July 25, 2025

Via electronic submittal

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California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on ZEV Forward Public Dialogue Sessions in Support of Immediate Regulatory Action for Zero-Emission Transportation

Honorable Members of the California Air Resources Board,

We respectfully submit the following comments in response to the California Air Resources Board's ("CARB") Zero-Emission Vehicles ("ZEV") Forward Dialogue Sessions. We greatly appreciate CARB's continued leadership in securing an equitable, zero-emission future, especially in the face of a federal administration that continues to illegally roll back critical protections for clean air and environmental justice. In this moment, California must not just replace what was lost but continue to accelerate the pace of electrification in our transportation system, especially for environmental justice communities that are most impacted by dangerous air pollution, including those that live in heavily polluted freight corridors.

In his June 2025 Executive Order N-27-25, Governor Newsom set a clear path forward by reaffirming California's commitment to the zero-emission targets established in his 2020 Executive Order N-79-20: 100% in-state sales of new passenger cars and trucks by 2035, 100% adoption of zero-emission medium- and heavy-duty vehicles by 2045 where feasible, 100% zero-emission drayage trucks by 2035, and 100% adoption of off-road zero-emission vehicles and equipment where feasible by 2035. We urge CARB to immediately begin work on a set of priority zero-emission rulemakings that are critical to achieving these goals, including:

- Advanced Clean Trucks II ("ACT II")
- Advanced Clean Cars III ("ACC III")
- Advanced Clean Fleets II ("ACF II")
- In-Use Locomotive II
- Transport Refrigeration Unit II ("TRU II")
- Harbor Craft II
- Cargo Handling Equipment ("CHE")
- Clean Shipping/Oceangoing Vessels In-Transit

Additionally, we strongly encourage CARB's support for targeted local strategies such as Indirect Source Rules ("ISRs") and cargo fees, which are critical tools for reducing emissions in freight-impacted corridors and accelerating ZE technology adoption where it is needed most.

Transportation remains California's largest source of climate- and health-harming pollution, accounting for about 50% of statewide greenhouse gas emissions, almost 80% of nitrogen oxide emissions, and 90% of diesel particulate matter pollution.[1] These pollutants disproportionately affect communities living near ports, railyards, highways, and warehouses. Immediate action is needed to protect public health, reduce climate risk, and meet California's clean air obligations.

California is already leading the transition to zero-emission vehicles, with growing deployment of electric cars, trucks, buses, and rail technologies. However, continued progress will depend on clear direction, effective and comprehensive regulations, and a process that centers equity. Governor Newsom and CARB must use all tools available to deliver the life-saving benefits of clean transportation to the Californian communities who need them most. Below, we share our detailed recommendations for ensuring that California can deploy zero-emissions technologies at the pace and scale necessary to save thousands of lives and secure a safe, healthy future for all Californians.

I. Center Community Engagement and Public Health in Every Decision.

CARB must commit to a clear, transparent, and inclusive process that centers the voices of community members, labor, and public health representatives in determining how to proceed. Frontline and fenceline communities—those most affected by pollution from freight, ports, and industrial infrastructure—must be meaningfully engaged early and often in regulatory planning and implementation. Doing so will put the state in the strongest position to reduce emissions and meet our clean air obligations under California's State Implementation Plan ("SIP"). It is important that the folks who experience the greatest negative impacts from status quo operations

[1] California Energy Commission, *Transforming Transportation*, https://www.energy.ca.gov/about/core-responsibility-fact-sheets/transforming-transportation.

are included and heard throughout this process, and this requires both linguistic inclusivity and ensuring that opportunities for input are compatible with stakeholder's work schedules.

A whole-of-government approach is also critical for meaningful engagement. CARB should coordinate closely with agencies such as the California Energy Commission ("CEC"), Governor's Office of Business and Economic Development ("GOBiz"), California State Transportation Agency ("CalSTA"), local Air Quality Management Districts ("AQMDs"), CalTrans, and others to align actions and accelerate the transition to 100% zero-emission transportation across all modes and jurisdictions.

Transparent and consistent engagement with the community, labor, and public health proponents strengthens policy development and is our best tool to combat the fossil fuel, trucking, and rail industry's perpetuation of misinformation and myths. We look forward to seeing more opportunities for engagement and information sharing.

II. Zero-Emission On-Road Vehicle Strategy.

Although the recission of waivers under the Congressional Review Act was clearly illegal and will now be subject to a fight before the courts, California's commitment to a zero-emissions future where all Californians are safe to breathe regardless of their zipcode must remain unwavering. We want to thank CARB staff, leadership and Board members who worked tirelessly to adopt nation-leading zero-emission regulations that would have saved lives. That effort was not wasted.

Now CARB must act without delay or deference and return to one of its fundamental authorities—regulating. CARB should immediately initiate rulemaking processes for an Advanced Clean Cars III Rule (ACC III), an Advanced Clean Trucks II (ACT II) Rule, and an Advanced Clean Fleets II (ACF II) Rule. These rules must be consistent with the timelines laid out in Governor Newsom's E.O. N-79-20, and reaffirmed in E.O. N-27-25, including 100% in-state sales of on-road ZEVs by 2035, 100% adoption of on-road ZEVs by 2045 where feasible, and 100% ZEV drayage trucks by 2035.

We understand that it can take years for regulations to be finalized. At the same time, California must be ready with new regulations to send to EPA in less than four years' time. Prompt rulemaking will keep California on course and provide a clear signal to automakers, fleet operators, and other states that California remains committed to its public health and air quality goals, regardless of federal interference. Early action also reinforces California's leadership in protecting our health and that of residents in the growing coalition of Section 177 states that rely on CARB's rules to guide their own programs. While softer measures like incentives are also needed and will support manufacturers and fleet operators in the transition to zero-emission

vehicles, CARB must use its regulatory authority to set mandates, which continue to be the most effective means of giving a clear signal to the market that California is committing to a zero-emissions future.

A. Advanced Clean Cars III

We strongly support the Governor's directive to CARB in E.O. N-75-25 to develop an ACC III regulation that reduces criteria air pollutants, toxic emissions and greenhouse gases from passenger cars, light-duty trucks, and medium- and heavy-duty vehicles. Phasing out the sale of internal combustion engine vehicles is essential to ending California's reliance on fossil fuels and achieving a clean, zero-emission transportation system. CARB must act without delay to initiate an ACC III rulemaking to keep California on track to meet its target of 100% zero-emission new vehicle sales for passenger cars, trucks, and SUVs by 2035.

This target is both necessary and achievable. The ZEV market has matured substantially, with record growth in sales, increased model availability across vehicle classes, and expanded charging infrastructure. The ACC II regulation was projected to create immense benefits for Californians, preventing more than 7,400 premature deaths from air pollution by 2050 and delivering $194 billion in health and economic benefits.[2] CARB must ensure that ACC III maintains or exceeds these projected outcomes and provides a clear signal that California will not back down from its ZEV targets.

B. Advanced Clean Trucks II

New truck rulemakings are critical to address outstanding gaps in the transition to a zero-emissions future. Trucks are the dirtiest vehicles on our roads, and Black and Latino communities are disproportionately burdened by air pollution from diesel trucks. Trucks are the largest single source of air pollution from vehicles, responsible for 70% of smog-causing pollution and 80% of carcinogenic diesel soot despite making up only 2 million among the 30 million registered vehicles in the state. California's actions have both nationwide and local implications.[3] According to a 2022 report from the American Lung Association, in the U.S. the transition to zero-emission heavy-duty transportation sector and clean, non-combustion energy by 2050 would result in up to $735 billion in cumulative health benefits, 66,800 avoided deaths, 1.75 million avoided asthma attacks, and 8.5 million avoided lost workdays.[4] The study also

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[2] Environmental Defense Fund, *California: 100% New Zero-Emission Vehicle Sales by 2035 will Deliver Extensive Health, Environmental and Economic Benefits,* p. 1 (May 2021), Final-Combined-CA-ZEV-Report-5.4.21.pdf.
[3] California Air Resources Board, *California takes bold step to reduce truck pollution* (June 25, 2020), https://ww2.arb.ca.gov/news/california-takes-bold-step-reduce-truck-pollution.
[4] American Lung Association, *Delivering Clean Air: Health Benefits of Zero-Emission Trucks and Electricity* (Oct. 2022), at 1, https://www.lung.org/getmedia/e1ff935b-a935-4f49-91e5-151f1e643124/zero-emission-truck-report.

showed that the Los Angeles-Long Beach metro area would be the county that would see the most significant health benefits from a transition to zero-emission trucks.

The Clean Truck Partnership plays an important role in coordinating zero-emission commitments from major truck manufacturers in California. But fundamental gaps still remain in bridging the gap between the commitments in the Clean Truck Partnership and the requirement for 100% zero-emission in-state truck sales by 2036 as adopted in Advanced Clean Fleets I. Advanced Clean Trucks II is needed to bridge the gap between the progress achieved so far, and the promise of where we need to go.

C. Advanced Clean Fleets II

It is also important for CARB to initiate an ACF II regulation to support ZEV manufacturers with a built-in market at the outset of the ZEV transition. While key pieces of ACF I do not need a waiver and therefore still remain in place—including ZEV requirements for public fleets and the 100% ZEV sales by 2036 requirement—a new rulemaking for ACF II will help transition private and drayage fleets to meet California's ZEV goals. An ACF II Rule will fill an important gap: there is still a need for CARB to support fleets in transitioning to ZEVs, and that need is not addressed by the Clean Truck Partnership, ACF I or ACT II.

CARB should immediately initiate ACC III, ACT II, and ACF II rulemakings. These rules must align with—or exceed—the targets established in E.O. N-79-20 and reaffirmed in E.O. N-27-25, keeping California on the pathway to 100% ZEVs by 2035 and 2045. These rules must also include mechanisms to guarantee benefits in the environmental justice communities that need them most.

III. Zero-Emission Off-Road Vehicle Strategy.

While on-road transportation is the focus of Governor Newsom's June directive, we cannot lose sight of the need for California to develop a well-coordinated off-road strategy that brings all vehicles and equipment to zero-emissions. CARB must develop and implement a comprehensive strategy to ensure that we have the regulations in place to achieve 100% zero-emission off-road vehicles and equipment operations by 2035 as directed in EO N-79-20. This should be achieved by prioritizing updating and/or establishing zero-emission rulemakings for off-road freight sources including transport refrigeration units, locomotives, harbor craft, cargo handling equipment, and oceangoing vessels. Throughout these rulemaking processes, CARB must consistently and transparently collaborate with community, labor, and public health representatives.

Off-road vehicle categories like locomotives, TRUs, maritime/ships, and aviation contribute to a growing percentage of harmful emissions at freight facilities such as ports, railyards, and warehouses. While these have long been sources of pollution in underserved communities, the relatively recent and growing boom in e-commerce has only exacerbated the need for CARB to act immediately and strategically.

We urge CARB to develop a comprehensive, ambitious strategy to decarbonize off-road sources of transportation pollution, including rail, maritime, and aviation.

- **Rail:** The most cost-effective, efficient, and healthy passenger and freight rail system for California will be electrified by overhead catenary and incorporate discontinuous catenary in key nodes. Battery-electric technology likely makes the most sense for switcher operations. The only rail system that makes sense in the state is one that is electrified. CARB and our other state and local agencies need to commit to this vision so that we can plot out exactly what we need to get there.

- **Maritime:** CARB staff identified the need to reduce pollution from ships in-transit nearly 3 years ago[5]; absent regulatory action, pollution from ships in-transit will make up 95% of all nitrogen oxide emissions and 86% of all fine particulate matter emissions from oceangoing vessels.[6]

- **Aviation:** We encourage CARB to develop a strategy for zero-emission aircraft, maximizing electrification applications. CARB should consider a Zero-Emission Airport Ground Operations regulation to require zero-emission taxiing, zero-emission ground support equipment, and zero-emission gate operations.

A. In-Use Locomotive II Regulation

We understand that CARB formally repealed the In-Use Locomotive Rule. Without replacement, the loss of CARB's In-Use Locomotive Rule will have devastating consequences for communities across California and beyond that will remain vulnerable to continued harm from freight pollution. Many of us have fought for decades to be able to live without being poisoned by the rail industry, and we are deeply concerned by this repeal.

CARB must commit to doing everything within its legal authority to bring rail pollution to zero. Asthma, cardiovascular disease, and other dangerous illnesses are known to be associated with

[5] CARB, *Interim Evaluation Report: Control Measure for Oceangoing Vessels At-Berth*, (Dec. 2022), at 89, https://ww2.arb.ca.gov/sites/default/files/202212/At%20Berth%20Interim%20Evaluation%20Report_Final_Remediated.pdf.
[6] *Id.* at 88.

diesel locomotive pollution and contribute to shorter lifespans. For decades, the rail industry has harmed and poisoned families, workers, and communities with a barrage of pollution from outdated locomotives. According to the EPA's COBRA model, the rail industry is responsible for 2,200-3,100 premature deaths annually, with total health-related costs of $36 to $48 billion.[7] Research has shown that in California, children living within 10 miles of a railyard are over 20% more likely to be sent to the emergency room for asthma-related causes compared to children living 20-25 miles from a railyard.[8]

As discussed above, the only rail system that makes sense in the state is one that is electrified. Electric rail technology is the global gold standard, and building catenary infrastructure across California will bring good jobs, economic benefits, and help address our deadly public health crisis here in the state. The most cost-effective, efficient, and healthy passenger and freight rail system for California will be electrified by overhead catenary and incorporate discontinuous catenary in key nodes.

We urge CARB to immediately begin development of a zero-emission, electric-only In-Use Locomotive II Rule. This new rule should be ready for resubmission to EPA by 2029, positioning California to advance rail electrification and protect communities from rail pollution.

B. Harbor Craft II Regulation

The thousands of vessels that keep California ports operating (including tugboats, dredges, ferries, and commercial fishing vessels) primarily burn dirty diesel fuel, one of the worst sources of nitrogen oxides and small particulates. These emissions are a major driver of air pollution near seaports, and contribute to asthma, lung and heart disease, cancer, and premature death. At the Ports of Los Angeles and Long Beach, these vessels contributed more diesel particulate matter in 2023 than trucks.[9] In California, harbor craft are one of the top three sources of cancer-causing emissions at the Ports of Oakland, Long Beach, and Los Angeles. Port-adjacent communities in Los Angeles and Long Beach, including West Long Beach, Wilmington, and San Pedro, already experience a life expectancy that is up to eight years lower than the Los Angeles County average.

The benefits of transitioning to ZE harbor craft are clear. CARB estimates that its updated Commercial Harbor Craft Rule will save more than 531 lives, save $5.25 billion in public health

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[7] David Cooke, *Railroads are Running Dirty Diesel Trains Through Communities and No One is Doing Anything About It,* Union of Concerned Scientists (June 17, 2025), https://blog.ucs.org/dave-cooke/railroads-are-running-dirty-diesel-trains-through-communities-and-no-one-is-doing-anything-about-it/.

[8] Spencer-Hwang R. et al, *Association of major California freight railyards with asthma-related pediatric emergency department hospital visits*, Preventive Medicine Reports 13 (2019) at 76, https://pmc.ncbi nlm nih.gov/articles/PMC6279983/pdf/main.pdf.

[9] Port of Los Angeles, *2023 Emissions Inventory*, https://kentico.portoflosangeles.org/getmedia/3fad9979-f2cb-4b3d-bf82-687434cbd628/2023-Air-Emissions-Inventory, ES-2; Port of Long Beach, 2023 Emissions Inventory, https://thehelm.polb.com/download//14/emissions-inventory/20586/2023-air-emissions-inventory.pdf, ES-2.

care costs, and reduce greenhouse gas emissions by 415,000 metric tons.[10] The 2022 Harbor Craft regulation has been successful in bringing ZE harbor craft to California ports, and we are seeing zero-emission harbor craft being deployed across the United States and around the world.

We urge CARB to build on this success and comprehensively address pollution from harbor craft by pursuing a Harbor Craft II regulation that requires zero-emissions across all categories of harbor craft, including tugboats, long-haul ferries, workboats, and service vessels. We are already seeing other countries, such as Singapore, set more stringent standards for new harbor craft.[11]

C. Oceangoing Vessels At-Berth Regulation

CARB must continue to enforce that At-Berth Rule to protect the health of communities living near ports. Oceangoing vessels are the top source of cancer-causing diesel particulate matter at California's major ports, including Oakland, Long Beach, Los Angeles, and Richmond. The Oceangoing Vessels At-Berth Rule is critical for protecting portside communities, with projected benefits including a 55% decrease in potential cancer risk from oceangoing vessels at the Ports of Los Angeles, Long Beach, and Richmond.[12] CARB estimates that this rule will reduce diesel particulate matter emissions by 270 tons, nitrogen oxide emissions by 17,500 tons and carbon dioxide equivalent emissions by 365,000 metric tons.[13] This is a prime example of California's leadership, with China and the European Union adopting similar shore power standards.

Now is not the time for California to back down on any rules that cut freight and port pollution. We continue to see industry attacks on this lifesaving rule, despite built-in compliance flexibility and clear data demonstrating feasibility. CARB must not weaken the At-Berth Rule, especially considering that shore power, including for tankers,[14] has proven effective at reducing this dangerous pollution.

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[10] CARB, *Initial Statement of Reasons Proposed Amendments to the Commercial Harbor Craft Regulation*, at V-6, V-7, ES-4, (Sept. 2021), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/chc2021/isor.pdf.
[11] Enterprise Singapore, *Singapore rolls out new standard for charging electric harbour craft*, (March 25, 2025) https://www.enterprisesg.gov.sg/resources/media-centre/news/2025/march/singapore-rolls-out-new-standard-for-charging-electric-harbour-craft.
[12] CARB, *California's regulation to reduce pollution from ocean-going vessels granted U.S. EPA authorization* (Oct. 18, 2023), https://ww2.arb.ca.gov/news/californias-regulation-reduce-pollution-ocean-going-vessels-granted-us-epa-authorization.
[13] CARB, *Interim Evaluation Report*, (Dec. 1, 2022), at 4, https://ww2.arb.ca.gov/sites/default/files/2022-12/At%20Berth%20Interim%20Evaluation%20Report_Final_Remediated.pdf.
[14] L.A. Times, *Long Beach port, BP pioneer shore-power system*, (June 3, 2009), https://www.latimes.com/archives/blogs/greenspace/story/2009-06-03/long-beach-port-bp-pioneer-shore-power-system.

D. Clean Shipping/Oceangoing Vessels In-Transit Regulation

As discussed above, CARB staff identified the need to reduce pollution from ships in-transit nearly three years ago; absent regulatory action, pollution from ships in-transit will make up 95% of all nitrogen oxide emissions and 86% of all fine particulate matter emissions from oceangoing vessels.[15] CARB must adopt a Clean Shipping Rule that requires 100% ZE oceangoing vessels by 2040. This regulation will be critical for catalyzing technology for clean oceangoing vessels and must focus on non-combustion ZE technology. We appreciate that CARB has started the process, but the rulemaking must be finalized by 2028 given the dangerous health impacts associated with ship pollution. By accelerating this rulemaking, California has an opportunity to shape market and technology trends.

E. Transport Refrigeration Unit II Regulation

CARB's current TRU II rulemaking is a critical opportunity to require all TRUs operating in California to transition to zero-emission technology. Because the ZE provisions of the original TRU I Rule were not authorized by EPA, it is essential that the TRU II regulation establishes a clear, enforceable requirement for 100% zero-emission TRUs by 2035, consistent with Governor Newsom's executive order.

Although California has made meaningful progress in deploying zero-emission TRUs, continued action is urgently needed to protect public health. Approximately 200,000 diesel-powered refrigeration units currently operate in the state, emitting toxic pollution into neighborhoods as goods are loaded and unloaded at grocery stores, distribution centers, and freight facilities. The market for TRUs is rapidly maturing, with zero-emission technologies already available. CARB must move forward decisively to finalize the TRU II Rule and require a full transition to ZE TRUs by 2035 to safeguard the health and welfare of our communities.

F. Cargo Handling Equipment Regulation

Seven years ago, CARB identified the need to develop a Zero-Emissions Cargo Handling Equipment Regulation to reduce health risks to communities living near seaports and railyards and to achieve further emission reductions necessary to attain state and federal air quality standards. CARB must start this rulemaking immediately. While several California ports have set goals to achieve 100 percent zero-emissions cargo handling equipment, the pace of procurement and adoption of these technologies have not matched the rate of port expansion and the accompanying increase in emissions. We appreciate that incentive funding has helped to

[15] CARB, *Interim Evaluation Report: Control Measure for Oceangoing Vessels At-Berth*, (Dec. 2022), at 89, https://ww2.arb.ca.gov/sites/default/files/202212/At%20Berth%20Interim%20Evaluation%20Report_Final_Remediated.pdf.

accelerate the deployment of zero-emissions CHE throughout the State, but a Zero-Emissions Cargo Handling Equipment Regulations is necessary to ensure a transition to zero-emission CHE at all California ports and railyards and reduce the pollution burdens on our freight-impacted communities.

IV. Targeted Localized Strategies.

Alongside the comprehensive approach to regulating on-road and off-road vehicles outlined above, we strongly encourage CARB to support targeted local strategies such as Indirect Source Rules and cargo fees. These strategies have proven benefits, and can effectively cut pollution from sources like ports, warehouses, and freight corridors.

A. Indirect Source Rules

A statewide Indirect Source Rule ("ISR") is critical for reducing dangerous air pollution from warehouses, railyards, and other major freight hubs. Freight facilities are among the largest contributors to localized air pollution in California, disproportionately affecting communities of color and low-income neighborhoods that are located near highways and freight corridors and have long been forced to breathe dirty air. ISRs are a proven, effective approach for addressing California's pollution hot spots, addressing emissions from vehicles while incentivizing the buildout of the infrastructure needed to support cleaner technologies, such as charging or fueling stations for zero-emission trucks. Roughly half the state already lives under the protection of an Indirect Source Rule, and these standards have a proven track record of spurring clean transportation projects.

Until CARB can adopt a statewide ISR, we urge CARB to support local air district efforts to clean up indirect sources in their jurisdictions. At the same time, CARB must stay alert to efforts to undermine local authority to regulate these pollution sources, such as SB 34. This bill would unnecessarily strip the South Coast Air Quality Management District ("SCAQMD") of tools needed to address air pollution from the Ports of Los Angeles and Long Beach, which are the largest fixed sources of air pollution in one of the most air polluted parts of the country. This bill threatens the SCAQMD's ability to address port pollution, a primary culprit in a region that consistently fails to meet air quality standards for ozone—a fundamental indicator of public health. Communities adjacent to the ports, such as Wilmington and West Long Beach, already suffer disparities in health outcomes, experiencing a life expectancy that lags behind the rest of Los Angeles County by as much as eight years. Pollution in the air can reduce lung function and exacerbate asthma, particularly in vulnerable populations.[16] The clustering and centralization of

[16] *See, e.g.*, Angelica I. Tiotiu, *et al.*, *Impact of Air Pollution on Asthma Outcomes*, International Journal of Environmental Research and Public Health, (July 22, 2020) at 2, https://pmc.ncbi nlm nih.gov/articles/PMC7503605/pdf/ijerph-17-06212.pdf.

freight transport industries in and around harbor communities places a heavy burden on public health—and children's lungs in particular. The short- and long-term effects of exposure to high levels of ambient air pollution in these overburdened communities is a major concern based on a large body of research documenting associations between exposure to pollution from diesel-related sources and illness.[17] SB 34 attempts to exacerbate these injustices, leaving our most vulnerable residents without the protections they desperately need as cargo levels surged by nearly 60% over the previous year.[18]

While certain local air districts have taken advantage of this useful regulatory tool to cut pollution in their regions, it is critical to supplement local action with a strong floor of clean air safeguards across California. We are heartened to see that Assemblymember Robert Garcia introduced the Pollution Hotspots Solution Act (AB 914) that would amend the California Health & Safety Code to clarify CARB's authority to pursue statewide indirect source rules, with priority for the sources that have the most significant statewide impact or contribute to pollution in disadvantaged communities. A statewide Indirect Source Rule would provide companies with the regulatory certainty they need, while ensuring all of California benefits from building a modern goods movement system. A statewide indirect source rule can lead to significant emission reductions, benefiting many regions in California that are in violation of NAAQS and helping to bring them into attainment. The inclusion of a statewide ISR in California's SIP will also help the state to meet its legal obligations under the federal Clean Air Act.

B. Cargo Fees

Cargo fees allow ports to raise dedicated, locally controlled funding for investment in zero-emission operations. These funds are key for achieving climate and pollution goals for ports, such as the target of 100% zero-emission drayage trucks by 2035, 100% emissions-free switcher locomotives by 2035, and full electrification of the Alameda Corridor. This local funding is even more essential given potential loss of future federal funding for zero-emission equipment and infrastructure.

Programs like the Clean Truck Fund at the Ports of Los Angeles and Long Beach already complement state-level initiatives to reduce pollution from drayage trucks and freight rail. Trucking companies are successfully combining Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) incentives with Clean Truck Fund revenues to purchase zero-emission trucks, demonstrating the potential of layered funding strategies.

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[17] *See id.*

[18] Port of Los Angeles, *Port of Los Angeles February Cargo Volume Jumps 60% Over Previous Year*, (March 18, 2024), https://www.portoflosangeles.org/references/2024-news-releases/news_031824_feb_cargo.

CARB should actively collaborate with ports across the state to increase the adoption of cargo fee programs. These local funding mechanisms are an important strategy for helping ports achieve state regulations that target zero-emission operations. CARB should also consider these types of funding and investment programs as it designs and implements complementary programs, such as HVIP and Clean Off-Road Equipment Voucher Incentive Project (CORE). It's critical that CARB's programs work together with port programs, and allow for the stacking of state and local incentives in order to make investments (like battery-electric drayage truck purchases) feasible, especially for smaller operators who otherwise might not be able to afford the upfront costs. CARB must support small fleets in accessing vouchers and other incentive programs.

In addition to cargo fees and CARB-administered programs, other funding sources (such as the South Coast Air Quality Management District's EPA INVEST CLEAN program and CalTrans' Trade Corridor Enhancement Program) can also support port decarbonization. We need an all-of-government approach to investment programs that requires coordination across CARB, air districts, CalTrans, and other relevant agencies. All groups should work together to ensure compatibility between funding programs and maximize the ability to stack incentives where appropriate.

V. Center Equity and Affordability in All Decisions, Including by Conducting a Comprehensive Assessment of Pathways to Zero-Emission Vehicles.

Given limited capacity and resources, California's transition to a zero-emission transportation sector must prioritize the deployment of ZE technologies in environmental justice communities most impacted by fossil fuel infrastructure and air pollution. Ports, railyards, and warehouses are creating diesel death zones in California, where freight routes concentrate dangerous diesel pollution in Latino and Black neighborhoods, harming people's health. These impacts are well established and have been measured and mapped out time and time again.

Only a fully zero-emissions future can deliver health and justice for all Californians, but in the near-term we need to make sure that the communities that are most impacted receive immediate benefits. An equitable transition that ensures emission reductions in freight-impacted communities will also require CARB to adopt policies and programs that make ZEV adoption economically viable for small fleets and independent owner-operators, who are often based in or operate within pollution-burdened communities.

Affordability is another key barrier. Low-income households—which already face high energy burdens—often struggle to access and benefit from zero-emission technologies, whether due to upfront costs, lack of infrastructure, or financing limitations. CARB must design every rule with

equity at its core, using clear metrics and ensuring that the transition to zero-emission transportation is accessible to all.

CARB should also conduct a comprehensive assessment of pathways to zero-emissions for both on-road and off-road vehicles that addresses equity and affordability concerns for low-income households and communities of color. This assessment must be developed in meaningful collaboration with impacted communities and include robust engagement throughout.

VI. Better Align State Transportation Investments with Zero-Emissions Technology.

We cannot protect Californians from environmental health hazards and climate impacts without a rapid transition to zero-emission technologies in our transportation system. This transition depends on long-term, stable investments that directly address the fossil fuel usage that is the root cause of air pollution and the climate crisis, and those investments must prioritize emissions reductions in environmental justice communities that are overburdened by air and climate pollution.

We urge CARB to implement a planning and evaluation process to better align investments with pathways to meet our climate targets and cut air pollution in overburdened communities, ensuring that all investments are focused on a transition to non-polluting, battery-electric technologies in the transportation sector and prioritizing air quality benefits in disadvantaged communities. We need an all-of-government approach to ensure that we have a cohesive, comprehensive strategy to invest in zero-emission technologies at the pace and scale necessary to protect communities. It's critical that state-level funding is compatible with regional and local investments, and that incentives are designed to stack appropriately to ensure that zero-emission projects and technology deployments can be funded at the level necessary to spur investments.

We also encourage CARB to take seriously its authority on public procurement, and ensure the highest levels of ambition when leveraging government purchasing power towards zero-emission technologies across all categories of transportation.

VII. Decenter Fossil Fuel Technologies and Combustion in Existing Climate Programs.

Fossil fuels continue to pollute California's air, driving dangerous climate impacts and harming our health. California must leave polluting fuels behind as swiftly as possible, and we can't afford to continue business-as-usual for programs that subsidize the combustion of polluting fuels. Recent cuts to federal and state funding make it even more critical that we use existing resources effectively, and supporting continued use of combustion fuels is counterproductive to our climate and clean air goals.

A. The Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS) is an example of a program that uses money paid by California drivers to directly subsidize the use of combustion fuels, such as dirty hydrogen, biofuels, and biogas that pollute our air. In 2022, almost 80% of LCFS credits went to non-ZEV fuels, like biofuels and biogas.[19] As opposed to zero-emission transportation technology, biofuels pollute the air both when they're processed in refineries and when they're burned as fuel in vehicles. The conversion of refineries to biofuels is a lifeline for Big Oil, extending the life of refineries that should be shut down as we transition to clean energy. Biofuels can be just as polluting as fossil fuels, and in some cases can be even worse. Biofuel refining also releases significantly greater amounts of certain hazardous air pollutants than oil refineries—including carcinogens like formaldehyde. Communities like Martinez, Rodeo, and Paramount bear the brunt of this pollution.

Electrification is the key to cleaning up transportation pollution, not the continued combustion of polluting fuels. The vast majority of what the LCFS supports each year—burning fuels to power transportation—is not what California needs. We need to focus on zero-emissions transportation that will clean our air and deliver the strongest climate benefits. Environmental justice groups offered concrete suggestions for how to reform the LCFS, but CARB staff didn't properly consider those recommendations, or the science underpinning them. We are willing to work with CARB to make sure the LCFS stops subsidizing combustion fuels that aren't as clean as industry claims, and starts rewarding ZEVs for the benefits that they deliver.

B. The Cap-and-Trade Program

The cap-and-trade program is another example of a program that supports the fossil fuel industry through loopholes and giveaways. Reforms are urgently needed, and it's critical that the cap-and trade program is not allowed to continue in its current form. There are specific changes that CARB should make to the program that would decenter fossil fuel combustion while generating additional revenue for investment in ZE technology. These changes include:

- **Eliminating free allowances for the oil and gas industry.** Currently, oil and gas companies receive a free, direct allocation of emissions allowances for industrial activities that include oil refining, hydrogen production, and extraction of crude petroleum and methane gas. Eliminating these free allowances would raise additional revenue for the GGRF, which could be used to cut fossil fuel usage (including in the transportation sector) and provide direct benefits to environmental justice communities.

[19] Kleinman Center for Energy Policy, *California's Low Carbon Fuel Standard*, (Oct. 2024), at 4, 2024), at 4, https://kleinmanenergy.upenn.edu/wp-content/uploads/2024/10/KC-Paper-16-Californias-Low-Carbon-Fuel-Standard.pdf.

Analysis by California Environmental Justice Alliance (CEJA) and other environmental justice groups found that, based on CARB's vintage 2024 allowance allocation summary, the oil and gas industry (for activities including petroleum refining and hydrogen production, and crude petroleum and natural gas extraction) received 25,284,110 free allowances in 2024.[20] At an average 2024 auction settlement price of $35.23, the free allowances given to the oil and gas industry in 2024 alone represent a value of over $890 million.[21]

- **Eliminating offsets.** Eliminating offsets from the cap-and-trade program would generate additional revenue for the GGRF. Analysis by Resources for the Future (RFF) found that if offsets were eliminated from the cap-and-trade program from 2031 onward, cumulative additional revenues from 2025 through 2030 would total approximately $1.6 billion in a scenario with low allowance demand, and $4.2 billion in a scenario with high allowance demand (which RFF characterizes as the more realistic scenario).[22]

VIII. Ensure a Stable, Equitable Appropriations Landscape to Fund ZE Transportation.

CARB must use every tool available to ensure that we have a stable landscape for appropriations that enables the transition to ZE transportation, and also ensure that funding for electrification is equitably distributed so that low-income communities, communities of color, and rural communities are not left behind in the transition. Year-to-year variations in the funding available for ZE transportation programs make it difficult to build consistent progress, and can prevent the private sector from having the certainty that they need to invest. With rapid and unpredictable changes to the federal funding landscape, it's even more critical that California provides consistent, stable investment to support a transition to zero-emission transportation.

This must include continuous investments for programs that specifically benefit low-income Californians, and California must also ensure that we have adequate funding to support AB 617 into the future. Funding must be extended to ensure that AB 617 communities can continue their work until pollution disparities are fully eliminated, and additional communities that are overburdened by pollution should be able to take part in the program. CARB must also work to make sure that implementation activities identified in Community Emission Reduction Programs ("CERPs") are adequately funded.

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[20] CARB, *Cap-and-Trade Program Vintage 2024 Allocation Summary* (Dec. 8, 2023), https://ww2.arb.ca.gov/sites/default/files/2023-12/nc-v2024%20Public%20Allocation%20Summary.pdf.
[21] *See* CARB, *California Cap-And-Trade Program: Summary of California-Quebec Joint Auction Settlement Prices and Results*, (May 2025), https://ww2.arb.ca.gov/sites/default/files/2020-08/results_summary.pdf.
[22] Dallas Burtraw & Nicholas Roy, *Offset Reform Could Drive Investments in Nature-Based Climate Solutions*, Issue Brief 25-02, Resources for the Future, at 3 (Jan. 2025), https://media.rff.org/documents/IB_25-02_updated_3.13.2025_bXnHIVH.pdf.

One funding stream for investing in ZE transportation is the Greenhouse Gas Reduction Fund ("GGRF"). However, the appropriation of money from the GGRF varies widely from year to year. We do not yet have consistent GGRF funding streams that are aligned with the urgent need to get off of fossil fuels and electrify our transportation sector. The budget negotiations this year have provided a clear example of this, as we saw CARB's multi-year spending plan halted, and funding for many climate programs put at risk.

CARB should support continuous allocations from the GGRF to cut fossil fuel use and deploy ZE technologies at scale across our economy, including in the transportation sector. We must act to ensure that there is adequate funding, and ensure that funding is stable on a year-to-year basis. As advocates, we will keep pushing for a stable, comprehensive strategy for investment in zero-emission transportation.

IX. Conclusion

California stands at a defining moment in its transition to a zero-emission transportation sector. The decisions that CARB makes in the coming months will help determine whether or not the Trump Administration's illegal rollbacks are successful in derailing California's progress towards decarbonization and clean air. We must meet the moment by ensuring that California has a comprehensive, ambitious, equity-focused strategy for deploying ZE technologies for both on-road and off-road vehicles.

We urge CARB to move swiftly and decisively on the full suite of zero-emission rulemakings necessary to ensure that California follows through on its clean air and climate commitments. This includes adopting strong, enforceable standards consistent with 100% ZEV goals by 2035 and 2045 through ACC III, ACT II, ACF II, In-Use Locomotive II, Harbor Craft II, a Clean Shipping/Ocean-Going Vessels regulation, TRU II, and CHE II. At the same time, CARB must support complementary, community-driven solutions such as Indirect Source Rules, cargo fees, and programs that ensure smaller fleets and frontline communities can access the benefits of zero-emission technology.

Thank you for your consideration. We appreciate your leadership and look forward to engaging with you further to advance ZE technologies in our transportation sector.

Cc: Governor Gavin Newsom

Sincerely,

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