May 10, 2024

Rajinder Sahota
Deputy Executive Officer – Climate Change and Research
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Ms. Sahota:

On behalf of the members of the American Coalition for Ethanol (ACE), I am writing in response to certain topics discussed during the April 10 workshop held by the California Air Resources Board (CARB) on the Low Carbon Fuel Standard (LCFS).

Specifically, I am writing in response to the proposed "sustainability criteria" for crop-based biofuels and the benefits approving E15 use in California.

Crop-Based Sustainability Criteria

The subject of sustainability criteria for crop-based biofuels is complex and consequential. ACE members do not believe CARB's broad yet cursory proposal, nor the brief discussion of this topic during the April 10 workshop, warrant implementation of such criteria within the context of the overall LCFS amendments under consideration.

Rushing to implement such criteria could backfire. As we noted in our February 20 comment letter, the broad proposal to require pathway holders to track crop-based feedstocks to their point of origin and obtain independent third-party certification will discourage participation in the LCFS and hinder the goals of the program.

Instead, we recommend initiating a thoughtful stakeholder engagement process so all parties can better understand what CARB wants to accomplish through sustainability criteria. We believe this process can help surface the fact there are multiple existing protocols which can be relied upon to satisfy any real or perceived concerns related to ensuring the LCFS is not causing land use change (LUC) to forests, wetlands, and native prairies.

One such protocol is the "R&D Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) 2023 Rev1 Technical Report" on indirect effects of biofuels completed by the U.S. Department of Energy to help establish the 40B GREET model for the 40B sustainable aviation fuel (SAF) tax credit. The Department of Energy engaged Purdue University to generate results on induced land use changes (ILUC), crop production, livestock production, and rice production with its GTAP-BIO model, and ICF to develop emission profiles of crop production, livestock production, and rice paddy fields.[1]

[1] https://greet.anl.gov/files/greet-2023rev1-summary April 2024. Development of R&D GREET 2023 Rev1 to Estimate Greenhouse Gas Emissions of Sustainable Aviation Fuels for 40B Provision of the Inflation Reduction Act.

Argonne modified R&D GREET 2023 to create an updated version, R&D GREET 2023 Rev1, that addresses the lifecycle GHG emissions associated with seven SAF pathways for 40B use. The technical report includes updates to ensure the indirect effects of four SAF pathways using dedicated feedstocks (corn, soybean, canola, and sugarcane) are covered. It can help inform questions CARB may have relative to indirect effects, including ILUC, from crop-based biofuels.

Second, since 1985, the United States Department of Agriculture (USDA) has been enforcing certain requirements ensuring farmers meet conservation requirements on croplands in order to be eligible for federal farm programs administered by USDA's Farm Service Agency (FSA), Risk Management Agency (RMA), and Natural Resource Conservation Service (NRCS). Known as "conservation compliance," Congress charged USDA with this responsibility to ensure that federal farm programs did not entice farmers to grow crops on highly erodible lands or convert wetlands for agricultural production.

Farmers who fail to abide by these rules are ineligible for federal farm programs including FSA loans and disaster assistance payments, NRCS and FSA conservation benefits, and Federal crop insurance support.

USDA has 40 years of experience enforcing these provisions. Under federal regulation, farmers and affiliated persons must affirmatively attest (form AD-1026) that they will not plant or produce an agricultural commodity on highly erodible land without following an NRCS approved conservation plan or system, plant or produce an agricultural commodity on a converted wetland, or convert a wetland which makes the production of an agricultural commodity possible. Additionally, activities that may affect compliance such as removing fence rows, combining fields, or conducting drainage activities must be pre-approved by USDA to ensure compliance.

USDA's FSA and NRCS are tasked with ensuring eligibility. Leveraging nearly 10,000 staff in state and county offices, NRCS is responsible for making the technical determinations of compliance at the farm level, and FSA's staff of nearly 7,000 state and county offices use this information to make program eligibility determinations for the covered programs. Farmers understand and accept this system. There is no need to re-invent the wheel. Instead, state and federal fuel programs should leverage USDA's infrastructure to verify desired sustainability criteria.

Speaking of federal fuel programs, third, as you know, the U.S. Environmental Protection Agency (EPA) is charged with enforcement of land use and total cropland acres relative to implementation of the Renewable Fuel Standard (RFS). This is yet another safeguard in place to prevent expansion of cropland for biofuel use.

Finally, ACE has previously written about a project we are engaged on with USDA's Regional Conservation Partnership Program (RCPP) to unlock corn ethanol access to LCFS markets and new tax incentives based on the adoption of climate-smart agricultural practices which reduce GHG emissions.

Michael Wang, Hao Cai, Uisung Lee, Saurajyoti Kar, Tom Sykora, and Xinyu Liu, Systems Assessment Center, Energy Systems and Infrastructure Analysis Division, Argonne National Laboratory

Under this project, we are leveraging USDA funding to help farmers adopt reduced tillage, nutrient management and cover crops on nearly 100,000 acres across 167 counties surrounding 13 ethanol facilities partnering with ACE to implement the project in a 10-state region of Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin. The sites were strategically chosen to provide our project's scientific team with statistically significant data regarding the GHG effect of conservation practices in different soil types and climates.

ACE and our partners will accomplish three important objectives with this funding support from USDA. First, we will incentivize farmers in 10 states to adopt conservation practices. Three-fourths of the funding will go toward farmer adoption of practices. Second, our team of soil scientists and agronomists will monitor, measure and verify how the conservation practices adopted by the farmers reduce GHG emissions from corn production. The data they collect will be shared with the U.S. Department of Energy who will use it to pressure test existing models such as the GREET model to address real and perceived 'information gaps' which currently prevent farmers and ethanol producers from adequately monetizing climate-smart ag practices. Third, our ultimate objective is to empower ethanol producers and farmers with modeling and calculator tools to earn higher tax credits and premium prices in clean or low carbon fuel markets based on climate-smart ag practices.

Our partners, including 13 ethanol companies and team of technical experts, are currently making plans to ensure farmers in the 167 counties are aware of their eligibility and we hope to execute contracts for initial conservation practices following the 2024 fall harvest. This larger project is based on ACE's existing South Dakota RCPP, where we have nearly 20,000 acres in seven counties under contract for climate-smart ag practices.

While we may share CARB's goal for better understanding the GHG impacts farming practices have on crop-based biofuels, we disagree feedstocks such as corn must be tracked to their point of origin. Rather, GREET and other models CARB and other regulators use today to penalize corn ethanol for LUC and farm-level practices can be improved and modified to assign carbon credits based on climate-smart agriculture practices. Specifically, GREET currently estimates nitrous oxide emissions from fertilizer use, contains a module for estimating LUC penalties through the Carbon Calculator for Land Use Change from Biofuels (CCLUB), and features a relatively new Feedstock-Carbon Intensity Calculator (FD-CIC) module estimating soil carbon emissions and sequestration credits for practices such as conservation tillage and cover crops on corn production.

<u>E15</u>

While it is outside the scope of the proposed amendments to the LCFS, we were encouraged by discussion during the April 10 workshop about how E15 could help reduce retail pump prices. This is true. E15 typically costs 5 to 25 cents per gallon less than E10 and 40 cents to $1.00 less than non-ethanol gasolines. E15 also has a higher octane rating, so allowing the sale of this fuel would give consumers the option to buy a higher quality product for less money. Moreover, 95 percent of all U.S. vehicles are approved to use E15 and nearly 3400 retail sites offer E15 across 30 states.

We implore CARB to finally approve the use of E15 in California, noting that the Center for Environmental Research and Technology at the University of California Riverside found that replacing E10 with E15 in California will significantly improve air quality.[2]

Thank you for your time and consideration of these comments.

Sincerely,

Brian Jennings, CEO
American Coalition for Ethanol

[2] https://ww2arb.ca.gov/resources/documents/comparison-exhaust-emissions-between-e10-carfg-and-splash-blended-e15