

“Should we all be flying?”

Air transport, climate change and corporate jets

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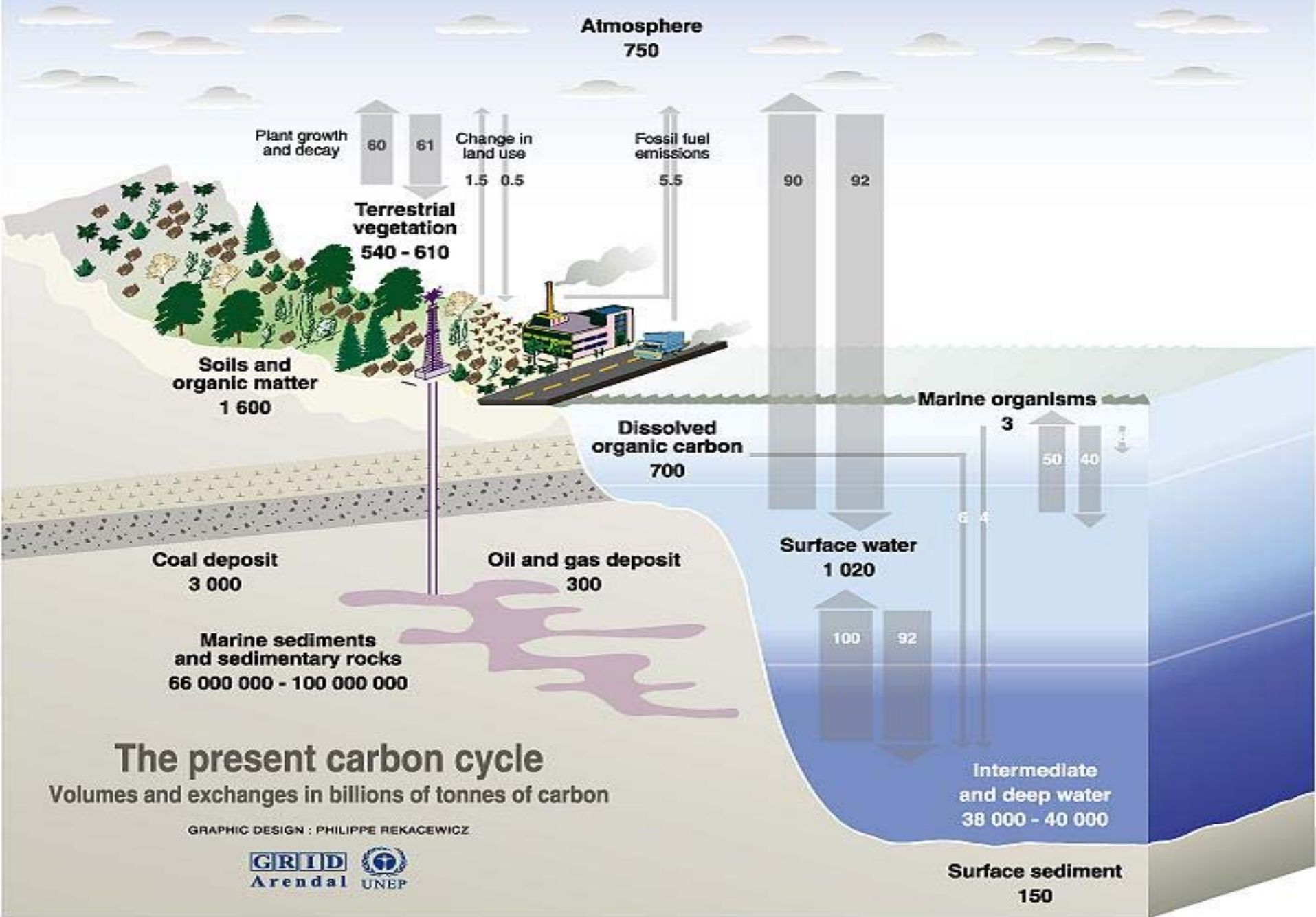
EUACA seminar, Amsterdam, 30th September 2009

FRIDAY
WEST END FINAL
**BROWN'S
CRUSHING
BY-ELECTION
BLOW**

 Evening
Standard

FRIDAY
**QUEEN
HIT BY
CREDIT
CRUNCH**

 Evening
Standard



The present carbon cycle

Volumes and exchanges in billions of tonnes of carbon

GRAPHIC DESIGN : PHILIPPE REKACEWICZ

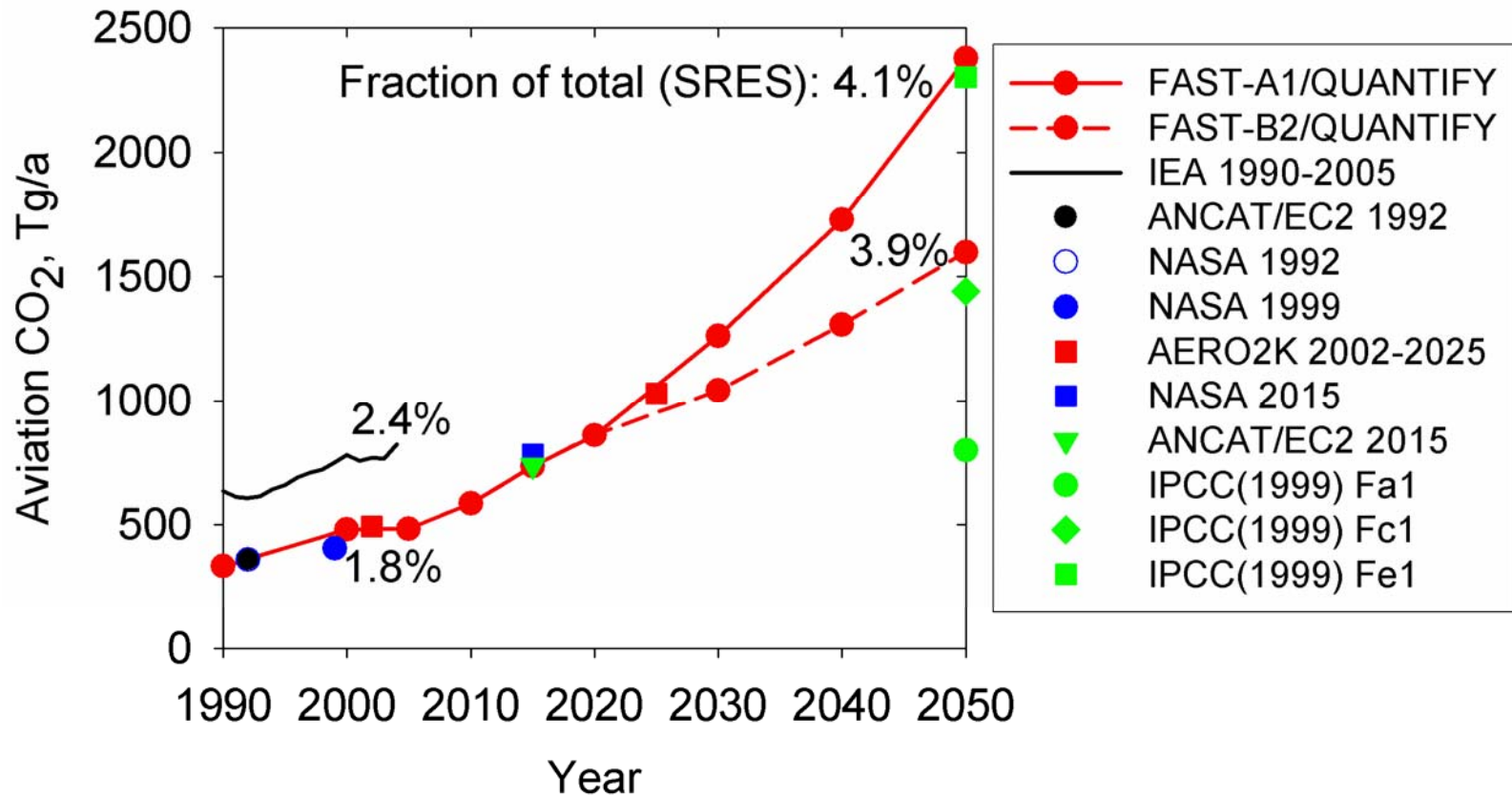


Sources: Center for climatic research, Institute for environmental studies, university of Wisconsin at Madison; Okanagan university college in Canada, Department of geography; World Watch, November-December 1998; Climate change 1995, The science of climate change, contribution of working group 1 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge press university, 1996.

Barcelona, 13th May 2008



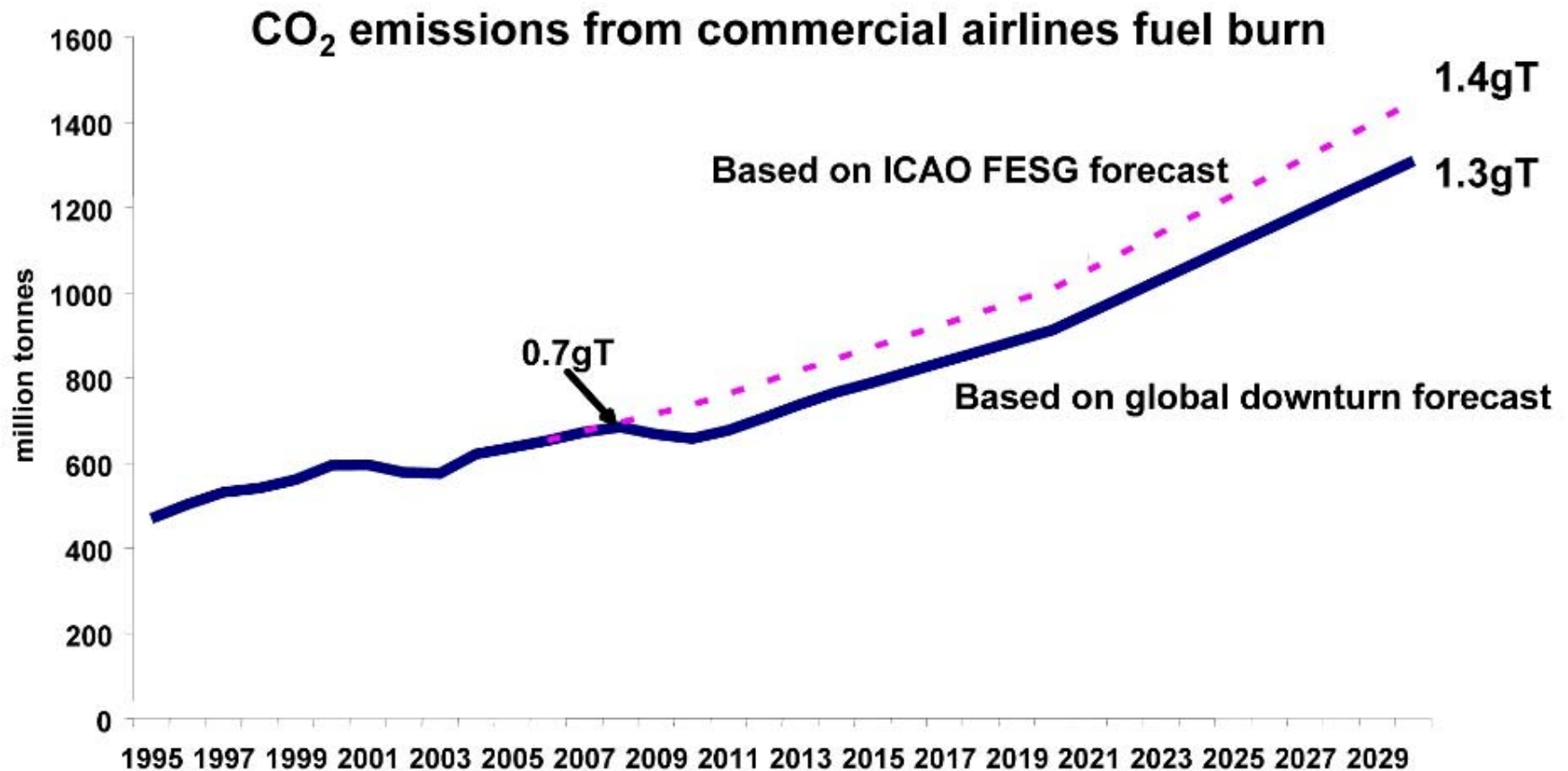
Current and projected aviation CO₂ emissions



Forecast global aviation CO₂ emissions
from regulator databases:

2005	610.637
2010	776.612
2015	991.101
2020	1088.886
2025	1228.934

CO₂ Emissions Forecast To Grow





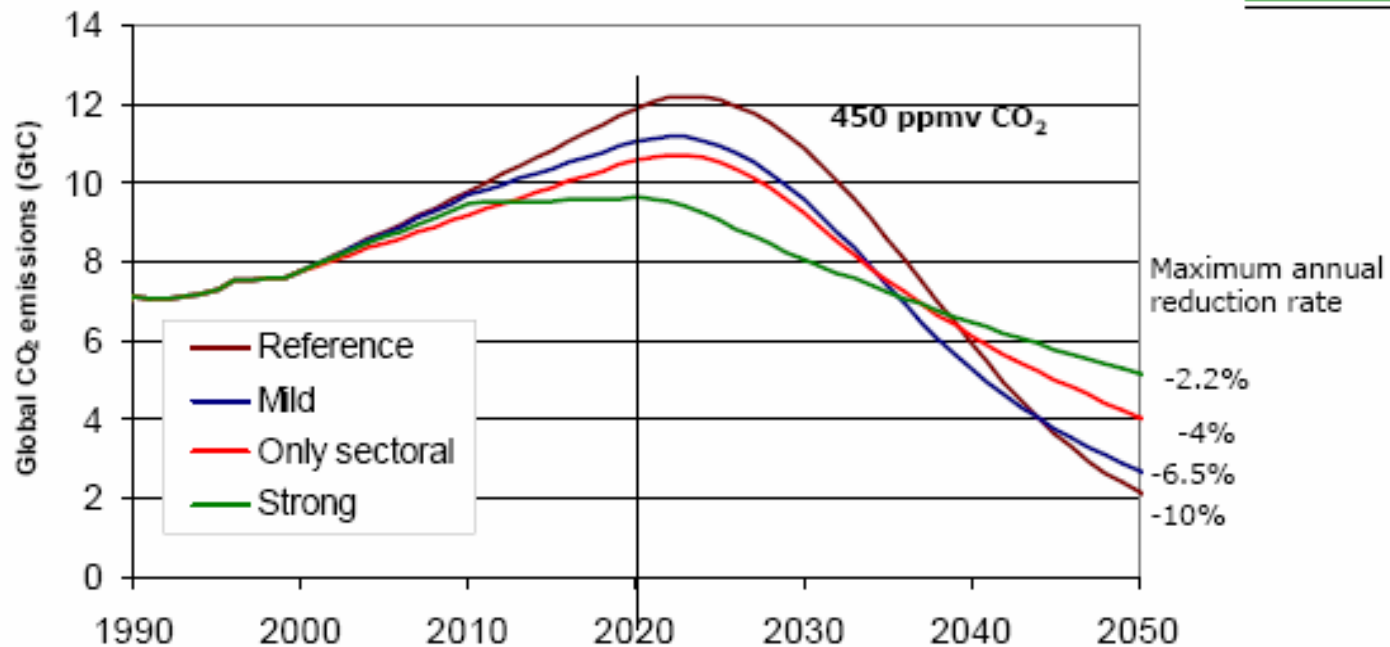


Impact of CO₂ from flying?

The present-day radiative forcing from aviation (2005) is estimated to be 55 mW m⁻² (excluding cirrus cloud enhancement), which represents some 3.5% (range 1.3–10%, 90% likelihood range) of current anthropogenic forcing, or 78 mW m⁻² including cirrus cloud enhancement, representing 4.9% of current forcing (range 2–14%, 90% likelihood range).

According to two SRES-compatible scenarios, future forcings may increase by factors of 3–4 over 2000 levels, in 2050. The effects of aviation emissions of CO₂ on global mean surface temperature last for many hundreds of years (in common with other sources), whilst its non-CO₂ effects on temperature last for decades.

Sector Proposal Can Keep World on Track in 2020 to Achieve 450 - 500 ppm by 2050



Global emission levels necessary to stay below 450 ppmv CO₂ concentration assuming that all greenhouse gases are reduced in the same proportion and that the global trend cannot change by faster than 0.5 percentage points per year using the MAGICC model. For 550 ppmv the difference between the cases is less pronounced (maximum annual reduction rate of 0.6%, 0.9%, 0.9%, 1% for immediate reductions after 2020)

Corporate aviation?

- Probably 1% of aviation emissions?
- How many flights? How many passenger carrying? How many positioning?
- How many passengers per flight and overall?
- Destinations? Distances?
- Vital business tool versus ego-driven vanity status symbol?

Conclusions

- Demand management & behavioural change screamingly urgent!
- Aim to stabilise growth at 1-2% p.a. in line with fuel efficiency claims
- Tough technology & operational goals, not greenwash, with independent monitoring
- 2030 & 2050 sectoral forecasts of emissions reductions and share - where are we going?

www.ditchthosebizjets.org

Pop stars, royalty, fat cats, heads of state,
racing drivers, jockeys, lottery winners
...and all those ordinary folk too!

