

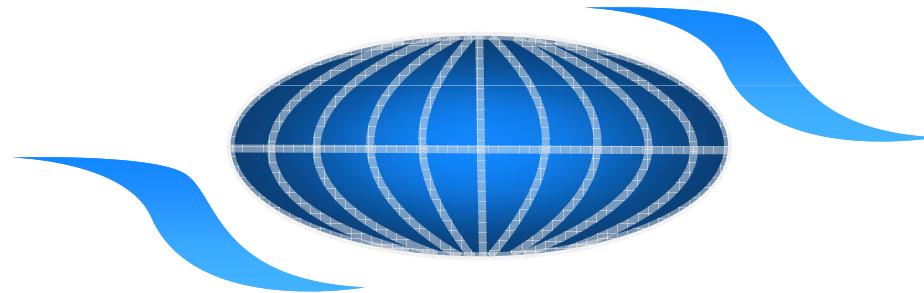


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ICAO: UNITING AVIATION ON CLIMATE CHANGE

ICAO Colloquium on Aviation and Climate Change

Adaptation and inter-agency co-ordination: a tourism perspective



**Chris Lyle, Representative of the World
Tourism Organization (UNWTO) to ICAO**

Montréal, 13 May 2010

A photograph of a ski slope. The foreground and middle ground are covered in a thin layer of snow, with patches of brown grass visible. In the background, a dense forest of evergreen trees covers a hillside under a clear blue sky. The word "Adaptation" is written in green text across the upper part of the image.

Adaptation

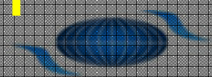
Climate change is NOT an abstract concept
for tourism



Tourism and climate change adaptation

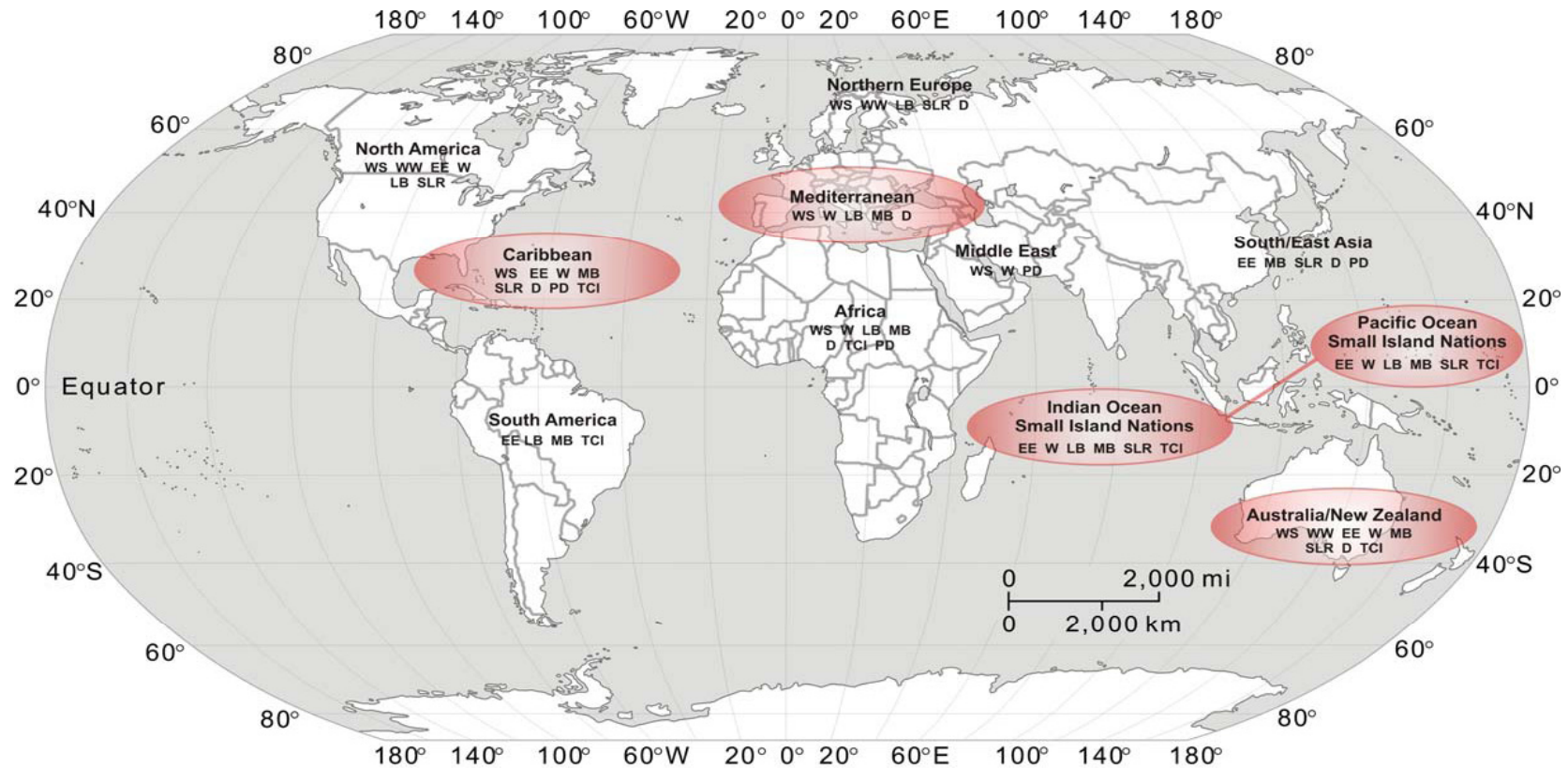
- Direct impacts (winter sports holidays, sun-and-sea destinations, infrastructural damage, higher operating expenses, etc)
- Indirect environmental change impacts (water availability, biodiversity loss, coastal erosion, etc)
- Impacts of mitigation policies on tourism mobility (changing travel patterns)
- Indirect societal change impacts (negative repercussions on climate change security hotspots)

Adaptation is ALREADY UNDERWAY





Major climate change impacts affecting tourism destinations



WS = warmer summers	LB = land biodiversity loss	D = increase in disease outbreaks
WW = warmer winters	MB = marine biodiversity loss	TCI = travel cost increase from mitigation policy
EE = increase in extreme events	W = water scarcity	
SLR = sea level rise	PD = political destabilization	





Aviation and climate change adaptation

- Passenger mobility (changing travel patterns, cf tourism)
- Operational safety impacts (more frequent hostile weather, more intense weather systems, etc)
- Infrastructural impacts (low-lying airports, etc)

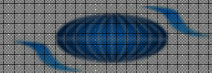




Tourism and climate change

- Increasing intensity in requirements for **adaptation** is correlated with increasing potential for climate destabilization and hence with the need for **mitigation**
- Even the most aggressive **mitigation** efforts will not eliminate the need for substantial **adaptation**

Tourism is thus focused both on **adaptation** and on **mitigation** from a sectoral as well as a global perspective





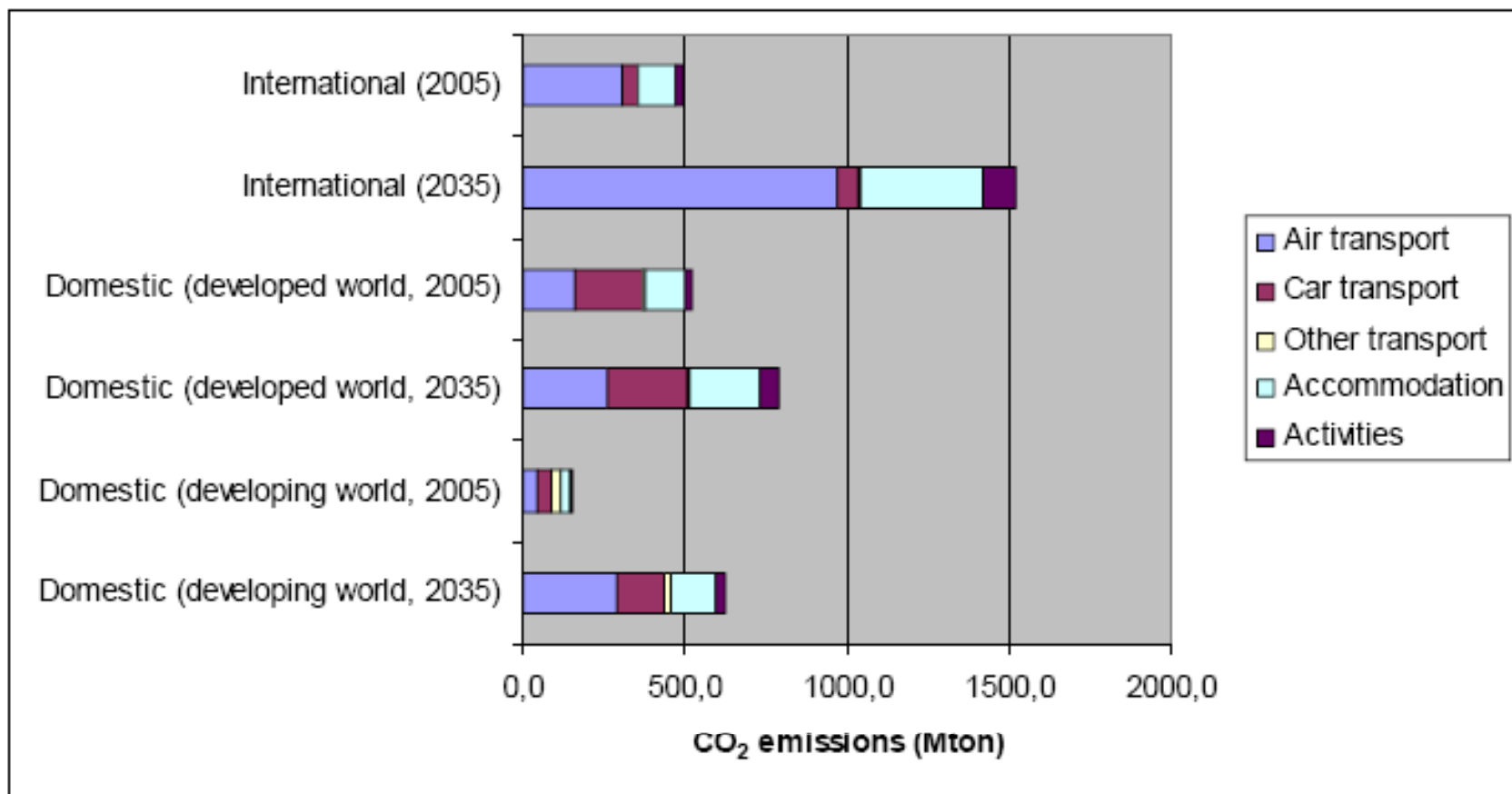
Tourism and climate change mitigation

- GHG emissions from travel and tourism are estimated to contribute about 5% in terms of global CO₂ emissions (less in terms of the total GHG impact)
- Air transport accounts for an estimated 40% of the travel and tourism contribution of CO₂ (and over well over half of the total GHG impact)
- Air transport accounts for an estimated 60% of the **international** contribution of CO₂, and is overwhelmingly dominant at medium- and long-haul

Source: UNWTO-UNEP-WMO, *Climate Change and Tourism: Responding to Global Challenges*, June 2008 (reconciled with IPCC reports)



Projected travel and tourism CO₂ emissions ('business as usual')





Tourism and climate change mitigation

- “While there are many options to reduce emissions [in the travel and tourism sector], by far the greatest potential is related to air travel; reducing flight numbers and flight distances will achieve more to make tourism more sustainable than most other measures taken together.”

“Climate Change and Tourism: Responding to Global Challenges”, eCLAT, November 2007





Tourism and climate change: the Davos Declaration

“...the tourism sector...must....

- progressively reduce its GHG contribution....
-collaborate in international strategies in transport (in co-operation with the International Civil Aviation Organization and other aviation organizations)....”

Adopted by the global *Conference on Climate Change and Tourism* in October 2007 and being pursued through the “Davos process”





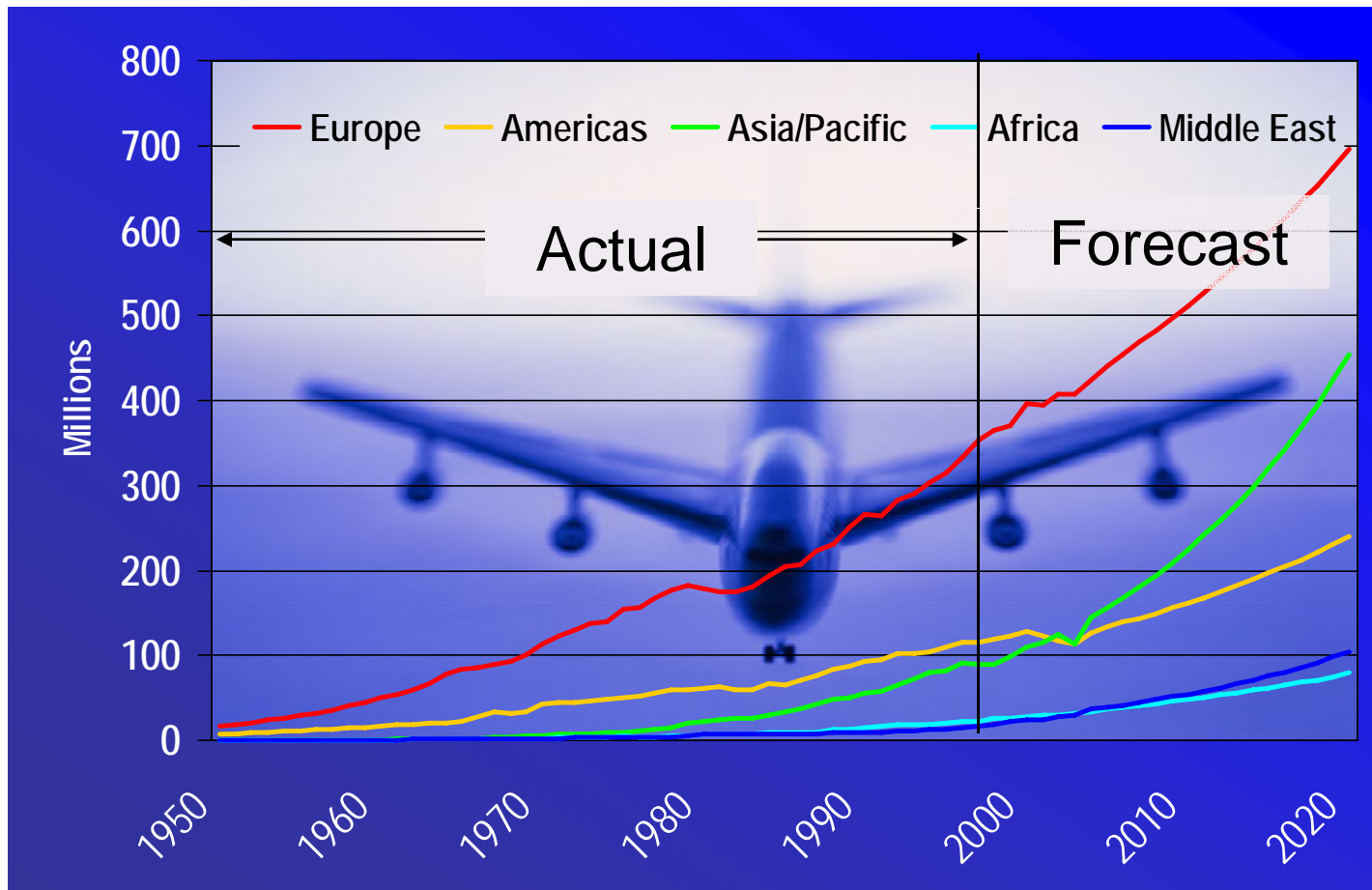
Air transport and international tourism: Locked at the hip

- International air passengers are predominantly tourists (business and leisure travellers)
- Over half of international tourist arrivals are by air (increasing yearly, with much higher proportions for long-haul destinations)
- International tourism and air transport traffic and revenues tend to move in lockstep, with tourism being more resilient in times of uncertainty when tourists stay closer to home



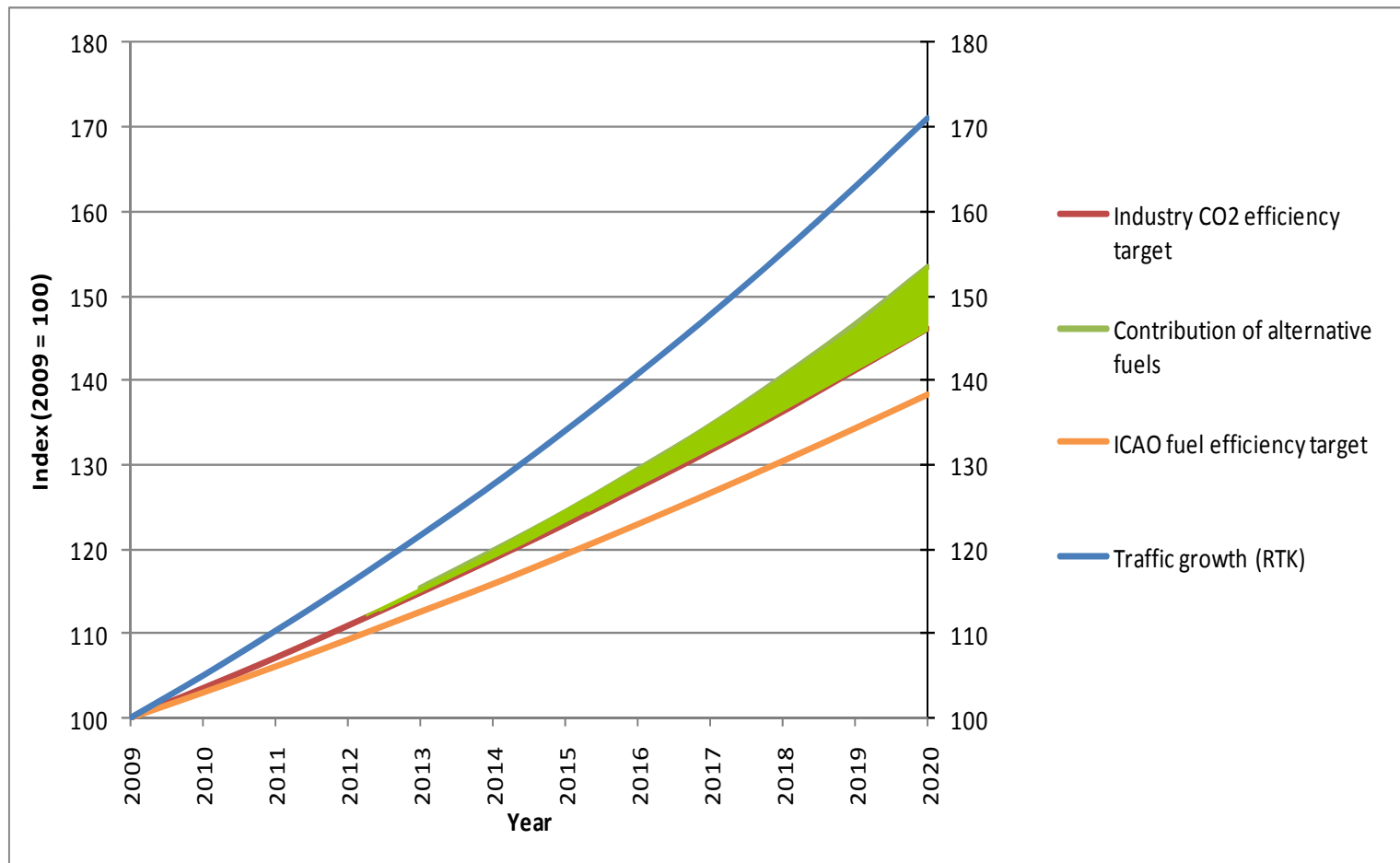


International tourist arrivals, 1950 - 2020





Global air transport traffic growth and emissions targets 2009-2020





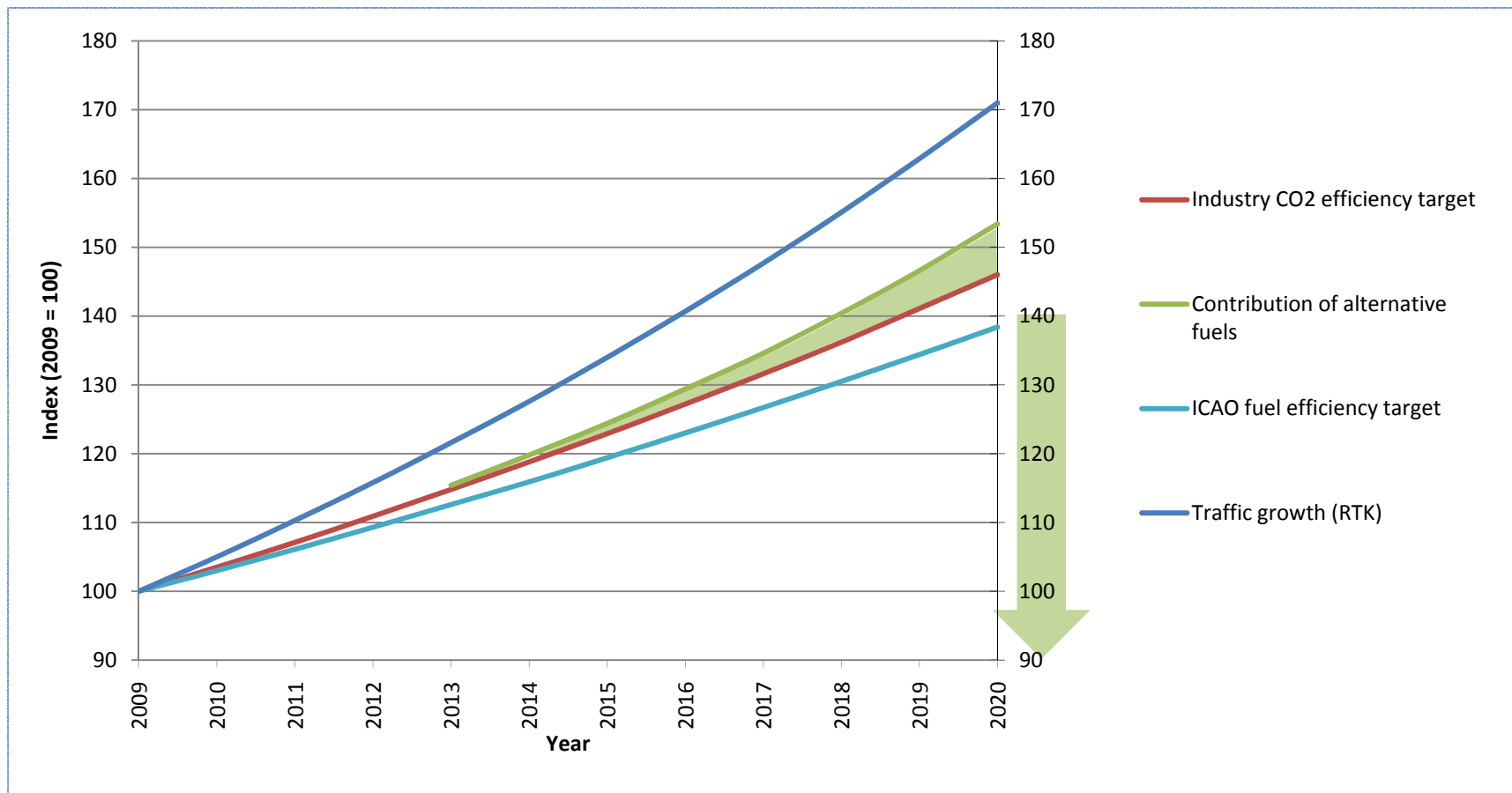
Global air transport emissions

- Technological, operational and infrastructure enhancements continue to be substantial
- Developments in alternative jet fuels are promising
- But even together they fall well short for the foreseeable future of countering anticipated growth in air traffic





Global air transport traffic growth and emissions targets 2009-2020





Global air transport emissions

- Economic instruments will be necessary
- Such instruments have scope implications well beyond air transport and beyond national boundaries
- Emissions policy for aviation is likely to have considerable consequences for destinations depending on tourism and travel





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A paradox



the seychelles islands
another world

- Tourism is the dominant economic sector, predominantly dependent on (long-haul) international air transport
- Tourism has enhanced establishment of nature parks and marine protection areas
- Partly in consequence, the country is a NET ABSORBER of GHGs

Air transport must be placed in context
Air transport is integral to tourism and should not
be treated in isolation



A tourism perspective on air transport and climate change (1)

- Assess mitigation measures against broad spectrum travel, tourism and trade, not for air transport in isolation
- Apply UNFCCC principle of CBDR
- Give preferential treatment to air services supporting the development of tourism in developing/small aviation market countries
- Take an even-handed approach to primary users (tourism and freight) and amongst modes of transport





A tourism perspective on air transport and climate change (2)

- Earmarking/recycling of revenues from levies/trading of emissions permits to GHG mitigation activities
- Technology transfer and financing to poor countries
- Continued recognition of a key role for ICAO in technology, ATM, infrastructure and operations
- Open, collegial forum for economic instruments and any global accord specific to aviation and/or shipping, in context of the “DELIVERING AS ONE UNITED NATIONS” initiative



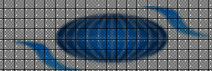


Delivering as one

Under the UNFCCC umbrella:

- UN providers (ICAO and IMO)
- UN users (UNWTO and UNCTAD)
- UN scientists (IPCC, UNEP, WMO)
- World Bank
- Private sector and NGOs (ATAG/IATA, ICS, ICSA, WTTC, WEF, booz&co)
- Etc

From silos to synergy





Thinking beyond the silos

- Carbon tax on accommodation to purchase carbon credits for aviation (truly “carbon neutral” destinations)?
- Carbon tax on jet fuel with proceeds to production and distribution of alternative aviation fuels?
- Hybrid closed/open emissions trading (an idea from the shipping industry)?
- Levy differentiation by route rather than solely by country (especially for LDCs and SIDS, consistent with both CBDR and Chicago)?
- Joint ICAO/IMO proposals to UNFCCC?





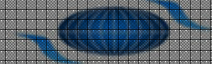
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What if air transport doesn't achieve?



Expect an un-coordinated patchwork of levies (some of unproven benefit), operating and capacity restrictions, even rationing, debilitating to both air transport and tourism





Further information:

- Tourism, Air Transport and Climate Change (2007)
 - Climate Change Mitigation Measures for International Air Transport (2009)
 - From Davos to Copenhagen and Beyond (2009)
- (www.unwto.org/climate/support/en/support.php)

“In rugby terms, the sidestep to evade being tackled on this issue will only work for so long – one day the big hit will come, and it will hurt”

Airline Business, Editorial, November 2007