

REPORT TO THE GOVERNOR IN RESPONSE TO

Executive Order N-27-25 on Zero-Emission Vehicle Deployment



AUGUST 2025



Introduction

California Reaffirms Commitment to Clean Transportation

In response to federal actions threatening to overturn California's authority to cut vehicle pollution, Governor Gavin Newsom signed Executive Order N-27-25 on June 12, 2025. This order strengthens the state's commitment to reduce harmful air pollution from transportation and protect public health.

It directs several state agencies – including the California Air Resources Board (CARB), California Energy Commission (CEC), Governor's Office of Business and Economic Development (GO-Biz), California State Transportation Agency (CalSTA), and Department of Consumer Affairs (DCA) – to recommend ways to expand the use of zero-emission vehicles (ZEVs) across all vehicle types. The goal is to make clean transportation more affordable, reliable, and accessible.

This order builds on previous efforts including:

- Executive Order N-79-20 (2020): Accelerates ZEV deployment to improve air quality and reduce greenhouse gas emissions.
- Assembly Bill 1279 (2022): Sets a goal for carbon neutrality by 2045.

Despite decades of progress, recent illegal federal efforts to revoke California's clean air waivers threaten the state's ability to meet clean air and climate goals. To keep momentum, state agencies held public sessions to help shape recommendations that support public health, climate action, and economic resilience, especially in communities most affected by pollution, within existing legal authorities.

California's Longstanding Leadership

Since the Clean Air Act was adopted in 1970, the U.S. Environmental Protection Agency has granted California more than 100 waivers for its clean air and climate efforts. California has consistently shown that these standards are achievable and that manufacturers have enough lead time to develop the technology to meet them.

From groundbreaking emissions control devices like the catalytic converter to zero-emission technology, California's rules have driven major innovations that have helped reduce vehicle emissions worldwide. Thanks to these efforts, today's average new car produces over 99% less smog-forming pollution than cars from the 1970s.

California's support for clean cars is unmatched and today the state is home to a thriving ZEV market.

- Around one in five new cars sold in California are ZEVs with the state hitting its goal of two million ZEVs ahead of schedule.
- 56 ZEV and ZEV-related manufacturers are operating in California – leading the nation in ZEV manufacturing jobs.

- 178,000 public or shared private electric vehicle chargers have been installed throughout California – nearly 50% more chargers than gas pumps.

California's efforts are strengthened through collaboration with many partners who also recognize the value of clean transportation technology. Across the nation, 17 other states and the District of Columbia have chosen to adopt at least part of California's vehicle standards because they also need the benefits of cleaner transportation. California does not stand alone, and its efforts are meaningful. The demand in these states for clean transportation collectively represents 40% of the nation's new light-duty vehicle market and 25% of the nation's new heavy-duty vehicle market, and 3-4 times that of California alone. In addition, three of these states have established complementary regulations similar to California's Low Carbon Fuel Standard (LCFS) to further advance the clean vehicle market.

Why California Must Continue Cutting Vehicle Emissions

California has made major progress on air quality, but its geography and persistent pollution challenges mean the work isn't over. The state must continue reducing vehicle emissions to meet national air quality standards, fulfill state goals, and fight climate change.

- Five of the 10 most polluted cities in the U.S. are in California.
- 10 million Californians in the San Joaquin Valley and Los Angeles live in areas with "severe nonattainment" for ozone – meaning the air is dangerously polluted.
- These communities face higher rates of asthma and heart and lung disease, which contribute to shorter life expectancy.

ZEVs are essential to protecting public health and meeting clean air goals.

Charting the Road Ahead

Meaningful involvement is foundational to ensure that all communities, especially low-income communities of color that may face historical barriers, can inform the recommendations in this report. In advance of developing the report, state agencies launched a series of public sessions throughout the state to hear from communities, industry experts, tribes, fleet operators, and others on ways to increase adoption of ZEVs across California.

- Three in-person and webcast sessions were held in Fresno, Sacramento, and Long Beach in July 2025.
- A fourth online-only community evening session allowed more people to participate and share input.
- Attendees included community members, tribal representatives, environmental leaders, industry experts, and fleet operators.

Participants were asked four key questions about how California can:

1. Keep momentum in the ZEV market despite federal changes
2. Create programs to meet air quality and climate goals
3. Use non-financial incentives to support ZEV adoption
4. Design inclusive programs that serve all Californians

Participants could respond publicly or anonymously using an online tool. CARB also opened a public docket for written comments.

These activities helped build ongoing communication between the public and state agencies, ensuring clean transportation solutions reflect community needs. As the state moves towards implementation, it will be critical to continue its engagement, especially with low-income communities of color that continue to face historical barriers, to ensure all communities realize the benefits from these recommendations.

Priority Recommended Actions

CARB, CEC, GO-Biz, CalSTA, DCA, and the California Public Utilities Commission (CPUC) have collectively identified the following recommended actions to further light-, medium-, and heavy-duty ZEV adoption in the state.

These actions bring together the agencies' shared goals of advancing affordable and reliable clean transportation options

The recommendations are organized into six categories – private investment, incentives, infrastructure, fuel pricing, regulations, and procurement – and reflect near-term actions that will have a significant impact on maintaining momentum and accelerating progress towards widespread ZEV adoption within existing state authorities.

Private Investment

Attracting private investment through the LCFS is a critical component to supporting accelerated ZEV adoption and moving away from fossil fuels. This program is bringing \$4 billion of private investment annually to support low-carbon fuels and zero-emission technologies to meet consumer demand in California –investments that create jobs, spur technology development, and help companies maintain a competitive edge in a global market headed towards zero-emission.

- **Sustain the LCFS program to ensure private investment continues to support the ZEV market.** With over 200 private companies participating in the LCFS, this program is effectively attracting investment from clean fuel producers (electricity, hydrogen, renewable diesel) and fueling infrastructure companies to generate credits that help subsidize clean fuels used in ZEVs, slashing ZEV ownership costs. Utilities also generate credits that can be used to fund the deployment of ZEVs in their service territories, with credit value going towards equity projects and further deployment.

Local governments benefit too, earning credits for clean public transit and expansion— over \$300 million in LCFS credit value to-date has gone to transit agencies. Traditional fuel suppliers are also generating credits by transitioning some of their in-state assets to cleaner alternatives for gasoline and diesel, and by diversifying their fuels production to include fuels such as sustainable aviation fuel and hydrogen.

Incentives

Incentives are an important component of the state's ZEV strategy that crosscuts the need to address both the affordability of vehicles and infrastructure and to support market expansion. These options, contingent upon available resources, would provide multi-year certainty for the ZEV market and have direct benefits for consumers that impact purchasing decisions.

- **Backfill the federal tax credits.** Federal clean vehicle tax credits will end after September 30, 2025. Subject to available resources and scaled to match our resources and policy goals, funding could provide point-of-sale rebates, vouchers, or other credits to keep new vehicle sales robust and expand the availability of used ZEVs on the secondary market. Incentives should support new and used vehicle purchases and leases and be available for individual vehicle purchases as well as bulk purchases by fleet operators.
- **Support ZEV market deployment incentive and rebate programs.** Reliable and consistent funding to CARB and CEC for the state's ZEV deployment and infrastructure incentive programs supports the expansion of existing and emerging light-, medium-, and heavy-duty markets (including transit), and increases access to ZEVs for low-income consumers and small businesses.
- **Create an education pipeline for good paying jobs.** The California Labor and Workforce Development Agency, in consultation with CARB, CEC, DCA, GO-Biz, and CalSTA, should develop additional educational pathways and ensure equitable access to apprenticeships, college courses, and certification programs in the clean transportation industry.
- **Explore options to retain high-occupancy vehicle (HOV) access.** CalSTA, in partnership with CARB, should investigate opportunities to reinstate HOV lane access for ZEVs after the federal highway program providing for that access expires on September 30, 2025, as well as opportunities for providing ZEVs with free or reduced fee access to Express Lanes, in compliance with applicable federal laws. Access to HOV lanes is a well-established, non-monetary incentive that is a critical element in purchasing decisions made by consumers in areas of the state with high congestion.

Infrastructure

The availability of reliable infrastructure remains one of the largest barriers to ZEV adoption for both private use and commercial deployments. Consumers need to feel comfortable that there is not only enough fueling capacity in the state, but that the fueling is accessible,

properly placed to serve charging and fueling demand, and in working order when accessed. Moving forward on the actions identified below will have an immediate impact on making progress towards this endpoint.

- **Collaborative build-out of infrastructure.** Prioritize the build out and funding of electric vehicle charging and hydrogen infrastructure along major corridors, in collaboration with West Coast partners and in line with recommendations in the [Clean Freight Corridor Efficiency Assessment](#) required by Senate Bill 671, the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES) [Transportation White Paper](#), the Pacific Coast Collaborative's [West Coast Electric Highway](#), and the Joint Office of Energy and Transportation's [National Zero-Emission Freight Corridor Strategy](#).
- **Increase electric vehicle (EV) charger reliability and access.**
 - Advance efforts to increase EV charger reliability through pending regulations, by providing enforcement authority, data sharing, and reporting.
 - Ensure regulations provide consistent compliance approaches and timelines across all currently installed chargers and enable timely commissioning and repair of EV charging stations.
 - Provide flexibility to payment methods at public chargers, accelerate Plug and Charge implementation, and ensure transparent charger price and navigation data access.
 - Expand support to at-residence charging installation, both single family and multi-family properties.
- **Accelerate zero-emission infrastructure build-out.** Advance strategies to accelerate zero-emission infrastructure development to eliminate delays impeding EV charging installation. Strategies may include permit streamlining, faster utility energization processes, flexible service connections, and other methods.
- **Maximize use of existing transportation funding programs to support ZEVs and infrastructure.**
 - Increase utilization of conventional funding programs such as the Trade Corridor Enhancement Program to support ZEV infrastructure needs.
 - Utilize qualifying federal funds for ZEVs and supporting infrastructure when possible.

Fuel Pricing

Strategies that reduce the cost of fueling a ZEV will provide long-term support for the ZEV market. Fueling costs have a direct impact on the total cost of ownership of a ZEV and by reducing and stabilizing these ongoing costs the state can play a significant role in reducing the overall price gap between a ZEV and conventionally fueled vehicle. The identified actions will lower overall grid energy and hydrogen transportation fuel costs.

- **Explore options to utilize the California Climate Credit to support more affordable ZEV charging.** Incorporate into the CPUC's recently opened rulemaking to improve the distribution of the California Climate Credit.

- **Expand regional power markets.** Pursue efforts that enable the California Independent System Operator (CAISO) to partner with an independent regional organization to manage and govern regional power markets. As evidenced in the [CEC's latest studies](#), these markets can lower energy costs, improve grid supply reliability and reduce grid emissions, which would make electrification more affordable.
- **Leverage private investments to bring down the cost of hydrogen.** Explore opportunities for state-connected projects to buy hydrogen fuel facilitated through ARCHES (for use cases in buses, trucks, rail, ports, power sector) with the goal of providing demand certainty for hydrogen producers and infrastructure providers and driving down fuel costs.
- **Unlock beneficial Vehicle-Grid Integration (VGI) technology.** Continue to improve the energization process to enable vehicles to power homes, business and/or export power back to the grid during peak demand and periods of stress. Develop dynamic rates that align EV charging and discharging with grid needs, delivering benefits to ratepayers and EV owners. Establish incentives to reward automakers who manufacture vehicles that can provide backup power. Set standards for chargers to enable the use of VGI technology.

Regulations

The agencies are recommending two new regulatory programs that will address consumer protection and ensure overburdened communities see the benefits of reduced emissions within their community. These recommended actions may require direction from the Legislature to clarify agency authority.

- **Advance ZEV consumer assurance measures.** The DCA or CalSTA should explore options for, and implement if feasible, consumer protection actions that bolster ZEV buyer confidence by ensuring ZEVs are equally as reliable and repairable as conventional vehicles. This would include actions such as battery warranty, vehicle durability, and battery state of health data requirements.
- **Advance statewide indirect source rule.** CARB should collaborate with local air districts to develop and implement a statewide indirect source rule. This program would reduce emissions from mobile sources that frequent indirect sources such as large warehouses, ports, airports, and railyards.

Procurement

The state has the ability to use its purchasing power as a market participant to put the state on the leading edge of ZEV deployments and support local governments in their efforts to go zero-emission. These recommended actions will put the state in the position to lead by example, expand the ZEV market, and align the procurements with the state's clean vehicle goals.

- **Prioritize use of ZEVs in state procurement.**
 - Ensure that state procurement procedures include a ZEV-first policy. This action should prioritize the use of ZEVs in state contracted services (including delivery services and rental contracts) and require the state to procure ZEVs and supporting infrastructure where feasible.
 - Ensure that state properties/facilities prioritize installation of EV charging infrastructure.
 - CARB should explore opportunities for development of voluntary programs for fleets to identify that they are operating ZEVs to be prioritized in the state procurement process.
- **Support local government fleet electrification.**
 - Update funding guidelines for state programs supporting local government and transit vehicle procurement to require or incentivize ZEV purchases.
 - Develop statewide cooperative purchasing strategies to aid local government agencies in procuring ZEVs at the lowest cost.