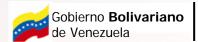


# Action Plan of the Bolivarian Republic of Venezuela for the activities to reduce CO2 emissions







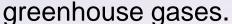


#### Action Plan on the Reduction of CO2 in the Aeronautical Sector



# Development of Emission Reduction Plan for Carbon Dioxide (CO<sub>2</sub>) emissions from civil aviation of the Bolivarian Republic of Venezuela

This Plan was developed according to Resolution A37-19 on policies and practices related to the protection of the Environment, Climate Change and following the policies and guidelines of the revolutionary government of Venezuela, which ratified the Kyoto Protocol to the UNFCCC. This plan is also based on a Venezuelan state policy on environmental conservation and the reduction of pollutants and





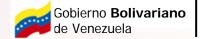






# √ Venezuelan State institutions involved in the elaboration of the plan:

- ✓ Ministry of Electric Power, Ministry of Petroleum and Mining, Petroleos de Venezuela, SA (PDVSA), Ministry of Environment and Ministry of Aquatic and Air Transport.
- ✓ For the National Institute of Civil Aviation (INAC): Air Transport Department, Air Navigation Services, Aviation Safety Department, Legal Advisor Office, Planning and Budget Office and International Relations Office.

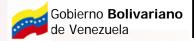






# Other institutions which colaborated in the elaboration of the plan:

- ✓ Teleconference hold on June 07th 2013 with Ms. Blandine Ferrier, ICAO Environment Subsection,, to discuss questions, challenges and phases of the Action Plan, by request of the Venezuelan government.
- ✓ Teleconference hold on July 09th 2013, directed by Venezuela and coordinated by the ICAO SAM Office, with delegates from South America in relation to the advices and experiences of the National Institute of Civil Aviation (INAC), in the development of the Action Plan.







The Venezuelan Aviation Sector has planned a series of actions to reduce CO<sub>2</sub> emissions from aviation, which will be applied on a medium and long term basis, some of which are under evaluation by the competent government agencies, and some others are already in execution, such as:









### **Organizational measures:**

# ✓ Creation of an Environmental Department within the organizational structure of INAC











## **Technological Measures:**

#### ✓ Fleet Modernization Plan:

The Government of the Bolivarian Republic of Venezuela is working with commercial companies to modernize the fleet.

#### ✓ CONVIASA's Fleet Renewal:

Modernization of its fleet with next generation aircraft in order to meet the international standards of quality and safety in service.





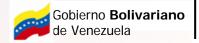






# **Operational Measures:**

- ✓ Implementation of Performance Based **Navigation** (PBN).
- ✓ Implementation of Air Traffic Flow Management (ATFM) in the Caribbean region / South America CAR/SAM.
- ✓ Action on the Air Traffic Services within **FIR** Maiquetía:
  - >TIME REDUCTION OF AIRCRAFT ON THE GROUND
  - > REDUCTION OF AIRCRAFT IN FLIGHT TIME









# Measures to reduce CO<sub>2</sub> emissions in airport infrastructure:

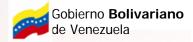
√To build Aerodromes with the vision of reducing greenhouse gas emissions by aircrafts in order to minimize the different impacts that the aviation activity causes on the environment.

√To enhance the aviation infrastructure for greater "DYNAMICS OF AIRPORTS", helping to reduce emissions from idling engines on

ground.











### Measures to reduce CO<sub>2</sub> emissions in aviation fuel:

The Venezuelan Aviation Regulation RAV 34 regarding Gas Emissions sets out the requirements for recognizing certificates emission and fuel venting issued by the Design States signatory to the Chicago Convention.













## Implementation of Air Quality Network at Airports:

To supervise air quality and environmental noise at the influence area of airports in order to design and implement control systems for emission sources of air pollutants and noise levels.







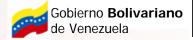




# Policies and Measures of the Bolivarian Republic of Venezuela in Environmental Management

The Simon Bolivar National Project is aimed to the for environmental of harmonious use resources conservation:

- ✓ As a result of the national inventory submitted in 2005, it was determined that emissions in the case of CO2 in Venezuela represent only 0.48% of the total emissions of the planet.
- a productive economic model based harmonious relationship between man and nature, to ensure the rational use and optimal utilization of natural resources.



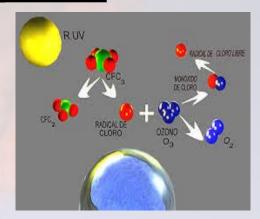




#### Policies and Measures of the Bolivarian Republic of Venezuela

# Policies and Measures of the Bolivarian Republic of Venezuela in Environmental Management

- 1. Efficient solid waste management.
- 2. Forest fire control.
- 3. Energy Revolution Mission.
- 4. Reduction of Chlorofluorocarbons.













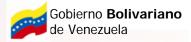


#### Policies and Measures of the Bolivarian Republic of Venezuela

# Policies and Measures of the Bolivarian Republic of Venezuela in Environmental Management

- 5. Energy Efficiency.
- 6. Six macro development projects nationwide on public transport.
- 7. Inspections of industrial activities.
- 8. Evaluation and monitoring of emissions from the vehicle fleet and protected tree planting mission.









#### Action Plan on the Reduction of CO2 in the Aeronautical Sector

The president of the National Civil Aviation Institute (INAC), GD. Francisco Paz Fleitas, on behalf of the Bolivarian Republic of Venezuela, presented the plan to the Secretary General of the International Civil Aviation Organization (ICAO), Mr. Raymond Benjamin on June 28th 2012, being a pioneer in the compliance of this commitment in the region.







#### Action Plan on the Reduction of CO2 in the Aeronautical Sector

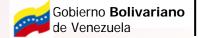
# **Assistance needs**

- •ICAO Leadership
- •Financial: To develop new technologies, methods and ways to reduce CO2 emisions.
- •Training: to know how to improve the Action Plan, and calculate the impact for the measures that we have taken.

New effective methods and tools to calculate the CO2 emissions.

How to create an efficient environment structure in Civil Aviation Authority









# Thank you for your attention



