

UNITING AVIATION ON CLIMATE CHANGE

ICAO Colloquium on Aviation and Climate Change

A Global Framework for Sustainable Aviation

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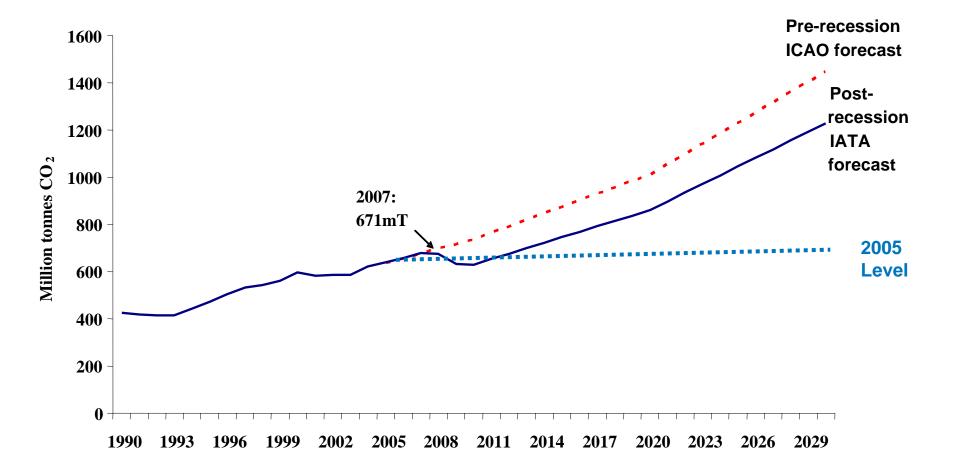
Aviation is a key driver of social & economic development



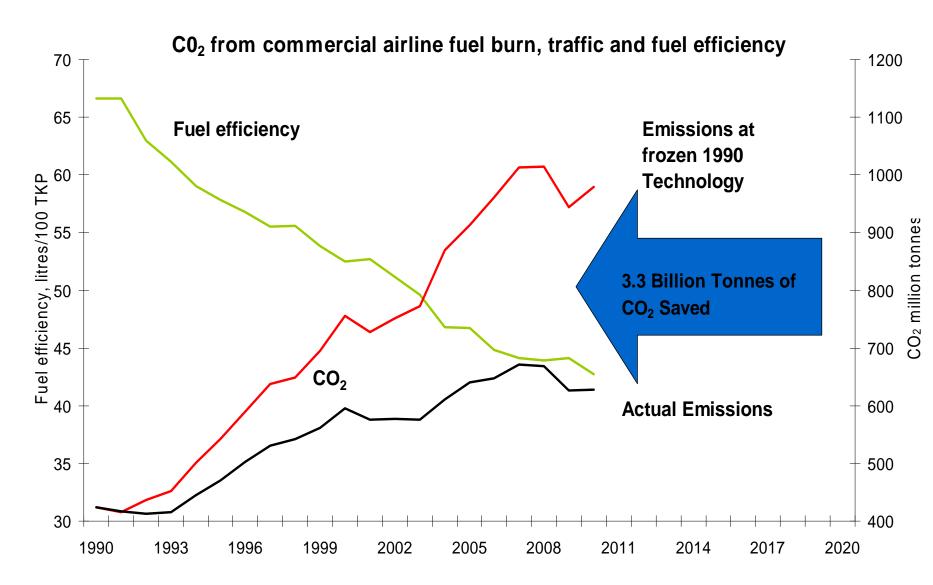
2.2 Billion Passengers
32 Million Jobs
8% of Global GDP (US\$ 3.5 Trillion)
2% of Global Man-made CO2 emissions
Major driver of tourism and trade

Aviation emissions challenge

CO₂ emissions from the global fuel burn of commercial airlines



Industry strong track-record



Industry targets

2010

1.5% p/a fuel efficiency

Working towards CNG

2020

CNG from 2020

Implementation of global sectoral approach

2050

50% reduction in net CO2 emissions over 2005 levels

Industry is united behind these targets

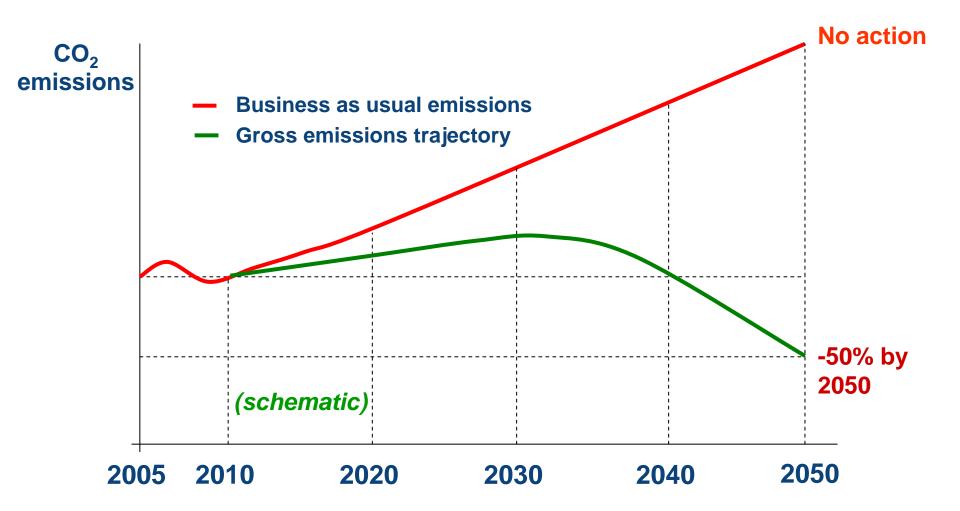
Aviation is facing the challenge

Four-Pillar Strategy

- Invest in new technology
- Fly more efficiently
- Build & use efficient infrastructure
- Use effective economic measures

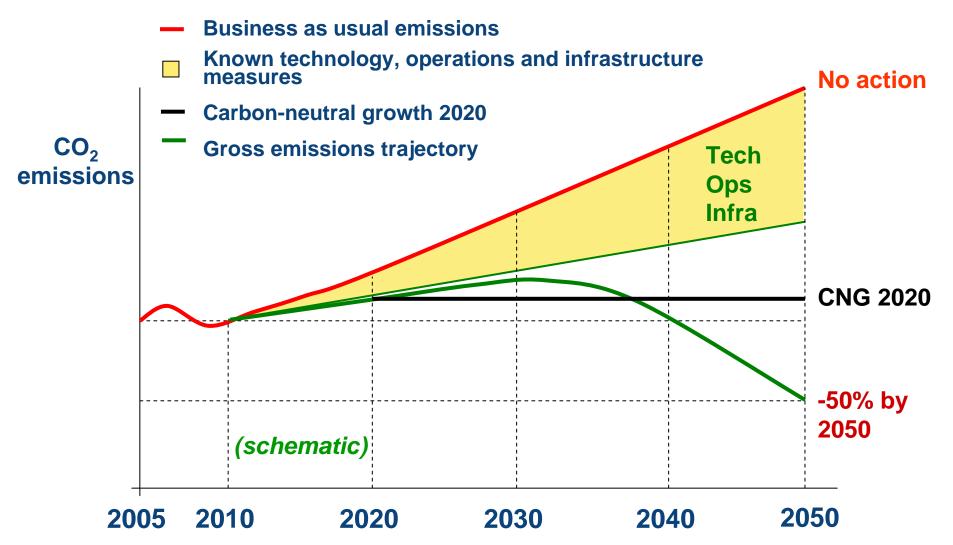


Emissions reduction roadmap



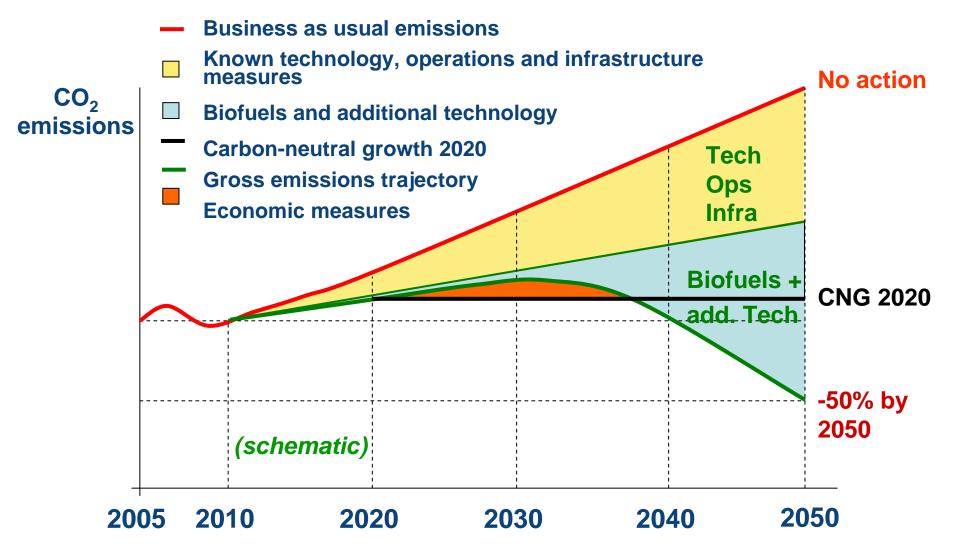


Emissions reduction roadmap

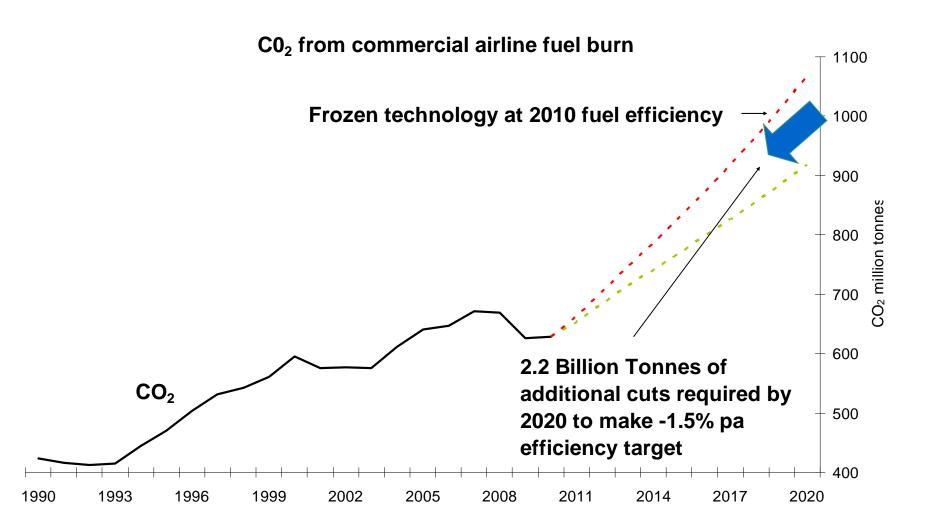




Emissions reduction roadmap

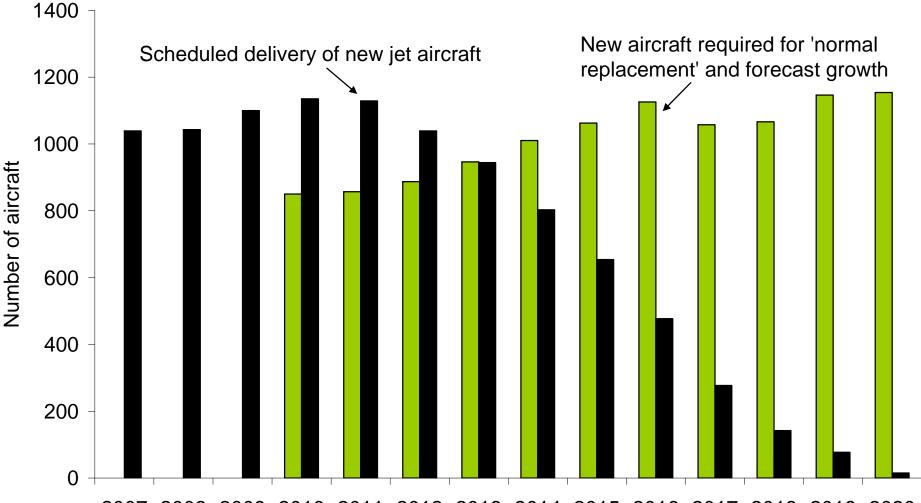


Industry 1.5% efficiency target



Industry +1.5% efficiency target 12,000 new aircraft to buy at cost of **\$1.3 trillion**

New aircraft deliveries



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Industry can't do it alone



Governments must do their part

Investments in ATM improvements

e.g. NextGen, SESAR

Increased R&D funding in technology



Governments <u>must</u> do their part

Promote aviation biofuels

R&D funding Pilot projects Fiscal & investment incentives Transport & Energy policy Increased R&D funding



Aviation needs global solutions



Need a global facilitating framework.....

- Positive market-based measures
- **R&T investments**
- **Investment incentives**
- Aviation access to global carbon markets
- Access to CDM mechanisms Fleet replacement Biofuels development



....based on sound principles

- ↗ Emissions accounted for at global level
- Emissions addressed through <u>combination</u> of technology, operations, infrastructure and economic measures
- ↗ Emissions accounted for once
- Open architecture access to global carbon markets /mechanisms
- Eventual revenues prioritised for reinvestment in aviation carbon reduction
- **Differing needs of states taken into account**
- Level playing field for operators between markets



ICAO has a major opportunity to take <u>ambitious</u> action at the 37th Assembly

...but ICAO is made up of states



....bridges must be built

- Available measures:
- ↗ De minimis rules
- Technology transfer
- ↗ Technical support
- ↗ Financial support
- ↗ Implementation frameworks

CBDR

Failure at ICAO will lead to governments taking fragmented decisions



.....which could question the orderly growth of civil aviation



Governments and industry must work together through ICAO

Targets ÷ **4 Pillar Strategy** + Global Framework



...to assure a sound sustainable future for aviation.









