

May 10, 2024

Carolyn Lozo Chief, Transportation Fuels Branch California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Via electronic submission

Re: Proposed Low Carbon Fuel Standard Amendments

Transportation Fuels Branch Chief Lozo:

Thank you for the opportunity to comment in response to the California Air Resources Board's (CARB) public workshop on April 10, 2024. The National Oilseed Processors Association (NOPA) appreciates the opportunity to provide additional insights on the proposed amendments to the Low Carbon Fuel Standard (LCFS).

Building upon our previous comments, NOPA supports CARB's additional analysis and remarks delivered at the workshop which recognize that consideration of a cap or limitation on crop-based oil feedstocks is unwarranted and would increase costs and fossil diesel use.

NOPA also appreciates CARB's acknowledgement that a more risk-based approach to sustainability certification is warranted. As noted in our previous comments, a targeted approach would streamline compliance requirements while ensuring that sustainability criteria are met. Recognizing biofuels produced in compliance with existing programs, such as the Renewable Fuel Standard (RFS), is a practical and effective way to achieve this goal.

Background

Organized in 1930, NOPA represents the U.S. soybean, canola, flaxseed, safflower seed, and sunflower seedcrushing industries. NOPA's membership includes 15 members that are engaged in the processing of oilseeds for meal and oil that are utilized in the manufacturing of food, feed, renewable fuels, and industrial products. NOPA member companies operate a total of five softseed and 62 solvent extraction plants across 21 states. NOPA members crush approximately 95% of all soybeans processed in the U.S.

NOPA members' oilseed processing operations yield protein-rich meal for human and animal nutrition, as well as vegetable oil that is used as an ingredient in food manufacturing and as a feedstock for renewable fuels such as biodiesel, renewable diesel and sustainable aviation fuel (SAF). These sustainably produced biofuels help reduce carbon dioxide equivalent (CO2e) greenhouse gas emissions and the carbon intensity of transportation fuels in use today. NOPA is uniquely qualified to respond to CARB's proposed sustainability criteria for crop-based biofuels given the number of markets that NOPA members serve, including the food, feed, fuel, and industrial markets.

CARB Should Continue to Oppose a Cap on Vegetable Oils

NOPA strongly supports CARB's findings that renewable diesel and biodiesel have a positive impact on both consumers and the environment. The data presented during the April workshop clearly underscores the importance of continuing to promote the use of these fuels as part of California's efforts to achieve its sustainability and air quality goals.

As CARB staff rightfully pointed out, biomass-based diesel (BBD) has displaced 60% of fossil diesel in California, reducing greenhouse gases, Particulate Matter (PM2.5) and Nitrous Oxide (NOx) emissions.

Placing a cap on crop-based feedstocks used to make BBD and other renewable fuels will simply increase:

- Fossil diesel use;
- Fuel costs;
- Carbon emissions;
- NOx emissions; and
- PM2.5 emissions.

Beyond increasing public health risks and driving up consumer costs, a cap on crop-based feedstocks can have far-reaching effects on investments many of those same companies have committed in dedicated energy crops like pennycress, camelina, carinata and winter canola; and climate smart agricultural practices. Taken together, these investments represent a new wave in renewable energy production – based on the promise of a market which rewards sustainability and carbon reduction – not artificial caps which would stymie innovation.

As CARB staff pointed out during the workshop, we cannot wait for full electrification. Internal combustion engines – particularly in the heavy-duty sector – will be on our roads for decades to come. California should take advantage of a low carbon fuel that is being produced today at scale. NOPA urges CARB to maintain its opposition to imposing a cap on vegetable oil feedstocks. Such a measure could hinder the development and adoption of renewable fuels and limit the availability of low-carbon options for consumers. We recommend implementing policies that encourage the responsible production and use of renewable feedstocks while addressing concerns about deforestation through targeted risk-based measures.

CARB Should Take a Targeted Risk-Based Approach to Sustainability Requirements

As CARB presented at the April workshop, a majority of BBD is already produced from waste feedstocks. Non-waste feedstock carbon intensity modeling already includes direct and indirect land-use change values and CARB notes that existing modeling "may not be accurate for applicants sourcing feedstocks from outside 2015 analysis area." To address this, CARB is considering assigning higher land use change values for high-risk feedstocks – but notably excludes U.S. soy and North American canola.

NOPA appreciates CARB's recognition that some regions carry a higher risk for deforestation. However, the proposed sustainability requirements take a one-size-fits-all approach which would disadvantage regions of crop-based feedstock production with low-risk of deforestation (United States and Canada) at the expense of feedstocks produced in regions with a significantly higher risk of deforestation where segregated supply chains are more prevalent due to those risks.

As shown in Figures 1-3, the U.S. grain handling industry is a complex network of farmers, grain elevators, processors, traders and transportation systems that work together to produce, store, transport and distribute grains such as soy and canola as well as their associated products. It's a dynamic and interconnected system where over 300,000 farmers deliver their grains to more than 8,000 storage points efficiently and at a low cost. The U.S. grain network is unlike any other in the world where most countries have shorter supply chains and fewer delivery points.



While biofuels represent one significant market for vegetable oil, they are by no means the sole destination for these products. Figure 1 demonstrates that vegetable oils are utilized in a wide array of industries, including food manufacturing, animal feed production, and industrial applications. Similarly, oilseed meal serves as a valuable protein source in livestock and poultry feed, contributing to global food security and nutrition.

Given the diverse end uses of vegetable oil and meal, oilseed processors must carefully evaluate the return on investment when considering participation in an expensive sustainability certification program like the one CARB is proposing. While California represents an important market for biofuels, it may constitute only a fraction of the overall market for oilseed products. In this context, the costs associated with obtaining and maintaining sustainability certifications may outweigh the benefits for many processors, particularly those with limited exposure to the California market.

For example, an oilseed processor located east of the Mississippi River is only likely to produce vegetable oil for the California LCFS market when market conditions warrant it. As a result, it may not make financial sense to establish and maintain a sustainability certification for one product at the facility when only a relatively small percentage of that vegetable oil would be used for biofuels in California. This could potentially limit the availability of low-risk, sustainable domestic feedstocks at the expense of higher-risk imported feedstocks.

Proposed Targeted Risk-Based Approach

NOPA would like to outline the following targeted risk-based approach for CARB to consider based on the risk associated with deforestation and the sustainability of crop-based feedstocks.

Low-Risk Regions

For regions identified as having the lowest risks of deforestation associated with crop-based feedstocks, such as the United States and Canada, crop-based feedstocks could be deemed to be in compliance with CARB's proposed sustainability criteria without the need for additional certification.

In the event CARB is unwilling to deem U.S. and Canadian feedstocks compliant, for regions where cropbased feedstocks comply with another established sustainability system, such as the Renewable Fuel Standard (RFS) or Canada's Clean Fuel Regulation (CFR), CARB could permit some level of aggregate compliance. This approach would streamline compliance requirements for feedstocks from regions with proven sustainability practices, aligning with existing regulatory frameworks while ensuring environmental integrity. As NOPA demonstrated in our previous comments (and included again here as Appendix A), the RFS meets each of CARB's proposed sustainability criteria. CARB could also recognize other domestic sustainability programs, such as the Soybean Sustainability Assurance Protocol (SSAP), as potential pathways for demonstrating compliance with its proposed criteria. These programs offer established frameworks for verifying sustainable practices and could complement existing regulatory efforts such as the RFS or CFR.

This approach would streamline compliance requirements while ensuring that sustainability criteria are met. Recognizing biofuels produced in compliance with existing programs, such as the RFS, is a practical and effective way to achieve this goal without sacrificing any sustainability gains.

Imported Feedstocks and High-Risk Regions or Regions with Insufficient Data

For imported feedstocks, including those in high-risk regions or regions where CARB has not adequately studied the deforestation risk associated with crop-based feedstocks, stricter measures could be applied. Feedstocks sourced from these regions would need to comply with CARB's proposed sustainability certification system, which may include certification processes to verify sustainable sourcing practices and efforts to mitigate deforestation risks.

This could include, as CARB noted at the April workshop, "additional detailed traceability, verification and/or enforcement of waste feedstocks to avoid fraud." NOPA noted in its prior comments that imports of Used Cooking Oil (UCO) have significantly increased since 2022 for LCFS compliance. NOPA appreciates CARB's recognition of these changing trade flows and continues to support CARB's proposed enhancement of traceability and enforcement of UCO imports to ensure the program is not being undermined by bad actors seeking to capitalize in the name of green energy. Such actions will ensure continued confidence and integrity in the LCFS program.

Implementing a targeted risk-based approach to sustainability criteria offers several advantages. It allows CARB to prioritize resources and regulatory efforts where they are most needed, ensures that sustainability criteria are effectively applied without imposing unnecessary burdens on low-risk regions or established sustainability programs, and ensures sufficient supplies of low-carbon fuels for the California market.

Indirect Land Use Change (iLUC)

In order to adequately assess risk, CARB needs to reassess its iLUC model, particularly regarding soybean oil, given the evolving data from models like Argonne GREET's Carbon Calculator for Land-Use and Land Management Change from Biofuels Production (CCLUB) Model. CARB staff have noted during previous workshops the particular scientific uncertainty surrounding the measurement of iLUC. Indeed, there is some inherent uncertainty in iLUC models, which assume direct relationships between agricultural production, economics, and land conversion. In reality, a wide range of factors affect land use decisions, including international and national policies, armed conflicts, technology disruptions, weather events, energy commodity prices, urbanization, development, and immigration/emigration trends.

Yet the iLUC values attributed to domestic crop-based feedstocks over time show a clear downward trend and convergence around a narrow range that is approximately *two to four times lower* than original estimates. CARB's most recent modeling of iLUC in 2015 for BBD of 29.1 gCO2/MJ is significantly higher than the figures provided by updated models. This stark contrast raises questions about the accuracy and relevancy of CARB's current approach in estimating the emissions associated with BBD.

For example, the more recent findings from the 2023 R&D Argonne GREET Model with CCLUB and the 2024 40B SAF GREET model with CCLUB estimate an iLUC value of 12.5 and 12.2 gCO2/MJ for soybean oil – a nearly 60% decrease from CARB's current value.

NOPA continues to encourage CARB to update its iLUC model with the latest science. This adjustment would not only ensure that CARB's regulations remain grounded in the latest science but also promote fairness and consistency within the industry. Additionally, CARB should maintain a flexible framework that allows for periodic reviews and updates to its iLUC model to incorporate emerging research and advancements in methodologies, ensuring that its regulations reflect the most accurate and up-to-date assessments of environmental impacts. By doing so, CARB can provide certainty to the marketplace and continue to play a leading role in driving sustainable practices and reducing carbon emissions in the transportation sector.

Conclusion

In conclusion, NOPA appreciates CARB's ongoing efforts to enhance the effectiveness and integrity of the LCFS. CARB analysis, market and scientific data collectively demonstrate that consideration of a cap or limitation on crop-based feedstocks is unwarranted. Further, doing so at this point would undercut the necessary investments that are being made to support low carbon feedstocks and further industry expansion.

NOPA also encourages CARB to consider adopting a targeted risk-based approach to implementing sustainability criteria under the LCFS. By accurately assessing deforestation risk, leveraging existing sustainability frameworks, and implementing targeted measures for high-risk regions, CARB can achieve its environmental objectives while also supporting a sustainable and resilient biofuels industry.

NOPA is eager to continue working with CARB to support the role of agriculture in diversifying the fuel supply through more sustainable feedstocks, thereby supporting cleaner fuel options in California and beyond. We appreciate this opportunity to comment and look forward to collaborating with CARB and other relevant stakeholders.

Sincerely,

Kaulee Thang Buller

Kailee Tkacz Buller President & CEO NOPA

Appendix A

RFS Compliance with CARB's Proposed Sustainability Criteria

Proposed Feedstock Sustainability Requirements	RFS Feedstock Sustainability Requirements
Must not be sourced on land forested after Jan. 1,	Must not be sourced from agricultural land cleared
2008	or forested after Dec. 19, 2007
Maintain continuous certification	Maintain continuous certification
Certification system must be recognized by an	The RFS was approved by the U.S. Congress on, and
international, national, or state/provincial	has been in effect since, Dec. 19, 2007
government for at least 24 months.	
Certification system must consider environmental,	Factors addressed by U.S. EPA during annual
social and economic criteria	rulemakings to establish Renewable Volume
	Obligations (RVOs) under the RFS include:
	 Impact on the environment
	 Impact on cost to consumers and cost to
	transport goods, and job creation
	Soil Quality
	Environmental Justice
Certification system standard-setting process is	The passage of the RFS through Congress was by
participatory, and consensus driven – convening	definition consensus driven, which allowed for the
groups of economic, environmental and social	input by all stakeholders as afforded during the
stakeholders in both formal and informal manners;	legislative process. EPA's annual rulemakings to
and creates a representative steering committee	establish RVOs allow for public comment by all
technical working group(s) and advisory group(s)	stakeholders, both formal and informal. This process
	includes input from EPA's Clean Air Scientific
	Advisory Committee (CASAC) – an independent
	advisory group of non-EPA scientists, engineers,
	economists and social scientists.
The certification system must have clear,	The development of the implementing regulations
accessible, and transparent processes;	for the RFS and each subsequent rulemaking to
	establish RVOs went through a transparent and
	public comment process before finalization.
The certification system must publish procedures,	All RFS regulations, certificates, and compliance
guidance, certificates and audit report summaries	reports are available at
on its website;	https://www.epa.gov/renewable-fuel-standard-
	<u>program</u>
The certification system must be science based,	The development of the implementing regulations
provide clear targets to reach, and support	for the RFS and each subsequent rulemaking to
demonstrable means of evaluation;	establish RVOs by U.S. EPA go through a transparent
	and public comment process before finalization,
	based on specific scientific criteria and evaluation.
The certification system must demonstrate that	The passage of the RFS through Congress was by
requirements that are additional to the	definition consensus driven, which allowed for the
requirements of this subarticle are vetted via a	input by all stakeholders as afforded during the

multi-stakeholder process to mitigate potential	legislative process. EPA's annual rulemakings to
stakeholder bias;	establish RVOs also allow for public comment by all
	stakeholders, both formal and informal. This process
	includes input from EPA's Clean Air Scientific
	Advisory Committee (CASAC) – an independent
	advisory group of non-EPA scientists, engineers,
	economists and social scientists.
The certification system must maintain an effective	The RFS compliance and audit program is
auditor training program to ensure auditor	maintained by U.S. EPA and can be found at
competency;	https://www.epa.gov/renewable-fuel-standard-
	program/compliance-overview-renewable-fuel-
	standard-program
The certification system must include an effective	EPA's annual rulemakings to establish RVOs also
grievance mechanism to ensure that problems are	allow for public comment by all stakeholders, both
resolved;	formal and informal. A petition process is also
	afforded under the RFS, which has been utilized by
	stakeholders. https://www.epa.gov/renewable-fuel-
	standard-program/other-requests-under-
	renewable-fuel-standard
The certification system must include sanction	The RFS compliance and audit program is
mechanisms for participating feedstock suppliers	maintained by U.S. EPA and can be found at
and auditing bodies to ensure conformance with its	https://www.epa.gov/renewable-fuel-standard-
system requirements; and	program/compliance-overview-renewable-fuel-
	standard-program. The RFS and Clean Air Act also
	establish penalties for non-compliance.