Mitigating emissions from International Aviation

the question of historical responsibility

June 2013



Historical responsibility in aviation

China IACO State Action Plan Aviation wasn't around in 1850

"International air transport in developed states enjoys a longer history, a larger marketshare worldwide and stable growth. Due to the historical contribution of their international aviation to global climate change, developed countries must shoulder their responsibility for their accumulative historical emissions and the current high level of per capita emissions"

Top historical emitters from 1850 include China, India, Brazil, South Africa Top 20 historical aviation emitters; China, Singapore, R Korea, UAE, Thailand, Malaysia, Brazil first flight 1903. first airline KLM 1919 First large jet Boeing 707 1960 first intercon Jet Boeing 747 1970 mass airtravel only took off in 1970 no country emissions data before 1990 ICAO 2010 RTK by country 1974-2009

Cum Int RTK 1974-2009 % Total 1USA 17.04% 2UK 8.29% 6.72%

5.67%

5.04%

4.40%

4.23%

4.07%

4.05%

2.55%

2.24%

1.92%

1.85%

1.81%

1.64%

1.61%

1.45%

1.23%

1.19%

1.09%

3Germany

4Japan

5France

6China

7Singapore 8Netherlands

9R of Korea 10Australia

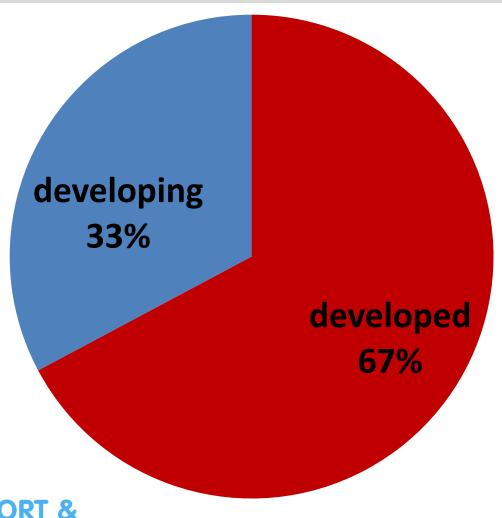
11Canada **12United Arab Emirates**

20Scandinavia

13Thailand 14 Italy 15 Switzerland

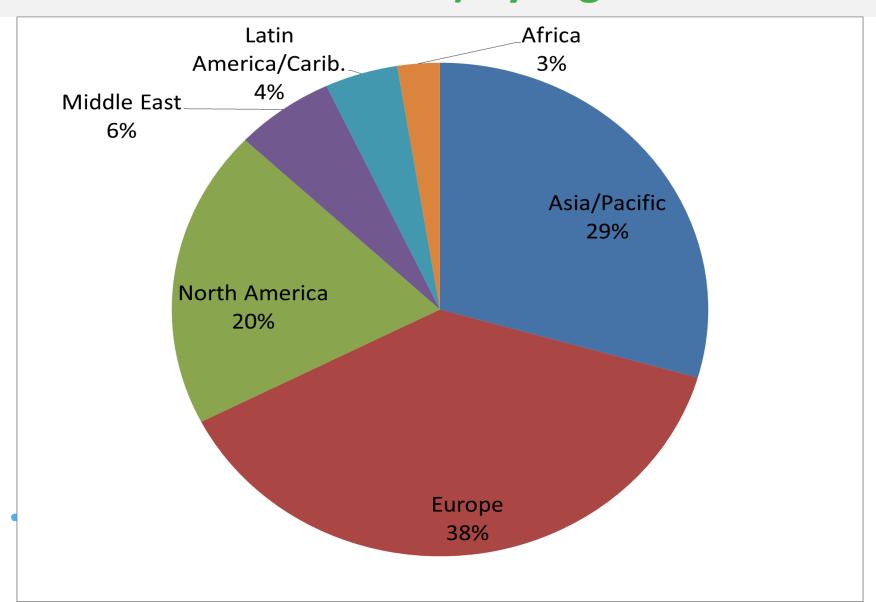
16Spain 17 Malaysia **18 Russian Fed** 19Brazil

Cumulative International Aviation Traffic (1974 to 2009 RTK)

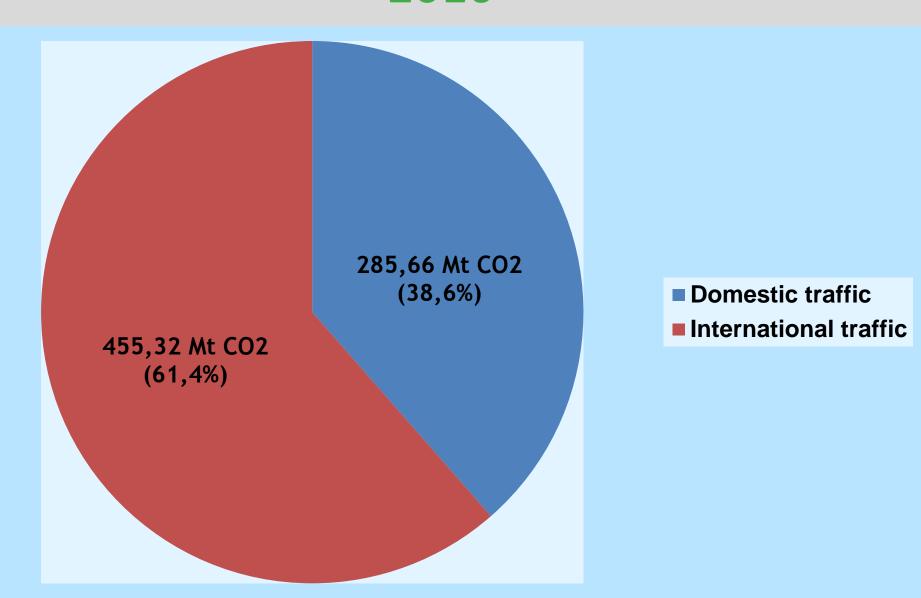




Cumulative International Aviation Traffic (1974 to 2009 RTK) by region



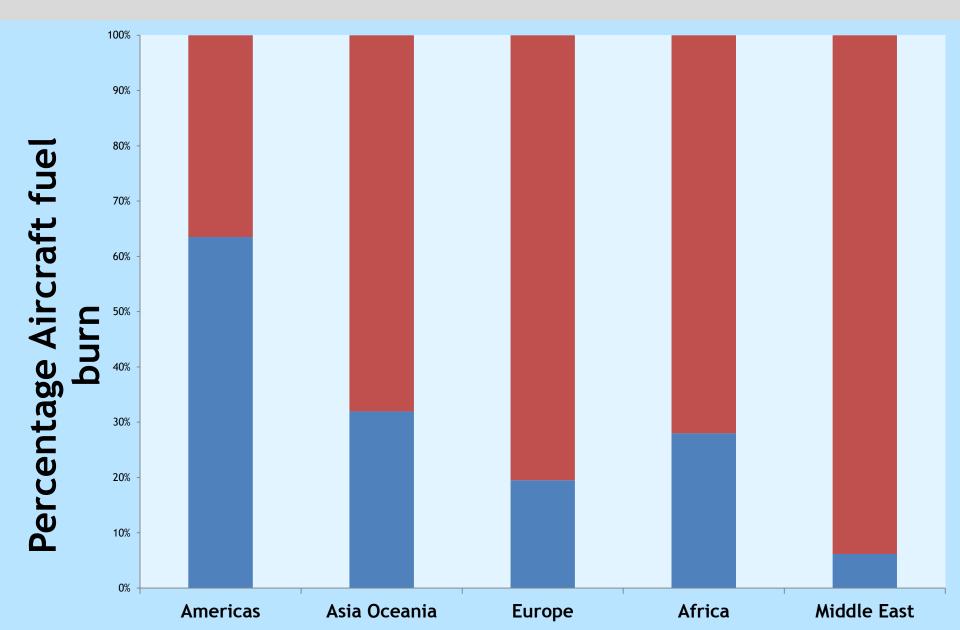
Int Domestic and International Fuel Burn 2010



Global Aviation Emissions 2010 by region



Fuel Burn by Region; 2010



Cumulative fuel burn by region 2020 to 2050

