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ICAO CAPACITY BUILDING SEMINAR ON LOW EMISSIONS AVIATION MEASURES

# States' strategy to deal with international aviation emissions: ICAO State Action Plans

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# Outline

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- ICAO Environmental Policies, Standards and Recommended Practices
- ICAO State Action Plan Initiative
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  - Current Status
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# Background on ICAO







<b>Vision</b>	<b>Mission</b>
<b>Achieve the sustainable growth of the global civil aviation system.</b>	<b>To serve as the global forum of States for international civil aviation.</b> <b>ICAO develops policies and Standards, undertakes compliance audits, performs studies and analyses, provides assistance and builds aviation capacity through many other activities and the cooperation of its Member States and stakeholders.</b>

### ICAO Strategic Objectives:

Safety

Air Navigation Capacity  
and Efficiency

Security &amp; Facilitation

Economic Development  
of Air Transport:Environmental  
Protection



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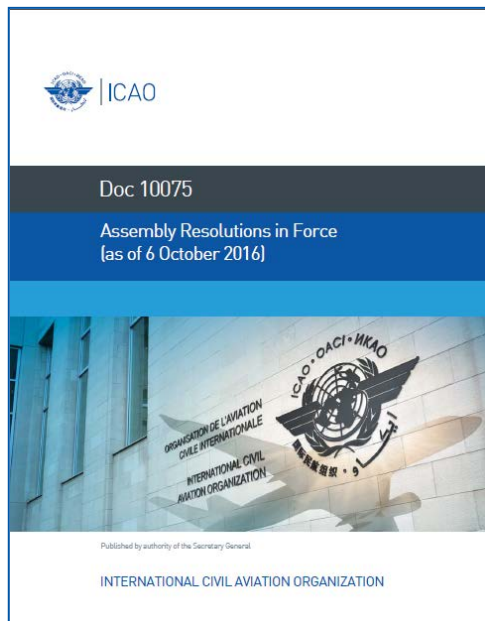
# ICAO Environmental Policies, Standards and Recommended Practices







## ICAO Environmental policies are defined in the ICAO Assembly Resolutions



**A39-1:** Consolidated statement of continuing ICAO policies and practices related to environmental protection — **General provisions, noise and local air quality**

**A39-2:** Consolidated statement of continuing ICAO policies and practices related to environmental protection — **Climate change**

**A39-3:** Consolidated statement of continuing ICAO policies and practices related to environmental protection — **Global Market-based Measure (MBM) scheme**

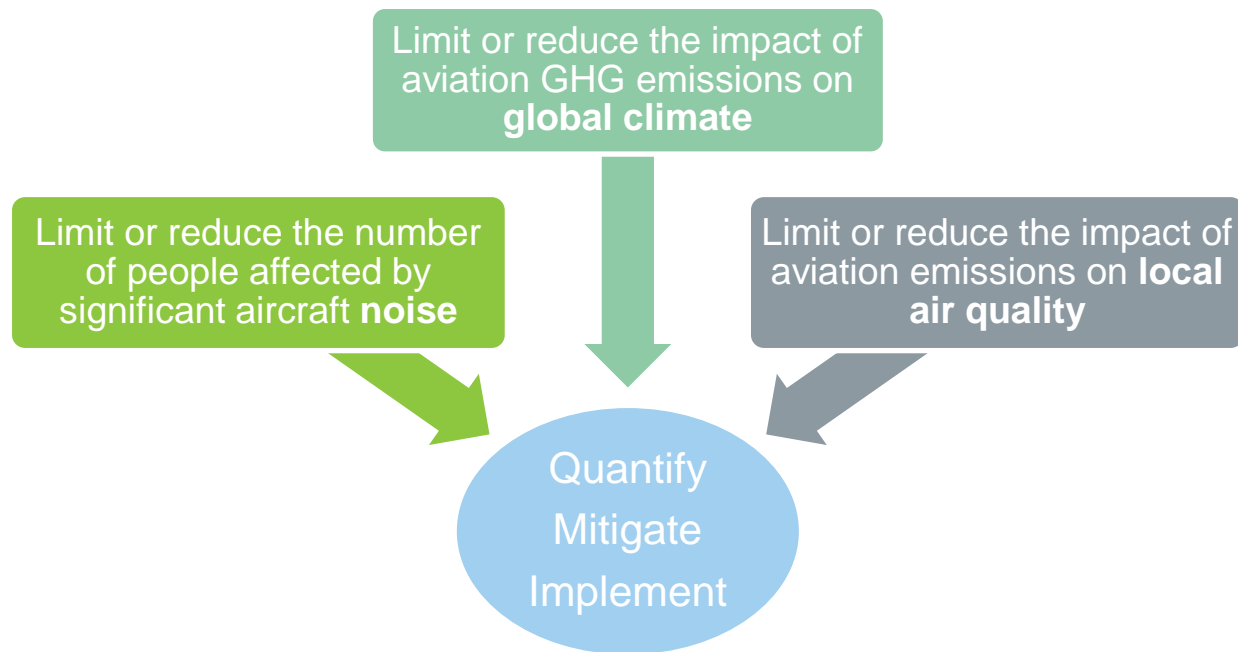
[https://www.icao.int/Meetings/a39/Documents/Resolutions/10075\\_en.pdf](https://www.icao.int/Meetings/a39/Documents/Resolutions/10075_en.pdf)



## ICAO Environmental Goals

### ICAO Strategic Objective on Environmental Protection:

Minimize the adverse effect of global civil aviation on the environment







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# ICAO State Action Plan Initiative





## History

- Initiative established in 2010 with the adoption of Assembly Resolution **A37-19**:

9. *Encourages* States to submit their action plans outlining their respective policies and actions, and annual reporting on international aviation CO<sub>2</sub> emissions to ICAO;

- Reaffirmed support in 2013 with ICAO Assembly Resolution **A38-18**:

- *Para 11: “action plans should include information on the basket of measures considered by States, reflecting their respective national capacities and circumstances, and information on any specific assistance needs”*

- And reaffirmed support in 2016 with ICAO Assembly Resolution **A39-2**:

- *Para 11: “Invites those States that choose to prepare or update action plans to submit them to ICAO” and include “quantified information on the expected environmental benefits from the implementation of the measures chosen from the basket”*

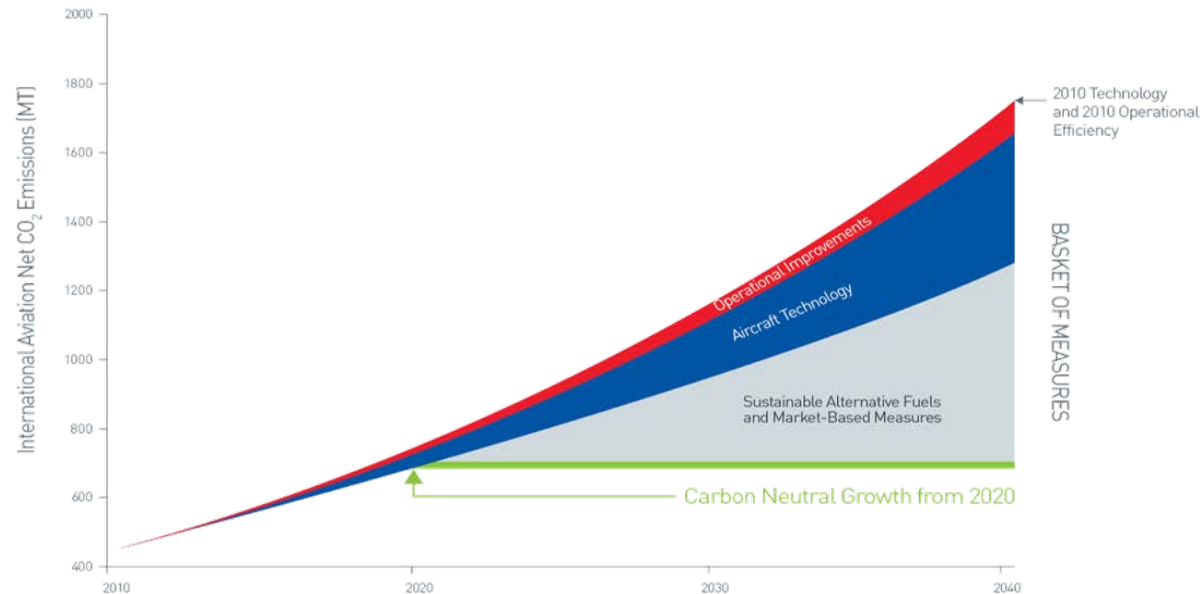
- *Para 12: “Encourages States that have already submitted action plans to share information contained in action plans and build partnerships with other member States in order to support those States that have not prepared action plans, and to make the submitted action plans available to the public, taking into account the commercial sensitivity of information contained in States’ action plans”*



## Purpose

- For States
  - Opportunity to identify measures that will improve fuel efficiency and reduce emissions
- For ICAO
  - Assess future progress toward the achievement of ICAO global aspirational goals

Contribution of Measures for Reducing International Aviation Net CO<sub>2</sub> Emissions





# Minimum Content

1

Contact information

2

Baseline (without action) fuel consumption CO<sub>2</sub> emissions and traffic (2010 or earlier to 2050)

3

List of selected mitigation measures

4

Expected results (fuel consumption, CO<sub>2</sub> emissions and traffic with the actions in #3 being taken 2017 to 2050)

5

Assistance needs

- ICAO assesses all submitted State Action Plans against the same criteria



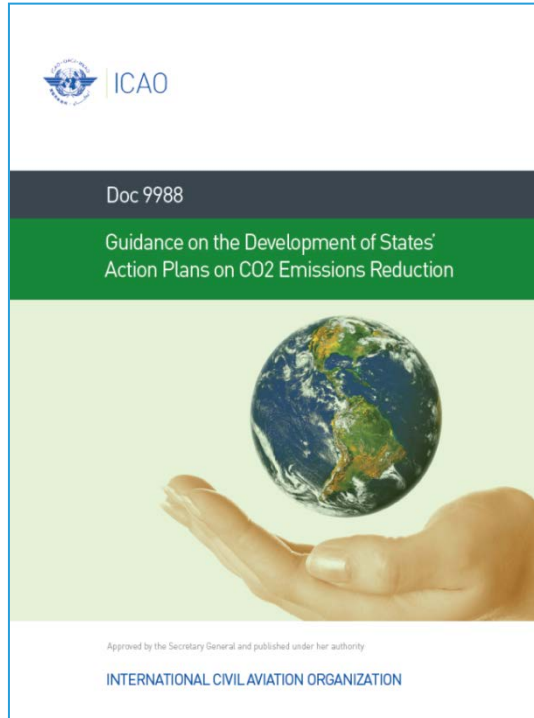
## ICAO's Facilitating Role

ICAO has facilitated the States' Action Plans initiative since 2010 by:

- developing guidance material and tools
- organizing workshops and training seminars
- enabling capacity-building and assistance projects
  - ICAO / European Union Joint Assistance Project
  - ICAO / UNDP Joint Assistance Project financed by the Global Environment Facility (GEF)
- partnering States through the Buddy Programme



# Guidance: ICAO Doc 9988

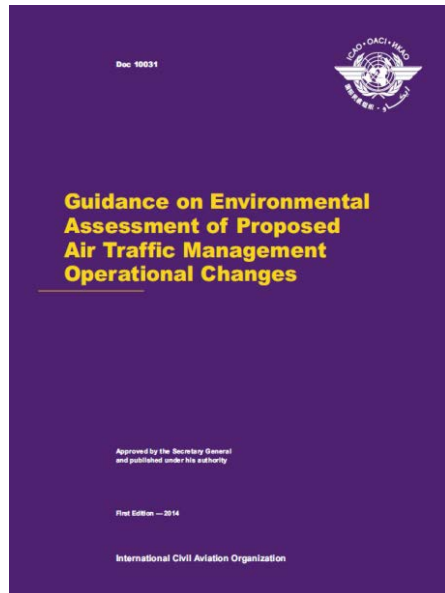


- State Action Plan Focal Points have dedicated access to Doc 9988 through the ICAO Secure Portal Action Plan for Emissions Reduction (APER) webpage
- It describes the required elements of a State Action Plan and provides a step-by-step guide on how to develop it
  - Overview and introduction
  - Baseline calculation
  - Mitigation measures and expected results
  - Implementation and assistance
  - Appendix with examples and detailed information





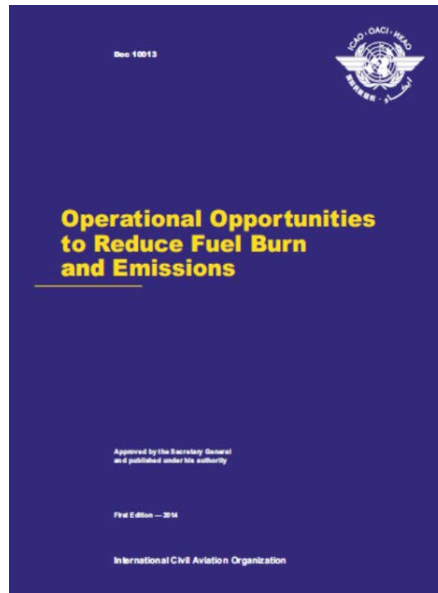
# Supporting guidance



## ICAO Doc 10031

Assessment of environmental effects from operations changes

Available on ICAO public website



## ICAO Doc 10013

Airport operations, maintenance, weight reduction, air traffic management etc.

Available on APER website



# ICAO Environmental Tools Suite

## Public ICAO Environmental Tools:



### *ICAO Carbon Emissions Calculator*

Allows passengers/cargo to estimate CO<sub>2</sub> emissions from air travel



### *ICAO Fuel Savings Estimation Tool (IFSET)*

Assists States in estimating fuel savings from operational improvements



### *ICAO Green Meetings Calculator*

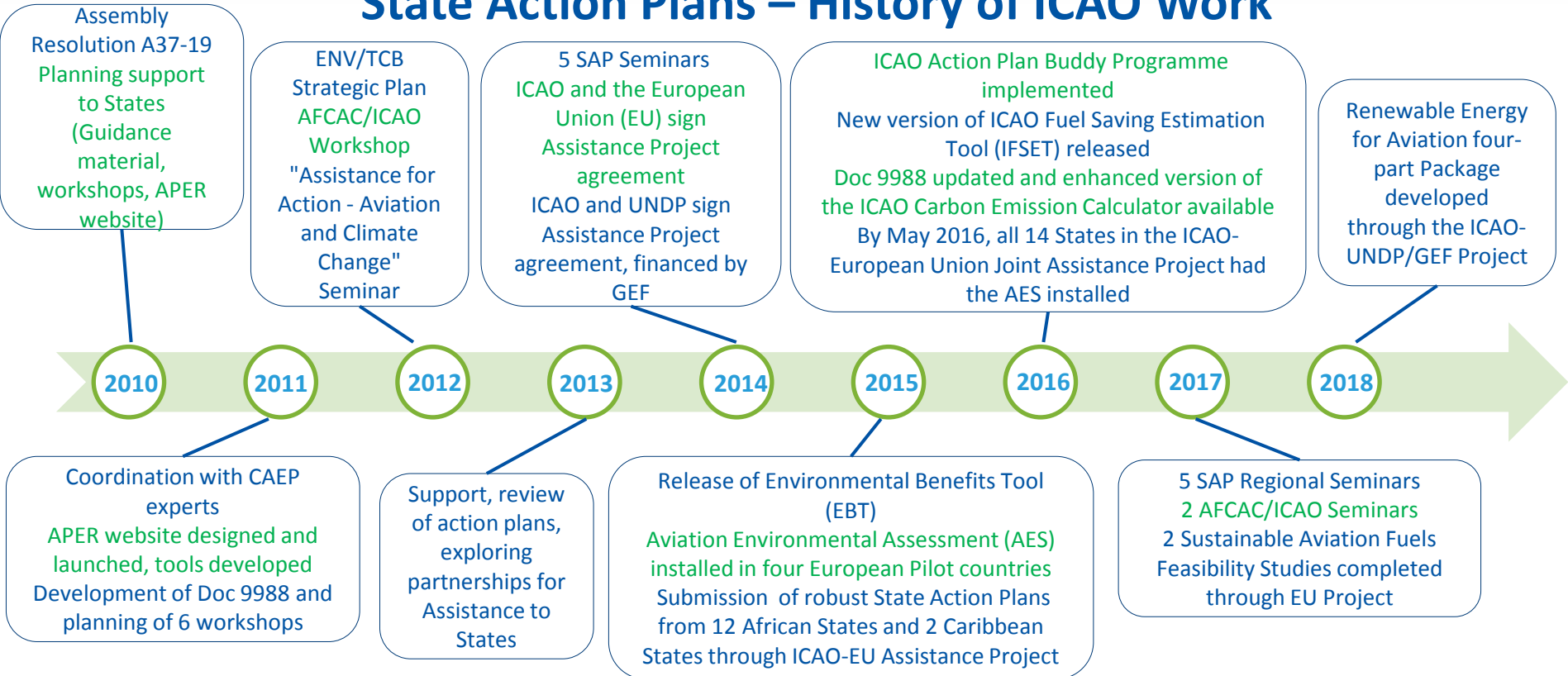
Supports decision making in minimizing CO<sub>2</sub> emissions from air travel to attend meetings

## Additional to facilitate the preparation of State's Action Plans:

- *ICAO Environmental Benefit Tool*  
Helps States to develop their Action Plan (Baseline, Mitigation Measures, Expected Results)
- *ICAO Aviation Environmental System (AES)*  
Allows CAAs to monitor CO<sub>2</sub> emissions from international aviation at State level

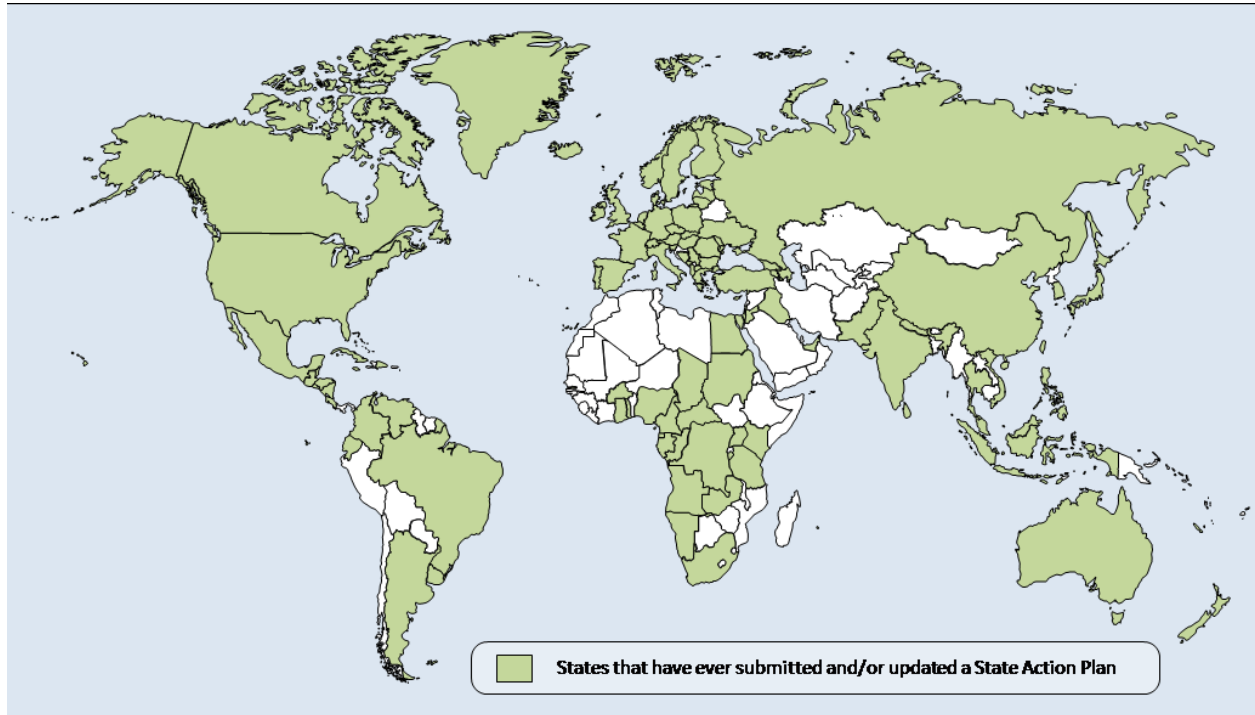


# State Action Plans – History of ICAO Work





## Current Status



**106** States representing **>90%** of global RTK have submitted an action plan to ICAO

**1171** experts trained from **132** States

**5** ICAO Buddy Partnerships

**2** capacity-building and assistance projects



# ICAO capacity building, assistance, and partnerships

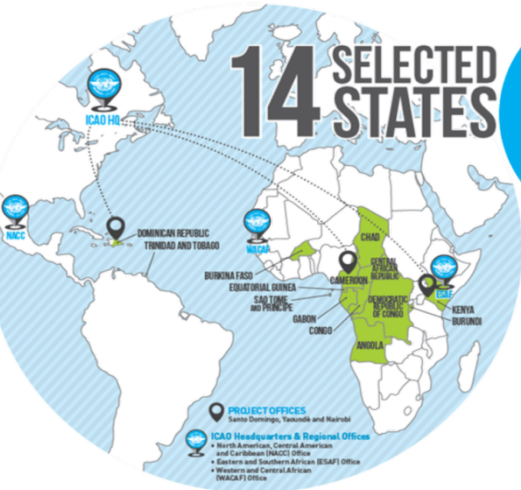
- **Facilitate financing for development and implementation of States' Action Plans**
  - ICAO-EU project: *Capacity Building for CO<sub>2</sub> Mitigation from International Aviation*
  - ICAO-UNDP project: *Transforming the Global Aviation Sector: Emission Reduction from International Aviation*
  
- **Support States for the implementation of CORSIA**
  - ICAO-Germany *Small-Scale Implementation Project of the CORSIA MRV system*
  
- **Various projects supporting the basket of measures for international aviation**
  - United Nations Framework Convention on Climate Change (UNFCCC)
  - United Nations Institute for Training and Research (UNITAR)
  - Accreditation with the Green Climate Fund (GCF)



# ICAO capacity building, assistance, and partnerships, continued

→ ICAO-EU project *Capacity Building for CO<sub>2</sub> Mitigation from International Aviation*

→ ICAO-UNDP project *Transforming the Global Aviation Sector: Emission Reduction from International Aviation*



**OBJECTIVE 1**  
ACTION PLANS DEVELOPMENT:  
Improved capacity of the National Civil Aviation authorities to develop an Action Plan on CO<sub>2</sub> emissions reduction from international aviation in accordance with ICAO recommendations

**OBJECTIVE 2**  
AVIATION ENVIRONMENTAL SYSTEMS (AES):  
Efficient CO<sub>2</sub> 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

- Development of guidance documents on Sustainable Aviation Fuels, Renewable Energy, Governance, and Financing of Clean Energy projects
- Implementation of a pilot project on renewable energy at two international airports in Jamaica





## In Summary

- ICAO encourages all Member States to develop a State Action Plan and keep it up-to-date
- State Action Plans provide States an opportunity to identify measures that will improve fuel efficiency and reduce emissions
- Robust and quantified State Action Plans allow ICAO to assess future progress toward the achievement of ICAO global aspirational goals
- The ICAO-UNDP-GEF Project has allowed ICAO to assist Member States in implementing emissions mitigation measures

For more information on this project, please visit ICAO's website:

[https://www.icao.int/environmental-protection/Pages/ICAO\\_UNDP.aspx](https://www.icao.int/environmental-protection/Pages/ICAO_UNDP.aspx)



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