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Item 5: 2022-2023 Investment Plan Update for the Clean Transportation Program

December 14, 2022 Business Meeting

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Fuels and Transportation Division, Transportation Integration and Production Branch



Origins of the Clean Transportation Program

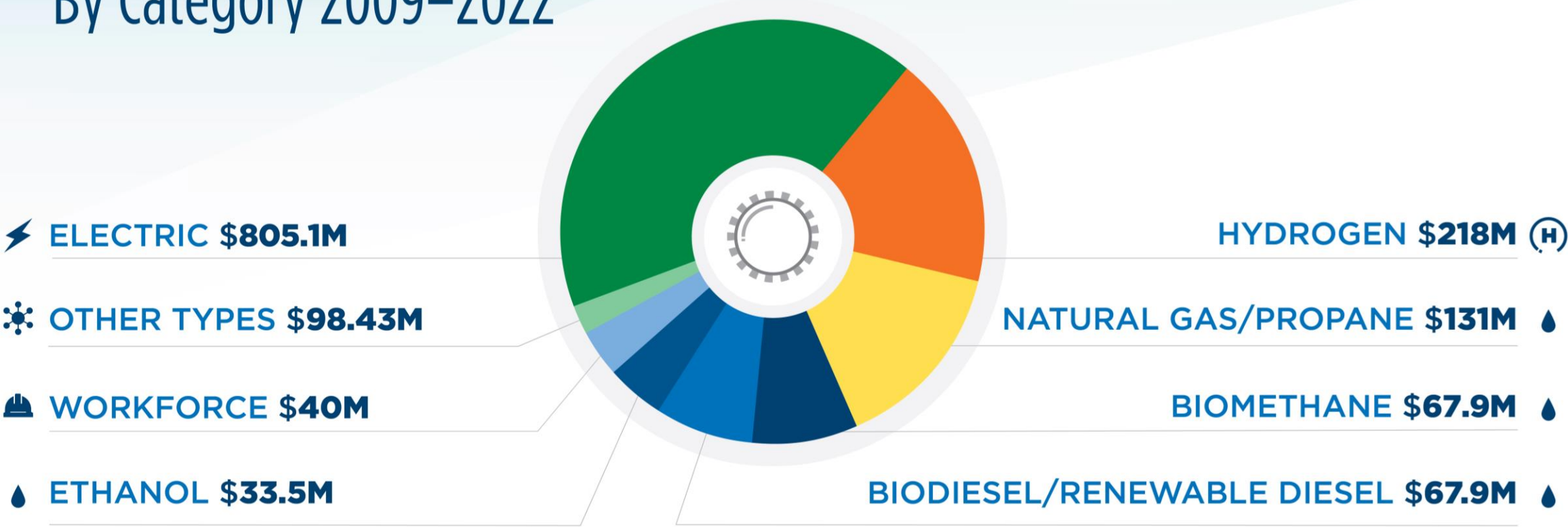


- Transportation sector responsible for significant greenhouse gas emissions and public health impacts.
- Pollution burdens fall disproportionately on vulnerable and disadvantaged communities.
- Clean Transportation Program created to invest in a cleaner, healthier transportation system.
- Provides up to \$100 million per year. Expires at end of 2023.



Clean Transportation Program Funding

By Category 2009–2022



Over \$1 Billion

invested to alternative fuel and vehicle technology projects that deliver health, environmental and economic benefits to communities.

2009-2022

Program Outcomes

49%

Funding located in disadvantaged or low-income communities

\$730M

Matched funding

20,000

Trainees

17,631

EV Chargers

86

Grants for regional and local planning

153

Public hydrogen stations

27

Manufacturing facilities



Benefits to California

Unprecedented Four-Year Investment: \$2.9 Billion

Improve air quality & advance climate change goals

Boost **job growth** and workforce development

Reduce petroleum dependence

Support low-income and disadvantaged communities

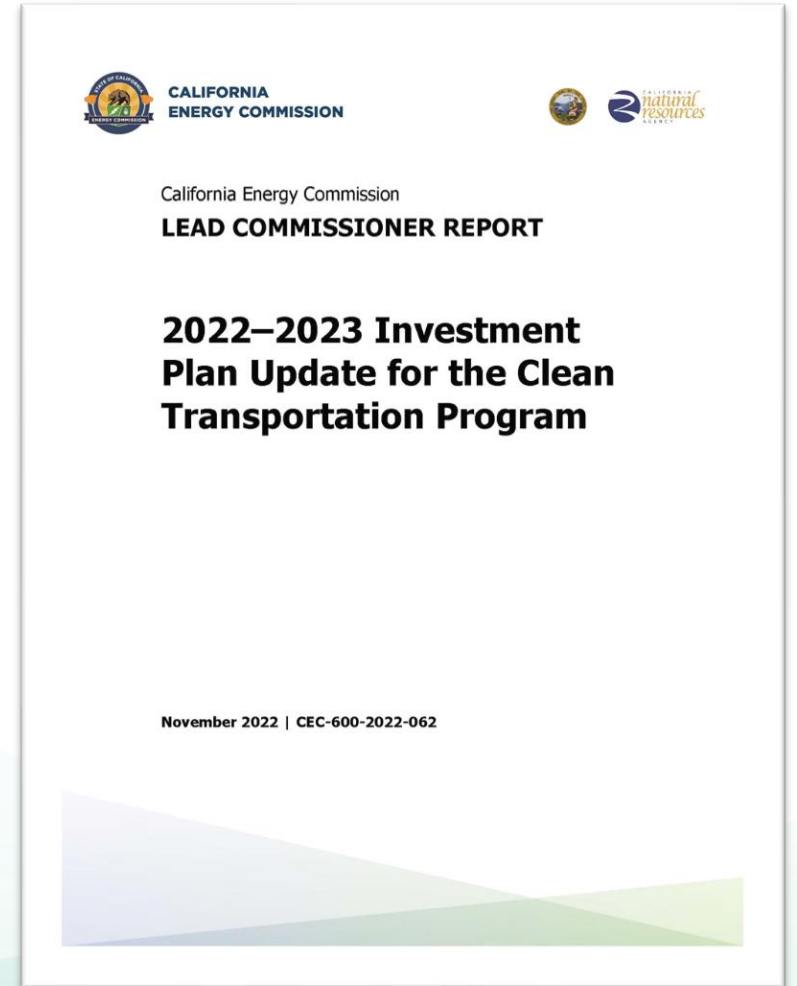
Support ZEV Deployment Goals

Leverage Private and Other Public Funds



Investment Plan Update Sets Direction for Future

- Guides investments to meet state's clean transportation goals
- Allocates funding
- Provides multi-year funding allocations for improved planning and visibility
- Promotes agency coordination





How the Investment Plan Update Was Developed

- Input from Advisory Committee, DACAG, and public
- Coordinated with state and federal agencies
- Findings and needs identified in CEC analyses, including:
 - *AB 2127 Electric Vehicle Charging Infrastructure Assessment*
 - *SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment*
 - *Zero-Emission Vehicle Infrastructure Plan (ZIP)*



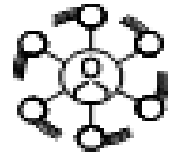
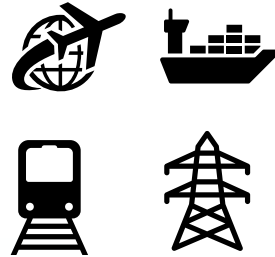
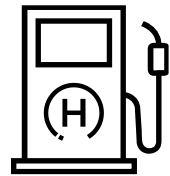
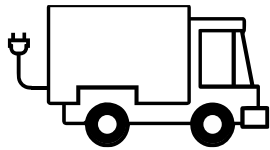
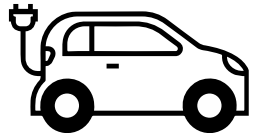
Commitments to Inclusion, Diversity, Equity, and Access

- Seek to provide over 50% of Clean Transportation Program funds to projects that benefit low-income and disadvantaged communities
- Expand outreach to local community-based organizations
- Better define, measure, and track community benefits beyond project location (e.g., health, mobility options, workforce)
 - First workshop held 11/29/22 with more planned over 2023



Proposed Investments

Total: \$2.9 Billion



\$900 M

Light-Duty
EV Charging
Infrastructure

+

\$384 M
NEVI

\$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

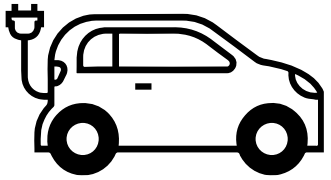
ZEV-Related
Manufacturing

\$10 M

ZEV
Workforce
Development



Light-Duty EV Charging



\$900 M

+

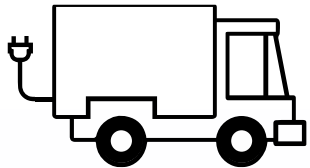
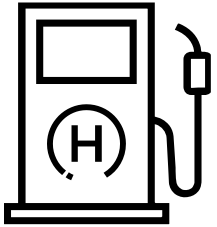
\$384 M

NEVI

- Equitable at-home solutions for multi-family residences
 - Targeted deployments in rural and priority communities
 - Broad network of high-power fast chargers
- This fiscal year: \$30.1M (Program) and \$237.5M (General Fund)



Heavy-Duty ZEV Infrastructure



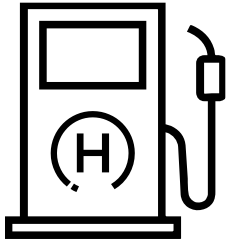
\$1.7 B

- Both hydrogen refueling and EV charging
- Zero emission port infrastructure
- Fuel thousands of trucks, buses, and off-road equipment

→ This fiscal year: \$30.1M (Program) and \$683.75M (General Fund)



Hydrogen Refueling Infrastructure



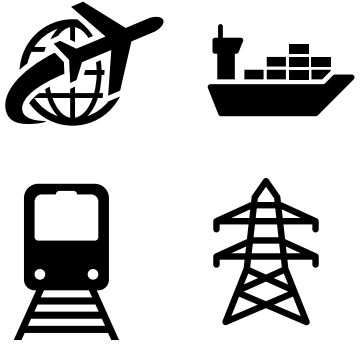
\$90 M

- Funding will exceed legislative goal of 100 stations
- Both light-duty and innovative mixed-use
- Sufficient to fuel ~275,000 light-duty fuel cell vehicles

→ This fiscal year: \$20M (Program)



Emerging Opportunities



- Sectors early in transition to zero emission including aviation, marine, and rail
- Vehicle-grid integration to support grid-friendly charging

\$97 M

→ This fiscal year: \$51.3M (General Fund)



Low Carbon Fuels

- Bio-derived fuels including from forest wastes
- Low-carbon hydrogen production
- Complements other funding and incentive programs



\$15 M

→ This fiscal year: \$10M (Program)



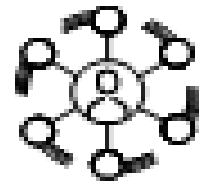
Workforce and Manufacturing

- In-state ZEV and ZEV-related manufacturing
- Training and workforce development programs
- Prioritize disadvantaged and low-income communities



\$118 M

ZEV-Related
Manufacturing



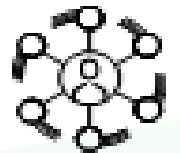
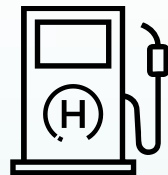
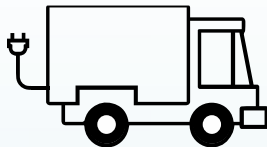
→ This fiscal year: \$5M (Program) and \$118.75M (General Fund) **\$10 M**

ZEV Workforce
Development



Staff Recommendation

- Approve report that includes:
 - proposed allocations for this fiscal year
 - planned allocations for future fiscal years
- Approve staff recommendation that investment plan is exempt from CEQA



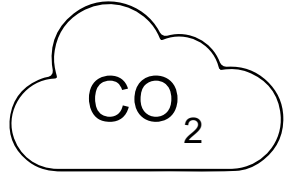


Appendix Slides



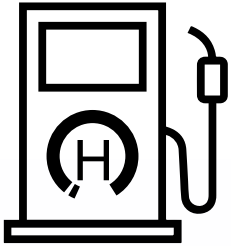


Policy Goals Accelerating ZEV Transition



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

- 100% in-state sales of new passenger cars and trucks zero-emission by 2035
- 100% of drayage trucks zero-emission by 2035, all other medium- and heavy-duty vehicles zero-emission by 2045
- 100% zero-emission off-road vehicles and equipment by 2035, where feasible



Gratitude to the Clean Transportation Program Advisory Committee

- **Leslie Aguayo**—The Greenlining Institute
- **Ruben Aronin**—Better World Group
- **Will Barrett**—American Lung Association in California
- **Morgan Caswell**—Port of Long Beach
- **Tyson Eckerle**—Governor’s Office of Business and Economic Development
- **Bill Elrick**—California Fuel Cell Partnership
- **Larry Engelbrecht**—Engelbrecht Consulting
- **John Frala**—Rio Hondo College
- **Casey Gallagher**—Workforce Economic Development California Labor Federation
- **Katherine Garcia**—Sierra Club
- **Matt Gregori**—SoCalGas
- **Kevin Hamilton**—Central California Asthma Collaborative
- **Samantha Houston**—Union of Concerned Scientists
- **Dylan Jaff**—Consumer Reports
- **Daryl Lambert**—Rising Sun Center
- **Joel Levin**—Plug In America
- **Jose Lopez**—Private Citizen
- **Morris Lum**—Recreational Boaters of California
- **Bill Magavern**—Coalition for Clean Air
- **Robert Meyer**—Employment Training Panel
- **Micah Mitrosky**—IBEW 9th District
- **Miles Muller**—Natural Resources Defense Council
- **Lori Pepper**—California State Transportation Agency



Gratitude to the Clean Transportation Program Advisory Committee Cntd.

- **Michael Pimentel**—California Transit Association
- **Jerome Qiriaz**i—Humboldt Transit Authority
- **Craig Segall**—California Air Resources Board
- **Mary Solecki**—AJW
- **Tracy Stanhoff**—Indigenous Post
- **JB Tengco**—BlueGreen Alliance
- **Zac Thompson**—East Bay Community Energy
- **Eileen Tutt**—Electric Transportation Community Corporation
- **Lucas Zucker**—Central Coast Alliance United for a Sustainable Economy



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