

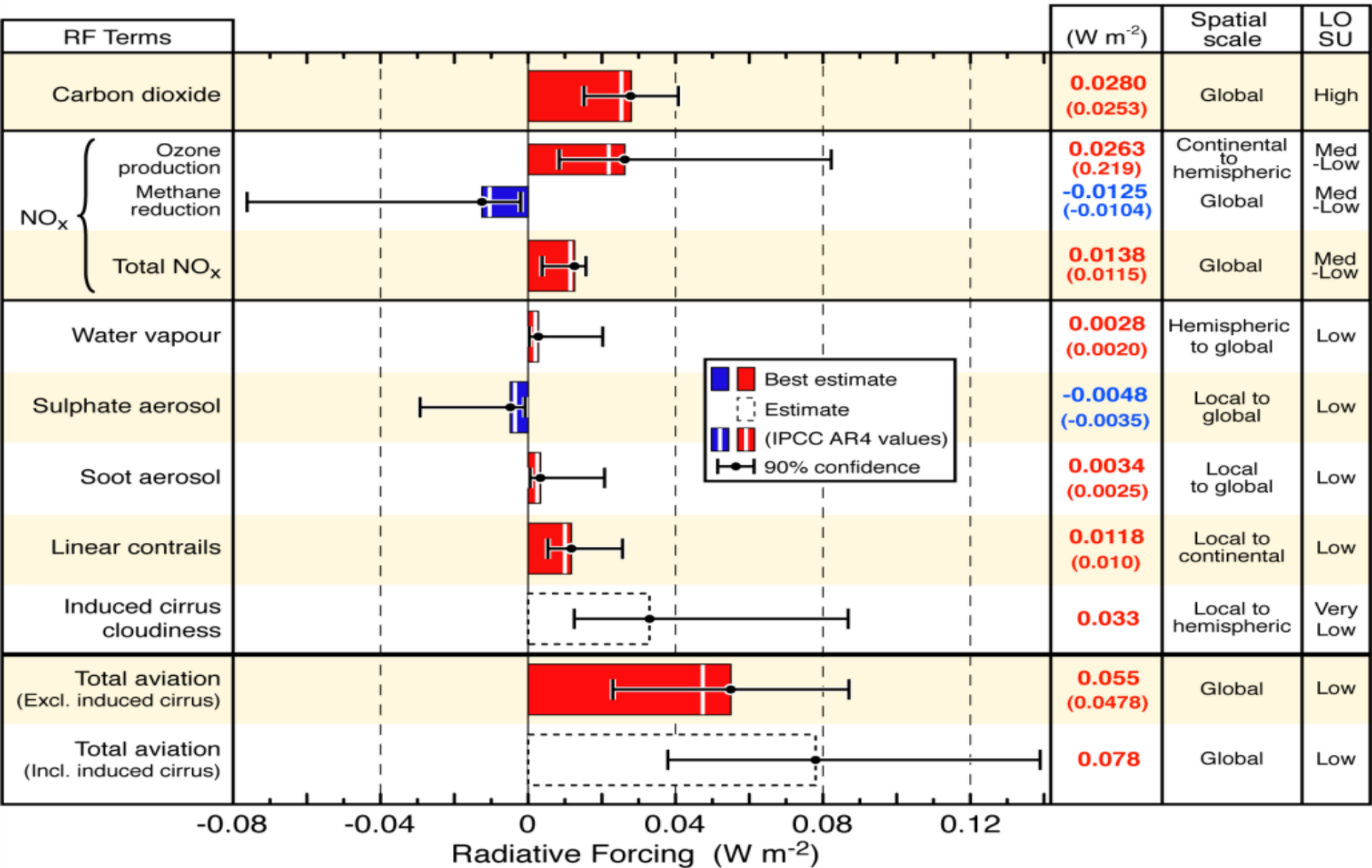
# Aviation and Offsets:

## The future of aviation climate action?

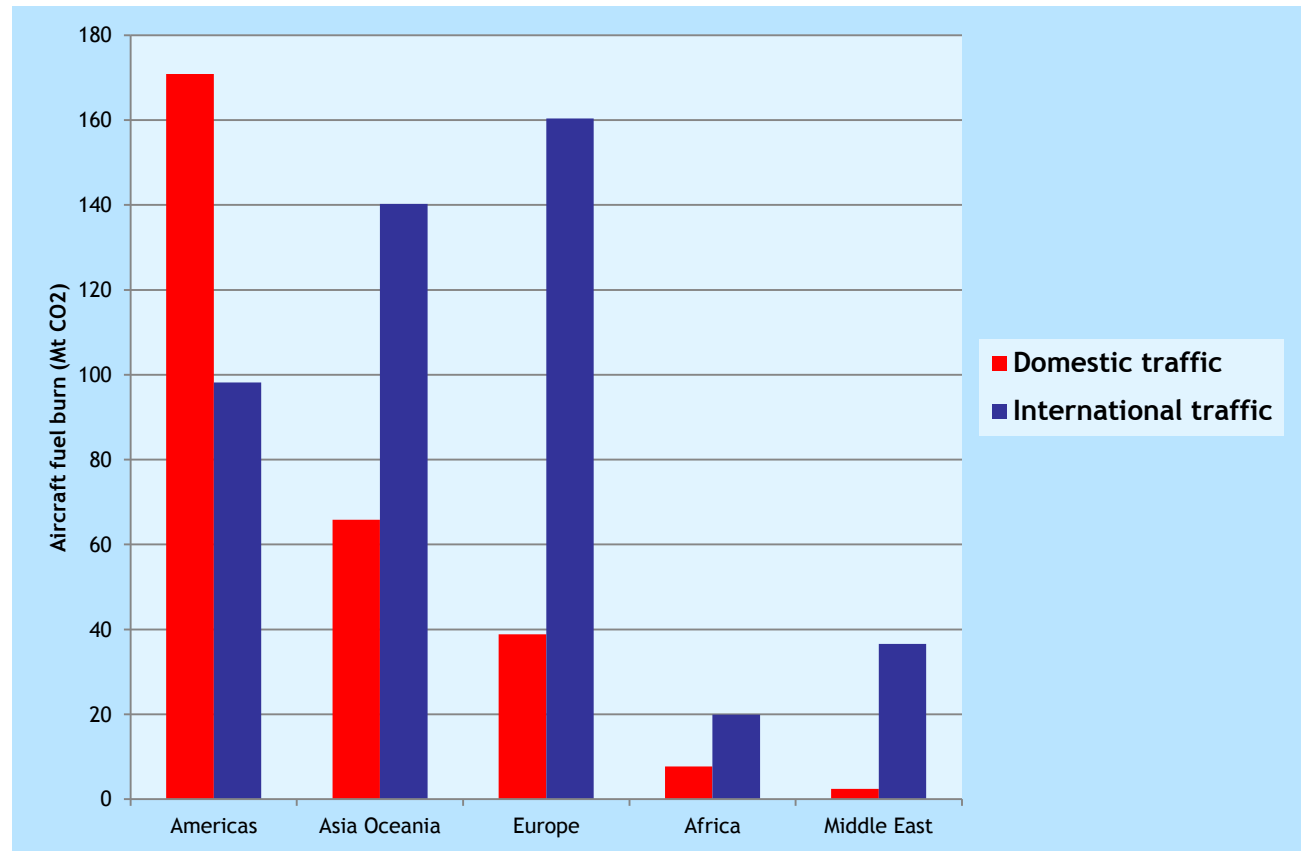
**Aoife O'Leary**

**July 2013**

# Aviation Radiative Forcing 5% of Global

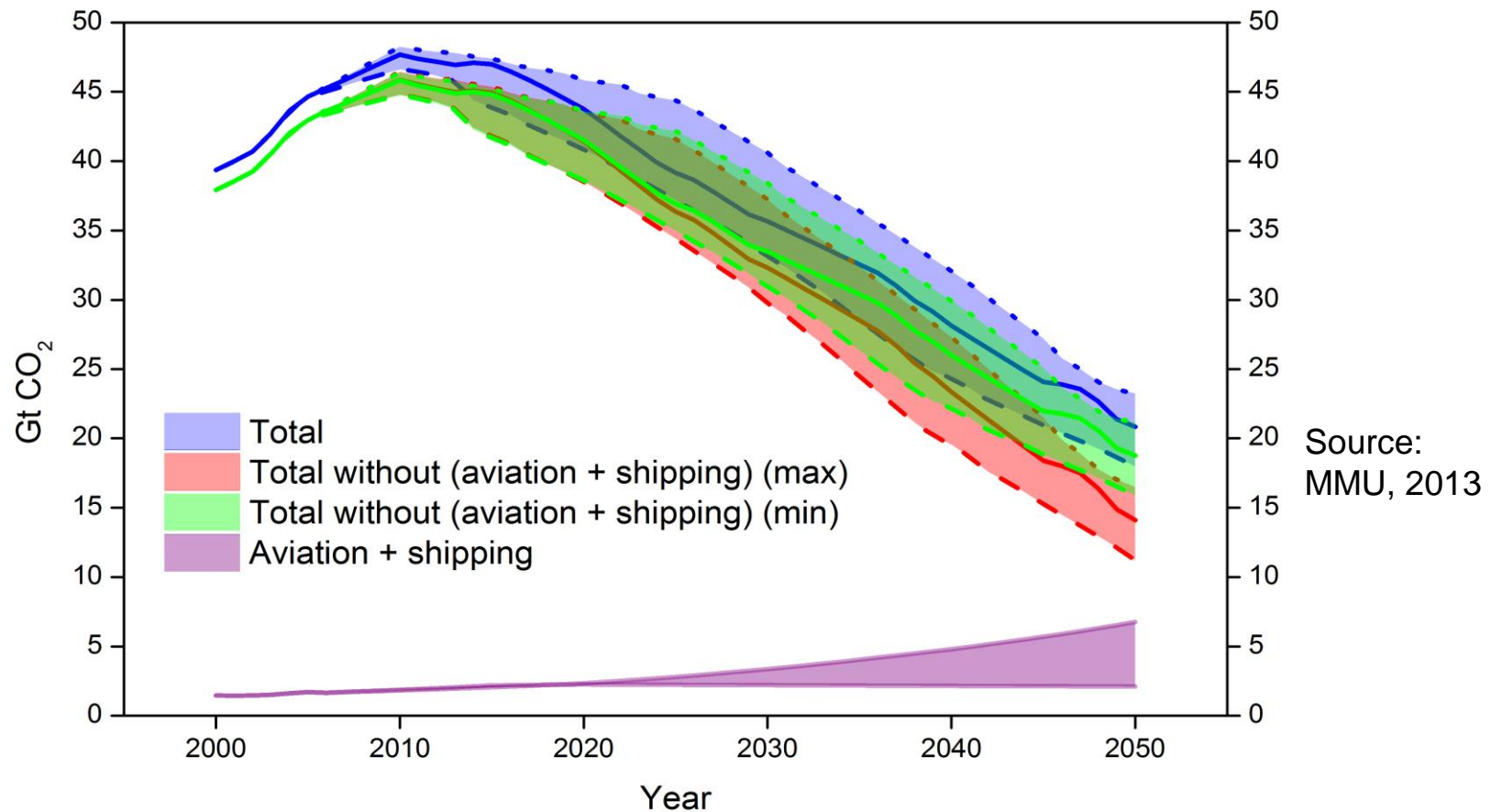


# International and Domestic Aviation Fuel Burn by Region in 2010

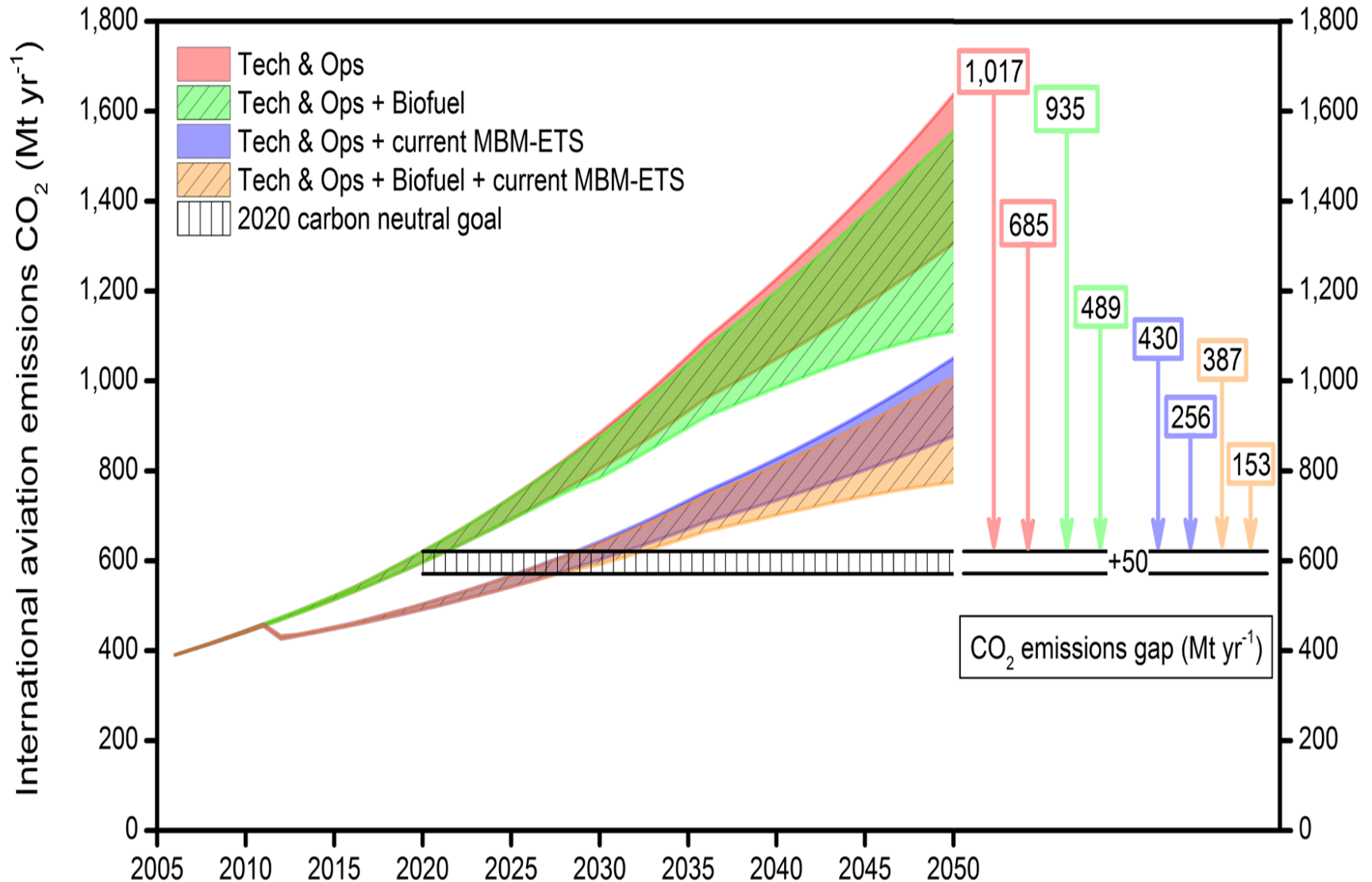


Source: IEA, 2012a; IEA, 2012b

# Under a 2°C emissions pathway, without a MBM, aviation could account for 4-15% of total median CO<sub>2</sub> equivalent emissions



# David Lee 2013: Carbon Neutral Growth 2020 Gap



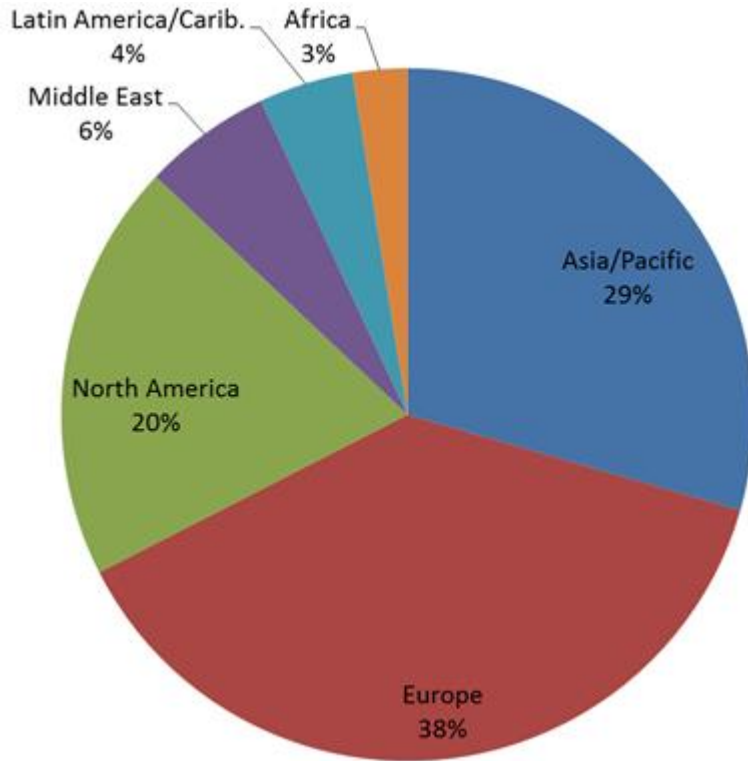
# Top 20 Aviation Emitters in 2009

(non-Annex I in red)

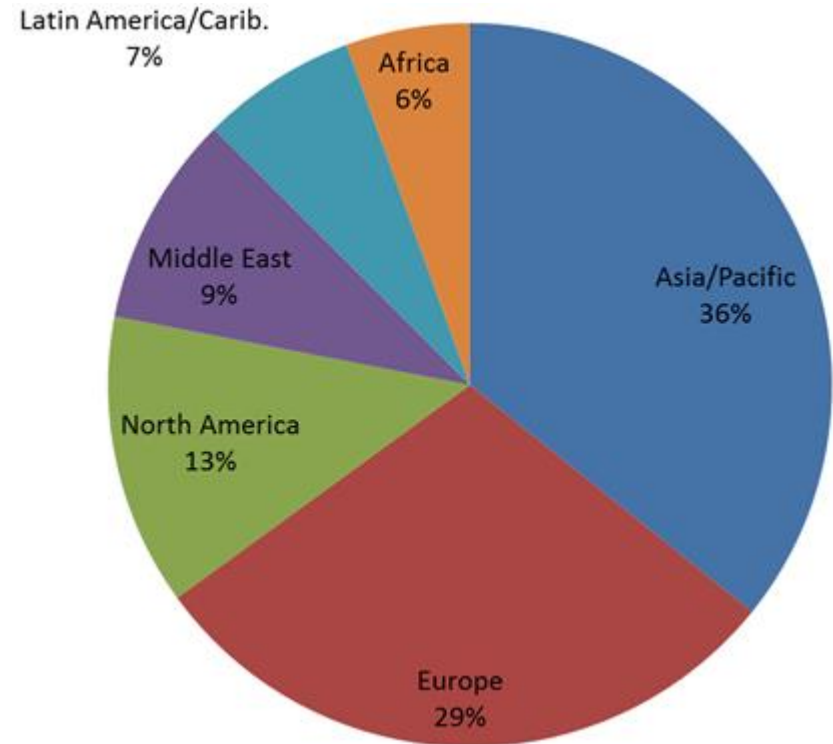
Ranking	Country	% Share in 2009
1	USA	15.14
2	China	8.02
3	Germany	7.31
4	UK	6.34
5	UAE	6.08
6	France	4.78
7	Korea	4.34
8	Netherlands	3.65
9	Singapore	3.61
10	Japan	3.53

Ranking	Country	% Share in 2009
11	Ireland	2.23
12	Canada	1.93
13	Australia	1.93
14	Thailand	1.82
15	Spain	1.77
16	Qatar	1.56
17	Malaysia	1.46
18	Russia	1.44
19	India	1.42
20	Turkey	1.35

# Past and Future by Region



1974 to 2009



2020 to 2050

# ICAO History of Inaction

- 1996: ICAO first considers climate impact of aviation
- 1997: Kyoto Protocol gives ICAO the task of reducing/limiting emissions
- 2008: 11 years of inaction in ICAO: EU includes aviation in EU ETS
- 2010: ICAO Assembly adopts guiding principles for a MBM and development by 2013 of a Framework
- 2013 (June): IATA (industry body) says it wants global offsetting
- 2013 (Sept): ICAO Assembly (only every 3 years)



# Current ICAO Deadlock

- Three options for MBMs on the table:
  - Offsetting
  - Offsetting plus a revenue generation mechanism
  - A cap and trade emissions trading system
- Non-MBM Measures
- Ticket Taxes in Member States

# Country Positions

- India & BRICS say no need for developing countries to act
- Very little support for revenue generating option
- No discussion on targets in HGCC (though CNG adopted by default), options, allocation
- Re Framework: US declared support for airspace as geographic scope; explicit acknowledgment that it is environmentally ineffective
- Countries like Singapore, Gulf States jump on bandwagon i.e. these countries probably won't be helpful

# Challenges for a Global Deal

- First time developing countries take on a reduction target = UNFCCC precedents?
- If offset regime, first time developing country entities buy offsets – from themselves?
- Aviation wants to be given unlimited licence to grow – alien concept in UNFCCC
- The biggest and fastest growing aviation market is China
- Setting up a registry and ETS is costly, especially for developing countries

# Discussion

- Given the weak target (unlimited licence to grow) how much pressure can we put on higher targets, and if so when?
- What can additional incentives for in-sector reductions and non-market based basket of measures do?
- Do we agree that emissions trading has advantages over offsetting?
- For regions where ETS is too complex to set up, would a dual approach using both ETS in some places and offsetting in others work?
- At what level do we address quality?