

To: Honorable Chair Liane Randolph and Members of the Air Resources Board  
From: Natural Resources Defense Council  
Date: November 5, 2024  
Re: Addressing environmental and equity-related concerns on the LCFS

Dear Honorable Members of the Board,

The LCFS – now in its fifteen year of implementation – has been one of the mainstays of SB32 and California’s climate policies. But it is in desperate need of reform and modernization to reflect the sustainability, environmental justice, and climate targets of today.

While staff has tried to address some of the concerns the past year, unfortunately today’s amendments are a far cry from what is necessary to resolve them. We ask the Board to provide staff with clear and strong direction to fix the following issues over 2025. We have attached recommended resolution language as part of our comments.

1. **Vegetable oil feedstocks:** To prevent the additional diversion of food to fuel, ARB staff proposed a 20 percent cap on soy and canola oil for diesel-based fuels. While an important step, the cap needs to include all vegetable oils and fuel types and should be based on the absolute volume limits.
2. **Avoided biomethane:** The Board must **stop the flood of credits** for livestock-based biomethane. California’s goals are to shift the transportation sector to zero emission vehicles, not natural gas engines. The LCFS should not be used as a subsidy for capturing methane from dairies, which it has turned into. Staff’s proposal to grandfather the next five years or more of new projects is unacceptable and must be dramatically reigned in.
3. **Municipal solid waste to fuel pathways:** There are strong concerns from communities and NGOs regarding hazardous air pollutants and other toxic impacts from facilities that process municipal solid waste (MSW), which includes waste plastic, into fuel – particularly pyrolysis and gasification which are regulated as incinerators. Given the increasing interest in building highly polluting pyrolysis and gasification incinerators for MSW in California and beyond, it would be highly concerning if the LCFS program were to essentially subsidize this effort.
4. **Electric transportation:** Staff made significant progress to expand fast charging infrastructure credits for heavy-duty trucks and support more electrified transit. However, they also are proposed a large change by granting the Executive Officer unilateral authority to shift electricity base credits to OEMs. The Board should ensure that the EO develop guardrails and requirements for OEMs to ensure the support for equity projects continues, including establishment of a Clean Fuel Reward for medium and heavy-duty trucks.
5. **Green electrolytic hydrogen:** Staff missed a unique opportunity to have **the LCFS drive truly green electrolytic hydrogen** by requiring that it be produced only with zero-carbon electricity adhering to the “three pillars” of additionality, deliverability, and hourly matching.



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6. **Enhanced oil recovery (EOR):** Last, the Board should eliminate LCFS credits for **captured carbon that is utilized for EOR**, in alignment with new the state law SB 1314 that bans this practice.

We need the Board to push for a gold standard LCFS. If it doesn't, the LCFS may eventually collapse under the weight of the problems and issues it is currently exacerbating. We urge you to direct ARB to fix these issues in the LCFS by the end of 2025, in a manner that genuinely protect communities and continues progress on climate.

Thank you,

Esther Portillo

Western State Advocate, Environmental Health

Renée Sharp

Director, Plastics and Petrochemical Advocacy, Environmental Health

Pete Budden

Hydrogen Advocate, Climate & Energy

Simon Mui, Ph.D.

Managing Director, Transportation, Climate & Energy



## Proposed Board Resolution Language:

1. **Electric Transportation:** "BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report back to the Board before base electricity credits will be transferred from Electrical Distribution Units to Original Equipment Manufacturers (OEMs), and present a plan to develop additional requirements, limitations, or guidance to ensure the credits to OEMs prioritize similar levels of equity-focused electrification programs, including but not limited to the establishment of a Clean Fuel Reward program for medium- and heavy-duty electric vehicles."
2. **MSW:** "BE IT FURTHER RESOLVED that the Board directs the Executive Officer to remove the pathway for Municipal Solid Waste (MSW) to fuel as an eligible source to receive LCFS credits."  
*Specific new 15 day-regulatory amendments*  
Page 7: Delete the words "and municipal" from the definition of "Biomass"  
Page 24: Delete the phrase "including the organic portion of municipal solid waste (MSW)" from the definition of "Renewable Hydrogen"  
Page 118: Delete the words "and municipal solid waste" from § 95488.1 (b)(2)(A)  
Page 148: Delete § 95488.8 (g)(1)(A)(4)  
Page 166: Delete § 95488.9 (f)(2)
3. **HYDROGEN:** "BE IT FURTHER RESOLVED that the Board directs the Executive Officer to introduce accounting rules for book and claim electricity for hydrogen production that align with the December 2023 proposed regulations by the US Treasury for the 45V tax credit, and include hourly matching, geographic deliverability and incrementality criteria, by 2028."
4. **BIOMASS:** "BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report back to the Board if the absolute volumes of vegetable oils incentivized by the program exceed the volume represented in 2024 under a percent-based cap, and that additional measures or adjustments are taken to limit or mitigate those exceedances."
5. **BIOMETHANE:** 15-day change amendments to remove the following clause from Section 95488.9 (f)(3)(B) Carbon Intensities that Reflect Avoided Methane Emissions from Dairy and Swine Manure or Organic Waste Diverted from Landfill Disposal.  
  
(B) Notwithstanding (A) above ~~for pathways associated with projects that break ground after December 31, 2029~~, in the event that any law, regulation, or legally binding mandate requiring either greenhouse gas emission reductions from manure methane emissions from livestock and dairy projects or diversion of organic material from landfill disposal, comes into effect in California during a project's crediting period, then the project is only eligible to continue to receive LCFS credits for those greenhouse gas emission reductions for the remainder of the project's current crediting period. The project may not request any subsequent crediting periods.