



[Union of Concerned Scientists

July 25th, 2025

Michelle Buffington
Division Chief for Mobile Sources
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Executive Order (N-27-25)- Proposals for Consideration

Dear Dr. Buffington,

We, the undersigned organizations, write to request consideration from the California Air Resources Board (CARB) of the below-referenced proposals that relate to further advancement of light-, medium-, and heavy-duty zero-emission vehicle adoption in the state of California.

California's global climate leadership is notably showcased by the state's ability to continually meet and exceed our ambitious climate and air quality goals, mitigating and reversing the environmental and public health harms stemming from climate change. The current federal administration's attempts to intentionally dismantle multi-year state-led clean air efforts has led to a pause on implementing and enforcing vital regulatory rules such as the Advanced Clean Trucks rule, Advanced Clean Cars II rule, and Heavy-Duty Omnibus rule. Additionally, other tools the state was relying on to reach electrification goals, such as the Advanced Clean Fleets rule, also did not come to fruition when anticipated. Unfortunately, without statewide efforts to work toward a zero-emission

transportation system, many Californians will continue to bear the burden of poor air quality and suffer significant adverse health effects.

Our organizations strongly support the commitments toward 100 percent zero-emission vehicles originally established in Executive Order N-79-20, and have spent much time evaluating various strategies the state could adopt that achieve, to varying degrees, emissions reductions that improve public health outcomes. We encourage all executive and legislative leaders to ensure that progress toward our existing goals through new policy continues at the swiftest possible pace while maintaining feasible strategies that account for long-lasting transition outcomes. We applaud the stated intentions and actions already taken by Governor Newsom and the California Air Resources Board, alongside other state entities, and greatly appreciate the timely issuance of Executive Order N-27-25 that further commits the intent of California's leaders to stay on course in reaching our environmental goals despite recent combative hurdles.

While we greatly support this conviction, our organizations also wish to highlight potential implications of the truncated time period indicated in the Executive Order for entities to submit reports to Governor Newsom (60 days from issuance)- namely, the limitations some groups may experience in submitting feedback within the timeframe. The perspectives and feedback from individuals and community-led organizations located in regions disproportionately affected by poor air quality from combustion emission sources are of vital importance when considering potential solutions for implementation. The three scheduled public dialogue sessions in mid-late July certainly will allow for some community participation; however, we would urge CARB to consider additional measures to ensure the utmost engagement possible from Environmental Justice and community-led groups. Allowing for additional opportunities to engage, such as additional virtual listening sessions and written comment periods, that are structured in a manner to promote equitable participation with advanced notice and needed language services, will better allow for front-line community involvement during this critical opportunity. The undersigned would also request that any feedback received is transparently reported upon when the final report is issued, so groups that participated have a clear understanding of how their comments were considered and embodied in the recommendations.

In regard to the Executive Order's call for actions to consider, our organizations believe there are several policies within the state's sole authority that would continue progress toward our climate and air quality goals. We would welcome your review and consideration of the proposals below, and hope that additional engagement sessions will allow for further discussion with disproportionately impacted communities to ensure solutions are tailored to community needs in combatting air pollution:

Policy Considerations Applicable to the Medium- and Heavy-Duty Vehicles and the Freight Sector:

Reducing pollution from the medium- and heavy-duty vehicle (MHDV) sector is critical to achieving federal air quality standards, reducing the outsized air pollution impacts on freight-adjacent neighborhoods, and, increasingly, addressing greenhouse gas pollution from the on-road transportation sector. California has led the nation in adopting innovative policies and programs to advance the availability of zero-emission MHDVs and supporting infrastructure, creating valuable market signals for private investments and resulting in growing deployments of zero-emission MHDVs.

Our state can continue this vital leadership toward a cleaner on-road freight system by focusing on electrification among the wider MHDV market and more targeted policies and programs to reduce harmful air and greenhouse gas pollution in and around freight hubs such as ports, railyards, and warehouses.

Developing zero-emission ecosystems at freight hubs

Focusing electrification efforts and investments at freight hubs – like seaports, railyards, and warehouses – is key to both reducing pollution in the areas struggling the most with poor air quality and fostering widescale truck electrification. Indirect Source Rules (ISRs) and container fees are two approaches currently implemented in Southern California that have proven to be successful in reducing emissions from port operations. Applied statewide, ISRs and container fees could help to turn ports, railyards, and warehouses into catalysts for widescale freight electrification.

Southern California’s Warehouse ISR has influenced significant progress since implementation in 2022, with zero-emission truck visits to covered facilities nearly tripled, usage of electric truck chargers increased by over 20-fold, and solar power usage at warehouses increased from under three gigawatt-hours to over 85 gigawatt-hours.¹ A statewide approach could expand these benefits to other warehouses as well as ports and railyards while better managing economic impacts from a patchwork adoption of ISRs. We would encourage any statewide ISR to set a strong focus on electrification by excluding all combustion technologies wherever feasible.

¹ South Coast Air Quality Management District. 2024. “2nd Annual Report for the Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program.” https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/annual_report_waire_program_102024.pdf

Similarly, a statewide fee on shipping containers moved by combustion drayage vehicles could encourage freight electrification and generate substantial revenue for electrification programs while promoting economically equitable impacts among the state's diverse ports and railyards. Since implementing the \$10 container fee in 2022, the Port of Los Angeles and Port of Long Beach have generated hundreds of millions of dollars for electrification efforts, including hundreds of zero-emission drayage truck purchases and over 400 electric truck charging positions throughout the region.^{2, 3} Such a program could deliver significant benefits if scaled statewide and expanded to goods movements beyond containers.

While studies have estimated container fees to have negligible impacts to throughput at the state's two largest ports, even at rates as high as \$70 per container, impacts may vary to smaller ports or those specializing in noncontainerized freight such as automobiles or bulk products.⁴ Statewide implementation would allow for a more nuanced approach that expanded the benefits of container fees while mitigating potential negative impacts on throughput at smaller ports.

Sustainable funding sources for MHDV electrification programs

With backsliding federal support for transportation electrification in recent months, California must step in to ensure continued development of the zero-emission MHDV market and progress toward upfront and total cost-of-ownership parity among combustion and zero-emission models. Additionally, state investments in zero-emission fueling infrastructure specific to commercial vehicles, particularly among Class 7 and 8 tractor trucks, are necessary to accelerate freight electrification in the near term and ensure that market signals for private investments are preserved. The state has several options to secure sustainable and expanded revenue generation for both new and existing zero-emission MHDV and infrastructure programs, such as the Energy Infrastructure Incentives for Zero-Emission and the Hybrid and Zero-Emission Truck and Bus Voucher Incentive programs.

Fees on the sale of new combustion MHDVs or annual registrations of combustion models may generate sizable revenues annually. In 2024 alone, over 88,000 new combustion Class

² Port of Long Beach. 2025. "Port to Increase Investment in Clean Trucks." <https://polb.com/port-info/news-and-press/port-to-increase-investment-in-clean-trucks-03-28-2025/>

³ Port of Los Angeles. 2025. "Port of Los Angeles Adopts Near-Term Clean Truck Spending Plan." https://www.portoflosangeles.org/references/2025-news-releases/news_052225_ctf

⁴ Clean Air Action Plan. 2020. "Economic Study for the Clean Truck Fund Rate." https://cleanairactionplan.org/wpfd_file/final-economic-study-for-clean-truck-fund-rate/

2b-8 vehicles were registered in California.⁵ The structure of such fees could take various shapes, including increasing in relation to vehicle size or by considering the comparative cost of analogous combustion and zero-emission models, potentially raising hundreds of millions of dollars in revenue annually. As the state considers clean MHDV incentive programs, we strongly encourage programmatic structures that influence upfront price reductions over time such as reverse auctions.

Discussion and analysis of similar fee and incentive concepts have often focused on Class 4-8 vehicles. However, because around 70 percent of the state's annual new registrations of MHDVs are Class 2b-3 vehicles, we would encourage the state to consider including combustion Class 2b-3 vehicles under a fee program. This could significantly increase the annual revenues for the programs supported by the fee while encouraging the continued growth of zero-emission Class 2b-3 vehicles, which made up over one-third of new Class 2b-3 registrations in 2024 in the state.⁶

Another potential significant and sustainable revenue source for electrification programs and investments is through small fees on last-mile deliveries to consumers made by fossil-fueled vehicles, including light-duty vehicles, MHDVs, and motorcycles. This approach would capitalize on both the significant growth in e-commerce and on-demand deliveries and the growing adoption of zero-emission MHDVs over the past several years. Even at de minimis rates, delivery fees could generate significant revenue for electrification programs. For example, Colorado's retail delivery fee, which is set at a flat rate of \$0.29 and exempts businesses with annual sales under \$500,000, raised over \$75 million during its first year of implementation for transportation electrification and infrastructure.⁷ Given California's significantly larger population and delivery market, annual revenue from delivery fees would likely be much larger.

Policy Considerations Applicable to the Light-Duty Vehicle Sector:

Manufacturer delivery requirements for LDV vehicles

Most of California's light-duty vehicles are powered by gasoline. Supply shortfalls and price spikes have significant impact on household spending and the economic health of

⁵ UCS analysis of new Class 2b-8 vehicle registrations in California. Data provided by S&P Global Mobility.

⁶ Ibid.

⁷ The Council of State Governments Midwestern Office. 2025. "Overview of retail delivery fees in Colorado and Minnesota." <https://csgmidwest.org/2025/02/27/question-have-states-implemented-or-considered-adoption-of-a-retail-delivery-fee/>

the state. The solution is to reduce gasoline demand in the state as quickly as possible by speeding the transition to electric vehicles.

California is also in the process of transitioning to a fully renewable and low emissions electricity grid. Transportation electrification can play an important role in enabling this transition, as vehicle recharging can be a flexible demand that can be matched to sources of electricity that vary over time (such as wind and solar power). Electric vehicles also have the potential to be used as energy storage, sending back power to the grid during periods of high demand. Because many passenger vehicles are in use for only a fraction of the day, this would allow EV batteries to provide personal mobility while also supporting a reliable grid and enabling lower electricity rates⁸.

To ensure that California has an affordable and reliable transportation system, it is imperative that new vehicles sold for use in the state are powered by electricity to the extent possible. Buyers of vehicles are limited by the options available from manufacturers. Therefore, California should enact policies that manage this transition through manufacturer requirements.

California should develop a system where permission for delivery or initial registration of a new gasoline or diesel vehicle must be granted to a manufacturer prior to sale to a car dealership or direct to a consumer. This would limit new gasoline/diesel “connections” to the state’s energy distribution system, in the same way that utilities and regulators manage costs and permissions to add new loads to the electric grid. New electric vehicles are also required to be capable of managed charging and bidirectional charging to ensure that these new connections to the electric grid maximize resiliency, affordability, and reliability of electricity for California’s households and industry.

A portion of the manufacturers’ allowances for new gasoline vehicles could be granted free of charge, based on prior vehicle sales volumes for a specific manufacturer (for example, in 2027 the allowance could equal to 70% of a manufacturer’s total sales in 2025). A vehicle manufacturer would need to purchase allowances to exceed this gasoline vehicle threshold, with any proceeds used for EV purchase incentives. Additionally, the allowances could be in a market-based system where a manufacturer could sell unneeded gasoline allowances to other manufacturers in lieu of purchasing allowances. The allowance of free certificates issued to a manufacturer will decline over time to ensure that liquid fuel demand continues to shrink and to increase the VGI-capable electric vehicle fleet.

⁸ Union of Concerned Scientists. 2025. “Harnessing the Power of Electric Vehicles”, online at: <https://www.ucs.org/resources/harnessing-power-electric-vehicles>

Incentives for lower-cost light-duty EVs

The state should develop and deploy a purchase incentive for the purchase of lower-cost electric vehicles. This incentive would encourage manufacturers to bring more affordable electric vehicles to the state. Targeting only lower-cost vehicles would maximize the effectiveness of the program and reduce costs compared to a broadly applicable incentive. It would also lower a barrier for drivers to switch to EVs and indirectly reduce prices in the secondary (used) market. This targeted incentive could be funded through GGRF revenue or by establishing new fees on luxury (high-cost) gasoline-only vehicles.

Ensure funding and access to vehicle replacement programs

The existing regional Clean Cars 4 All programs are important policy tools to assist low- and moderate-income drivers in switching from an older, polluting gasoline or diesel vehicle to a cleaner option like an electric vehicle or transit passes. The state should continue to invest in these programs and ensure that the programs are not interrupted by lack of funding.

Adaptable Policy Considerations Across Vehicle Classes:

Early Action ACCIII credits

As part of the Governor's Executive Order, CARB is directed to develop and propose an Advanced Clean Cars III regulation. As part of this regulation, CARB should consider the use of "early action" credits to manufacturers that deliver low emission and/or zero emission vehicles prior to the commencement of ACCIII as an alternative measure for deployment if the federal disapprovals of the Advanced Clean Cars II, Advanced Clean Trucks, and Heavy-Duty Omnibus regulations are not invalidated in court.

Lower electricity rates for vehicle charging

To increase the fuel savings from switching to an electric vehicle, California should enact policies to reduce the cost of charging vehicles. This could be accomplished by reducing the volumetric electricity rates and increasing fixed charges. In addition, focusing the California Climate Credit on only electricity rather than including natural gas subsidies will reduce electricity rates. Rates for electric vehicle charging could be targeted by utilizing virtual submetering technology for home charging and reducing commercial rates for charging infrastructure.

Inclusivity in Furthering California's Commitment

We appreciate the opportunity to share the above proposals aimed at accelerating zero-emission vehicle adoption in California, and hope our additional suggestions related to further engagement opportunities for communities facing the brunt of air pollution are considered and implemented to the greatest extent possible given the urgency of the report. Meaningful participation from front-line communities is essential to the development of new policies that will directly impact those very regions. We recognize the dialogue sessions that have been scheduled are in this very vein and that time is limited, but wish to emphasize the importance of further inclusive engagement, to ensure the process of perspective and information gathering is both comprehensive and equitable. We thank CARB for their consistent leadership in clean transportation efforts, and look forward to our organization's continued partnership.

We welcome any questions or further discussion on any of the topics presented; please reach out to Michele Canales at mcanales@ucs.org for any additional information.

Sincerely,

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