



May 12, 2022

The Honorable Gina McCarthy  
 National Climate Advisor  
 Executive Office of the President  
 1650 Pennsylvania Avenue, NW  
 Washington, DC 20502

RE: Complementary Action by the U.S. Environmental Protection Agency in Support of the Sustainable Aviation Fuel Grand Challenge

Dear National Climate Advisor McCarthy:

As a diverse set of stakeholders dedicated to building a cleaner, more resilient aviation industry, we appreciate your resolute leadership and steadfast support for sustainable aviation fuel (SAF) and applaud the Biden Administration’s commitment to greatly advance the availability of low carbon fuel for the aviation sector.

Before the COVID pandemic, civil aviation represented 2.5% of the United States’ total greenhouse gas emissions<sup>1</sup> and 11% of its transportation-related emissions (including departing flights of U.S. and non-U.S. operators) — a share that has remained steady over time even as the industry has grown to drive an increasing segment of U.S. economic activity and become a critical pillar of the nation’s economy. Without the emission reduction technologies readily available to other transportation sectors, aviation

<sup>1</sup> “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020” Tables A-98 and ES-6, U.S. Environmental Protection Agency (EPA 430-R-22-003), <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020>

is widely recognized as one of the more difficult sectors to decarbonize, and, absent aggressive public and private action, its share of emissions could grow in the coming years. In response, both the commercial and business aviation industries are actively pursuing comprehensive short- and long-term goals to reduce aviation’s environmental impact, with public commitments to reach net-zero carbon emissions by the year 2050. With a current lifecycle greenhouse gas emissions reduction of up to 80% compared to conventional, petroleum-based jet fuel, SAF is crucial to meeting those climate goals.

We are proud to be partners in the Administration’s SAF Grand Challenge and appreciate President Biden’s reaffirmation of this initiative to increase the production of SAF to at least 3 billion gallons per year by 2030. Advancing the SAF Grand Challenge as well as the proposed SAF blender’s tax credit and SAF grant program, which have passed the U.S. House of Representatives and are now pending in the U.S. Senate, will enable the federal government and the aviation industry to make significant strides in emissions reduction, while supporting U.S. job growth and energy security. We thank the Biden Administration for these ongoing efforts to spur SAF production.

We write today to urge the Biden Administration to take readily obtainable steps to address regulatory roadblocks that currently hinder further commercialization and scale-up of SAF. To complement the tremendous work being undertaken by the U.S. Departments of Agriculture, Energy, and Transportation in the SAF Grand Challenge, we specifically urge additional participation and action by the U.S. Environmental Protection Agency (EPA). Under the Grand Challenge, the EPA has pledged to take “steps designed to expedite the regulatory approval process to support newly developed fuels and feedstocks that may be viable for inclusion as able to generate Renewable Identification Numbers (RINs) under renewable fuel in the Federal Renewable Fuel Standard (RFS) program.”<sup>2</sup> As a first step in this process, it is imperative that the EPA finalize the “biointermediate” provisions contained in the RFS annual rule with simple fixes that would dramatically improve the opportunity to achieve the Administration’s 2030 Grand Challenge goal of 3 billion gallons of SAF.

Indeed, although we are pleased that the EPA now recognizes that the generation of biointermediates can be a key step in biofuel production, the provisions as proposed appear inconsistent with the EPA’s stated goal of expediting the regulatory process for SAF under the RFS program. To have any chance of scaling up SAF production to the levels called for under the Grand Challenge, we believe the biointermediates proposal must be finalized with the following simple fixes, each of which is fully consistent with existing statutory authority and can be made with strict environmental integrity ensured under EPA’s well-designed quality assurance program (QAP), which has effectively established substantial oversight over the RFS’ RIN market:

1. Allow SAF feedstock to be processed at more than two facilities.
  - EPA has proposed allowing biointermediate transfers between two facilities. SAF production, however, is difficult and can involve multiple steps: processing renewable biomass into a “biocrude” that can then be processed into a finished fuel involves, in some instances, up to three different facilities.

It is vital that EPA provide flexibility to enable the use of more than a single biointermediate facility for projects using feedstocks such as woody biomass and agricultural residue —

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<sup>2</sup> “Fact Sheet: Biden Administration Advances the Future of Sustainable Fuels in American Aviation,” The White House (U.S. Government, September 10, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/fact-sheet-biden-administration-advances-the-future-of-sustainable-fuels-in-american-aviation/>

where the ability to pre-process residues close to the source and then finish the process at another facility prior to delivery is critical for commercial feasibility.

2. Allow biointermediate feedstock to be sold to more than one refinery.

- EPA has proposed that a biointermediate producer may only sell its feedstock to a single off-taker each year, which is clearly restrictive and would severely limit production scale-up while interfering with free competition in the fuels market. We understand EPA's concern related to the complexity of tracking the feedstock and the potential for RIN fraud. However, as noted, EPA's well-designed QAP system obviates the need for EPA to limit sales of biointermediates to a single off-taker.

3. Update the definition of "biocrude."

- EPA specifically includes biocrude as a biointermediate and defines it as follows: "Biocrude means a liquid biointermediate produced from renewable biomass through gasification or pyrolysis at a biointermediate production facility to be used to produce renewable fuel at a refinery as defined in 40 CFR 1090.80."

Because biointermediates can be processed at both petroleum and renewable fuel facilities, such as renewable diesel plants, it is essential that the regulation be updated to utilize the current and more expansive definition of refinery: "Refinery means a facility where fuels are produced from feedstocks, including crude oil or renewable feedstocks, through physical or chemical processing equipment."

4. Allow for commingling of biointermediates.

- EPA has proposed physical segregation provisions that would prohibit the commingling of a "batch" of biointermediate with any other batch of biointermediate prior to receipt at the renewable fuel production facility, even if procured from the same supplier. In practice, this restriction would preclude the aggregation of significant quantities of biointermediate feedstocks at any off-site storage facility, which is common practice in the RFS-compliant biofuels industry today. Preventing any commingling of fully fungible feedstocks in the biointermediate context will significantly raise costs for SAF producers and could render some SAF pathways impracticable, such as those reliant on hub and spoke supply chains.

5. Authorize use of pipeline biogas.

- EPA currently permits the use of biogas transmitted via pipeline to produce transportation fuels that qualify for RINs, such as CNG or LNG, with regulations that impose several requirements to ensure that the RINs generated correspond to the biogas used to produce it. Extending this existing regulatory framework for the eligibility of SAF generated from biogas to qualify for RINs is straightforward.

It is important to note that the actions outlined above do not represent an exhaustive list of the proposed changes to the biointermediate proposal that would positively affect our nation's SAF supply; however, these simple first steps would have tremendous impact on SAF scale-up and enjoy broad industry support. We encourage the EPA to closely examine all comments on the proposed rule submitted by SAF industry stakeholders throughout the rulemaking process.

Creating a commercial supply of SAF is of critical importance to both the aviation sector and our nation's environment. We believe the SAF Grand Challenge can be the foundation for a viable and productive domestic SAF industry, creating tens of thousands of jobs and enabling the United States to retain its position as the world leader in this emerging market. However, it is imperative that the Biden Administration act now to solidify a complementary regulatory framework to foster cleaner, more sustainable, and more secure domestic energy sources for aviation. Our companies and organizations stand ready to collaborate with you, the EPA, and the Departments of Agriculture, Energy, and Transportation to ensure we meet our shared goal of a net-zero aviation industry by 2050. Thank you for your leadership on this issue and for your consideration of these essential fixes.

Sincerely,

Aequor, Inc.  
Aerospace Industries Association  
Airline Passenger Experience Association  
Airlines for America  
Airports Council International – North America  
Alder Fuels  
Algae Biomass Organization  
American Airlines  
American Express Global Business Travel  
Atlantic Aviation  
AvFuel  
Biotechnology Innovation Organization  
The Boeing Company  
Cargo Airline Association  
Cincinnati/Northern Kentucky International Airport  
Delta Airlines  
Fulcrum Bioenergy  
GE Aviation  
General Aviation Manufacturers Association  
Hawaiian Airlines

Helicopter Association International  
Honeywell  
International Flight Services Association  
LanzaJet  
LanzaTech  
National Air Carrier Association  
National Air Transportation Association  
National Business Aviation Association  
NetJets Association of Shared Aircraft Pilots  
Regional Airline Association  
Renewable Fuels Association  
Rolls Royce  
Shell Aviation  
Signature Aviation  
SkyNRG Americas  
Travelers United  
United Airlines  
Velocys  
World Energy  
World Fuel Services

cc: DOT Secretary Pete Buttigieg  
DOE Secretary Jennifer Granholm  
USDA Secretary Tom Vilsack  
EPA Administrator Michael Regan  
FAA Acting Administrator Billy Nolan