

May 10, 2024

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Via electronic submission

Re: Comments on April 10 Low Carbon Fuel Standard Workshop

The Kentucky Soybean Association appreciates the opportunity to provide comments in response to the April 10 Low Carbon Fuel Standard (LCFS) workshop. Kentucky Soybean Association (KSA) is an affiliate of the American Soybean Association (ASA) and welcomes the chance to engage with the California Air Resources Board (CARB) regarding its most recent workshop.

KSA represents Kentucky soybean farmers on domestic and international policy issues important to the soybean industry. U.S. soybean growers have long been committed to producing the world's food, feed, fuel, and thousands of bioproducts in a sustainable and climate-smart way.

As CARB revises and refines provisions in the Initial Statement of Reasons (ISOR) package, KSA is pleased to expand ASA's comments provided during the April 10 workshop. Of highest importance is ensuring that sustainability guardrails are workable for the soybean industry. Additionally, KSA requests that CARB update soybean land use change modeling that uses 20-year-old data and does not reflect current growing practices. Given the recent federal tax guidance released in April on sustainable aviation fuel, there are also additional opportunities to develop LCFS policies that complement work being done at the federal level rather than create duplicative frameworks that create additional burdens on the biofuels value chain.

Positive Workshop Outcomes

KSA appreciates much of the work that CARB staff highlighted in the April 10 workshop. We agree that the robust public process that CARB has championed throughout the LCFS update work has offered significant opportunities for engagement. The workshop highlighted that liquid fuels will continue to be needed in the transportation sector in California for at least the next decade, and KSA believes the role of soy-based biofuels to lower emissions in today's remaining liquid fuel market is vitally important to help mitigate the impacts of climate change. CARB also noted that the Environmental Justice Advisory Committee's proposed agricultural feedstock cap would result in an increase in petroleum diesel usage. We appreciate that analysis done by CARB aligns with ASA conclusions in terms of the negative and perverse impacts of an agricultural feedstock cap.

Looking specifically at soybean oil prices and demand, KSA appreciates that CARB explored soybean oil price volatility in recent years and determined that it was not the result of domestic biofuels policy, but instead the result of several factors, including the war in Ukraine, weather, and other market disruptions. Further, CARB dispelled arguments that use of soybean oil for biofuels was impacting food prices and called this argument a "misleading representation" of the interaction between food and fuel. KSA thanks CARB for their work on this and offers ASA and our state association as resources for additional data related to this in the future.

KSA also appreciates CARB's additional attention on waste feedstock integrity. Imports of these feedstocks, especially used cooking oil, have exploded in the past couple of years due to incentives in California's LCFS. During much of this period, used cooking oil (UCO) was worth more than virgin palm oil. The increase in U.S. imports of UCO occurred after the EU started investigating fraud allegations as much of the trade was rerouted to the North American market. KSA encourages CARB to verify the integrity of imported UCO used in the LCFS.

Sustainability Guardrails: Exploring Additional Options

While CARB had mentioned sustainability guardrails broadly before, this workshop was the first time that staff detailed potential sustainability measures required for agricultural feedstocks. KSA understands that CARB must balance liquid fuel market demands with environmental sustainability goals in California. However, we believe that it is important to work with the biofuels value chain to develop an outcome that is economically and logistically viable for the industry.

Unfortunately, the information provided in the ISOR and presented in the April 10 workshop offer limited explanation as to why sustainability guardrails are required for agricultural feedstocks. CARB workshop slides state despite increasing domestic virgin oil supplies and uncertainty about increases in virgin oil biofuel consumption in California, "Guardrails [are] still warranted to reduce risks of potential impacts from increased demand of virgin oils in CA LCFS and inform other clean fuels program design." It is not clear what risks remain that must be addressed. Total land use change risk is captured by the LUC score penalty from the GTAP model¹. From an aggregate standpoint, whether biofuels were produced from a U.S. acre in production in 2007 or thereafter is largely irrelevant for carbon intensity. The total change in the system is the important component. Simply shifting eligibility among domestic acreage only adds costs without a program benefit.

It is also not clear what is meant by informing other clean fuels program design. Many other programs already account for land use change. We also are uncertain what role California plays in the regulatory affairs of other jurisdictions, like Kentucky. The total land use change in the U.S. for crops cannot exceed late 2007 levels under the federal Renewable Fuel Standard. This provision ensures that total crop acreage in the U.S. cannot expand for biofuels. Furthermore, CARB's Global Trade Analysis Project model for biofuels (GTAP-BIO) assumed 812 million gallons of soy-based biofuels are consumed in state whereas California only consumed 378 million gallons in 2023. Last of all, announcements for crush plant expansion in the U.S. total about a 30% increase in domestic capacity. Even if all of these plants were built, that translates to about 15% of the U.S. soybean crop, and the country currently exports 40 to 50% of the soybean crop.

Without clearly demonstrated objectives, it remains difficult to devise suggestions for a program. Furthermore, other biofuels feedstocks consumed in California are generally not held to the same standard where they must prove they did not engage in a behavior that is already accounted for in the life cycle analysis. This in practice drives up the costs of agricultural feedstocks compared to other feedstocks and fuels, such as petroleum. In other words, it discourages the use of renewable diesel relative to diesel, which is detrimental to overall GHG emissions. If CARB insists that sustainability criteria for agriculture must be met, it should look to programs already developed through farmer input and provide improved scoring for feedstocks that employ sustainability practices to minimize the

¹ https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/iluc_assessment/iluc_analysis.pdf

changes in comparative costs. Based on the criteria outlined in the workshop and proposed third-party audit scheme, KSA finds the proposal problematic.

Aligning Sustainability Guardrails with Federal Initiatives

The recent tax guidance² for sustainable aviation fuel (40B) released by the Internal Revenue Service and Department of Treasury offers insights as to how CARB could offer improved scoring for feedstocks grown employing CSA. The 40B tax credit uses a new GREET methodology (40BSAF-GREET 2024), which shows soybeans offer a 55% emissions reduction, and can improve an additional 5% using limited CSA. The U.S. Department of Agriculture's Climate Smart Agriculture Pilot Program is currently collecting a myriad of outcomes-based data on agricultural improvements from farmers using CSA. Rather than penalizing agricultural feedstocks through an onerous audit system, CARB should consider providing additional emissions reductions to feedstocks employing CSA.

In January, a new Clean Fuel Production Credit (45Z) will go into effect, which we hope will build on the cover crops and no till practices included in 40B. Conservation tillage, crop rotations, sustainable inputs, precision agriculture, and other practices all help produce a more sustainable soybean. While these options are relevant to most Kentucky soybean farmers, it is not a one size fits all situation. Acknowledging the work being done throughout U.S. soybean fields will ensure that CARB does not restrict sustainable feedstocks from its fuel portfolio.

A Critical Need for Stakeholder Engagement

Any agricultural sustainability criteria that CARB establishes will have significant impacts on how the soy industry and biofuels value chain operates. Hosting one workshop that included sustainability concepts did not provide enough of an opportunity for stakeholder engagement on this topic. KSA supports ASA's request that CARB convene a working group of industry stakeholders before finalizing sustainability criteria to ensure that the logistical limitations and financial impacts that could result from this policy are properly considered.

We encourage CARB to convene a working group that includes agricultural feedstock providers, feedstock processors, and biofuels producers to help develop any sustainability provisions that they would be required to implement. This working group should endeavor to flesh out workable sustainability guardrail provisions that CARB can implement by the second quarter of 2025. This would ensure that CARB develop a solution that does not unintentionally limit sustainable lipid-based feedstocks through onerous reporting requirements, while allowing CARB to continue to focus on implementation of the rest of the LCFS update by the end of 2024.

Updating Modeling for Soy Oil Feedstocks

KSA is also concerned that without a comprehensive update to the GTAP-BIO that CARB utilizes and that relies on 20-year-old data, soy-based feedstocks will be phased out of the LCFS, even though current data indicates a much lower carbon intensity (CI) score. On the one hand, CARB is recommending stringent sustainability guardrails for U.S. soy, but on the other hand is still on track to phase-out soy-based biofuels from credit generation by approximately 2035 or sooner.

² Department of Treasury and Internal Revenue Service. Notice 2024-37.

CARB is updating all major models for lifecycle emissions calculations except for GTAP-BIO in this rulemaking. As mentioned above, the soy industry has made vast improvements in sustainability and efficiency over the past two decades, with even greater improvement goals ahead. At the same time, CARB continues to rely on a 2014 model that uses data from 2004. The ILUC score accounts for half or more of the CI score for soy-based biofuels. CARB's current modeling assigns soy biomass-based diesel with an ILUC impact of 29.1g CO₂e/MJ whereas updated results from the model used to calculate ILUC scores indicate a value of between 9 and 10 gCO₂e/MJ for soybeans³. The recently released 40BSAF-GREET 2024 model has an ILUC score of 12.2 for soy-based sustainable aviation fuel in federal programs. The benefits of the LCFS can only be achieved if CI values are accurately captured. If land use change concerns are large enough to justify sustainability guardrails, then the modeling should also be updated to reflect current land use change data. KSA urges CARB to update its GTAP model to align with other modeling changes being made.

Conclusion

KSA is encouraged by the continued successes of programs that support the development of cleaner, low-carbon fuels. California's LCFS has in turn supported rural economies that support the soy value chain. We appreciate the work that CARB has done to update and improve the LCFS. However, it is critical that CARB finalizes updates in a way that does not arbitrarily exclude agricultural feedstocks through onerous sustainability guardrails developed without the input of growers.

KSA is eager to continue working with CARB to support the role of agriculture in diversifying the fuel supply and supporting cleaner fuel options in California and beyond. On behalf of Kentucky soybean farmers, we appreciate the opportunity to comment and look forward to collaborating with CARB and other relevant stakeholders on implementation of policies that expand the use of soy-based biofuels and market opportunities for soybean farmers.

Sincerely,



Adam Hendricks
Kentucky Soybean Association President and Logan County soybean farmer

³ Taheripour, F., Karmai, O., and Sajedinia, E. (2023). *Biodiesel Induced Land Use Changes: An Assessment Using GTAP-BIO 2014 Data Base*. Purdue University