

WHY THIS PROJECT



Despite aviation only accounts for about 2% of global man-made CO₂ emissions, these emissions are projected to grow in the foreseeable future. As a response, under the auspices of ICAO, governments agreed on the aspirational goals of 2% annual fuel efficiency and carbon neutral growth from 2020 onwards.



In order to achieve these aspirational goals, ICAO has developed a basket of mitigation measures that includes concrete actions that States can undertake to reduce CO₂ emissions from international aviation.



The Action Plans reflect States' strategies to effectively implement actions from the basket of measures to address the CO₂ emissions according to their national context and aviation activity. By November 2015, 83 ICAO Member States, representing more than 80% of global traffic have voluntarily submitted their Action Plans to ICAO.



ICAO Member States had the willingness to take action but without the organization's assistance, initiatives dedicated to CO₂ mitigation measures would be hard or impossible to achieve in the expected timeframe. With the provision of dedicated support, this project facilitates the achievement of global aspirational goals.

IMPLEMENTATION OF MITIGATION MEASURES

the measures included in the Action Plans, are selected among the following categories:



- Aircraft-related technology development
- Alternative fuels
- Improved air traffic management and related infrastructure use
- More efficient operations
- Airport improvements
- Market-based measures
- Regulatory measures/other



ICAO TOOLS FOR ACTION PLANS DEVELOPMENT

ICAO Doc 9988 - Guidance Document for the Development of States' Action Plans
Includes guidance on the baseline calculation, the basket of mitigation measures and the quantification of selected measures.

Environmental Benefits Tool (EBT)

Provides a framework to automatize the calculation of the baseline for CO₂ emissions in international aviation, and the estimation of expected results obtained through the implementation of mitigation measures selected in ICAO's basket of measures.

ICAO Carbon Emissions Calculator

Allows the States to estimate the CO₂ emissions attributed to air travel, using only a limited amount of input information.

ICAO Fuel Savings Estimation Tool (IFSET)

Can be used to estimate fuel savings obtained through operational measures in a manner consistent with approved models.

Action Plan on Emissions Reduction (APER) website

Interactive website to assist States prepare and submit their Action Plans to ICAO.

For more information on ICAO's environmental programme, please visit: www.icao.int/environmental-protection



CAPACITY BUILDING FOR CO₂ MITIGATION FROM INTERNATIONAL AVIATION



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PROJECT HIGHLIGHTS

THE ICAO-EU PROJECT: AN INTEGRAL PART OF ICAO'S ENVIRONMENTAL PROGRAMME

Since 2010, the International Civil Aviation Organization (ICAO) has been working on a comprehensive strategy to strengthen national capacities on environment and, specifically, to reduce the impact of international aviation on climate change. Many of ICAO's Member States wanted to take action, but were unsure of how or where to start. In response, the concept of "Action Plans" on the environment became a reality and today, the States' Action Plans on CO₂ emissions reduction from international aviation have become one of the key elements of ICAO's environmental strategy. They are used as a tool to communicate the States' progress and efforts towards the environmental goals set by the ICAO Assembly and a means to request necessary assistance. ICAO has organized more than 14 seminars across all ICAO regions to train more than 110 national focal points, disseminating best practices on States' CO₂ mitigation actions.

Building on these successful achievements, on 17 December 2013, ICAO and the European Union (EU) signed an agreement to implement a joint assistance project: *Capacity Building for CO₂ Mitigation from International Aviation*. Fourteen States from the African and Caribbean regions were selected to participate in this 42-month programme, which is funded by the EU.

CAPACITY BUILDING FOR THE INCLUSIVE DEVELOPMENT OF STATE ACTION PLANS

This initiative has marked the beginning of an era of closer cooperation among ICAO Member States that had a willingness to address environmental issues but required assistance to mobilize their national stakeholders and take action.

The project activities were initiated with "Kick-off Seminars" in Santo Domingo, Dominican Republic, and Yaoundé, Cameroon. These seminars strengthened the capacities of 32 national focal points from the beneficiary States to prepare the action plans in accordance with the ICAO Doc 9988, *Guidance Document for the development of States' Action Plans*, collect historical data for the elaboration of baseline scenarios, and to analyze potential mitigation measures.

COLLABORATIVE SYNERGIES

The project has supported the establishment of **National Action Plan Teams (NAPT)** in the 14 selected States, which have become a key coordination mechanism and an inclusive process for the development of Action Plans. The NAPTs have changed the way the States work towards environment in aviation by triggering synergies amongst national stakeholders (i.e. civil aviation authorities, ministry of environment, ministry of transport, airports, airlines, air navigation services providers and fuel suppliers), facilitating the decision-making process and securing the financial and political support for the implementation of mitigation measures. The project's capacity building strategy has therefore enabled a shift in institutional culture towards the environment in the selected States, which have taken ownership and gained greater awareness of environmental issues and are enthusiastic to undertake concrete action.

INTEGRATED TOOL AND TRAINING FOR A RELIABLE MONITORING OF CO₂ EMISSIONS IN AVIATION

ICAO has provided assistance to effectively implement the **Aviation Environmental System (AES)** in the selected States – a resource developed under this ICAO-EU Assistance Project that facilitates the monitoring of CO₂ emissions and the establishment of national inventories in the aviation sector. Through this system, the selected States can make better decisions with regards to the impacts of aviation on the environment and the sustainability of the overall sector. To facilitate integration with the existing local reporting systems, country-specific interfaces have been developed, and relevant stakeholders have been trained through on-site missions to these States.

SUPPORT FOR THE EFFECTIVE IMPLEMENTATION OF MITIGATION MEASURES

Following the submission of the Action Plans, ICAO will support the selected States in the implementation of their mitigation measures by providing guidance, preparing feasibility studies and by facilitating access to financial resources through partnerships with international financial organizations that are interested in supporting this type of sustainable development initiative.

Many other Member States are now interested in this initiative as they see it as a successful example on how to tackle the impacts of aviation on the environment and the multiplier effect that it can bring for the establishment of a national strategy.

ADDITIONAL BENEFITS AND SYNERGIES

The robust data collection processes that are implemented in the context of the States' Action Plans also enable the States to obtain data related to domestic aviation and thus to enhance their capabilities to submit inventories and plans to mitigate CO₂ emissions to both ICAO and the United Nations Framework Convention on Climate Change (UNFCCC) on international and domestic aviation, respectively.

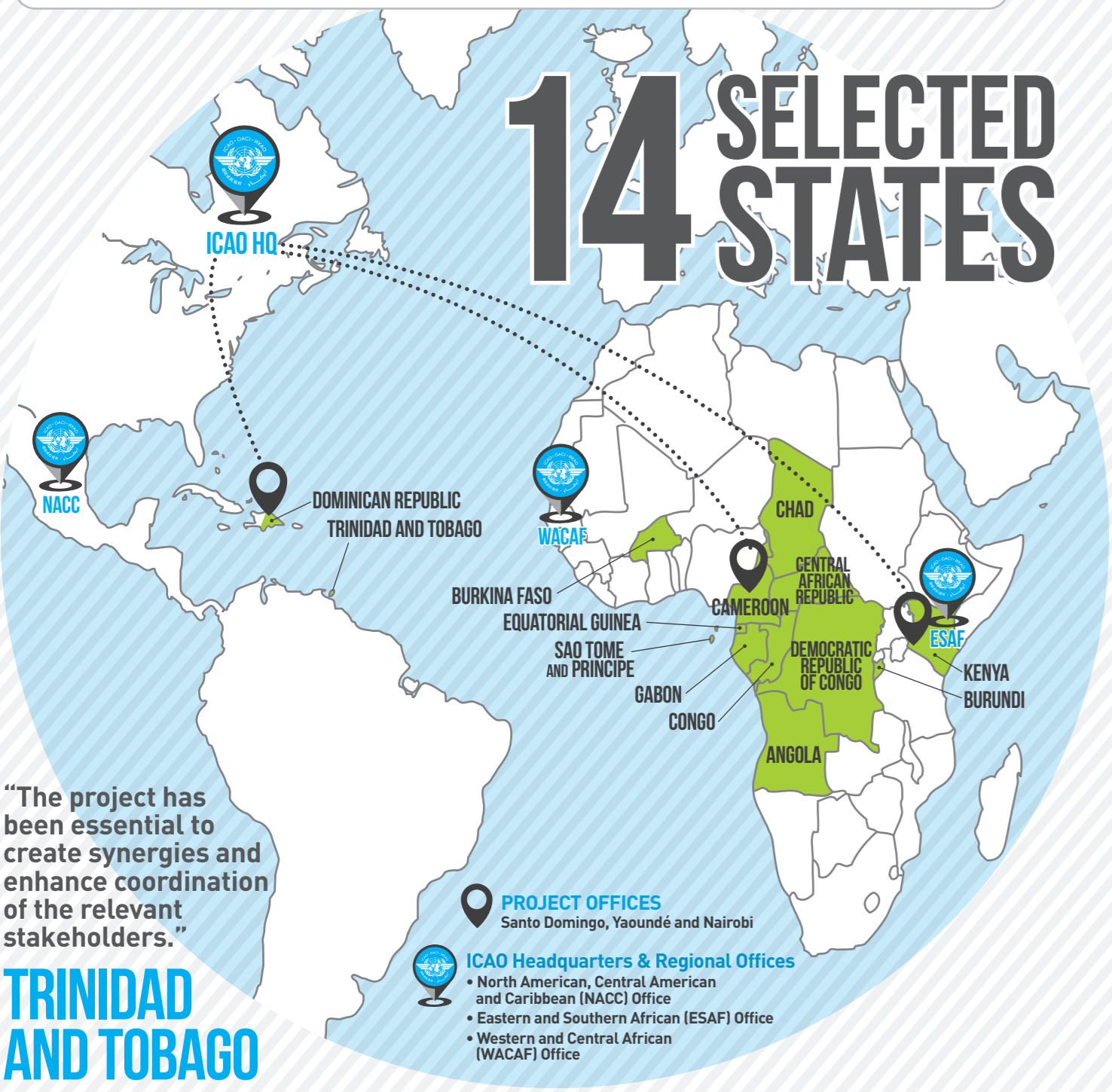
Similarly, initiatives aimed at reducing international aviation emissions may contribute as co-benefit to also reduce CO₂ emissions from domestic aviation falling under the scope of the UNFCCC. These initiatives create synergies are fully aligned with the national efforts promoted by the UNFCCC to reduce domestic CO₂ emissions through their Intended Nationally Determined Contributions (INDCs).

ICAO States' Action Plans also provide an important vehicle to identify assistance needs. The UNFCCC's Nationally Appropriate Mitigation Actions (NAMAs) also facilitate assistance for capacity building, technology transfer and financing.

Through parallel and complementary approaches, ICAO and the UNFCCC address emissions from international aviation and States' domestic emissions, respectively. By enhancing the synergies in the collection of aviation data and identification of mitigation measures for international and domestic aviation through the ICAO Action Plans, a robust set of information will be available to different UN bodies, while respecting both organizations' mandates and regulatory frameworks.



SUSTAINABLE DEVELOPMENT GOALS



"The project has been essential to create synergies and enhance coordination of the relevant stakeholders."

TRINIDAD AND TOBAGO

CAPACITY BUILDING FOR CO₂ MITIGATION FROM INTERNATIONAL AVIATION

"Whilst we have been implementing measures to improve fuel efficiency and reduce CO₂ emissions for some time, we have experienced challenges with a robust data collection system to monitor their effective progress. This gap will be filled by the activities planned in the ICAO-EU project."

KENYA

OBJECTIVE 1
ACTION PLANS DEVELOPMENT:
Improved capacity of the National Civil Aviation authorities to develop an Action Plan on CO₂ emissions reduction from international aviation in accordance with ICAO recommendations

OBJECTIVE 2
AVIATION ENVIRONMENTAL SYSTEMS (AES):
Efficient CO₂ emissions monitoring system for international aviation developed in each selected Member State

OBJECTIVE 3
IMPLEMENTATION OF MITIGATION MEASURES:
Priority mitigation measures identified, evaluated and partly implemented

"Our new Action Plan, prepared under the ICAO-EU project, is an important step to promote a comprehensive strategy to address climate change in the country within the aviation sector."

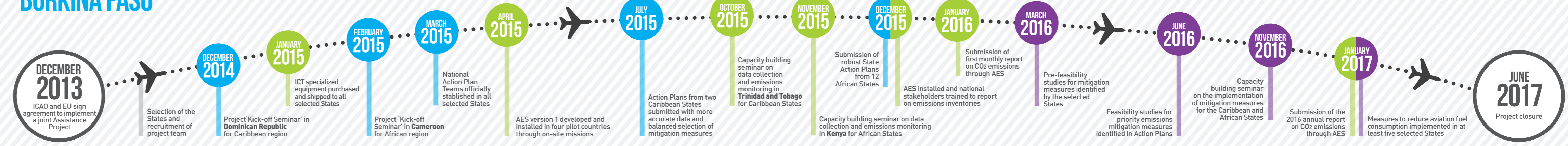
DOMINICAN REPUBLIC

"This project gives us the opportunity to pave the way in this area, to strengthen the regional cooperation on it and to trigger interest in neighbouring national civil aviation authorities to get more involved on CO₂ emissions reduction at their national level."

BURKINA FASO

"This project is a great example of the ICAO initiative "No Country Left Behind" and such assistance project should be definitely replicated in other group of countries."

CAMEROON



6.5 € MILLION BUDGET

The main objective of the ICAO-EU Assistance Project is to contribute to the mitigation of CO₂ emissions from international aviation by implementing capacity building activities that will support the development of low carbon air transport and environmental sustainability in the fourteen selected States. This project is a concrete example of ICAO's efforts to achieve the objectives of the "No Country Left Behind" initiative in the area of environmental protection.

