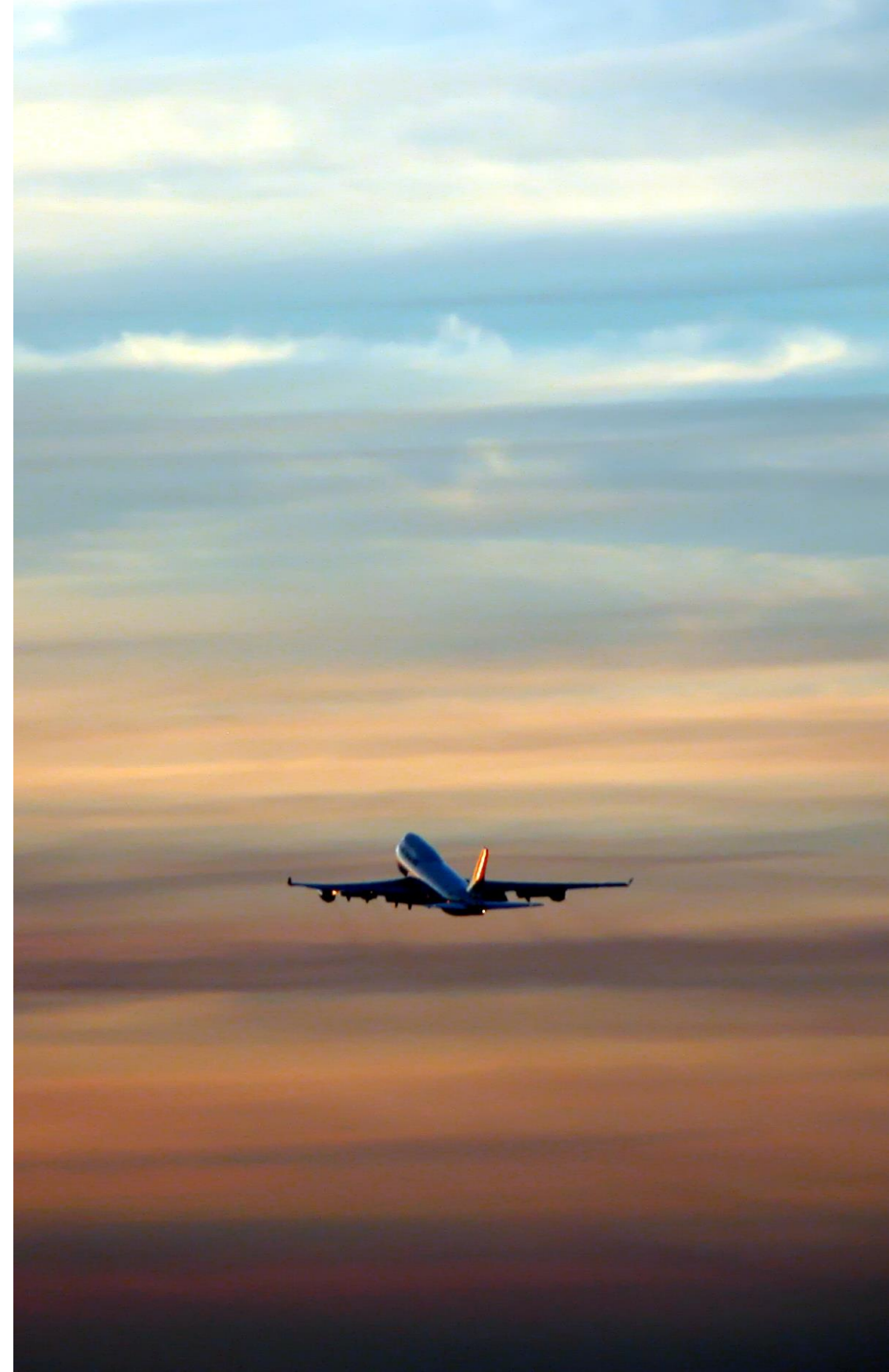


# Update on ICAO and U.S. Aviation Climate Action Plan

Presented to: **REDAC E&E Subcommittee**

By: **Dan Williams  
FAA Office of Environment and Energy (AEE)**

Date: **25 July 2024**



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**ICAO**

**Climate Action Plan**



# ICAO

## Non-CAEP

- Non-CO2 Impacts Symposium
- Capacity building and collaboration

## CAEP

- Steering Group 3 concluded two weeks ago.
- Groups now completing their work before the CAEP meeting in February.

## Events and Looking Ahead

- CAEP/13 (February 2025)



# CAEP13 / SG3 – Key Outcomes

## **Updates on the CAEP Work on the Integrated Dual-Stringency Analysis**

- This has been a huge effort across many of the CAEP work groups. SG3 saw a discussion on the results of the main analysis, which was designed to get all CAEP Members up to speed and ensure they understood both the inputs as well as the results of the main analysis.

## **Agreement on an Initial Methodology for Monitoring Progress Toward ICAO's Long-Term Aspirational Goal**

- At SG1 a group was formed to develop a methodology for tracking progress on the LTAG. The group provided an initial methodology to SG3, with an expectation of a final methodology in February.

## **Consideration of New SARPs and Green Pages**

- On the Supersonic front, WG1 provided a complete LTO noise SARP based on the Chapter 14 subsonic standard. In addition, WG3 has developed “green pages”—provisional standards in place until data is available—for carbon monoxide (CO), unburned hydrocarbons (HC) and non-volatile particulate matter (nvPM). The WG1 effort was complicated by a Russian proposal for a different LTO noise SARP not based on Chapter 14, which was eventually rejected.

## **Fuel Task Group (FTG) Discussions**

- The FTG continues to receive a lot of attention from CAEP. A discussion of embodied emissions from high-electricity input fuels sent the item back to FTG for a scoping of work, and an ongoing technical discussion on Brazilian second-crop corn resulted in the creation of a small group to help FTG resolve this effort at the meeting in September.





# Looking Ahead to CAEP/13 ...

## **Complete SARPs for Subsonic LTO Noise and CO2 (Dual Stringency) as well as SARPs for Supersonic LTO Noise**

- The goal has always been to complete both noise and CO2 standards through the dual stringency analysis.

## **Agreement on a Final Methodology for Monitoring Progress Toward ICAO's Long-Term Aspirational Goal**

- The ICAO Council is expecting a final methodology to enable ICAO's monitoring of LTAG efforts. CAEP represents the opportunity to have this completed before the 42nd Assembly in 2025.

## **CAEP Governance**

- At SG3 there was a proposal from Brazil regarding guidance and terms of reference for the various CAEP working groups and the subgroups within them. Much of the focus was on the need for diversity and representation. While there was clear agreement that technical expertise was the most critical aspect of the work, it will be interesting to see where this discussion goes.

## **Future Work**

- It seems likely that the CAEP work program will continue to expand at CAEP/13. In the coming CAEP cycle there will likely be interest in new SARPs for Emerging Technology Aircraft as well as updated SARPs for LTO NOx. There is also an increasing interest in “work” on non-CO2 emissions and impacts. Given the lack of clarity on what that “work” is, this is one in particular where we will need to be mindful of what CAEP is tasked with doing.



# Contents

ICAO

**Climate Action Plan**



# ICAO's State Action Plan Program

- Launched in 2010 to compile global progress towards meeting the climate goals set by the ICAO Assembly
  - ICAO encourages updates every 3 years
- U.S. Action Plans in 2012, 2015, 2021
- *146 States representing 98.99% of global RTK have submitted their State Action Plans to ICAO.*



# Background: 2021 Action Plan

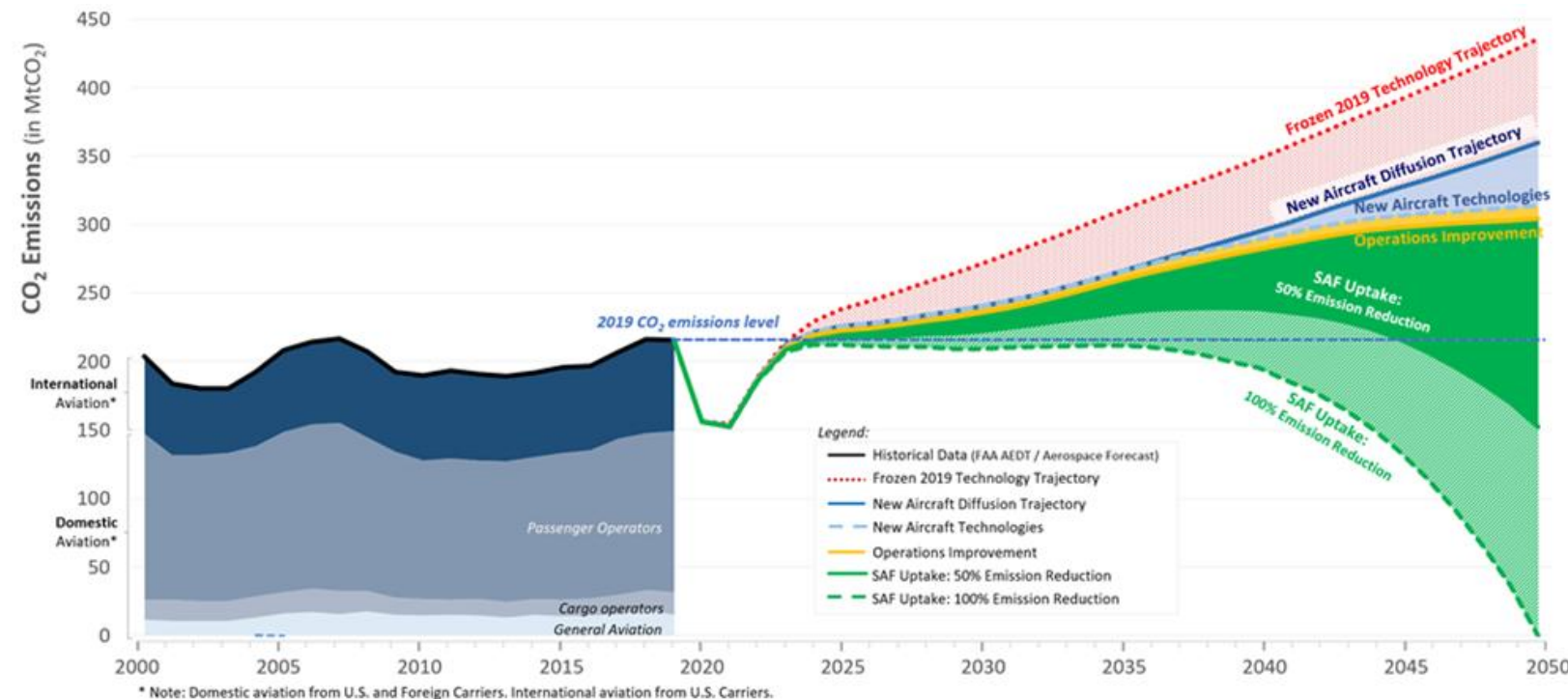
- On November 9, 2021, at COP/26, Secretary of Transportation Pete Buttigieg announced the *United States Aviation Climate Action Plan*, which included a goal of achieving net-zero emissions by 2050.
- The plan included individual and sector-wide commitments announced by the U.S. aviation industry and highlighted specific actions and policy measures by the government to foster innovation and drive change across the entire U.S. aviation sector.

- Climate Action Plan Press Release:

<https://www.faa.gov/newsroom/us-releases-first-ever-comprehensive-aviation-climate-action-plan-achieve-net-zero>

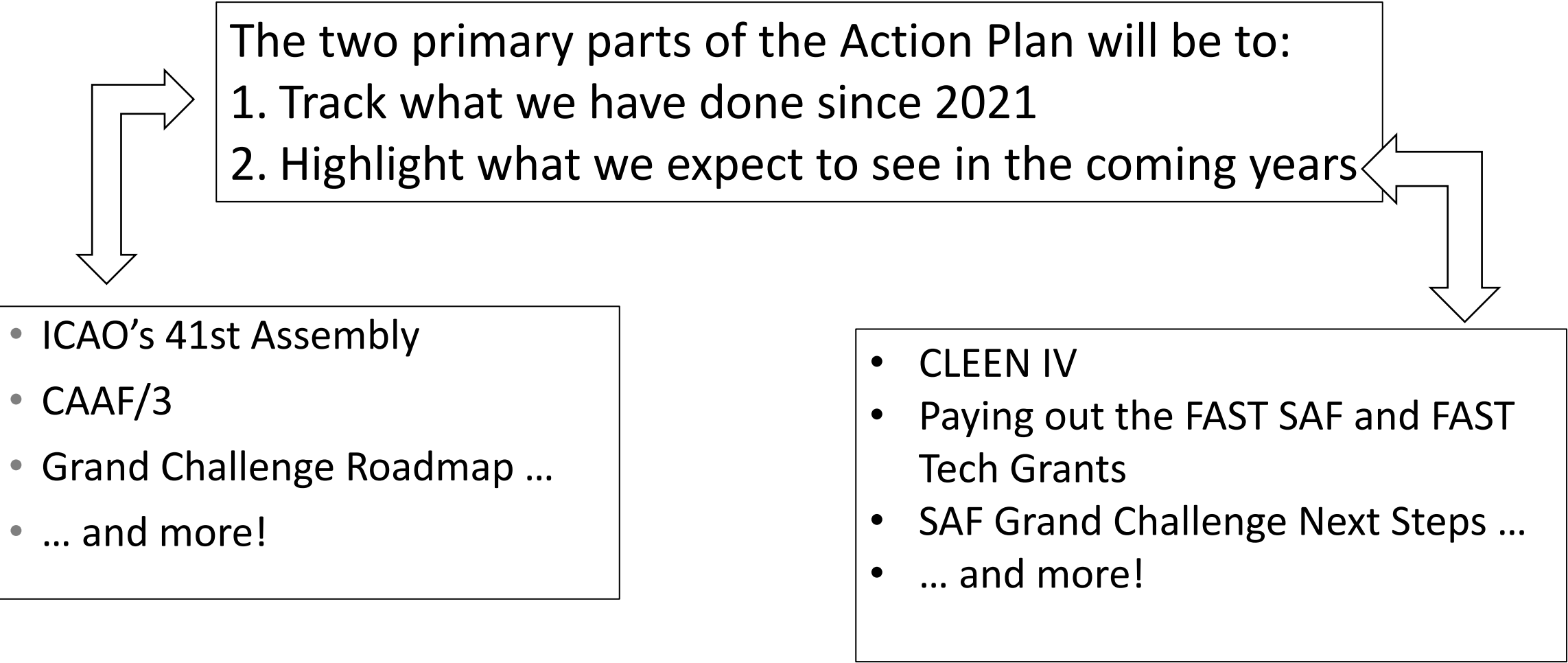
- Climate Action Plan Document:

[https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation Climate Action Plan.pdf](https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation%20Climate%20Action%20Plan.pdf)





# What has happened since 2021?



The two primary parts of the Action Plan will be to:

1. Track what we have done since 2021
2. Highlight what we expect to see in the coming years

- ICAO's 41st Assembly
- CAAF/3
- Grand Challenge Roadmap ...
- ... and more!

- CLEEN IV
- Paying out the FAST SAF and FAST Tech Grants
- SAF Grand Challenge Next Steps ...
- ... and more!

# Full Report Contents – 2021

- Introduction
- Climate Goals and Approach
  - Aircraft and Engine Technology Development
  - Operational Improvements
  - Sustainable Aviation Fuels
  - International Leadership and Initiatives
  - Airport Initiatives
  - FAA Leadership on Climate, Sustainability and Resilience
  - Non-CO<sub>2</sub> Impacts of Aviation on Climate
  - Policy and Measures to Close the Gap
- Conclusion



# Draft Contents – 2024

- Introduction
- Tracking Progress Against the 2021 Plan and Towards the Goal **NEW!**
- 2024 Updates to the U.S. Aviation Climate Action Plan
  - Aircraft and Engine Technology Development
  - Operational Improvements
  - Sustainable Aviation Fuels
  - International Leadership and Initiatives
  - Airport Initiatives
  - FAA Leadership on Climate, Sustainability and Resilience at FAA Facilities
  - Non-CO2 Climate Impacts of Aviation
  - Policy and Measures to Close the Gap
- Conclusion (Continued Commitment to Action)



# Questions?

