



May 10, 2024

Submitted electronically at:
<https://ww2.arb.ca.gov/public-comments/low-carbon-fuel-standard-workshop-april-10-2024>

California Air Resources Board
1001 I Street
Sacramento, California 95814

Re: Airlines for America® Comments on April 10, 2024 Low Carbon Fuel Standard Workshop

I. Introduction

Airlines for America® (A4A), the principal trade and service organization of the U.S. airline industry,¹ appreciates the opportunity to provide comments to the California Air Resources Board (CARB) following the public workshop hosted by CARB Staff on April 10, 2024 on the Proposed Low Carbon Fuel Standard (LCFS) Amendments.² These comments reiterate and supplement our statements provided in written comments on the proposed amendments submitted on February 20, 2024. In summary, CARB is federally pre-empted from regulating jet fuel under the LCFS program, but even if implemented the proposal to eliminate the exemption for jet fuel used on intrastate flights would not achieve CARB's stated objective to increase the production, availability, and use of Sustainable Aviation Fuel (SAF), also referred to as Alternative Jet Fuel (AJF) by CARB, in California. A different approach is necessary for CARB and the aviation industry to achieve our mutual objectives for SAF use in California.

The U.S. airline industry is committed to reducing its climate impact and achieving net zero carbon emissions by 2050. Transitioning to SAF is core to this commitment, and we have pledged to work with governments and other stakeholders to make three billion gallons of SAF available in the United States by 2030. Through this and individual airline targets and goals a clear market signal for affordable SAF has been established. Achieving these goals requires new and additional policy incentives, streamlined permitting processes, and close collaboration among airlines, the fuels industry, manufacturers, environmental organizations and governments, among others.

With respect to SAF, California has established itself as an early leader in attracting investment, production, and use of SAF through the existing LCFS Program, which provides an opt-in credit for SAF that helps reduce the price difference between SAF and conventional jet fuel. We look

¹ A4A's members are: Alaska Airlines, Inc.; American Airlines Group Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawaiian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member.

² These comments supplement and incorporate A4A's comments on the LCFS submitted on January 7, 2022, August 8, 2022, March 15, 2023, and February 20, 2024. as well as the comments previously submitted during the 2018 LCFS referenced in footnote 10 *infra*.

forward to working with CARB on measures that will rapidly expand availability and deployment of SAF in California.

Aviation accounts for 2.6% of the U.S. greenhouse gas emissions but 5% of U.S. Gross Domestic Product (GDP) and 4.1% of California's GDP, thus having an outsized economic impact relative to its share of emissions. There are more than 380,000 employees of U.S. commercial aviation firms based in California, with an overall economic impact of \$194 billion³. Aviation is critical to driving California's economy and its rank as the fifth largest economy in the world, enabling \$114 billion in annual trade flows and underpinning many of the rest of California's biggest economic drivers such as agriculture, tourism, manufacturing, banking, technology and small business. Ensuring a healthy and vibrant aviation industry is essential to California's future, and leveraging CARB's early leadership on SAF can enable California leadership in the emerging SAF production industry, creating new jobs and economic development opportunities.

II. Discussion

With this context, we reiterate our serious concern with the proposal by CARB to regulate jet fuel used for flights within California as an obligated fuel under the LCFS Program. This proposal to obligate jet fuel would be unlikely to result in increased SAF production, availability, or use in California, but would lead to higher jet fuel prices and slow down rather than accelerate efforts to increase SAF production and use in California. The primary impediment to increased SAF production and availability in California and elsewhere remains the higher cost of SAF for producers and buyers relative to conventional jet fuel and renewable diesel.

The relationship between deficit generation and credit generation is unchanged by the CARB proposal. Under the structure of the LCFS program, deficits are created for fuel producers from specific conventional fuels delivered into California as identified and defined by the program. These deficits form a common pool that can be retired with credits from any type of eligible fuel. But there is no requirement for a relationship between the type of fuel that created the deficit and the type of credit that retires that deficit. Because of the relative economic advantages of renewable diesel compared to SAF, fuel producers will continue to prioritize renewable diesel production instead of SAF. As a result, the removal of the exemption for conventional jet fuel is unlikely to materially change the SAF production relative to the status quo. In fact, the deficits created by intrastate jet fuel likely would be retired primarily by renewable diesel and other road transport related credits. Obligating jet fuel will lead to the increased price of jet fuel, diverting resources that might have gone for SAF purchase and use towards renewable diesel production instead, without creating additional SAF production. And because the proposal will not meaningfully increase SAF supply and use, the local air quality benefits attributed to increased SAF use as a result of eliminating the intrastate jet fuel exemption are overstated.

In addition to not being an effective policy tool to increase SAF production, the CARB proposal to regulate jet fuel is pre-empted by federal law, a fact that CARB recognized when it exempted

³ [The Economic Impact of Civil Aviation on the U.S. Economy, State Supplement, US Department of Transportation, November 2020](#)

jet fuel from the LCFS in 2018.⁴ It is critically important that uniform federal rules apply to aviation and aviation fuels, under the Supremacy Clause of the U.S. Constitution. The CARB proposal seeks to regulate jet fuel and reduce emissions from aviation through such regulation, both of which are pre-empted under federal law, as described in further detail below. In light of the clear and broad federal authority for regulating jet fuel and aircraft engine emissions, California is pre-empted from regulating jet fuel under the LCFS. This is explained in detail in our comments submitted on February 20, 2024.

III. Comments on Public Workshop and Supplemental Information

CARB Staff hosted a public workshop on April 10, 2024, and posted supplemental information on CARB Staff analysis on the proposed amendments. With regard to jet fuel, CARB Staff restated the objective to “Increase the use of alternative jet fuel in the State”. The supplemental information posted by CARB provides new data on CARB estimates and expectations for how much SAF would be used in California under the proposed regulations. While there is insufficient information provided to deduce the assumptions in how the projected volumes were achieved, the analysis overstates the projected increase in SAF volumes caused by removing the exemption for jet fuel used on intrastate flights.

Table 1. CARB Analysis of projected AJF volumes under BAU and Proposed Amendments Scenarios, in millions of gallons per year⁵

	2022	2023	2024	2025	2026	2027	2028	2029	2030
BAU Scenario	11.6	5.8	5.8	5.3	5.2	3.9	3.2	3.3	3.3
Proposed Amendments Scenario	11.6	5.8	6.1	111.5	144.8	178.1	211.4	244.7	278.0

The CARB analysis projects that in 2025 SAF use in California will grow from approximately 6.1 million gallons in 2024 to 111.5 million gallons in 2025, three years before the jet fuel obligation is proposed to take effect. First, it is highly unlikely that SAF availability and use could increase this dramatically in a single calendar year. And second, this analysis does not support the effectiveness of the proposal to eliminate the exemption for intrastate jet fuel. If anything, the CARB analysis indicates that eliminating the exemption for jet fuel (i.e. creating deficits from jet fuel) used on intrastate flights is not a significant contributor to increasing SAF use in California. To significantly increase SAF production, availability, and use of SAF in California, and to obtain the benefits of increased SAF use spoken of by many stakeholders at the workshop, one must address the economic disadvantages of SAF production relative to Renewable Diesel. The regulatory proposal does not materially change the relative value of RD and SAF to producers and therefore estimated increases in SAF production, availability and use as a result of the proposal to eliminate the intrastate jet fuel exemption are unlikely to occur. Increasing SAF availability and use as envisioned by the CARB analysis requires a different policy intervention.

⁴ CARB stated that “[s]ubjecting aircraft fuels to annual carbon intensity standards would raise federal preemption issues” available at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2018/lcfs18/isor.pdf?_ga=2.259407882.1202437490.1641231788-253234234.1573227006

⁵ [Supplemental 2023 LCFS ISOR Documentation | California Air Resources Board](#), posted April 10, 2024

The CARB Staff presentation and comments by staff during the workshop noted that CARB is seeking comments on guardrails for crop-based fuels. We further note that in its recent guidance on the Inflation Reduction Act (IRA) 40B SAF Blenders Tax Credit, that the federal government has recognized the existing CARB LCFS program process as sufficient to meet the value chain sustainability requirements of the U.S. government. We take this as endorsement of the existing CARB approach to ensure the sustainability of fuels used in the LCFS program, relying on independent auditors and modeling developed by Argonne National Labs and as implemented by CARB in the CA-GREET model. We also note in CARB's presentation at the subject workshop, the analysis that demonstrated the increasing stringency of the carbon intensity requirements of the LCFS program provides a limit on fuels with higher carbon intensity. We encourage CARB to continue to rely on the best available facts, data, and scientific understanding available (and demonstrated during the subject workshop), as it considers guardrails for crop-based fuels.

Lastly, we also note in the supplemental information provided by CARB for the workshop that only waste oil and virgin oil feedstocks and pathways are included in CARB's analysis for AJF. Our expectation is that a variety of feedstocks and pathways, including ethanol to jet, cellulosic biomass from wastes and residues, and power-to-liquid pathways will reach commercial maturity during the lifetime of the LCFS program. A4A member airlines are making investments and offtake agreements with future SAF producers of these next generation production pathways to help accelerate their availability.

CONCLUSION

A4A supports the existing opt-in crediting model under the LCFS, combined with U.S. federal incentives, as an effective approach for increasing SAF production, use and availability in California. With further collaboration and partnership, we see the potential to dramatically increase the production and use of SAF in California and other jurisdictions and are interested in identifying new opportunities to work together. A4A offers its technical and operational expertise to work together with CARB and other stakeholders in better understanding the challenges and opportunities for promoting the availability of SAF to achieve CARB's objectives of a sustainable and workable reduction of carbon emissions in the transportation sector. The proposal to remove the exemption for jet fuel used on flights within California, however, will not be an effective tool for stimulating SAF production and use, and instead would divert resources and attention away from SAF objectives shared by California and the aviation industry. In addition, CARB is federally pre-empted from removing the exemption for jet fuel and obligating conventional jet fuel as a deficit-generating fuel. We urge CARB to reconsider and withdraw the proposal to eliminate the exemption for jet fuel used on flights within California and instead preserve the existing opt-in approach for SAF and partner with the aviation sector and stakeholders across the emerging SAF ecosystem on new policies and approaches to address the underlying challenges which could rapidly increase the availability and use of SAF in California. We encourage further dialog on this point to find a mutually acceptable path forward.

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Thank you for your consideration of our comments. Please do not hesitate to contact us if you have any questions.

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Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Welsh", with a long, sweeping horizontal flourish extending to the right.

Kevin Welsh

Vice President, Environmental Affairs and Chief Sustainability Officer

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