



“I will a have a conscience, but I won't not go to Miami” – drivers for growth in aviation emissions, and implications for emissions reduction

Sarah Mander, **Alice Bows**, Sally Randles

Tyndall Centre for Climate Change Research
The University of Manchester

23rdth September 2008

Presentation outline

- The emissions issue
- What explains growth?
- Aviation expansion: meeting an economic agenda
- Changing norms of flying
- Putting the brakes on expansion?



Policy clash

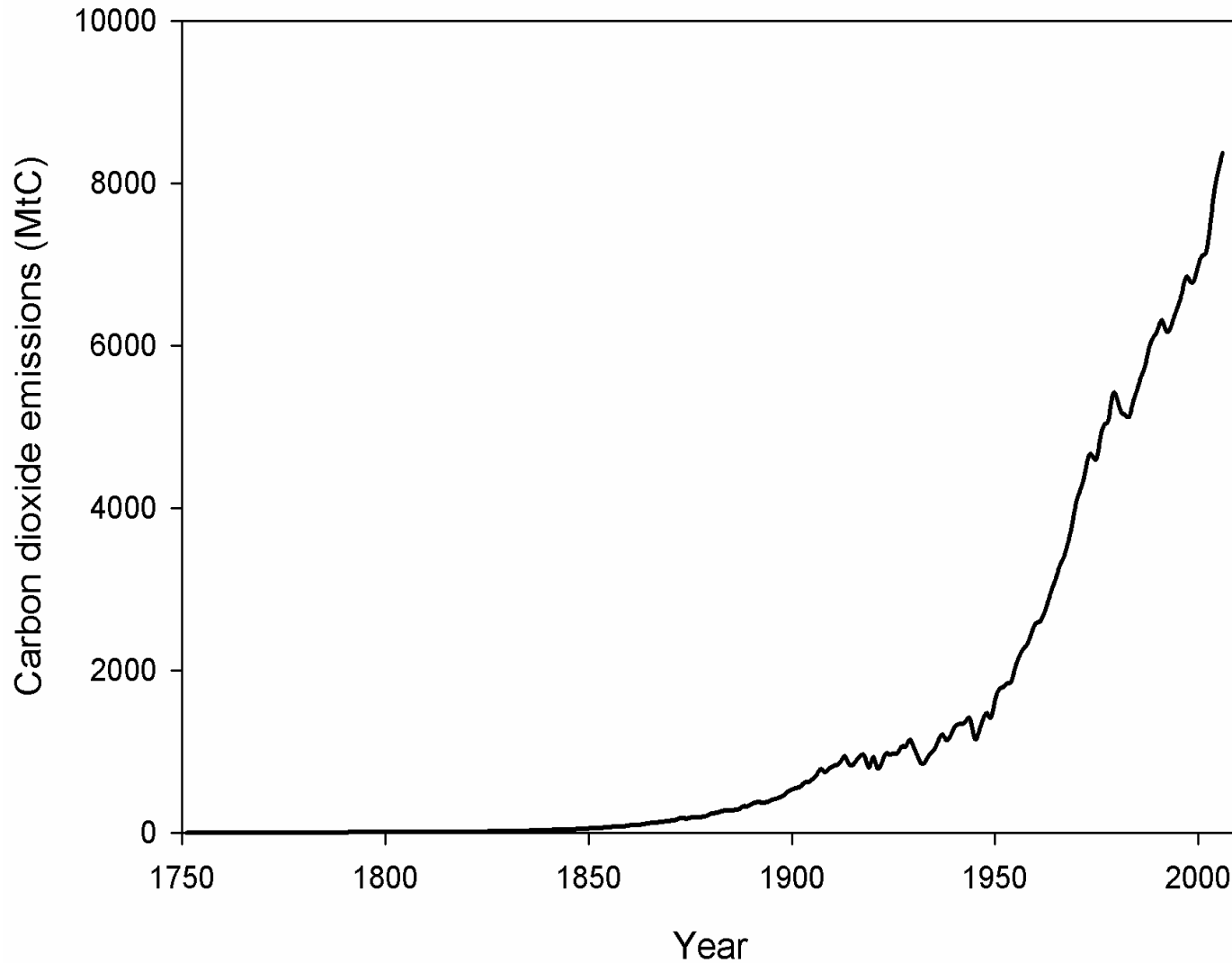


Aviation & Energy White papers of 2003 outlined conflicting objectives:

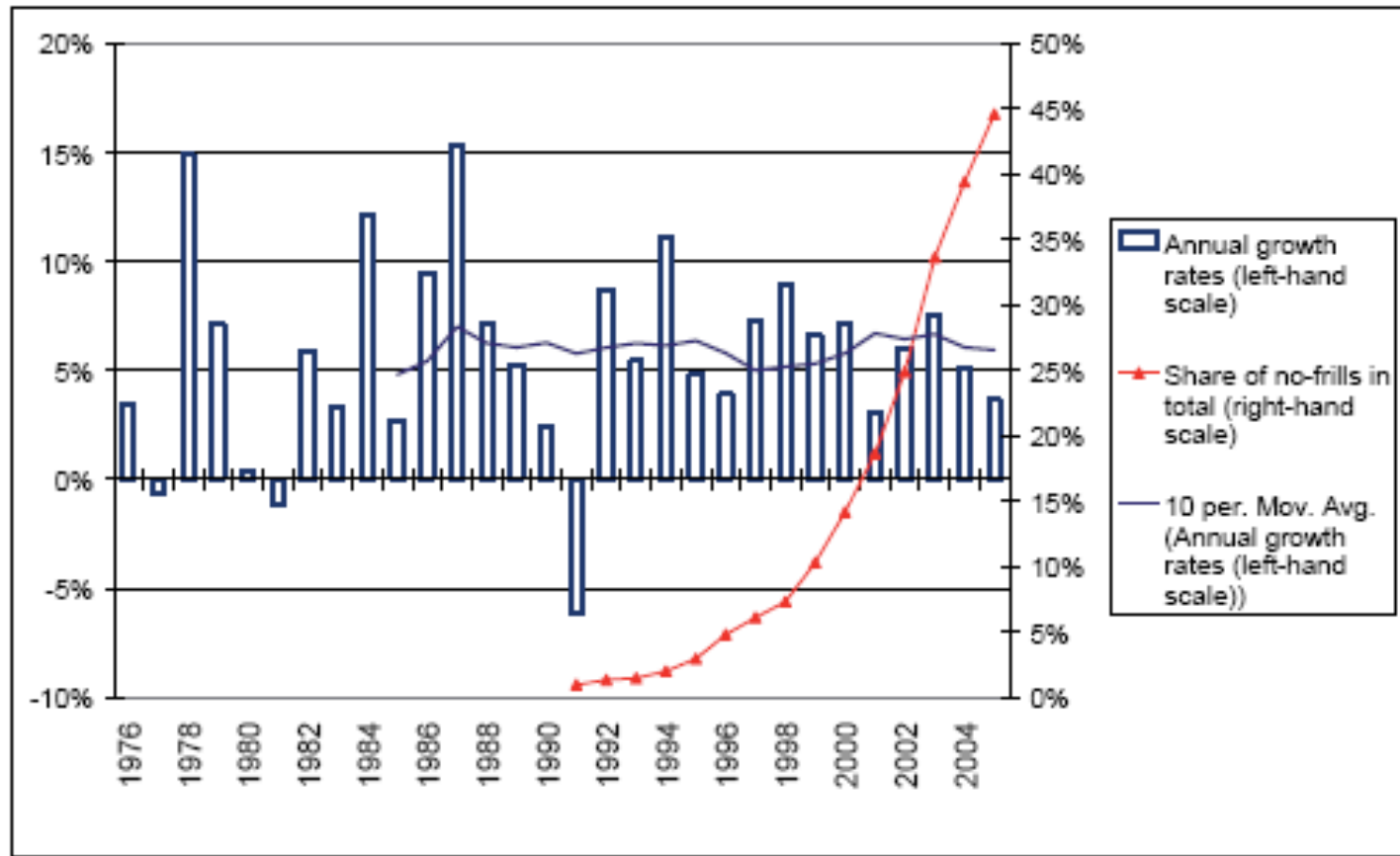
- 1) Reduce emissions by 60% by 2050 in line with a global 2°C temperature target
- 2) Expand the UK's aviation industry to meet demand

[Bows & Anderson, 2007, *Transport Policy*, **14** (2) 103-110]

Latest global CO₂ emission trends



UK to EU and UK domestic traffic (combined growth 1976-2005)



Source: CAA statistics

Aviation expansion is the result of two coupled and co-evolving processes:

Expansionary tendencies of air services provision – *growth coalition*

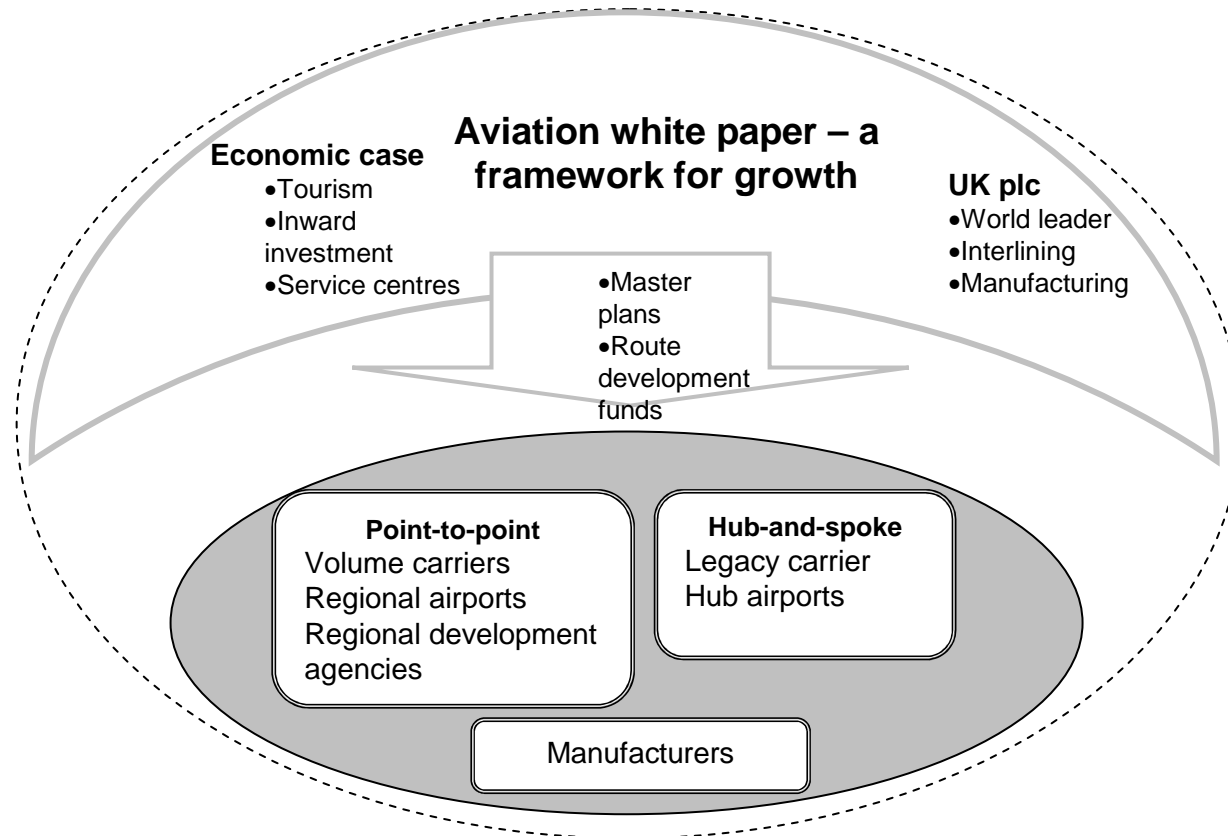
The Aviation White Paper forecasts future passenger numbers, rising from some 200 million passengers passing through UK airports in 2003 to between 400 and 600 million passengers by 2030

Changing standards of occasion which now routinely incorporate flying – *changing norms of flying*

“ you see them in the departure lounge at Gatwick or Stansted. They have no luggage, only what they are dressed in – going for a night out in Barcelona or Milan.”



The aviation growth coalition (1)



The aviation growth coalition (2)

- A coalition is a collection of organisations working together for a common purpose (to achieve the passenger numbers set out in the AWP)
 - Partnership working e.g. ACARE targets
 - Common agenda
 - Common discourse



Changing norms of flying

People don't fly for flying's sake, they fly to enable them to do something else: a holiday, a celebration, play golf.....

“It was a trip to Lapland on the 16 December, just one day, we went on a sleigh ride to see Santa.....”

Flying enables busy people to fit everything in

“You can just cram more in now . You can sit in departure lounge & think ‘in 3 hours time I will be sat in Milan.’”

**These two elements act as a ratchet,
increasing the tendency to fly**



Putting the brakes on expansion (1)

Consumer interviews revealed some possible downwards ratchets



- (dis)comfort and the flying experience

‘Theres no pleasure in the journey (train is hugely more enjoyable).’

- Upper limits

‘..feel as if I’ve got too many (trips)- it is a pressure, all that packing..’

- Environmental concern

‘It seems that climate change will be more extreme than at first thought. It’s the observations of the scientists, it matters, doesn’t it, when you think about what flying might be doing to the environment?’

Putting the brakes on expansion (2)

From an industry perspective, little alternative to growth

- Technology essential to counter the.....

‘threat to the growth in air travel that arises from its environmental impact’

- EU ETS, only supported policy

‘It is an international regulation, treats all carriers the same way (legacy and volume), drives innovation’.

‘Certainty over environmental outcomes if linked to a cap’.

‘Push pull effect so will drive innovation, and reduce demand....cost of ticket will reflect the carbon price



Conclusion



Explored aviation growth from a production-consumption approach

Aviation growth has two key elements:

economic growth coalition - *production*

changing norms of flying – *consumption*

Alignment of drivers towards growth is in conflict with wider climate change objectives

Downward ratchets may be levers for change