



"Better Skies for Africa"

AFRAA POLICY PAPER ON ENVIRONMENT

Championing Regional Coordination on Environment for Better Skies in Africa

1. Introduction

Air Transport contributes to 2% of human-made CO₂ emissions. Though air traffic doubles every 15 to 20 years, the Aviation Sector developed a strategy setting and maintaining neutral carbon growth of the emission of CO₂ by 2020. The climate change trends put pressure on the sector to further reduce its modest share of CO₂ emission faster. This policy paper summarises AFRAA's position relating to the environment in Africa.

2. Africa Status vis-à-vis the Environment

Africa's air transport market recorded a small share of less than 3% for four decades. Therefore, Africa's share of the contribution of flight operations in the 2% of the entire industry is very tiny. However, Aviation needs to proactively work and promote measures and programs relating to the protection of the environment in Africa.

3. AFRAA Regional Approach for Environment

Climate change effects are more visible across the Continent, the continuous expansion of the Sahara, the changing patterns raining seasons, and frequent records of severe floods and droughts alternatively. Therefore, AFRAA articulates its strategy relating to the environment based on the Aviation Sector initiatives.

Pillar 1: Continuous Fuel Efficiency Improvement through New Technology

As African airlines access new fleet of aircraft meeting more stringent environmental SARPS, flight operations will burn less fuel lessening further their impact on the environment.

Pillar 2: Alternative Fuel

As the industry demonstrates the use of bio-fuel as one of the means to reduce the use of jet A1 refined from crude oil, SAA pioneered such a demonstration in operations with blend-in bio-fuel between Johannesburg and Cape Town.

Africa and African airlines should prepare for the use of bio-fuel as technology mature in the medium term.

Pillar 3: Implementation of Fuel Conservation Initiatives in Operations

Focused on maintenance, ground, and flight operations, AFRAA urges members to implement relevant fuel conservation initiatives to burn less fuel in operations, to emit less CO₂ while reducing their fuel bills.

AFRAA will work closely with member airlines to foster the implementation of fuel conservation programs in the operations of an increasing number of African air carriers.

Pillar 4: Air Navigation Infrastructure

Stakeholders agreed and to set as a priority the implementation of Performance-Based Navigation PBN procedures in terminal areas (TMAs) at African airports. To support the deployment of PBN in TMAs, ICAO established the African Flight Procedure Program (A-FPP) to assist the African States in designing the procedures at very competitive costs.





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These PBN procedures support the performance of safe Continuous Climb Operations (CCOs) and Continuous Descend Operations (CDOs) along Standard Instrument Departure (SID) and Standard Arrival Routes (STARs) while improving fuel efficiency in the TMAs.

It is AFRAA's view that groups of Air Navigation Service Providers (ANSPs) should provide flexible routings in clusters of airspaces with entry and exit points, taking advantage of the low-density flights across the Continent's huge area. Flight operations along flexible routings exploit high altitude winds, reduce flight times, decrease fuel burnt, and limit CO₂ emission significantly.

Therefore, AFRAA urges airlines, ANSPs, and States to build on gained experience in the Atlantic Ocean Random Routing Area (AORRA) to extent flexible routing operations gradually in the continental airspace.

Pillar 5: CORSIA

ICAO Assembly negotiates CORSIA, the Carbon Offsetting and Reduction Scheme for International Aviation. Hence, Aviation avoids the proliferation of carbon offsetting schemes. AFRAA actively participates in regional coordinated position of African States for CORSIA.

AFRAA urges member airlines and the African States to increase CORSIA awareness to ensure smooth introduction and sound implementation of the scheme by African operators and States.

The stakeholders should also work together to support regional projects relating to environmental protection such as "Great Green Wall of the Sahara and the Sahel" to stop the southbound expansion of the Sahara.

4. Conclusion

Climate change trends ring wake-up calls for all economic sectors to take action and reduce human-made CO₂ emissions worldwide. Though air transport emission share is only 2% of the world's CO₂, the aviation sector has developed several initiatives to reach and maintain carbon-neutral growth by 2020, while air traffic increases.

AFRAA believes that African aviation will contribute to protecting better the environment; it requires that aviation stakeholders continue coordinated efforts in line with the five pillars:

- Continuous Fuel Efficiency Improvement through New Technology;
- Alternative Fuel;
- Implementation of Fuel Conservation Initiatives in Operations;
- Air Navigation Infrastructure and;
- CORSIA.

