Union of Concerned Scientists

To: Office of Governor Newsom

From: Jeremy Martin and Daniel Barad

Date: June 22, 2023

Subject: LCFS Modernization

UCS is a long-standing supporter of the Low Carbon Fuel Standard (LCFS) and has been actively involved in its implementation for more than 15 years. We write in solidarity with Earthjustice, Leadership Council for Justice and Accountability and associated groups to urge you to modernize the LCFS to ensure it equitably meets the needs of Californians and supports the attainment of air quality standards. Our analysis is independent, but we agree with them, and NRDC, on the key reforms to the LCFS.

UCS is a long-time supporter of the LCFS.

- The LCFS provides vital support for transportation electrification, and as such it underpins other critical regulations that help cars and trucks transition to zero emission vehicles.
- The Total Cost of Ownership analysis used for the Advanced Clean Fleets Rule was based on an LCFS credit prices of $200 through 2030, while recent prices have been around $80.
- The sharp and sustained decline in LCFS credit prices creates broader problems for these associated policies and must be promptly addressed.
- Beyond California's borders, the LCFS is an important policy model that UCS is advocating for other states and that should one day be the basis for an improved federal fuels policy to address the many deficiencies of the Renewable Fuel Standard.
- The forthcoming LCFS rulemaking will be essential to a sustainable LCFS in California that also sets the best possible example for other jurisdictions.

Cap the share of compliance from lipid-based biofuels to keep the LCFS in balance.

- The balance of fuels supported by the LCFS has been distorted by interactions with federal policies, especially the Renewable Fuel Standard, which is subsidizing a flood of renewable diesel and driving LCFS down credits prices.
- Restoring balance and stabilizing LCFS credit prices requires CARB to implement a limit on LCFS compliance from soy-based renewable diesel and other lipid-based biofuels.

CARB should phase out credits for "avoided methane emissions" and limit LCFS carbon intensity scores to no less than zero to wind down what has become in effect a poorly run offset program.

- Most of the California dairies large enough to cost effectively implement manure digesters already have them, so going forward the main benefits claimed by negative carbon intensity manure biomethane pathways are so-called avoided methane emissions from manure lagoons in other states, which will not help California meet its AB32 targets.
- Almost all of the methane used for transportation in California is already biomethane, so there is no need for additional biomethane as a transportation fuel in California.

- California should move away from combustion fuels, both in vehicles and in fuel supply chains, which means biomethane should not be used to generate electricity or produce hydrogen.
- Crediting an oil refinery in California with negative CI scores for producing dirty hydrogen at a steam methane reforming (SMR) unit in California based on avoided emission credits purchased from an out of state manure lagoon is obviously a kind of offset program if not state endorsed greenwashing, since the projects are not even subject to additionality requirements.

To meet its climate goals California must transition from incentives to regulations of large dairies.

- The LCFS manure methane program has already financed the construction of digesters at most of the suitable facilities in California. These facilities should not be extravagantly subsidized indefinitely but should be regulated as authorized by SB 1383. CARB should initiate this rulemaking immediately and phase out negative CI scores from the LCFS as quickly as possible.
- Ending crediting for avoided methane emissions will require oil refineries and hydrogen producers to meet emission reductions through actions that reduce climate and air pollution at their own facilities rather than relying on de facto offsets.

Prioritize high quality emissions reductions and cobenefits in California over high targets based on bogus credits that will increase regressive pass-through costs for California drivers.

- CARB should tighten the rules of the LCFS to focus on reducing emissions from California transportation fuels rather than simply raising targets to absorb a huge quantity of bogus credits that will create an unfair burden on drivers of older internal combustion vehicles in California.

Redirect credit value from electrification to support equity and ensure the LCFS does not become an unfair and regressive burden on low-income drivers of older internal combustion vehicles.

- Without substantial adjustments the LCFS could become a regressive burden on low-income drivers unable to quickly transition to EVs.
- CARB should redirect the support from LCFS EV credits to support low income and overburdened populations, starting with the Clean Fuel Rewards program.

Enhanced oil recovery should not be credited and project-based credits for CCS should be paused.

- SB 1314 and SB 905 make it clear the legislature does not support carbon dioxide captured for use in enhanced oil recovery and therefore CARB should exclude this use of sequestered carbon from credit generation within the LCFS whether it occurs within California's borders or outside.
- Expanded federal support already covers the costs of CCS-EOR. Adding LCFS compliance value to federal tax credit effectively subsidizes oil-extraction at the expense of California drivers.
- SB 905 instructed CARB to develop a CCS program with protections for environmental justice communities. CARB should conclude the SB 905 rulemaking process prior to approving any new LCFS projects or pathways involving CCS to ensure these are consistent with the SB 905 program and do not undermine the protections required by this legislation.

The LCFS should not support hydrogen produced by SMR in refinery communities.

- Many recent LCFS pathways rely on the use of highly polluting SMR operations, which can increase air pollution burdens in already overburdened communities.
- LCFS credits for any hydrogen projects in refinery communities or otherwise overburdened communities should not be approved without a thorough public engagement process, assessment of the cumulative environmental burden they impose on adjacent communities, and development of pollution mitigation and community benefits agreements.

For more details, see UCS comments below:

1. June 6, 2023: Comment on May 23,2023 workshop
2. March 15, 2023.
   General comment on February 22, 2023 workshop,
   Additional comments on why an LCFS cap on lipid-based fuels is required.
3. December 21, 2022. Comments on November 9th workshop
   UCS Comments 1 of 3 on Petroleum Phaseout,
   UCS Comments 2 of 3 on feedstock safeguards,
   UCS Comments 3 of 3 on avoided methane credits,
   Joint comments from UCS, CBE and APEN.
4. August 8, 2022.
   Comments to CARB on July 7th LCFS workshop.
5. April 8, 2022.
   Comment on Workshop on Methane, Dairies and Livestock, and Renewable Natural Gas in California.
6. January 6, 2022. Manure biomethane analysis.