
California Air Resources Board
1001 I Street
Sacramento, CA 95814

August 15, 2022

**Re: The Case for Adopting a Stronger Advanced Clean Fleets Rule**

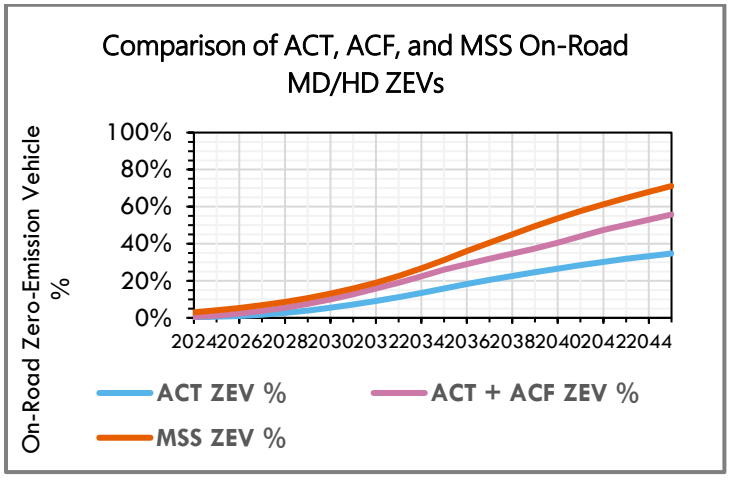
Dear Chair Randolph and Members of the Board:

As you know, diesel trucks are one of the fastest growing sources of greenhouse gas emissions,[1] the largest source of California's NOx pollution,[2] and the largest source of air pollution disparity in the United States.[3] Without immediate action, the freight industry's rapid growth means pollution burdens will worsen, especially for low-income, Black, and Brown Californians.

[1] OECD, International Transport Forum 2021 Outlook, (May 2021) https://www.oecd-ilibrary.org/sites/e8125f08-en/index.html?itemId=/content/component/e8125f08-en.
[2] CARB, Mobile Source Strategy Presentation (Oct. 28, 2021) at slide 9 https://ww2.arb.ca.gov/sites/default/files/barcu/board/books/2021/102821/21-11-2pres.pdf.
[3] Mary Demetillo et al., Space-Based Observational Constraints on NO2 Air Pollution Inequality from Diesel Traffic in Major US Cities (Aug. 25, 2021) https://doi.org/10.1029/2021GL094333.

The Advanced Clean Fleets ("ACF") rule is vital to addressing California's climate and environmental justice crises. There are no additional regulatory mechanisms identified that can so directly accelerate the transition away from polluting medium and heavy-duty vehicles and their emissions. **Thus, strengthening the ACF rule is one of CARB's most critical opportunities to put us on a path to meet the Governor's Executive Order, the targets in the Mobile Source Strategy, and our health and climate needs.**

The current ACF proposal falls far short of these objectives. **In 2045, when the Governor's Executive Order calls for a 100% zero-emission (ZE) fleet where feasible, the current proposal leaves nearly *50%* of the truck population combustion-powered.** Accepting this outcome imperils our clean air and climate commitments.




Our comments explain the necessary revisions to the ACF proposal to better align with our targets, and the benefits and feasibility of doing so. Specifically, we urge the Board to adopt Alternative 2, which was included in CARB's Standardized Regulatory Impact Assessment (SRIA). Adopting Alternative 2 would mean requiring 100% ZE sales by 2036 and lowering the High-Priority Fleets threshold to fleets of 10 trucks or more. As Staff's analysis confirms, adopting Alternative 2 is feasible and will lead to critical emission reductions. In addition, we urge the Board to accelerate the transition for Class 7-8 tractors, because these are some of the most polluting vehicles on California's roads.

1. **CARB Should Adopt Alternative 2 of the ACF Rule.**

We appreciate Staff's willingness to incorporate two of our coalition's three key asks into Alternative 2 of the SRIA. These are:

- Moving up the 100% ZEV sales requirement to 2036; and
- Lowering the High Priority Fleet threshold to fleets of 10 or more trucks.

Adopting these changes in the final ACF rule will accelerate the transition to ZE trucks and help deliver sorely needed emission reductions that will bring us closer to fulfilling our climate and air quality commitments.

We urge the Board to direct Staff to incorporate Alternative 2 into the ACF rule. **California, and the communities on the frontlines of the freight system, cannot afford to forfeit the reductions that come with adopting Alternative 2**. The state is far from attainment in the most polluted air basins in the nation[4] and from meeting the 2030 climate targets. Meanwhile, emissions from freight are rising[5] and new warehouses and logistics centers sprout almost weekly, consuming the land and air around low-income communities of color.[6] Even more dramatic reductions are needed to fulfill CARB's obligations, but anything less than Alternative 2 imperils the chances of doing so.

**a. Alternative 2 delivers substantially greater emission reduction benefits at little additional cost.**

Staff's assessment demonstrates that advancing the 100% sales requirement to 2036 and lowering the fleet threshold to 10 or more trucks would greatly speed the delivery of ZE trucks. These components will add earlier and larger reductions in nitrogen oxide (NOx), fine particulates ($PM_{2.5}$), and greenhouse gases (GHGs), and avoid thousands of additional deaths and hospitalizations. The improvements to climate and public health hardly reduce the economic benefits from CARB's proposal (only 3%), and still yield dramatic economic savings (even excluding environmental externalities) because of the favorable total cost of ownership for electric trucks. Benefits from Alternative 2 include:

- Over 130,000 more ZE trucks in 2050;
- 43% greater reduction tons of NOx;
- 40% greater reduction in MMT of CO2
- $25.9 billion in additional health benefits
- Over 2,500 avoided premature deaths

Our coalition would be hard-pressed to conceive of another measure in CARB's forthcoming rulemaking portfolio that would provide such an outsized benefit for such a low marginal, additional cost.

**b. CARB should require 100% ZE truck sales by 2036.**

Alternative 2 includes one of the most important corrections: moving the 100% ZEV sales requirement from 2040 to 2036. This change will make the timeline align as closely as possible with the 2035 date called for in the Mobile Source Strategy (MSS), the Governor's Executive Order, CARB's own Board Resolution, and over 10,000 Californians who have urged CARB to deliver clean air now. Shifting the timeline from 2040 is also CARB's best tool to bridge the

[4] American Lung Association, "State of the Air – Report Card: California" (Accessed July 24, 2022) https://www.lung.org/research/sota/city-rankings/states/california.

[5] Chris Busch et al., California Energy Policy Simulator Update – Earlier Action Delivers Social and Economic Benefits (June 16, 2022) https://energyinnovation.org/wp-content/uploads/2022/06/California-Energy-Policy-Simulator-Insights.pdf.

[6] Kaveh Waddell and Maanvi Singh, "Warehouses in their Backyards: When Amazon Expands, These Communities Pay the Price" (Dec. 9, 2021) https://www.theguardian.com/us-news/2021/dec/09/when-amazon-expands-these-communities-pay-the-price.

shortfall of ZE trucks left unregulated by the current proposal, given the large share of trucks that fall outside any identifiable fleet. Even with 100 percent ZEV sales by 2036, the Governor's goal of 100 percent ZEV by 2045 would not be met—in 2045 more than 750,000 medium- and heavy-duty vehicles driving on California roads will not be ZEVs, roughly a third of all M/HDVs.

### i. An earlier sales mandate is one of CARB's greatest levers for market transformation.

We strongly agree with CARB staff that 100% sales targets are necessary to send clear signals to spur investments in the broader transition to electrification. A study of California's transportation policies points to the ZEV sales requirement as sending a strong "signal, effectively channeling innovation activities towards ZEV development and increasing the availability of ZEVs for sale, where supply constraints have proven to be a major barrier to widespread uptake."[7] Clear regulatory requirements prime the investment pump and can bring ZE truck production to scale, which in turn will advance technologies and drive down prices in a virtuous feedback loop.[8] If CARB's intention—as indicated by the MSS—is to achieve 100% zero emission truck sales by 2035, then the best way to secure that outcome is to directly mandate it with as close a date as possible, rather than "signal" with an end to combustion sales in 2040. To avoid any overlap with the ACT rule, the ACF's sales mandate could be set in 2036. Additionally, if the 100 percent ZEV sales requirement begins in 2040, the early accumulation of ZEV credits under the ACT, as fleets meet their in-use requirements, could suppress ZEV sales between 2036 and 2039 causing over 170,000 fewer M/HD ZEV sales compared to when the 100 percent ZEV sales requirement begins in 2036. There are no reasons for delaying the sales mandate five years past the target identified in the MSS. Below are responses to common concerns and questions from Staff.

### ii. A "suite of measures" cannot offset a less-protective ACF rule.

First, Staff claim the gap between the MSS and the ACF can be filled through a "suite" of measures yet offer no explanation for how less direct policies, such as incentives, could make up for the shortfall left by the current proposal. Moreover, the MSS already relies excessively on indirect measures to deliver unrealistic levels of ZE truck deployments. For example, to match the MSS, 8,500 diesel trucks must voluntarily turnover to ZE trucks annually beginning last year. However, so far only about 800 ZE trucks are on California's roads. It is untenable to imagine that an even larger number of trucks will somehow voluntarily turnover to make up for an even larger gap is the ACF sales requirement is delayed to 2040.

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[7] John Axsen et al., Crafting strong, integrated policy mixes for deep CO2 mitigation in road transport Nature Climate Change (Aug 24, 2020) https://doi.org/10.1038/s41558-020-0877-y. See also, J.B. Greenblatt, Modeling California policy impacts on greenhouse gas emissions (Feb. 2015) https://escholarship.org/uc/item/9n62b5xv; and David Greene et al., Public policy and the transition to electric drive vehicles in the U.S.: the role of the zero emission vehicles mandate (Dec. 2014) https://doi.org/10.1016/J.ESR.2014.10.005.

[8] "[A ZEV mandate] sends the strongest transformational signal of all the policies examined, receiving a score of 5/5. As a regulatory policy, it is likely to be reasonably durable and it also provides clear directionality with respect to investment in PEVs" Noel Melton et al., Which plug-in electric vehicle policies are best? A multi-criteria evaluation framework applied to Canada (Dec. 2019) https://doi.org/10.1016/j.erss.2019.101411.

### iii. Electrification of long-haul trucking is feasible well before 2036.

Staff also claim there is uncertainty about the feasibility of zero emission long-haul trucks. Notwithstanding CARB's duty and authority to set technology-forcing mandates that move the market in line with breathable air and a safe climate, we believe the bevy of reports highlighting the feasibility of zero-emission long-haul trucking today means it is perfectly reasonable to assume all long-haul sales will be zero-emissions by more than a decade from now. In Attachment A, we highlight the progress to date on the developments in national charging networks that should give CARB full confidence it can meet the Governor's Executive Order.

### iv. Stronger sales targets will speed the ZE transition for communities in both California and other Section 177 States.

Staff have expressed concerns that Section 177 states may be unwilling to adopt a more ambitious sales requirement. First and foremost, CARB's clear obligation is to Californians that live with the most polluted air anywhere in the nation. The ACF rule is intended to redress the pollution burdens of California's freight communities (primarily low-income communities of color) and the state's air pollution crisis—worsened by our expanding freight operations. California must forge ahead with its commitment to its own communities, and prove by example that ambitious, life-saving regulations are compatible with a thriving economy.

Aside, an accelerated timeline is likely to be well received by the 16 additional states that joined a multi-state Memorandum of Understanding (MOU) to accelerate ZE truck and bus adoptions, some of whom are in non-attainment for the 8-hour ozone standard.[9] All but two MOU states have statutory economy-wide climate targets as or more aggressive than California's[10] and the recently released MOU Action Plan urges states to establish more aggressive electrification timelines given positive market developments.[11] These states need sufficiently aggressive standards to meet their objectives and are counting on California to regulate as strongly as possible.

Ultimately, we believe moving up the sales mandate to better align with the MSS is the most necessary and impactful change to the ACF regulation, and we urge CARB staff to incorporate it into the final rule.

## c. Lower the High Priority Fleet threshold to 10 or more trucks.

The ACF rule's purchase requirements should capture more trucks. We strongly support the purchase requirements in the Drayage and Public Fleets portions of the rule and believe that they are appropriately ambitious while providing ample exemptions. However, the High Priority Fleet section covers too few trucks. By lowering the fleet threshold, more work trucks, delivery vans, day cabs, and drayage trucks that do not visit ports or railyards, will transition to zero emissions.

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[9] U.S. Environmental Protection Agency, 8-hour Ozone (2015) Nonattainment Areas by State/County/Area (June 30, 2022) https://www3.epa.gov/airquality/greenbook/jncty.html.

[10] *See, e.g.* UC Berkeley, States' Climate Action Map (Accessed July 23, 2022) https://ccci.berkeley.edu/states-climate-action-map.

[11] https://www.nescaum.org/documents/multi-state-medium-and-heavy-duty-zev-action-plan.pdf

At the same time, capturing more fleets under ACF rule will help reduce driver exploitation in an industry where it continues to be rampant.

**i. A lower fleet threshold will reduce worker exploitation without burdening legitimate owner-operators.**

As members of our coalition from the labor community have detailed to CARB, legitimately, properly classified independent contractors cannot own and operate more than a handful of trucks (*i.e.*, 4-5) and therefore would not be affected by lowering the fleet threshold to 10 trucks. Distressingly, a large swath of companies with fleets of 10 or more trucks continue to misclassify their drivers as independent contractors while they retain functional control of the business. Unless CARB lowers the fleet cap size to 10, many of these truck fleets will be exempted from the regulation, leading both to a slower timeline for electrification, and fewer drivers benefiting from the accountability of the controlling company language that CARB has correctly incorporated into the ACF.

Thus, lowering the fleet size threshold will not burden owner-operators, but it will deter more companies from exploiting their truck drivers in fleets of 10-50 trucks through misclassification. Capturing more fleets under the High Priority Fleets section will both increase badly-needed emissions reductions and improve labor conditions by requiring more companies to transition to ZE and appropriately absorb their drivers as employees. The labor members of our coalition expand on the importance of this issue in Attachment B.

**ii. Administrative implementation of a lower fleet threshold is manageable and will deliver outsized benefits.**

We believe that implementation of the ACF with a lowered fleet size cap can be straightforward. The same regulatory structure and compliance regime would be used for these added fleets. With significant lead time (between 2 and 7 years before the first fleet milestones come into force) CARB has ample opportunity to conduct outreach to additional fleets and drivers without needing to create any fundamentally new workshop materials and regulatory language. Insofar as outreach to fleets of 10-50 trucks requires additional staffing, CARB could consider a fee to fund regulatory implementation similar to the structure used in the Transportation Refrigeration Unit rule.

**2. CARB Should Accelerate Fleet Milestones for Highly-Polluting Class 7-8 Tractors.**

In addition, we ask the Board to direct Staff to accelerate the start date for Group 3 vehicles—primarily Class 8 Sleeper Cabs—in the High-Priority Fleets section of the rule by three years, so the regulation requires these trucks to begin transitioning in 2027 instead of 2030.

If, in addition to the improvements outlined in Alternative 2, CARB accelerates the delayed phase-in milestones for Group 3 vehicles (e.g., Class 7 and 8 tractors) under the High Priority Fleet regulation, we believe the ACF rule can put California in striking distance of its climate and air pollution goals in a manner that accelerates progress for the most polluted communities.

These vehicles have some of the largest pollution impacts and their emissions are concentrated in environmental justice communities already hit by numerous sources of pollution. Indeed, Class 7 and 8 Day-Cabs and Sleeper Cabs travel extensively through freight corridors, which are very often located in low-income communities of color, poisoning the air in people's homes, backyards, and schools. While the Drayage section of this rule will address operations for trucks that travel into a port or railyard on at least one end of their trip, container trucks that do *not* travel into one of these facilities will fall under the High-Priority Fleets section of the rule, or not be regulated by ACF at all. Our concern is that Class 8 Sleeper Cabs that do not fall under drayage operations (as defined in this regulation), will be left to pollute in environmental justice communities on an ongoing basis.

Currently, Class 8 Sleeper Cabs are included under Group 3 of the High-Priority Fleets section and are not set to *begin* to transition to ZE until 2030. Group 3 is set to complete its ZE transition by "2042 and beyond," as shown in the table below. Drayage trucks that do not visit a port or railyard will only be covered by this regulation, which clearly fails to transition them to zero emission by 2035—as required by both the Governor's Executive Order and the Board itself.

Table A: ZEV Fleet Milestones by Milestone Group and Year

| **Percentage of vehicles that must be ZEVs** | **10%** | **25%** | **50%** | **75%** | **100%** |
|---|---|---|---|---|---|
| Milestone Group 1: Box trucks, vans, buses with two axles, yard tractors, light-duty package delivery vehicles | 2025 | 2028 | 2031 | 2033 | 2035 and beyond |
| Milestone Group 2: Work trucks, day cab tractors, buses with three axles | 2027 | 2030 | 2033 | 2036 | 2039 and beyond |
| Milestone Group 3: Sleeper cab tractors and specialty vehicles | 2030 | 2033 | 2036 | 2039 | 2042 and beyond |

We urge CARB to shift the "Group 3" milestones up by 3 years, so that they align with Group 2. This will help address one of our coalition's—and as we understand it, one of many Board Members'—highest priorities, which is to clean up the concentrated pollution from the freight industry in impacted communities as quickly as possible.

At the same time, the current pace of innovation—and the five years' time between today and 2027—provides a high likelihood that ZE Sleeper Cabs will be available beginning in 2027 to meet our suggested initial 10% milestone category date. Continuous advancements in battery capacity and range combined with the advent of Megawatt Charging Standard (MCS) ultra-fast charging, suggest that near-term feasibility concerns about long distance ZE Sleeper Cabs are exaggerated. Further, many Sleeper Cabs are used in regional haul operations, and so do not require long range batteries.

**i. Announced, Committed, and Implemented Infrastructure Funding Can Support Faster Electrification for Long-haul Tractors.**

In our Attachment A, we explain the exciting pace of action on medium- and heavy-duty charging infrastructure at both the State and National level. Here we highlight a non-exhaustive selection of recent initiatives underway to support a national network of MHD charging infrastructure:

- Daimler, Nextera Energy and Blackrock have signed an MOU making an initial commitment of $650 million to build a publicly available national charging network for MHD vehicles beginning in 2023. [12]
- Volvo trucks will be building a MHD charging network project in California funded in part with a $2 million CEC grant[13]
- Penske has ordered 750 GM Brightdrop electric delivery vans and is beginning to install chargers in several states to support them. They are testing several other electric MHD vehicles for consideration to add to their fleets and installing the necessary EVSE. [14]
- The National Association of Truck Stop Operators (NATSO) signed an MOU with ChargePoint to secure $1 billion in funding to help install EVSE at up to 4,000 trucks stops nationally by 2030. [15]
- Travel Center and Truck Stop companies that are planning or installing EVSE include Travel Centers of America (TA), [16] Loves Travel Stops,[17] and Pilot Flying J Travel centers, where GM is partnering with EVgo to install up to 2,000 chargers at up to 500 DC fast-charging stations across the country.

We agree with many Board Members that this regulation must address the heavy-duty truck pollution that impacts communities living in 'diesel death zones' as urgently as possible. Without this small fix, these Class 8 Sleeper Cabs will continue poisoning impacted communities for much longer than is necessary. We ask the Board to shift the milestone start dates for Group 3 up by three years to match Group 2 in order to fix this critical gap in the rule.

### 3. A Stronger ACF Rule is Imminently Feasible Given the Pace of Progress.

We have already provided CARB Staff and the Board with an annotated bibliography of reports, studies, announcements, and demonstration reviews that we believe clearly demonstrate the feasibility of a much more rapid transition to zero emission trucks. Because of the pace of progress in this sector, even more favorable research has now been published as well as new announcements for investment in battery and vehicle manufacturing, charging infrastructure, and large purchase orders. An updated list of resources indicating the technical feasibility of our asks is appended in Attachment C.

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[12] Daimler Truck North America, NextEra Energy Resources and BlackRock Renewable Power Announce Plans To Accelerate Public Charging Infrastructure For Commercial Vehicles Across The U.S. | Daimler

[13] Volvo Trucks to construct charging network throughout California (electrek.co)

[14] Penske Electric Trucks and Vehicles - Penske Truck Leasing

[15] https://www.natsoaltfuels.com/EVCharging.php

[16] https://www.ta-petro.com/newsroom/travelcenters-of-america-enhances-commitment--to-sustainability-and-alternative-energy

[17] https://www.loves.com/en/news/2020/august/electrify-america-announces-collaboration-with-loves-travel-stops

We note here, however, that no one disputes this transition is already rapidly underway. Manufacturers have acknowledged that the transition to ZE trucks is underway: press release pages for major truck manufacturers are dominated by news and stories about their electric trucks.[18] Industry experts testing ZEV trucks in real-world demonstrations concluded that all "four market segments [that they tested]– vans and step vans, medium-duty box trucks, terminal tractors, and heavy-duty regional haul tractors – are ready to go electric," and specifically, that **"half of heavy-duty regional haul tractors are electrifiable now."**[19] And as CARB can attest, there is widespread agreement, confirmed across multiple independent analyses, that these trucks already represent lower total costs of ownership in a large share of use cases.[20] This undeniable cost advantage is already enabling fleets to place large orders of ZE trucks (800 Class 8 semi battery electric tractors by 2026, in the recent case of Sysco) well before the ACF rule will even come into effect.[21]

In the SRIA, CARB Staff claim that the stronger Alternative 2 raises "questions about feasibility" for fleets that are smaller and have less time to gain experience with the technology. They further claim that sufficient time is needed to build out "maintenance, supply, and infrastructure networks." We understand these concerns, but do not believe they justify a more hesitant approach to regulatory ambition. Leading OEMs like Daimler and Volvo and major truck leasing firms like Penske, for example are aggressively building out maintenance capabilities with trained staff in their extensive national networks of facilities. In fact, we believe the opposite is true: stronger regulations will speed the maturation of a market that is already growing.

Within the course of CARB's rulemaking for the Advanced Clean Trucks rule, new manufacturer announcements enabled CARB staff to revise upward their ZEV targets for manufacturers.[22] The same should be done here. In their updated analysis on increasing sales requirements, Staff noted that "the large number of ZEVs launched before the regulation begins [and] the more established ZEV marketplace…support higher ZEV sales requirements in the earlier years and is consistent with Board direction and many public comments seeking to increase the number of ZEVs deployed."[23] A larger number of fleets participating in a stable transition to ZE trucks will spur economies of scale from manufacturers and catalyze increased

[18] See, e.g., Volvo, "News and Stories" https://www.volvotrucks.com/en-en/news-stories.html; Daimler, "Global Media Site" https://media.daimlertruck.com/marsMediaSite/en/instance/ko/Start.xhtml?oid=4836258; Traton, Press Releases" https://traton.com/en/newsroom/press_releases.html.

[19] NACFE, Electric Trucks Have Arrived, Documenting a Real-World Electric Trucking Demonstration (Jan 2022) https://nacfe.org/heavy-duty-regional-haul-tractors/.

[20] CARB, Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document (Sept. 2021) https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf.

[21] Daimler Truck North America, "Sysco Corporation Intends to Purchase up to 800 Battery-Electric Freightliner eCascadia" (May 25, 2022) https://media.daimlertruck.com/marsMediaSite/en/instance/ko/Daimler-Truck-North-America-Sysco-Corporation-intends-to-purchase-up-to-800-battery-electric-Freightliner-eCascadia.xhtml?oid=51944900.

[22] CARB, Updated Analysis Regarding Increased Manufacturer Zero-Emission Vehicles Sales Requirements – Attachment B (2019) https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/30dayattb.pdf.

[23] CARB, Updated Analysis Regarding Increased Manufacturer Zero-Emission Vehicles Sales Requirements – Attachment B (2019) https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/30dayattb.pdf.

private investment in charging infrastructure and fleet management. This will build on the already-substantial public investment being made by the State and Federal governments for truck electrification. Calling on additional fleets to make this investment in their own long-term financial interests, with ample public support, should not be controversial and will deliver outsized air and climate benefits that it will deliver.

## 4. Conclusion

Even with the changes we are calling for, the ACF will not guarantee the level of ZE truck deployments necessary to achieve our air and climate targets. However, we believe that our stronger alternative will not only bridge the gap to our targets but build the signals and momentum necessary to reach earlier tipping points that unlock greater progress. In doing so, we can achieve and even exceed our commitments. The fate of the air we breathe and the planet we inhabit depends on this outcome, which CARB has the unique ability to influence. We urge you to use it.

Sincerely,

Sam Appel, California State Manager, **Blue Green Alliance**
Ameen Khan, Regulatory Affairs Advocate, **California Environmental Voters**
Lorena Gonzalez Fletcher, Executive Secretary-Treasurer, **California Labor Federation, AFL-CIO**
Shane Gusman, Legislative Director, **California Teamsters Public Affairs Council**
Marven Norman, Policy Specialist, **Center for Community Action and Environmental Justice**
John Shears, Consultant on Air Quality, Climate and Clean Transportation, **The Center for Energy Efficiency and Renewable Technologies**
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Jack Symington, Sr. Program Manager, **Los Angeles Cleantech Incubator**
Heidi Harmon, Senior Public Affairs Director, **Let's Green CA!**
Patricio Portillo, Senior Advocate, **Natural Resources Defense Council**
Ray Pingle, Transportation Electrification Policy Advocate, **Sierra Club California**
Victoria Leistman, Senior International Campaigner, **Stand.earth**
Sam Wilson, Senior Vehicles Analyst, **Union of Concerned Scientists**

CC: Liane Randolph, Chair, California Air Resources Board
Clerk of the Board, California Air Resources Board
Richard Corey, Executive Director, California Air Resources Board
Craig Segall, Deputy Executive Officer, California Air Resources Board

## Appendix

**Attachment A:** CA Charging Infrastructure Development Sufficiency to Support Robust ACF Rule
**Attachment B:** Labor Recommendations to CARB Concerning the Advanced Clean Fleet Rule
**Attachment C:** Follow-Up Resources Supporting 100% Sales Target in 2036