

Committee on Transportation and Infrastructure U.S. House of Representatives Washington DC 20515

Peter A. De Fazio Chairman Katherine W. Dedrick Staff Director Sam Graves
Ranking Member
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March 18, 2021

The Honorable Gene L. Dodaro Comptroller General of the United States U.S. Government Accountability Office 441 G Street, NW, Room 7000 Washington, D.C. 20548

Dear Mr. Dodaro:

In 2018, commercial, business, and general aviation aircraft (including passenger and all-cargo flights) accounted for 9 percent of the U.S. transportation sector's carbon emissions and approximately 3 percent of all carbon emissions in the United States. Between 1970 and 2016, the energy intensity of air travel decreased by 75 percent due to improved aircraft fuel efficiency, air traffic operations initiatives, and aircraft configuration changes. However, additional steps are needed to reduce the growth in commercial aviation's carbon emissions and to comply with reduction and offsetting requirements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Sustainable aviation fuel (SAF), or jet fuel refined from biomass, waste streams, or gaseous carbon oxides, has emerged as the leading contender to reduce aviation emissions. Given this, we are requesting that the Government Accountability Office (GAO) assess the Federal government's role in facilitating the development, certification, production, deployment, and use of SAF and barriers to SAF deployment in the United States.

As we understand it, while there are many benefits to SAF, there are significant barriers to its widespread adoption. Depending on the feedstock, SAF offers a carbon lifecycle reduction of up to 80 percent when compared to conventional jet fuel.³ Unlike other lower emissions proposals, such as the potential for hydrogen-powered aircraft in decades to come, SAF is a

¹ EPA, Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990 –2018, available at https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100ZK4P.pdf.

² Environmental and Energy Study Institute, *Fact Sheet: The Growth in Greenhouse Gas Emissions from Commercial Aviation* (Oct. 17, 2019), https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation.

³ "Developing Sustainable Aviation Fuel (SAF)," *IATA*, https://www.iata.org/en/programs/environment/sustainable-aviation-fuels.

drop-in fuel that works in existing aircraft and can utilize most of the fueling infrastructure already in place. However, SAF is currently more expensive to produce and purchase than conventional jet fuel. These high costs currently mean that SAF is produced in smaller quantities, resulting in limited availability. The International Air Transport Association assessed that despite 1.6 billion gallons in global forward purchasing agreements for SAF, only 10.5 million gallons of SAF would be produced in 2020, or 0.015 percent of total jet fuel.⁴ Additionally, SAF must currently be blended with conventional jet fuel, although the low availability of SAF mitigates this issue in the short term.

There is widespread industry and bipartisan support for accelerating and incentivizing the development, certification, production, deployment, and use of SAF in greater volumes. Accordingly, we request the GAO assess existing barriers to SAF deployment in the United States and address the following questions:

- 1. What role does the Federal government currently play in facilitating the development, certification, production, deployment, and use of SAF?
- 2. What Federal laws or policies, including but not limited to tax law, present barriers to the development, certification, production, deployment, and use of SAF?
- 3. What other governmental and non-governmental barriers are currently preventing the widespread adoption of SAF in the U.S. commercial aviation market?
- 4. What Federal policies do stakeholders believe could be adopted, modified, or expanded that would accelerate and incentivize the near-term development, certification, production, deployment, and use of SAF in greater volumes, particularly in a way that does not hinder or delay the U.S. aviation industry's recovery from the COVID-19 pandemic?
- 5. In what areas and in what form do stakeholders believe additional Federal resources would be most effective in accelerating and incentivizing the near-and-long term development of a commercial SAF market in the United States?
- 6. As the domestic production, deployment, and use of SAF increases, what issues should the Federal government consider to ensure SAF continues to be produced in a manner that conforms to the standards, guidance, and recommended practices adopted by the International Civil Aviation Organization (with the agreement of the United States)?

⁴ Id.

We appreciate your attention to this important matter. If you have questions, please contact with the Subcommittee on Aviation, Minority Staff, at with the Subcommittee on Aviation, Majority Staff, at with the Subcommittee on Aviation, Majority Staff, at Sincerely,

Sincerely,

Peter A. DeFazio
Chair

Rick Larsen
Chair

Chair

Subcommittee on Aviation

Subcommittee on Aviation