



NEW ZEALAND
FOREIGN AFFAIRS & TRADE
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MAY 2025

California's electric vehicle ecosystem

MARKET INTELLIGENCE REPORT

Summary

- California offers valuable insights on how sustainability policies have been implemented to enhance the Electric Vehicle (EV) ecosystem. With 35% of all EVs in the United States registered within the state, California sets benchmarks in infrastructure development, regulatory initiatives, and market penetration. Underpinning this is Sacramento's vision for California as a global leader in the green transition, offering generous incentives to promote uptake. For New Zealand, understanding California's experience presents an opportunity to adopt best practice to enable a smooth transition towards the EV future.

Report

California's EV Landscape: Incentive Programmes and regulations for EV growth

California's incentives to encourage EV adoption have been instrumental in offsetting the higher upfront costs of EVs, making them more accessible to a broader demographic. State-level incentives include programmes like Clean Cars 4 All, which assists low-income residents with up to USD \$12,000 for eligible households, and up to an additional USD \$2,000 for charging equipment or pre-loaded charge cards. Non-monetary benefits include access to High-Occupancy Vehicle (HOV) lanes (fast lanes to skip traffic on freeways), and free curb-side parking with a verified clear air sticker in some cities including Santa Monica.

A comprehensive incentive approach that involves businesses and municipalities ensures infrastructure growth keeps pace with rising demand for EVs. Grants are available for installing charging stations at workplaces and public facilities. California's Zero Emission Vehicle (ZEV) Program requires automakers to sell a minimum percentage of EVs. Additionally, California enforces stricter emissions standards than federal requirements, compelling automakers to invest in cleaner technologies. In 2022 California adopted a policy to ban the sale of gas vehicles by 2035, accelerating the shift to zero-emission transportation.

Comparatively, only a few other West Coast states offer similar incentives for the purchase of EVs, including Oregon offering a rebate of up to USD \$7,500, and Colorado offering residents up to USD \$3,500-4,000 for the purchase of a new EV.

Counting California's EVs: A Million and Growing

California had 1.2 million registered EVs in January 2024, representing 35% of EVs in the United States. Just ten months later in November 2024, this number had climbed to two million EVs, accounting for one in four new cars purchased (i.e. 26.4% of the state's new vehicle market share). The combined share for California's hybrid and EV sales reached 39.4% in the third quarter of 2024. The rapid growth of EV sales is not confined to urban areas. Suburban and rural communities are also experiencing increased adoption, driven by expanded charging infrastructure and financial incentives, proving the incentives towards uptake work quickly. California Air Resources Board (CARB) predicts that California will have 12.5 million registered EVs by 2035.

The Federal EV landscape has changed significantly under the new administration

The Trump Administration's Unleashing American Energy Executive Order (EO) of January 2025 outlines that US Government policies will aim to create a "level regulatory playing field for vehicles". While the EO doesn't outline which EV policies would be eliminated, federal EV incentives under the Biden administration included a tax credit of up to USD \$7,500 for the purchase of a new EV. Governor of California, Gavin Newsom, previously suggested that should President Trump eliminate this federal EV tax credit, California would re-introduce a new version of the state's former Clean Vehicle Rebate Program (CVRP) that ended in 2023 (which spent USD \$1.49 billion to subsidize more than 594,000 vehicles). Were this to happen, eligible households in California could get up to a USD \$7,500 rebate once again.

Tesla was identified as a company that may not qualify for applications of California's CVRP, should it be reintroduced. Tesla CEO Elon Musk previously announced that he is supportive of Trump's removal of the USD \$7,500 federally-funded tax credit.

On February 6, two weeks after the EO, the Trump administration froze Biden's National Electric Vehicle Infrastructure (NEVI) program, set to provide USD \$5 billion to states for projects that expand EV charging infrastructure. A letter from the Federal Highway Administration notified State Directors of Transportation that, effectively, they can't spend NEVI funds. EV charger companies' shares have plummeted since (stocks like ChargePoint dropped by 30.8% in February). Charging companies are not only battling the freeze on NEVI, but also waiting to see how manufacturers are affected by the administration's tariffs particularly for essential steel and aluminium.

California's charging network expansion

Through initiatives like the California Electric Vehicle Infrastructure Project (CALeVIP), California is expanding access to charging stations. On 20 March 2025 Governor Newsom announced that California has 48% more public and shared private EV chargers than the number of gasoline nozzles. Out of the more than 178,000 EV chargers installed in the state, over 162,000 are Level 2 chargers, and nearly 17,000 are fast chargers. In addition to the public network, the California Energy Commission estimates that more than 700,000 Level 2 chargers are installed statewide in single-family homes. This extensive network supports the growing number of EVs and alleviates range anxiety among potential buyers.

The city of Los Angeles has the most EV charging stations in the US. Nearly 16,000 EV chargers have been installed over the past two years, a 77% increase in the city's available charging infrastructure, with a total of 36,000 public chargers for the city's 3 million residents. However, California has needed to invest in "charging deserts"—areas

with limited or no public charging infrastructure, such as Central California, known for farmlands. The high cost of installing fast chargers in low-density regions and limited grid capacity can slow the expansion of charging networks.

Early feasibility studies are taking place for the installation of under road surface EV chargers for EV Semi Trucks from the Port of Long Beach, to create greener supply chains and support charging infrastructure. These innovations would work to reduce on-route charging time, and use less land given the charging technology's subterranean nature.

As total EV uptake increases rapidly, concerns are being raised that neither the grid nor the charging infrastructure will be able to support the pace of growth across the different areas of EV adoption.

Self-driving cars in Hollywood – the Jonny Cab is here

California is a testing ground for autonomous EV robo-taxis, a futuristic transportation model that could redefine urban mobility, and provide a zero-emission alternative to traditional taxis. Los Angeles City already has self-driving taxis, Cruise and Waymo. In 2023 Cruise reported over four million driverless miles in California, showcasing the viability of autonomous EVs in real-world conditions.

While these innovations reduce congestion, emissions, and offer safety to passengers by avoiding riding with strangers, they also raise challenges around public acceptance, regulations, and cybersecurity. Interestingly, the only notable accident involved an autonomous taxi hitting an autonomous food delivery robot.

New Zealand's contribution to California's EV footprint

On 12 March 2025, Ohmio, a New Zealand company that's leading the way in EV autonomous shuttles, relocated and officially opened its international headquarters in Riverside, California. The move signifies a great example of business to city relations in California that align to [New Zealand and California's Memorandum of Cooperation on Climate Change](#)

Nuro, a San Francisco-based robotics company valued at USD \$14 billion that specializes in autonomous delivery vehicles, represents the intersection of EV technology and AI. Nuro's compact, electric-powered robots are designed to transport goods sustainably, and with a New Zealander as their President, demonstrates New Zealand's expertise in innovation, and contribution to California's EV ecosystem.

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