



September 1, 2021

Mr. Joshua Cunningham
California Air Resources Board
Advanced Clean Cars
1001 I St.
Sacramento, CA 95814

RE: Renewable Fuels Association Comments on the August 11, 2021, Advanced Clean Cars II Workshop

Thank you for the opportunity to comment on CARB's August 11, 2021, Advanced Clean Cars II Workshop. The Renewable Fuels Association (RFA) is the leading national trade association representing U.S. fuel ethanol producers. Its mission is to advance the development, production, and use of low-carbon fuel ethanol by strengthening America's ethanol industry and raising awareness about the benefits of renewable fuels. Founded in 1981, RFA serves as the premier forum for industry leaders and supporters to discuss ethanol policy, regulation, and technical issues. RFA's 300-plus members are working daily to help America become cleaner, safer, more energy secure, and economically vibrant.

RFA believes that renewable fuel, especially ethanol, can further decarbonize passenger cars and light-duty trucks today. Already, ethanol is responsible for reducing climate change emissions from the nation's transportation by more than 50 million metric tons annually.

Today's ethanol reduces greenhouse gas emissions by an average of 40-50% compared to petroleum fuels and is on a technological curve to be carbon neutral or negative. Oregon and California's programs have encouraged lower carbon intensity (CI) fuels, and ethanol's average CI score has dropped by 27% since the California program's inception. In both states, the fuel standard has driven growth of E85 (85% ethanol blends for Flex Fuel Vehicles), which boasts up to a 66% reduction in carbon intensity per mile over gasoline.

In response to the August 11, 2021, workshop, RFA would like to reinforce that the most rapid and affordable route to decarbonizing the transportation sector in the near term is by utilizing low carbon liquid fuels. The State should consider requiring that post model year 2026, all internal combustion engine light duty vehicles sold in California be Flexible Fuel Vehicles (FFVs). As those vehicles age, this would help ensure their continued use with higher ethanol blends that will emit fewer toxic tailpipe emissions using an affordable low carbon fuel in the legacy fleet.

Under the LCFS, the sales of high ethanol content E85 for FFVs continues to grow, showing consumer acceptance and growing demand for the fuel. Plug-in Hybrids (PHEV), an important vehicle choice among lower income consumers, should also be FFVs as well to facilitate using less fossil-based fuels and reducing carbon emissions.

Using renewable naphtha or other renewable substitutes for the hydrocarbon portion of E85 can ensure that the fuel utilized in FFVs is 100% renewable, maximizing GHG reductions that will be comparable to battery electric vehicles. This kind of solution can provide the immediate CO₂, NO_x, and PM reductions that the state is looking for and can help bridge the gap between petroleum-based fuels and electric vehicles, particularly in hard-to-decarbonize applications.

California consumers are already taking advantage of the benefits of E85, and California is well-positioned for a requirement that all non-battery electric vehicles (i.e., all vehicles, including PHEVs, that have an internal combustion engine) be FFVs beginning with model year 2026. In this instance, RFA believes that the proposed 20% compliance credit cap should be eliminated. An FFV using E85 made from zero-carbon ethanol and a renewable naphtha/renewable gasoline blendstock has the potential to perform as a 100% zero-emission vehicle on a full lifecycle basis. Therefore, PHEV FFVs should be eligible to receive ZEV credits.

In conclusion, higher blends of ethanol, which are compatible in nearly all the vehicles on the road today, represent an immediate, mid-term, and long-term opportunity for California to maximize GHG reductions, while proving affordable fuel to consumers and encouraging new economic development and job growth in the state. For these reasons, it is important for the Advanced Clean Cars II Regulation to include the positive contribution of low-, zero-, and negative-carbon renewable liquid fuels in achieving California's ZEV targets as well as its broader carbon neutrality goals.

Thank you for the consideration of our comments, and we look forward to working with and further conversation with CARB staff to address this opportunity.

Sincerely,

Kelly Davis
VP of Regulatory Affairs