



Aviation and Climate Change

UNFCCC Accra Climate Change Talks 2008
August 2008

Aviation - a key part of the global village

- Aviation provides a safe, global mass transit system
- We connect people and bring goods to markets
- Aviation supports:
 - US\$3.5 trillion in economic activity
 - 32 million jobs



And a small part of climate impact

- Air traffic grows at 5% per year
 - Its emissions are growing at 3%
- Aviation contributes 2% to global carbon emissions
 - Growing to 3% by 2050 (IPCC)
- Growing footprint is not acceptable



Our vision

- Is for carbon neutral growth
- Leading to a zero carbon emissions future
- We can only achieve this with cross-industry cooperation
 - Including government
- ICAO is best equipped to facilitate this





IATA Four Pillar Strategy

➤ **Technology**

- Cleaner airframes, engines and fuels

➤ **Aircraft operations**

- Achieve maximum efficiency & minimum weight

➤ **Infrastructure**

- Improve air & ground traffic management

➤ **Economic instruments**

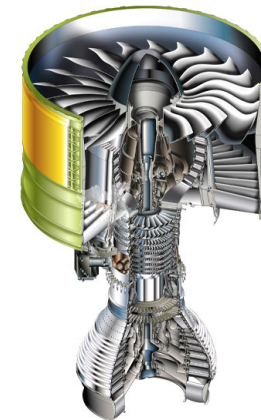
- Support technology
- Mitigate emissions



Pillar 1: Technology

➤ Aircraft

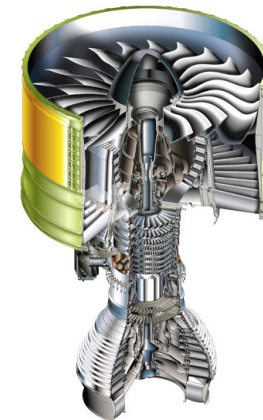
- **Short Term:** aircraft upgrades
- **Medium Term:** new aircraft and engines
- **Longer Term:** radical new aircraft design
- **IATA target** is for 25% lower carbon intensity by 2020 compared to 2005



Pillar 1: Technology

✈ Aircraft

- ✈ **Short Term:** aircraft upgrades
- ✈ **Medium Term:** new aircraft and engines
- ✈ **Longer Term:** radical new aircraft design
- ✈ **IATA target** is for 25% lower carbon intensity by 2020 compared to 2005



✈ Alternative fuels

- ✈ Safe & sustainable
- ✈ Available & affordable
- ✈ **IATA target** is for 10% alternative fuel by 2017



Pillar 2: Operations

- In 2007 IATA Green Teams saved airlines and the environment 7 million tonnes CO₂
- How? For example through
 - Better flight planning
 - Better fuel planning
 - Weight reduction
- Following ICAO Guidance
 - Circular 303



Pillar 3: Infrastructure

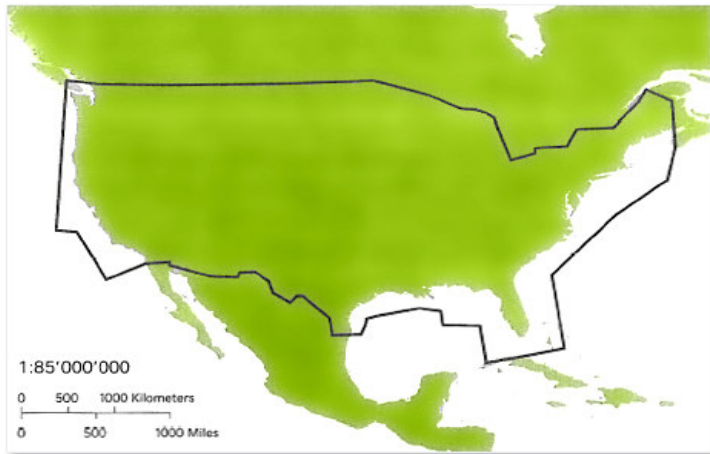
- Efficient Air Traffic Management cuts CO₂
- 395 routes shortened in 2007
- **“IATA 1”**
 - Saves 15 minutes
 - and 84,000 tonnes of CO₂ per year
- **“Olympic Bypass”**
 - Saves 60 miles
 - And 83,000 tonnes of CO₂ per year



Pillar 3: Infrastructure

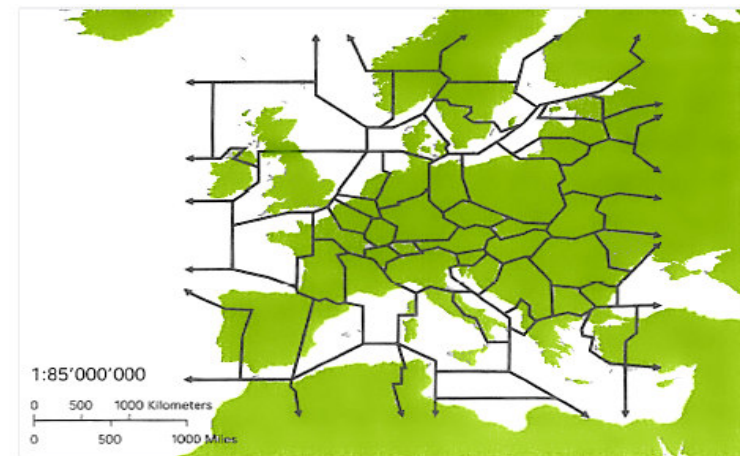
➤ US

➤ Next Gen



➤ Europe

➤ SESAR

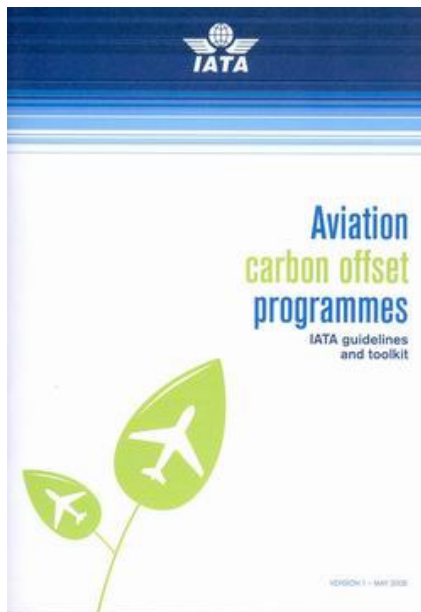


Pillar 4: Economic measures



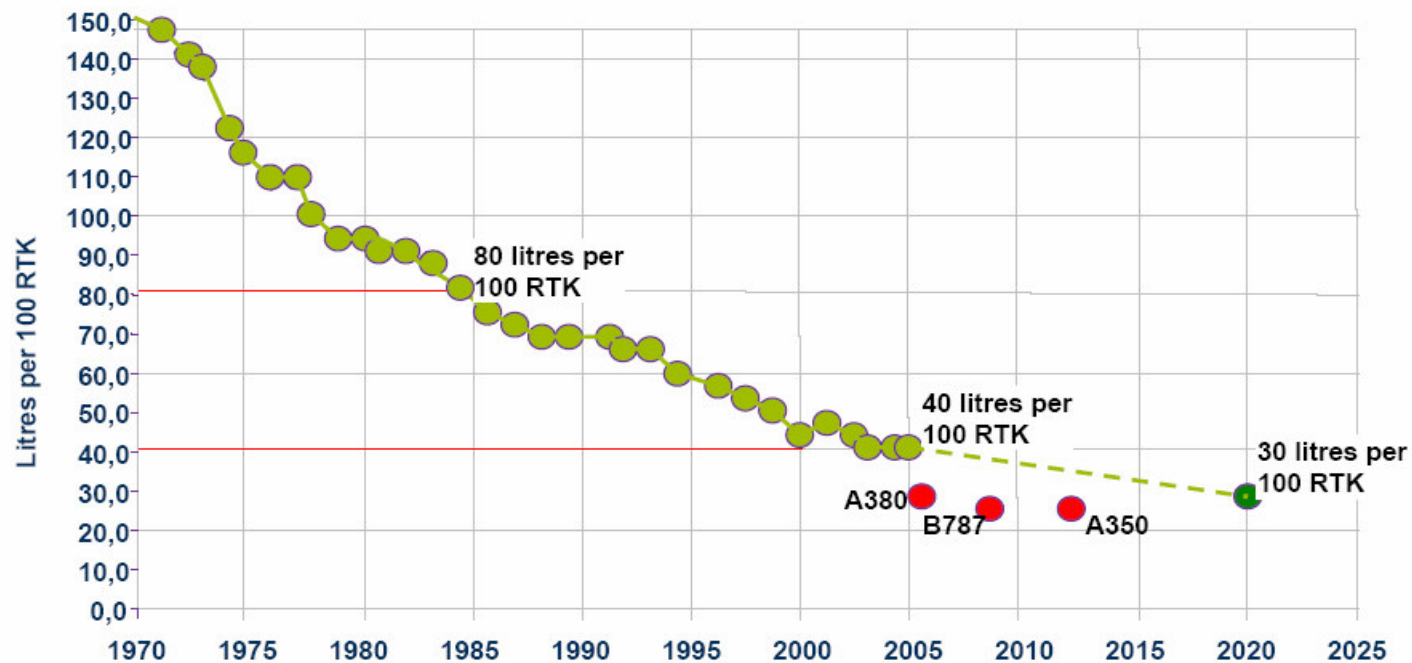
- More carrot – less stick
- Innovative solutions to accelerate clean technology development and fleet renewal
- Emissions trading could play a role
 - If designed properly, through ICAO
- Carbon offsets should be part of the solution
 - Can deliver real benefits
 - Especially via REDD projects

Pillar 4: Economic measures



- Aviation fuel bill for 2008 could be \$190 bn
 - The largest economic incentive possible
- Taxes do not reduce emissions
 - But take away cash that is needed to invest in cleaner aircraft and technologies
- Emissions trading could play a role
 - If coordinated through ICAO
- Carbon offsets should be part of the solution
 - Can deliver real benefits
 - Especially via REDD projects

Continuous improvement



Cooperation is crucial



Governments



Air Navigation
Service Providers



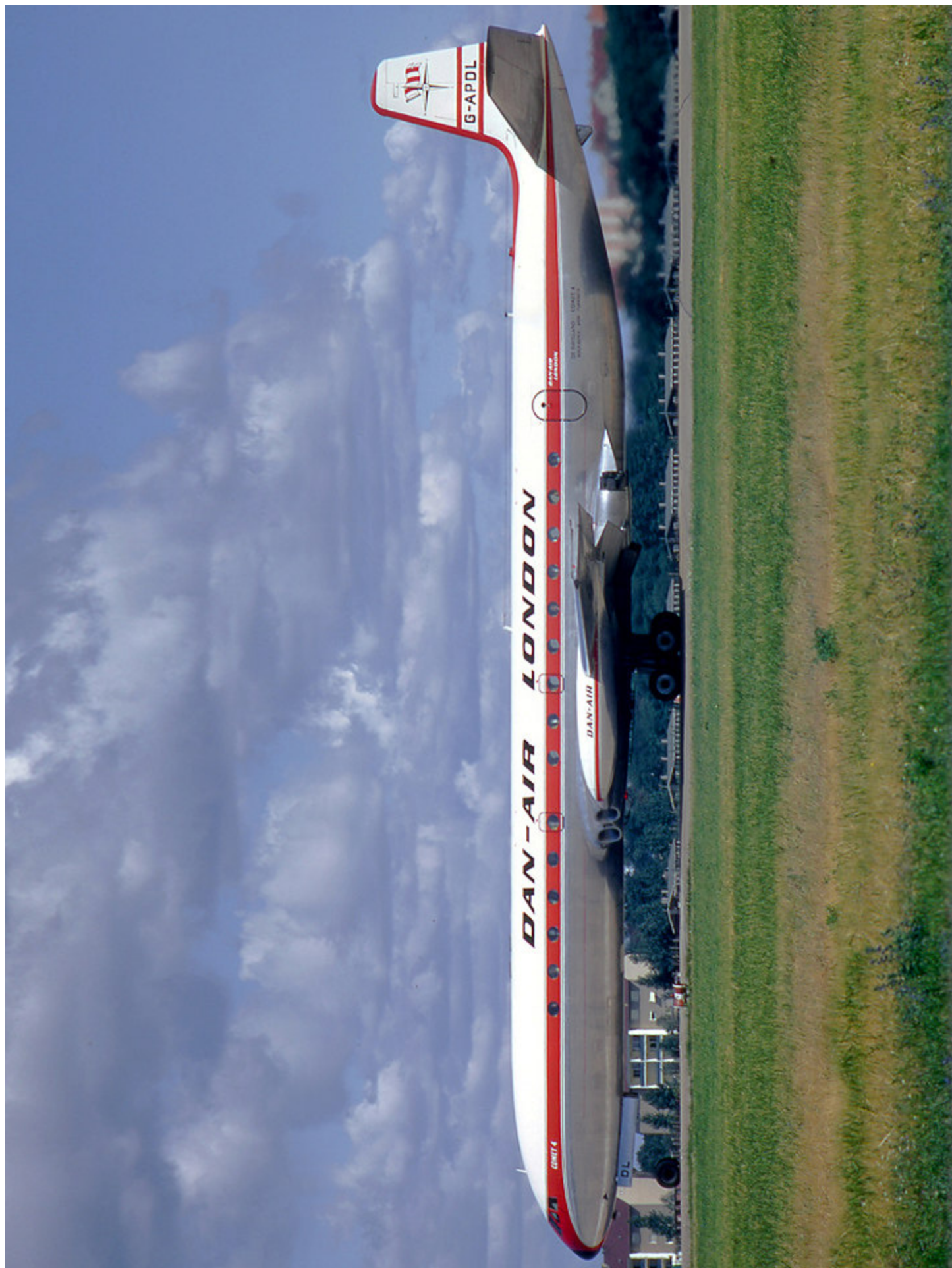
Aircraft & engine
makers



Aircraft buyers &
operators









**We are a global mass
transit system
safely transporting
2.2 billion
passengers
annually**

Air transport was
built by turning
dreams into
reality

and turning
challenges
into
opportunities



Anything is possible



even zero carbon-emission flight!



Aviation and Climate Change

Thank you

Andreas Hardeman
IATA Aviation & Environment
hardemana@iata.org