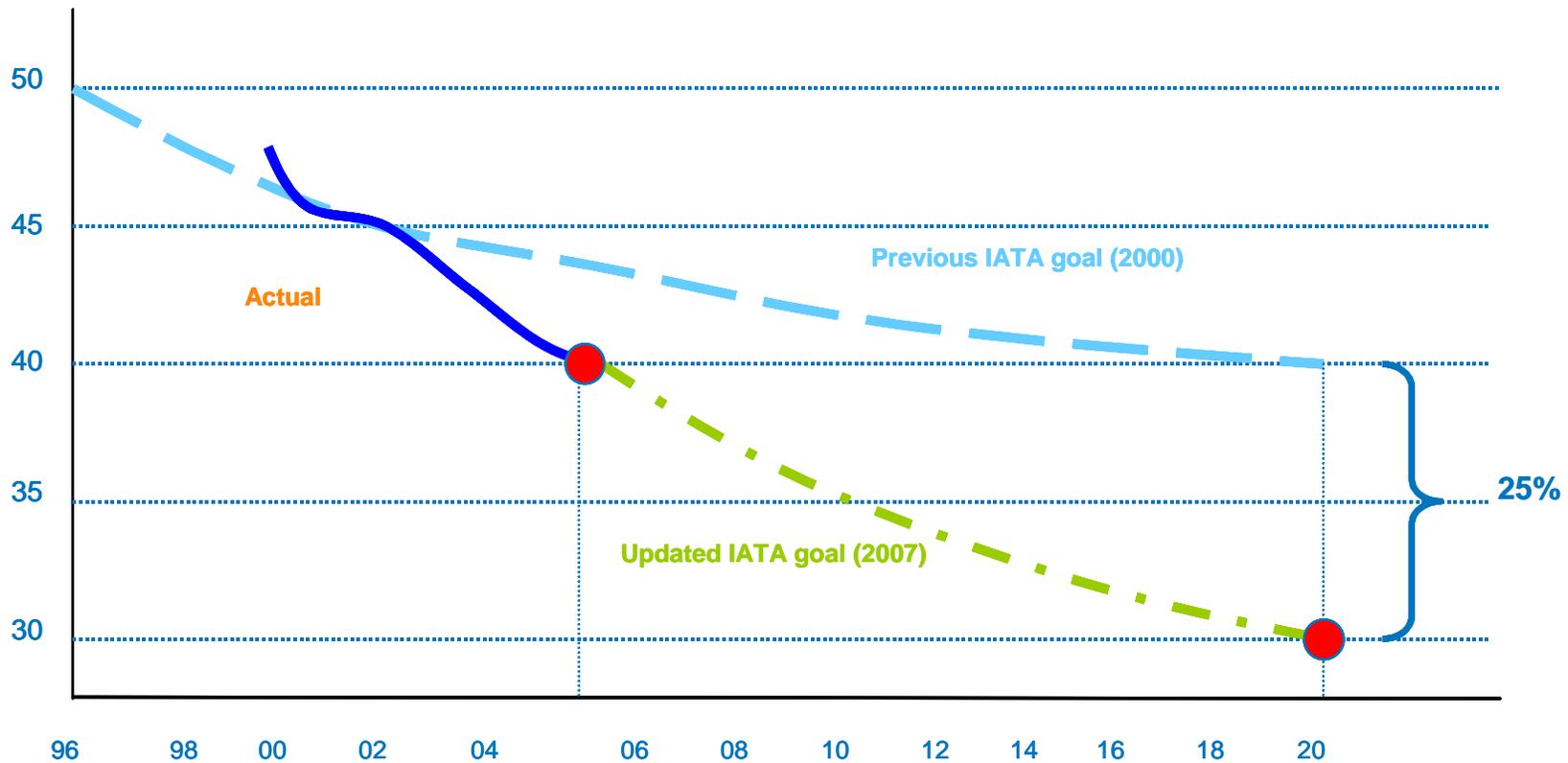




Clarify the facts – Fuel efficiency gains advancing



Litres per 100
RTK

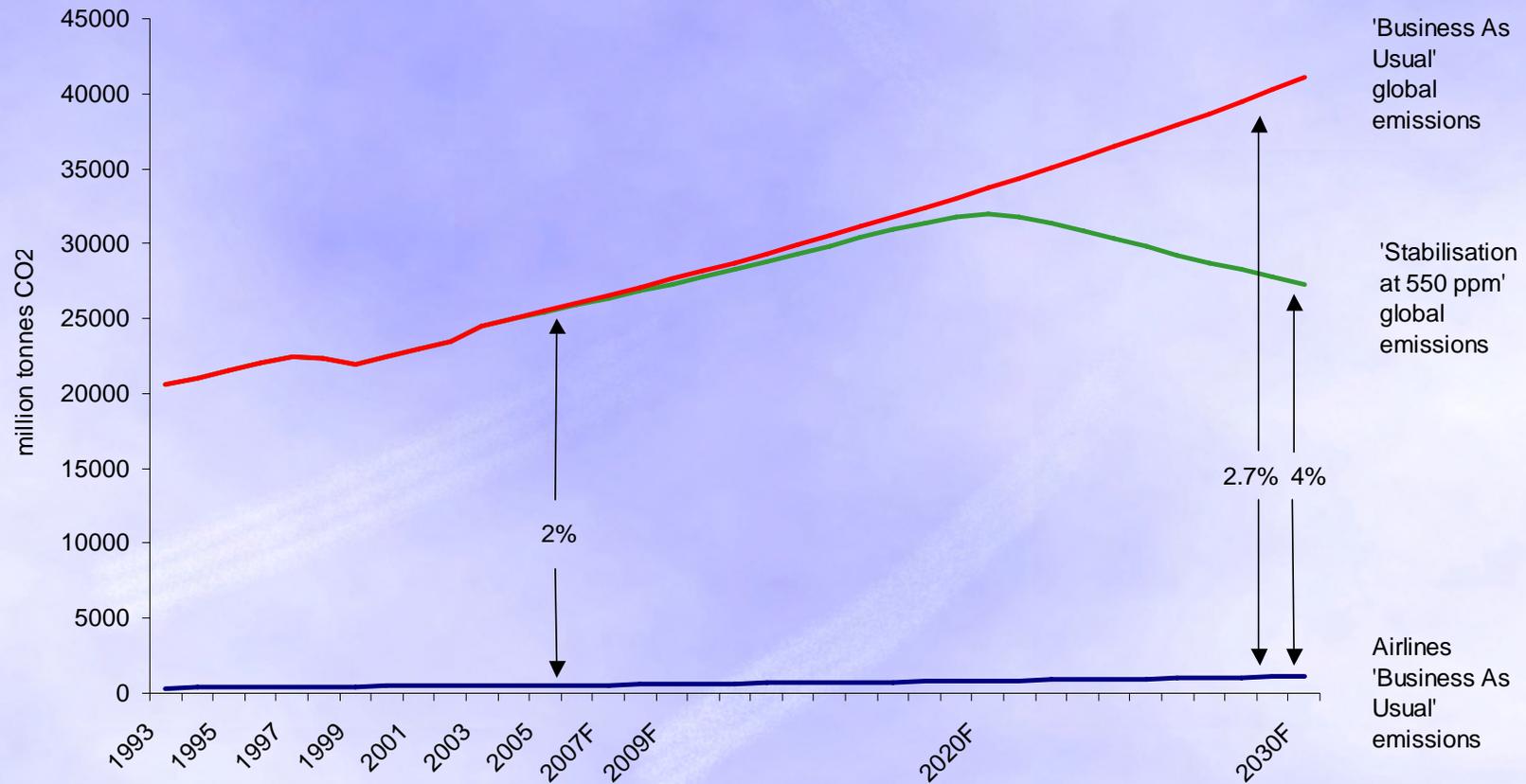




Clarify the facts - There is a problem but it is small



Airline CO₂ emissions vs Global CO₂ emissions

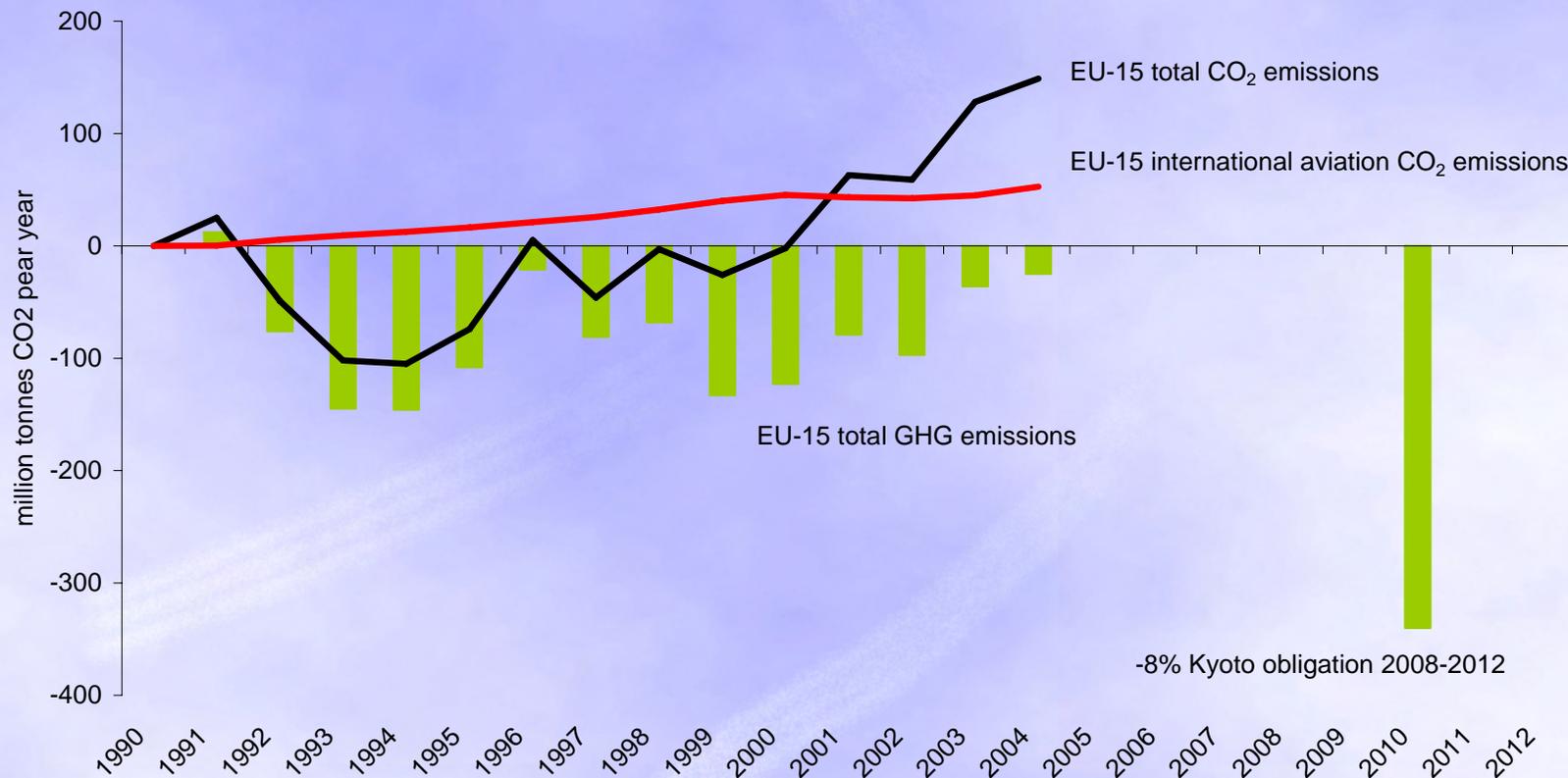




Clarify the facts – Let's get some perspective in Europe



Changes from 1990 baseline in EU-15 GHG and CO₂ emissions



Source: European Environment Agency (2006) Annual European Community greenhouse gas inventory 1990-2004 and inventory report 2006, EEA



Eliminate 'wasteful' emissions



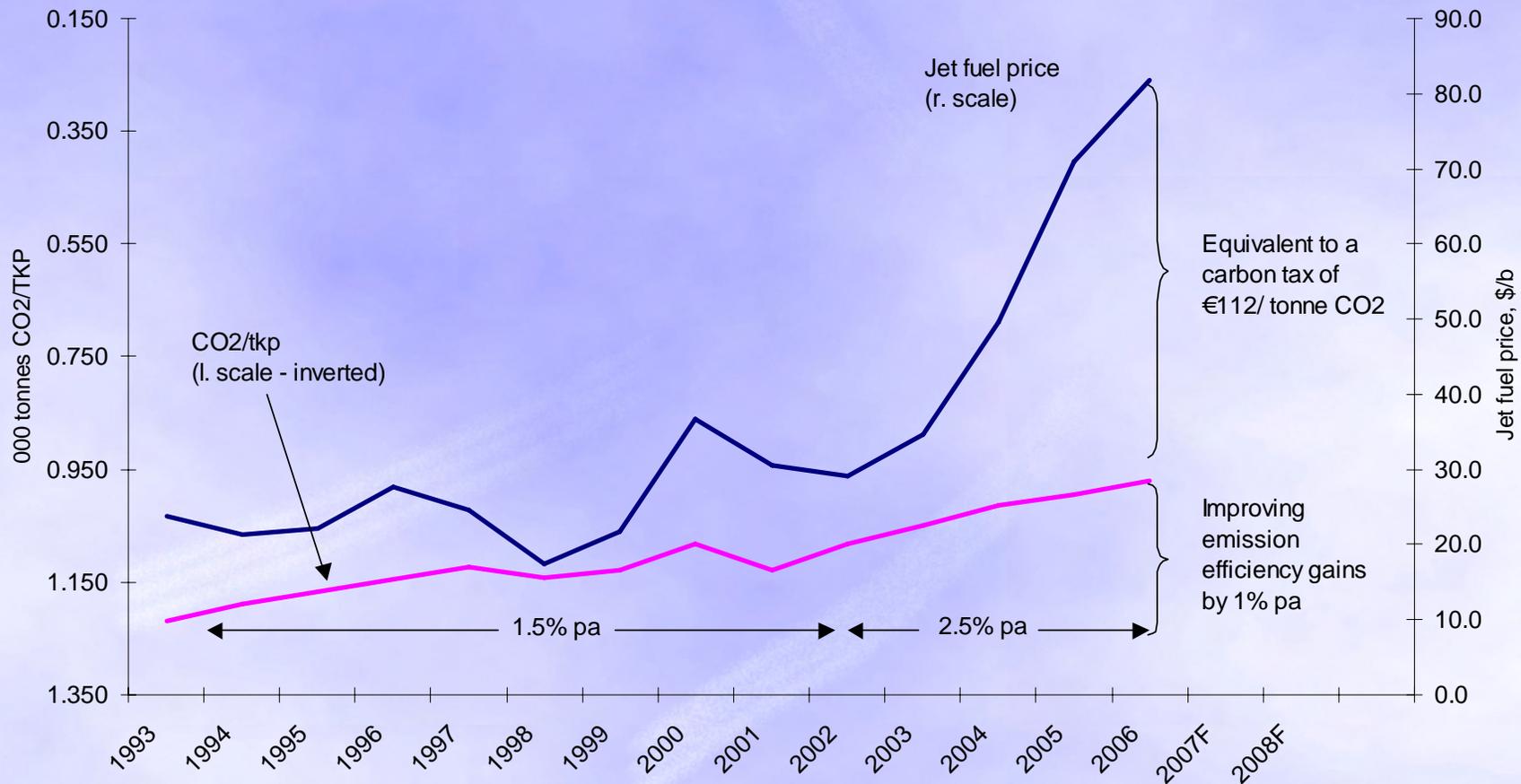
- IPCC identified 8-18% 'wasteful' emissions
 - Inefficient airspace (6-12%)
 - Still no Single European Skies
 - Inefficient TMA management
 - Inefficient airport access
 - Government action required
 - Inefficient airline operations
 - Fuel price incentive + IATA 'Go teams'



Recognise the limits to a 'price for carbon'



Impact of fuel shock on emissions/tkp

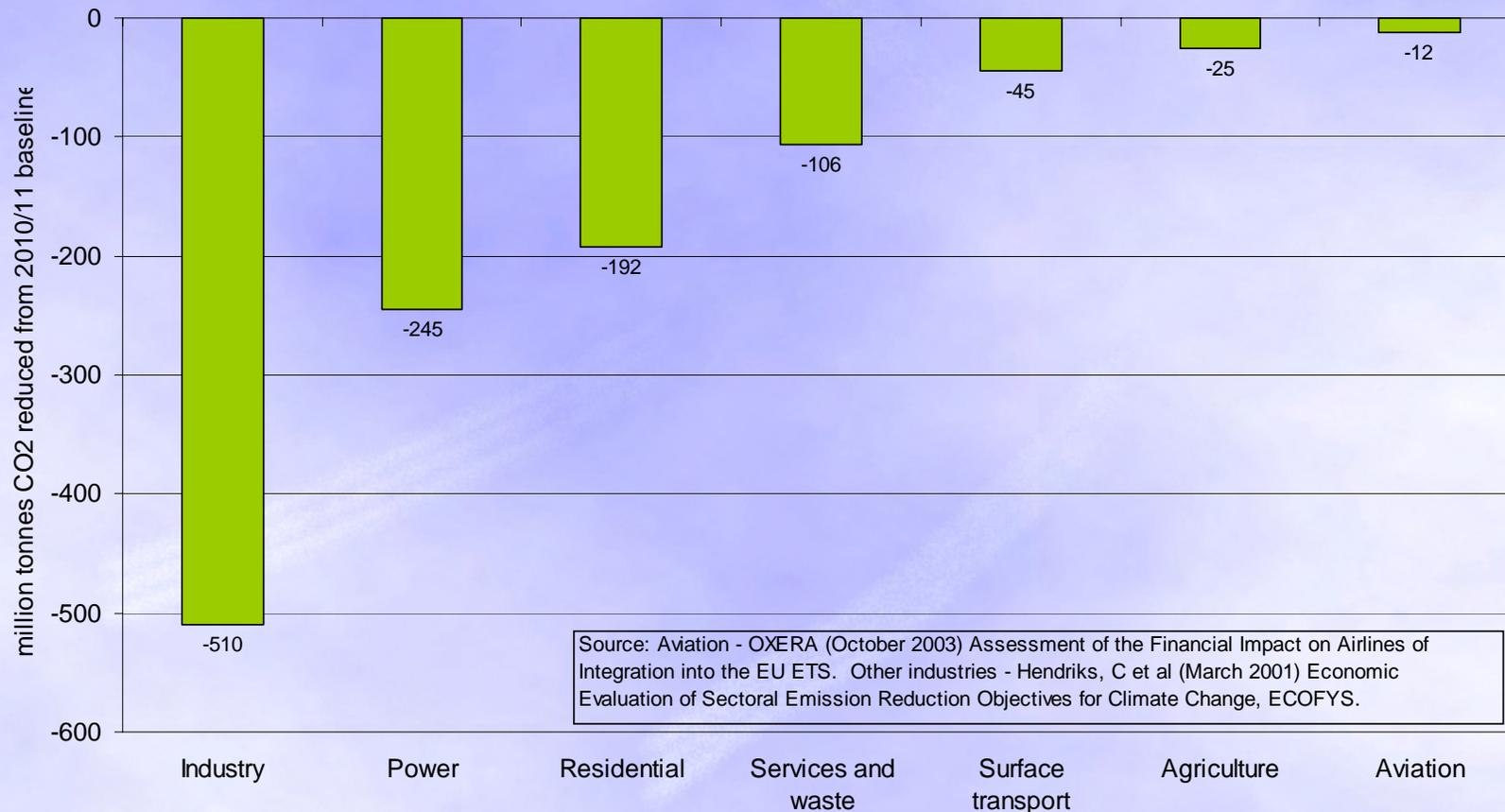




Recognise the high cost of abatement by airlines

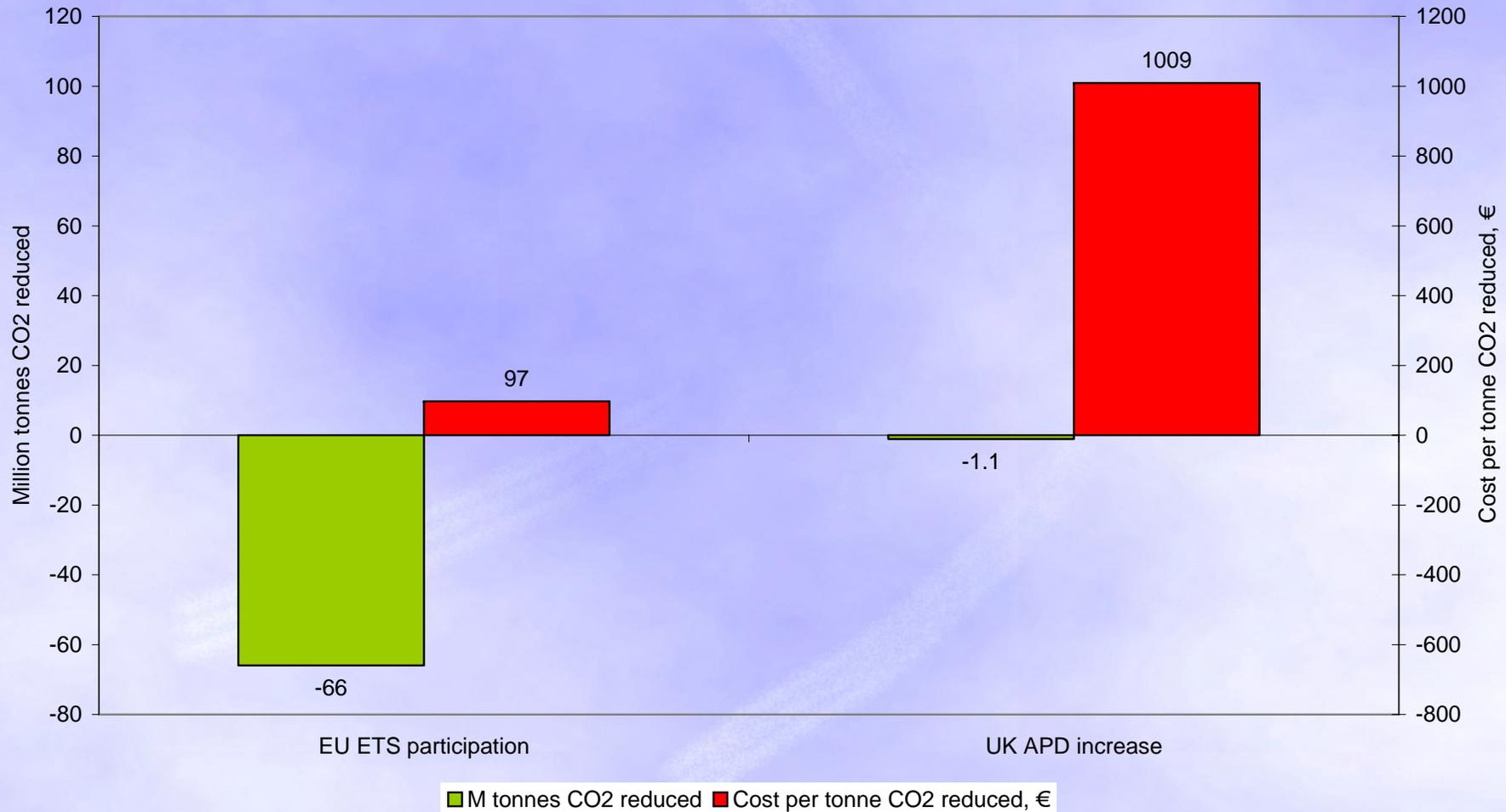


Emissions reductions in the EU possible at a cost of <math><€20/TCO_2</math>





Taxation is a blunt instrument





Tradable caps could help in principle



- Saves economic resources by abatement in sectors where most efficient
- Promotes development through CDMs
- There must be equity with other sectors
- Most air travel is international so local or regional ETS distort competitiveness
- To work efficiently it must be global
- Support for ICAO's leadership



IPCC highlights need to support new technology



- IPCC working group III in May 2007
 - ‘The lower the stabilisation levels, especially 550 ppm or lower, the greater the need for more efficient R&D and investment in new technology.’
 - ‘Government funding for most energy research programmes has been flat or declining for nearly 2 decades; now about half of 1980 levels.’



The focus is shifting to incentivising new technology



- Awareness that Kyoto/ EU ETS offer no long-term commitment or other R&D incentives
- US-Asia Pacific Climate Change Partners
- UK Energy Technologies Institute
- EU Clean Sky joint technology initiative
- Climate change policies must be designed to maximise technology incentives