



Overview

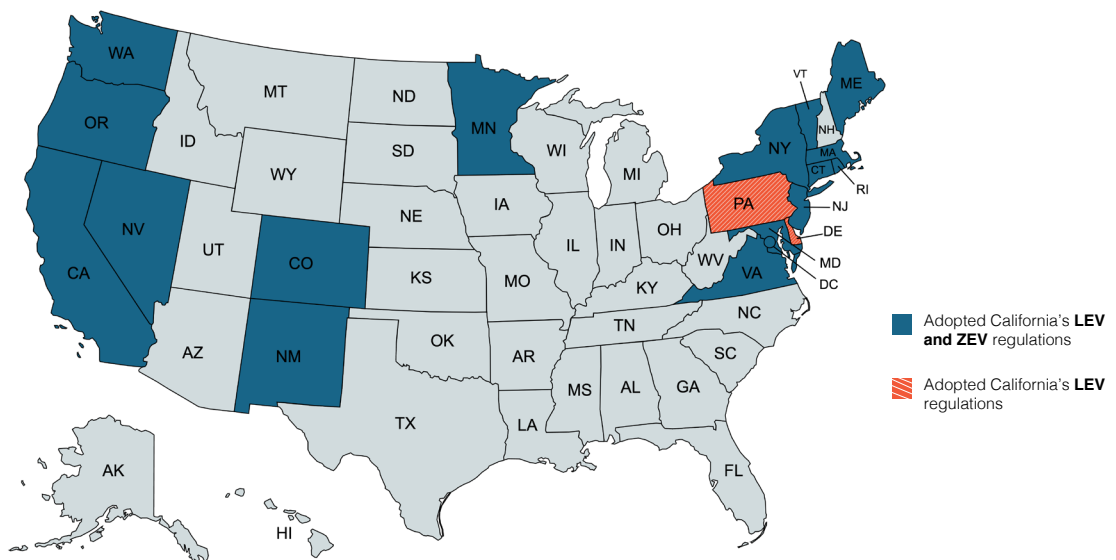
Price volatility of fossil fuels and a growing emphasis on reduction of greenhouse gas (GHG) emissions make electric vehicles (EV) and hybrids an attractive alternative to conventional internal combustion engine vehicles. States have utilized multiple policy mechanisms to spur deployment and adoption of EVs at the commercial scale, capitalizing on benefits to energy security and both environmental and human health. This page gives an overview of Low Emission Vehicle (LEV) and Zero Emission Vehicle (ZEV) Programs, while the following three pages outline policy options for batteries, charging infrastructure, electric school buses, direct sales, electrifying state fleets, multi-family housing charging, incentives, and rural access.

Low Emission Vehicle (LEV) Program

California adopted the first [Low-Emission Vehicle \(LEV\) regulations](#) in 1990, including three components: 1) tiers of exhaust emission standards for increasingly more stringent categories of low-emission vehicles, 2) a mechanism requiring each auto manufacturer to phase-in a progressively cleaner mix of vehicles from year to year with the option of credit banking and trading, and 3) a requirement that a specified percentage of passenger cars and light-duty trucks be zero-emission vehicles (ZEVs) with no exhaust or evaporative emissions. The most recent phase of regulation ([LEV III](#)) includes gradually stricter requirements for greenhouse gas and particulate emissions from 2015 to 2025. [Sixteen states](#), including the District of Columbia, have adopted California's LEV regulations.

Zero Emission Vehicle (ZEV) Program

California adopted the [Zero Emission Vehicle \(ZEV\) Program](#) in 1990 with a key update in 2012. The program assigns each automaker ZEV credits, which are required to consist of an increasing percentage of their total vehicle sales. The credit requirement is 7%, until it rises to 22% in 2025. Plug-in hybrid vehicles, battery electric vehicles, and hydrogen fuel cell vehicles are eligible under this program; however, different types of vehicles are worth varied amounts of credits. [Fourteen states](#), including the District of Columbia, have adopted California's ZEV regulations.





Electric Vehicles Legislation (***) indicates bipartisan support)

Batteries

- **California A.B.2832 (enacted 2018):** Created an Advisory Group to advise the legislature on the recovery and recycling of vehicular lithium-ion batteries. The Advisory Group released its [draft report with policy recommendations](#) at the end of 2021.
- **New Jersey A.1273 (introduced 2022):** Requires manufacturers of electric vehicles to establish and implement electric vehicle battery management plans.
- **Illinois H.B.5160 (introduced 2022):** Provides that manufacturers of electric vehicles that contain hazardous components and batteries must begin to implement a collection program that facilitates the removal of hazardous components and batteries from end-of-life vehicles.

Charging Infrastructure

- **Colorado S.B.22-1218 (enacted 2022):** Required commercial buildings and multifamily residences to include electric vehicle charging for at least 10% of the parking spaces if the building is 25,000 square feet or more; etc.
- **Hawaii S.B.2196 (passed both chambers 2022):** Requires cooperative housing corporations, homeowners associations, planned community associations, and condominium associations to develop plans to integrate electric vehicle charging stations onto their properties and make funds available for that purpose.
- **New York A.8409A/S.6692B (passed Senate 2022):** Requires electric vehicle charging stations to be installed at gasoline stations in an amount equal to or greater than the number of new gas dispensing motor fuel pumps being installed.
- ****Oregon H.B.2180 (enacted 2021):** Amended state building code to require that new construction of certain buildings include provisions for electrical service capacity for specified percentage of parking spaces.
- **Rhode Island H.B.5031/S.B. 994 (enacted 2021):** Required the department of transportation to develop a plan for a statewide electric vehicle charging station infrastructure in order to make electric vehicle charging stations more accessible to the public.

Direct Sales

- **Michigan S.B.268 (enacted 2015):** Allowed manufacturers to offer direct sales of electric vehicles.
- **New Jersey A.B.3216 (enacted 2015):** Allowed a manufacturer to directly buy from or sell to consumers a zero emission vehicle (ZEV) at a maximum of four locations.



Direct Sales (Continued)

- **[Utah H.B.369 \(enacted 2018\)](#)**: Provided for a direct-sale manufacturer license for only manufacturers that sell exclusively new electric, hydrogen fuel cell, or other vehicles fueled by “other non-fossil fuel sources” and manufacturers that are located in the United States.
- **The National Conference of State Legislatures** examines each [state’s status for vehicle direct sales](#).

Electric School Buses

- **[Colorado S.B.22-193 \(enacted 2022\)](#)**: Created the electrifying school buses grant program to award grant money to school districts to help finance the purchase and maintenance of electric-powered school buses, the conversion of fossil-fuel-powered school buses to electric-powered school buses, charging infrastructure, and upgrades for electric charging infrastructure and the retirement of fossil-fuel-powered school buses.
- **[Maryland H.B.0696 \(enacted 2022\)](#)**: Established an electric school bus pilot program administered by the Public Service Commission; authorized investor-owned electric companies to implement an electric school bus pilot program with a participating school system.
- **[Virginia H.B.2118 \(enacted 2021\)](#)**: Established the Electric Vehicle Grant Fund and Program for the purpose of awarding grants on a competitive basis to public school divisions for replacing diesel school buses with electric school buses, implementing recharging infrastructure, and providing training to support the maintenance, charging, and operation of such electric school buses.

Electrifying State Fleets

- **[California S.B.498 \(enacted 2017\)](#)**: Established a statutory requirement for the Department of General Services to ensure that at least 50% of the light-duty vehicles purchased for the state fleet each fiscal year are zero-emission vehicles.
- **[Maine L.D.1579 \(enacted 2022\)](#)**: Required the Central Fleet Management Division to reduce greenhouse gas emissions of the state fleet of light-duty motor vehicles by 75% by 2035; and transition 100% of the state fleet of light-duty motor vehicles to zero-emission vehicles by 2040.
- **[Virginia S.B.575 \(enacted 2022\)](#)**: Required, beginning 2023, all agencies of the Commonwealth to utilize the total cost of ownership calculator prior to purchasing or leasing light-duty vehicles and to purchase electric vehicles unless the calculator clearly indicates that purchasing or leasing an internal combustion-engine vehicle has a lower cost of ownership.
- **ACEEE** has a [State Policy Tracker for State Fleet Electrification](#), and the **Electrification Coalition** has a [State Plug-In Adoption Resource Kit](#) for fleet managers and other state government officials.



Multi-Family Housing Charging

- **[Maryland S.B.0144/H.B.0110 \(enacted 2021\)](#)**: Mandated that the Homeowner's Association shall process an application to install EV charging equipment in the same manner as for an approval of an architectural modification; required that if the application is not denied within 60 days of the application being submitted, the request shall be considered approved.
- **[Utah S.B.152 \(enacted 2022\)](#)**: Prohibited a community association from prohibiting a unit owner from installing or using a charging system.
- **[Vermont H.433 \(enacted 2021\)](#)**: Authorized up to \$1 million to the Interagency Electric Vehicle Supply Equipment Grant Program for a pilot program for charging stations at multi-unit affordable housing and multi-unit dwellings owned by a nonprofit.

Incentives

- **[Hawaii H.B.1585 \(enacted 2019\)](#)**: Established a rebate program for installation of eligible new or upgraded multi-user electric vehicle charging systems. Authorized the Public Utilities Commission to contract for third-party administration of the rebate program.
- **[Maine L.D.347 \(enacted 2021\)](#)**: Directed transmission and distribution utilities to submit a proposed incentive rate schedule to promote the installation of electric vehicle charging stations by November 2021.
- **[Virginia H.B. 1979 \(enacted 2021\)](#)**: Created a rebate program for the purchase or lease of new and used electric vehicles for a \$2,500 rebate applied toward payment for the purchase and an additional \$2,000 rebate for households with income not exceeding 300 percent of the federal poverty level.
- **[Vermont H.433 \(enacted 2021\)](#)**: Created a high fuel efficiency vehicle incentive program to provide point-of-sale vouchers through the State's network of community action agencies and set income eligibility for the voucher at 80 percent of the State median income.

Rural Access

- **[Nebraska L.B.1257 \(introduced 2022\)](#)**: Appropriates available federal funds to the Nebraska Department of Transportation for the purpose of establishing an electric vehicle charging station grant program with a focus on rural areas and areas unserved or underserved by charging stations.
- **[Ohio S.B.32 \(introduced 2021\)](#)**: Creates a grant and rebate program for entities that buy charging stations, including in rural areas.
- **[Virginia H.B.2282 \(enacted 2021\)](#)**: Directed the State Corporation Commission to report on policy proposals to accelerate transportation electrification specifically in low-income, minority, and rural communities.
- **The U.S. Department of Transportation** created ["Charging Forward: A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure."](#)



Additional Resources

- **The Regulatory Assistance Project** has a [roadmap](#) for electrifying transportation with legislative and policy guides.
- **The Georgetown Climate Center** maintains [state policy resources](#) on electric vehicles.
- **The Center for Climate and Energy Solutions** has a map for [U.S. State Clean Vehicle Policies and Incentives](#) tracking.
- **The Sierra Club** produced [AchiEVe: Model Policies to Accelerate Electric Vehicle Adoption](#).
- **The National Conference of State Legislatures** examines each [state's status for vehicle direct sales](#).
- **ACEEE** has a [State Policy Tracker for State Fleet Electrification](#), and the **Electrification Coalition** has a [State Plug-In Adoption Resource Kit](#) for fleet managers and other state government officials.