COMMUNITIES FOR A BETTER ENVIRONMENT
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Via electronic submittal

Chair Liane Randolph and
Members of the Board
California Air Resources Board
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Submitted via CARB's online Comment Submittal Form

Re: Comment on the Proposed Modifications (15-Day Changes) Low Carbon Fuel Standard Regulation

Dear Chair Randolph and Members of the Board,

Communities for a Better Environment ("CBE") writes in opposition to the California Air Resources Board ("CARB") proposed Low Carbon Fuel Standard ("LCFS") modifications (15-day changes). CBE is an environmental justice organization, working with community members in East Oakland, Wilmington, Richmond, Southeast Los Angeles, and surrounding communities, which are heavily impacted by fossil fuel pollution from mobile sources, oil refineries, and drilling operations, power plants, airports, warehouses, and many other sources. This comment sets out CBE's concerns regarding how CARB's 15-day changes impact environmental justice communities. In particular, this letter explains that:

- The twenty percent limit on soy and canola-based biodiesel will not correct the biofuels credit glut, thereby depressing the program, and resulting in continued pollution impacts for fence-line environmental justice communities.
- The addition of identified regions in biofuels land use change analysis are insufficient to account for the range of imports and therefore will not reduce biofuels over crediting, which harms fence-line biofuels refinery communities.
- Allowing biomethane book-and-claim accounting for fossil fuel-based hydrogen production perpetuates harm in environmental justice communities.
- Removing fossil jet fuel from the program sends a bad message to polluting airlines, and the workers and communities they harm.
- Diverting credits from utilities to Original Equipment Manufacturers will perpetuate historic barriers to access to electric vehicles and charging infrastructure for low-income communities and communities of color.

CBE and a broad coalition of organizations representing groups from environmental justice, environmental, labor union, and social justice organizations have been actively voicing many of the issues and suggestions raised in this letter throughout the rulemaking process. CBE is extremely concerned with the direction of these changes and the status of the rulemaking process and urgently requests that further changes and corrections are made to better align the program with the suggestions and concerns raised in this letter and throughout the rulemaking process.

I. CHANGES TO BIODIESEL CREDITING ACKNOWLEDGE PROBLEMS, BUT DO NOT PROVIDE AN ADEQUATE REMEDY.

CBE recognizes that the changes made to sections 95482(1) and 95488(d)(1) attempt to remedy the overrepresentation of renewable diesel in the program, at nearly 40% of the total program in the 2024 quarter one LCFS Reporting Tool (LRT).[1] Unfortunately, as explained at length below, the proposed twenty percent company-wide limit on canola and soy based biodiesel crediting, and Executive Officer discretionary pathway closure option are too opaque for companies to implement, for CARB to enforce, or for community stakeholders to decode. Further, these unclear and untimely changes will not correct the program's outstanding renewable diesel credit glut. Ultimately, these changes fail to correct the LCFS as it applies to biodiesel, and thereby perpetuate pollution harms to fence-line communities surrounding biofuels refineries.

To move forward in addressing biofuels' climate and health problems, CBE echoes prior ask for CARB to place a cap on credits for crop-based biofuels at 2020 levels and conduct a risk assessment of biofuel feedstocks. In lieu of the changes as they are proposed, this measure would more clearly and readily serve CARB's statutory mandate to achieve maximally technologically feasible and cost-effective emission reductions by boosting incentives for truly clean, scalable technologies including electrification. In addition, a cap at 2020 levels will be critical to begin addressing the harms of biofuel refining for fence-line communities, as well as the expansive impact of biofuels on global deforestation, and food security risks.

a. Changes to the biodiesel rule are unclear regarding reporting, which will make them impossible to enforce in a timely manner.

The addition of subsection (i) in section 95482 introduces an unnecessarily opaque "company-wide" twenty percent credit eligibility limit that will likely lead to confusion for companies attempting to comply with the LCFS, CARB staff enforcing the LCFS, and members of the public seeking to understand the pollutants to which their communities are exposed.

The added twenty percent credit eligibility limit is applied to the "annual production reporting" of each "company" seeking to produce biodiesel and acquire biodiesel related credits. First, it is entirely unclear where the "annual production reporting" will be drawn from for new biodiesel applicants. Annual production reporting is only required once a fuel reporting entity has applied, and been accepted, thereby establishing an account in the LCFS Reporting Tool and Credit Bank and Transfer System (LRT-CBTS). Unlike the changes, the "company-wide"

[1] CAL. AIR RESOURCES BD., 2023 LCFS REPORTING TOOL (LRT) QUARTERLY DATA SUMMARY REPORT NO. 1 (2024).

analysis required for hydrogen refueling infrastructure (HRI) is defined as "all the stations registered by an entity with a unique FEIN in the LRT-CBTS," which is readily discernable because upon establishing an LRT CBTS account, hydrogen reporting entities are required to register all fueling supply equipment.[2] Unlike the HRI framework, producers of biodiesel are only required to report the volume of each specific blend stock produced per quarterly reporting period which is later compiled into an annual report.[3] It is therefore unclear how CARB proposes to manage new canola and soy based biofuels applications, and delaying enforcement of a twenty percent limit for new applicants is confusing, unnecessary, and ineffective.

b. <u>The twenty percent company-wide credit limit on canola and soy oil-based biodiesel will not fix the credit glut, because of untimely enforcement and potential for growth.</u>

The twenty percent credit eligibility limit will not apply to biodiesel producers already receiving credits above twenty percent of their production until 2028. This delay in enforcement will drastically reduce the small benefit of a twenty percent limit on canola and soy-oil based biodiesel because of the existing glut of renewable diesel credits. As explored above, credits for renewable diesel represent roughly forty percent of the program, earning approximately 1.6 times more credits than the next largest creditor, electricity.[4] Marathon Martinez and Phillips 66 Rodeo together account for a major share of the new renewable diesel capacity coming online in 2023 and 2024.[5] The delayed enforcement timeline for already accepted biodiesel producers will prolong the subsidization of biodiesel, leaving credit prices low. Therefore, there is likely to be only a marginal change in renewable biodiesel crediting as a result of the twenty percent limit, ensuring that the LCFS program remains weighed down by renewable biodiesel credits.

CARB's 2022 Scoping Plan includes plans for a phasedown in oil and gas refining by 2045.[6] As oil refineries go offline following CARB's oil and gas refining phasedown, they are likely to follow the existing trend towards biofuels production. As more refineries go offline, LCFS crediting provides motivation for refiners to bring once shuttered refineries back online for biofuels. Under CARB's Plan there is significant potential for more companies to apply for biofuels applications, and the overall number of companies operating with a twenty percent limit for soy and canola-based biodiesel could increase the biofuels market overall. Further compounding this issue, the twenty percent limit on soy and canola-oil based biodiesel is likely to have little effect on the entire biofuels crediting market because oil refiners can easily shuffle feedstocks to produce biofuels from soy and canola oil to tallow and cooking oil. A twenty

[2] Cal. Air. Res. Bd., *Proposed 15-Day Changes* (Aug. 12, 2024) § 95486.2(4)(F), [hereinafter "15-Day Changes"].
[3] *15-Day Changes* § 95491(d) and (e).
[4] CAL. AIR RESOURCES BD., 2023 LCFS REPORTING TOOL (LRT) QUARTERLY DATA SUMMARY REPORT NO. 1 (2024).
[5] Phillips 66 Rodeo and Marathon Martinez have nameplate capacities of 680 and 480 million gallons per year, respectively, making them two of the largest renewable diesel producers in the state. Maria Gerveni & Scott Irwin, *Overview of the Production Capacity of U.S. Renewable Diesel Plants for 2023 and Beyond*, FARMDOCDAILY (Mar. 29, 2023), https://farmdocdaily.illinois.edu/2023/03/overview-of-the-production-capacity-of-u-s-renewable-diesel-plants-for-2023-and-beyond.html.
[6] *California's 2022 Climate Change Scoping Plan Fact Sheet*, California Air Resources Board (Jun. 16, 2022), https://ww2.arb.ca.gov/resources/fact-sheets/californias-2022-climate-change-scoping-plan-fact-sheet#:~:text=The%20Draft%202022%20Scoping%20Plan,and%20gas%20extraction%2C%20and%20refining.

percent company-wide limit is, in other words, an insufficient long-term and short-term remedy for fixing and maintaining a steady credit price for renewable diesel.

A cap on credit subsidies for crop-based biofuels will help ensure that the glut of biofuels entering California does not slow down our transition away from combustion vehicles by diluting incentives for zero-emission technologies.[7] For example, we know that the high volumes of biofuels expected under the LCFS will dilute incentives for investment in electrification and other real climate solutions.[8] The twenty percent company wide limit on canola and soy-oil based biodiesel does not operate in the same way that a volume based cap does because as new biodiesel producers enter the market, the overall volumetric limit will increase. Implementing a cap on biofuels can correct this issue by creating a firm limit on the number of credits available in the market.

c. Granting the Executive Officer discretionary power to close biomass-based diesel pathway applications is an insufficient alternative remedy because it is too uncertain.

The changes to section 95488 grant the Executive Officers the power to choose to stop accepting new fuel pathways for all biomass-based diesel in the event that 132,000 class 3-8 ZEVs or NZEVs are registered in California. This change is unclear based on the language of the change itself, but also is uncertain because of the Executive Officers discretionary authority, and the lack of sufficient support in the LCFS for ZEV pathways in medium and heavy-duty class vehicles.

First, it is unclear from the language of the change if the Executive Officer would be effectuating a complete ban on new applications or a selective rejection of new applications. While a complete ban on new fuel pathway applications for biomass-based diesel would be a solid step forward in correcting the LCFS's biomass-based diesel over crediting, the language of this change on its face does not clearly require the Executive Officer to do so. Further in this vein, the timeline for the decision itself is unclear. While the Executive Officer may choose not to accept new applications for biomass-based diesel beginning on January 1, 2031, the number of registered vehicles must exceed 132,000 NEVs or NZEVs on December 31, 2029, with a posted notification on August 31, 2030. Does this mean that the Executive Officer cannot exercise fuel pathway closure discretion if the 132,000 threshold is surpassed after December 31, 2029? As an important mechanism for enforcement, and a potentially significant step forward for the program the terms of this decision should at the very least be clear to CARB and members of the public.

This change grants the Executive Officer the discretion to make the choice not to accept new pathway applicants (either wholly or selectively) if the required amount of 132,000 NEV and NZEV vehicle registration amount is surpassed. At the end of 2023, the California Energy

[7] *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.).

[8] *Id.* 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…").

Commission reported that there were 3,784 electric and hydrogen medium and heavy-duty ZEVs in California.[9] To reach this threshold, the number of medium- and heavy-duty ZEV's would have to more than double itself every year. Such a steep growth rate would likely require an increase in investment in electrification that is not currently included in the program or represented in these changes. Therefore, the change is structurally incongruous with the lack of meaningful investment in the adoption of zero-emission vehicles.

In the Initial Statement of Reasons (ISOR), CARB recognized that achieving carbon neutrality will require a massive shift towards electric vehicles, and that this transition is technologically feasible. The outstanding glut of biofuels credits will diminish incentives to invest in other technologies, including electrification and zero-emission technology.[10] As explored above, changes to canola and soy-oil based biodiesel are not timely or effective enough to motivate sufficient correction for existing over crediting. Further, none of the changes included provide incentives supporting investment in the development and uptake of medium and heavy-duty ZEVs. CARB should revisit this change to clarify that the triggered outcome is a complete bar on new biofuels applications and make further changes to support more rigorous investment in electrification.

d. Biofuel reshuffling under the federal Renewable Fuel Standard violates CARB's duty to assure emission reductions are additional, and dilutes any purported reduction in over crediting from the twenty percent limit.

The twenty percent limit change is further inadequate because CARB still has not addressed the issue of crediting reductions that should be attributed to the federal Renewable Fuel Standard ("RFS"). Under AB 32, CARB is required to ensure that any greenhouse gas emissions achieved are "real"[11] and "*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."[12] As CBE's prior comment explains, the federal RFS requires nationwide production of biofuels and allows for overcompliance in one state to compensate for undercompliance in another state.[13] The double incentive of LCFS and RFS thus encourages biofuel producers to concentrate sales in California to take advantage of our LCFS incentives.[14] This has led to California consuming an increasingly large share of the country's biodiesel and renewable diesel, and in 2022 California consumed half of all the biomass-based diesel

[9] California Energy Commission, *Medium- and Heavy-Duty Zero-Emission Vehicles in California*, (May 1, 2024), https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/medium.
[10] *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).
[11] 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).
[12] Emphasis added. CAL. HEALTH & SAFETY CODE § 38562(d)(2).
[13] *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.
[14] Jeremy Martin, *A Cap on Vegetable Oil-Based Fuels Will Stabilize and Strengthen California's Low Carbon Fuel Standard*, THE EQUATION (Jan. 30, 2024), https://blog.ucsusa.org/jeremy-martin/a-cap-on-vegetable-oil-based-fuels-will-stabilize-and-strengthen-californias-low-carbon-fuel-standard/.

consumed in the U.S.[15] Meanwhile, consumption outside California is declining.[16] Therefore, under this dual system, a share of the biomass-based diesel consumption that CARB attributes to the LCFS is actually reshuffled from other states, where it would be consumed anyway due to the federal RFS. By taking credit for emissions reductions that should be credited to the federal RFS, CARB is violating AB 32's additionality requirement and inflating emission reduction estimates that will dilute the potential effect of a twenty percent soy and canola based biofuels limit.[17] In the 2018 LCFS rulemaking, CARB addressed this by calculating the greenhouse gas emissions reductions attributable to the LCFS in order to count only reductions where "complying with the LCFS can be argued to be the primary reason for the action."[18] CARB has backtracked on this issue, and continues to, by failing to correct for reshuffling, thereby reducing the effectiveness of attempts to limit biodiesel credits. Dual application of the LCFS and RFS will weaken the already weak results of the twenty percent limit by creating double incentives for oil produced within the credited twenty percent, and for other biofuels in the program. Further, incentives from the RFS will apply to LCFS deficit generating canola and soy-based biofuels created outside of the twenty percent limit for LCFS crediting.

e. <u>The impacts of biofuel refining on fence-line communities are current and drastic, fence-line communities are entitled to clear and accurate rulemaking and enforcement.</u>

Changes to the LCFS do not support a timely or effective reduction in incentives for biofuels refining. LCFS biofuel incentives drive rapid increases in renewable diesel production in California, largely occurring at oil refineries.[19] As such, the LCFS is undermining the clean-up of pollutants in highly impacted refinery communities.[20]

Refinery communities have been living with the racist impacts of fossil fuel pollution for a century and are deeply, and personally aware of the need to phase out polluting refineries. As retired oil refineries come back online for biofuels, refinery communities are again being asked to disproportionately bear the burden of pollution and safety risks from biofuel refinery conversion. The refinery conversions of Phillips 66 Rodeo, Marathon Martinez, and Altair Paramount are illustrative. Phillips 66 Rodeo and Marathon Martinez are located in the San Francisco Bay Area Basin, which is out of attainment with state standards for particulate matter

[15] *Id.*
[16] Martin, *supra* note 14 ("Rising California consumption has come partly at the expense of biodiesel consumption elsewhere in the US, which fell 28% percent in 2022 compared to its peak in 2016.").
[17] 15-Day Changes, §954821, and §95491(d). (The twenty percent company-wide limit cannot inherently address reshuffling because it would only apply to annual reporting, which is limited to production in California, or import into California.)
[18] CAL. AIR RES. BD., *Appendix F to Initial Statement of Reasons: Methodologies for Estimating Potential GHG and Criteria Pollutant Emissions Changes Due to the Proposed LCFS Amendments*, F-13 (Mar. 6, 2018), https://www.arb.ca.gov/regact/2018/lcfs18/appf.pdf?_ga=2.136358512.1729481274.1707759900-1149230758.1693940701.
[19] *See* Martin, *supra* note 14.
[20] Jeremy Martin, *Everything You Wanted to Know About Biodiesel and Renewable Diesel. Charts and Graphs Included*, THE EQUATION (Jan. 10, 2024), https://blog.ucsusa.org/jeremy-martin/all-about-biodiesel-and-renewable-diesel/.

(PM10), fine particulate matter (PM2.5), and ozone.[21] Further, the cities of Rodeo and Martinez are home to environmental justice communities where residents are disproportionately burdened by pollution, and vulnerable to health risks. According to CalEnviroScreen, residents in the census tract closest to the Phillips 66 refinery experience a pollution burden greater than 86 percent of census tracts in the state.[22] For the census tracts nearest the Marathon refinery, the pollution burden is greater than 82–91 percent of state census tracts.[23] Communities near these refineries experience increased rates of asthma and cardiovascular disease, and newborns born near the refineries have increased risk of low birthweight.[24] Both the Rodeo and Martinez refinery communities are designated as "disadvantaged communities" by the California Environmental Protection Agency under SB 535 based on geographic, socioeconomic, public health, and environmental hazard criteria.[25]

In another stark example of environmental injustice, the Altair Paramount refinery in Paramount, California took small steps toward producing biofuels in 2013, after it had ceased processing crude oil and gone idle in 2011.[26] In 2018, the refinery proposed a plan to substantially expand its operations to 25,000 barrels per day of biofuel feedstock throughput (up from 3,500 barrels per day). The City of Paramount in Los Angeles County is majority people-of-color and is considered an environmental justice community, where residents are exposed to a range of industrial pollutants, including high levels of hexavalent chromium (a cancer-causing air toxin).[27] Paramount is in the South Coast Air Basin, which is in "extreme" non- attainment of many federal air quality standards, including ground-level ozone.[28] The Environmental Impact Report for the expansion project estimated that the expanded refinery would release 1,743 pounds of VOCs and 2,133 pounds of NOx emissions per day, and it would require 50 rail car unloads per day and 540 diesel truck trips.[29] The Paramount refinery demonstrates how biofuel incentives can encourage previously shuttered oil refineries to expand refining operations, even when they are located within environmental justice communities that already face air pollution levels far beyond what is considered safe for human health.

These conversions also demonstrate that biofuel refining creates new health and safety risks for fence-line communities. Biofuel refining may require more intensive use of hydrogen

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[21] *Air Quality Standards and Attainment Status*, BAY AREA AIR QUALITY MGMT. DIST., https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status (last visited Feb. 9, 2024).
[22] CalEnviroScreen 4.0, CAL. OFF. ENV'T HEALTH HAZARD ASSESSMENT, https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0/?org=OEH (last visited Aug. 25, 2024) (search for census tract 6013320001).
[23] *Id.* (last visited Aug. 25, 2024) (search for census tracts 6013320001, 6013320004, and 6013315000).
[24] *Id.*
[25] *SB 535 Disadvantaged Communities*, CAL. OFF. ENV'T HEALTH HAZARD ASSESSMENT, https://oehha.ca.gov/calenviroscreen/sb535 (last visited Feb. 9, 2024) (see "Disadvantaged Communities Map" and search for census tracts 6013358000, 6013320001, 6013320004, and 6013315000).
[26] Verified Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief at 11, *Communities for a Better Environment v. City of Paramount*, Los Angeles County Central District Superior Court, available at https://climatecasechart.com/wp-content/uploads/case-documents/2022/20220516_docket-na_petition-for-writ-of-mandate.pdf.
[27] *Id.* at 8.
[28] *Id.* at 8.
[29] *Id.* at 12–13.

compared to fossil fuels, which can cause more frequent flaring hazards.[30] This is supported by site-specific evidence: since the Marathon Martinez facility reopened as a biofuel refinery in late 2022, there have been over 46 flaring incidents reported by the refinery.[31] The Martinez refinery has also had an alarming number of health and safety emergencies. In a 2022 incident that the refinery failed to report, it released 20 to 24 tons of spent catalyst chemicals into the community, where residents found dust containing heavy metals settled onto front yards and vehicles.[32] In November 2023, the refinery had two major fires that refinery officials described as "facility-wide emergencies;" one of these fires resulted in life-threatening injuries for a refinery worker and released over 200,000 pounds of renewable diesel fuel.[33] These incidents have triggered a federal investigation by the U.S. Chemical Safety Board and led the Contra Costa Health department and Bay Area Air Quality Management District to conduct a surprise inspection at the facility, and local health officials have publicly expressed concerns about the frequency of safety incidents at the refinery since reopening.[34]

The seminal statute AB 32 requires that CARB move forward "in a manner that is equitable [and] seeks to minimize costs and maximize the total benefits to California,"[35] and ensure that measures "do not disproportionately impact low-income communities"[36] or interfere with "efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions."[37] The subsequent adoption of SB 32 is further instructive, demanding that CARB in adopting rules to maximally reduce greenhouse gas emissions "in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public."[38] Under this mandate, CARB should further study the direct and indirect effects of biofuels on refinery communities so that there is adequate support for transparent and accountable rulemaking. The sections that follow provide further detail regarding how the twenty percent limit change is insufficient to support CARB in fulfilling the mandates of AB 32.

i. The twenty percent limit's untimely and ineffective implementation will prolong and promote harms to environmental justice communities.

These changes prolong and promote the existing harms of biofuels production by providing for an ineffective and untimely limit on canola and soy-oil based biodiesel. Further,

[30] *Phillips 66 Rodeo Renewed Project (File No. LP20-2040) – comment concerning draft environmental impact report* at 38, submitted by Communities for a Better Environment and other environmental organizations (Dec. 17, 2021), available at https://www.nrdc.org/sites/default/files/rodeo_renewed_deir_comment.pdf; *see also* Katie Lauer, *Biofuel is poised to usurp crude oil refining in the Bay Area. But are their 'renewable' fuels a green solution or 'greenwashing'?*, EAST BAY TIMES (Feb. 4, 2024), https://eastbaytimes.com/2024/02/04/biofuel-is-poised-to-usurp-crude-oil-refining-in-the-bay-area-but-are-their-renewable-fuels-a-green-solution-or-greenwashing/.
[31] *Health officials conduct surprise inspection at Martinez refinery after recent incidents*, ABC7 NEWS (Dec. 26, 2023), https://abc7news.com/martinez-refining-company-surprise-inspection-refinery-flaring-air-quality/14228185/.
[32] *Id.*
[33] Ted Goldberg*, Federal Agency Probes Marathon's Martinez Refinery After Two Large Fires Last Month*, KQED (Dec. 5, 2023), https://www.kqed.org/news/11968786/recent-fires-at-marathons-martinez-refinery-spark-major-safety-concerns.
[34] *Id.*; ABC7 NEWS, *supra* note 31.
[35] CAL. HEALTH & SAFETY CODE § 38562(b)(1).
[36] CAL. HEALTH & SAFETY CODE § 38562(b)(2).
[37] CAL. HEALTH & SAFETY CODE § 38562(b)(4).
[38] S.B. 32, 2016, Reg. Sess. (Ca. 2016).

including co-processing of biomass and petroleum feedstocks in the applicable definition of credit-generating renewable diesel[39] will encourage major oil producers to further entrench communities who already experience the harms of oil refining with the expansion into biofuel refining co-processing with petroleum. Again, AB32 requires CARB to act in a manner that does not interfere with efforts to reduce toxic air contaminates, maximizes benefits with minimal costs, and is equitable and does not disproportionately impacting low-income communities.[40] The experiences at Phillips 66 Rodeo, Marathon Martinez, and AltAir Paramount refineries provide examples of how biofuel refining extends existing pollution and creates new harms in disadvantaged communities. The clear evidence that producing biofuels at oil refineries can create serious, under-studied health and safety risks for low-income communities, communities of color, and communities heavily impacted by air toxics undoubtedly indicates that CARB should be acting to rein in biofuels crediting that incentivizes expanded production.

As set out above, the twenty percent per company limit does not limit the expansion of the market, and as oil refining is phased down in line with the 2022 scoping plan, biofuels credits will incentivize oil refineries to pivot and continue operation as biofuels refineries. Further, the twenty percent limit does nothing to discourage the uptake of other biofuels such as tallow and cooking oil-based biofuels. Environmental justice communities, such as Martinez, Rodeo, and Paramount, as well as new communities where biofuels production expands will bear the burden of the little studied health and safety impacts of biofuels refining. As such, CARB's twenty percent limit does not adequately or equitably minimize costs to Californians and will ultimately prolong the disproportionate health and environmental burdens faced by refinery communities.

ii. Unaccounted for reshuffling under the RFS concentrates harmful biofuel refining in California's environmental justice communities.

As explored in section one, subsection d of this comment, dual incentives under the federal RFS and LCFS have resulted in a trend towards concentrating biofuels production and use in California. Oil refineries are generally located in areas with higher pollution burdens that are largely comprised of low-income households and people of color, due in part to a history of racist housing discrimination. As biofuel producers concentrate in California because of reshuffling incentives not addressed by changes to include a twenty percent cap, oil refineries come back online as biofuels refineries and California's fence-line refinery communities will face new pollution burdens and risks despite California's much needed commitment to reduce the use and impacts of fossil fuel. To comply with additionality requirements under California law[41] and ensure the program is administered in a manner that does not disproportionately impact low-income communities,[42] CARB should correct the program to adequately account for reshuffling under RFS.

[39] 15-DAY CHANGES § 95481.
[40] CAL. HEALTH & SAFETY CODE § 38562(b)(1), (b)(2), and (b)(4).
[41] CARB must ensure that any greenhouse gas emission reductions achieved are "real" 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." CAL. HEALTH & SAFETY CODE § 38562(d)(1) & (2).
[42] CAL. HEALTH & SAFETY CODE § 38562(b)(4).

iii. *The twenty percent limit does not account for or reduce the externalized impacts of biofuel refining on fence-line communities.*

Pollution from oil refining itself is not the only biofuel refining related pollution that impacts fence-line environmental justice communities. Biofuels refining creates an array of diverse stationary and mobile pollution sources that must be adequately accounted for. For example, in the Environmental Impact Report for the Marathon Martinez biofuel conversion project, the county estimated that the biofuel refinery would require 180 diesel truck trips through the area per day, 63 railcars per day (an increase compared to the oil refinery due to the transport of biofuel feedstocks), and 400 marine vessels per year (also an increase compared to the oil refinery).[43] Looking at cumulative impacts on air pollution, the county found that the conversion would have a significant and unavoidable impact on PM2.5 exposure for residents and workers in the area.[44] Similarly, the Phillips 66 Rodeo refinery conversion is estimated to have significant impacts on pollution-causing activities. The refinery is now one of the largest biofuel refineries in the world. The Environmental Impact Report for the 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: rail car unloads per day would increase from 4.7 to 16, and tanker vessel and barge calls per year would more than double.[45] The refinery requires approximately 16,000 diesel truck trips per year.[46] Martinez is located in the San Francisco Bay Area Basin which is out of attainment with state standards for particulate matter (PM10), fine particulate matter (PM2.5), and ozone.[47] Marathon Martinez is an illustrative example of how conversion to biofuels refining will contribute to an increase in diverse and distinct air pollution sources for fence-line communities. The immense amount of pollutants from diverse sources associated with biofuels refining conflicts with CARB's statutory requirement to complement efforts to attain air quality standards and to avoid disparate harms in low income communities and communities of color. The twenty percent limit has no deterrent power for the expansion of companies who elect to convert to biofuels production as oil and gas is phased down under the Scoping Plan. As such, this rule change fails to satisfy CARB's statutory requirements under AB 32. As previously recommended, CARB should implement a cap on biofuels credits. A cap on the market for biofuels credits could provide a deterrent effect on the incursion of biofuels conversions, while CARB and Air Quality Management Districts otherwise address the issue of biofuel related pollution affecting fence-line communities.

f. An effective cap on credits for crop-based biofuels would better achieve maximum technologically feasible and cost-effective emission reduction, and more readily incentivize electrification.

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[43] Contra Costa Cnty. Dep't of Conservation and Dev., *Draft Environmental Impact Report Vol. I (County File# CDLP20-02046)*, at 2-36–38 (Oct. 2021), https://www.contracosta.ca.gov/DocumentCenter/View/72957/Martinez-Refinery-Renewable-Fuels-DEIR-Vol-1-Complete-DEIR.

[44] *Id.* at 3.3-40.

[45] Verified Petition for Writ of Mandate at 13, *Communities for a Better Environment v. County of Contra Costa*, Contra Costa County Superior Court, Case No. N22-1091 (2023).

[46] *Id.*

[47] *Air Quality Standards and Attainment Status*, BAY AREA AIR QUALITY MGMT. DIST., https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status (last visited Aug. 26, 2024).

A cap on crop-based biofuels at 2020 energy levels is an important step toward addressing the local and global environmental harms of biofuels; it also better serves CARB's statutory objectives. Under AB 32, CARB's primary regulatory objective is to "achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions. . . in furtherance of achieving the statewide greenhouse gas emissions limit."[48] The twenty percent limit change, which encourages an unchecked increase in crop-based biofuels conversions and does not meaningfully reduce the biodiesel credit market, does not maximize technologically feasible and cost-effective reductions. Capping crop-based biofuels would open up room in the LCFS to prioritize investments in scalable technologies that are truly clean and drive us toward our goal of carbon neutrality by 2045.

The twenty percent limit will not provide cost-effective emission reductions. Analysis by the International Council on Clean Transportation and the Union of Concerned Scientists shows that biomass-based diesel will likely only be economical to produce when it is subsidized, because the costs of producing vegetable oils are regularly higher than the costs of wholesale diesel (without even considering the costs of producing diesel from vegetable oils).[49] Reducing crediting will only increase the burdensome cost of vegetable oil, potentially furthering credit shuffling to other biofuel feedstocks circumventing the twenty percent limit. Further, many of the new renewable diesel production facilities are oil refineries. For these refineries, part of the benefit of converting to biofuels is the opportunity to offset their compliance burden and delay a costly facility closure process.[50] The twenty percent limit does not adequately limit the market for biofuels credits and will thus be used to enshrine oil giants' impacts to local communities despite a transition away from fossil fuels. The misapplication of credits to benefit more polluting fuels like biofuels is not a cost-effective measure of enforcement because credits that are offered for biofuels in lieu of crediting other fuels such as electrification reduce the effectiveness of the program. CARB should correct this by providing for a cap on biofuels.

The glut of credits for renewable diesel will undermine LCFS incentives for electrification and other scalable clean transportation technologies. Setting a cap on biofuels would help stabilize credit prices and focus credit money on electrification.[51] As explained above, the twenty percent limit is insufficient to remedy the glut of credits because of its delayed implementation, opportunities for feedstock shuffling for other biofuels, and incidence of credit shuffling under the RFS. In the ISOR, CARB recognized that achieving carbon neutrality will require a massive shift towards electric vehicles, and that this transition is technologically feasible. However, continuing to allow a glut of credits to weigh down the market inhibits progress toward this transition by allowing biofuel credits to crowd out opportunities for regulated parties to invest in electrification.

[48] CAL. HEALTH & SAFETY CODE §§ 38560, 38560.5(c).
[49] JANE O'MALLEY ET AL., SETTING A LIPIDS CAP UNDER THE CALIFORNIA LOW CARBON FUEL STANDARD 4 fig. 2 (2022), https://theicct.org/wpcontent/uploads/2022/08/lipids-cap-ca-lcfs-aug22.pdf.
[50] Martin, *supra* note 14.
[51] *Id*.

II. CHANGES TO LAND USE CHANGE (LUC) VALUES FOR BIOFUELS DO NOT ADEQUATELY OR DIRECTLY CORRECT CARBON INTENSITY VALUES FOR INTERNATIONAL FEEDSTOCKS.

Changes pertaining to Land Use Change (LUC) effects for biofuels feedstocks to include identifying regions of analysis are insufficient to address LUC related carbon intensity misrepresentations. These changes represent an important acknowledgement of the drastic impacts of LUC effects related to the programs biofuels incentives. However, identifying regions of analysis alone does not sufficiently correct carbon intensity values because they still do not reflect the range of specific LUC effects of regional biomass producers internationally. Further, the Executive Officer's ability to adjust the regional representations is not adequately outlined. Finally, these shortcomings, including underestimating LUC changes, will adversely affect fence-line refinery communities. One basic step CARB should take is to calculate LUC effects for each region that provides imported crop-based feedstocks in the program.

a. Regional analysis of soy and Canola is inadequate because it is limited to the U.S. and North America.

Changes to section 95488.3 that identify the region of analysis for each LUC factor are insufficient because they only identify one region of analysis per biomass type and make no substantive changes to the LUC analysis. CARB has already approved fuel pathways for a major biofuel producer, Phillips 66, to produce biofuels from soybean oil imported from Argentina,[52] and imports from South America are likely to accelerate under the proposal that only limits soy-based oil biofuels credits on an individual company basis. Land use change effects vary by region due to specific domestic economic factors and trade dynamics, and South American soybean oil presents particularly strong deforestation risks.[53] One study that looked at soybean oil cultivation in Brazil found that its direct and indirect LUC impacts could outweigh the carbon benefits of replacing fossil diesel.[54] By focusing its LUC analysis on U.S. soy feedstock production shocks, CARB is underestimating the carbon intensity of the feedstocks that this proposal will incentivize. Since CARB continues to provide credits to biofuels sourced from imported crop-based feedstocks, the proposal's failure to thoroughly evaluate LUC by region produces indefensibly inaccurate carbon intensity estimates.[55] Underestimation of the LUC effects of biofuels can have catastrophic consequences. In South America, deforestation linked to soybean farming is destroying critical tropical forests like the Gran Chaco Forest in Argentina and Paraguay, which is one of the biggest carbon sinks in the world, provides a critical habitat for thousands of plant and animal species, and is an ancestral home to many Indigenous communities. These crop-based feedstocks have numerous harmful effects, including climate

[52] Low Carbon Fuel Standard Tier 2 Pathway Application No. B0520, Phillips 66 Rodeo (certified Dec. 26, 2023), https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0520_cover.pdf.
[53] *Comments on Tier 2 Pathway Application No. B0520*, submitted by Communities for a Better Environment (Dec. 13, 2023), available at https://ww2.arb.ca.gov/public-comments/lcfs-fuel-pathways-public-comments/webform/submission/7151.
[54] David M. Lapola et al., *Indirect land-use changes can overcome carbon savings from biofuels in Brazil*, 107 PNAS 3388 (2010), http://www.pnas.org/content/107/8/3388.full.pdf+html.
[55] *See Comments on Tier 2 Pathway Application No.* B0520 at 2–3, submitted by University of California, Davis Policy Institute for Energy, Environment, and the Economy (Dec. 13, 2023), available at https://ww2.arb.ca.gov/public-comments/lcfs-fuel-pathways-public-comments/webform/submission/7161 (hereinafter "*U.C. Davis Comments*").

impacts from deforestation, loss of indigenous lands, and increased food insecurity. The lack of effective changes to restrict crop-based biofuels will accelerate these effects. It is therefore especially important for CARB to accurately estimate the LUC effects of crop-based feedstocks.

As CBE has previously supported, CARB should provide a region-specific direct and indirect land use change analysis for fuel pathway applications that rely on imported crop-based feedstocks. While the changes acknowledge that regional analysis is important, they merely identify one preset region per biomass type, and provide an inadequate corrective remedy for regional analysis when the pre-calculated regional analysis does not match the actual biofuel source region. If CARB provided modeling analysis that reflected a region-specific production shock, it would more accurately account for domestic economic factors and trade dynamics to arrive at a carbon intensity estimate that better aligns with the true climate impacts of feedstocks.[56] CARB should substantively correct carbon intensity valuation by studying regional producers land use change effects, and incorporating findings into regional carbon intensity valuations.

b. Executive Officer ability to supersede the LUC calculation table is not an adequate remedy because it is unclear what "conservatively representative" is, or how it would be surmised.

Changes to section 95488.3(d) grant the Executive Officer the ability to supersede the calculated LUC changes if the Executive Officer determines that they are not "conservatively representative of a particular region/feedstock/fuel combination" based on the best available empirical data. CBE appreciates that this change acknowledges the diverse range of factors needed for a comprehensive analysis but is concerned with the lack of clarity regarding the Executive Officer's calculations, as well as when and how this discretionary correction tool will be used. First, this is not a sufficient remedy for CARB's failure to accurately calculate LUC factors because it leans too heavily on an unclear standard of discretion. No definition or further specification is provided for the Executive Officer to base their determination of when the LUC calculation in table 6 is not "conservatively representative" and what scope of analysis the Executive Officer should use to create an appropriate substitution LUC value. Further, while the provision is backloaded with sources for the final determination of a new value, there is no standard for determining whether Table 6 values are not a conservative representative and therefore triggering valuation of a more appropriate LUC effect. Uncertainty regarding when a more appropriate LUC effect should be evaluated could result in underuse of this process. This tool is not practically useful for correcting LUC values if it is not exercised regularly with a clear set of standards. Without accurate, accountable LUC factors, CARB will undervalue the carbon intensity of biofuels, further deflating renewable diesel credit prices and depressing the market.

c. Underestimating carbon intensity based on low LUC calculations, and permissive sustainability certification will adversely impact refinery communities.

With inaccurate LUC values based on region, CARB will continue to underestimate the climate harm of crop-based fuels and thereby over-incentivize biofuels which will drive over-crediting and increases in harms for fence-line communities. The asserted climate benefits of the

[56] *See U.C. Davis Comments*, *supra* note 55, at 2–3.

proposal are based in part on the carbon intensity advantages assigned to biomass-based diesel. Concerningly, CARB's analysis is rooted in an incomplete and inaccurate evaluation of the climate impacts of biomass-based diesel. Biomass-based diesel in California is increasingly produced from virgin vegetable oil, primarily soybean oil, and producers are starting to import soybean oil from South America. The Environmental Protection Agency ("EPA") technical documents comparing LUC models shows that of the models CARB used to calculate LUC effects, only the GTAP model found that displacing fossil diesel with soybean diesel led to lower greenhouse gas emissions, while the other two models found that soybean biodiesel could emit *more* greenhouse gas than fossil diesel due to deforestation.[57] This EPA publication suggests, at the very least, that the GTAP model may be seriously underestimating the land use change effects of crop-based feedstocks. LUC changes continue to include the GTAP model and the AEZ-EF model, the addition of regions of analysis did not change the LUC values in Table six. One of the most important reasons to accurately estimate land use change effects is that these estimates are used in Tier 2 fuel pathway applications to calculate carbon intensity values for crediting biofuels. In this context, underestimating a land use change value results in over-crediting a biofuel project. Further, as explained above, the Executive Officers discretionary ability to amend LUC values does not correct LUC undervaluation. Underestimating LUC effects inflates biofuels crediting, and credits for biofuels support costly biofuel production and investment in biofuel refinery conversions. As explored at length in section one, subsection e of this comment, over incentivizing biofuels has an adverse impact on fence-line refinery communities who bear the burden of direct and indirect pollution from biofuels refining.

In sum, crop-based biofuels present serious, likely underestimated, direct and indirect land use change risks, as well as impacts to fence-line communities and the 15-day changes will not reduce these risks. Echoing CBE's prior asks, one basic way CARB should address land use change risks is by providing more thorough analysis for fuel pathway applications.

III. BIOMETHANE BOOK-AND-CLAIM ACCOUNTING FOR HYDROGEN PERPETUATES POLLUTION HARMS IN ENVIRONMENTAL JUSTICE COMMUNITIES.

Changes to section 95482(h) revokes crediting for fossil fuel-based hydrogen production beginning in 2031 but, counterintuitively continues to allow crediting for fossil fuel-based hydrogen production with indirect book-and-claim biomethane matching for hydrogen production. CARB's continued support for book-and-claim crediting despite acknowledging that fossil fuel-based hydrogen is not a path forward is deeply concerning. Indirect book-and-claim accounting permitted under section 95488.6(i)(2) will encourage hydrogen producers to produce fossil fuel-based hydrogen, because they can make fossil-based hydrogen look carbon negative by purchasing avoided methane credits from dairy digesters that may not even operate in California.

[57] Dan Lashof, *EPA's New Renewable Fuel Standard Will Increase Global Carbon Emissions – Not Lower Them*, WORLD RESOURCES INST. (Jul. 3, 2023), https://www.wri.org/insights/us-renewable-fuel-standards-emissions-impact.

The LCFS should only incentivize green hydrogen produced in a manner consistent with Environmental Justice Equity Principles.[58] The Environmental Justice Equity Principals were created as a framework to prevent rapidly developing hydrogen projects from perpetuating the injustices that polluting infrastructure has imposed on fence-line communities historically and today.[59] The Hydrogen Equity Principles call for green hydrogen that is not defined by CO2 equivalent,[60] in direct conflict with the direction of the program's permissive book-and-claim accounting system. Rather, the Principles outline how hydrogen can be produced without climate emissions, through electrolysis of water using surplus wind and solar energy.[61]

While hydrogen *can*[62] be a zero-emission energy carrier at its point of use, there is an array of hydrogen production methods with a range of potential local climate emissions. Hydrogen produced from fossil fuels, known as grey hydrogen, involves using steam reformation of natural gas to create hydrogen.[63] Steam reformation is both energy intensive and highly polluting.[64] For example, Shell Energy has had two certified pathways for production of fossil-based hydrogen produced from natural gas via steam methane reformation at facilities in Wilmington and Carson, communities with already exceptionally high fossil fuel pollution.[65] Shell uses book-and-claim accounting to claim the environmental attributes of biomethane derived from manure digesters in Minnesota; Minnesota biomethane does not have to actually reach California. Under this scheme, CARB has certified Shell to earn LCFS credits using carbon intensity values of -147 and -152 gCO2e/MJ—these low carbon intensity values make the pathway more valuable than most electric vehicle pathways.[66] Shell is earning highly valuable LCFS credits to produce fossil-based hydrogen in deeply burdened environmental justice communities.

While Cap and Trade allows polluters to pay for the privilege of polluting EJ communities, book-and-claim credits for fossil hydrogen funnel money right back into polluters' pockets in these same communities, counting the fossil gas extracted in EJ communities as a net climate benefit while benzene, NOx, carbon monoxide, methane, and all manner of particulate matter poison the same neighborhoods.[67]

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[58] *Equity Principles for Hydrogen: Environmental Justice Position on Green Hydrogen in California*, COMMUNITIES FOR A BETTER ENV'T (Oct. 10, 2023), https://www.cbecal.org/wp-content/uploads/2023/10/Equity-Hydrogen-Initiative-Shared-Hydrogen-Position-1.pdf.
[59] *Id*. at 2.
[60] *Id*. at 3.
[61] *Id*. at 2-3.
[62] Hydrogen combustion results in NOx emissions, a smog precursor which increases risk of asthma.
[63] Arjun Makhijani & Thom Hersbach, *Hydrogen: What Good Is It?*, INST. FOR ENERGY AN ENV'L RESEARCH, at 14 (Jan. 2024), https://ieer.org/wp/wp-content/uploads/2024/01/What-Good-is-Hydrogen-IEER-report-for-Just-Solutions-January-2024.pdf.
[64] *Id.* at 51-52.
[65] Low Carbon Fuel Standard Tier 2 Pathway Application No. B0348, Shell Energy (certified Sep. 29, 2022), https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0348_cover.pdf; Low Carbon Fuel Standard Tier 2 Pathway Application No. B0349, Shell Energy (certified Sep. 29, 2022), https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0349_cover.pdf (hereinafter "Shell Hydrogen Pathway Applications").
[66] *See LCFS Pathway Certified Carbon Intensities*, CAL. AIR RESOURCES BD., https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities (last visited Aug. 27, 2024) (Note that the Wilmington facility is now a retired pathway).
[67] INST. FOR ENERGY AN ENV'L RESEARCH, *supra* note 59, at 30-31.

Currently, funding and incentives abound for hydrogen infrastructure development. It is essential that the LCFS program send the correct signal to hydrogen producers regarding acceptable long term hydrogen infrastructure development. Grey hydrogen production is already the cheapest, most widely used option for hydrogen production.[68] Crediting for book-and-claim accounting provides additional incentives for the proliferation of fossil fuel-based hydrogen production that will crowd out more expensive, but less polluting hydrogen produced from electrolysis.[69] Allowing fossil fuel-based hydrogen production to proliferate at this early stage in hydrogen infrastructure development could deeply entrench California in continuing dependence on fossil fuels for hydrogen production. To stop sending the wrong signals to an emerging market, CARB should end biomethane book-and-claim crediting for hydrogen.

IV. REMOVING FOSSIL JET FUEL FROM THE PROGRAM SENDS A BAD MESSAGE TO POLLUTING AIRLINES.

Changes throughout the program removing fossil jet fuel are a substantial backslide in policy. In such a hard to decarbonize sector, it is essential that the cost of pollution is adequately accounted for. Removing fossil jet fuel from the program fails to internalize the substantial emissions impact of aviation, and its pollution impacts on airport workers, and communities surrounding airports. Further, the use of fossil jet fuel is not without consequences for the communities and workers who work and live in and around airports. Communities surrounding airports and airport workers have increased hospital admissions for respiratory disorders including asthma, and chronic bronchitis, as well as cardiovascular issues such as heart disease, and stroke.[70] Fossil jet fuel deficit generation could provide an important platform for investing in technology development to decarbonize air travel and remedy its impacts while also appropriately compensating for a significant sector of California's greenhouse gas emissions.

V. ELECTRIC VEHICLES AND CHARGING ACCESS ALREADY EXCLUDE LOW-INCOME COMMUNITIES AND COMMUNITIES OF COLOR; WITHOUT CLEAR AND EXPLICIT DIRECTIVES, OEM CREDIT DIVERSION WILL FURTHER ENTRENCH INEQUITY.

Changes to section 95483 give the Executive Officer discretion to direct up to forty-five percent of base credits otherwise obligated to go towards Electrical Distribution Utilities (EDUs) to be used for specified purposes if sales of new zero emissions vehicles represent less than a thirty percent of certified zero emissions vehicles. Under these changes, OEMs must use base credit benefits towards specified eligible projects to support transportation electrification. However, the eligible uses are flawed in the following ways:

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[68] Elena Krieger et al., *Green Hydrogen Proposals Across California*, PSE HEALTHY ENERGY, at 15 (May 21, 2024) https://www.psehealthyenergy.org/work/green-hydrogen-proposals-across-california/.

[69] *Id.* at 75 ("If green hydrogen incentives and subsidies are allowed to flow to the dominating SMR industry, it could shut down the fledgling industry of green hydrogen production via electrolysis before it even begins.").

[70] S. Lin et al., *Residential Proximity to Large Airports and Potential Health Impacts in New York State*, Int. Arch. Occup. Environ. Health (2008); *see also* Quan Qi et al*., Hidden danger: The long-term effect of ultrafine particles on mortality and its sociodemographic disparities in New York State,* J. of Hazardous Materials*,* Volume 471, (2024).

- There are no additionality mechanisms to ensure that rebates and incentives are actual, and not otherwise reflected in price spikes.
- There are no equity mechanisms to ensure that OEM's will subsidize EV charging infrastructure in historically underserved communities, or that rebates and incentives will be offered to underserved communities.
- There are no requirements for OEM marketing, education, and outreach to be targeted to reach historically underserved communities.
- It is unclear what alternative OEM projects can be developed, and what, if any, equity requirements the Executive Officer can apply.

While the eligible credit projects require "multilingual marketing, education, and outreach," a promising acknowledgement of the need for language justice, there are no further equity requirements. As it stands, affluent, white communities have been the main benefactors of government investment in zero-emission vehicles. Electric vehicles are still rare in low-income and rural communities and communities with the largest percentages of Black and Latinx residents.[71] Further, these same communities bear the brunt of criteria pollutant harms related to fossil fuel based medium and heavy-duty vehicle use.[72] Without clear requirements, there is little to no incentive for OEMs to work to ensure that credit projects such as installing EV charging infrastructure, or rebates and incentives are not inequitably distributed in line with existing barriers to access to these benefits. Particularly in light of the equity requirements that public utilities are subject to under the California Public Utilities Commission,[73] the shift of credits to OEMs without any equity requirements will continue to leave low-income communities and communities of color experiencing inequal access to electrification and heightened pollution burdens.

While the changes specify that credit proceeds cannot be used to pay the cost of regulatory compliance, support lobbying costs, employee bonuses, shareholder dividends or settlement costs there is no promising regulatory requirement to show that the credit proceeds are not used for marketing, education, or outreach that would otherwise happen to promote the sales of OEM vehicles, or that rebates and incentives will not be otherwise offset by price increases. CARB should prioritize electrification investment that reduces access barriers to ensure low-income communities receive benefits from the LCFS and do not disproportionately bear its costs.

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[71] Nadia Lopez & Erica Yee, *Who buys electric cars in California — and who doesn't?*, CALMATTERS (Mar. 22, 2023), https://calmatters.org/environment/2023/03/california-electric-cars-demographics/#:~:text=Communities%20with%20high%20concentrations%20of,faces%20electrifying%20the%20entire%20fleet.

[72] Environmental Justice and Transportation, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/mobile-source-pollution/environmental-justice-and-transportation#:~:text=Pollution%20from%20the%20transportation%20sector,disproportionate%20exposures%20to%20this%20pollution (last visited Aug. 27, 2024).

[73] *See Environmental & Social Justice Action Plan*, Version 2.0, CAL. PUBLIC UTILITIES COMMISSION (April 7, 2022) https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf.

Conclusion

CBE appreciates the opportunity to comment on the 15-day changes and urges the Board to direct CARB staff to make critical changes that will align the LCFS with AB32 requirements and the needs of environmental justice communities. In doing so, CBE urges CARB to more thoroughly and comprehensively explore the comments and suggestions that CBE and a broad coalition of organizations representing groups from environmental justice, environmental, labor union, and social justice organizations have been working diligently to share. Regretfully, CBE expresses deep concern regarding the direction of these changes and the status of the rulemaking process. CBE requests with urgency that CARB make further changes and corrections to better align the program with the suggestions and concerns CBE has raised in this letter and throughout the rulemaking process. CBE again uplifts our asks for a cap on biofuels, an end to book-and-claim biomethane, hydrogen crediting, and the addition of fossil jet fuel as a deficit generator.

Sincerely,

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