

Tackling Aviation's Impact on Climate Change: U.S. Perspectives

Presented to: Sustainable Skies World Summit

By: Kevin Welsh, Executive Director, Environment and Energy, U.S. Federal Aviation Administration

Date: 6 April 2022



**Federal Aviation
Administration**

Discussion Topics

- **The Aviation and Climate Challenge**
- **Aviation Climate Action Plan**
- **International Action – Role of ICAO and other Initiatives**
- **Closing Remarks – Linking Ambition to Action**



The Aviation and Climate Challenge

- ***The Opportunity:***
 - Governments worldwide and the private sector have increasingly recognized the need to decarbonize aviation and have made ambitious commitments for achieving net-zero emissions from the sector.
- ***The Challenge:*** Aviation is a difficult to decarbonize sector.
 - While there is an economic incentive for airlines to reduce fuel burn, abatement costs are high; the aviation sector is projected to continue to grow; and there are limited near-term opportunities to significantly reduce emissions.
 - The politics of international climate negotiations pose a barrier to reaching consensus internationally on goals, targets and measures to reduce aviation emissions. Depending on development status and aviation market maturity, countries have different perspectives on the role of future aviation sector growth and associated costs for decarbonization.
 - “Net Zero” goals create an important ambition signal, but are difficult to operationalize without concrete action and commitments; they can also pose challenges in terms of near term investments and decision-making.
- ***The Path Forward:*** Capitalize on ambition, take strong and effective action, and collaborate internationally to ensure a global approach.



Aviation Climate Action Plan

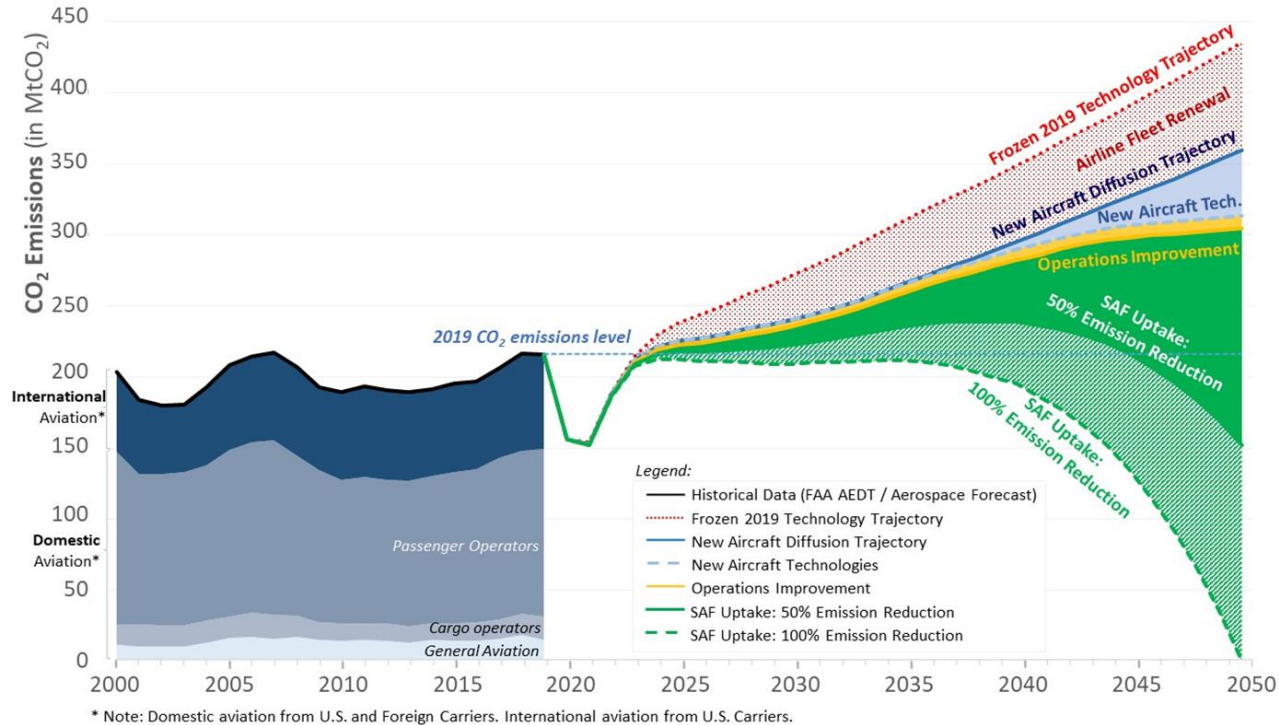
- On November 9, 2021, Secretary of Transportation Pete Buttigieg announced the ***United States Aviation Climate Action Plan***, which describes a whole-of-government approach to put the aviation sector on a path toward achieving net-zero emissions by 2050.
- The plan builds on individual and sector-wide commitments announced by the U.S. aviation industry, and highlights specific actions and policy measures to foster innovation and drive change across the entire U.S. aviation sector.
- Key elements include:
 - New technologies, including through NASA’s Sustainable Flight National Partnership
 - More efficient air traffic operations
 - A goal of 3 billion gallons SAF produced per year by 2030 through the “SAF Grand Challenge”
 - International action
 - Climate research



https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation_Climate_Action_Plan.pdf



Aviation Climate Action – Opportunities



NOTE: Analysis conducted by BlueSky leveraging FAA Aerospace Forecast and R&D efforts from the FAA Office of Environment & Energy (AEE) regarding CO₂ emissions contributions from aircraft technology, operational improvements, and SAF

International Action

International action is essential to tackling aviation emissions. Critical for the International Civil Aviation Organization (ICAO) to play a leadership role.

- **Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)**
 - Global sectoral market-based measure for international aviation.
 - Requires monitoring and reporting of emissions from all member countries.
 - Over 100 countries participating in the pilot/voluntary phase
 - Incentivizes uptake of sustainable aviation fuel (SAF) in all regions through annual reporting mechanism
 - While more action is needed, CORSIA is a critical and foundational element for tackling aviation’s climate impact.
- **Long Term Goal**
 - Widespread, but not universal, support for an ambitious long-term goal for aviation.
 - ICAO’s upcoming assembly in September 2022 will consider adoption of a long-term aviation goal.
 - Important opportunity to establish a clear ambition signal for aviation emissions.



Closing Remarks – Linking Ambition to Action

High ambitions must be linked to effective and achievable action in the near-term

- Risks
 - Unrealistic objectives & timelines
 - Failure to address well-understood challenges and hurdles (or pretending as if they don't exist)
 - Seizing on a silver bullet
 - Costs – need to openly and clearly address costs and
- Path for Success
 - Establish clear, measurable near and mid-term targets and action and mechanisms for accountability