

Market based and policy options

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Market based/policy options

- Emission Trading
- Offsets
- Taxes
- Charges

Test: will they influence environmental performance – directly/indirectly (e.g. funding innovation)



Emissions Trading

Short term

- Planned for 2011/12
- Foreign A/L treatment
- RPK / RTK decision
- 182 m tonnes p.a.
- Impact contested

Longer term

- NOx and Contrails: non-ET solutions better?
- Greater auctioning
- Use of proceeds?
- Global ETS

- Core tool to address climate change
- No special treatment for aviation?
- Money will leave the aviation
- How strong a driver will it be?



Offsetting

Current

- Rapid growth
- Wider product range
- UK Govt Code
- Lead indicator

Future

- 400 MT pa by 2010?
 - Robust standards
 - Ratchet effect
 - More fungibility?
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- Can complement regulation
 - Has APD hike removed scope for major offset initiative?
 - A means to escape the spotlight?



Taxes

To pass the test, taxes must

- reduce demand/movements
- stimulate fleet replacement
- encourage fuel saving

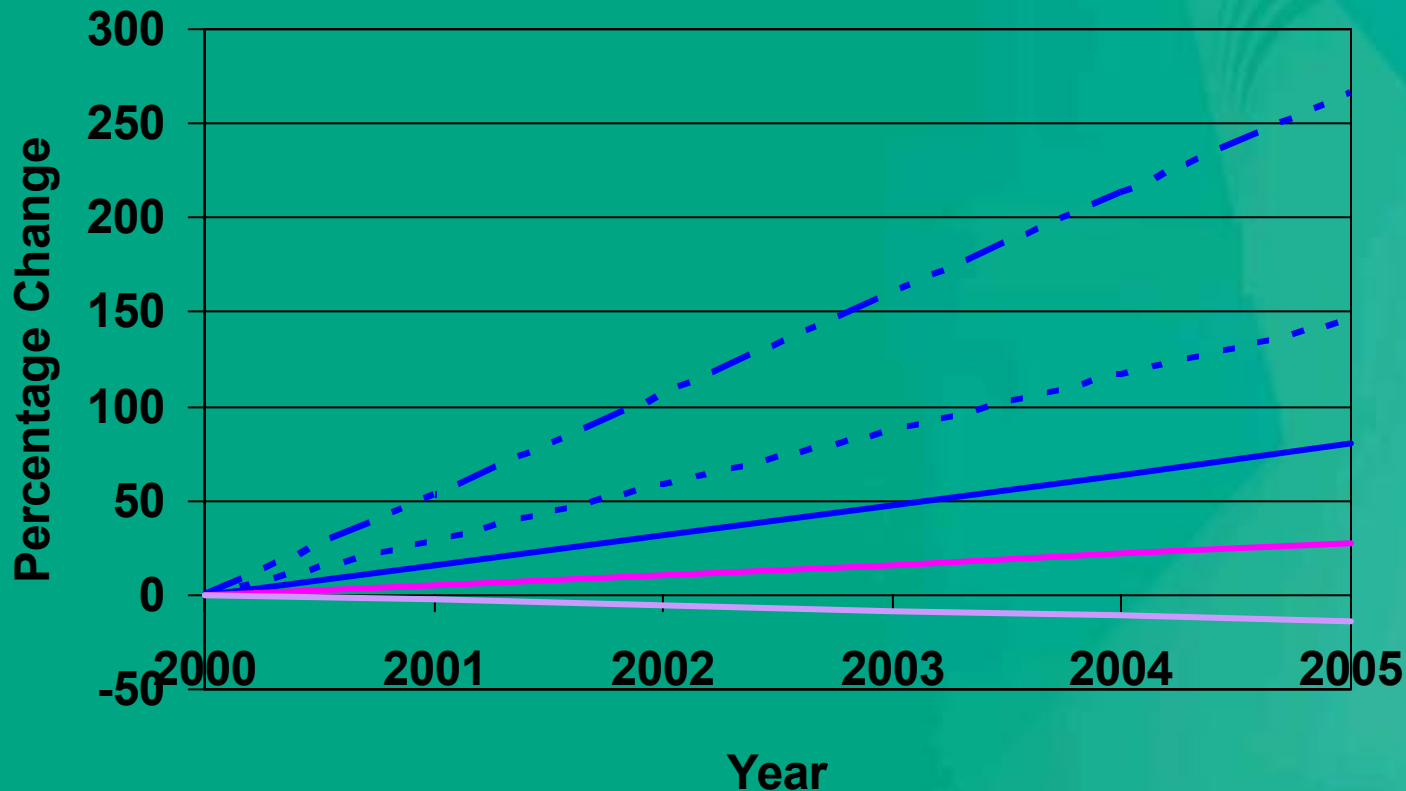


Demand management

- **Elasticity forecasts are probably only academic**
 - HMT/APD; Delft; LibDems; DfT
 - Income, not fares, may be more of a factor
- **Real world experience suggests a market highly resistant to cost-induced movement management**



US costs v flights/fares 2000-06



— Total Costs — Fuel ··· Landing Charges — Movements — Fares



Fleet/consumption impacts?

A380/787 orders flowing...

...but no short haul step change imminent

Big issue is incentive to move to next generation +1

Fuel was 12-20% of DOC; now up to 30% - largest single cost item

Fuel saving plans in place

Airlines want to glide at 600mph - further incentives unnecessary?



Conclusion

- **No evidence that taxes will work unless levied at a very high level - c.150% on fuel**
- **? impact of ultra-high taxes - regressive; investment in new technology hit**
- **Open call for market-based evidence on likely impact of taxes**
- **Can the model continue to resist tax-type pressures?**



Charges

No difference between tax/charge re aviation economics and incentives

Hypothecation could fund innovation and accelerate introduction of new technologies...

...BUT

Oil price/commercialisation strategies are more important drivers of timing/willingness

Clean Sky: why have a charge if taxes are already paying for this?

Should we rob Peter to pay Paul?



Regulation – a better solution?

Backstop to ETS: turn ACARE targets to standards - non-compliant operators could face ETS permit cost penalty from 2025-30.

? rolling EU-wide ban on older aircraft

NOx in ETS by ?2018. Could this + ACARE compliance turn more efficient carriers from net purchasers to sellers of permits?

Turn ICAO NOx standard to a CO₂/NOx standard

?use ETS permit revenues for development funding; early depreciation write-off allowances.



Conclusions

- **Achievement of greatest environmental benefit at least cost**
- **Emissions trading to play significant role**
- **Impact of funds flowing out of aviation**
- **Scope for more incentives / greater use of regulation / more hypothecation?**
- **Scope for offsetting to reduce short term pressure?**

