



Is Jet Fuel a Transportation Fuel or Not?
Treatment of Sustainable Aviation Fuel under the Renewable Fuel Standard Program

The Biden Administration has outlined a government-wide policy to promote sustainable aviation fuel (SAF),¹ which is seen as “critical to aviation’s ability to meet the net-zero goals.”² The Administration’s efforts to support SAF include reducing costs, enhancing its sustainability, and expand supply and end uses.³ These efforts, including international commitments, have a preference for non-food based feedstocks, such as waste oils, fats, and greases.⁴ SAF producers may qualify for incentives from multiple programs, which may result in the same emissions reductions being counted more than once. Among other incentives identified to support SAF is the ability to generate credits under federal and state laws. In particular, the U.S. Environmental Protection Agency (EPA) allows Renewable Identification Numbers (RINs) to be generated for renewable jet fuel (or SAF) as “biomass-based diesel” under the Renewable Fuel Standard (RFS), but jet fuel is not an obligated fuel, which means there is no requirement that SAF be used. The RFS program sought to support renewable fuels because, among other things, of the greenhouse gas emissions reductions that could be realized in the transportation sector.

On July 12, 2023, EPA issued its first “Set” rule under 42 U.S.C. §7545(o)(2)(B)(ii) that requires EPA to set the minimum applicable volumes under the RFS Program post-2022.⁵ Because the statute did not include any provisions on how EPA was to implement the volume requirements after 2022, in the “Set” rule, EPA determined that it would continue to set percentage standards as was required under 42 U.S.C. §7545(o)(3) through compliance years 2022 for biomass-based diesel, cellulosic biofuel, advanced biofuel, and renewable fuel under “Set.” In so doing, EPA continued to define “biomass-based diesel” broadly to even include SAF over objections that such treatment violated the statute and arbitrarily allows the displacement of biodiesel under the RFS. Sustainable Advanced Biofuel Refiners Coalition is urging EPA to implement the RFS in a manner that ensures growth of *all* fuels, including biodiesel and SAF.

Under the RFS, Sustainable Aviation Fuel is an “Advanced Biofuel” but not “Biomass-based Diesel.”

- The RFS defines biomass-based diesel as “biodiesel,” which, by statute, means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by EPA under 42 U.S.C. §7545(b).
- Diesel fuel is a common term for distillate fuel used in motor vehicles.⁶ The biodiesel definition incorporated into the RFS was referring to methyl esters, which is now specifically defined as fuel meeting ASTM D6751, not renewable diesel and certainly not renewable jet fuel.⁷ Indeed, the inventor of the diesel engine looked at *biodiesel* as a substitute to petroleum-based diesel.⁸

¹ See, e.g., *United States 2021 Aviation Climate Action Plan* (2021), available at https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation_Climate_Action_Plan.pdf (“Aviation Climate Plan”).

² *Id.* at 8.

³ *Id.* at 23.

⁴ See, e.g., International Air Transport Association (IATA), *Net zero 2050: sustainable aviation fuels* (2023), <https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet--alternative-fuels/> (defining SAF as having 80% greenhouse gas emissions reductions and being derived from non-food based feedstocks).

⁵ EPA has previously issued the volume requirements for biomass-based diesel under 42 U.S.C. §7545(o)(2)(B)(ii), because the statute only provided specified biomass-based diesel volumes through 2012 rather than through 2022.

⁶ U.S. Energy Information Administration (EIA), *Diesel fuel explained*, <https://www.eia.gov/energyexplained/diesel-fuel/> (last updated Dec. 22, 2023).

⁷ H.R. Rep. No. 105-727, at 8-9 (1998).

⁸ EIA, *Diesel fuel explained*, <https://www.eia.gov/energyexplained/diesel-fuel/>.

- SAF is not a “diesel fuel substitute,” nor does it meet EPA’s registration requirements, which fall under its Part 79 regulations and apply only to motor vehicle fuels. In short, ***SAF is not biomass-based diesel by statute and, therefore, should not be allowed to be used to meet the RFS program’s biomass-based diesel volume requirements.***
- Ignoring the plain terms of the statute and mis-reading the definition of “biodiesel” broadly to include *any* diesel fuel substitute, EPA’s only explanation for treating SAF as “biomass-based diesel” has been that SAF can be produced at renewable diesel fuel refineries. But they are different fuels with different specifications that are used in different markets. Moreover, had Congress wanted to treat them the same, it would not have needed to define “additional renewable fuel,” which includes renewable fuel substitutes for fossil-based jet fuel. Indeed, biomass-based diesel targets emissions reductions in the medium- and heavy-duty vehicle sector, which will be lost if merely transferred to the aviation sector.
- Jet fuel and SAF specifications are designed to ensure proper operation of aircraft engines, not diesel engines. These specifications limit trace amounts of diesel fuel and biodiesel in jet fuel, which must be periodically checked to ensure the specifications continue to be met and are often transported in pipelines restricted to jet fuel only or that limit the types of fuels that can be transported to limit potential contamination.⁹ These are not fuel substitutes.
- In addition, EPA has limited the growth of biomass-based diesel due to claims of limited feedstock. But, EPA has allowed sugarcane ethanol to jet fuel to also participate in the biomass-based diesel program. While this approval is counter to the statutory definition and inconsistent with EPA’s own regulations, EPA has created an artificial “biomass-based diesel” market that is not consistent with Congress’ goals of supporting *biodiesel*.

Treating Sustainable Aviation Fuel as Advanced Biofuel Will Continue to Support Investments.

- EPA has routinely found that increases in production of renewable diesel and sustainable aviation fuel is being driven by the advanced biofuel category, not the biomass-based diesel category.¹⁰ Where jet fuel is not obligated but sustainable aviation fuel can generate RINs, its production will only serve to replace biodiesel and even renewable diesel as, according to EPA, the same refineries largely produce both fuels. Counter to the goals of the RFS and this Administration, this will not result in any reduced greenhouse gas emissions from the transportation fuel sector.
- Moreover, because of the diverse fuels that can constitute advanced biofuel, EPA should not be able to limit its growth based on asserted feedstock limitations as it must ensure sufficient incentives to support innovation and new fuels.

The RFS Can Help Further Support SAF Without Endangering Biodiesel.

- The RFS program has shown that it can incentivize and grow biofuels, when implemented properly. While acknowledging that the RFS provides support for SAF, it is currently an opt-in program for SAF.¹¹ The Administration’s Aviation Climate Action Plan indicates that, it “will undertake extensive consultations with stakeholders on options for policies and programs and will assess existing legal authorities with a view to advancing additional tools in support of the goal” of net-zero emissions for U.S. aviation by 2050.¹² The RFS presents an opportunity to help further bolster SAF production in a way that does not merely shift emissions and negatively impact existing investments in biodiesel. In particular, emissions reductions in the aviation sector should be *in addition to* emissions reductions in the medium- and heavy-duty vehicle sector, which remains the second largest source of greenhouse gas emissions in the transportation fuel sector at 23.1% compared to 8.6% stemming from commercial and other aircraft.¹³

⁹ See, e.g., Mark A. Rumizen, *Qualification of Alternative Jet Fuels*, Bioenergy and Biofuels (2021), available at <https://www.frontiersin.org/articles/10.3389/fenrg.2021.760713/full>.

¹⁰ See, e.g., 88 Fed. Reg. 44,468, 44,516 (July 12, 2023).

¹¹ Aviation Climate Plan at 22.

¹² *Id.* at 34.

¹³ EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021*, at 2-35 (2023).

- EPA can further support growth in sustainable aviation fuel by treating jet fuel as “transportation fuel” under the RFS. The RFS is intended to promote renewable fuel use in “transportation fuel,” which is defined as: “fuel for use in motor vehicles, motor vehicle engines, nonroad vehicles, or nonroad engines (except for ocean-going vessels).”¹⁴ EPA defines “jet fuel” as “any distillate fuel used, intended for use, or made available for use in aircraft.”¹⁵
- In 2010, EPA found it had discretion in defining “transportation fuel” and determined it would not include jet fuel as an obligated fuel, only including “diesel” fuels.¹⁶ While this confirms that jet fuel is *not* a diesel fuel (and thus sustainable aviation fuel should not be considered biomass-based diesel), there is no basis for treating jet fuel differently under the RFS program, particularly now that sustainable aviation fuel is more commercial. Further, obligating jet fuel would support the administration’s goals of producing 3 billion gallons of SAF by 2030.¹⁷
- EPA has acknowledged it has discretion under “Set” in how to implement the volume requirements,¹⁸ and such authority allows subcategorizing the volume requirements to better protect existing investments while ensuring *additional* growth and *actual* reductions in greenhouse gas emissions. The statute also gives EPA discretion in issuing regulations regarding “credits” provided for additional renewable fuel, which includes SAF, including regulations “for the use of such credits by the generator, or the transfer of all or a portion of the credits to another person, for the purpose of complying with paragraph (2).”¹⁹ SAF presents a unique consideration because of the unique markets and different feedstocks that can be used, which can include, among other things, corn ethanol and soybean oil. Ensuring a specific category for SAF could better help these fuels compete in the RFS program, supporting this Administration’s goals of promoting SAF. Keeping them as an opt-in fuel that competes with biodiesel does not achieve the emissions reductions goals, even if it may result in some increased production of SAF.

Revising the Biomass-Based Diesel Category Would Not Impact Treatment of Biodiesel as Heating Oil.

- Biodiesel (methyl esters) is a diesel fuel substitute and is a registered fuel under Part 79, regardless of whether it is used in motor vehicles, nonroad applications, or as heating oil. Moving sustainable aviation fuel out of the biomass-based diesel category would not impact heating oil.
- Moreover, unlike jet fuel, heating oil is, by definition, not a transportation fuel. As such, EPA could not make it an obligated fuel under the RFS program.

¹⁴ 42 U.S.C. §7545(o)(1)(L).

¹⁵ 40 C.F.R. §1090.80.

¹⁶ EPA, *Renewable Fuel Standard Program (RFS2) Summary and Analysis of Comments*, at 3-198 (2010).

¹⁷ The White House, *Fact Sheet: Biden Administration Advanced the Future of Sustainable Fuels*, Sept. 9, 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/>.

¹⁸ 88 Fed. Reg. 44,468, 44,519 (July 12, 2023).

¹⁹ 42 U.S.C. §7545(o)(5)(E).