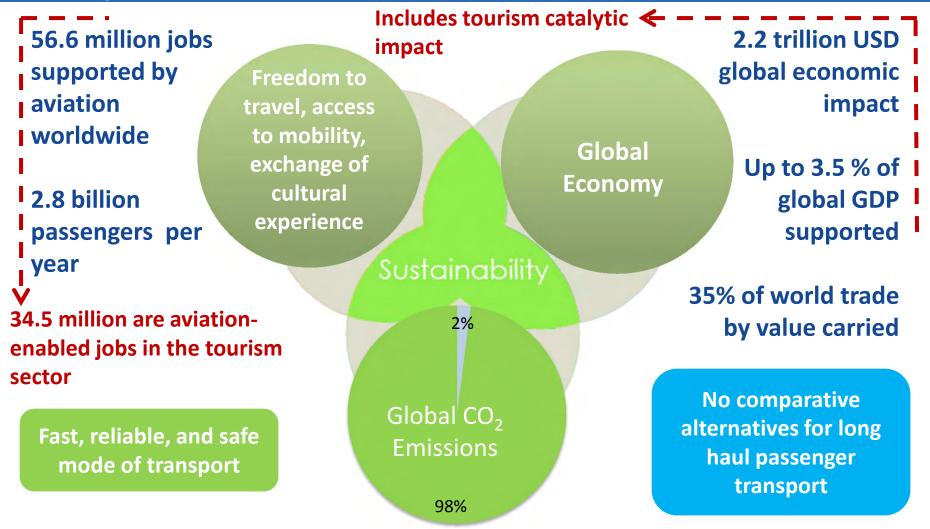


International Civil Aviation Organization

Global Action on International Aviation and Climate Change Jane Hupe Chief, Environment Branch, ICAO 29 November 2012

Aviation in context: contributions across Social, Economic and Environmental pillars of Sustainable Development





2% of Global human-made CO₂ emissions

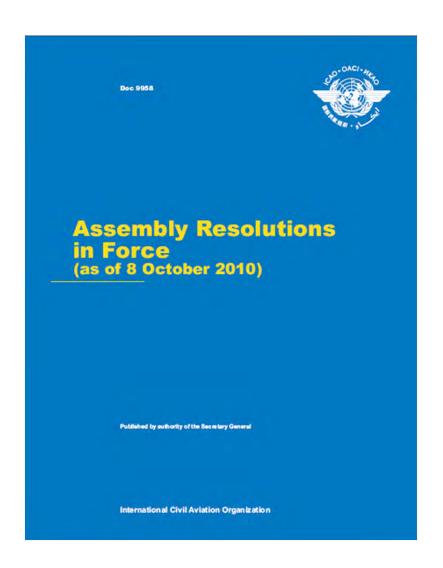


International Aviation and Tourism

- Aviation provides the only rapid worldwide transportation network, which makes it essential for global business and tourism.
- Aviation is indispensable for tourism, globally, 51% of international tourists travel by air.
- GHG emissions from travel and tourism are estimated to contribute about 5% in terms of global CO2 emissions

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ICAO Policy on Climate Change



A37-19: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change

ICAO is the first United Nations agency to lead a sector in the establishment of a globally harmonized agreement for addressing its CO₂ emissions

Climate Change: Key Elements of Resolution A37-19



Global Aspirational Goals:

- 2% annual fuel efficiency improvement
- stabilizing its global CO₂ emissions at 2020 levels

Basket of Mitigation Measures:

- Technological Measures CO₂ certification Standard, etc.
- Operational Measures Air Traffic Management, etc.
- Market-based Measures framework / a global scheme
- Sustainable Alternative Fuels for Aviation

• States' Action Plans, allowing:

- Sates to identify measures on CO₂ emissions reduction activities
- ICAO to monitor progress in achieving the global aspirational goals and address assistance needs of States

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States' Action Plans

For Member States

Opportunity to identify and communicate measures to address CO2 emissions from international aviation as well as any assistance needs to implement the measures



For ICAO

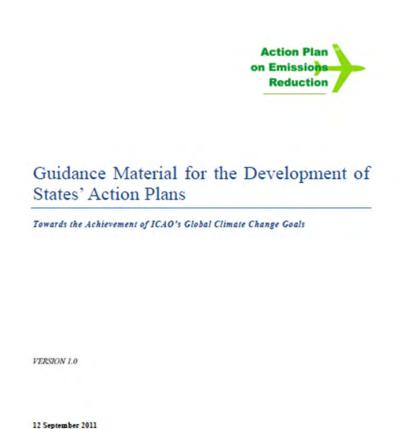
Assess the global progress towards the achievement of aspirational goals and address specific assistance needs of States.

... Dynamic shift of ICAO from "Standard and policy setting" to "implementation mode"

ICAO provides assistance to States to develop their action plan (1/4)



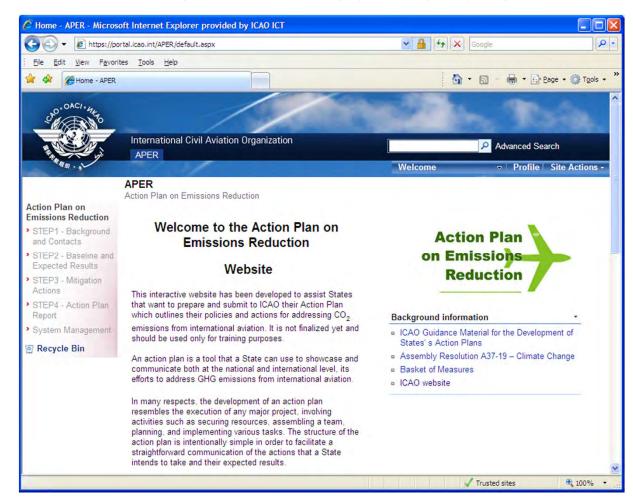
ICAO Guidance Document



ICAO provides assistance to States to develop their action plan (2/4)



ICAO APER Web Interface



ICAO provides assistance to States to develop their action plan (3/4)



7 Regional Workshops organized



ICAO provides assistance to States to develop their action plan (4/4)

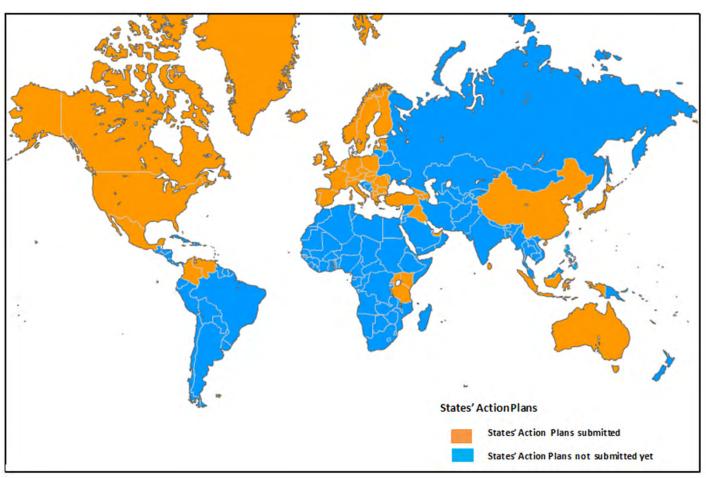


ICAO "Assistance for Action – Aviation and Climate Change" Seminar



States' Action Plans



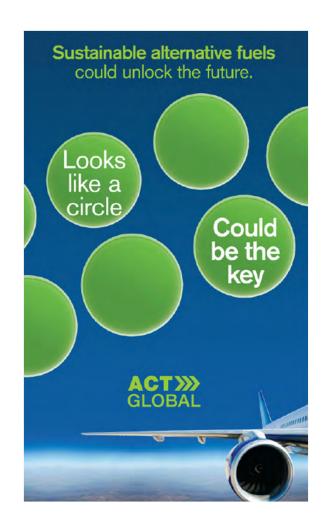


54 Member States that represent 75.45 % of global international air traffic developed and submitted their action plans to ICAO (as of 4 September 2012)

Sustainable drop-in Alternative Fuels for Aviation



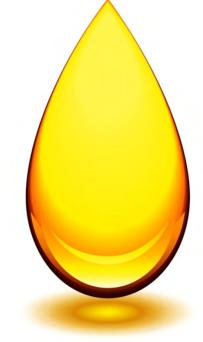
- One of the most exiting and promising opportunities for reducing aviation CO2 emissions, while improving local air quality
- Airlines are using sustainable drop-in biofuels from different feedstocks that do not require changes to aircraft or fuel delivery infrastructure
- Technological aspects are proved to be viable



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Biofuels & ICAO's role

- ICAO Global Framework on Aviation
 Alternative Fuels (GFAAF), a platform for
 sharing information on best practices and
 initiatives on the development and
 deployment of such fuels
- ICAO is facilitating international efforts to ensure the availability of sufficient, costcompetitive quantities of such fuels for use in aviation



ICAO experts group to develop policy recommendations

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Market Based Measures (MBMs)

- The 37th Assembly requested the development of a framework for MBMs, and the exploration of a global MBM scheme
- Options for a global MBM scheme identified by the ICAO Council were reduced to three in June 2012:
 - Global Mandatory Offsetting
 - Global Mandatory Offsetting with a Revenue Generation Mechanism
 - Global Emissions Trading (Cap & Trade System)
- In November 2012 the Council agreed to establishment of a High-level Group to provide recommendations on a series of policy issues which have arisen in the course of ICAO's work on aviation and climate change, including the feasibility of a global MBM scheme for international aviation

ICAO Carbon Emissions + Green Meetings Calculators



Carbon Emissions Calculator

ICAO has developed a methodology to calculate the carbon dioxide emissions from air travel for use in offset programmes.

The ICAO Carbon Emissions Calculator allows passengers to estimate the emissions attributed to their air travel. It is simple to use and requires only a limited amount of information from the user.

The methodology applies the best publicly available industry data to account for various factors such as aircraft types, route specific data, passenger load factors and cargo carried.



For additional information, please see the accompanying <u>methodology</u> to the ICAO Carbon Emissions Calculator.

The Carbon Calculator is additionally available in the Apple App Store as an <u>iPhone and iPad</u> application.

You can find your carbon footprint by entering your city of origin and destination.



http://www.icao.int/environmentalprotection/Pages/Tools.aspx





Tool define optimal location for a meeting in terms of CO₂ emissions, taking into consideration the city origin and the number of participants, as well as other parameters.

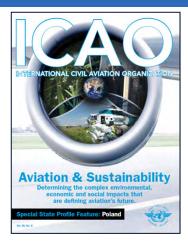
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Summary

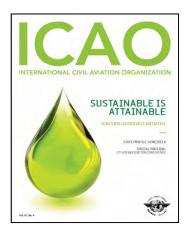
- ICAO and its member States have been making progress in key areas on international aviation and climate change:
 - CO2 Standard
 - Operational improvements
 - Sustainable alternative fuels for aviation
 - Market-based Measures (MBMs)
- A package of all the mitigation measures is available for States to choose and include in their Action Plans.
- Climate change will remain the main challenge on the ICAO environmental activities in the upcoming years.

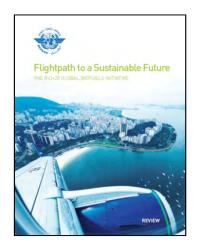
Additional information

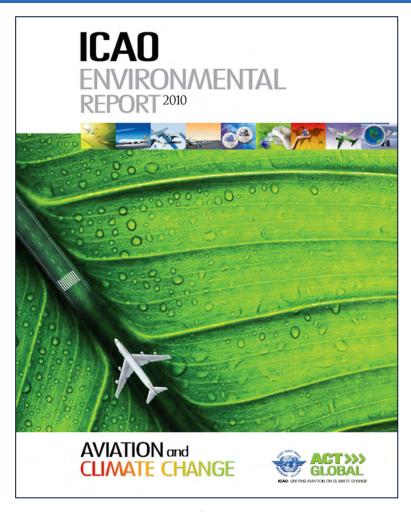












For more information on our activities, please visit ICAO' website: http://www.icao.int/env