



Growth Energy™
Expanding America's Bioeconomy

October 16, 2024

Liane Randolph
Chair
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
Via electronic submission

RE: Growth Energy Comments on Proposed LCFS Amendments

Chair Randolph:

Thank you for the opportunity to provide written comments regarding the proposed Low Carbon Fuel Standard (LCFS) amendments. Growth Energy is the world's largest association of biofuel producers, representing 97 U.S. plants that each year produce more than 9.5 billion gallons of renewable fuel; 121 businesses associated with the production process; and tens of thousands of biofuel supporters around the country. Together, we are working to bring better and more affordable choices at the fuel pump to consumers, improve air quality, and protect the environment for future generations. We remain committed to helping our country diversify our energy portfolio in order to grow more green energy jobs, decarbonize our nation's energy mix, sustain family farms, and drive down the costs of transportation fuels for consumers.

Growth Energy has previously submitted extensive comments demonstrating the vital role low carbon biofuels and higher biofuel blends can play in meeting California's ambitious climate goals. As we have previously noted, biofuels have been among the largest contributors to the success of the LCFS program to date and are poised to continue to do so with appropriate updates to the program.¹

As our comments in response to the April workshop and the August 15-day package also noted, we continue to have serious concerns over the proposed amendments. Of particular concern are the details added to the sustainability certification requirements, the California Air Resources Board (CARB) neglecting to consider farm-level carbon reduction practices and technologies, the unilateral discretion given to the Executive Officer on new fuel pathway applications, and the authority given to the Executive Officer to modify land use change (LUC) penalty values in table 6 for the purposes of determining a fuel's carbon intensity (CI).

¹ https://www.transportationenergy.org/wp-content/uploads/2023/07/Decarbonizing-Combustion-Vehicles_FINAL.pdf

Continued Concerns Over Proposed Sustainability Certification

In our previous comments, we reiterated our concerns over the onerous and costly requirements on biofuels producers and farmers, and how CARB's Economic Impact Analysis (EIA) of the proposal does not discuss the sustainability certification requirement's financial burden of implementation. In the recirculated EIA, this impact is still not sufficiently addressed. Rather, the EIA acknowledges potential direct and indirect land use change "is at least partially (and potentially fully) accounted for by the LUC scores added to crop-derived pathways."² This acknowledgement renders the need for a sustainability certification moot as potential LUC concerns for crop-based feedstocks are specifically addressed in Table 6, which will itself include more geographically refined data under the proposed amendments. In Table 6, Corn starch bioethanol is given an automatic 19.8 gCO₂e/MJ penalty for indirect land use change (ILUC).³ Relatedly, we also believe the 19.8 penalty is outdated and not based on the most up to date research. A review of more recent science indicates a decreasing trend in land use values with the newer data indicating values closer to 4 gCO₂e/MJ.⁴ Adding the sustainability certification requirement to the current ILUC score amounts to an unfair and unnecessary double penalty for corn starch bioethanol.

As we have previously commented, the concerns over LUC factors are unfounded relative to corn starch bioethanol. In fact, the United States is planting grain corn on roughly the same number of acres as was planted in 1900.⁵ At the same time, the per acre yield has increased more than 600%.⁶ As shown in the graph below, the number of acres harvested annually have consistently hewn to the average since 1900.

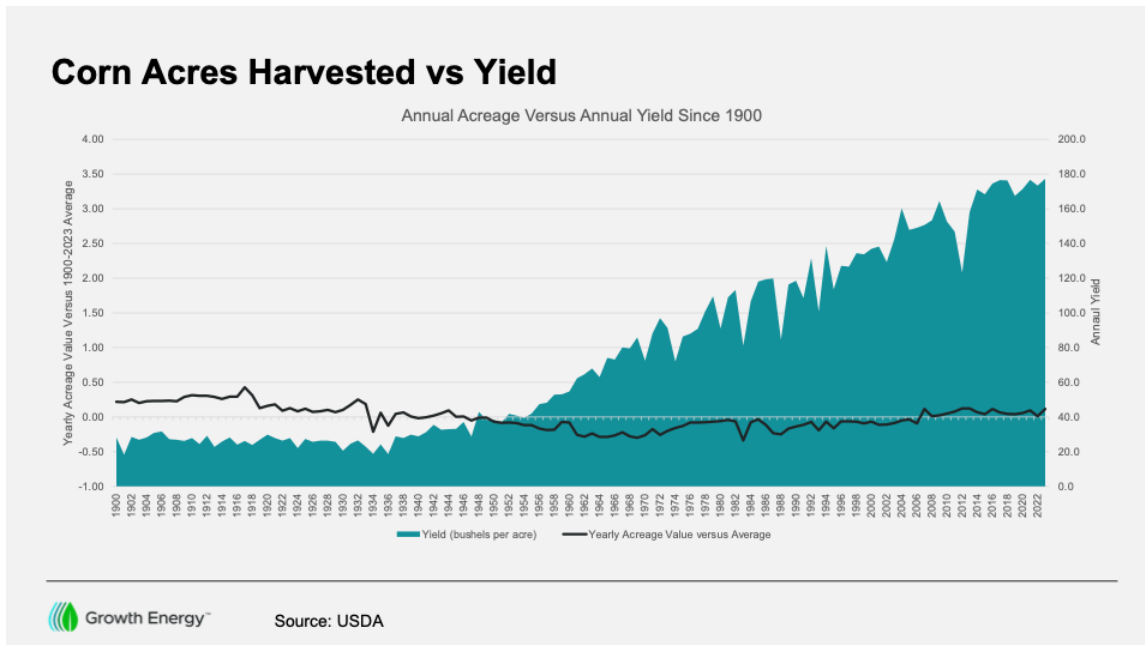
² https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/recirculated_draft_eia.pdf

³ https://ww3.arb.ca.gov/fuels/lcfs/iluc_assessment/iluc_analysis.pdf

⁴ <https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf>

⁵ https://www.nass.usda.gov/Publications/Todays_Reports/reports/croptr19.pdf,
https://www.nass.usda.gov/Charts_and_Maps/Field_Crops/cornac.php

⁶ <https://www.agry.purdue.edu/ext/corn/news/timeless/YieldTrends.html>



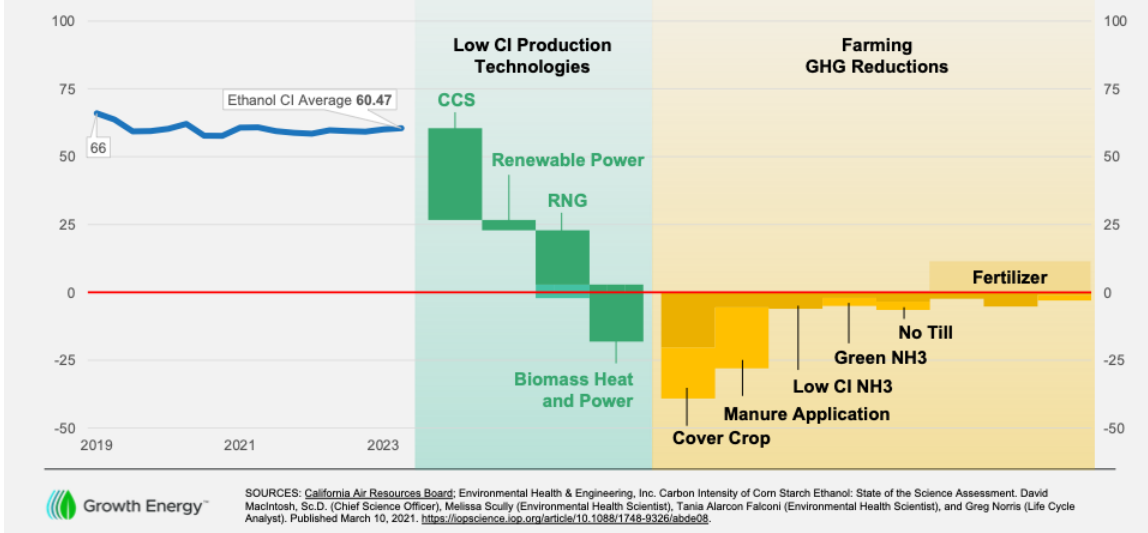
While the current proposal details the “best environmental management practices” required for biomass used in fuel pathways and those climate-smart agriculture (CSA) practices result in the reduction of carbon emissions, CARB continues to disregard these and other practices when factoring CI scores. Some of these practices include precision application of fertilizer, use of low CI fertilizer, no or low-till farming practices, and the use of cover crops.⁷ The use of these practices for measured carbon reduction is not new. Other state agencies are using some of these same practices to reduce the release of soil carbon in the state’s natural and working lands.⁸

CSA practices are an important component to bioethanol’s continued efforts to get to net-zero. We urge CARB to recognize these practices and their carbon-reduction potential and allow CSA practices to be considered when determining a pathway’s CI.

⁷ <https://growthenergy.org/policy-priority/climate-smart-agriculture/>

⁸ <https://www.gov.ca.gov/2020/10/07/governor-newsom-launches-innovative-strategies-to-use-california-land-to-fight-climate-change-protect-biodiversity-and-boost-climate-resilience/>

Carbon Intensity of Ethanol Continues to Approach Net-Zero



Additionally, changes to section 95488.9(g)(2) expand the scope of the sustainability requirement and expose the limitations of its enforceability to such a degree that it raises the question of whether CARB has the resources to enforce the proposed mandate that biomass-based feedstocks are “cultivated and harvested in accordance with all local, State, and federal rules and permits.” Such broad, unrefined language, added to the amendments just one month before the Board is set to vote on the proposal, raises a multitude of questions:

- Does this added criteria apply only to environmental and sustainability factors related to the new sustainability requirement?
- Would bioethanol be assigned the CI of CARBOB if the farm from which the corn is sourced, for instance, failed to pay a state workers’ compensation insurance premium or violated a federal labor law?
- Would these same standards apply to the supply chain for fuel pathways derived from other renewable sources?
- What resources does CARB have to enforce such a diverse patchwork of federal, state, and local rules?
- Does CARB have the authority to investigate instances of alleged violations of another state’s laws?

We oppose the addition of this broad and vague mandate, particularly since, as we noted above, bioethanol would be required to follow these sustainability requirements without any credit for on-farm CI reduction practices. We strongly encourage the Board to reconsider this provision and allow staff and stakeholders the opportunity to investigate

the breadth, cost, and unintended consequences of such vague text before its consideration.

Finally, with respect to the proposed sustainability audit, the proposal's audit requirements address issues that, while important to environmental and social justice, fall outside the scope of the LCFS. According to the April 10 staff presentation, the proposed sustainability audit process would require auditors to conduct: "review of management systems", "review of social practices", and an assessment of the "economic sustainability of the applicant." The proposed amendments require approved certification systems for the sustainability requirement to take "social and economic criteria" into account alongside environmental concerns. While important and laudable goals themselves, "social and economic criteria" have no bearing on GHG reduction. Additionally, many aspects of these audit provisions are addressed by federal programs. For instance, the Fair Labor Standards Act has clear employment guidelines specifically for the agriculture industry.⁹ Furthermore, if the proposal is adopted, crop-based biofuels would be the only feedstock for which these criteria would be audited.

Expanding Specified Source Feedstocks

We acknowledge CARB's recognition of the use of a variety of "waste, residue, by-product or similar material in a fuel pathway", particularly the inclusion of distiller's corn oil, and its consideration as specified source feedstock. Biofuels producers are pushing innovations to use every part of the corn crop. While traditionally considered waste, corn stover and corn kernel fiber have increasingly been used as a feedstock for bioethanol production. As a byproduct of corn bioethanol production, we appreciate the recognition and inclusion of corn stover in the list of specified source feedstocks, and encourage the Board to also recognize corn kernel fiber.

Biofuel Cap and Executive Officer Discretion on Fuel Pathways and LUC Values Betrays Technology Neutrality

CARB has made clear its intentions to increase the role and market for zero emissions vehicles (ZEVs) in the state. However, the revised amendments give the Executive Officer discretion to reject new fuel pathway applications for particular crop-based fuels solely based on achieving a threshold of 132,000 registered Class 3-8 ZEVs. It endows the Executive Officer with such an authority without a proper rulemaking. This, combined with a 20 percent cap on the use of specific biofuels for credit generation opportunities sets a dangerous precedent for the use of all GHG reducing feedstocks and technologies, violating the LCFS' commitment to technology neutrality. The program already requires the use of a lifecycle model and assesses penalties for land use change, further limits make little to no sense. Using the full range of Class 3-8 trucks allows for the very real possibility this threshold can be met with smaller lighter vehicles (Class 3-4), thus leaving the larger, heavier vehicles (Class 7-8) reliant on liquid fuel that may only be available in

⁹<https://www.dol.gov/agencies/whd/agriculture/flsa>

fossil fuels if new biofuels pathways are not allowed. This could be especially true after an update to CA-GREET where legacy pathways are termed out. This situation would result in environmental backsliding and loss of GHG benefits.

Similarly, the proposed discretion of the Executive Officer to revise LUC values in Table 6 if such a value is deemed not “conservatively representative of a particular region/feedstock/fuel combination” also betrays the Standard’s technology neutrality. This proposed provision, much like the sustainability certification requirement, singles out crop-based feedstocks.

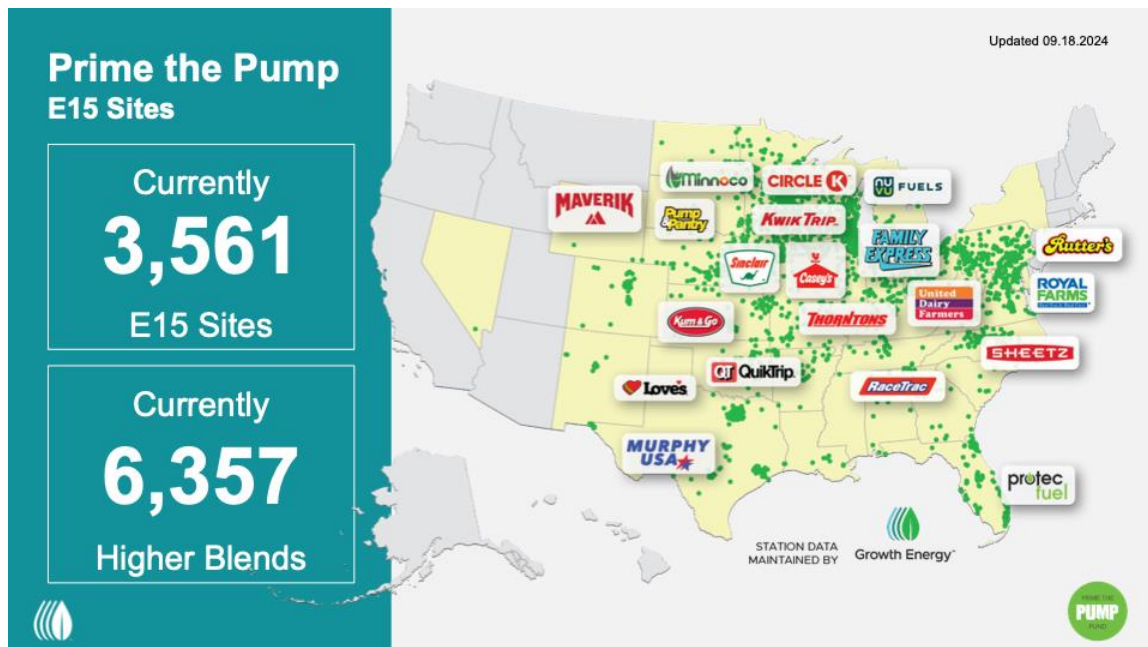
Not only are concerns over LUC values unwarranted for cornstarch bioethanol, as we previously detailed, but the proposal does not provide any opportunity for a LUC value to be revised down, even if the Executive Officer were presented with “the best available empirical data” indicating a lower value. For instance, data showing corn bioethanol with a LUC value less than the 19.8 gOC₂/MJ would not be considered.

Approval of E15

We acknowledge CARB’s consideration of the role E15 can play in reducing the state’s greenhouse gas (GHG) emissions while also providing a cost-savings opportunity for California drivers.¹⁰ Consumers have embraced E15’s reputation as a more environmentally beneficial, more affordable fuel. Since the US EPA approved E15 in 2011, at which time there were zero retailers offering it, its availability rapidly expanded to now more than 3,500 retail sites in 33 states. Since then, drivers in America have relied on E15 to drive 100 billion miles.¹¹

¹⁰ <https://ww2.arb.ca.gov/sites/default/files/2024-04/LCFS%20April%20Workshop%20Slides.pdf>

¹¹ <https://growthenergy.org/2024/01/29/100-billion-miles-e15-growth-energy/>



In contrast, with Nevada, Oregon, the Phoenix metro area, and most recently Montana approving E15 for sale, California remains the only state to have not approved this cost-effective, environmentally beneficial fuel that can be used in nearly all the state's 31 million gasoline-powered vehicles.¹² If CARB not only approved E15, but replaced E10 with E15, this switch would be responsible for the GHG-reduction equivalent of removing more than 400,000 ICE vehicles from California's roads *without negatively impacting California drivers*.¹³ Neither will it have a negative impact on land use change for bioethanol.

We urge CARB to complete the analysis of and approval process for E15 so that Californians can take advantage of this more affordable, cleaner burning fuel that can be used to power more than 96% of the light duty vehicles on the road today.

E85, Flex-Fuel Vehicles, and CCUS

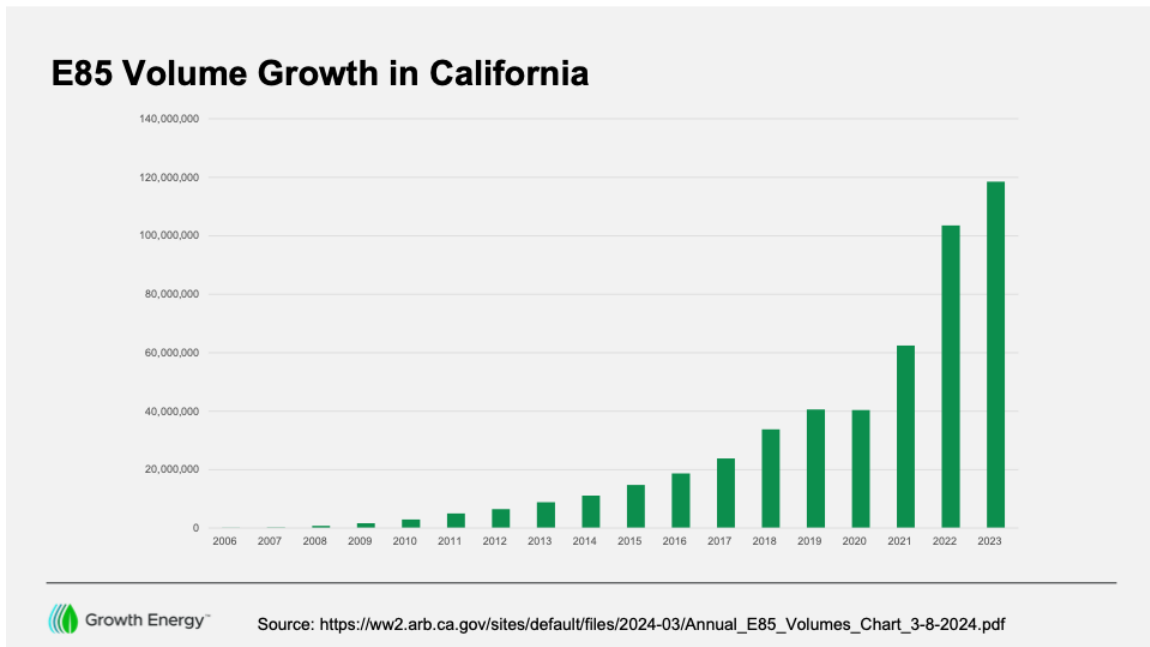
Additionally, we appreciate CARB's August 2023 updates to the California Transportation Supply (CATS) Model that recognize the value of carbon capture utilization and sequestration (CCUS) in carbon reduction during bioethanol production. By accounting for CCUS, a process incentivized by the Inflation Reduction Act, the pathway carbon intensity (CI) for E85—approved for use in California—was updated such that it reduces the assumed CI score for bioethanol from 66 gCO₂e/MJ to 35 gCO₂e/MJ.¹⁴ We appreciate CARB's recognition of the bioethanol industry's efforts to further reduce carbon emissions via CCUS, a process which is incentivized by the Inflation Reduction

¹² <https://ethanolproducer.com/articles/montana-becomes-49th-state-to-approve-the-sale-of-e15>

¹³ <http://www.airimprovement.com/reports/national-e15-analysis-final.pdf>

¹⁴ https://ww2.arb.ca.gov/sites/default/files/2023-08/CATS%20Technical_1.pdf

Act of 2022. This is a welcome update to CATS and a recognition of the positive impact bioethanol has on California's emissions reduction goals.



Additionally, California's existing approval of E85 has resulted in significant growth of its use in flex-fuel vehicles (FFVs): more than 118 million gallons have been sold at 375 locations across the state in 2023 alone.¹⁵ The current size of California's FFV fleet stands at more than 1.3 million vehicles.¹⁶ The use of E85 will promote even greater reductions in GHG emissions and reductions of air toxics. We would continue to encourage CARB to implement policies that strongly incentivize and as necessary, require the production and use of flex-fuel vehicles, as well as continued investment in infrastructure for expanded access to E85 in the state. In doing so, the Board will be achieving multiple goals: improving air quality and GHG emissions, reducing the state's dependence on fossil fuels, and providing consumers with an affordable choice to power their vehicles. Again, this can be done without any negative land conversion impact.

Expand Access to Low-CI Power Sourcing for Biofuels Producers

With respect to Low-CI power sourcing, the proposal fails to recognize its carbon-reduction potential in biofuels production. The proposal currently only allows this mechanism for hydrogen as a transportation fuel, Direct Air Capture projects, and electricity as a transportation fuel. Firstly, this fails the LCFS' fundamental policy goal of carbon intensity reduction in transportation fuels used in California. Allowing bioethanol producers to source *new* contracted low-CI power that is not included in a utility resource plan via a power purchase agreement does not impact electricity demand.

¹⁵ https://ww2.arb.ca.gov/sites/default/files/2024-03/Annual_E85_Volumes_Chart_3-8-2024.pdf

¹⁶ <https://afdc.energy.gov/vehicle-registration?year=2022>

Secondly, biofuels production occurs largely in electricity markets outside of California. This renders the argument against expanding low-CI power sourcing due to purported resource shuffling moot. Additionally, by not expanding this provision to biofuels, it denies the state the opportunity to lead other jurisdictions towards increasing their low-CI power generation capability.

Finally, similar to other proposed provisions in the amendments, limiting the approved use of indirect accounting for Low-CI power sourcing to a handful of fuels and processes violates the LCFS' commitment to technology neutrality.

Accelerate the Use of Sustainable Aviation Fuel (SAF)

As producers of one of the most scalable feedstocks for SAF production, we encourage CARB to continue to work with SAF producers, biofuel feedstock producers, and airlines to continue to seek ways to accelerate use of these important fuels to help decarbonize the aviation sector.

Thank you for the opportunity to provide input on the recent proposed amendments. The LCFS Program is a critical tool to addressing climate change. We urge the Board to recognize the role biofuels has played and can continue to play in making California's fuel mix more sustainable, and help the state achieve its progressive climate goals through the expanded use of bioethanol.

Sincerely,



Christopher P. Bliley
Senior Vice President of Regulatory Affairs
Growth Energy