

May 10, 2024

Via electronic submittal

Chair Liane Randolph and
Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814
cotb@arb.ca.gov

Re: CBE Comments in Response to the April 10, 2024, Low Carbon Fuel Standard Workshop

Dear Chair Randolph and Members of the Board:

Communities for a Better Environment (“CBE”) writes in opposition to the Proposed 2024 Low Carbon Fuel Standard (“LCFS”) Regulation, which was discussed at the April 10, 2024, LCFS workshop. CBE is an Environmental Justice (“EJ”) organization, representing Wilmington, Richmond, East Oakland, Southeast Los Angeles, and surrounding communities that are heavily impacted by fossil fuel pollution from oil refineries, oil drilling operations, mobile sources, power plants, and many other sources.

CBE submitted comments on February 20, 2024, in response to the LCFS proposal described in the Initial Statement of Reasons.¹ Our comments explained that CARB must make critical changes to the proposal to comply with Assembly Bill 32, which requires CARB to design greenhouse gas emission reduction measures “in a manner that is equitable [and] seeks to minimize costs and maximize the total benefits to California,”² and ensure that these measures “do not disproportionately impact low-income communities”³ or interfere with “efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.”⁴ Our comments described why a cap on credits for crop-based biofuels would better serve CARB’s statutory mandate by (1) addressing the local harms of biofuel refining and biofuels’ global deforestation and food security risks and (2) opening up opportunities to incentivize truly clean, scalable technologies including electrification.

Building upon our previously submitted comments, this comment addresses issues discussed in the April 10, 2024, LCFS workshop hosted by CARB staff. Specifically, this comment responds to CARB’s reasons for declining to consider a cap on crop-based biofuels, which has severe implications for environmental justice communities living near refineries. This comment explains the following reasons why CARB must reconsider a biofuel cap:

¹ *CBE Comments on the Proposed 2024 Low Carbon Fuel Standard Regulation* (Feb. 20, 2024), https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=lcfs2024&comment_num=6984&virt_num=313.

² CAL. HEALTH & SAFETY CODE § 38562(b)(1).

³ CAL. HEALTH & SAFETY CODE § 38562(b)(2).

⁴ CAL. HEALTH & SAFETY CODE § 38562(b)(4).

- CARB is asking refinery communities to choose between two untenable options: either accept decades of future pollution from biofuels or live with the continued production and pollution of fossil fuels. CARB can choose a different approach, focused on investments in zero-emission technologies, that prioritizes liberating refinery communities from the pollution burden they have held for too long.
- CARB’s analysis does not support its conclusion that biofuels will create meaningful public health and safety benefits.
- CARB’s argument that a cap on biofuels will cause greater fossil diesel consumption does not account for the benefits of increased investments in zero-emission technologies, which CBE and others have been asking for.
- CARB continues to overcount the emission benefits of biofuels by overlooking the LCFS’ interaction with the federal Renewable Fuels Standard.
- The biofuel sustainability guardrails proposed by CARB are unlikely to be effective and are no substitute for a cap to restrain the dangerous oversupply of crop-based biofuels.

Below, we provide more detailed comments on the flaws in CARB’s arguments and analysis in the LCFS proposal and at the April 10 workshop. We request that the Board direct CARB staff to revise the proposal to include a cap on crop-based biofuels.

I. Refinery communities should not be asked to make a sacrificial choice between two polluting fuels.

In the proposal and at the workshop, CARB has presented refinery communities with two options: either accept biofuels and the pollution they generate in your communities, or live with extended production of fossil diesel and extended fossil pollution.⁵ This is a false choice between two pollution traps. In calling for a cap on biofuels, refinery communities are rejecting this exploitive choice; instead, we are asking CARB to have the vision and ambition to think beyond these two options and direct investments to the zero-emission technologies that will transition us more swiftly away from combustion fuels.

Refinery communities have been living with the racist impacts of fossil fuel pollution for a century and are deeply, personally aware of the need to phase out fossil fuel consumption. CBE’s community members in the Wilmington area of Los Angeles deal with pollution from five oil refineries, a large oilfield, two major ports, nine rail yards, four major freeways, and multiple chemical facilities.⁶ Oil refineries are one of the largest sources of criteria pollution and toxic pollution in this area, where pollution burdens are among the highest in the country. Over 86

⁵ See, e.g., Statement by Rajinder Sahota at April 10, 2024, CARB LCFS Workshop, 3:56:35 on YouTube recording (“Part of the purpose of our presentation is to explain why we think we need alternative drop in fuels so that we’re not using diesel fuels...Is it okay to keep using diesel fossil fuels in our ongoing combustion fleet or should we consider and actually follow through with giving a cleaner alternative that does deliver GHG benefits and...NOx and PM benefits? Because that’s literally the choice we’re facing.”).

⁶ Erica Yee & Hannah Getahun, *A hot spot for polluted air: By the numbers*, CALMATTERS (Feb. 1, 2022), <https://calmatters.org/environment/2022/02/california-environmental-justice-by-the-numbers/>.

percent of Wilmington residents are Latinx.⁷ In Richmond in the Bay Area, CBE community members deal with pollution from the Chevron refinery, which is the largest source of fine particulate matter pollution in the city. As a result, Richmond residents suffer asthma rates higher than 90 – 99% of other California residents.⁸ Richmond’s Black and Latinx residents are exposed to higher particulate matter pollution than its white residents.⁹ Communities like Wilmington and Richmond, who directly experience environmental racism and the impacts of “sacrifice zones,” have long been at the forefront asking for a rapid phaseout of fossil fuel production and consumption.

Refinery communities are also increasingly being asked to accept the pollution burdens and safety risks from biofuel refinery conversions. To date, three California refineries – Phillips 66 Rodeo, Marathon Martinez, and AltAir Paramount – have been converted to produce biofuels. CBE’s February 20, 2024 comments explain why these biofuel conversions are not a legitimate source of public health improvements in environmental justice communities; rather, they are likely to lengthen the life of polluting infrastructure and create new health and safety dangers.¹⁰ Refinery communities – who often live in areas that are severely out of attainment with federal and state air quality standards – should be among the first communities to benefit from California’s transition away from fossil fuels. But biofuel conversions are breathing new life into refineries and creating a new generation of pollution burdens. Environmental impact analyses for the three already-converted biofuel refineries have shown that these conversions have significant impacts on criteria pollution through direct refinery emissions and associated emissions from truck, rail, and marine transportation of feedstocks and biofuel products.¹¹ Experience has also shown that biofuel conversions pose new risks for residents: the Marathon Martinez refinery has had an alarming increase in major health and safety emergencies since converting, which have resulted in dangerous pollution releases in neighboring communities.¹² These biofuel conversions have shown that biofuel production, especially at the heightened levels that the LCFS supports, is undermining much-needed pollution abatement in refinery communities.

In asking for a cap on biofuels, we are not asking for increased fossil diesel production in refinery communities. We are asking CARB to place commonsense limits on subsidies for an inherently harmful and unsustainable alternative fuel, and to instead focus LCFS investments in vehicle electrification and zero-emission mass transit options to help transition away from combustion vehicles as rapidly as possible. We understand that this transition will not happen overnight, but we know it can happen faster with the benefits of LCFS investment dollars. A cap on subsidies for crop-based biofuels will not eliminate the use of biofuels during this transition; instead, it will help ensure that the glut of biofuels entering California does not slow down our

⁷ Cameron Luu, *Environmental Racism In Wilmington, Los Angeles* (Nov. 19, 2022), <https://storymaps.arcgis.com/stories/230933c5afe24b468e1f839efe6305dd>.

⁸ CalEnviroScreen 4.0, CAL. OFF. ENV’T HEALTH HAZARD ASSESSMENT, https://experience.arcgis.com/experience/11d2f52282a54cee6184203/page/CalEnviroScreen-4_0/?org=OEH (last visited May 8, 2024).

⁹ Alfredo Angulo, *Taking Stock: Visioning Beyond the Refinery*, University of Berkeley Othering and Belonging Institute (Aug. 31, 2022), <https://belonging.berkeley.edu/taking-stock-visioning-beyond-refinery>.

¹⁰ *CBE Comments*, *supra* note 1, at 4-6.

¹¹ *Id.*

¹² *Id.*

transition away from combustion vehicles by diluting incentives for zero-emission technologies.¹³

By capping subsidies for biofuels and prioritizing investments in zero-emission technologies, the LCFS could become a program that prioritizes community health and sustainable climate solutions. This reform would help us move beyond the two unacceptable options that CARB has presented to refinery communities.

II. Because it omits key analysis and facts, CARB’s staff analysis does not support a CARB conclusion that biofuels will create meaningful public health and safety benefits.

CARB’s presentation at the April 10 workshop, and the underlying analysis provided in the Initial Statement of Reasons, do not support a conclusion that switching to biofuels will provide significant public health benefits. The presentation only discussed the air pollution impacts of biofuel combustion, which is not a complete discussion of air pollution impacts because it overlooks production and transportation of biofuels. Even looking narrowly at combustion, the presentation did not show meaningful air quality benefits. The presentation focused on particulate matter and NOx emissions factors for vehicle combustion of renewable diesel, biodiesel, and fossil diesel, using results from the 2021 study prepared for CARB, which CBE and others had asked CARB to use.¹⁴ CARB’s presentation showed that biofuels reduce emissions in older legacy engines but have no significant beneficial impacts in the modern engines that both the on-road and off-road vehicle sectors are transitioning to. These small emissions reductions at the margins of a highly polluting transportation system are a far cry from the changes we need.

CARB’s workshop presentation did not discuss the health impacts of biofuel production, although CBE’s previous comments urged CARB to consider that biofuel production does not meaningfully improve public health and safety compared to oil refining. As explained above and in CBE’s previous comments, biofuel production at refineries has significant direct emissions and associated truck, rail, and marine transport emissions. In some cases, converting to biofuels can increase pollution sources relative to fossil fuel refining.¹⁵ The existing refinery conversions have also shown that these conversions can lead to increases in serious health and safety emergencies.¹⁶ Instead of claiming generally that biofuels improve air quality, CARB should look carefully at the evidence from existing biofuel refinery conversions in environmental justice communities that are already out of attainment with air quality standards.

¹³ See Colin Murphy & Jin Wook Ro, *Updated Fuel Portfolio Scenario Modeling to Inform 2024 Low Carbon Fuel Standard Rulemaking*, at 8, U.C. Davis Policy Institute for Energy, Environment, and the Economy (2024) (explaining that the supply of inexpensive biofuel credits will diminish fuel producers’ incentives to invest in more expensive, but innovative, technologies.).

¹⁴ *Id.* at 10.

¹⁵ For example, the Environmental Impact Report for the Marathon Martinez refinery conversion found that it would have a significant and unavoidable impact on PM2.5 exposure for residents and workers in the area. The Environmental Impact Report for the Phillips 66 Rodeo refinery conversion found that the refinery’s increased need for delivery of feedstocks would cause marine and rail traffic to increase substantially compared to when the refinery processed oil. *CBE Comments, supra* note 1, at 5.

¹⁶ *Id.* at 6-7.

We know that the high volumes of biofuels expected under the LCFS will dilute incentives for investment in electrification and other real climate solutions.¹⁷ Given the minimal public health and climate benefits we can get from biofuels, we cannot afford this distraction from our real goals.

III. CARB’s modeling has not provided a reliable prediction of the impacts of a biofuel cap on fossil diesel consumption.

CARB has argued that placing a cap on crop-based biofuels will lead to higher consumption of fossil diesel, but it has not provided sufficient analysis to evaluate the impacts of capping incentives for biofuels and amplifying credits for electrification and mass transit. In comments on the Initial Statement of Reasons, CBE, along with many experts and other environmental and EJ organizations, asked CARB to cap incentives for crop-based biofuels at 2022 levels and enhance crediting for zero-emission vehicles and zero-emission mass transit.¹⁸ These changes would boost incentives for a quicker transition to zero-emission transportation technologies by increasing direct incentives and by reducing the crowding-out effects of a biofuel supply glut.¹⁹

CARB’s modeling of biofuel cap scenarios, which justified CARB’s rejection of the biofuel cap option, does not account for the effects on zero-emission technologies and is therefore an incomplete representation of the biofuel cap option. CARB’s modeling, using the California Transportation Supply model, holds vehicle electrification and other electrification pathways as fixed, meaning that changes to electrification incentives within the LCFS will not impact the deployment of alternative transportation technologies.²⁰ It is reasonable to expect that creating greater incentives for electrification will increase deployment of electric vehicles and mass transit, and will thereby reduce the need for combustion vehicles. This in turn will likely reduce demand for combustion fuels, including fossil diesel. To reliably predict the effects of a biofuel cap on consumption of fossil diesel, CARB must evaluate the dynamic effects of increased incentives for zero-emission technologies.

IV. CARB has not yet addressed the biofuel reshuffling problem, which violates AB 32’s additionality requirement and undermines any conclusions regarding biofuels’ benefits.

¹⁷ Colin Murphy, *supra* note 13, at 8 (“Obligated parties will have little incentive to invest in innovative, but riskier, approaches to reducing GHG emissions from transportation fuels until either the supply of inexpensive [renewable diesel] is exhausted, or it has displaced all petroleum diesel...”).

¹⁸ See, e.g., *CBE Comments*, *supra* note 1; *Earthjustice Comments on the Low Carbon Fuel Standard Staff Report: Initial Statement of Reasons*, at 32-39 (Feb. 20, 2024), https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=lcs2024&comment_num=7077&virt_num=392.

¹⁹ See Colin Murphy, *supra* note 13, at 9 (“A limited amount of waste-based biofuel may have a role in the long-term fuel portfolio, but excessive deployment of crop-based fuels risks creating stranded assets or crowding out more sustainable solutions.”).

²⁰ *Earthjustice Comments*, *supra* note 18, at 11.

CARB’s proposal overestimates any emission reductions associated with increasing biofuel consumption because it takes credit for reductions that should be attributed to the federal Renewable Fuel Standard (“RFS”). As CBE’s previous comment explained, the federal RFS requires nationwide production of biofuels and allows for overcompliance in one state to compensate for undercompliance in another state.²¹ This encourages biofuel producers to concentrate sales in California to take advantage of our LCFS incentives. As a result, a portion of California’s biofuel consumption that CARB attributes to the LCFS would have occurred anyway due to the federal RFS.

CARB’s failure to account for this reshuffling effect is a deviation from past rulemakings and is also inconsistent with CARB’s statutory mandate. In the 2018 LCFS rulemaking, CARB conducted an attribution analysis to account for the portion of emissions reductions that should be attributed to the federal RFS. CARB has not yet provided any explanation for why it removed this analysis from the current rulemaking. It is imperative that CARB make this correction, because CARB is required under AB 32 to ensure that any greenhouse gas emissions achieved are “real”²² and are “*in addition to* any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.”²³ By taking credit for emissions reductions that should be credited to the federal RFS, CARB is violating this additionality requirement and providing inflated emission reduction estimates.

V. CARB’s proposed sustainability guardrails will not resolve the problems caused by rapidly growing production of biofuels.

The biofuel sustainability guardrails that CARB discussed at the workshop will not resolve the harmful impacts of the biofuel supply glut and are not a substitute for serious measures to restrict incentives for biofuel oversupply. As CBE explained in previous comments, the sustainability guardrails on the table, including a ban on credits for fuels made from palm oil, and sustainability certifications for crop-based biofuel pathways, do not address the critical problem of consumer substitution leading to indirect land use changes.²⁴ Evidence submitted to CARB by Biofuelwatch also show that existing certification programs have in practice “failed as an instrument for addressing sustainability challenges with land-based commodities.”²⁵ These approaches are likely to fail at their own goals, and they will not address the biggest problems with crop-based biofuels. CARB can only rein in the severe and irreversible consequences of overinvesting in biofuels by capping the LCFS incentives for crop-based biofuels.

²¹ *CBE Comments, supra* note 1, at 8-9.

²² CARB must ensure that “[t]he greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable.” CAL. HEALTH & SAFETY CODE § 38562(d)(1).

²³ Emphasis added. CAL. HEALTH & SAFETY CODE § 38562(d)(2).

²⁴ *CBE Comments, supra* note 1, at 12-13.

²⁵ *Biofuelwatch Comments on Notice of Public Hearing to Consider Proposed Low Carbon Fuel Standard Amendments* (Feb. 20, 2024),

https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=lcfs2024&comment_num=7028&virt_num=349.

CBE appreciates the opportunity to comment on the April 10, 2024, LCFS workshop. We urge CARB to reign in subsidies and incentives for crop-based biofuels and instead prioritize investments in zero-emission technologies that will create deeply needed public health benefits in environmental justice communities.

Sincerely,

Amelia Keyes
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