

DOCKETED

Docket Number:	22-ALT-01
Project Title:	2022-2023 Investment Plan Update for the Clean Transportation Program
TN #:	246354
Document Title:	Presentation - Advisory Committee Meeting for the Clean Transportation Program
Description:	Oct 6, 2022 - 2nd revised AC Presentation Combined
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California Energy Commission

Advisory Committee Meeting for the Clean Transportation Program

October 6, 2022



Housekeeping

- This workshop is being recorded.
- Virtual participation will be possible through Zoom or telephone.
- Workshop event webpage is <https://energy.zoom.us/j/95568308474?pwd=eHM2R0ZrajFQRVVYNHVPd0ZhWENidz09>
- Docket location <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-ALT-01>
- Written comments should be submitted to Docket 22-ALT-01 <https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=22-ALT-01>

Deadline for comments is Tuesday, October 25, 2022, by 5:00 P.M.



Meeting Agenda

- Welcome and Housekeeping.
- Opening remarks by Commissioner Monahan.
- Presentations by CEC staff on the Clean Transportation Program, including updates on recent program implementation and related activities, additional funding from the federal government and the state budget.
- Overview of the revised staff draft report version of the *2022-2023 Investment Plan Update*.
- Advisory Committee discussion on the *2022-2023 Investment Plan Update*.
- Public comment.
- Closing remarks.



**Welcome to the
October 6, 2022 Meeting of the
Clean Transportation Program
Advisory Committee**



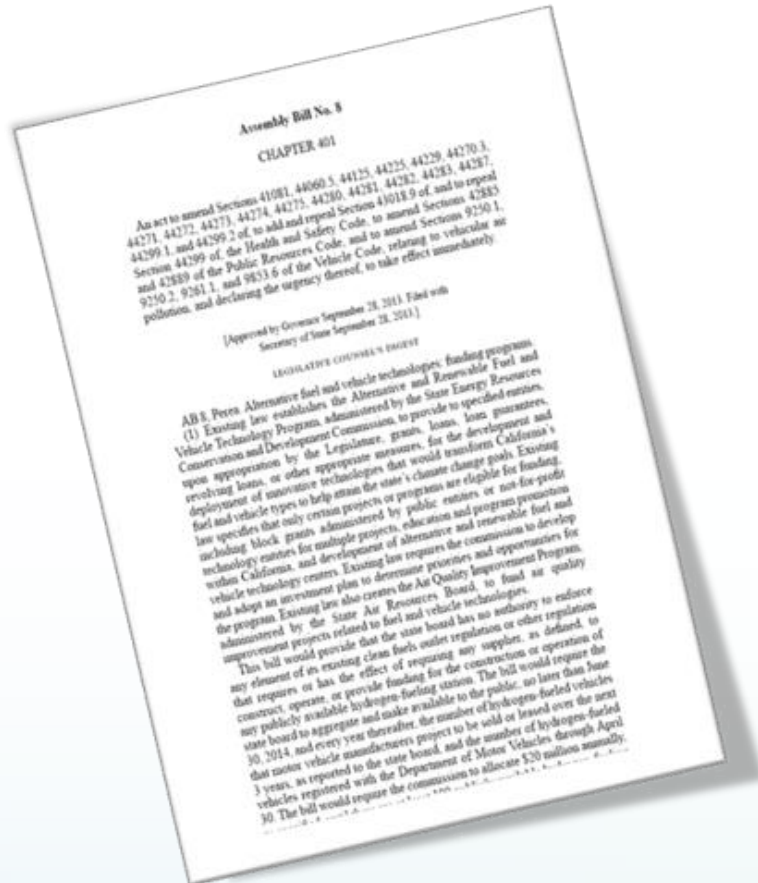
Overview of the Clean Transportation Program and Investment Plan Process

October 6, 2022, 2nd Advisory Committee Meeting

Patrick Brecht – Project Manager for the Clean Transportation Program
Investment Plan
Fuels and Transportation Division



Clean Transportation Program Origins in Statute



- Established by Assembly Bill 118 (Nunez, 2007)
- Provides approximately \$95.2 million per year
- Extended to January 1, 2024 by Assembly Bill 8 (Perea, 2013)



Clean Transportation Program Highlights (as of Spring 2022)

17,000+
Installed or
Planned
Chargers

79 Hydrogen
Refueling
Stations
74 approved
additional
stations

Workforce
Training for
More than
22,000 Trainees
and 277
Businesses

Block Grants for
both LD and
MD/HD ZEV
Infrastructure

27 ZEV-Related
Manufacturing
Projects

Leveraged over
\$730 Million in
Private and
Other Public
Funds

- **Sufficient funding to reach 250,000 chargers by 2025**
- **Sufficient funding to reach 200 hydrogen stations by 2025**

(Pending future state budgetary approval)



Purpose of the Investment Plan

- Guides the Clean Transportation Program's investments toward meeting the state's clean transportation goals
- Since 2020, sets multi-year funding allocations (through 2023) for improved planning and visibility
- Takes into consideration state regulations and other funding programs to promote coordination across agencies
- Allocates funding for multiple fuel and vehicle technologies, transportation sectors, and supporting activities (e.g. workforce development)



Commitment to Inclusion, Diversity, Equity and Access

- Seek to provide more than 50% of Clean Transportation Program funds to projects that benefit low-income and disadvantaged communities.
- Investment Plan input from Disadvantaged Communities Advisory Group (DACAG), diverse interests from the Clean Transportation Program Advisory Committee, and other groups.
- Expand outreach to local community-based organizations

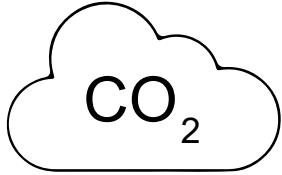


Program Community Benefits

- Planning a public process to define, measure, track, and target more program community benefits.
 - Outreach and engagement with DACAG, Clean Transportation Program Advisory Committee, coalitions, and community groups.
 - CEC will engage the public through workshops and will share information on the CEC website.
- Will explore community benefits beyond project location and GHG reductions such as health, mobility options, workforce, economic, and more.
- First workshop planned before end of 2022.

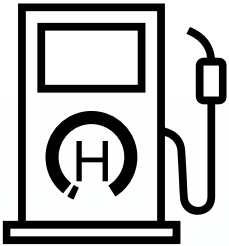


Key California ZEV Policy Goals



Climate

- Reduce GHG emissions to 40 percent below 1990 levels by 2030
- Achieve carbon neutrality by 2045



ZEV Infrastructure

- 250,000 electric vehicle chargers, including 10,000 DC fast chargers, by 2025
- 200 hydrogen refueling stations by 2025



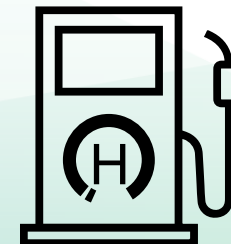
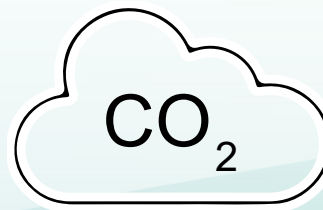
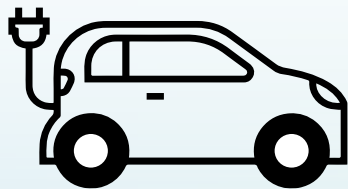
ZEV Fleet

- (See next)



Executive Order N-79-20 Goals

- ✓ 100% in-state sales of new passenger cars and trucks be zero-emission by 2035 (**CARB's Advanced Clean Cars II Regulations**)
- ✓ 100% medium- and heavy-duty vehicles be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks (**CARB's Advanced Clean Trucks Regulation**)
- ✓ 100% zero-emission off-road vehicles and equipment by 2035 where feasible



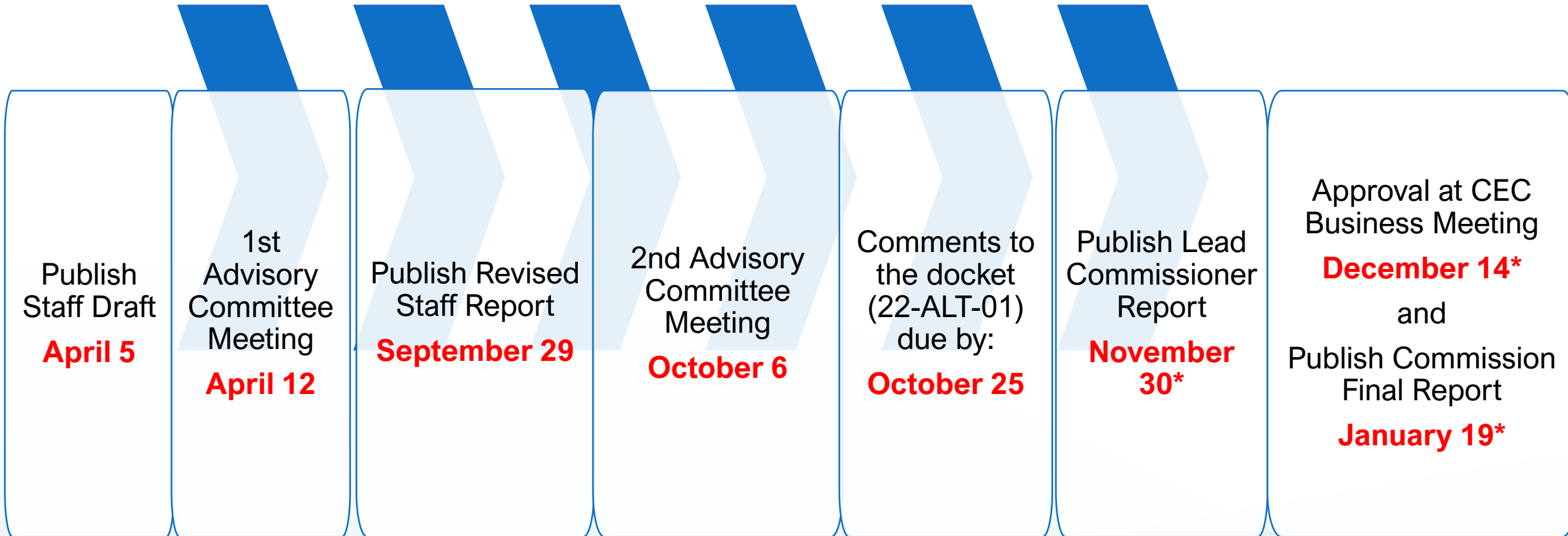


Informing the Investment Plan

- *AB 2127 Electric Vehicle Charging Infrastructure Assessment*
- *SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment*
- Zero-Emission Vehicle Infrastructure Plan (ZIP)
- Public meetings/workshops with the Advisory Committee
- Consultation with the Disadvantaged Communities Advisory Group
- Experience with administration of past Investment Plans
- Adjusting for federal government and state budget augmentations



Investment Plan Process & Schedule



*Tentative



Legislative Updates for the Clean Transportation Program

- Assembly Bill 1389
- Assembly Bill 2061
- Assembly Bill 2700



Image credit: CA Department of General Services



Clean Transportation Program Funding and ZEV Acceleration

Clean Transportation Program

- **\$100 Million**
- Annual

ZEV 1.0 Beginning with FY 2021-22

- **\$1.165 Billion**
- Over 3 years

ZEV 2.0 Beginning with FY 2021-22

- **\$2.415B**
- Over 5 years



Light-Duty Electric Vehicle Charging Infrastructure

Phil Cazal, Air Pollution Specialist
Fuels and Transportation Division



CALeVIP 1.0

First Light-Duty Block Grant

- 13 regional projects covering 36 Counties
- \$226 million in incentives (\$40 million from partners)
- Installed and in-progress:
 - More than 5,500 Level 2 connectors
 - More than 1,400 DC fast chargers
- 57% in disadvantaged and/or low-income communities





New Block Grant Agreement #1 Center for Sustainable Energy (CSE)

- CALeVIP 2.0
- DC fast chargers
- Applications sorted by level of readiness, rather than first-come, first-served
- Golden State Priority Project: \$30 million
 - Eligible projects must be in disadvantaged and/or low-income communities
 - Launches Q1, 2023



Photo credit: PlugShare



New Block Grant Agreement #2

CALSTART

- Communities in Charge
- Level 2 chargers
- Community sites and disadvantaged low-income communities prioritized
- First project: Statewide, \$30 million
 - Design workshop on October 18, 2022
 - Accepting applications beginning Q1 2023





Targeted Projects that Increase Access to Charging Infrastructure

REACH (GFO-21-603):

- Multifamily Housing
- Disadvantaged and low-income communities
- 13 Agreements proposed
- \$26.6 million



Photo credit: GRID Alternatives

CARTS (GFO-21-601):

- Transportation Services
- 10 Agreements proposed
- \$16.6 million



Photo credit: CARB

REV (GFO-21-604):

- Rural EV Drivers
- 17 Agreements proposed
- \$20.6 million



Photo credit: CEC



Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (EnerglIZE)

Jamaica Gentry, Air Pollution Specialist
Fuels and Transportation Division



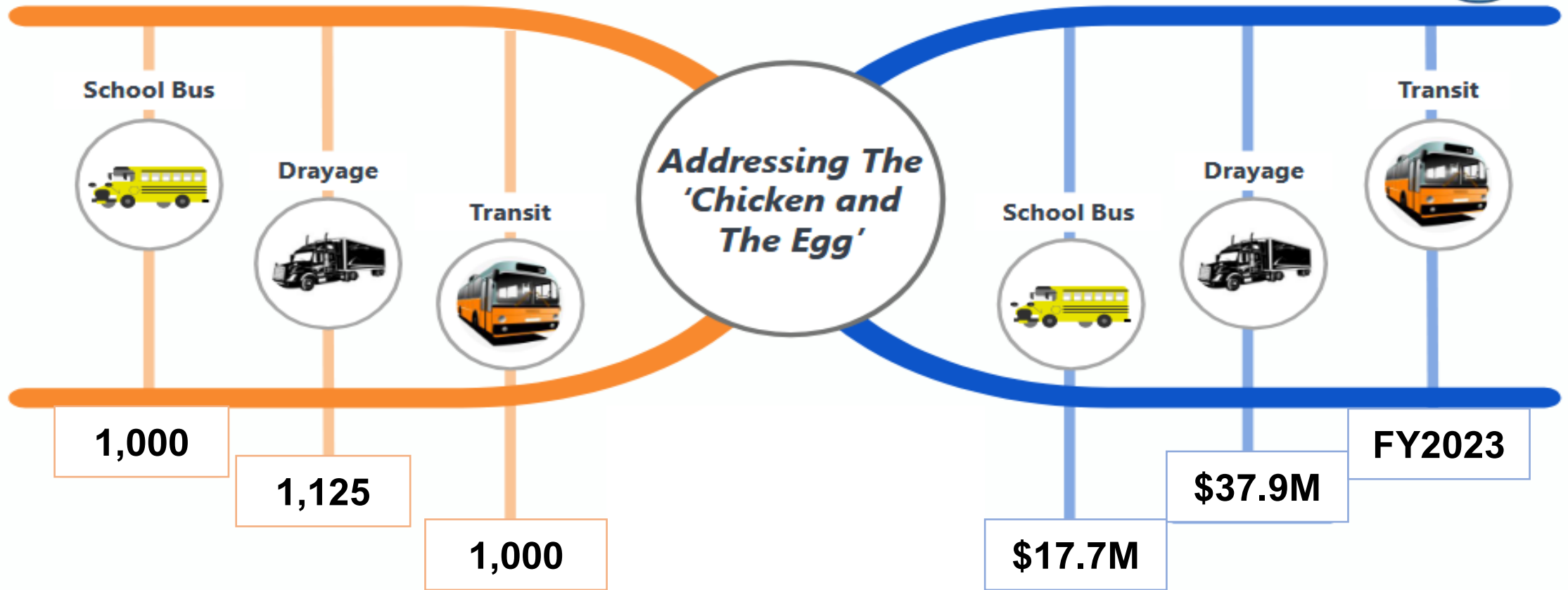
CEC Programs – EnergIIZE

- Supports MD/HD commercial fleet ZEVs through incentives
- Up to \$276 Million available
- 5 Opportunities for funding in 2022
 - EV Fast Track
 - EV Public Charging Lane
 - Hydrogen Lane
 - EV Jump Start (Equity) Lane
 - HVIP Participation

The ZEV Incentive Collaborative

A cooperative effort to address the need for synergy between vehicle and infrastructure incentives.

Aligning incentives under an overarching project with 3 unique initiatives.





EnergIIZE: Infrastructure Funding Lanes

- First-come, First-served Application
 - \$16.6 million available
 - Max. Project Cap = \$500,000/project
 - Incentives for 50% of equipment costs
-
- Opened & Closed March 23, 2022
 - Fully Subscribed

Fast Track



EnergIZE: Infrastructure Funding Lanes

- Competitive Application Process
 - \$17 million available
 - Max. Project Cap = \$3 million/project
 - \$4 million, if equity criteria met
 - Incentives for 50% of equipment costs
-
- Closed July 14, 2022
 - Fully Subscribed



Hydrogen



EnergIIZE: Infrastructure Funding Lanes

Jump Start

- Competitive Application Process
- \$14 million available
- Max. Project Cap = \$750,000 per project
- Incentives for 75% of equipment and soft costs
- Launch Date: September 1, 2022



EnergIIZE: Infrastructure Funding Lanes

Public Charging

- Competitive Application Process
- \$8.1 million available
- Max. Project Cap = \$500,000 per project
- Incentives for 50% of equipment costs

- Launch date:
October 14, 2022



California Zero-Emission Vehicle-Related Manufacturing

Jonathan Bobadilla, Energy Commission Specialist I
Fuels and Transportation Division



Manufacturing Solicitations

GFO-21-605 Zero Emission Transportation Manufacturing (ZETM)

- Attract new and expand existing ZEV-related manufacturing in California
- Increase number and quality of jobs
- Bring positive economic impacts to the state
- Contribute to California's goals of zero-emission transportation





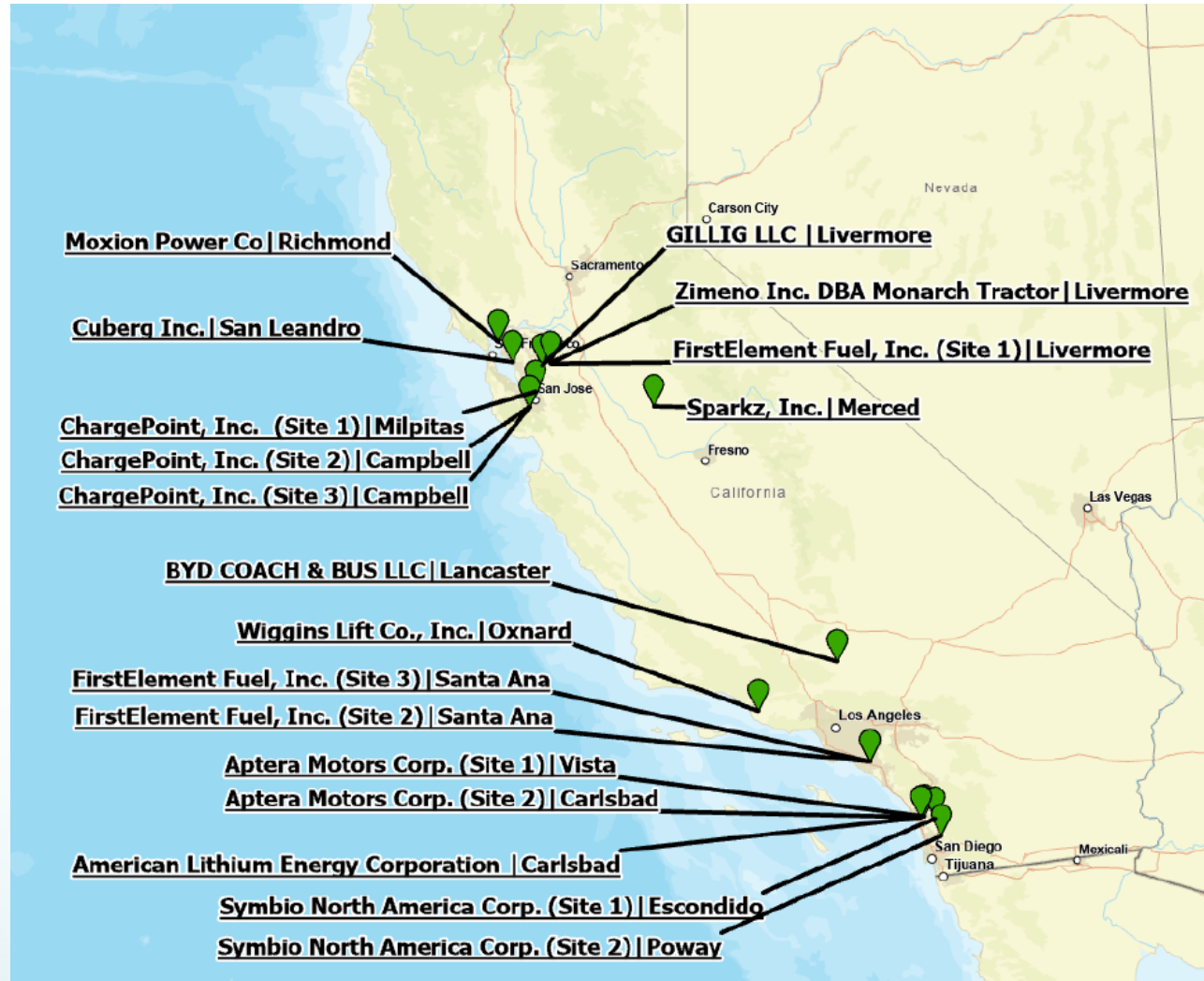
GFO-21-605 ZETM Results

Project Category	Applications Received	Funding Requested (\$ million)	Proposed Awards	Proposed Funding (\$ million)	Proposed Match (\$ million)
Complete ZEVs	15	\$183	6	\$112	\$134
ZEV Infrastructure	2	\$18	1	\$15	\$15
Components for ZEV & ZEV Infrastructure	2	\$16	1	\$9	\$17
Batteries for ZEV & ZEV Infrastructure	7	\$94	4	\$49	\$102
TOTAL	26	\$311	12	\$185	\$268

Source: [GFO-21-605 Solicitation Page](#). Proposed awards pending approval at CEC business meeting.



GFO-21-605 Awardee Map



Source: [GFO-21-605 Solicitation Page](#). Awards pending approval at a CEC business meeting.



Manufactured Products Supported



Source: GILLIG, battery electric bus



Source: BYD, battery electric school bus



Source: ChargePoint, EVSE



Source: Wiggins, battery electric forklift



Source: Moxion, EVSE battery pack



Source: Cuberg, battery cells



Source: FirstElement, HRSE pump



ZEV Manufacturer Data Efforts



California Zero-Emission Vehicle-Related Manufacturing

To view data from this application visit [California Zero-Emission Vehicle-Related Manufacturing Data](#).

For more CEC data on ZEVs, such as ZEV population and number of electric vehicle chargers, please visit <https://www.energy.ca.gov/zevstats>



Find address or place

< 19 of 43 >

Company	HummingbirdEV
Manufactured Product	ZEV Components
Website	View
Description	Medium- and heavy-duty electric vehicles.
City	Livermore
Zip	94551
Year Incorporated	2015

Zero Emission Vehicle

ZEV Components

ZEV Infrastructure

ZEV Batteries

*Please note that selecting multiple filters results in data that satisfy any of the filters simultaneously.

Number of Zero-Emission Vehicle-Related Manufacturers in California:
43



California State Parks, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS. Powered by Esri.

Source: CEC, [California Zero-Emission Vehicle-Related Manufacturing](#)



Active or Upcoming Clean Transportation Program Funding

- Convenient, High-Visibility, Low-Cost, Level 2 Charging (CHiLL-2) **\$24 million**
- Bidirectional School Bus
- Vehicle Grid Integration (VGI)-focused Solicitation
- Signage **\$1 million**
- Battery Manufacturing Block Grant (GFO-21-606) **\$25 million**
- Low-Carbon Fuel Production and Supply



More Information

Please visit our [CEC Solicitations page](https://www.energy.ca.gov/funding-opportunities/solicitations) for more information and updates on any solicitation

<https://www.energy.ca.gov/funding-opportunities/solicitations>

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Enter keywords, e.g. Tracking Progress

HOME PROCEEDINGS RULES AND REGULATIONS PROGRAMS AND TOPICS **FUNDING** DATA AND REPORTS SHOWCASE

California Energy Commission > Funding > **Solicitations**

Solicitations

Information about funding opportunities that the California Energy Commission offers that advance the state's transition to clean energy and transportation through innovation, efficiency, and the development and deployment of advanced technologies.

FUNDING

- Solicitations**
- Awards
- Funding Resources



National Electric Vehicle Infrastructure (NEVI) Program

Ben De Alba, NEVI Lead
Fuels and Transportation Division



IRA & IIJA: Key ZEV Infrastructure Provisions

Inflation Reduction Act

- ✓ Extends federal tax credit on charging equipment through 2032
 - Individual/residential uses:
 - 30%, up to \$1,000
 - Commercial uses:
 - 6%, up to \$100,000 per unit
 - Equipment must be placed in a low-income community or non-urban area
- ✓ \$1 billion to states, municipalities, Indian tribes, and school for heavy-duty ZEVs - infrastructure included
- ✓ \$2.25 billion for zero-emission technology at ports

Infrastructure Investment and Jobs Act

- ✓ \$5 billion for the National Electric Vehicle Infrastructure (NEVI) Formula Program
- ✓ \$2.5 billion for two discretionary grant programs:
 - Corridor Charging Grant Program
 - Community Charging Grant Program



National Electric Vehicle Infrastructure (NEVI) Program

- Established through Infrastructure Investment and Jobs Act (IIJA)
- Establish a nationwide, interconnected network of publicly available electric vehicle chargers along Alternative Fuel Corridors
- California's distribution of the formula funding is estimated at \$384 million over 5 years
- Local governments and community benefit organizations will have the opportunity to apply for \$2.5 billion in discretionary funding

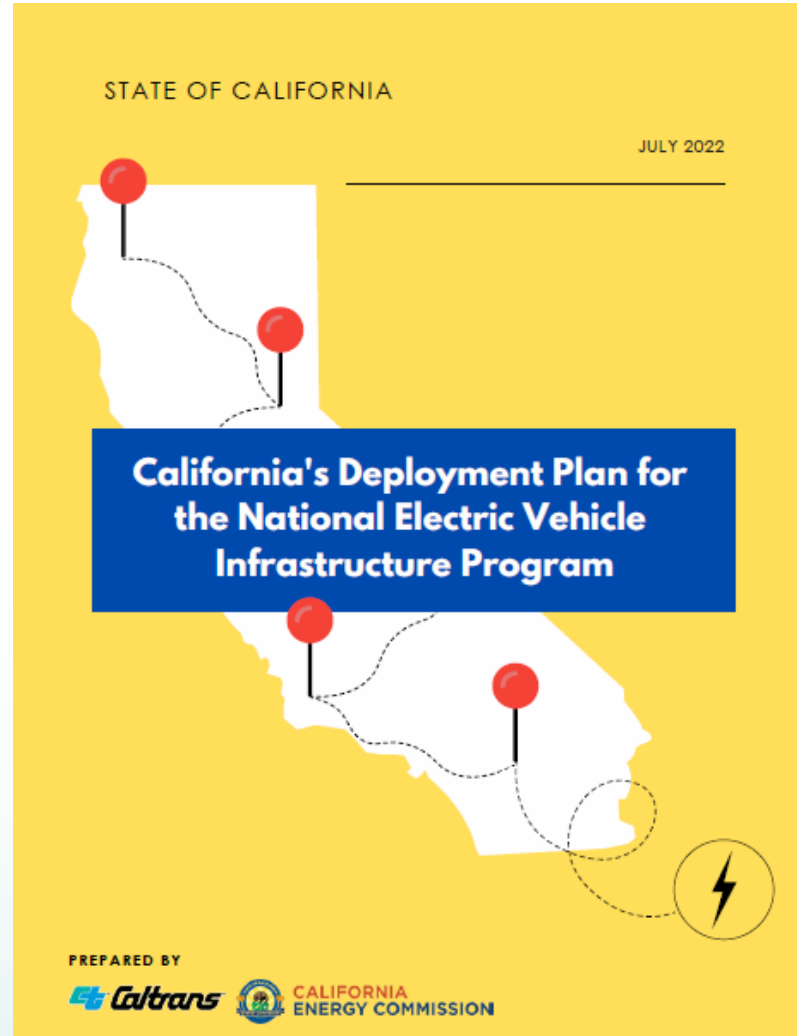
Partnership Between CEC & Caltrans



Caltrans



NEVI Deployment Plan Development





NEVI Implementation Timeline

Milestone	Time
✓ Draft plan released	June 8, 2022
✓ State submits final plan	August 1, 2022
✓ Federal approval of CA's plan	September 14, 2022
❑ State develops grant funding opportunity	Q2 2022 to Q4 2022
❑ Anticipated first round of solicitation release	Q1 2023
❑ Subsequent rounds of solicitation releases	Q3 2023; Q1 2024; Q3 2024



Purpose of Solicitation

- Install high-powered direct current fast chargers along California's Alternative Fuel Corridors
- Install at least the required number of charging stations and chargers to complete the corridor sections within a group
- Competitive grant solicitation
- Leverage private funds



Proposed Corridor Groups



Legend

• Stations that meet NEVI Criteria

Group

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

* Stations that meet minimum criteria may change at the time of solicitation release.

[US Department of Transportation Federal Highway Administration Alternative Fuel Corridors Map](#)

[https://hepgis.fhwa.dot.gov/fhwagis/ViewMap.aspx?map=Highway+Information%7CElectric+Vehicle+\(EV-Round+1,2,3,4,5+and+6\)](https://hepgis.fhwa.dot.gov/fhwagis/ViewMap.aspx?map=Highway+Information%7CElectric+Vehicle+(EV-Round+1,2,3,4,5+and+6))

[US Department of Energy Alternative Fuels Data Center Station Data for Alternative Fuel Corridors](#)

<https://afdc.energy.gov/corridors>



NEVI Docket

Docket Name:

National Electric Vehicle Infrastructure Funding Program

Docket Number:

22-EVI-05

Link:

[e-Commenting Page for Docket 22-EVI-05](https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=22-EVI-05)

(<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=22-EVI-05>)



Recap of CARB Regulations-ACCII, ACT & ACF

Michael Nicholas, Supervisor, Infrastructure Modeling and Assessment Unit
Fuels and Transportation Division



Recap of CARB Regulations

- Advanced Clean Cars II (**ACCII**)
 - Applies to light duty
 - By 2035, 100% of new vehicle sales are ZEVs (20% PHEVs OK)
 - Estimated on-road fleet
 - 2030: 5.7 million ZEVs
 - 2035: 12.2 million ZEVs
- Advanced Clean Trucks (**ACT**)
 - Class 2b-8 trucks
 - New vehicle sales requirements starting in 2024 and by 2035:
 - 55% class 2b-3 (really big pickups and vans)
 - 75% class 4-8 straight truck (non-articulated trucks)
 - 40% class 7-8 tractor trailers (“big rigs”)
 - Estimated on-road fleet
 - 2030: 172,000 ZEVs
 - 2035: 361,000 ZEVs



Recap of CARB Regulations

- Advanced Clean Fleets (**ACF**)
 - Not completed
 - Uses executive order N-79-20 goals to guide regulation
 - 100 percent zero-emission drayage trucks by 2035
 - 100 percent zero-emission off-road vehicles and equipment by 2035, where feasible
 - 100 percent zero-emission medium- and heavy-duty vehicles by 2045, where feasible
 - Sets varying regulations based on fleet size, revenue, ownership model and application.

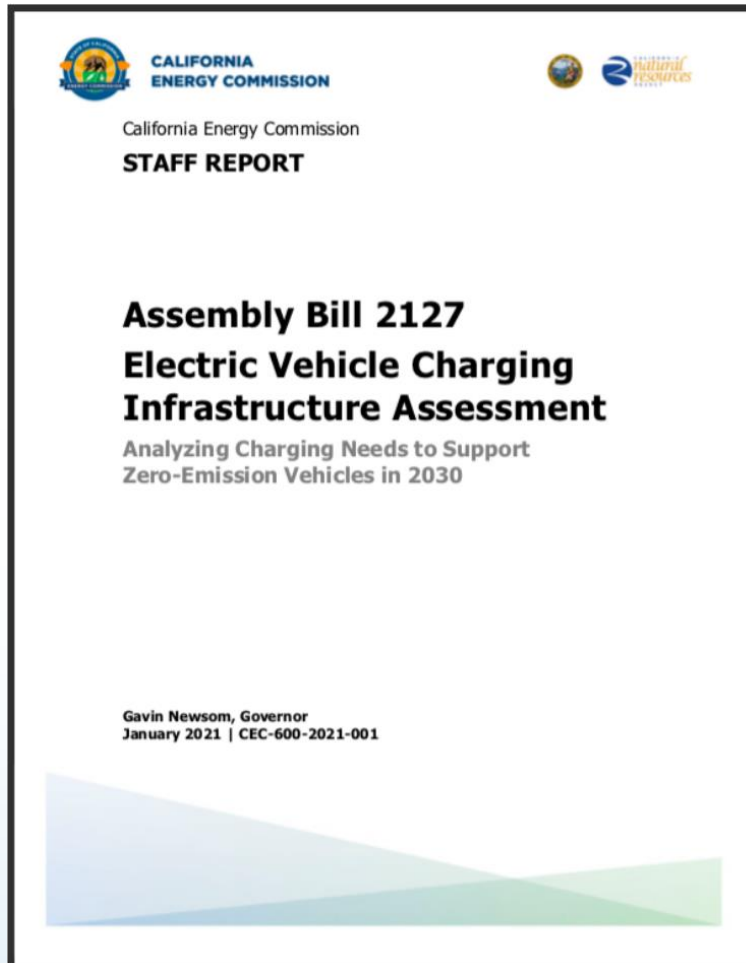


Plan and Timeline for the next AB 2127 Report

Michael Nicholas, Supervisor, Infrastructure Modeling and Assessment Unit
Fuels and Transportation Division



First AB 2127 Assessment



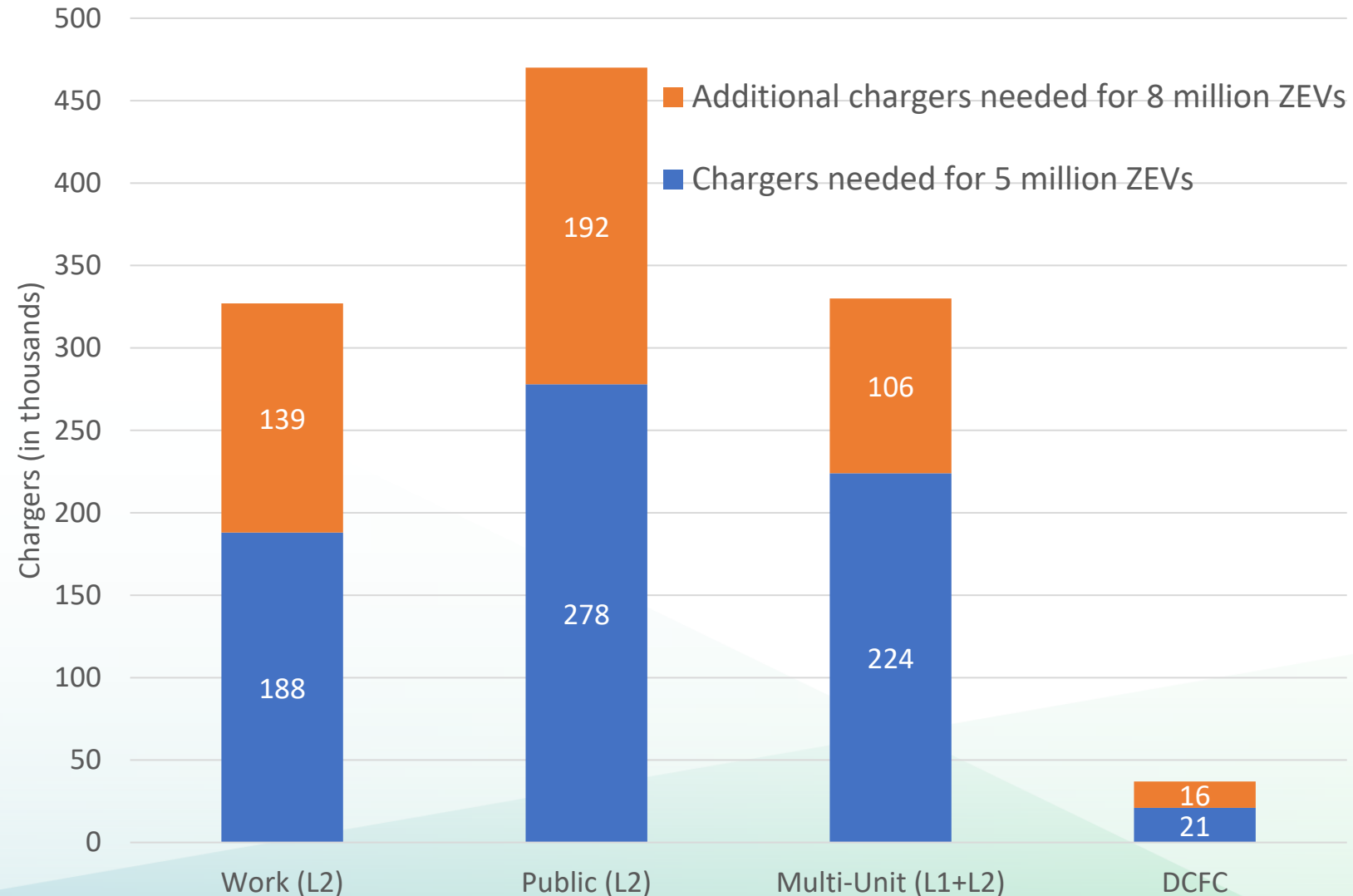
Front cover of AB 2127 report

- Assess infrastructure necessary to support 5 – 8 million ZEVs on CA roads by 2030
- Need to identify geographic locations to sufficiently, economically host charging stations
- “Early warning system”; focus infrastructure deployments and investment planning
- Iterative process which requires ongoing analysis



Light Duty EV Charger Needs 2030

- About **700,000** chargers needed to support **5 million ZEVs**
- Over **1.2 million chargers** needed to support **8 million ZEVs**
- Does not include residential chargers at single-family homes

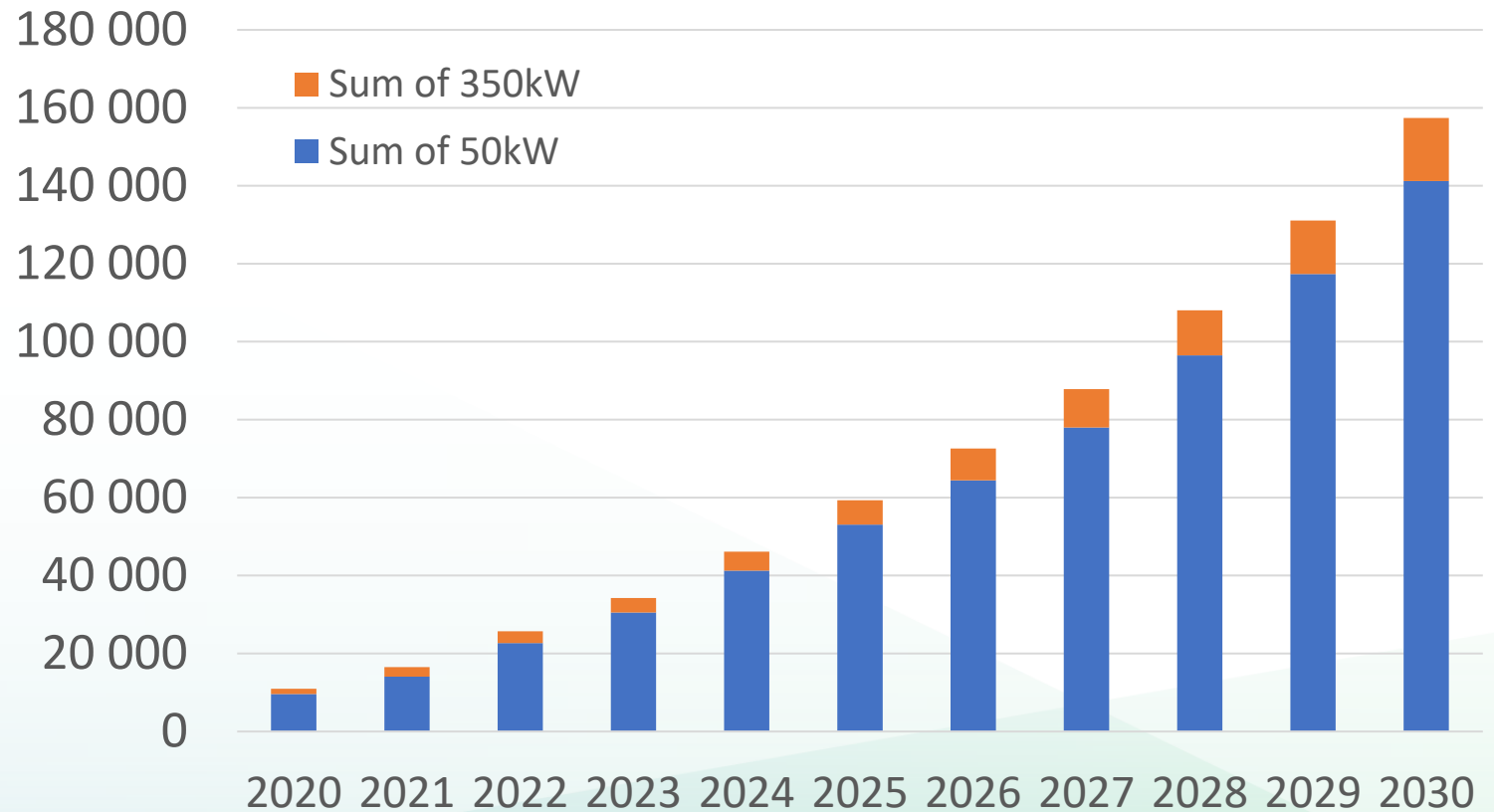




Medium/Heavy Duty EV Chargers

- **157k** chargers needed to support **180,000 BEVs**
- **141,000 50 kW chargers** used overnight
- **16,000 350 kW chargers** used in the daytime

Mobile Sources Strategy, Charger Deployment





AB 2127 2nd Assessment Update

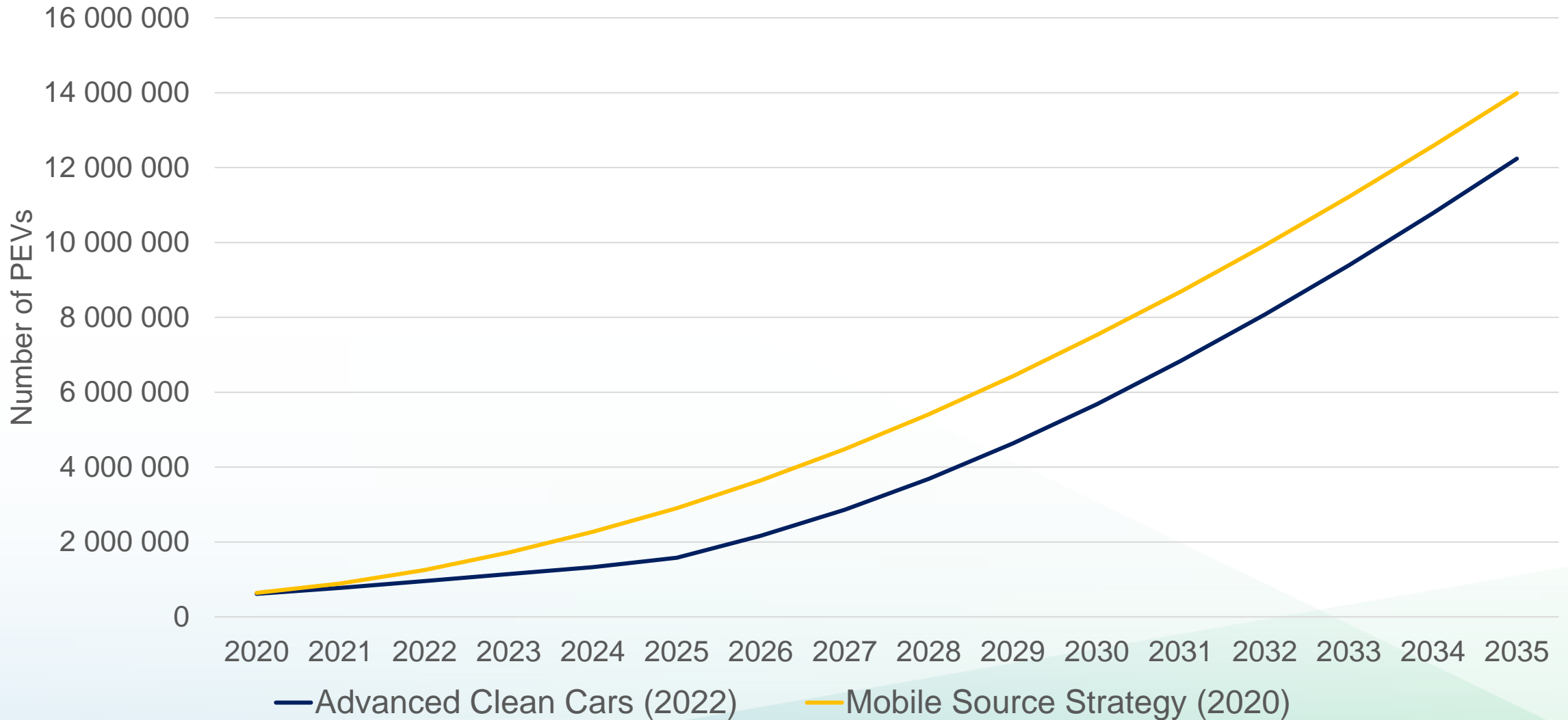
- Extend assessment horizon to 2035
- Adjust estimates to reflect changing technology and refined assumptions

Outline

- Existing charging infrastructure
- Current ZEV trends
- Sections detailing chargers needed for:
 - Light-duty vehicles
 - Medium- and heavy-duty vehicles
 - Transportation network companies (Uber/Lyft)
- Other topics:
 - Grid needs analysis from additional charger load
 - Vehicle-grid integration - vehicle charging is responsive to grid conditions
 - Labor and Workforce – added based on new legislation (SB 589)



Fleet Scenarios in 2nd AB 2127 Report





AB 2127 Report Timeline

Date	Item
8/15/22-11/21/22	Draft Staff Report
2/6-2/24/23	Public review period for Staff Report
2/13/23	Workshop on Staff Report
7/31/23	Publish Revised Staff Report
8/14/23	CEC Business Meeting approval of AB 2127 Final Report
8/14-8/28/23	Publish AB 2127 Commission Report



The Grid and EV Charging

Preparing for EV charging load growth and decarbonization

Jeffrey Lu, Air Pollution Specialist
Fuels and Transportation Division



EV charging will become significant share of statewide electricity consumption

<2 percent

Total Electricity
Consumption, 2022



~10 percent

Total Electricity
Consumption, 2030

Charging is generally **flexible** as a result of long dwell times. Most charging can be accommodated outside 4-9 p.m. peak hours:

<1 percent

Peak Electric Load, 2022



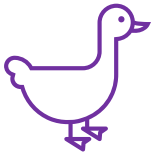
<5 percent

Peak Electric Load, 2030



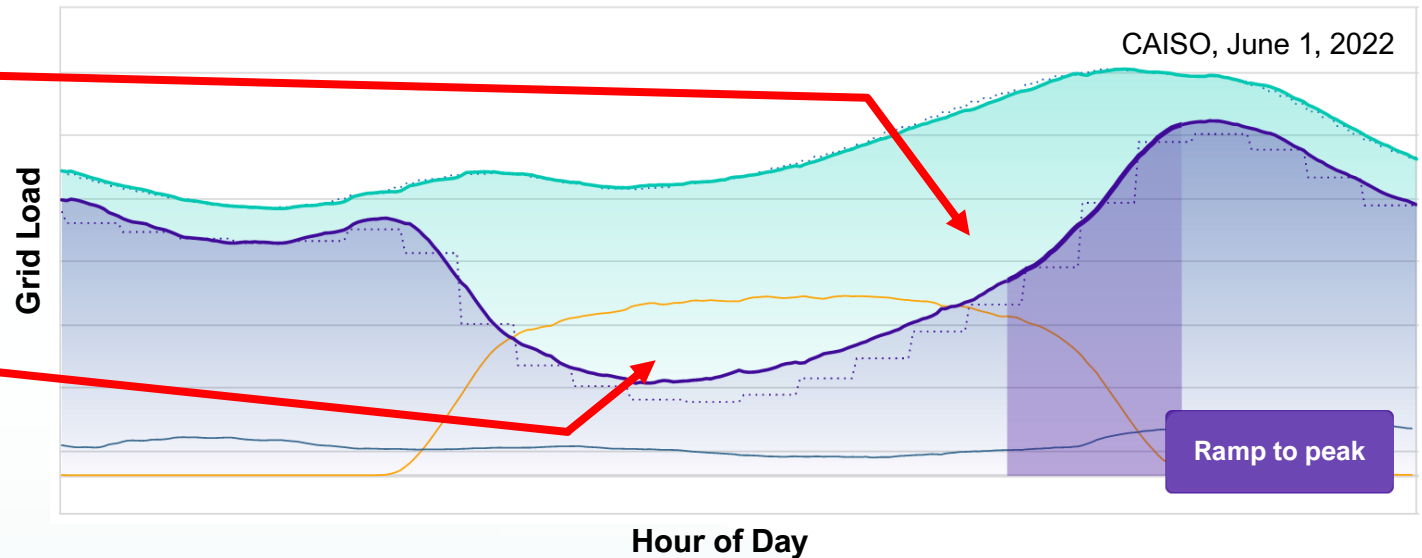
How charging load is integrated onto the grid will impact grid costs, planning, operation

- Outside of peak hours, the grid is often under utilized:



Solar generation results in duck shape (purple line) and daytime net demand dip

Where possible, slot in charging load during periods of grid abundance!



- Vehicle-grid integration (VGI): Strategies to thoughtfully integrate charging load while respecting both driver/customer and grid needs
- Even with VGI, some grid upgrades will be needed to accommodate new load



CEC has several ongoing actions and analyses to prepare for charging load growth

- AB 2127 tasks CEC with analyzing statewide charging infrastructure needs
 - CEC models project charging load under various adoption scenarios
 - Integrating modeling results with utility data can help identify areas of the grid which will need upgrades
 - Qualitative needs: Grid connection processes, workforce development, segment-specific challenges, and so on
- Wide range of VGI-related work to maximize use of existing infrastructure
 - Technical analysis (advanced communication + technologies)
 - Funding and technology deployment (solicitations)
- Coordinate findings and actions across CEC, also CPUC and CARB



Thanks!

For questions after today's presentation, contact jeffrey.lu@energy.ca.gov.



SB 643: Statewide Assessment of Medium-and Heavy-Duty Fuel Cell Electric Vehicle Hydrogen Infrastructure and Production

Kristi Villareal, Associate Energy Specialist
Fuels and Transportation Division



SB 643 “H2 for MD/HD” Report Overview

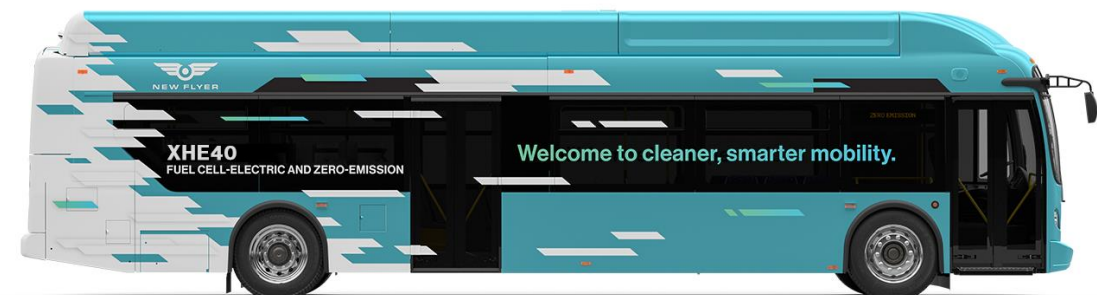
- Assessment of hydrogen fueling infrastructure & supply necessary to support zero-emission trucks, buses and off-road applications to meet state mandates, regulations and goals



Source: Hyundai



Source: Cummins



New Flyer Xcelior XHE40 FCEB

Source: New Flyer



Report Overview

- To be developed in consultation with CARB, CPUC, with input from other agencies and interested parties
- Inaugural report due to the Legislature by December 2023, updated every 3 years until January 2030



Next Steps

- Finalize schedule and report outline
- Collaborate with CARB, CPUC and other agencies
- Public workshop in early 2023 and other comment opportunities
- Docket Number 22-HD-02
- <https://www.energy.ca.gov/proceedings/dockets/california-energy-commission-dockets>



ZEV Dashboard

Liz Pham, Electric Generation System Specialist
Energy Assessments Division

Zero Emission Vehicle and Infrastructure Statistics

The California Energy Commission (CEC) has partnered with the Department of Motor Vehicles (DMV) to track the sales and population of light duty zero emission vehicles (ZEVs) in California. ZEVs include battery electric, plug-in hybrid electric, and fuel cell electric vehicles. The DMV vehicle registration database contains data on all registered vehicles in California. These data are cross-referenced with a secondary database that translates each Vehicle Identification Number to a specific make, model, year, and fuel type. The CEC also tracks the number of plug-in electric vehicle chargers and hydrogen refueling stations serving light-duty vehicles in California.

The California Energy Commission has also teamed up with Veloz to deliver quarterly electric car sales data to support [Veloz's sales dashboard](#) that provides California electric car sales, national electric car sales, electric car chargers, hydrogen stations and the current number of electric makes and models available in the state. Shop and save on your next electric car with [ElectricForAll.org](#)

VISUALIZATIONS



Light-Duty Vehicle Population in California

Explore California's light-duty vehicle population. Light-duty vehicle population reflects the number of vehicles "on the road."



New ZEV Sales in California

Explore how many new zero emission vehicle are registered.

ENERGY ALMANAC

California Electricity Data

California Power Plants

California's Natural Gas Market

California's Petroleum Market

Data on Renewable Energy Markets and Resources

Transportation Energy

Zero Emission Vehicle and Infrastructure Statistics

CONTACT

[Media Office](#)



Medium- and Heavy-Duty Zero-Emission Vehicles in California

Learn about zero-emission medium- and heavy-duty vehicle deployment in California.



Electric Vehicle Chargers in California

Explore how many electric vehicle chargers are available in California.



Hydrogen Refueling Stations in California

Explore how many hydrogen refueling stations are available in California.



CEC Funded School Buses

Explore how many electric school buses were delivered and projected in California.



CEC Funded School Bus Chargers

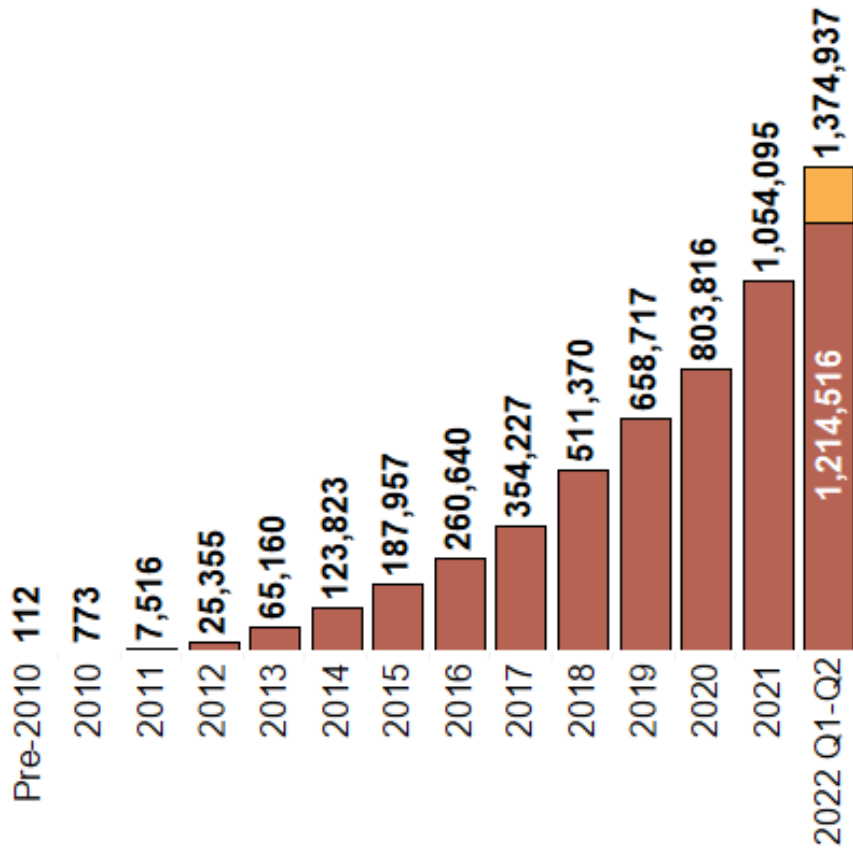
Explore how many school bus chargers were completed and projected in California.

Visit our dashboards at <https://www.energy.ca.gov/zevstats>



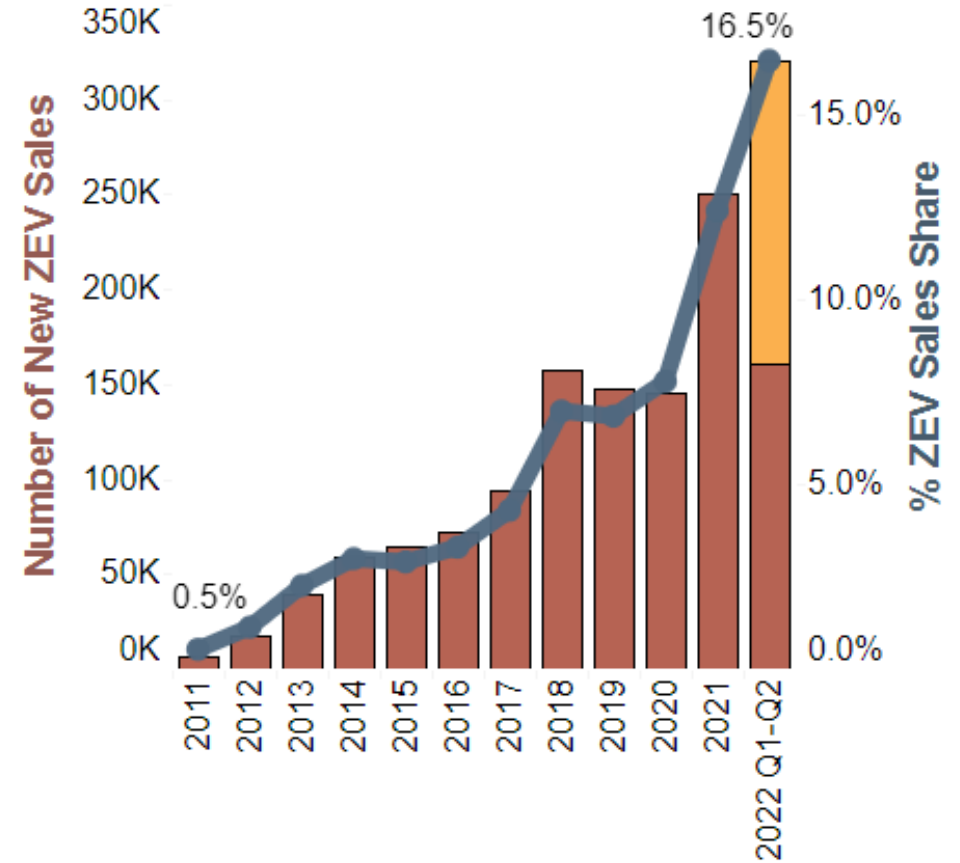
Light-Duty Zero Emission Vehicles - Sales

Cumulative New ZEV Sale



■ Additional ZEVs in 2022 at current rate
■ Current Cumulative Sales

ZEV Sales Share



■ % ZEV Sales Share
■ Additional ZEVs in 2022 at current rate
■ Actual annual new ZEV sales

Medium- and Heavy-Duty Zero-Emission Vehicles in California

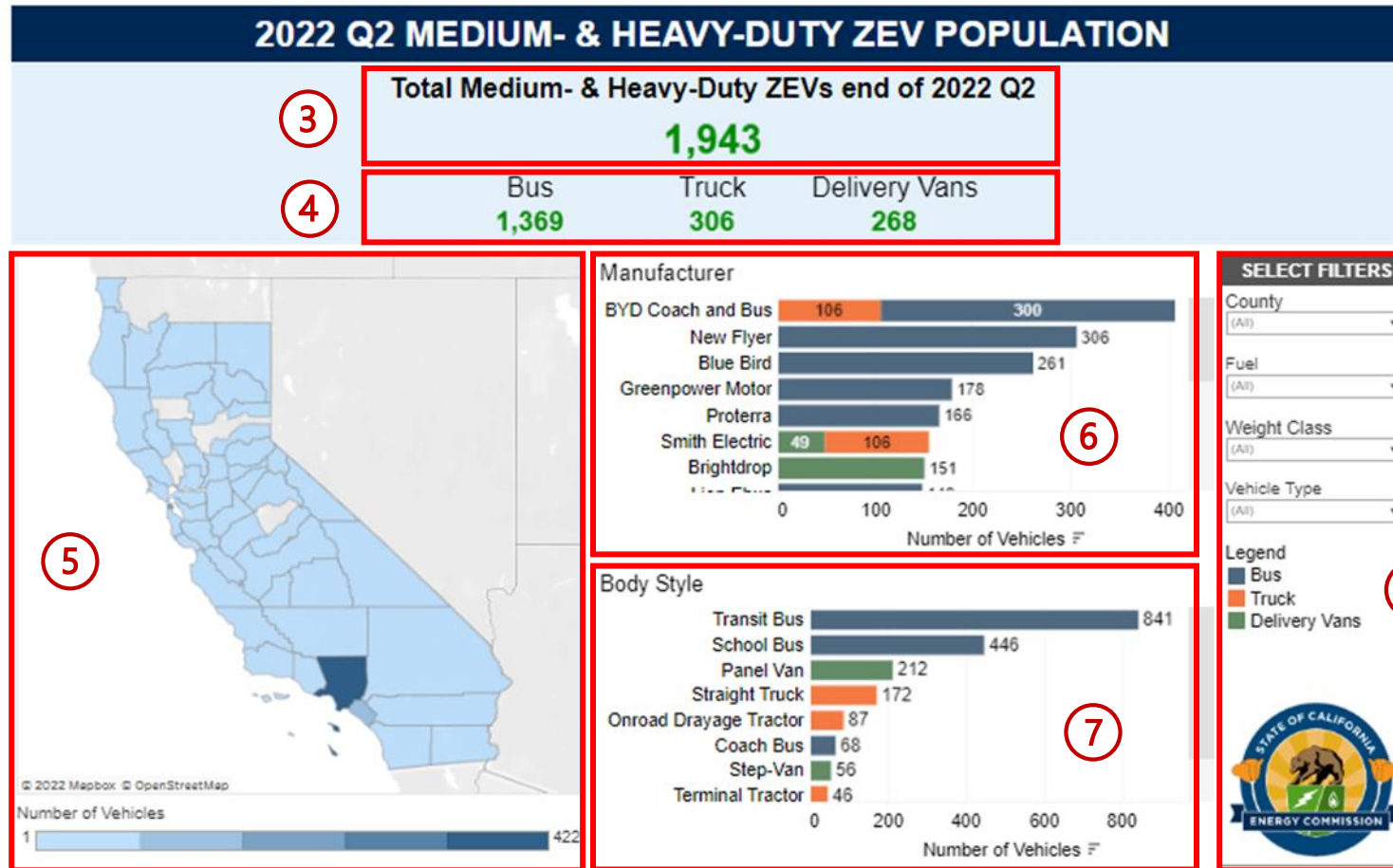
Medium- and heavy-duty vehicles have a gross vehicle weight rating of more than 10,000 pounds and include vans, buses, and trucks. This dataset is updated annually in April to reflect the number of DMV-registered vehicles "on the road" during the previous calendar year. [Visit full page layout of dashboard](#), [download data](#), or return to [dashboard collection page](#).

1

Other Dashboards in this Collection:

[New ZEV Sales](#) | [Light-Duty Vehicle Population](#) | [Medium- & Heavy-Duty Vehicle Population](#) | [EV Chargers](#) | [Hydrogen Stations](#) | [School Buses](#) | [School Bus Chargers](#)

2



9 Landing Page: <https://www.energy.ca.gov/zevstats>



Questions on materials so far?

- Clean Transportation Program Overview
- Recent Clean Transportation Program Funding
- Active or Upcoming Clean Transportation Funding
- ZEV-Related Manufacturing Map Demo
- Federal Funding –National Electric Vehicle Infrastructure (NEVI) Program
- Recap of California Air Resources Board Regulations
- Plan and Timeline for next AB 2127 Report
- EV Impacts on the Grid
- Plan and Timeline for inaugural SB 643 Report
- Medium- and Heavy-Duty Dashboard



Meeting Break Screen

Meeting of the Clean Transportation Program Advisory Committee

Break
Reconvening at X:XX



2022-2023 Investment Plan Update for the Clean Transportation Program



Patrick Brecht

Project Manager for the Clean Transportation Program
Investment Plan

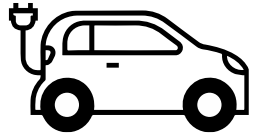


Key Changes in the Revised Staff Report Version of the 2022-2023 Investment Plan

- Incorporated \$2.4 billion from 2022 State Budget General Fund ZEV Package 2.0 to be administered by the CEC over four fiscal years
 - Note that Program funding allocations are unchanged
- Updates on National Electric Vehicle Infrastructure Program (NEVI)
- Incorporated CARB's 2022 Scoping Plan, Advanced Clean Cars II Regulations and Advanced Clean Truck Regulation
- Updates to CA Electric Vehicle Deployment Assessment (SB 1000 Report) and leveraging findings to inform Clean Transportation Program investments

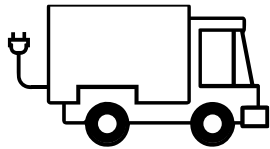


Investments in FYs 22/23 - 25/26



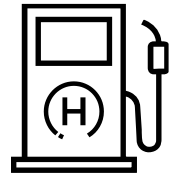
\$900 M

Light-Duty
EV Charging
Infrastructure



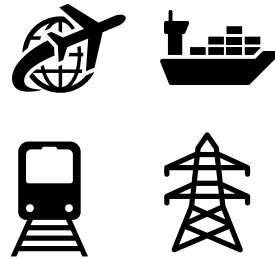
\$1.7 B

Medium and
Heavy-Duty
ZEV
Infrastructure



\$ 90 M

Hydrogen
Refueling
Infrastructure



\$97 M

Emerging
Opportunities



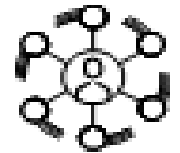
\$15 M

Low Carbon
Fuels



\$118 M

ZEV-Related
Manufacturing



\$10 M

ZEV
Workforce
Development

+

\$384 M

NEVI

Total: \$2.9 Billion



Funding Allocations Table

Category	Funding Source	2022-2023	2023-2024	2024-2025	2025-2026
Light-Duty Electric Vehicle Charging Infrastructure	Program	\$30.1	\$13.8	-	-
Light-Duty Electric Vehicle Charging Infrastructure	General Fund	\$218.5	\$210.0	\$90.0	\$40.0
Equitable At-home Charging	General Fund	\$19.0	\$160.0	\$80.0	\$40.0
Medium- and Heavy-Duty ZEV Infrastructure	Program	\$30.1	\$13.8	-	-
Drayage Truck ZEV Infrastructure	General Fund	\$171.95	\$185.0	\$49.0	-
Transit Bus ZEV Infrastructure	General Fund	\$28.50	\$90.0	\$50.0	\$30.0
School Bus ZEV Infrastructure	General Fund	\$389.25	\$15.0	-	-
Clean Trucks, Buses and Off-Road Equipment ZEV Infrastructure	General Fund	\$94.05	\$315.0	\$31.0	\$25.0
Port ZEV Infrastructure	General Fund	-	\$40.0	\$80.0	\$30.0
Emerging Opportunities	General Fund	\$51.3	\$35.0	\$11.0	-
Hydrogen Fueling Infrastructure	Program	\$20.0	\$10.0	-	-
Hydrogen Fueling Infrastructure	General Fund	-	\$20.0	\$20.0	\$20.0
Zero- and Near Zero-Carbon Fuel Production and Supply	Program	\$10.0	\$5.0	-	-
ZEV Manufacturing	General Fund	\$118.75	-	-	-
Workforce Training and Development	Program	\$5.0	\$5.0	-	-
	Total Program	\$95.2	\$47.6		
	Total General Fund	\$1,091.3	\$1,070	\$411	\$185



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Questions for Consideration

1. Given the prescriptive nature of the General Fund allocations from the State Budget Acts of 2021 and 2022, should the Investment Plan shift fungible Clean Transportation Program dollars to other categories? (e.g. low-carbon fuel production; ZEV manufacturing; workforce training and development?)
2. Does the timing and allocations between light-duty and medium-duty/heavy-duty infrastructure investments in the Investment Plan strike the right balance for ZEV acceleration? If not, where should adjustments be made and why?
3. What should the Investment Plan include within each funding allocation to improve equitable access and benefits from that allocation?



Closing Links and Contact

More information:

<https://www.energy.ca.gov/programs-and-topics/topics/transportation>

Submit e-comments by October 25, 2022 at:

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=22-ALT-01>

Contact:

Patrick.Brecht@energy.ca.gov