

Aviation Sustainability Initiatives

A. Sustainable Aviation Fuels (SAF)

- **SAF-specific Blender's Tax Credit:**

Establish a 10-year, \$2/gallon performance-based SAF blender's tax credit that would require a (a la the bill soon to be introduced by Reps. Brownley, Schneider and Kildee) minimum 50% greenhouse gas (GHG) emissions life cycle reduction threshold to receive \$1.50 gallon credit with additional credit -- up to 50¢ -- for SAF that achieves a higher GHG life cycle emissions reduction.

- **Alternative Fuel and Low-Emission Aviation Technology Program:**

Enable SAF producers to construct facilities and establish or scale up operations, and for other entities to develop, demonstrate, or apply low-emission aviation technologies by creating a new DOT competitive grant program based on Section 10201 of H.R. 2 from 116th Congress.

Proposed changes from H.R.2: Funding level through an annual appropriations authorization of \$400 million and for DOT to conduct this program in consultation with DOE and NASA rather than EPA.

- **FAA's Environmental R&D:**

Expand Section 10204 of HR 2 from 116th Congress to provide enhanced funding for the Center of Excellence for Alternative Jet Fuels and Environment (ASCENT) and Continuous Lower Energy, Emissions and Noise (CLEEN) program by providing an additional **\$25 million annual appropriations authorization for ASCENT and \$15 million for CLEEN, above FY21 appropriations levels, to enhance funding for SAF research and development and other activities (ASCENT is funded at \$16.37 million in FY21 and CLEEN is at \$21.6 million).**

ASCENT is the primary FAA effort to support the development and qualification of jet fuel from alternative and renewable sources, including from the standpoint of environmental and economic sustainability, and ensures fuels are appropriately credited under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA). Funding would include, but not be limited to, work associated with evaluating producers' prospective fuels in accordance with the ASTM International D4054 fuel specification. The CLEEN Program is FAA's principal environmental effort to accelerate the development of new aircraft and engine technologies.

Note: This is consistent with increase proposed in HR 2 for research and development funding particularly as it pertains to SAF.

- **Update of the 2016 Federal Alternative Jet Fuels and Research Development Strategy:**

The Federal R&D Strategy document, which can be found [here](#), was issued almost five years ago (in June 2016) and an update of the document would take account of the SAF gains that have been made over the past five years and the obstacles to widescale production and deployment that remain. It would also support further coordination of research efforts across agencies and programs.

B. Technology

- **NASA Aeronautics:**

Enhance funding for NASA Aeronautics (ARMD) through a **\$200 million annual appropriations increase** above current FY21 enacted levels to advance sustainable aircraft, materials, and propulsion technologies, as well as other R&D technologies to improve efficiency, reduce noise and reduce emissions. (NASA Aeronautics, which includes an array of programs, was funded at \$829 million in FY2021).

- **DOE Sustainable Transportation Program:**

Provide an additional \$150 million annually through the Sustainable Transportation program of the Department of Energy's Office of Energy and Efficiency and Renewable Energy program to establish a proper focus on aviation energy research especially in terms of electric and hydrogen and fuel cell research.

- **Emission Standards:**

Direct FAA to continue to play a leading role in efforts at ICAO to continue work on aircraft emission standards and explore the potential adoption of a long-term aspirational carbon goal at the 2022 ICAO Assembly. U.S. government officials have played a leading role in these efforts so far and aircraft manufacturers, airlines, and aircraft operators look forward to continuing to support these multilateral efforts.

- **Advanced Air Mobility (AAM) Planning and Infrastructure Grants:**

Establish a targeted DOT grant program with a \$25 million annual authorization, focused on planning and capital costs, to help communities begin the process needed to develop the infrastructure associated with AAM, connect AAM to existing transportation networks, and achieve sustainability and societal benefits.

- **Lower Carbon-Emitting Ground Support Equipment (GSE) and Aircraft:**

Establish a DOT/FAA grant program, in consultation with DOE, to provide funding to eligible entities to acquire and install infrastructure to reduce reliance on traditional GSE and promote use of electric aircraft and lower carbon emissions. Program should consider city pairings of investment to stimulate use of electric aircraft on routes between urban and rural areas.

- **Alternative Fuel Vehicle Refueling Tax Credit:**

Ensure the Securing America's Clean Fuels Infrastructure Act introduced by Senators Carper, Burr, Cortez Masto, and Stabenow designed to improve and expand the alternative fuel vehicle refueling property investment tax credit (ITC) is applicable to aviation vehicles and vehicles that access airport or other aviation properties.

- **Aircraft Propulsion Plan:**

Direct FAA, NASA, and DOE to develop a comprehensive research and budget plan for the development and flight demonstrations of low/zero emission aircraft propulsion technologies, including batteries, fuel cells, hydrogen, and/or hybrid systems as well as for the use of SAF.

- **SAF/Hydrogen/Electric Airport Planning:**

Direct FAA to study what is needed to accelerate adoption and use of drop-in SAF in the existing airport infrastructure as well as addressing how to facilitate low emission technologies like electric and hydrogen into the airport ecosystem to support GSE, taxi, bus, supply trucks, etc., as well as aviation traffic directly (AAM, GA, and scheduled air service to include passenger and cargo) to determine obstacles and opportunities and how to integrate it into, and support, the needs of surrounding communities. Such study should consider hubs, smaller regional airports, as well as general aviation airports and also evaluate projected demands for SAF, hydrogen and electric to support the aviation ecosystem at these airports given future commercial aviation, general aviation, cargo traffic, and advanced air mobility. The study should also consider suggesting elements for airport community planning or an “overall community plan” for adoption of widespread adoption of these technologies.

C. Air Traffic Performance

- **Aircraft Modernization Equipage Fund:**

Key impediment to the success of the NextGen implementation and the realization of environmental and efficiency benefits is the varied avionics capabilities of aircraft, particularly in the legacy aircraft operator fleet, commonly referred to as “mixed equipage.” Congress should authorize and appropriate \$1.5 billion to an Aircraft Modernization Equipage Fund to permit an aircraft operator to use an equipage grant for the purchase and installation of avionics and equipment necessary to satisfy the May 2020 NextGen Advisory Committee Minimum Capability List (MCL) report, specifically the Baseline Capacities and Supplemental Capabilities identified in the MCL.

- **Oceanic Space-Based ADS-B:**

Provide \$60 million to improve the safety, efficiency and reduce environmental impact in oceanic airspace through deployment of Space-Based ADSB. The FAA should proceed with plans to implement planned initial operating readiness for Alaska, select oceanic airspace in Hawaii, Pacific Islands, and the Atlantic.

- **Performance Based Navigation (PBN) Organization Office at FAA:**

Establish a program management office (PMO) to oversee the program elements such as procedure design, community outreach, and the suite of controller “tools” that enable the management and sequencing of aircraft, and aircraft equipage.

- **Support for \$2.5 Billion Funding Authorization for Air Traffic Control Facilities**

The FAA operates more than 300 air traffic control facilities of varying ages and conditions all across the United States. Many of these facilities have exceeded their expected life. Some facility condition issues have led to periodic airspace shutdowns and many others lead to safety concerns for the workforce. When major systems fail or facilities have integrity problems it can lead to a less efficient airspace. Aviation is a critical part of our nation’s infrastructure, and the repair or replacement of aging air traffic control facilities will be essential to allow the United States to maintain the safest, most efficient airspace system in the world. Providing a \$2.5 billion authorization for the repair or replacement of aging air traffic control facilities will result in jobs for the American people, ensure the greenest, most efficient airspace operations for commercial and general aviation operators and the flying public alike.