

Global Aviation Dialogue

**CLIMATE ACTION
TAKES FLIGHT**



**Market-based
measure for
aviation: an
industry
perspective**

INTRODUCING: AVIATION IN LATIN AMERICA AND THE CARIBBEAN

226.5 million

Passengers

\$153 billion

worth of GDP
supported

3.4 million

Flights

631

Airports

177

Airlines

29

ANSPs



840,000 million

Direct jobs in the
sector

4.9 million

Jobs supported in the
wider economy

INTRODUCING: AVIATION IN AFRICA

69.8 million

Passengers

1.5 million

Flights

371

Airports

245

Airlines

38

ANSPs



\$80.5 billion

worth of GDP
supported

428,000

Direct jobs in the
sector

6.9 million

Jobs supported in the
wider economy

INTRODUCING: AVIATION IN THE MIDDLE EAST

144 million
Passengers

1,240,000
Flights

131
Airports

64
Airlines

14
ANSPs



\$116 billion
worth of GDP
supported

356,000
Direct jobs in the
sector

2 million
Jobs supported in the
wider economy

INTRODUCING: AVIATION IN ASIA-PACIFIC

947.9 million

Passengers

9.6 million

Flights

906

Airports

355

Airlines

44

ANSPs



\$516 billion

worth of GDP
supported

580,000

Direct jobs in the
sector

24.2 million

Jobs supported in the
wider economy

INTRODUCING: AVIATION IN NORTH AMERICA

808 million

Passengers

12.2 million

Flights

866

Airports

167

Airlines

2

ANSPs



\$700 billion

worth of GDP
supported

2.7 million

Direct jobs in the
sector

8.3 million

Jobs supported in the
wider economy

INTRODUCING: AVIATION IN EUROPE

780.6 million

Passengers

9.4 million

Flights

959

Airports

387

Airlines

46

ANSPs



\$860 billion

worth of GDP
supported

2.6 million

Direct jobs in the
sector

11.7 million

Jobs supported in the
wider economy

THREE GOALS...

1.5%

**IMPROVEMENT IN
FUEL EFFICIENCY
PER YEAR**



**STABILISE NET CO₂
EMISSIONS FROM
THE SECTOR AT**

2020

**LEVELS THROUGH
CARBON-NEUTRAL
GROWTH**



-50%

**CO₂ EMISSIONS
FROM AVIATION BY
2050 (2005
BASELINE)**



FOUR PILLARS OF CLIMATE ACTION

TECHNOLOGY

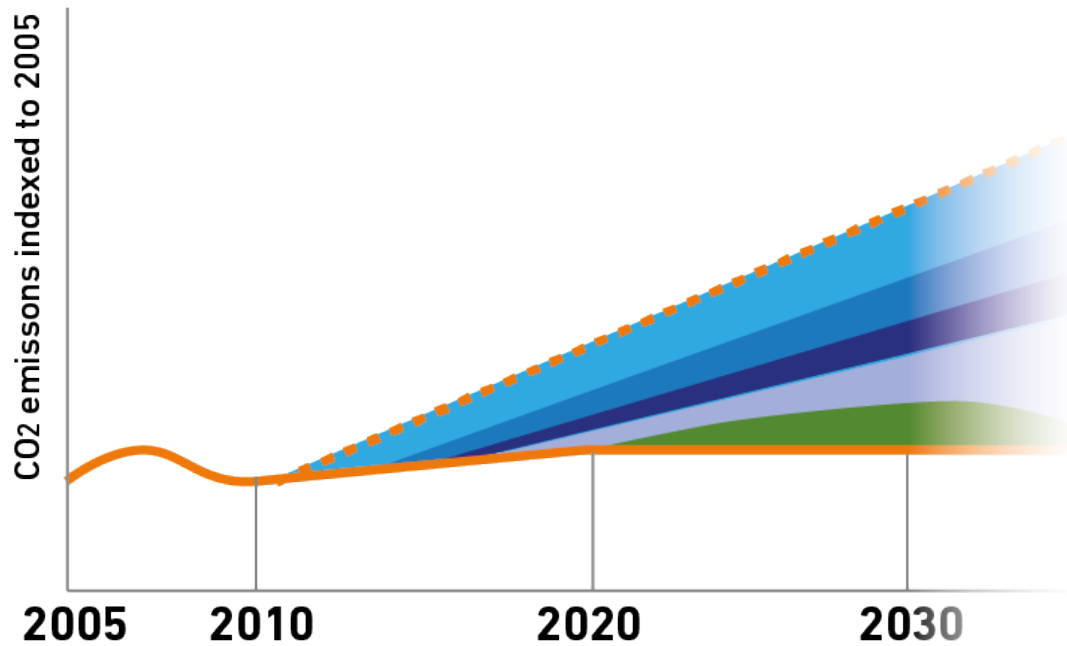
(INCLUDING SUSTAINABLE
ALTERNATIVE FUELS)

OPERATIONS

INFRASTRUCTURE

GLOBAL MARKET-BASED MEASURE

THE CLIMATE PLAN



- KNOWN TECHNOLOGY, OPERATIONS AND INFRASTRUCTURE MEASURES
- BIOFUELS AND ADDITIONAL NEW-GENERATION TECHNOLOGIES
- ECONOMIC MEASURES

- NET EMISSIONS TRAJECTORY
- 'NO ACTIONS' TRAJECTORY

A GLOBAL MARKET-BASED MEASURE FOR AVIATION: THE PRINCIPLES

A global MBM should be guided by the following principles:

SHOULD NOT BE USED TO RAISE GENERAL REVENUE OR SUPPRESS DEMAND FOR AIR TRAVEL

MAXIMISE ENVIRONMENTAL INTEGRITY AND BE COST-EFFECTIVE

MINIMISE COMPETITIVE DISTORTION

EASY TO IMPLEMENT AND ADMINISTER, COST EFFECTIVE

A GLOBAL MARKET-BASED MEASURE FOR AVIATION: CARBON OFFSETTING

A global carbon offsetting scheme is the industry's
stated preference because it is:

**FASTEST
TO
IMPLEMENT**



**EASIEST
TO
ADMINISTER**



**MOST
COST-
EFFICIENT**



AIRLINE EXPERIENCE WITH OFFSETTING

- » Many airlines have launched their own programmes
- » Voluntary schemes for passengers to purchase carbon offsets
- » Investment in carbon reduction projects that generate carbon credits

OFFSETTING BY ONE MID-SIZED EUROPEAN CARRIER IN 2013:

70,000 offsets purchased

150 million kilometres offset

15 million kilogrammes
of CO₂ reduced

AIRLINE EXPERIENCE WITH OFFSETTING: PROJECT EXAMPLE

RENEWABLE ENERGY PROJECT

Off-river hydro-electric
project in Brazil.

Use of high-quality CER
credits issued under the
Kyoto Protocol CDM.

AIRLINE EXPERIENCE WITH OFFSETTING: PROJECT EXAMPLE

CO₂ REDUCTION WITH SOCIAL CO-BENEFITS

Low-pressure solar heaters installed in South African townships.

Reduces carbon and improves livelihoods of inhabitants.



ICAO'S ROLE IN ADDRESSING AVIATION EMISSIONS

Industry supports the leading role of ICAO.

EAG and GMTF have achieved significant progress and demonstrated ICAO is the right forum to deal with aviation's emissions

International aviation is a global sector with very specific operational, commercial, financial and regulatory requirements requiring specific expertise



SUMMARY: INDUSTRY SUPPORT FOR A GLOBAL MBM

- » Industry has set itself ambitious goals
- » Strategy in place to meet them
- » ICAO work crucial to deliver aviation's responsibilities on climate change
- » Committed to working with everyone in this room to achieve that.

SUMMARY: AIRLINE EXPERIENCE WITH OFFSETTING

- » Voluntary carbon offsetting is already present in the aviation industry
- » Simple to implement and operate within strict quality guidelines
- » Brings benefits to developing countries
- » Mandatory offsetting
 - Delivers environmental integrity
 - Simple and transparent
 - Cost effective to the industry

**CLIMATE ACTION
TAKES FLIGHT**



For more information on
industry climate action:
www.enviro.aero