



ZEV Market Development + Cross Agency Collaboration

CTC/CARB/HCD Joint Meeting

April 11, 2024

GO-Biz Overview



Business Investment
Services



International Affairs



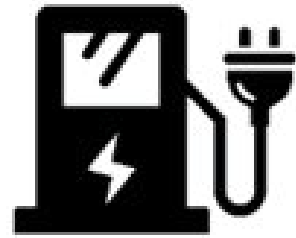
Supply Chain



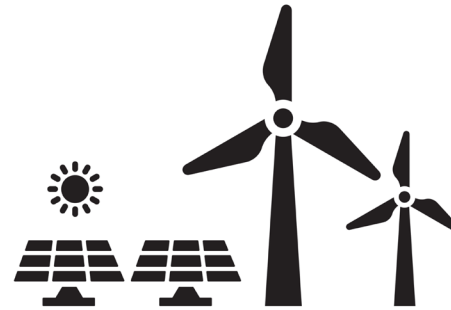
Small Business



Permits



Zero Emission Vehicle
Market Development

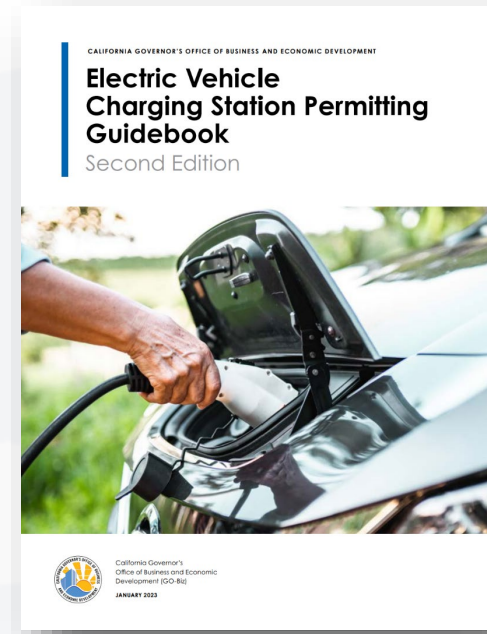
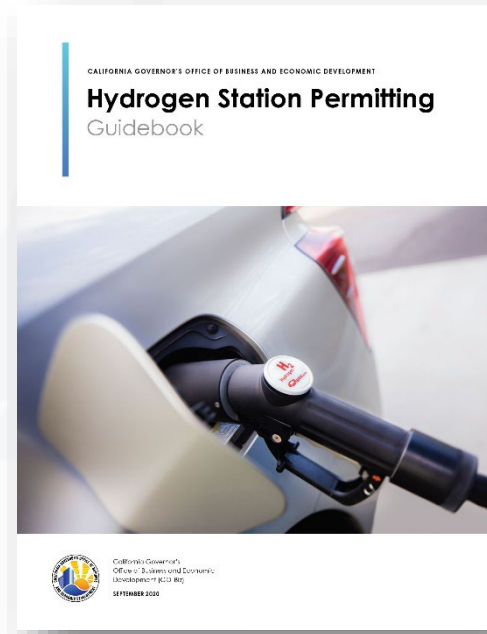


Climate &
Clean Energy



Infrastructure &
Economic Development
Bank (I-Bank)

Zero Emission Vehicle Market Development



- State agency alignment and coordination
- Industry collaboration and collective problem-solving
- ZEV-related business support
- Fueling infrastructure permitting assistance
- Existing and proposed regulatory navigation assistance

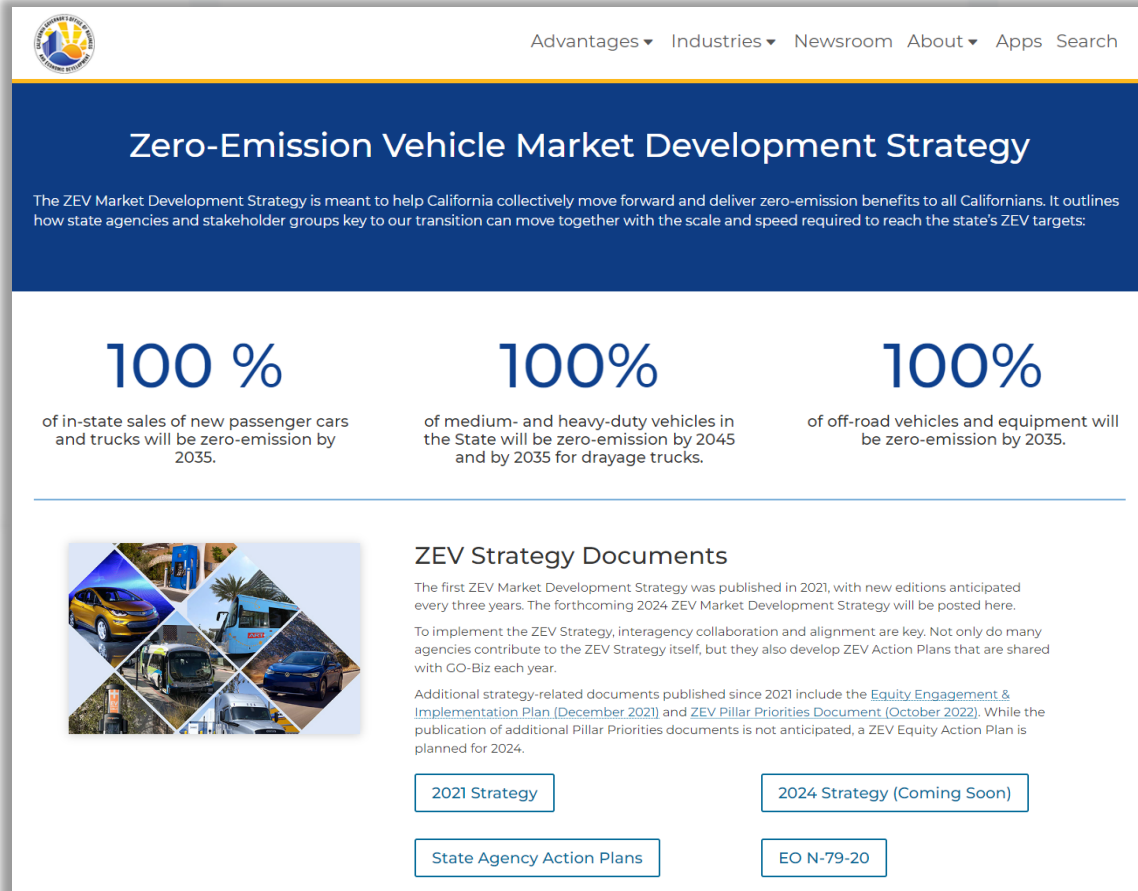
ZEV Market Development Strategy



1. Articulate **core principles** for collective action
2. Clearly identify **targets**
3. Establish **Roles/objectives** of agencies and major stakeholder groups
4. Organize **collective problem-solving** Increase transparency and target stakeholder engagement
5. Ensure **lessons learned** are captured and incorporated

Empower actors to exceed expectations

ZEV Strategy Website



The screenshot shows the homepage of the Zero-Emission Vehicle Market Development Strategy website. At the top, there is a navigation bar with links for Advantages, Industries, Newsroom, About, Apps, and Search. The main heading is "Zero-Emission Vehicle Market Development Strategy". Below this, a paragraph explains the strategy's purpose. Three large statistics are displayed: 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035; 100% of medium- and heavy-duty vehicles in the State will be zero-emission by 2045 and by 2035 for drayage trucks; and 100% of off-road vehicles and equipment will be zero-emission by 2035. A section titled "ZEV Strategy Documents" includes a collage of images and text about the strategy's history and future updates. At the bottom, there are four buttons: "2021 Strategy", "2024 Strategy (Coming Soon)", "State Agency Action Plans", and "EO N-79-20".

Advantages ▾ Industries ▾ Newsroom About ▾ Apps Search

Zero-Emission Vehicle Market Development Strategy

The ZEV Market Development Strategy is meant to help California collectively move forward and deliver zero-emission benefits to all Californians. It outlines how state agencies and stakeholder groups key to our transition can move together with the scale and speed required to reach the state's ZEV targets:

100 %
of in-state sales of new passenger cars and trucks will be zero-emission by 2035.

100%
of medium- and heavy-duty vehicles in the State will be zero-emission by 2045 and by 2035 for drayage trucks.

100%
of off-road vehicles and equipment will be zero-emission by 2035.

ZEV Strategy Documents

The first ZEV Market Development Strategy was published in 2021, with new editions anticipated every three years. The forthcoming 2024 ZEV Market Development Strategy will be posted here.

To implement the ZEV Strategy, interagency collaboration and alignment are key. Not only do many agencies contribute to the ZEV Strategy itself, but they also develop ZEV Action Plans that are shared with GO-Biz each year.

Additional strategy-related documents published since 2021 include the [Equity Engagement & Implementation Plan \(December 2021\)](#) and [ZEV Pillar Priorities Document \(October 2022\)](#). While the publication of additional Pillar Priorities documents is not anticipated, a ZEV Equity Action Plan is planned for 2024.

[2021 Strategy](#) [2024 Strategy \(Coming Soon\)](#)
[State Agency Action Plans](#) [EO N-79-20](#)

1. Public ZEV Strategy Website

- Latest information; document repository
- Progress and metrics tracking

2. ZEV Strategy Document

- Guiding document: principles, strategies, objectives, direction
- Updated at least every 3 years

3. Annual State Agency Action Plans

4. ZEV Equity


- ZEV Equity Advocate
- Align definition
- Develop ZEV Equity Action Plan

ZEV Market Metrics


ZEV Market Metrics

ZEV Market Metrics provide a quick overview of targets and progress in each of the Pillars and Outcomes areas of the ZEV Strategy. Click the tiles for more information, including one-page Metrics Snapshots with links to data sources.

Pillars





Vehicles

Progress 





Infrastructure

Progress 




End Users


Progress 




Workforce


Progress 

Outcomes





Air Quality

Progress 





Reduced Greenhouse Gases

Progress 




Access

Progress 



Economic Development & Jobs

Progress 

ZEV Market Metrics

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ZEV Market Metrics provide a quick overview of targets and progress in each of the Pillars and Outcomes areas of the ZEV Strategy. Click the tiles for more information, including one-page Metrics Snapshots with links to data sources.

Pillars



Vehicles

Progress ●

[View Metrics Snapshot](#)

Light-Duty Passenger Vehicles

Targets: 1.5 million ZEVs by 2025, 5 million by 2030, and 100% ZEV market share by 2035

Where we are: 25% market share in 2023 and 1.8 million ZEVs sold

Medium & Heavy-Duty Vehicles

Targets: 100% of vehicles are ZEVs in CA by 2045

Where we are: 2,300+ MHD on-road ZEVs registered at end of 2022



Infrastructure

Progress ●

[View Metrics Snapshot](#)

EV Charging

Targets: 250,000 EV charging stations by 2025
Where we are: 93,855 light-duty stations at end of 2023

Hydrogen Refueling

Targets: 200 hydrogen refueling stations by 2025
Where we are: 68 light-duty stations at end of 2023



End Users

Progress ●

[View Metrics Snapshot](#)

Voucher & Rebate Programs

- More than 560,000 passenger EV purchases incentivized, along with 8,000+ vouchers for trucks, buses, and off-road equipment.

Consumer Awareness & Experience

- 50% of Californians surveyed in 2022 said they would "definitely" or "seriously" consider buying or leasing a BEV today compared to 36% of Americans nationwide



Workforce

Progress ●

[View Metrics Snapshot](#)

Jobs

- 56 ZEV-related manufacturing companies are based in California
- 16,000+ California jobs are in ZEV manufacturing
- 4,074 electricians approved through the Electric Vehicle Infrastructure Training Program (EVITP) to install EV charging infrastructure

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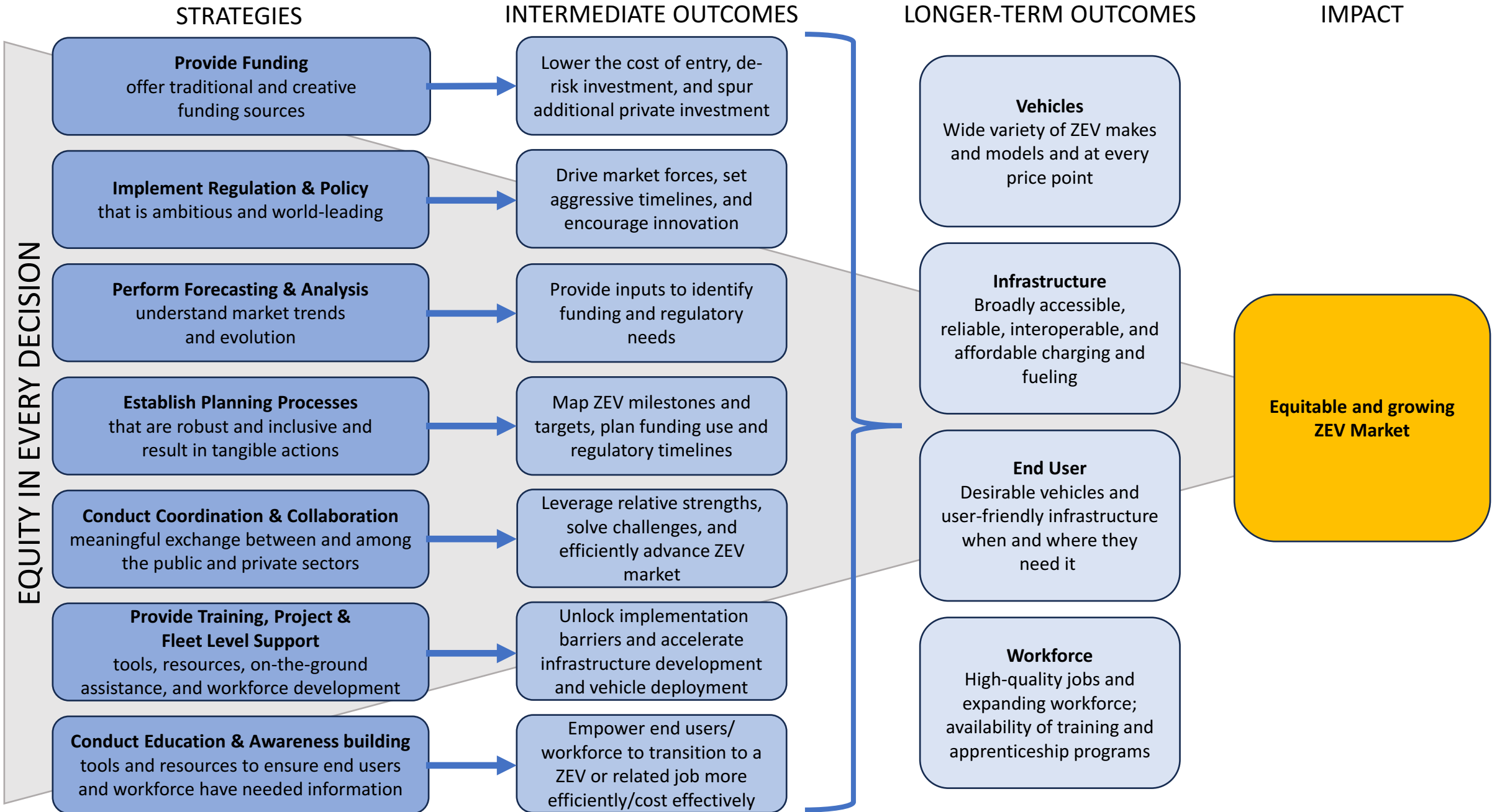


TABLE 9: NON-GOVERNMENTAL ORGANIZATIONS (NGOs)

ZEV Stakeholder	ZEV Connection	Equity Connection	Vehicles	Infrastr.	End Users	Workforce
Codes and Standards Bodies	Develop and adopt codes, standards and protocols that ensure safety, consumer protection, and enable market scale	Achieve safety, consumer protection for all	Support	Support	Support	-
Collaboratives	Multi-stakeholder collaboration	Connect, synthesize, and apply a diverse set of views	Lead	Lead	Lead	Support
Community-based NGOs	Policy research, analysis, and implementation; ZEV education, awareness, and advocacy; sharing lessons learned; connect priority communities to ZEV benefits and address community-based and specific transportation and mobility needs; solicit resident input and provide expertise on historical community conditions to build workable solutions	Community partnership, engagement, and capacity building	Support	Support	Support	Support
Environmental NGOs	Policy research, analysis, and implementation; ZEV education, awareness, and advocacy; sharing lessons learned; connect priority communities to ZEV benefits and address community-based and specific transportation and mobility needs; solicit resident input and provide expertise on historical community conditions to build workable solutions	Showcase diverse perspectives; help increase program effectiveness	Support	Support	Support	Support
Equity NGOs	Policy research, analysis, and implementation; ZEV education, awareness, and advocacy; sharing lessons learned; connect priority communities to ZEV benefits and address community-based and specific transportation and mobility needs; solicit resident input and provide expertise on historical community conditions to build workable solutions	Bring voices and perspective to policy making, represent the underrepresented	Support	Support	Support	Support
Trade Associations	Represent collective business interest to streamline policymaking input; workforce development	Pursue employees from priority communities, bring in minority owned businesses	Support	Support	Support	Support

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ZEV Strategy Document

GO-BIZ ZEV MARKET DEVELOPMENT OBJECTIVES

Objectives	Vehicles	Infrastr.	End User	Workforce
ZEV Strategy: Organize and lead the development and implementation of the ZEV Market Development Strategy.	Direct	Direct	Direct	Direct
Infrastructure Permitting: Streamline ZEV infrastructure development.	–	Direct	–	–
Market Development Growth: Actively support clean mobility business development and work with industry, labor agencies and stakeholders to enable equitable job growth (leverage Business Investment Services, Cal Competes, and the Office of the Small Business Advocate).	Indirect	Indirect	–	Direct
Incorporate Industry Voice: Feed business perspective into agency decision-making and regulatory processes—strategic problem solving, market enabler.	Indirect	Indirect	Indirect	Indirect
Market Innovation: Enable and catalyze innovation within California (innovation hubs)				

KEY GO-BIZ DOCUMENTS RELATED TO ZEV MARKET DEVELOPMENT

Report & Key ZEV Market Related Questions Addressed	Role & Frequency
ZEV Market Development Strategy: 1) Articulate core principles for collective ZEV action, 2) Identify ZEV targets, 3) Establish roles and objectives of agencies and stakeholder groups, 4) Organize collective problem-solving, 5) Ensure lessons learned are captured and incorporated.	Lead Agency, Ongoing
Electric Vehicle Charging Station Permitting Guidebook: 1) Current plug-in electric vehicle (PEV) landscape in California, 2) Station development phases, process, best practices and pitfalls, 3) Future market perspectives.	Lead Agency, Ongoing
Hydrogen Station Permitting Guidebook: 1) Hydrogen and fuel-cell electric vehicles (FCEV) ecosystem and current landscape in California, 2) Hydrogen station development phases, process, best practices and pitfalls, 3) Future market perspectives.	Lead Agency, Ongoing
Sustainable Freight Action Plan (CTC, CARB, CEC, CPUC, Caltrans, CalSTA, GO-Biz): Actions each agency can take to 1) achieve California's vision of a modern, safe, integrated, and resilient freight system that continues to support California's economy, jobs, and healthy, livable communities and 2) reach the Plan's targets for freight system efficiency, transitioning to zero-emission technologies, increased competitiveness and economic growth.	Coauthor, Supporting Agency

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State Agency Action Plans

California State Agencies Included in the ZEV Market Development Strategy



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Equity: A Multipronged Approach



1. High-level Direction & Focus
2. Funding: Largest investment in low-income and disproportionately affected populations in CA history
3. Research & Analysis to Understand Barriers/Opportunities
4. Awareness Building & Assistance Tools/Programs
5. Workforce & Just Transition

ZEV Equity Action Plan Input

ZEV Equity Action Plan Input Form

You can assist GO-Biz with the development of the ZEV Equity Action Plan by helping us further understand the equity topics that matter to stakeholders. Use the following form to identify elements that are important to you and provide suggestions on the development process, content, or other feedback you have as we begin our outreach.

smartsheet

ZEV Equity Action Plan Input Form

First name

Last name

Please select your role as a stakeholder

Do you participate in any equity working group(s)?

If yes, please identify which group(s).

What suggestions do you have for the Plan?

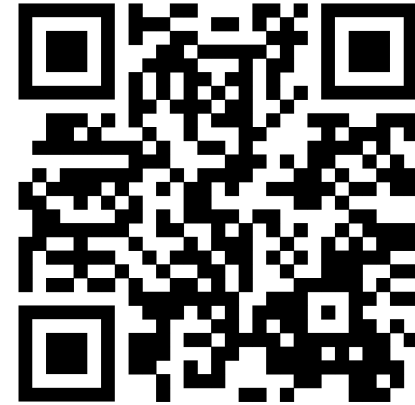
Do you have concerns about the Plan development?

Do you have concerns about implementation?

Other comments on the development of the Plan?

Contact Information
Please provide an email address or other contact information if you would be open to follow-up discussion regarding your comments.

If you would like to receive ZEV Market Development Updates from GO-Biz, please complete the form in this link after submitting your feedback: [Sign-Up for ZEV Strategy Roll Up Your Sleeves](#)



<https://business.ca.gov/industries/zero-emission-vehicles/zev-equity-action-plan-input-form/>




**Infrastructure Strike Team
ZEV/H2 Working Groups**

IST Working Group Objectives

1. Dashboards to track progress
2. Coordinate among agencies for fast and effective project delivery
3. Identify potential statutory and regulatory changes for IST consideration
4. Identify opportunities to leverage state/federal funding for workforce needs
5. Raise awareness for state/federal funding opportunities

Build.ca.gov

**Building California's future**

[Home](#) [About](#) [More resources](#)

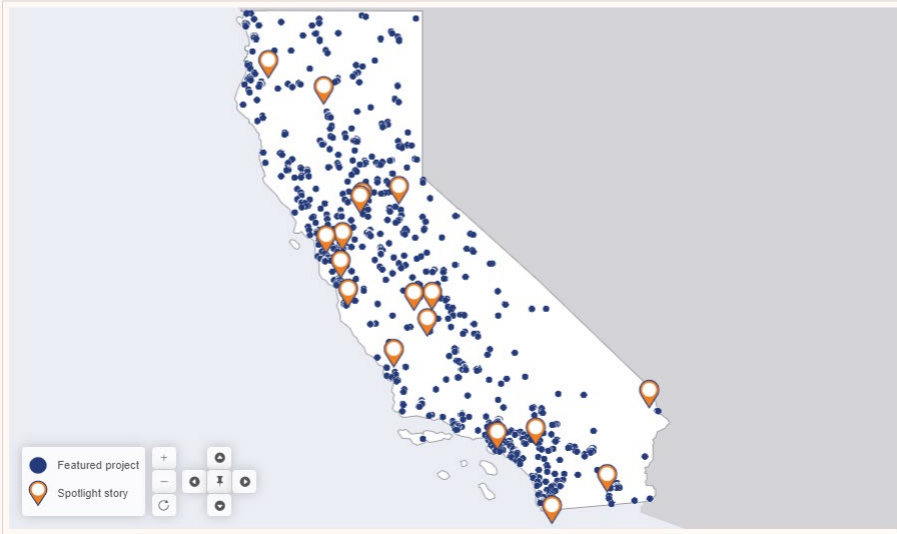
Infrastructure projects

There are thousands of infrastructure projects planned or underway in California. Here are some examples.

Project map

Select any point in the map for details. Project locations are approximate.

All Spotlight stories Featured projects



● Featured project

📍 Spotlight story

Project list

Learn more about these projects. You can sort and filter by county, topic, or type, or search by project name. The **Details** link will take you to more information about an individual project.

Note: Projects tagged as "Multiple Counties" cross at least one county line. These projects will appear when you filter on an included county.

[Export filtered list](#) [Export all](#)

County	Project	County	Topic	Project details
All	AC Transit - Division 4 Hydrogen Fueling Infrastructure Upgrade	Alameda	ZEV	Details
Selected (1)	Heavy-Duty Vehicle Electrification and its Potential as a Clean Energy Alternative for Critical Operations	Alameda	ZEV	Details
<input type="checkbox"/> Other	Hydrogen-fueled trucks at the Port of Oakland	Alameda	ZEV	Details
<input type="checkbox"/> Semiconductors	NorCal ZERO Truck Project	Alameda	ZEV	Details
<input type="checkbox"/> Transportation	V2B Oakland	Alameda	ZEV	Details
<input type="checkbox"/> Water	Princeton Joint Unified	Colusa	Electric Vehicles, Buses and Ferries	Details
<input checked="" type="checkbox"/> Zero-Emission Vehicles	Building a Scalable and Repeatable School Bus Electrification Business (BuSy Bees)	Contra Costa	ZEV	Details
	Coalinga-Huron Unified	Fresno	Electric Vehicles, Buses and Ferries	Details
	South-Central Fresno Pepsi Delivery Truck Electrification	Fresno	ZEV	Details
	El Centro Elementary	Imperial	Electric Vehicles, Buses and Ferries	Details
	21st Century Truck Stop - 1st Public MD/HD Charging Station in California	Kern	ZEV	Details
	21st Century Truck Stop: 1st MD/HD eTruckStop in California	Kern	ZEV	Details
	Commercial Hydrogen Fueling Infrastructure (EnergiZE) - Bakersfield	Kern	ZEV	Details
	Golden Empire Transit District	Kern	ZEV	Details

Previous 1 2 3 Next

Zero-Emission Vehicles

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We need partnership to succeed...





Thank You!

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