

# EV REGULATIONS:

## Medium- and Heavy-Duty Zero Emission Vehicle (ZEV) Requirement

The California Air Resources Board’s (ARB) Advanced Clean Truck Program requires all new medium- and heavy-duty vehicles sold in California to be a ZEV by 2045. Zero-emission technologies include all-electric and fuel cell electric vehicles. Beginning in 2024, manufacturers seeking ARB certification for Class 2b through Class 8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales. Manufacturers must achieve the following annual sales percentages for medium- and heavy-duty ZEVs sold in California:

	<b>ZEV Sales Percentages</b>			
Vehicle Model Year (MY)	Class 2b-3	Class 4-5	Class 6-8, excluding tractors	Class 7-8 Tractors
2024	5%	9%	9%	5%
2025	7%	11%	11%	7%
2026	10%	13%	13%	10%
2027	15%	20%	20%	15%
2028	20%	30%	30%	20%
2029	25%	40%	40%	25%
2030	30%	50%	50%	30%
2031	35%	55%	55%	35%
2032	40%	60%	60%	40%
2033	45%	65%	65%	40%
2034	50%	70%	70%	40%

2035 and future years	55%	75%	75%	40%
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\*Excludes pickup trucks for 2024-2026 MYs

Additionally, entities with annual gross revenues greater than \$50 million, fleet owners with 50 or more medium- and heavy-duty vehicles, and any California government or federal agency with one or more vehicles over 8,500 pounds must report their existing fleet operations to ensure fleets are purchasing and placing zero-emission trucks in the correct service locations.

For more information, including additional requirements and exemptions, see the ARB [Advanced Clean Trucks Program](#) website.

(Reference [California Code of Regulations](#) Title 13, Sections 1963-1963.5 and 2012-2012.2)

## Zero-Emission Airport Shuttle Requirement

By 2035, all airport fixed-route shuttle fleets must transition to 100% zero-emission vehicles (ZEVs). Zero-emission shuttle technologies include all-electric or fuel cell electric technologies. Starting in 2022, shuttle fleets must report the details of their vehicles to the California Air Resources Board (ARB).

Starting in 2023, if fleets replace a ZEV shuttle, the replacement must be a ZEV. For additional terms and conditions, see ARB's [Zero-Emission Airport Shuttle](#) website. (Reference [Resolution Number](#) 19-8, 2019)

## Zero-Emission Transit Bus Requirement

By 2040, all public transit agencies must transition to 100% zero-emission bus fleets. Zero-emission bus technologies include all-electric or fuel cell electric.

Transit agencies must purchase or operate a minimum number of zero-emission buses according to the following schedules:

	<b>Large Transit Agency</b>	<b>Small Transit Agency</b>
January 1, 2023	25% of the total number of new bus purchases in each calendar year must be zero-emission buses	No requirement
January 1, 2026	50% of the total number of new bus purchases in each calendar year must be zero-emission buses	25% of the total number of new bus purchases in each calendar year must be zero-emission buses
January 1, 2029	All new bus purchases must be zero-emission buses	All new bus purchases must be zero-emission buses

Each transit agency will submit a plan demonstrating how it will purchase clean buses, develop infrastructure, train personnel, and other required details. Large transit agencies must submit a plan in 2020 and small agencies must submit a plan in 2023. Additional rules and requirements apply.

For more information, including definitions of large and small transit agencies and additional terms and conditions, see the California Air Resources Board’s [Innovative Clean Transit](#) website.

(Reference [California Code of Regulations](#) Title 13, Section 2023.1)

## **Fleet Vehicle Procurement Requirements**

When awarding a vehicle procurement contract, every city, county, and special district, including school and community college districts, may require that 75% of the passenger cars and/or light-duty trucks acquired be energy-efficient vehicles. By definition, this includes hybrid electric vehicles and alternative fuel vehicles that meet California’s advanced technology partial zero emission vehicle standards. Vehicle procurement contract evaluations may consider fuel economy

and life cycle factors for scoring purposes. (Reference [California Public Resources Code 25725-25726](#))

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## **Freight Efficiency Action Plan**

The California State Transportation Agency, the California Environmental Protection Agency, the Natural Resources Agency, and other state departments implemented the California Sustainable Freight Action Plan (Plan), which establishes targets to improve freight efficiency and transition to zero emission technologies. The Plan identifies state policies, programs, and investments to achieve the following targets:

- Improve freight system efficiency by 25% by 2030; and
- Deploy over 100,000 zero emission freight vehicles and associated equipment, maximizing the number of vehicles powered by renewable energy, by 2030.

The involved parties have also initiated corridor-level freight pilot projects to integrate advanced technologies, alternative fuels, freight and fuel infrastructure, and local economic development opportunities based on the Plan. For more information, see the [Transportation Planning](#) website. (Reference [Executive Order B-32-15](#), 2015)

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## **Support for Zero-Emission and Autonomous Vehicle Infrastructure**

Cities and counties that receive funding from the Road Maintenance and Rehabilitation Program are encouraged to use funds towards advanced transportation technologies and communication systems, including, but not limited to, zero-emission vehicle fueling infrastructure and infrastructure-to-vehicle communications for autonomous vehicles. (Reference [California Streets and Highways Code 2030](#))

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## Vehicle Acquisition and Petroleum Reduction Requirements

The California Department of General Services (DGS) is responsible for maintaining specifications and standards for passenger cars and light-duty trucks that are purchased or leased for state office, agency, and department use. These specifications include minimum vehicle emissions standards and encourage the purchase or lease of fuel-efficient and alternative fuel vehicles (AFVs). Specifically, DGS must reduce or displace the fleet's consumption of petroleum products by 20% by January 1, 2020, as compared to the 2003 consumption level. Beginning in fiscal year 2024, DGS must also ensure that at least 50% of the light-duty vehicles purchased by the state are zero emission vehicles (ZEVs). Further, at least 15% of DGS' fleet of new vehicles with a gross vehicle weight rating of 19,000 pounds or more must be ZEVs by 2025, and at least 30% by 2030.

On an annual basis, DGS must compile information including, but not limited to, the number of AFVs and hybrid electric vehicles acquired, the locations of the alternative fuel pumps available for those vehicles, and the total amount of alternative fuels used. Vehicles the state owns or leases that are capable of operating on alternative fuel must operate on that fuel unless the alternative fuel is not available. DGS is also required to:

- Take steps to transfer vehicles between agencies and departments to ensure that the most fuel-efficient vehicles are used and to eliminate the least fuel-efficient vehicles from the state's motor vehicle fleet;
- Submit annual progress reports to the California Department of Finance, related legislative committees, and the general public via the DGS website;
- Encourage other agencies to operate AFVs on the alternative fuel for which they are designed, to the extent feasible;
- Encourage the development of commercial fueling infrastructure at or near state vehicle fueling or parking sites;
- Work with other agencies to incentivize and promote state employee use of AFVs through preferential or reduced-cost parking, access to electric vehicle charging, or other means, to the extent feasible; and
- Establish a more stringent fuel economy standard than the 2007 standard.

(Reference [California Public Resources Code](#) 25722.5-25722.11 and 25724)

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## Zero Emission Vehicle (ZEV) Deployment Support

California joined Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont in signing a [memorandum of understanding \(PDF\)](#)

(MOU) to support the deployment of ZEVs through involvement in a ZEV Program Implementation Task Force (Task Force). In May 2014, the Task Force published a [ZEV Action Plan](#) identifying 11 priority actions to accomplish the goals of the MOU, including deploying at least 3.3 million ZEVs and adequate fueling infrastructure within the signatory states by 2025. The Plan also includes a research agenda to inform future actions.

On an annual basis, each state must report on the number of registered ZEVs, the number of public electric vehicle supply equipment (EVSE) and hydrogen fueling stations, and available information regarding workplace fueling for ZEVs. In June 2018, the Task Force published a new [ZEV Action Plan](#) for 2018-2021.

Building on the 2014 Action Plan, the 2018 Action Plan makes recommendations for states and other key partners in five priority areas:

- Raising consumer awareness and interest in electric vehicle technology;
- Building out a reliable and convenient residential, workplace and public charging/fueling infrastructure network;
- Continuing and improving access to consumer purchase and non-financial incentives;
- Expanding public and private sector fleet adoption; and
- Supporting dealership efforts to increase ZEV sales.

For more information, visit the [Multi-State ZEV Task Force](#) website.