July 17, 2026
Clerk's Office, California Air Resources Board
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Via electronic submittal

RE: Comments on CARB's Drive Forward Light-Duty Vehicle Program

Chair Sanchez and Members of the California Air Resources Board:

The undersigned environmental, community, and health organizations appreciate the opportunity to comment on the California Air Resources Board's ("CARB") proposal for new multi-pollutant light-duty vehicle standards. With federal attacks on clean air protections, California's leadership in cutting harmful transportation emissions is more critical than ever. We support CARB moving forward with strong fleet-average light-duty vehicle standards. **CARB's Drive Forward Light-Duty Vehicle Program must be designed to: (1) ensure the South Coast and San Joaquin Valley air basins can meet federal clean air standards and (2) keep California on track to meet its legally required 2045 climate goal. CARB's initial Drive Forward proposal must be significantly strengthened to meet these objectives.**

Illegal actions by the federal government have threatened CARB's authority to enforce the most recent regulatory standards (including Advanced Clean Cars II, Advanced Clean Trucks, and the Heavy-Duty Omnibus rules), which puts California's ability to meet its air quality, climate, and environmental justice obligations at risk. But California's authority to develop and enforce new regulations is clear. With some of the worst air quality in the country and disproportionate pollution burdens on Black, brown, and low income communities,[1] escalating climate harms across the state, and volatile prices at the pump, it is essential that California set strong standards to cut vehicle pollution, reduce consumer dependence on oil, and accelerate the deployment of zero-emission vehicles.

CARB Must Adopt Strong Criteria-Pollutant Standards Sufficient to Protect Public Health and Meet Clean Air Act Obligations

CARB must deliver a strong Light-Duty Program by adopting more protective non-methane organic gases and oxides of nitrogen (NMOG + NOx), evaporative emissions, and particulate matter (PM) standards that fully phase in by Model Year 2036 and deliver the passenger-vehicle pollution reductions needed for California to meet its air quality obligations, including National Ambient Air Quality Standards (NAAQS) for ozone. Particulate matter and nitrogen oxide are major transportation-related pollutants that continue to harm public health in California. Strong transportation standards that increase zero-emission vehicle adoption across sectors **could save California $150 billion in health costs while saving 15,000 lives**.[2] California has several regions that suffer from the worst air quality in the country despite the progress the state has made in reducing emissions from transportation sources over the last several decades. As CARB staff emphasized at the Drive Forward Light-Duty Program workshops, air pollution continues to threaten public health across the state, especially for disadvantaged communities and low-income households that are disproportionately impacted by unhealthy air pollution and dangerous climate impacts.

Stronger light-duty vehicle standards would deliver substantial public health benefits. Without new achievable regulations that keep California's zero-emission transition on track and swiftly cut vehicle pollution, more Californians will suffer from asthma, cardiopulmonary disease, and premature death. California's previous Advanced Clean Cars II (ACC II) standard was projected to prevent 1,290 deaths, 460 hospital admissions, and 650 emergency room visits for asthma—benefits valued at almost $13 billion in avoided health costs.[3] These health

[1] Union of Concerned Scientists, "Inequitable Exposure to Air Pollution from Vehicles in California (2019)" (January 28, 2019), https://www.ucs.org/resources/inequitable-exposure-air-pollution-vehicles-california-2019.
[2] American Lung Association, Living and Breathing in California: Health Benefits of Clean Air Programs (2024), https://www.lung.org/getmedia/fed6a54d-524e-409e-897a-a4b1cffa6400/ala-ca-clean-air-programs
[3] California Air Resources Board, California moves to accelerate to 100% new zero-emission vehicle sales by 2035 (Aug. 25, 2022), https://ww2.arb.ca.gov/news/california-moves-accelerate-100-new-zero-emission-vehicle-sales-2035.

outcomes are also affordability benefits for Californians. Researchers have found that the average annual per person incremental medical cost of asthma in the U.S. is approximately $3,266, rising to $3,581 for people living below the poverty line.[4] These costs add up immensely over time, with the total lifetime cost for a new asthma case in the U.S. estimated at $36,500.[5] For low-income families, these costs can be especially devastating. For taxpayers, reducing asthma-related healthcare costs means less of a burden on public goods.

CARB's Drive Forward Light-Duty Program must deliver the pollution reductions needed from passenger vehicles necessary to meet our statewide goals and federal requirements, including our federal Clean Air Act obligations. Both the South Coast Air Basin and the San Joaquin Valley are currently classified as "extreme" nonattainment areas, the most severe classification under the Clean Air Act, for the 2015 8-hour ozone NAAQS. Failure to attain the standard by the 2037 deadline would trigger severe penalties under the Clean Air Act, including the potential loss of federal highway funding. In the San Joaquin Valley, air quality modeling shows that total NOx emissions will need to decrease to approximately 62 tons per day in 2037 to achieve the ozone standard, which is a 29% reduction from baseline and a 73% reduction from current levels. In the South Coast, the Air Quality Management District projected that it must reduce NOx emissions by 124 tons per day by 2037 to meet the standards, which is a 67% reduction from baseline levels and 83% reduction from current levels.[6] The South Coast Air Quality Management District found that for on-road mobile sources specifically, NOx emissions would need to decline by 91% between 2018 and 2037 to achieve federal ozone compliance, or from 168 tons per day to 15 tons per day.[7] For light-duty vehicles, this corresponds to a decline from 45 tons per day to just over 4 tons per day in 2037.[8]

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[4] Tursynbek Nurmagambetov, et al., The Economic Burden of Asthma in the United States, 2008–2013, Annals of the Am. Thoracic Soc'y, Vol. 15, Iss. 3, at 353 (Mar. 2018), https://www.atsjournals.org/doi/abs/10.1513/AnnalsATS.201703-259OC.

[5] Anna Belova et al., Estimating Lifetime Cost of Illness, An Application to Asthma, Annals of the Am. Thoracic Soc'y, Vol. 17, Iss. 12, at 1566 (Dec. 2020), https://www.atsjournals.org/doi/full/10.1513/AnnalsATS.201910-729OC.

[6] S. Coast Air Quality Mgmt. Dist., *Final 2022 Air Quality Management Plan*, 4-1, https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf.

[7] South Coast Air Quality Management District, 2022 Air Quality Management Plan (December 2, 2022), available at https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=edcebd61_16; Figure ES-2 and Table D-1 of Appendix III display on-road vehicle NOx emissions as 168 tpd, and Figure ES-3 displays a 61% NOx emissions reduction relative to a 2037 baseline (denoted as 39.40 tpd in Table D-15 of Appendix III) as necessary to be in attainment for ozone. This corresponds to a 91% decline compared to 2018.

[8] South Coast Air Quality Management District, 2022 Air Quality Management Plan (December 2, 2022), available at https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=edcebd61_16; Figure ES-2 and Table D-1 of Appendix III display on-road vehicle NOx emissions as 168 tpd, and Figure ES-3 displays a 61% NOx emissions reduction relative to a 2037 baseline (denoted as 39.40 tpd in Table D-15 of Appendix III) as necessary to be in attainment for ozone. This corresponds to a 91% decline compared to 2018.

These projections likely underestimate the challenge California now faces because they assumed emissions reductions that have since been jeopardized by federal rollbacks and attacks on the state's ability to enforce our clean car standards. Mobile sources are expected to account for about 80% of regional NOx emissions in the South Coast in 2037.[9] South Coast Air Quality Management District's 2022 Air Quality Management Plan acknowledged that "there is no viable pathway to achieve the needed reductions without widespread adoption of zero emissions (ZE) technologies across all mobile sectors and stationary sources, large and small."[10]

We therefore urge CARB to adopt more protective NMOG+NOx tailpipe standards, NMOG evaporative standards, PM tailpipe standards and brake wear standards for light-duty vehicles. These standards are necessary for the South Coast and San Joaquin Valley — two of the most polluted air basins in the country — to achieve compliance with the emission-reduction commitments in California's state implementation plans (SIPs) and to attain national and state ambient air quality standards. **CARB's proposal for NMOG + NOx standards of 12 milligrams per mile for Model Year 2038 for light-duty vehicles and 100 milligrams per mile for Model Year 2033 for medium-duty vehicles are insufficient for meeting this emissions goal. CARB must strengthen this standard to a maximum of 7 mg/mi by Model Year 2036 for light-duty vehicles and revise the proposed medium-duty vehicle standards to be significantly more protective to protect our health and give California a chance at NAAQS ozone attainment.**

A Fleet-Average GHG Standard Must be Consistent with California's 2045 Climate Goal

Californians across the state are also facing an unprecedented and escalating financial burden from the climate crisis. Tens of thousands have lost their homes to wildfires and floods, home insurance costs are skyrocketing, and the financial impacts of sea level rise loom large. A recent study from the UCLA Fielding School of Public Health found that from 2008 to 2018, more than 52,000 premature deaths in California were attributable to fine particulate matter (PM2.5) from wildland fire, with an estimated economic impact of more than $430 billion.[11] California's Insurance Commissioner studied seven extreme heat events from 2013 to 2022 and found that these events resulted in almost 460 deaths, over 5,000 hospitalizations, and nearly 10,600 emergency department visits, with associated total costs of over $4.8 billion.[12] The health costs of illness, disease, and premature deaths exacerbated by climate change impacts are

[9] *Id*. at 4-7.
[10] *Id.* at ES-5.
[11] Connolly, R. et.al. Mortality attributable to PM2.5 from wildland fires in California from 2008 to 2018. ScienceAdvances: vol.. 10, 2024. DOI: 10.1126/sciadv.adl125
[12] Impacts of extreme heat to California's people, infrastructure, and economy. IEc and CA Department of Insurance. July, 2024. https://www.insurance.ca.gov/01-consumers/180-climate-change/upload/Impacts-of-extreme-heat-to-California-s-people-infrastructure-and-economy-by-California-Department-of-Insurance-June-2024.pdf

staggering and fall hardest on the most vulnerable communities. These costs are directly contributing to California's affordability crisis and will get far worse in the future without aggressive action to cut climate pollution.

Fossil fuel passenger vehicles are responsible for 28.3% of California's greenhouse gas (GHG) emissions.[13] These emissions must be significantly curbed through CARB's Drive Forward Program if California is to meet its emission reduction goal of 85% below 1990 levels by 2045 (82% below 2023 levels) and its goal of economy-wide carbon neutrality, as established by AB 1279: *The California Climate Crisis Act*.[14] **CARB's proposal for a Model Year 2038 fleet average standard of 80 grams CO_2 per mile is insufficient for meeting this emissions goal. We urge CARB to strengthen this standard to approach at most 40 g/mi by Model Year 2036.**

Given the outsized contribution of passenger vehicles to California emissions, and the wide availability of technology to drastically reduce these emissions, CARB's new standards must achieve a greater reduction in passenger vehicle emissions than is expected in other harder-to-decarbonize sectors. Automakers have the available technology needed to meet stringent fleet average light-duty vehicle standards and will have sufficient lead time to plan for implementation, given that the standards would start in Model Year 2031.

For California to have a reasonable chance of meeting its economy-wide goal of 85% emissions reduction below 1990 levels by 2045, the light-duty passenger vehicle sector must be on pace to achieve *even more* proportional emissions reductions than the economy-wide target. And to be most effective, these reductions must be in the near-term and not delayed past 2035. California has lost ground because of the federal government's reckless attacks on our clean air protections and climate policy. CARB has the opportunity through this rulemaking process to get California back on track by adopting a strong, achievable fleet average vehicle standard of 40 g/mi or less in Model Year 2036.

This strong fleet-average GHG standard would still provide automakers with flexibility to meet the requirement with a variety of reasonable fleet mixes. CARB can and should ensure these fleet mixes fully utilize electric vehicles – the cleanest available technology– by including provisions that advance and support the electric vehicle market. These measures will be critical to improve consumer choice, protect air quality and continue California's broader transportation fuels transition. A strong fleet-average GHG standard would also allow CARB to design an effective early compliance mechanism to encourage deployment of low-emission technologies as

[13] California Air Resources Board, California Greenhouse Gas Emissions from 2000 to 2023: Trends of Emissions and Other Indicators (November 4, 2025), Figure 5, https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf

[14] Health & Saf. Code § 38562.2; California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (December 2022), https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents

rapidly as possible. It is particularly important that CARB reduce the allowable emissions in Model Year 2031 to ensure that potential early compliance options are effective.

To further protect air quality, we support inclusion of standards to reduce the non-exhaust emissions from brake wear that comprise a large and growing proportion of fine particle emissions. If necessary, such consideration could reasonably occur on a longer timeline. It should not delay CARB's rulemaking efforts on the remainder of the light-duty program.

California's transition to nonpolluting electric vehicles is already underway and will deliver billions in savings for Californians

The transition to nonpolluting electric passenger vehicles is already underway, with California leading the nation in electric car adoption and creating a large and durable ZEV market. In 2024, one in four new cars sold in California was electric.[15] Zero-emission cars accounted for 29.1% of all new car sales from July through September of 2025, the highest quarterly share for ZEVs ever reported in the state.[16] By the end of 2025, California had surpassed 2.5 million cumulative new ZEV sales, which is a growth of more than 300% since the end of 2019.[17] California's FY 2026-27 Budget includes over $135 million for a new light-duty ZEV incentive program for first-time buyers, which will be matched with funds from manufacturers. This new state program will help backfill the loss of federal incentives, bringing down the upfront cost of ZEVs and accelerating ZEV adoption.

Electric cars save drivers money. Compared with internal combustion engine vehicles, electric vehicles can reduce average fuel and maintenance costs by more than $1,500 annually for drivers who travel 12,000 miles per year in California. [18] As ZEV sales have increased, California's ZEV economy has grown, with more electric cars being produced in California than in any other state. According to the American EV Jobs Alliance, there are more than 250,000 workers employed in the EV economy in California.[19] These jobs span vehicle design and manufacturers, battery R&D and engineering, charging infrastructure, and service and maintenance. A strong program will help keep California competitive in the global ZEV marketplace, support our clean economy, and provide Californians with the affordable clean cars they need.

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[15] California Energy Commission, New ZEV Sales in California (accessed Nov. 19, 2025), https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/new-zev

[16] Office of Governor Gavin Newsom, Record-breaking quarter: California reaches historic high in ZEV sales (Oct. 13, 2025), https://www.gov.ca.gov/2025/10/13/record-breaking-quarter-california-reaches-historic-high-in-zev-sales/

[17] California Energy Commission, California surpasses 2.5 million ZEV sales (Jan. 20, 2026), https://www.energy.ca.gov/news/2026-01/california-surpasses-25-million-zev-sales

[18] Coltura, Coltura EV Cost Savings Index, https://data.coltura.org/ev-savings-index.

[19] American EV Jobs Alliance, https://www.caevjobs.org/.

The Drive Forward Light-Duty Program's Outreach and Engagement Must Center Those Who Are Most Impacted by Vehicle Pollution

Those who live and work on the frontlines of transportation-related pollution bear a disproportionate health burden, and are also the closest to the solutions necessary to protect the health and safety of their communities. Grassroots and frontline community-led organizations must be engaged meaningfully and put in position to lead in stakeholder and public engagement efforts to ensure the Drive Forward Light-Duty Program meets the needs of all Californians.

We appreciate CARB staff's stated commitment to early engagement and partnership with community members and community-based organizations across the state. It is essential that their perspectives and lived experiences help guide this work. CARB should establish meaningful community engagement practices that accommodate and facilitate the ability for community members and frontline workers to fully participate in the rulemaking process. This includes allowing for public access to key staff and decisionmakers, and scheduling frequent, regular meetings at times and locations that are available to community members. We also urge staff to ensure full access to all information, research, and assumptions used throughout the rulemaking process.

CARB Staff Must Analyze Whether the Proposed Standards Deliver the Emission Reductions Needed to Meet State and Federal Climate and Clean Air Requirements

We urge CARB staff to clearly analyze–and make publicly available prior to the release of the Initial Statement of Reasons–how the proposed Drive Forward Light-Duty Program standards will translate into real-world reductions in criteria air pollution and climate pollution over time. This is necessary in order for the public to evaluate whether fleet-average standards for new vehicles are sufficient. CARB should quantify the total expected reduction in climate and air pollution and transparently compare those reductions against California's legally binding climate targets, state implementation plan commitments, and federal Clean Air Act attainment obligations.

This analysis should show how the proposed standards perform into the future, including key milestone years such as 2035, 2037, 2040, and 2045. It should also identify how much pollution would remain from light-duty vehicles under the proposal, and how quickly fleet turnover would deliver benefits. For ozone nonattainment regions such as the South Coast and San Joaquin Valley, CARB should specifically evaluate whether the proposed standards deliver the passenger-vehicle NOx reductions needed to meet the 2037 attainment deadline. CARB should also make clear the assumptions underlying this analysis, including projected vehicle sales, fleet mix, and plug-in hybrid treatment.

CARB should make the results of these analyses publicly available before or at the next Drive Forward Light-Duty Program workshop, in a format that allows the public to compare the

proposed standards against California's climate goals, SIP commitments, and Clean Air Act requirements. This information is essential for meaningful public review and for ensuring that the Drive Forward Light-Duty Program is designed to achieve California's climate and clean air obligations.

CARB Must Consider Stronger MDV Standards

We appreciate CARB's inclusion of medium-duty vehicles in Class 2b and 3 within this Drive Forward Light-Duty Program proposal. However, we urge CARB to consider a stronger NMOG+NOx fleet average standard, Federal Test Procedure (FTP) certification bins, PM and in-use standards for MDVs.

CARB should closely examine potential negative impacts of combining Class 2b and Class 3 NMOG+NOx fleet standards. This approach may reduce the effectiveness of the proposed fleet standards by encouraging manufacturers to shift existing Class 2a ZEVs into the less stringent Class 2b category to reduce otherwise required reductions in emissions from Class 3 vehicles. It could also reduce deployment of Class 3 vocational and delivery ZEVs, where progress is lagging that of Class 2b.

Conclusion

We support the full scope of the new rulemaking and consider each of the proposed priority areas essential to California's path towards a zero-emission future. Our coalition looks forward to continued participation in the rulemaking process and to continue working with CARB to drive greater electric vehicle adoption throughout California and reduce emissions from all vehicles.

Sincerely,

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