



June 14, 2023

Cheryl Laskowski, Ph.D.  
Low Carbon Fuels Standard Program  
California Air Resources Board  
Sacramento, CA 95814

*Submitted electronically*

Re: Comments on the Low Carbon Fuel Standard Community Meetings

Dear Dr. Laskowski,

Thank you for the opportunity to provide comments on the community meetings hosted by the California Air Resources Board (CARB) on May 31<sup>st</sup> and June 1<sup>st</sup>. Earthjustice appreciates the work that CARB staff have invested in improving the Low Carbon Fuel Standard (LCFS).

As we have stated in previous comments, changes to the LCFS are needed to ensure that the program aligns with federal air quality requirements and zero-emissions vehicle goals while also ensuring that the program does not exacerbate pollution burdens on California's most vulnerable communities. At the community meetings, many San Joaquin Valley residents who live near large dairies raised concerns about the pollution harms that they experience from concentrated herds and digesters. CARB also heard from people who are impacted on a daily basis by the production of dirty fuels at refineries. We urge CARB to heed their calls to reform the LCFS so that it longer supports polluting, combustion fuels.

To that end, we provide comments on 1) the information presented at the community meeting by Dr. Michael Wara and other scholars from Stanford University regarding adjustments to the CATS model that would address problems with the way that the LCFS currently treats biomethane and biofuels; 2) the specific questions posed by CARB in its presentation at the community meeting.

**I. CARB should include in its modeling a scenario that incorporates the assumptions presented by the Stanford University team.**

As presented at the community meetings, the Stanford modeling results show that CARB can improve the integrity of the LCFS by 1) eliminating credits for avoided methane by 2024 and

by 2) putting a cap on crop-based biofuels and that these changes will not adversely impact the credit price.<sup>1</sup>

In prior comments, Earthjustice and other stakeholders have explained in detail why these two changes to the LCFS program's treatment of biomethane and crop biofuels are needed.<sup>2</sup> First, they would eliminate the over generation of credits that are not providing actual emissions reductions. Second, they would reduce the adverse, unintended consequences of the program, including pollution from combustion of biofuels, the conversion of forests to farmland, incentivizing pollution harms from large dairies, and the disadvantaging of zero-emissions transportation. Third, the changes would help align the LCFS with crucial air quality requirements and environmental justice aims and facilitate the success of key clean transportation rules including the Innovative Clean Transit rule, Advanced Clean Cars II, and Advanced Clean Fleets. CARB has acknowledged in its Strategy for the State Implementation Plan that California must end reliance on combustion fuels wherever possible,<sup>3</sup> and phasing out LCFS support for dirty fuels is necessary to achieve that goal.

We therefore urge CARB to closely consider the Stanford team's analysis and incorporate its assumptions into its modeling scenarios. At a minimum, we urge Staff to include this scenario as a regulatory alternative under the Standardized Regulatory Impact Assessment (SRIA) so that the public and Board members can thoroughly assess the merits of various proposed changes to the policy.

## II. Answers to CARB questions

In this section, we answer the questions asked by CARB in its community meeting presentation.<sup>4</sup>

1. Should the program prioritize incentives for specific fuels (e.g., electricity, hydrogen, RNG, renewable diesel, biodiesel, ethanol, others)? Why or why not?

Yes. The program should prioritize incentives for fuels that align with the State's strategy to fulfill its Clean Air Act obligations. As CARB's recently adopted Strategy for the State Implementation Plan recognizes, "[t]he progressive tightening of federal ambient air quality standards will require sustained emissions reductions strategies over coming decades and underscores the ongoing need for continuing transformation of California's transportation sector

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<sup>1</sup> Wara et al., Simulating an "EJ Scenario" for the Low Carbon Fuel Standard Rule update using the ARB CATS Model (May 31, 2023) at 6, 10, <https://ww2.arb.ca.gov/sites/default/files/2023-05/Stanford%20Presentation.pdf>.

<sup>2</sup> See generally Earthjustice, Comments on November 9, 2022, Workshop (Dec. 21, 2022), <https://www.arb.ca.gov/lists/com-attach/155-lcfs-wkshp-nov22-ws-UTQCZQFyWX4LZQlj.pdf>; Earthjustice, Comments on February 22, 2023 Workshop (March 15, 2023), <https://www.arb.ca.gov/lists/com-attach/159-lcfs-wkshp-feb23-ws-Wz5VMIwvVXIEagRu.pdf>.

<sup>3</sup> See CARB, 2022 State Strategy for the State Implementation Plan (Sept. 22, 2022) at 22, 24, [https://ww2.arb.ca.gov/sites/default/files/2022-08/2022\\_State\\_SIP\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf).

<sup>4</sup> CARB, California's Low Carbon Fuel Standard (May 31, 2023) at 12, <https://ww2.arb.ca.gov/sites/default/files/2023-05/CARB%20Presentation.pdf>.

to non-combustion sources of energy.”<sup>5</sup> Further, the plan notes that “achieving an 83 percent reduction in NOx emissions will require comprehensive and coordinated efforts to address emissions from both stationary and mobile sources.”<sup>6</sup>

**Accordingly, Earthjustice believes the program should prioritize incentives for fuel pathways that are zero-emissions from end-to-end, including:**

- Direct electrification powered by zero-emitting electricity generation; and
- Hydrogen fuel cells using electrolytic hydrogen produced from zero-emitting electricity generation.

**The program should de-prioritize, phase-out, or eliminate incentives for fuel pathways that exacerbate air pollution or environmental injustice, including:**

- Combustion of liquid biofuels such as renewable diesel, biodiesel, and ethanol;
- Combustion of methane in CNG vehicles;
- Electric vehicles or hydrogen fuel cells relying on combustion or steam methane reformation.

In the shrinking window to slash climate emissions and meet looming air attainment deadlines, the LCFS should prioritize the fuel pathways that have the clearest long-term relevance to the State’s goals, the greatest transformational potential in the sector. At the same time, it should leverage the technologies that are most readily available and show the greatest potential for further progress and cost declines. Thus, the LCFS program should prioritize fuel pathways and transportation projects that are zero-emissions from “end-to-end.” Accordingly, direct electrification and hydrogen fuel cells – both powered by zero-emissions electricity, are the only fuel pathways compatible with addressing the State’s twin goals of eliminating climate and air pollution. As our previous comments note, the need to overhaul the transportation system to zero-emissions has been echoed across State climate and transportation policy – most notably through CARB’s entire suite of regulatory actions, but also by the California Public Utilities Commission, the California Energy Commission, the State Legislature, and the Governor’s Executive Order.<sup>7</sup>

Several studies, including ones commissioned by California’s state agencies, confirm that rapidly electrifying the bulk of our economy and supplying that electricity zero-emissions renewable energy is poised to be a centerpiece in the State’s battle against both climate change and air pollution.<sup>8</sup> Widespread transportation electrification paired with a non-emitting electricity

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<sup>5</sup> CARB, 2022 State Strategy for the State Implementation Plan (Sept. 22, 2022) at 22, [https://ww2.arb.ca.gov/sites/default/files/2022-08/2022\\_State\\_SIP\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf).

<sup>6</sup> *Id.* at 24.

<sup>7</sup> See, Earthjustice, Comments on November 9, 2022, Workshop (Dec. 21, 2022) at 2, <https://www.arb.ca.gov/lists/com-attach/155-lcfs-wkshp-nov22-ws-UTQCZQFyWX4LZQlj.pdf>.

<sup>8</sup> “Combined with non-emitting generation, electrification has previously been shown to significantly reduce greenhouse gas emissions. This analysis extends previous work to investigate the effects of electrification on air quality. The results show that there are significant improvements in air quality due to

generation greatly reduces greenhouse gas emissions while yielding enormous health and economic benefits. Observational data on the early phase of the ZEV transition in California show that even the early uptake of relatively small numbers of electric vehicles has already achieved reduced air pollution emissions, translating to decreased asthma-related emergency room visits.<sup>9</sup>

While direct electrification is the most efficient and cost-effective route to eliminating emissions from most on-road transportation uses, green hydrogen – produced from electrolysis powered by zero-emission, renewable energy – used in fuel cells can help further eliminate combustion from the toughest segments of the transportation sector, like heavy-duty marine and off-road equipment, and certain long-haul trucking fleets. Crucially, this technology must also scale to displace the use of fossil-fuel derived hydrogen produced from steam methane reformation (SMR). The State Implementation Plan underscores the need to reduce emissions from tailpipes and smokestacks—especially those like hydrogen SMR facilities, which are concentrated densely in communities of color near refineries and other major stationary sources of pollution.

Unfortunately, the LCFS currently sends the opposite signal, rewarding SMR of fossil methane *more* favorably than renewably-powered, electrolytic hydrogen, as long as producers pair a portion of their gas use with claimed biogas credits. Those credits in turn often come from factory farm facilities, which themselves contribute to local air and water pollution. The LCFS should disincentivize legacy, polluting hydrogen production that relies on methane offsets from polluting factory farms.

At the same time, the LCFS should de-prioritize support for fuels burned in on-road engines that worsen our air quality and have no long-term relevance given explicit State policy. Support for crop-based biofuels and CNG vehicles has long been controversial, but the thinking a decade ago may have been that these technologies offer incremental benefits relative to conventional petroleum-based fuel. While one can debate whether these fuels ever provided near-term GHG and air pollution benefits (our previous comments point to research that underscore why this is increasingly unclear<sup>10</sup>) it is unequivocal that they are no longer necessary

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electrification, which lead to substantial health benefits.” California Energy Commission, Air Quality Implications of an Energy Scenario for California Using High Levels of Electrification (June 2019), <https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2019-049.pdf>

<sup>9</sup> Erika Garcia et al., California’s Early Transition to Electric Vehicles: Observed Health and Air Quality Co-Benefits (Apr. 2023), <https://doi.org/10.1016/j.scitotenv.2023.161761>.

<sup>10</sup> On air pollution impacts of CNG vehicles, *See* Earthjustice, Comments on February 22, 2023 Workshop (Mar. 15, 2023) at 14, <https://www.arb.ca.gov/lists/com-attach/159-lcfs-wkshp-feb23-ws-Wz5VMIwvVXIeagRu.pdf>. On climate impacts of biofuels, *see, id.* at 18.

nor sufficient for achieving the State’s climate and air quality goals.<sup>11</sup> In fact, the evidence shows that they will undercut progress toward attainment by perpetuating reliance on combustion.<sup>12</sup>

Moreover, many of the potential ecological and humanitarian harms of these fuel pathways (e.g. loss of biodiversity from land use change, water and soil degradation from increased fertilizer use, increased global hunger from rising food prices, collapse of the Amazon rainforest system) are irreversible and far outweigh the potential upsides of a marginal reduction in greenhouse gases. Given these grave risks, Earthjustice strongly urges CARB to take a more precautionary approach when considering these pathways, especially given that less harmful alternatives for decarbonizing the transportation sector exist. We support the asks outlined in the EJ scenario presented by Stanford researchers as a sensible way to limit the LCFS’s reliance on fuel pathways with high social and ecological risk profiles.

2. How can the State and LCFS better support long-term ZEV ownership?

Earthjustice believes a more equitable, less regressive (and therefore “better”) way for the LCFS to support ZEV ownership is to adopt the recommendations outlined in the Stanford presentation of the EJ scenario. By limiting credit-generating opportunities for biofuels and biogas that risk increasing social and environmental justice harms and fail to align with clean air obligations, the program not only becomes more equitable, but also helps mitigate the over-supply of credits in the credit bank.

Reducing the credit glut will help lift the LCFS credit price and increase the level of support for credit-generation opportunities that support ZEV ownership. This approach reduces the need for the program to quickly ramp up stringency, which would have the effect of increasing pass-through costs to remaining conventional fuel consumers and disproportionately burden consumers least able to transition to ZEVs. Whether or not CARB decides to increase the CI target for 2030 (Earthjustice believes durable, high-integrity GHG reductions should be prioritized over nominally larger reductions) reducing credit-generation from un-aligned pathways would “free up” (by increasing credit values) greater support for new credit-generating opportunities that advance a rapid and equitable ZEV transition. We elaborate on these potential opportunities in response to questions 3 and 5.

3. What types of fueling and charging infrastructure do you think are needed in your community?

Earthjustice represents diverse clients and partners across the country. In California, we represent communities on the frontlines of some of the State’s most severe air and water pollution burdens – those living near oil and gas extraction, oil refineries, ports and freight hubs, industrial agriculture operations, and other industrial facilities. Our clients live in communities in

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<sup>11</sup> See, e.g. Michael Grunwald, “The Climate Solution That’s Horrible for the Climate” (June 6, 2023), <https://www.nytimes.com/2023/06/06/opinion/climate-change-biofuels-corn-ethanol.html>.

<sup>12</sup> See, e.g. Id., and Rachel Muncrief, A Comparison of Nitrogen Oxide Emissions from Heavy-Duty Diesel, Natural Gas, and Electric Vehicles (Sept. 2021) at p. 5, <https://theicct.org/sites/default/files/publications/low-nox-hdvs-compared-sept21.pdf>.

the most polluted air basins in the nation fighting to meet health-based air standards. Across the State, burning fuels in the transportation sector is responsible for 80% of all air pollution.<sup>13</sup>

Each of our partners and the communities they work in have distinct needs for alleviating their pollution burdens that the LCFS can harm or help. In our work to uplift their voices in local, regional, and state-wide advocacy efforts, some key infrastructure needs have emerged across the board as pressing priorities for our partners. These include:

- Medium- and heavy-duty charging infrastructure for public transit;
- Charging infrastructure to support electric school buses, particularly in disadvantaged or underserved school districts, and vehicle-to-grid integration (VGI)-enabled electric school buses that can help serve as zero-emissions back-up power for community resilience;
- Depot charging to support drayage, delivery truck, and cargo-handling equipment electrification at ports and key freight hubs, starting with those cited in freight-impacted disadvantaged communities;
- Medium- and heavy-duty fast charging stations along key freight corridors to enable electrification of additional truck routes and reduce pollution at truck stops.
- Publicly accessible fast-charging in low-income communities, and Level 2 or faster charging options in or dedicated toward residents of multi-family housing; and,
- Charging or refueling infrastructure for zero-emissions off-road vehicles, including locomotives, commercial harbor craft, shore-power for ocean-going vessels, and agricultural equipment, to accelerate the shift away from harmful, diesel equipment.

We applaud CARB staff for considering the adoption of new fueling infrastructure credits for medium- and heavy-duty charging stations. To ensure that these infrastructure credits help meet critical needs, CARB should not cap the number of credits available for charging infrastructure incentives and should allow participation at shared private sites like warehouses.

4. What are some barriers you see that are preventing ZEV ownership or ZEV fueling/charging?

As ZEV costs rapidly decline and vehicle availability proliferates across light, medium, and heavy-duty market segments, the key remaining barrier to a faster, more equitable ZEV transition is the lack of adequate charging infrastructure. The high upfront costs of charging infrastructure and the “chicken-and-egg” challenge of securing infrastructure financing without committed utilization has stymied the rapid buildout of the ZEV charging network, especially for medium- and heavy-duty vehicles. Similarly, the high upfront costs of charging installation has

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<sup>13</sup> CARB, “California Moves to Accelerate to 100% New Zero-Emission Vehicle Sales by 2035” (Accessed June 13, 2023), <https://ww2.arb.ca.gov/news/california-moves-accelerate-100-new-zero-emission-vehicle-sales-2035/printable/print#:~:text=Background,of%20air%20pollutants%20in%20California.>

posed a challenge for cash-strapped public transit agencies and school districts, even if conversion to ZEVs would be a sound investment over the lifetime of their fleets' operation. The LCFS's capacity credits can provide a powerful tool for electric vehicle supply equipment providers to secure financing and overcome this barrier. Our comments below elaborate on the opportunities to further catalyze the potential of capacity credits and credit-generation more generally to support ZEV and charging infrastructure deployment.

5. Given the transition to ZEVs will take time, what are some strategies the LCFS should to pursue to promote near-term GHG reductions from vehicles and vehicle fuel use?

Earthjustice believes that the LCFS should focus on strategies that *reduce* the time the transition to ZEVs will take. We believe the most effective and durable strategies to achieve near-term GHG reductions is to ensure the program is working in tandem with CARB's entire suite of ZEV policies and the State's clear signal about the direction of the transportation system at every level of government.

CARB has been insistent that the ZEV mandates across the transportation system are only one piece of the policy puzzle to overhauling the transportation system and emphasized that more will be needed to ensure the shift is both rapid and equitable. Because California is not yet on track to meet air quality attainment deadlines, CARB should ensure it is exhausting all possible options for accelerating the phase-out of combustion. And while regulations such as the Innovative Clean Transit rule, Advanced Clean Cars II, and Advanced Clean Fleets set an end date for the sale of new combustion vehicles, much work remains to ensure the transition concentrates health and economic benefits in the communities most burdened by failures of the legacy transportation system.

**A. Allow full credit generation for all fixed guideway systems.**

Allowing full credit generation for all fixed guideway systems is a straightforward update to the LCFS regulation to better align the program with California's zero-emission, air quality, vehicle-miles-traveled (VMT), and equity goals. The LCFS regulation currently disfavors transit agencies because fixed guideway systems that were built before 2011 generate an artificially low number of credits, which does not reflect their energy economy ratio.<sup>14</sup> This policy has significant consequences for transit agencies with long-established fixed guideway systems. If older fixed guideway transit system were treated the same as newer systems, they would generate 3.1 to 4.6 times as many LCFS credits, depending on the type of vehicles that use the system.<sup>15</sup>

California's transit agencies are facing critical budget shortfalls, making LCFS revenue a potential lifeline for cash-strapped agencies. Transit agencies sought \$5 billion to avoid a fiscal cliff—the budgetary shortfall that would occur when COVID relief funds end and declining

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<sup>14</sup> 17 CCR § 95486.1(a)(4).

<sup>15</sup> *Id.* at Table 5 (Heavy Rail has an EER of 4.6; Light Rail has an EER of 3.3; and Trolley Buses, Cable Cars, and Street Cars have an EER of 3.1).



ridership does not allow the agencies to make up for those funds with fare revenue.<sup>16</sup> A legislative proposal would begin to fill that gap with \$1.1 billion in cap-and-trade funds, which would avert crisis temporarily and still require transit agencies to find new revenue sources to maintain operations.<sup>17</sup>

Without additional revenue, transit agencies may be forced to severely reduce service or delay procurements of zero-emissions vehicles. Service cuts could drive transit riders to shift to driving personal vehicles—spiking VMT, increasing emissions of climate and health-harming pollution, and impacting the carbon intensity of California’s transportation fuels. CARB should prioritize support for public transit agencies because their provision of reliable and affordable service is necessary to reach the VMT goals in CARB’s Scoping Plan. Moreover, there is a moral imperative to avoid transit service cuts because they would disproportionately burden the vulnerable populations that rely on public transit for their transportation needs. Without sufficient revenue for transit agencies to maintain service levels, it will also be difficult for these agencies to invest in ZEVs and their associated infrastructure to comply with the Innovative Clean Transit rule. CARB can help transit agencies avoid these dire outcomes and successfully achieve California’s ZEV goals by allowing agencies to fully generate credits for all fixed guideway systems.

#### **B. Develop adjustment factors based on pathways’ air pollution.**

To improve the LCFS’s alignment with CARB’s air quality mandate, Staff should consider incorporating a multiplier that adjusts credit generation potential based on a pathway’s lifecycle air pollution impacts. As Bloom Energy points out, “calculations of the economic and health benefits associated with reducing NOx and PM emissions have been found to exceed the economic and health benefits of reducing GHG emissions on a per ton basis.”<sup>18</sup> Earthjustice agrees that the State’s urgent air quality crisis merits at least equal consideration with greenhouse gas emissions in the State’s clean transportation funding criteria. Moreover, the availability of proven solutions for eliminating *both* climate and air pollution means that air quality can be incorporated into the program without trading off greenhouse gas reductions. We therefore support Bloom’s proposal that reductions of criteria air pollutants warrant consideration as part of the calculation methodology.

One option would be for CARB to develop an “avoided air pollution ratio,” roughly analogous to the energy-economy ratio (EER). By comparing the criteria air pollution emissions for the conventional fueled pathway with the proposed alternative fuel pathway, CARB can produce a factor that roughly reflects the avoided pollution benefits of a pathway, and multiply pathways by this factor. Under this regime, the LCFS would increase the credit-generating

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<sup>16</sup> Dan Brekke, KQED, “\$1.1 Billion State Bailout Proposed for Transit Agencies Facing ‘Fiscal Cliff’” (June 12, 2023), <https://www.kqed.org/news/11952821/1-1-billion-state-bailout-proposed-for-transit-agencies-facing-fiscal-cliff>.

<sup>17</sup> *Id.*

<sup>18</sup> Bloom Energy, Comments Regarding Potential Changes to the LCFS, (Mar. 15, 2023) at 3, <https://www.arb.ca.gov/lists/com-attach/147-lcfs-wkshp-feb23-ws-AGMBaFwwBTsLaAVr.pdf>.



potential of pathways that avoid combustion, refining, and reformation throughout their lifecycle, and increase compliance with pathways that are zero-emission from end-to-end.

**C. Create credit multipliers for ZEV projects that advance key State and environmental justice priorities.**

CARB should consider adding credit multipliers, project-based crediting, or enhanced capacity-credits for projects that support near-term progress to achieve crucial State and environmental justice priorities. For example, under CARB’s HVIP program, medium- and heavy-duty ZEVs can receive enhanced voucher amounts for vehicles or vehicle placements that fulfill key State or environmental justice priorities. For example, refuse trucks and Class 8 drayage trucks receive 25% voucher enhancements, disadvantaged community placements and public transit agencies receive 15% voucher enhancements, and school buses for public school districts receive a 65% voucher enhancement. CARB Staff could design credit multipliers under the LCFS that mirror these enhancements, or consider increasing capacity credits for medium- and heavy-duty charging infrastructure that serves these segments of the transportation sector. Finally, CARB could consider new categories of project-based credits that prioritize environmental justice outcomes. Currently, project-based credits are only available to projects that reduce emissions in the petroleum supply chain, e.g. through direct air capture or carbon capture and sequestration. Other GHG-reducing projects that CARB should consider crediting could include VGI-enabled electric trucks or buses that serve as back up power for community resilience centers or reduce dependence on diesel back-up generators.

**D. Transition 100% of Holdback Credits to Support Disadvantaged Communities and Target Low-Income “Gasoline Superusers.”**

We appreciate that currently, CARB dedicates at least 50% of revenues from base credits generated by utilities to supporting transportation electrification in disadvantaged and low-income communities. As transportation electrification among more affluent drivers accelerates, and CARB seeks to ratchet up CI targets, the time is ripe for CARB to shift towards 100% of these revenues going toward bridging the transportation-electrification “access gap” for low-income and disadvantaged communities. At the cap of \$200 per ton, LCFS credits passthrough roughly 20 cents a gallon. If the CI target is strengthened to 30% in 2030, the passthrough costs to gasoline could become 60 cents per gallon.<sup>19</sup> While zero-emissions vehicles offer significant savings in the form of fueling and maintenance over the life of the vehicle, the upfront costs of electrifying is likely to remain out of reach for low-income drivers. Because some of these drivers will remain tethered to rising or volatile gas prices, it is reasonable to direct all resulting holdback funds to speed their transition to the savings that more affluent drivers can likely self-finance.

Further, we encourage CARB to redirect the Clean Fuel Reward program allocation toward targeted efforts to transition low-income “gasoline superusers” to ZEVs. In light of the significant new tax credits made available through the Inflation Reduction Act to purchases of

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<sup>19</sup> Jim Duffy, Comments on May 23, 2023 LCFS Workshop (May 28, 2023) [https://ww2.arb.ca.gov/system/files/webform/public\\_comments/3121/Duffy\\_LCFS\\_5-28-2023.pdf](https://ww2.arb.ca.gov/system/files/webform/public_comments/3121/Duffy_LCFS_5-28-2023.pdf).

new and used electric vehicles, the need to allocate funds to the Clean Fuel Reward program is reduced. Instead, we support the suggestion by commenter and former CARB Staff member Jim Duffy to target funds toward ZEV ownership for low-income superusers. This change will amplify the LCFS revenue's climate, health, and economic justice impact – a recent report highlights how prioritizing electrification of lower-income superusers can reduce fossil fuel consumption faster while delivering greater financial benefit to those most in need.<sup>20</sup> The same report uses California vehicle records to establish geographic, demographic and vehicle details down to the zip code level for gasoline-superusers, which can serve as a valuable starting point in identifying key participants *and* key geographies to target public fast charging infrastructure.<sup>21</sup>

6. What low carbon transportation incentives do you think are most needed (e.g., more rebates for new/used vehicle, easier access to existing rebates, charging/fuel subsidies, free/reduced transit, lower overall utility bills, others)?

See responses to questions 3 and 5.

7. Other ideas/feedback on the program?

In closing, we appreciate the work of CARB Staff and the opportunity to comment on the LCFS community meetings. We are especially appreciative that CARB Staff provided a thoughtful space for discussion of EJ-led alternatives to the LCFS. We hope that Staff will continue to work with community stakeholders to explore how the program can achieve the most environmentally just outcomes, and provide the Board with ample opportunity to consider how these recommendations can be incorporated into the program.

We look forward to working with CARB to ensure that the LCFS program supports California's rapid transition to a just, zero-emissions future.

Sincerely,

Sasan Saadat, Senior Research and Policy Analyst  
Sara Gersen, Senior Attorney  
Nina Robertson, Senior Attorney  
Earthjustice

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<sup>20</sup> Janelle London et al., Gasoline Superusers 2.0 – Supporting Gasoline Burdened Families' Transition to EVs to Maximize Climate and Equity Benefits (Mar. 2023), <https://coltura.org/wp-content/uploads/2023/03/Report-COLTURA-2.0.pdf>.

<sup>21</sup> *Id.*