ACTION PLAN OF MEXICO ON AVIATION AND CLIMATE CHANGE

Bonn, June 7, 2011
CLIMATE CHANGE ACTIONS IN MEXICO FOR THE AVIATION SECTOR

- Improvements and optimization of Communication Navigation Surveillance/Air Traffic Management (i.e. optimal flight profiles, etc).
- Use of advanced technology related to aircraft and modifications to existing airplanes (i.e. winglets installation, fleet renewal).
- Promotion and planning for alternative fuels for aviation use through the program “Flight Plan”.

- Close relation to the national air industry
HAC5  AMX changed its MD80s for 737-NG with winglets
       Interjet & Volaris began operations with A320s airplanes.
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HAC6  through CANAERO our principal air operators association (at least 90% of all air operators)
       HP Authorized Customer, 6/06/11
Mexico’s Action Plan is integral and dynamic in order to identify and include more areas and opportunities towards our country contribution to ICAO’s aspirational goals for reducing GHG emissions in the mid and long term.
Through our Action Plan, we calculate our mid-term aspirational goal for an annual average fuel efficiency improvement of 1.7%.

![Graph showing fuel consumption metric change with reduction and mitigations actions.](image)

**ANNUAL AVERAGE FUEL EFFICIENCY IMPROVEMENT -1.7%**

**Note:** calculated on the basis of volume of fuel used per revenue tonne kilometre performed.
DGAC used ICAO guidance material of ENV Action Plan and worked with ICAO together in order to define baseline on 2010 year and for future expected results projections.

At the same time, DGAC got in contact with national air industry as CANAERO, SENEAM & ASA Combustibles and found the following principal reduction and mitigation actions:

Principal Mexican air carriers plans to renewal its fleet beginning at 2014, with this action expected annual fuel savings will be 24.8 Million Kg.

SENEM introduced optimal approach and descend profiles on Mexico and Cancun International Airports, decreasing 90% of the time due to holding patterns at these airports, and also improving all phase of flights to these destinations thru PBN.

These actions represent 3.6 million Kgs. annual fuel savings.

Taking into account all the information and data provided by each one of air industry participants....

Mexico decides voluntarily to contribute with an annual average fuel efficiency improvement of 1.7 per cent in the mid-term to achieving the ICAO global aspirational goal for international aviation, and improve this rate to 2050 as possible circumstances and capabilities allowed.

Also DGAC recognizes that this is the first step to work even closer to air carriers, CNS/ATM and Fuel Suppliers, in order to improve and implement more environment measures as soon as possible.

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STATUS OF THE MEXICAN AIR INDUSTRY IN 2010

1. 621, 359 flight operations
   - More than 48 million passengers transported.
   - More than 570 million Kg of air cargo transported.

2. 76 airports (64 of them perform international flights - 84% airports).

3. In the last decade, the international RTK annual average growth rate was approximately 3%.

4. Mexican air industry contributes to our GDP in about 10.5%.
HAC1  249, 369 international flights, and 371, 990 domestic flights were performed.
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HAC2  (50% international / 50% national).
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HAC3  where 81% of total cargo was international
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HAC4  Main reason to keep the Mexican Aviation industry growing in sustainable and harmonized with the environment
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FORECAST FUEL GROWING FOR INTERNATIONAL MEXICAN AVIATION (2010 baseline)