

DOCKETED

Docket Number:	24-ALT-01
Project Title:	2024–2025 Investment Plan Update for the Clean Transportation Program
TN #:	259337
Document Title:	Public Meeting of the Advisory Committee for the Clean Transportation Program Investment Plan Presentation
Description:	October 1, 2024
Filer:	Spencer Kelley
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	9/27/2024 2:20:49 PM
Docketed Date:	9/27/2024



California Energy Commission

Public Meeting of the Advisory Committee for the Clean Transportation Program Investment Plan

October 1, 2024



Housekeeping

- Meeting is being recorded
- Virtual participation possible through Zoom or telephone
- Meeting event webpage: <https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/clean-transportation-program-investment-9>
- Docket location: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-ALT-01>
- Submit written comments to Docket 24-ALT-01.

Deadline for comments: Tuesday, October 15, 2024, 5:00 PM



Housekeeping, cont'd.

- Bagley-Keene Act (amended by SB 544)
- Remote Advisory Committee attendees:
 - Any other adults with you?
 - Keep cameras on when unmuted, except in specific cases



Meeting Agenda

- Welcome, housekeeping, and roll call
- Opening remarks by Commissioner Monahan
- Overview of CEC's Clean Transportation Program, zero-emission vehicle (ZEV) infrastructure planning and analysis, regulations, and funding activities
- Overview of the upcoming revised staff draft version of the *2024–2025 Investment Plan Update*
- Advisory Committee discussion on the *2024–2025 Investment Plan Update*
- Public comment
- Closing remarks



Welcome to the October 1, 2024 Public Meeting of the Advisory Committee for the Clean Transportation Program Investment Plan



Refreshed Clean Transportation Program Advisory Committee

Representative Name	Organization
Commissioner Patty Monahan (Presiding Member)	California Energy Commission (California Natural Resources Agency)
Beverly Greene	Santa Clara Valley Transportation Authority
Bill Magavern	Coalition for Clean Air
Brittany Carpenter	Fresno Metro Black Chamber of Commerce
Elise Candelaria	Employment Training Panel (Labor and Workforce Development Agency)
Gia Vacin	Governor's Office of Business and Economic Development (GO-Biz)
Gillian Gillett	Caltrans (State Transportation Agency)
Gregory Cane	California Hydrogen Car Owners Association
Joel Levin	Plug In America
Jon Hart	PowerFlex
Katrina Fritz	California Hydrogen Business Council
Kevin Hamilton	Central California Asthma Collaborative
Larry Engelbrecht	Engelbrecht Consulting
Laura Renger	California Electric Transportation Coalition



Refreshed Clean Transportation Program Advisory Committee, cont'd.

Representative Name	Organization
Luis Olmedo	Comite Civico Del Valle
Mariela Ruacho	American Lung Association
Marissa Wu	The Greenlining Institute
Micah Mitrosky	IBEW Ninth District
Michael Pimentel	California Transit Association
Morgan Caswell	Port of Long Beach
Morris Lum	Recreational Boaters of CA
Nicholas Blair	Association of California Water Agencies
Rev. Charles Dorsey	The Dorsey Group
Rev. Harvey Vaughn III	Bethel AME Church
Sam Wilson	Union of Concerned Scientists
Suzanne Caflisch	Better World Group
Sydney Vergis	California Air Resources Board (California Environmental Protection Agency)
Ted Lamm	UC Berkeley School of Law
Teresa Bui	Pacific Environment
Vanessa Warheit	Electric Vehicle Charging for All Coalition

Background for the Clean Transportation Program and Investment Plan



Charles Smith, Branch Manager
Fuels and Transportation Division



California's Zero-Emission Vehicle Goals

2025



1.5 MILLION

ZEV'S SOLD



INCLUDING 
10,000 FAST
CHARGERS

250,000

CHARGERS INSTALLED



200 OPEN

HYDROGEN STATIONS

2029



100%

NEW BUS
PURCHASES
ARE ZEVs

2030



5 MILLION

ZEV'S SOLD

2035



100%

ELECTRIC
SALES FOR
NEW PASSENGER
VEHICLES



100%

ELECTRIC
OPERATIONS
FOR DRAYAGE
TRUCKS AND
OFF-ROAD
VEHICLES &
EQUIPMENT

2040



100%

ALL BUS
FLEETS
ARE ZEVs

2045



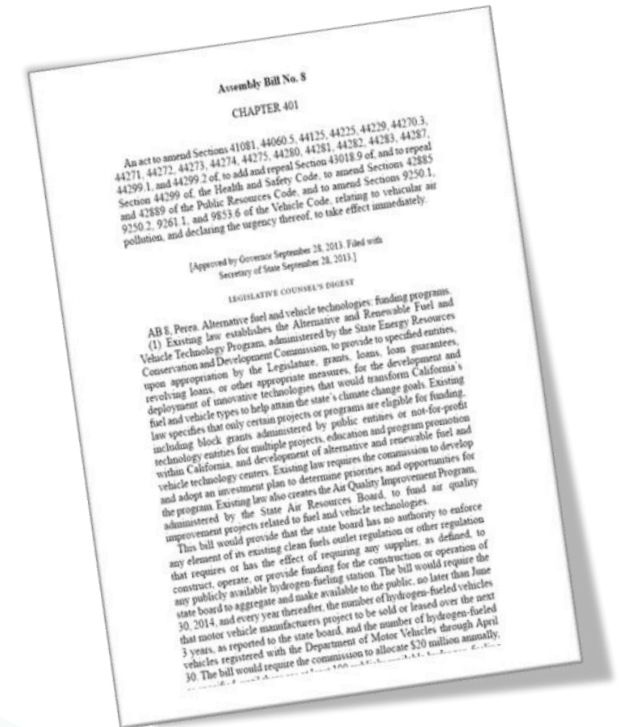
100%

ELECTRIC
OPERATIONS
FOR MEDIUM-
AND HEAVY-DUTY
VEHICLES



Origins of the Clean Transportation Program

- Transportation pollution burdens vulnerable and disadvantaged communities most
- AB 118 (2007) created Clean Transportation Program
- Up to \$100 million per year
- AB 126 (2023) reauthorized through July 1, 2035





The CEC is Committed to Inclusion, Diversity, Equity and Access

- More than 50% of Clean Transportation Program funds to projects benefiting low-income and disadvantaged communities
- Engaging DACAG, Clean Transportation Program Advisory Committee, coalitions, and community groups
- Nonprofits eligible, often incentivized, to participate in grants
- Working to better measure and target program community benefits



Community Benefits Background

- Clean Transportation Program funding:
 - At least 50% to benefit or serve residents of disadvantaged and low-income communities
- Eligible projects may include:
 - Equitable light-duty charging
 - Infrastructure for clean public transportation, school buses, and other medium- and heavy-duty vehicles
 - Multilingual marketing, education, and outreach
 - High-quality job creation



Community Benefits Metrics

Proposed Site Metrics

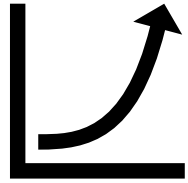
- Site located in priority communities
- Low-income housing or multifamily housing units served
- Public transit, school buses, or other medium- or heavy-duty vehicles served

Proposed Agreement Metrics

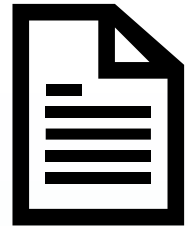
- Emission reductions
- Jobs created
- Marketing, education, and outreach materials distributed
- Materials distributed in another language
- Impressions in priority communities



Three Ways CEC is Advancing the ZEV Transition



ZEV infrastructure planning and analysis



Regulations and charging standards



Funding programs for ZEV charging and refueling infrastructure, manufacturing, and workforce development

Photo credit: CEC

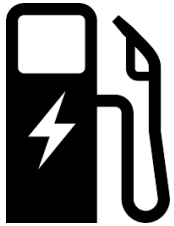


ZEV Infrastructure Planning and Analysis





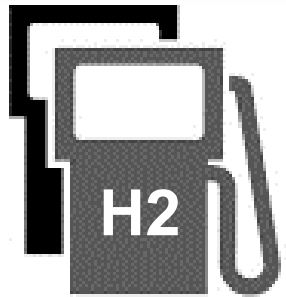
Zero-Emission Vehicle Infrastructure Deployment Today



~152,356 light-duty chargers (excluding private residences)

137,648 Level 2

14,708 DC fast chargers



44 operating light-duty refueling stations

18 not operating (not included)

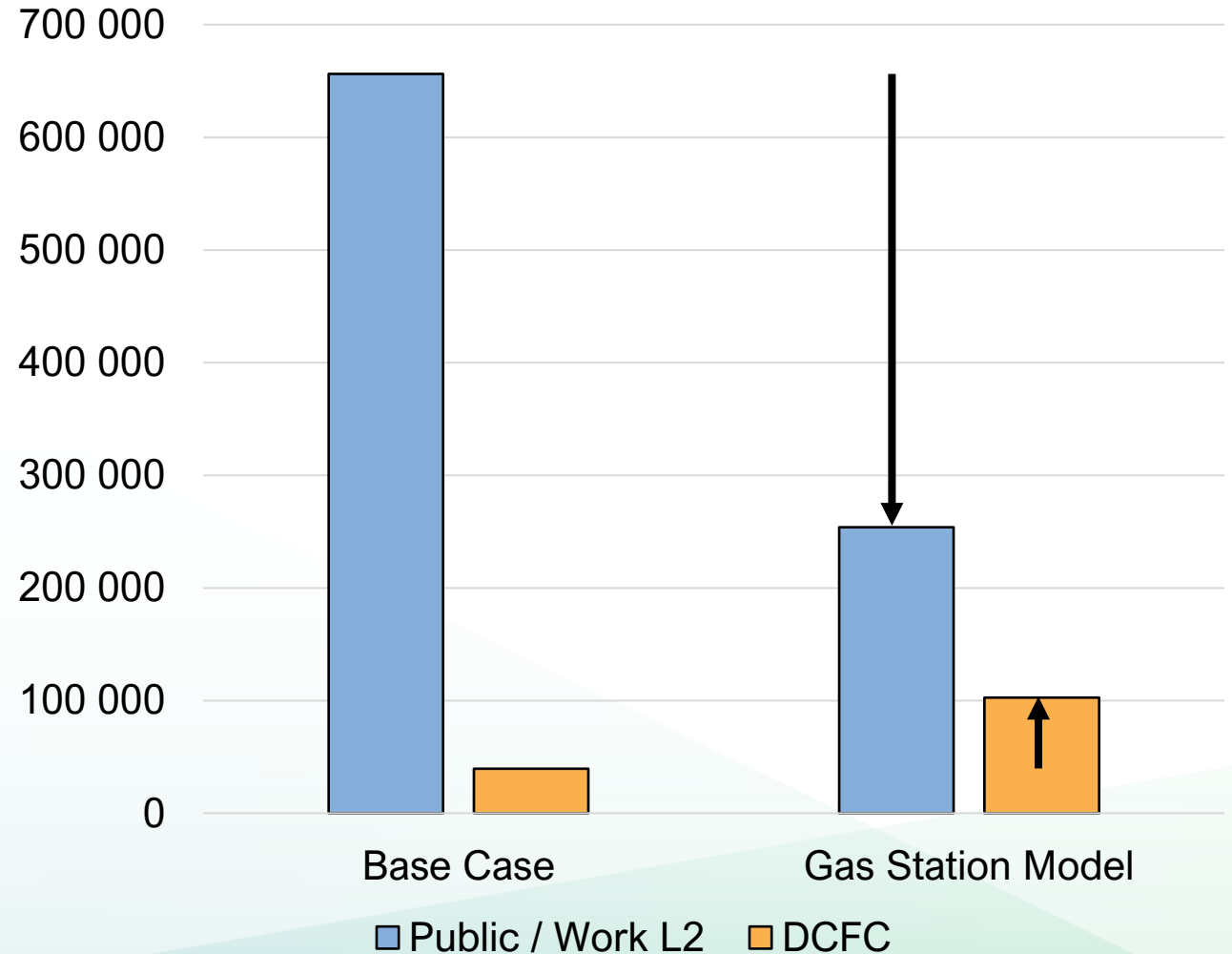
3 transit bus stations operating

4 public medium- and heavy-duty stations open



AB 2127: Charging Infrastructure Assessment

Expanded DC fast charger installation could substitute for some types of Level 2 charging





AB 8 and SB 643: Projections for Hydrogen Refueling Infrastructure

Passenger Vehicles

- Cumulative sales: 17,769 FCEVs
- Estimated on-road: 14,286 FCEVs
- Projected by 2029: 62,600 FCEVs

- Today's 44 operating stations can support about 31,000 FCEVs, based on average performance
- Funding for 119 total stations

Medium- and Heavy-Duty Trucks

- Number of stations needed uncertain
- Stations needed by 2035:
 - Estimates range from 11 to over 2,000

- 4 operating stations
- 25 under development
- 3 operating mobile refuelers



Regulations to Improve the ZEV Driver Experience



Major CEC Clean Transportation Rulemakings Underway

- CEC staff plan to advance three major rulemakings in Quarter 4, 2024–Quarter 1, 2025:
 - EV charger inventory and reliability regulations
 - EV charger payment and communications standards regulations
 - Replacement tire efficiency regulations
- Strong regulations are vital to improving EV driver experience, good stewardship of state funds, and reducing transportation energy use.



Photo credit: CEC

Funding Program Overview



Marissa Williams, Supervisor, Program Integration Unit
Fuels and Transportation Division



Light-Duty Charging Infrastructure Block Grants

California Electric Vehicle Infrastructure Project (CALeVIP 1.0)

- DC fast and/or Level 2 chargers
- Closed to new applications
- \$226 million

CALeVIP 2.0

- 150 kW or greater DC fast chargers
- Closed to new applications
- \$68 million

Communities in Charge

- Level 2
- Two funding windows
- \$68 million



Photo credit: CEC



Photo credit: PlugShare



Photo credit: IKON



Medium- and Heavy-Duty Block Grant Incentive Programs



- Energy Infrastructure Incentives for Zero-Emission (Energize) commercial vehicles
 - EV Fast-Track
 - Hydrogen
 - EV Jump Start
 - EV Public Charging



- Zero-Emission School Bus and Infrastructure (ZESBI) incentives
 - Workforce development and technical assistance resources
 - Year 1 application closed September 30, 2024



Targeted Solicitations

Multifamily

- Charging for multifamily housing residents
- ~\$19M proposed

Rural

- Charging for rural areas
- ~10M proposed

Urban

- Community charging in urban areas
- ~\$10M proposed

Hydrogen

- Hydrogen refueling stations, and operations and maintenance
- \$15M, deadline January

Commercial Corridors

- Infrastructure along designated corridors
- ~\$30M proposed

Ports

- Port infrastructure
- ~\$40M proposed

Tribal

- Address barriers identified by Tribes
- \$10M, awards anticipated October 2024

Technical Assistance

- Providers to assist potential grant applicants
- ~\$4M proposed



Administering and Applying for Federal Funding

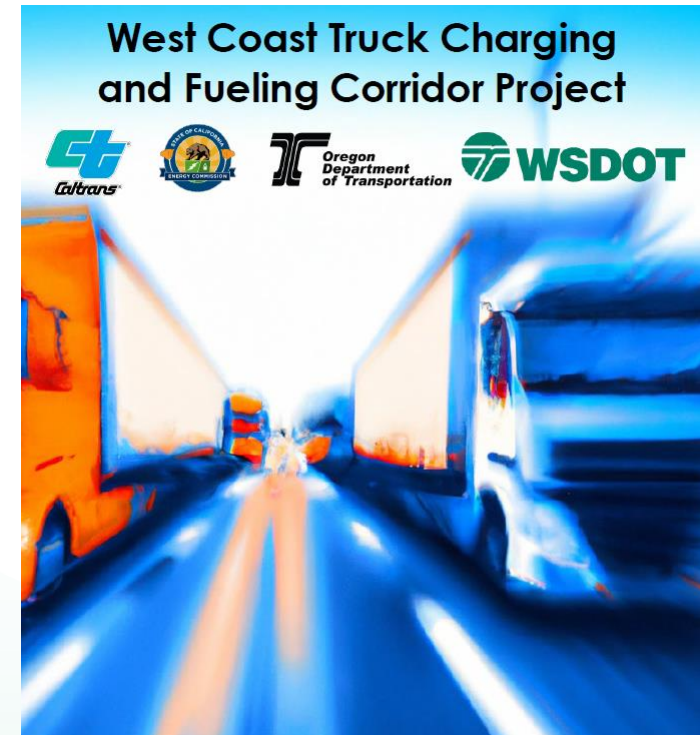
- National Electric Vehicle Infrastructure (NEVI) Program
 - \$384 million for California over 5 years
- Electric Vehicle Charger Reliability and Accessibility Accelerator (EVC RAA) Program
 - Caltrans awarded \$63.7 million





Recent Federal Awards

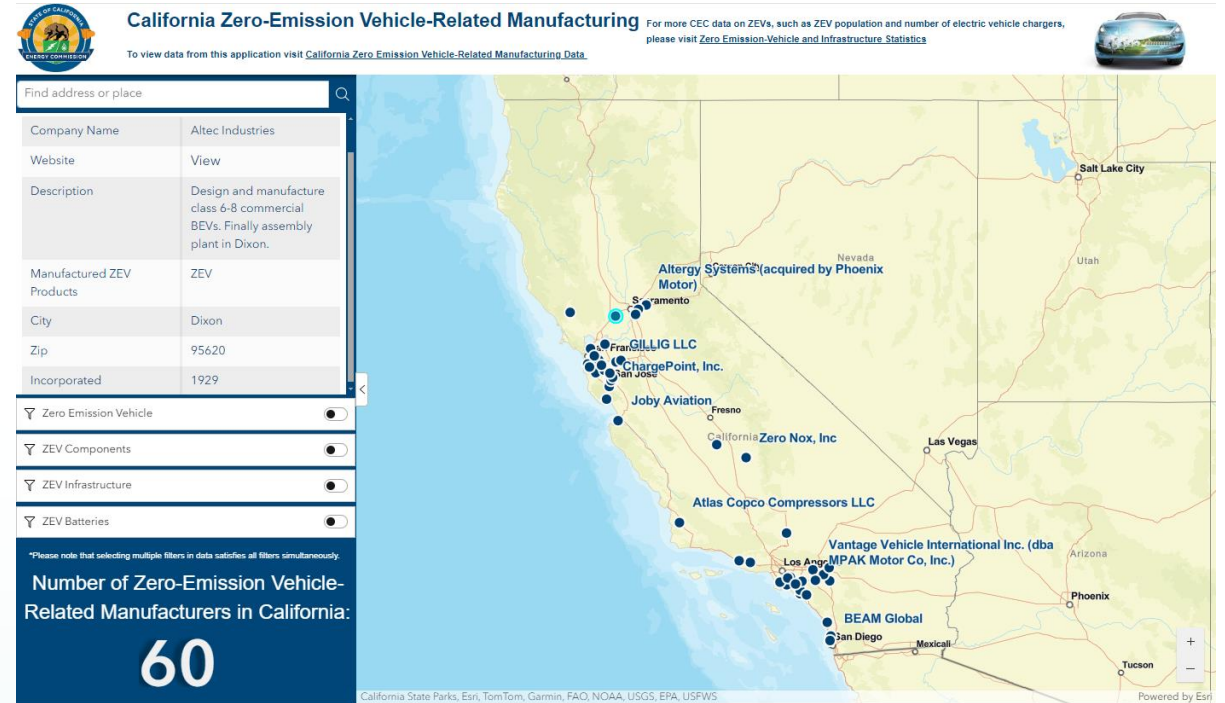
- Charging and Fueling Infrastructure Discretionary Grant Program
 - Awarded \$102 million in August 2024
 - Charging and hydrogen stations for zero-emission trucks across CA, OR, and WA
- Climate Pollution Reduction Grants
 - \$500 million to South Coast air district
 - Zero-emission trucks, trains, and infrastructure





Manufacturing Grants

- Zero-Emission Transportation Manufacturing
 - \$197.9 million for 13 projects
- PowerForward ZEV Battery Manufacturing Block Grant Program
 - \$43.6 million for 3 projects



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





Workforce Training and Development



Source: Victor Valley High School

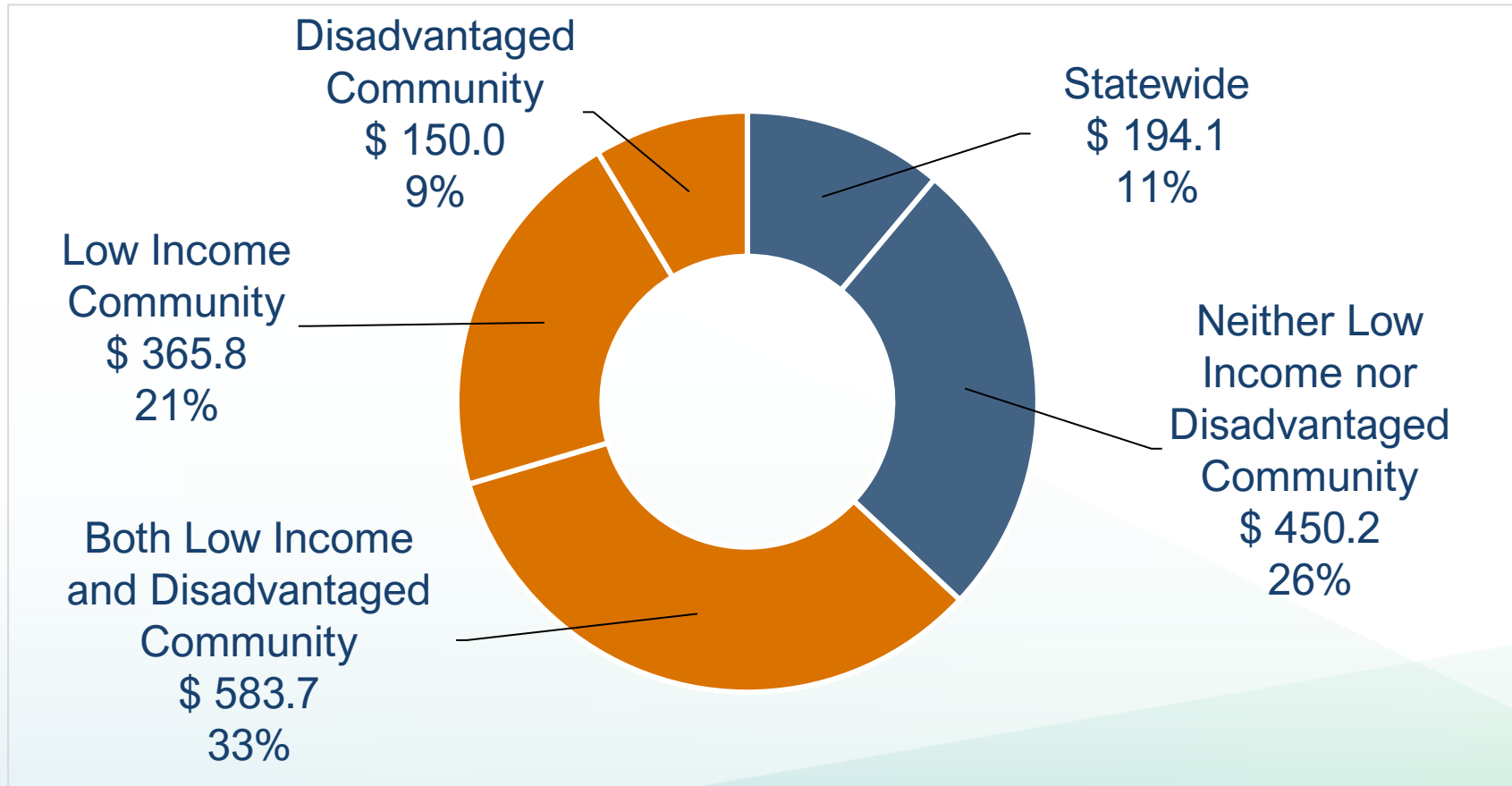
- Interagency collaboration
- Recent Funding Strategies
 - Employment Training Panel EVITP Fund
 - Tribal Infrastructure, Planning, and Workforce Training and Development
 - IDEAL ZEV Workforce Pilot
 - Electric School Bus Training
 - ZEV High School Pilot
- Draft ZEV Workforce Training and Development Strategy





63% of Funding in Disadvantaged or Low-Income Communities

Clean Transportation Program Funding in Millions through July 2024





Questions so far?

- Background for the Clean Transportation Program
- ZEV Infrastructure Planning and Analysis
- Regulations to Improve the ZEV Driver Experience
- Funding Program Overview

Next:

- 2024-2025 Investment Plan Update and Allocations



Break

Meeting will resume at 10:30 AM

Investment Plan Update and Advisory Committee Discussion



Benjamin Tuggy, Project Manager, Clean Transportation Program
Investment Plan

Fuels and Transportation Division



Investment Plan Background

- Guides program investments at high level
 - Zero-emission focus
- Controls base funds, not state budget funds
- Guided by:
 - CEC analyses and other state and federal context
 - Advisory Committee and Disadvantaged Communities Advisory Group
 - Other public feedback



Investment Plan Schedule



* Full Revised Staff Draft available soon



Investment Plan Schedule, cont'd.

Comments Due
on Revised Staff
Draft
October 15*

Disadvantaged
Communities
Advisory Group
Meeting
October 18

Publish Lead
Commissioner
Report
November 22†

CEC Business
Meeting Approval
December 11†

Publish
Commission
Report and
Distribute to
Legislature
January 2025†

* May be extended following full report publication

† Tentative



State Budget Changes Since May

- No more state supplementary funds for Fiscal Year 2024–2025
- General Funds for school bus ZEV infrastructure
 - Removed proposed \$160 million for 2024–2025
 - Increased projected 2025–2026 amount by \$35 million



Estimated Future General Fund and GGRF Allocations

Category	Eligible Fuel Types	Funding Source*	2025–2026	2026–2027	2027–2028
Light-Duty Charging Infrastructure	Electric	Greenhouse Gas Reduction Fund (GGRF)	\$140	\$80	\$219
Equitable At-Home Charging	Electric	GGRF	\$60	\$40	\$80
Drayage Truck Infrastructure	Electric, Hydrogen	GGRF	\$50	\$49	\$50
School Bus Infrastructure	Electric	General Fund	\$125	-	-
Clean Truck, Bus, and Off-Road Equipment Infrastructure	Electric, Hydrogen	GGRF	\$89	-	\$137
Port ZEV Infrastructure	Electric, Hydrogen	GGRF	-	\$130	-
Emerging Opportunities	Electric, Hydrogen	GGRF	\$46	-	-
		Total	\$510	\$299	\$486



2024–2025 Investment Plan Update: Revised Staff Draft Report Funding Allocations

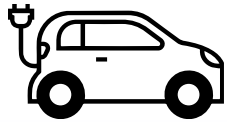




Anticipated Investments in Fiscal Years 2024–2025 to 2027–2028

Total: \$1.39 Billion

Not counting base Clean Transportation Program funds after 2024–2025, nor federal funds
Amounts subject to change



\$659 Million

Light-Duty EV
Charging
Infrastructure

+

\$163 Million

National Electric
Vehicle Infrastructure



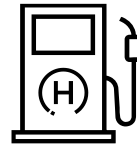
\$668.2 Million

Medium- and
Heavy-Duty ZEV
Infrastructure

+

\$102 Million

West Coast
Corridor



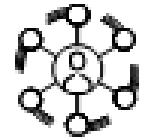
\$15 Million

Hydrogen-Specific
Funding



\$46 Million

Emerging
Opportunities

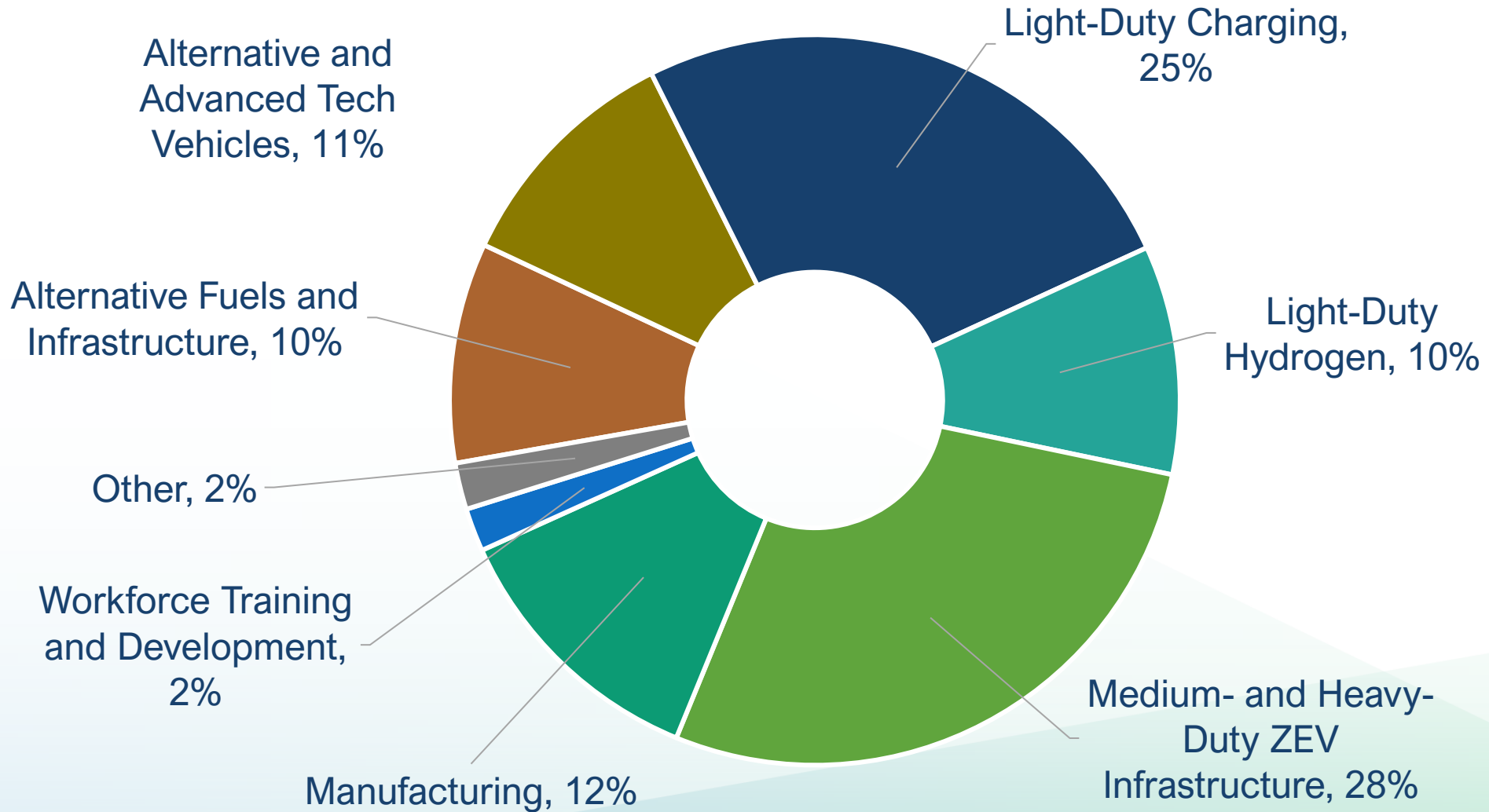


\$2 Million

ZEV Workforce
Development



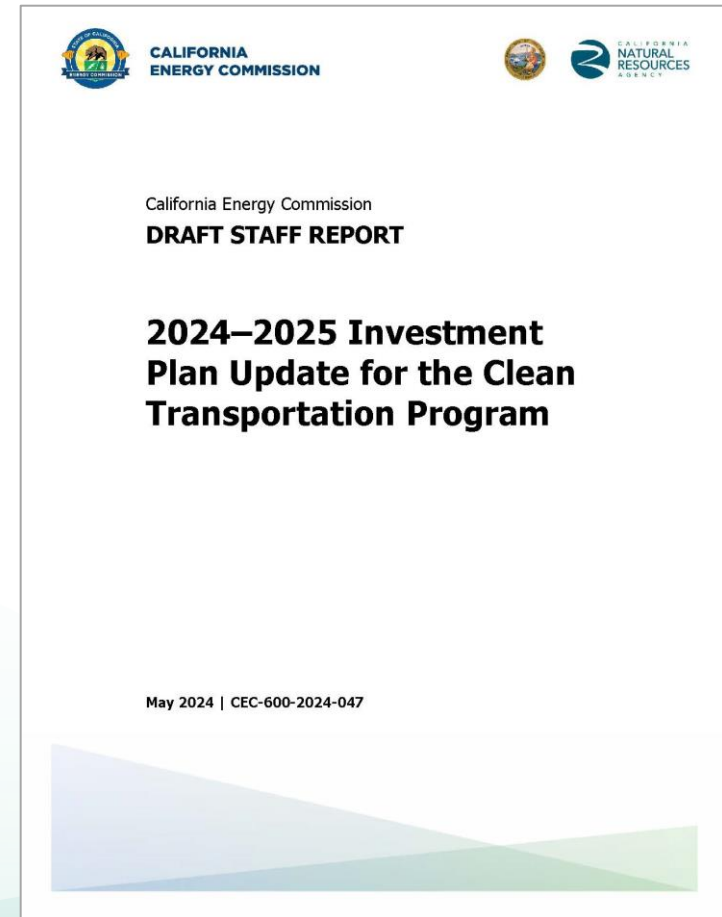
Clean Transportation Funded Activities through July 2024





Feedback from Staff Draft Report

- Prior funding allocations seemed appropriate
- Support for more light-duty ZEV infrastructure
- Support for emphasis on medium- and heavy-duty ZEV infrastructure
- Recommendations for more clarity on hydrogen funding
- Workforce funding mixed feedback





2024–2025 Funding Allocation Changes Summary

Category	Eligible Fuel Types	Staff Draft	Revised Draft
Light-Duty Charging Infrastructure	Electric	\$37.0	\$40.0
Medium- and Heavy-Duty ZEV Infrastructure	Electric, Hydrogen	\$55.2	N/A
Medium- and Heavy-Duty Charging Infrastructure	Electric	N/A	\$38.2
Hydrogen Refueling	Hydrogen	N/A	\$15.0
Workforce Training and Development	Electric, Hydrogen	\$3.0	\$2.0
	Total Base	\$95.2	\$95.2



Proposed Clean Transportation Program Base Fund Allocations for Fiscal Year 2024–2025

Category	Eligible Fuel Types	Funding Source	2024–2025
Light-Duty Charging Infrastructure	Electric	Clean Transportation Program (Base)	\$40.0
Medium- and Heavy-Duty Charging Infrastructure	Electric	Base	\$38.2
Hydrogen Infrastructure	Hydrogen	Base	\$15.0
Workforce Training and Development	Electric, Hydrogen	Base	\$2.0
		Total Base	\$95.2

Federal funding also expected (estimated \$82 million in NEVI funds—federal fiscal year 2025)



Proposed & Estimated Funding (in millions) Fiscal Years 2024–2025 to 2027–2028

Category	Eligible Fuel Types	2024–2025	2025–2026*	2026–2027*	2027–2028*
Light-Duty Charging Infrastructure	Electric	\$40	\$200	\$120	\$299
Medium- and Heavy-Duty Infrastructure	Electric, Hydrogen	\$38.2	\$264	\$179	\$187
Emerging Opportunities	Electric, Hydrogen	-	\$46	-	-
Hydrogen Infrastructure	Hydrogen	\$15	-	-	-
Workforce Training and Development	Electric, Hydrogen	\$2	-	-	-
	Total	\$95.2	\$510	\$299	\$486

Not including NEVI funds—estimated \$163 million for two fiscal years

*Base allocations not proposed yet



Lunch Break

Meeting will resume at 1:00 PM



Questions for Consideration

1. Do you recommend further changes to 2024–2025 funding allocations to help the state equitably expand ZEV infrastructure?
2. Any recommendations for infrastructure for specific vehicle segments?
3. Given limited funding this fiscal year, what are your recommendations for the workforce development category?

3-MINUTE TIMER





Public Comment





Closing Links and Contact

- More information: <https://www.energy.ca.gov/programs-and-topics/topics/transportation>
- Submit e-comments by October 15, 2024 at: <https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=24-ALT-01>
- Contact: Benjamin.Tuggy@energy.ca.gov



Estimated Future Allocations Recap

Category	Eligible Fuel Types	Funding Source*	2025–2026	2026–2027	2027–2028
Light-Duty Charging Infrastructure	Electric	-	-	-	-
Light-Duty Charging Infrastructure	Electric	Greenhouse Gas Reduction Fund (GGRF)	\$140	\$80	\$219
Equitable At-Home Charging	Electric	GGRF	\$60	\$40	\$80
Medium- and Heavy-Duty Charging Infrastructure	Electric	-	-	-	-
Drayage Truck Infrastructure	Electric, Hydrogen	GGRF	\$50	\$49	\$50
School Bus Infrastructure	Electric	General Fund	\$125	-	-
Clean Truck, Bus, and Off-Road Equipment Infrastructure	Electric, Hydrogen	GGRF	\$89	-	\$137
Port ZEV Infrastructure	Electric, Hydrogen	GGRF	-	\$130	-
Emerging Opportunities	Electric, Hydrogen	GGRF	\$46	-	-
Hydrogen Infrastructure	Hydrogen	-	-	-	-
Workforce Training and Development	Electric, Hydrogen	-	-	-	-
		Total Base*	-	-	-
		Total GGRF, General Fund, and Reimbursements	\$510	\$299	\$486

Not including five years of NEVI funds, including estimated \$82 million—federal fiscal year 2026

*Base allocations not proposed yet