



August 27, 2024

Submitted electronically at:
<https://ww2.arb.ca.gov/applications/public-comments>

California Air Resources Board
1001 I Street
Sacramento, California 95814

Re: Airlines for America® Comments on Proposed Low Carbon Fuel Standard
Amendments posted August 12, 2024

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 posting of Modified Text and Availability of Additional Documents and/or Information Proposed Low Carbon Fuel Standard Amendments.² A4A supports CARB's withdrawal of the proposal to eliminate the jet fuel exemption and its retention of the existing opt-in approach for SAF under the CARB LCFS Program.

These comments supplement our statements provided in written comments on the proposed amendments submitted on February 20, 2024. In those comments we stated that a different approach is necessary for CARB and the aviation industry to achieve our mutual objectives to expand 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. Individual airlines have also adopted specific SAF targets and goals to send a clear market signal for affordable SAF.. 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 not only incentivizes SAF production but also helps reduce the price difference

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, February 20, 2024, and May 10, 2024.

between SAF and conventional jet fuel. We look 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

1. Comments on Modifications to Section 95482. Fuels Subject to Regulation

A4A supports the revised proposal that does not add jet fuel to the list of regulated fuels under the LCFS program. In our prior comments to the initial December 19, 2023 Proposed Amendments to the CARB LCFS Program we expressed concerns with CARB's proposal to remove the exemption for jet fuel under the program. CARB's Initial Statement of Reasons (ISOR) stated the purpose and intent of was to increase the production and use of SAF in California. We disagreed with the assessment that the proposal would achieve the desired result, and asserted that making jet fuel an obligated fuel under the LCFS program would not, by itself, result in increased SAF production, availability and use in California. We are pleased that after further analysis CARB has reached a similar conclusion.

As we stated in prior comments, 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. Because of the relative economic advantages of renewable diesel compared to SAF, fuel producers will continue to prioritize renewable diesel production instead of SAF. We share CARB's objective to increase the use of alternative jet fuel in the State. To significantly increase SAF production, availability, and use of SAF in California, one must address the economic disadvantages of SAF production relative to Renewable Diesel. We look forward to opportunities to work together with CARB and other SAF stakeholders to explore policy and non-policy interventions that have the potential to achieve this mutual objective.

2. Comments on Modifications to Section 95483. Fuels Reporting Entities.

As noted in the summary of modifications, removing fossil jet fuel from the list of liquid fuels for reporting is necessary for consistency for removing fossil jet fuel from the list of regulated fuels. A4A supports this proposal.

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

3. Comments on Modifications to Section 95488.8. Fuel Pathway Application Requirements Applying to All Classifications.

While CARB made some changes in its consideration of the matching period for Low-CI electricity, CARB did not change its proposal regarding deliverability of Low-CI electricity when applied to the production of SAF. As stated in our prior comments, we continue to believe that our mutual interests in SAF would be best served by CARB preserving its existing policy allowing use of indirect accounting mechanisms for low-CI electricity that is used for hydrogen production where that hydrogen is then used in the production of another transportation fuel. We also recommended that CARB expand the use of its existing indirect accounting mechanisms to extend the use of book-and-claim (e.g. RECs) to facilitate sourcing power to produce SAF (including biomass SAF and PtL SAF) and other alternative fuels. The revised proposal does not address the issues underlying these recommendations, and is counter to California's priorities ("California prioritizes waste feedstocks and advanced decarbonization technologies") as stated by CARB in this current proposal

CARB's proposal will severely inhibit the growth of Power to Liquid (PtL) SAF production, availability and use in California. PtL is a promising fuels pathway that has the potential to provide very low CI SAF. Other jurisdictions (e.g. European Union and United Kingdom) have policies in place to promote and attract PtL SAF fuels, and CARB's proposal will encourage PtL SAF producers that utilize indirect accounting for the sourcing of low-CI electricity used in their PtL SAF production processes to sell their fuels into those other jurisdictions. Absent CARB's allowance of indirect accounting for low-CI electricity, PtL SAF producers that wish to participate in the LCFS Program will effectively have no choice but to co-locate their facilities with or otherwise ensure a direct connection to a renewable energy source, which is often impractical and infeasible. Again, the likely effect of this will be to discourage PtL SAF production in California and to discourage delivery into California of PTL SAF produced elsewhere. For other types of biomass based SAF utilizing indirect accounting for use of low-CI electricity in their SAF production will have their CI scores lowered accordingly, which may make markets in other jurisdictions more attractive.

Due to the vital importance of Low-CI Electricity to the production of PtL fuels, and the importance of PtL fuels to meeting both California's 2045 carbon neutrality goal and California's specific goals to displace fossil jet fuel with SAF, we respectfully recommend that CARB modify the proposed LCFS amendments such that SAF fuel production facilities (PtL and other SAF production pathways) are authorized to procure Low-CI Electricity for electrolytic hydrogen production and their other energy needs via Book-and-Claim Accounting.

A4A supports the revised proposal for the inclusion of forest waste biomass feedstocks as a specified source feedstock.

4. Comments on Modifications to Section Modifications to Section 95488.9. Special Circumstances for Fuel Pathway Applications.

A4A appreciates the proposed revisions to the proposal that provide more specific definitions, and additional time and flexibility to allow fuel producers to comply with the new biomass supply chain 3rd party sustainability certification requirements.

A4A and its member airlines support the use of 3rd party sustainability certification systems (SCSs) and 3rd party audits of compliance with sustainability requirements by fuel producers. Airlines and their fuel producer partners have growing experience with SCSs through voluntary SAF purchases, in addition to having been directly and extensively involved in the definition of the CORSIA Eligible Fuels sustainability certification requirements. From this experience base we offer the following observations and recommendations:

- a. There are only two established third-party SCSs generally relevant to biofuels and both have been developed through Europe-based organizations. Both SCSs have requirements that have limited experience in being applied to U.S. agricultural feedstocks, supply chains and business practices.
- b. Third, the existing SCSs are struggling with capacity constraints in providing certifications under already established voluntary certification programs, EU RED, and ICAO CORSIA. Burdening the existing SCSs with an additional requirement for the CARB LCFS program could create an administrative bottleneck on qualifying feedstocks and supply chains for the LCFS program that would otherwise be qualified. This would have the adverse impact of slowing down supply growth, which for the still emerging SAF market is a constraint that must be avoided.
- c. As part of the SCS acceptance process defined in the revised LCFS Program proposal, we recommend CARB consider adopting an existing U.S. government standard, such as controls incorporated into the EPA Renewable Fuel Standard, with 3rd party audit verification as an equivalent 3rd party SCS.
- d. In order to minimize the administration burden on and prevent duplication of efforts by the biofuels supply chain, in its implementation plan CARB should include cross recognition of sustainability certifications and certification audits obtained for other programs (e.g. EPA RFS, EU RED, CORSIA, voluntary certifications).

CONCLUSION

A4A supports the withdrawal of the proposal to eliminate the jet fuel exemption and retain the existing opt-in approach for SAF under the CARB LCFS Program.. The existing opt-in crediting model under the LCFS, combined with U.S. federal incentives provides the foundation for 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 production, availability and use of SAF in California to achieve CARB's objectives of a sustainable and workable reduction of carbon emissions in the transportation sector.

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

Sincerely,

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

Kevin Welsh

Vice President, Environmental Affairs and Chief Sustainability Officer

kwelsh@airlines.org