

Governor's Office of Business and Economic Development (GO-Biz)

GO-Biz leads the ZEV Market Development Strategy and serves as the first point of contact for ZEV-related businesses to engage with state government.

Equity: Facilitate economic expansion in underserved communities and integrate minority-owned and small businesses/suppliers into the growing ZEV market. Ensure program wide robust outreach and engagement with priority communities.

GO-Biz ZEV MARKET DEVELOPMENT OBJECTIVES

1. **ZEV Strategy.** Organize and lead the development and implementation of the ZEV Market Development Strategy.

Key Collaborators: all stakeholders.

Key Results & Actions:

- a. **Agency Action Plans.**

- Publish 2021 Agency Action Plan Reports, with lessons learned incorporated by January 31st.
- Publish 2022 Agency Action Plans by March 1st with a visualization of agency interconnections.

GO-Biz collected and published the Agency Action Plans and Reports, which are available to review on the [ZEV Strategy website](#). In 2023, GO-Biz will implement process improvements to help standardize reports and simplify the process for agencies in an effort to post the Action Plans earlier in the year.

- b. **Pillar Priorities.**

- Update Pillar Priorities and publish by March 15th. Focus on End User, and clearly define GO-Biz's role in leading continual improvement of the End User experience.

GO-Biz published the updated [Pillar Priorities document](#) in October 2022, which includes an End User Implementation table identifying opportunities to improve the system with corresponding actions, lead/support agencies, and key stakeholder groups. We have found it helpful to publish the document later in the year to better understand our collective emerging priorities and will target Q2/Q3 for publishing in 2023.

- Support CEC's ZEV Infrastructure Plan development (ZIP), which will serve as a concise guiding document for near-term actions related to the Infrastructure Pillar.

GO-Biz provided input and feedback to CEC on the ZIP. CEC published the [final report](#) in December 2022.

c. **Equity Engagement & Implementation Plan.**

- Implement the Equity Plan published in December 2021 with goal to report progress on priorities for improvement in March 2023. In 2022, focus on developing clear, shared equity metrics.

[SB 1251 \(Gonzalez, 2022\)](#) created the position of ZEV Equity Advocate in the GO-Biz ZEV Market Development Unit. Once appointed, the ZEV Equity Advocate will steer the development of a shared, cross-agency definition of equity, and set an equity agenda for the deployment of light-, medium-, and heavy-duty zero-emission vehicles, the supporting infrastructure, and workforce development.

Equity measures were incorporated into several items reported in the ZEV Market Metrics Snapshot, including the size of California's used ZEV inventory, and the percentage of Clean Vehicle Rebate Program voucher funding that has been issued in priority communities. Additional equity measures will continue to be identified.

- d. **Stakeholder engagement.** Webinar to share lessons learned using the format of the previous ZEV Strategy webinars. Build on The Plug & The Nozzle and Roll Up Your Sleeves.

GO-Biz published five newsletters in 2022, which are available in [The Plug & Nozzle Newsletter Archives](#). GO-Biz also utilized the Roll Up Your Sleeves list in 2022 to share and gather feedback from stakeholder groups on the EV Charging Station Permitting Guidebook update, which will be published in early 2023.

- e. **Metrics and Best Practices.** Publish quarterly ZEV metrics reports, with continual refinement.

GO-Biz has published two [ZEV Metrics Snapshots](#), showcasing some of the latest published indicators for each of the Four Pillars of the California ZEV Market Development Strategy: Vehicles, Infrastructure, End Users, and Workforce. Given the different update intervals of the input data (i.e., annual, quarterly, and monthly), GO-Biz has found that a biannual rather than quarterly report will provide a better opportunity to visualize and track the state's progress and will continue to refine the snapshot in 2023.

- f. **Ongoing.** *Collect feedback and ideas, improve the process.*

2. Infrastructure Permitting. Streamline ZEV infrastructure development.

Key Collaborators: Local & Regional government, Tribal Government, Electricity and Hydrogen Providers, NGOs, CEC, CARB, CPUC, Caltrans.

Key Results & Actions:

- **Plug In Charging:**

Guidebook Update. Update the EVCS Permitting Guidebook to reflect updates in policy and processes since its first publication in 2019. Publish by June 30th.

The update to the [EVCS Permitting Guidebook](#) through stakeholder engagement took longer than expected, but GO-Biz finished the final draft in 2022, and will publish the Guidebook in Q1 2023.

Best Practice Updates. Develop a step-by-step adoption guide for AB 1236 and AB 970. Utilize and distribute this material after webinars and calls with jurisdictions. Add a FAQ's page to the website by February 2022.

GO-Biz created the [FAQ page](#) added it to the existing [Plug-in Readiness page](#). The resource was shared with jurisdictions during outreach around the state's EVCS streamlining laws ([AB 1236 and AB 970](#)), in addition to the step-by-step adoption guide used during calls and webinars. GO-Biz will continue to update and refine materials in 2023.

- **Turn the State Green.** Goals:

- Streamline all large jurisdictions (200,000 or more residents). Target end of March.
- Streamline all small jurisdictions by end of December 2022.

GO-Biz was unable to streamline all large and small jurisdictions in 2022, but made significant progress: in Q4 2022, 232 (or 42.9% of jurisdictions, up from 155 in Q1) were "streamlined", 108 were designated "streamlining in progress" (20%), and 210 were "not streamlined" (38.8%). GO-Biz gained additional capacity in Q4 2022, hiring a ZEV Infrastructure Permitting and Development Specialist, who will continue work with jurisdictions on streamlining and track progress on the [CA EVCS Permit Streamlining Map](#) in 2023.

The team also developed an outreach prioritization strategy and engaged in discussions with EVSPs about on-the-ground challenges they are facing with permitting. Additionally, GO-Biz initiated conversations with local community groups that have capacity to

assist with permit streamlining efforts. We will organize and leverage these groups in 2023.

Additionally, the ZEV permit streamlining data was added to the [California State Geportal](#) showing compliance with AB 1236.

- **Hydrogen:**

- Develop and deploy permit education and streamlining effort to proactively engage local jurisdictions where fueling infrastructure is planned/anticipated.
- Engage station developers and other key industry stakeholders to understand common permitting challenges and potential solutions that could be addressed at the state-level.
- Include map on GO-Biz ZEV website of jurisdictions that have permitted or are in the process of permitting hydrogen stations to raise visibility of cities that have experience with hydrogen fueling stations.

[SB 1291 \(Archuleta, 2022\)](#) was chaptered in 2022, building on the state's existing EV charging station permit streamlining laws ([AB 1236](#) and [AB 970](#)), requiring every city and county to create an expedited, administratively approved permitting process for hydrogen fueling stations. The GO-Biz ZEV Infrastructure Permitting and Development Specialist began discussions with station developers to share outreach plans to local jurisdictions and to gain insight into where the next stations were being planned. We also began strategy planning for 2023, which will include strategic outreach, development of fact sheets, a compliance checklist, model ordinance, and other resources, as well as focus on the hydrogen education, streamlining, and transparency bullets above.

- **Expand ZEV Readiness Portfolio:**

- Highlight and share resources from local initiatives/regional collaboratives through permitting map (target – web infrastructure set up by March 2022, fully populated by June).
- Streamline utility interconnection processes (charging and fueling) by connecting utility information to project developers – add a layer to our permit streamlining map by March 2022.
- Establish building reach code adoption map to help showcase leading cities and counties. Encourage broader adoption by June 2022.
- Develop framework for ZEV Readiness Olympics; launch if we have sufficient stakeholder support. Potential events: permit streamlining, reach code adoption, signage and utility interconnection. Target June 2022.

GO-Biz launched a [Community & Place Based Data Tool](#), and the ZEV team added layers to the map that include alternative fuels (electric corridors, hydrogen corridors, hydrogen fueling stations, public EV stations) and electric utility coverage.

GO-Biz did not have the capacity to establish the building reach code adoption map, but will explore further opportunities to expand the ZEV readiness portfolio in 2023 (potentially including ZEV Readiness Olympics and/or adding local voluntary building codes to the data tool).

- **Ongoing.** *Collect and share lessons learned, direct project support.*

- 3. Market Development Growth.** Actively support clean mobility business development and work with industry, labor agencies and stakeholders to enable equitable job growth.¹

Key Collaborators: Vehicle Manufacturers and Supply Chain; Infrastructure Providers; Organized Labor; Fleets; Investors; Academia; International; NGOs; Local, Regional, Federal, Tribal Government; CARB, CEC; Caltrans; CWDB; CTC; DGS; DOF; HSR; IBank; SGC; STO

Key Results & Actions:

- a. **Jobs Metrics.** Collaborate with CWDB, ETP, CEC, OPR and stakeholders to establish a more nuanced tracking of ZEV related workforce metrics, including priority community access to jobs. Incorporate into quarterly ZEV metrics.

GO-Biz together with agency partners identified data on a subset of the ZEV workforce (manufacturing and EV charger installation) in California to track in the [ZEV Metrics Snapshot](#). GO-Biz convened a working group on the topic of defining and measuring the ZEV workforce, conducted a review of previous studies and existing data, and identified key challenges to measuring the ZEV workforce, including the lack of classification for ZEV-specific jobs, and the fact that some workers make components used both in ZEVs and in other vehicles.

It was agreed that GO-Biz will continue to collaborate with the CEC to update the count of ZEV manufacturers in the state, and one such update was made in 2022. For the time being, GO-Biz is utilizing jobs numbers published by Atlas Public Policy, with the goal of connecting with staff there to understand their methodology.

¹ Note: Business support is an ongoing, core function of GO-Biz.

Next steps identified by the working group include beginning to quantify the number of ZEV businesses with a significant presence in California apart from manufacturing, including R&D and corporate headquarters.

b. **Federal Opportunities.**

- **Hydrogen Hub.** Work with CEC, CARB, CPUC, Infrastructure Providers, NGOs, Utilities and more to determine and implement appropriate role of the state in developing a federally funded hydrogen hub in California

GO-Biz became a founding member of a statewide public-private partnership, the [Alliance for Renewable Clean Hydrogen Energy Systems \(ARCHES\)](#), that is building the framework for a renewable, clean hydrogen hub in California and serving as the applicant for the U.S. Department of Energy (DOE) \$8 billion funding opportunity. ARCHES submitted the initial concept paper to the DOE in November 2022 and was one of 33 groups (out of 79) that was encouraged by the DOE to submit a full proposal by April 7, 2023, with the opportunity to receive up to \$1.25 billion.

- **EV Charging.** Coordinate with Caltrans, CalSTA, and CEC to ensure federal investments in charging infrastructure have maximal impact on the market.

GO-Biz participated in CalSTA's implementation efforts around the [Infrastructure Investment and Jobs Act \(IIJA\)](#) and provided input and feedback to Caltrans and CEC as they partnered to draft California's [NEVI Deployment Plan](#) implement the [National Electric Vehicle Infrastructure Program \(NEVI\)](#) (\$384 million in federal over 5 years to establish an interconnected network of fast charging stations on the national highways).

Additionally, GO-Biz is working across agencies and stakeholders to facilitate a collective effort to maximize federal investment in clean energy and climate related programs. This is being done in collaboration with the ongoing transportation related federal funding work led by CalSTA.

- c. **Business Development.** Ongoing business support – connect ZEV related business to various state incentives, provide site selection support, etc. Actively track and share market developments, success stories, as appropriate.

GO-Biz continues to actively support business location and expansion in CA and make connections with state funding opportunities. We engaged with 172 businesses in 2022 with 48 new engagements: 31

foreign/international businesses, 86 California businesses, the remainder from various states in the US.

- d. **Big ZEV Fleet/End User Perspective.** In close coordination with CARB, CEC, and Caltrans, gain an understanding of end user needs and concerns. Identify and advance tools for addressing these needs, leveraging information gained through public processes (e.g., Advanced Clean Fleets Regulation) and previous efforts (e.g., GO-Biz industry interviews on Big ZEV barriers and solutions).

GO-Biz actively participated in CARB's workshops around Advanced Clean Fleets and created a fleet-related service providers resource (see Advanced Clean Fleets Support below). We also met with three leading truck manufacturers and local agencies in the California/Mexico border region to better understand concerns and challenges they face.

- e. **Low/Zero-Carbon Hydrogen Procurement.** In collaboration with CEC, CARB, Caltrans, and DGS, lead development of a low/zero-carbon hydrogen master services agreement (MSA) for state-wide procurement. Identify project(s)/region(s) ripe for pilot and help facilitate deployment.

GO-Biz initiated the process with DGS to create a procurement contract for zero/low-carbon hydrogen fuel for zero-emission hydrogen fuel cell electric buses operated by transit agencies in California with the goal of helping to streamline and standardize fuel procurement and ultimately create a more predictable and affordable market for hydrogen fuel statewide.

- 4. **Incorporating Industry Voice:** Feed business perspective into agency decision-making and regulatory processes— strategic problem solving, market enabler.

Key Collaborators: Industry and all agencies.

Key Results & Actions:

- a. **End User Focus.** Make End Users the centerpiece of state action through this year's Pillar Priorities—implemented by multiple agencies through state budget implementation, and federal infrastructure funding opportunities. Conduct regular check-ins/interviews with bellwether companies, and leverage insights to help shape program implementation. Ongoing.

The 2022 [Pillar Priorities document](#) focused on opportunities to improve the End User experience and identifies actions, lead/support agencies, and key stakeholder groups. GO-Biz continues to check-in with industry

to gain insights and incorporate learnings into policy and program implementation.

- b. **Advanced Clean Fleets Support** Establish a publicly available list of consultants who have raised their hands to support fleet electrification (including plug-in and hydrogen). Collaborate with CARB, CEC, and CPUC to widen our reach for collecting names and disseminating results.

GO-Biz created a [Services for Transitioning to a Zero-Emission Fleet page](#) and published a list of consulting firms and fleet-related service providers there. GO-Biz is continuing to explore ways to expand support for fleets, including adding new and shared resources to list.

- c. **Policy Alignment.** Develop system to make it easier for stakeholders to track and feed info into regulatory, funding, and other proceedings across agencies. Determine, with stakeholder input, if the approach provides sufficient value relative to staff time required to implement and maintain the system.

GO-Biz sent out information through the Plug & Nozzle but did not establish a new system for stakeholders to use to track proceedings. We can revisit this idea in the future if stakeholders express interest.

5. **Market Innovation.** Enable and catalyze innovation within California (innovation hubs).

Key Collaborators: Academia, Local and Regional Governments, Tribal Governments, Industry, Investors/Financing Institutions, CARB, CEC, CPUC, Caltrans, DGS, HSR

Key Results & Actions:

- a. **Innovation Hubs (iHubs).** Work with the GO-Biz Office of Small Business Advocate to determine an appropriate ZEV related strategy for iHubs² (proposed in the CA Budget Blueprint).

CalOSBA launched the California Inclusive Innovation Hub program (iHub²) with a new focus on diversity, equity and inclusion. The iHub² program will accelerate technology and science-based firms in key industry areas with a strong outreach focus on diverse founders, including women, veterans, and people of color, as well as underserved geographies and regions. Ten institutions across the State of California have received iHub² designation. To learn more about the background of the iHub² program and the awardees of designation in 2022, please visit the program [site](#). The ZEV team was not deeply involved in an overarching ZEV-related strategy, but going forward we plan to engage with the awardees around the update to the ZEV Market Development Strategy.

- 6. International Business.** Attract foreign direct investment, assist companies in gaining access to new markets, share lessons learned with, and learn from, global partners.

Key Collaborators: International partners and businesses, NGOs, all levels of government, CARB, CEC

Key Results & Actions:

- a. **Foreign Direct Investment.** Participate in events, trade missions, and one-on-one meetings with international ZEV companies to encourage investment in California.
- b. **International Partnerships.** Share policy, best practices, and lessons learned through established bilateral and multilateral partnerships to accelerate the global transition to ZEVs.
- c. **EU Synergy Agenda.** Connect to the EU Synergy Agenda as part of the MOU between CA and EU Climate KIC signed at COP in 2021.

The ZEV team partnered with the GO-Biz International team to engage with numerous global partners and businesses on ZEVs – support is ongoing, including significant collaboration with the International team to plan and recruit delegation members for a trip to Japan in March 2023.

The EU Climate KIC 2022 Year Plan was developed in Q1 and approved by the Governor's Office in Q2. More than ten projects were planned and executed – additional details are available in the Governor's Office of Planning and Research (OPR) 2022 Action Plan Report.

- 7. ZEV Consumer Awareness.** Expand consumer awareness and buy-in with an additional focus on priority communities and convert this awareness into decisions to drive or ride in ZEVs. (note: this objective has been updated).

Key Collaborators: Local, Regional and Tribal Governments; NGOs; Vehicle Manufacturers, Infrastructure Providers

Key Results & Actions:

- a. **Consumer Awareness Grants.** Work with awardees to ensure everyone involved learns from one another, leverages each other's strengths, etc.

In February 2022, GO-Biz awarded two [ZEV Consumer Awareness Grants](#) (from one-time \$5 million funding in the 2021-22 State Budget) to Valley Clean Air Now (\$2.5 million) and Veloz (\$2.5 million) who are implementing projects through May 2023.

Valley Clean Air Now (CAN) has utilized GO-Biz grant funding to expand existing initiatives and launch new ones, and also shared insights with relevant state agency leadership and staff during briefing and meeting

events. The Universal ZEV Equity Charging Card demonstration with the California Integrated Travel Project (Cal-ITP) in particular has garnered attention as a demonstration project for how to equitably deliver ZEV charging benefits to unbanked and underbanked Californians. State leaders were briefed on the project, which is now expanding to a second cohort. Additionally, Valley CAN has developed the curriculum for and launched ZEV maintenance courses with a growing number of community college partners and been connected to other entities interested in developing opportunities in the ZEV workforce training space. Other grant-funded projects include a FCEV replacement pilot to assess the viability of hydrogen fuel cell vehicles for low-income, high mileage drivers, and the expansion of the emPOWER engagement platform to reach priority, disadvantaged communities and provide resources on available ZEV incentives.

Veloz launched a new Electric for All ZEV Education Campaign and Program ([Myths Busting Myths](#)), worked with partner Charge Across Town to produce a large-scale ZEV educational event in San Francisco ([EVs Kick Gas!](#)), and with ETcommunity to host two faith and community-based events. Veloz and the group of 8 community partners included on the grant coordinated to include links to Access Clean California on their respective webpages to bring incentive information to low- and moderate-income Californians through a variety of channels. Veloz's grant partners also coordinated to include links to electricforall.org on their respective sites, thereby helping integrate the ZEV information landscape and make it easier for consumers to navigate the many available information sources.

Both Valley CAN and Veloz were invited to a briefing that GO-Biz and CARB organized with Consumer Reports about Consumer Reports' latest research on consumer attitudes toward and awareness of ZEVs, including California-specific findings and findings across socio-economic and demographic groups.

- b. **Film Commission.** Work with film commission to implement a social media outreach opportunity—launch at strategic time.

The team did not identify a strategic opportunity to launch a social media campaign with the Film Commission in 2022 but will continue to explore options in 2023. However, GO-Biz grantee Veloz launched a ZEV education campaign with partners, linked above.