DOCKETED	
Docket Number:	19-TRAN-02
Project Title:	Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
TN #:	257726
Document Title:	Presentation - MDHD Zero-Emission Vehicle Infrastructure Solicitation Concepts
Description:	Overview of the pre-solicitation concepts that will be presented at the Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure staff workshop on July 16, 2024.
Filer:	Michelle Vater
Organization:	California Energy Commission
Submitter Role:	Energy Commission
Submission Date:	7/12/2024 1:49:12 PM
Docketed Date:	7/12/2024



# **California Energy Commission**

Pre-Solicitation Concepts for Medium-and Heavy-Duty Zero-Emission Vehicle Infrastructure July 16, 2024



#### Housekeeping

- Meeting is being recorded
- Virtual participation possible through Zoom or telephone
- Meeting event webpage: <a href="https://www.energy.ca.gov/event/workshop/2024-07/staff-workshop-medium-and-heavy-duty-zero-emission-vehicle-infrastructure">https://www.energy.ca.gov/event/workshop/2024-07/staff-workshop-medium-and-heavy-duty-zero-emission-vehicle-infrastructure</a>
- Docket location:
   https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19 TRAN-02
- Submit <u>written comments</u> to Docket 19-TRAN-02.

Deadline for comments: Tuesday, July 30, 2024, 5:00 p.m.



#### **Meeting Agenda**

- Welcome and Housekeeping
- Clean Transportation Program Overview
- California Air Resources Board California Climate Investments Overview
- Medium- and Heavy-Duty (MDHD) Solicitation Concepts
  - CRITICAL PATHS 2.0 (MDHD Corridors)
  - Implementation of MDHD Zero-Emission Vehicle (ZEV) Infrastructure Blueprints 2.0
  - Agriculture/Construction
  - Ports
  - Hydrogen
- Zero-Emission Heavy-Duty Infrastructure Loan Pilot Project
- EnergIIZE Commercial Vehicles
- Public Comment
- Closing Remarks/Next Steps



# Overview of the Clean Transportation Program

Presenter: Alex Wan, Energy Commission Specialist I

#### **California's Electric Vehicle Goals**

#### 2025 - 2045

2025





1.5 MILLION

EV'S SOLD



INCLUDING 10,000 FAST CHARGERS

250,000

**CHARGERS INSTALLED** 



**200 OPEN** 

HYDROGEN STATIONS

2030



**5 MILLION** 

**EV'S SOLD** 

2035



100%

ELECTRIC SALES FOR NEW PASSENGER VEHICLES



100%

FOR DRAYAGE TRUCKS AND OFF-ROAD VEHICLES & EQUIPMENT 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



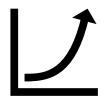


# Commitment to Inclusion, Diversity, Equity and Access

- 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



# 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





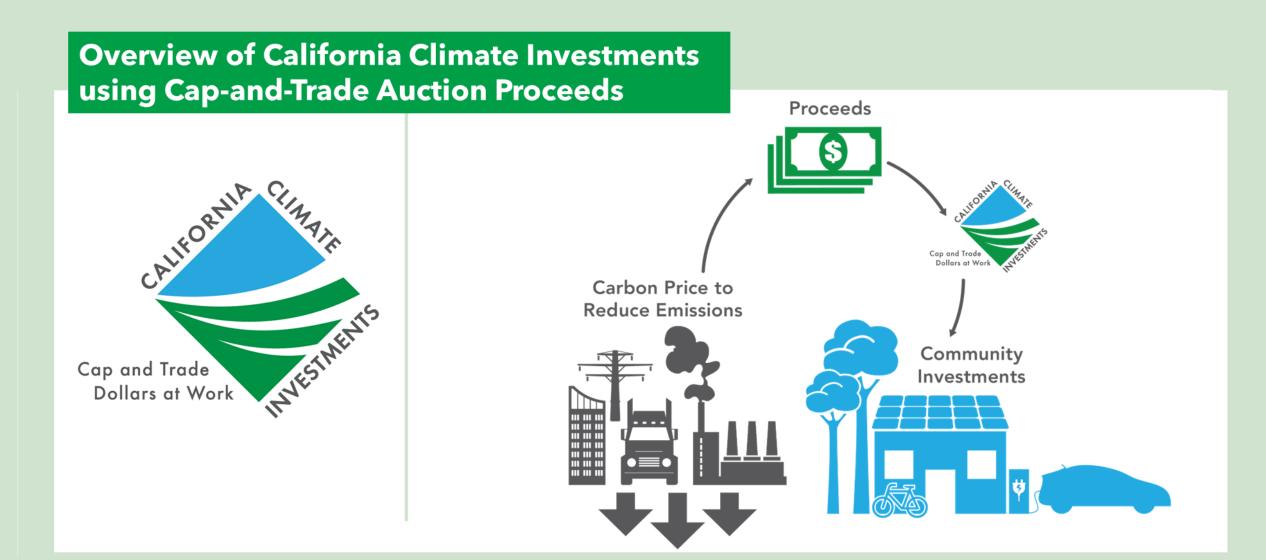
Photo credit: CEC



## California Climate Investments Overview

California Air Resources Board

Presenter: James (Jamie) Tipton, Air Resources Engineer



# **Administering** Agencies

















































## **Program Design and Implementation**

- Agencies responsible for program design
- Must adhere to CARB Funding Guidelines
- Leveraged funds
  - Existing programs
  - Preferential scoring
- Long-term funding

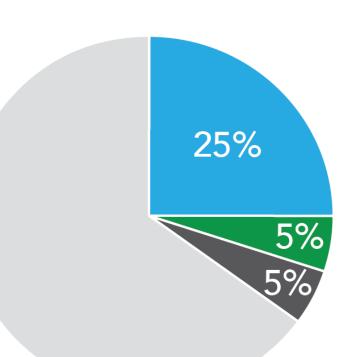


# Funding Guidelines for Agencies that Administer California Climate Investments

- Sets guiding principles and investment requirements
  - Facilitate GHG emissions reductions
  - Benefit priority populations
- Used by agencies as they design programs and select projects
- Supports accountability and transparency
  - Annual Report on outcomes
  - Interactive project map and downloadable database
- Draft 2024 Funding Guidelines available for comment through
   July 26

## **Priority Populations**

- Assembly Bill 1550
  - Disadvantaged communities (25%)
  - Low-income communities and households (5%)
  - Low-income communities and households within ½ mile of disadvantaged communities (5%)
- CARB sets investment targets for programs
- Require agencies to evaluate project benefits





#### **CUMULATIVE PROJECT ACHIEVEMENTS**

As of November 2023

\$11.0 billion implemented through November 2023



\$8.1 billion+ (76%) benefiting priority populations



GHG emissions reductions



1,248 transit agency projects funded, adding or expanding transit service



578,500 individual projects implemented



420,210+ rebates issued for zero-emission and plug-in hybrid vehicles



12,606 affordable housing units under contract

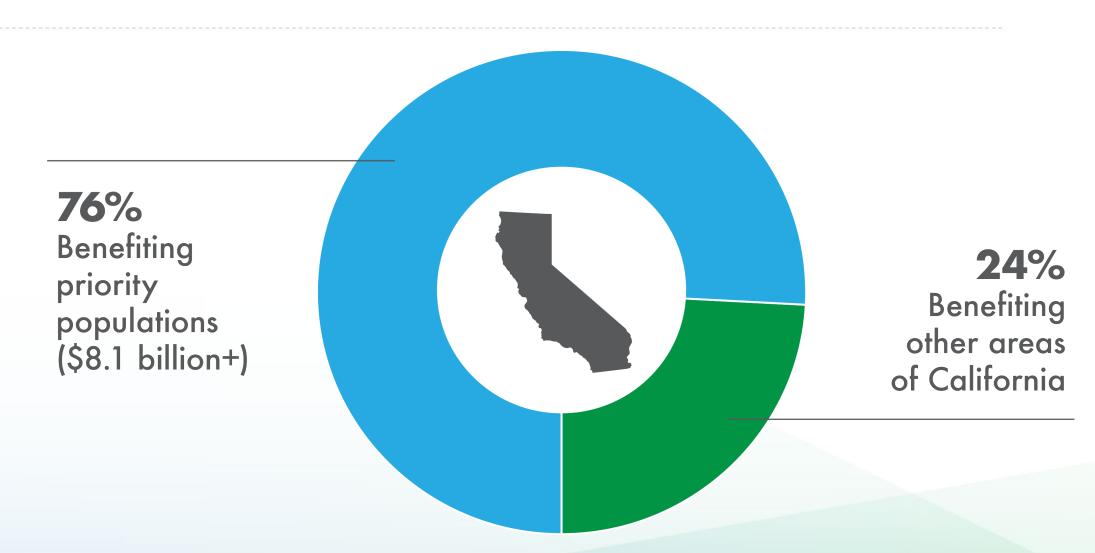


983,000 acres of land conservation or restoration



221,918 urban trees

## **Benefits to Priority Populations**



# Cap and Trade Dollars at Work

caclimateinvestments.ca.gov





@CAClimateInvest

info@caclimateinvestments.ca.gov

1-800-757-2907 • Hablamos Español









## Concept 1

Charging and Refueling Infrastructure for Transport in CALifornia Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0

Presenter: Kristi Villareal, Air Pollution Specialist



#### Purpose

- Second round of CRITICAL PATHS (GFO-23-602)
- Provide up to \$30 million to support MDHD ZEV hydrogen refueling and/or charging projects along designated freight corridors
- Of the \$30 million, \$6 million is set aside for hydrogen refueling projects
- The remaining \$24 million is available for either technology
- Support a coordinated strategy with other agencies for the statewide buildout of MDHD ZEV infrastructure



# **SB 671 Top 6 Priority Clean Freight Corridors**

#### **Priority corridors identified**

Ordered by truck volume - 2022 projected



I-5 from California's Southern border with Mexico to its Northern border with Oregon



I-15 from San Diego to California's Southeast border with Nevada



Route 99 from Red Bluff to Bakersfield



I-10/I-710 from the San Pedro Bay Ports to Los Angeles to California's Southeast border with Arizona



I-40 from its intersection with I-15 to California's Southeast border with Arizona



I-80/I-580 and I-880 from the Port of Oakland to San Francisco to California's northeast border with Nevada

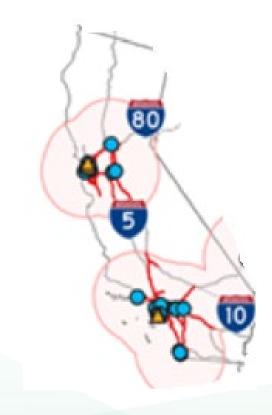


https://catc.ca.gov/-/media/ctc-media/documents/programs/sb671/sb671-final-clean-freight-corridor-efficiency-assessment-dor.pdf



#### **National MDHD ZEV Corridors**

- National Zero-Emission Freight Corridor Strategy
  released March 2024
  (https://driveelectric.gov/files/zef-corridorstrategy.pdf)
  - California corridors listed in Appendix D are eligible under CRITICAL PATHS 2.0
  - In addition to SB 671 Top 6 Priority Clean Freight Corridors



Source: <u>U.S. Department of Transportation</u>



#### **Eligible Applicants**

- All public and private entities, excluding investor-owned utilities.
  - Unless Applicant received a funding award of other State or federal funds for the development of MDHD ZEV infrastructure along corridors.
    - Examples: Trade Corridor Enhancement Program (<u>TCEP</u>) or Charging and Fueling Infrastructure (<u>CFI</u>) funding
- Applicants must accept Terms and Conditions, without negotiation
- Applicants who are registered with the California Secretary of State and in good standing to enter into an agreement with the CEC.



### Eligible Applicants, continued

- Solicitation has two technology categories:
  - Charging infrastructure for MDHD battery electric vehicles (BEV)
  - Hydrogen refueling infrastructure for MDHD fuel cell electric vehicles (FCEV)
- Applicants may propose both technologies at a site
  - "Make ready" infrastructure is eligible as match, but not as reimbursable
- Applicants must include at least two sites per project
- Applicants may submit multiple applications



## **Project Requirements**

#### All projects must:

- Include installation of EV charging and/or hydrogen refueling stations for MDHD vehicles, along designated corridors.
- Deployment may include:
  - 1) Minimum 10 direct current fast chargers (DCFCs) at each location (350 kW and above)
  - 2) Minimum 3 heavy-duty hydrogen dispensing platforms for simultaneous refueling (700 bar)
  - 3) Minimum of 6 DCFC and 2 HD hydrogen dispensing platforms at each location



# Project Requirements, continued<sub>(1)</sub>

#### All projects must:

- Deploy MDHD EV charging or hydrogen refueling stations at two or more locations for public use
- Be located in California and on a SB 671 designated top 6 priority clean freight corridor or a national zero emission freight corridor
- Be located within 1.0 linear mile of the identified corridor segment's offramp



#### Project Requirements, continued(2)

- Proposed charging sites must be no farther than 125 miles from the Applicant's other proposed charging site(s)
- Proposed hydrogen refueling sites must be no farther than 300 miles from the Applicant's other proposed refueling site(s)
  - Measured as highway miles between each exit
- Must operate for a minimum of 6 years
- Open to the public 24 hours/day, 7 days/week year-round



#### Project Requirements, continued(3)

#### **Hydrogen Refueling Infrastructure Projects:**

- Installation of eligible <a href="hydrogen equipment">hydrogen equipment</a> compressors, cryogenic pumps, dispenser with hose and nozzles for MDHD FCEVs
- Hydrogen Safety Plan
- Hydrogen Refueling Station Design Reviews
- Virtual Inspections
- Reporting Safety Incidents
- NREL Data Collection Tool
- Initial, biannual, and as needed hydrogen purity test results
- Open Retail Attestation Form: Vehicles must be acquired to demonstrate realworld operating conditions
- 12 months Data Collection



#### Project Requirements, continued(4)

#### **Charging Infrastructure Projects:**

- Installation of <u>eligible</u> charging equipment
- Minimum power per charger is 350 kW DCFC
- Compliance with AB 841
- Record keeping for and reporting standard for charging equipment installed after January 1, 2024 requirements can be found in AB 2061 (Ting, Chapter 345, Statutes of 2022) and Cal. Pub. Resources Code sect. 25231.5
- 12 months data collection



#### **Solicitation Timeline**

Activity	Tentative Action Date
Solicitation Release	Late August/ Early September 2024
Deadline to Submit Applications	November 2024
Anticipated Notice of Proposed Awards Posting	March 2025
Anticipated CEC Business Meeting Approval	June 2025



#### **Discussion Questions**

- 1. Is the proposed increased minimum power output per charger from >150kW to >350kW reasonable?
- 2. What are the greatest barriers to developing public MDHD charging/refueling sites at this time? Electrification, permitting, land availability, others?
- 3. Did certain requirements in the first CRITICAL PATHS (<u>GFO-23-602</u>) prevent potential applicants from submitting projects that would have achieved the goal of public MDHD ZEV infrastructure on priority corridors? Please elaborate.



#### **Zoom Comments**

#### Two ways to provide comments:

- 1. Use the raise hand function in Zoom:
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    - \*9 Raise hand.
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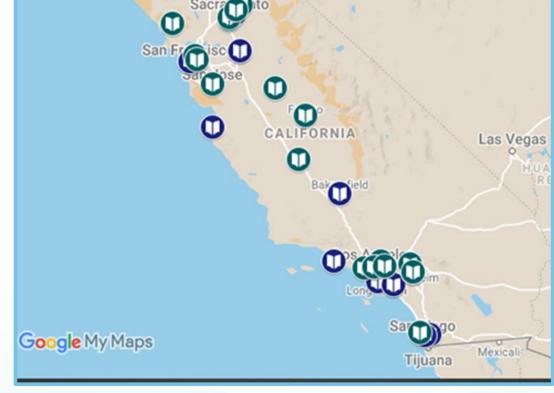
# Concept 2

Implementation of MDHD ZEV Infrastructure Blueprints 2.0

Presenter: Esther Odufuwa, Air Pollution Specialist



- Competitive grant solicitation
- Round 2 of GFO-23-603
- Provide up to \$20 million to support MDHD ZEV hydrogen refueling and/or charging projects
- Projects that will implement ZEV charging and/or hydrogen refueling infrastructure projects developed and identified in the final blueprint planning documents resulting from GFO-20-601, "Blueprints for Medium- and Heavy-Duty (MDHD) Zero-Emission Vehicle and Infrastructure", and other blueprints for MDHD ZEV Infrastructure not funded by CEC



GFO-20-601 Blueprints: Source CEC Staff

Proposed Solicitation Release Date: Q4, 2024



### **Eligible Applicants**

- All entities listed on the Notice of Proposed Awards (NOPA) for GFO-20-601 the "Blueprints for Medium and Heavy Duty Zero-Emission Vehicle and Technology Infrastructure" solicitation that have <u>completed</u>, <u>submitted</u>, <u>and received CEC-approval of their Final Blueprint</u>.
- Entities that have received funds from round 1 of the Blueprint Implementation Solicitation GFO-23-603 may be eligible provided the new proposal is to deploy chargers and/or hydrogen refueling equipment at other project sites identified in the blueprint.
- Any commercial fleets <u>identified</u> as a case study or with an infrastructure analysis completed in a GFO-20-601 project, <u>if a Final Blueprint has been completed</u>, <u>submitted</u>, and <u>received CEC approval</u>.
- Entities with other blueprints for MDHD ZEV Infrastructure not funded by CEC <u>provided</u> the blueprint meets the set criteria in GFO-20-601.
- Applicants who are registered with the California Secretary of State and in good standing to enter into an agreement with the CEC.



#### **Eligible Projects**

#### All projects **must**:

- Install and deploy new CEC-funded electric vehicle chargers and infrastructure, and/or new CEC-funded hydrogen fueling dispensers and hydrogen refueling equipment and infrastructure to support current and future deployment of zero-emission MDHD vehicles
- Be installed in California
- Acquire zero-emission MDHD vehicles to demonstrate real world infrastructure operating conditions
- Provide 12 months Data Collection



## **Ineligible Projects**

- Projects that do not deploy chargers and the related infrastructure to support MDHD ZEV charging
- Projects that do not deploy hydrogen dispensers with hoses and nozzles
- Projects that have received funding from another CEC grant funding opportunity (GFO) or block grant incentive program for the same project being proposed to this Solicitation
- Lab Scale Research and Validation



## **Project Requirements**

#### **Charging Infrastructure projects**:

- Installation of EVSE, transformer, electric panel, wiring, etc.
- Must install at least 10 DCFC chargers as part of the project
- Facilitate vehicle-charger interoperability
- Leverage open standards-based network communications
- Be capable of managing charging costs and supporting grid reliability
- Bidirectional power flow (optional)
- AB 841 which requires Electric Vehicle Infrastructure Training Program (EVITP) certification
- Record keeping for and reporting standard for Charging Equipment Installed After January 1, 2024. AB 2061 (Ting, Chapter 345, Statutes of 2022) and Cal. Pub. Resources Code sect. 25231.5



## Project Requirements cont.

#### **Hydrogen Refueling Infrastructure Projects**:

- Installation of hydrogen compressors, cryogenic pumps, dispenser with hose and nozzles for MDHD ZEVs
- Must install at least two fueling positions for MDHD ZEVs
- Hydrogen Safety Plan
- Hydrogen Refueling Station Design Reviews
- Virtual Inspections
- Reporting Safety Incidents
- NREL Data Collection Tool
- Initial, biannual, and as needed hydrogen purity test results
- Open Retail Attestation Form, if applicable (for public, open retail stations)



## **Project Costs**

#### **Eligible project costs include:**

- Electric vehicle supply equipment (EVSE)
- Transformers, electric panels, conduit, wiring, meters, stub outs
- Distributed energy resources or energy storage equipment/systems capable of providing independent or supplemental power to the EV chargers
- Photovoltaic solar panels separately metered for electric vehicle charging
- Installation costs
- Planning and engineering design costs
- Demand management equipment
- Hydrogen compressors, cryogenic pumps
- Dispenser with hose and nozzles
- Commissioning

#### **Ineligible project costs include:**

- Market, literature, or technology surveys
- Vehicle purchase and Vehicle demonstration costs
- Distribution grid or other equipment costs that are otherwise covered by programs or tariff rules of the electric utilities
- Utility service upgrade costs covered by the utility
- Projects that are mandated by local, regional, state, or federal law, rule, or regulation
- Tests for regulatory compliance
- Transportation of fuel
- Nonrenewable DERs



#### **Match Share**

- At least 25 percent of total project cost
- Other CEC funds cannot be used as match (i.e. block grant funding)
- Other state, local, and federal funding may count towards match share



## **Solicitation Timeline**

Activity	Tentative Action Date
Solicitation Release	December 2024
Deadline to Submit Applications	March 2025
Anticipated Notice of Proposed Awards Posting	June 2025
Anticipated CEC Business Meeting Approval	August 2025



### **Discussion Questions**

- What is missing from this concept that should be included?
- Is the list of "Eligible Applicants" adequate?
- Should there be caps on how much CEC pays per charger?
- Should the solicitation request minimum charger levels and/or minimum number of dispensers and/or ports/nozzles?
- Should Applicants be allowed to propose sites that are not included in their original blueprint?
- Should there be caps on microgrid components?
- How do we ensure that microgrid(s) is/are dedicated to the vehicles and sized appropriately?
- What is the best way to ensure that CARB and CEC coordinate funding?



#### **Zoom Comments**

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## Concept 3

Agriculture and Construction Infrastructure

Presenters: Ian Baird, Energy Commission Specialist

# Purpose

- This solicitation will fund the deployment of ZEV charging or refueling infrastructure for California agriculture and construction sites
- Solicitation will also focus on building out reliability through construction of on-site energy generation
- Solicitation will be competitive
- Up to \$20 million available



## **Eligible Applicants**

The solicitation will be open to all eligible farm and construction sites in California, in four groups.

#### Eligible applicants:

- Small Farms
- Medium Size Farms
- Large Size Farms
- Construction Project Sites



## **Eligible Projects**

- All projects must install and deploy new charging dispensers or hydrogen refueling equipment
- All infrastructure must be utilized by eligible agriculture and construction vehicles
- Four categories of projects:
  - New installations and upgrades to in-ground fueling infrastructure
  - On-site zero emission energy generation in support of new/upgraded charging dispensers or hydrogen refueling
  - Grid capacity expanding technologies
  - Zero-emission mobile charging solutions



#### Minimum award of \$2 million for demonstrations in all categories

Applicant Group	Minimum Award	Maximum Award	Match Share (Total Award)	Minimum number of charging dispensers and/or ports to be installed and deployed
Small Farm	\$2 million	\$5 million	10%	5
Medium Farm	\$2 million	\$8 million	20%	10
Large Farm	\$2 million	\$10 million	30%	15
Construction Sites	\$2 million	\$5 million	25%	5



## **Solicitation Timeline**

Activity	<b>Tentative Action Date</b>
Pre-Solicitation Workshop	July 16, 2024
Solicitation Release	November 2024
Deadline to Submit Applications	February 2025
Anticipated Notice of Proposed Awards Posting	April 2025
Anticipated CEC Business Meeting Approval	June/July 2025



### **Discussion Questions**

- Is fund stacking eligible?
- Is minimum award reasonable?
- What is missing from this concept that should be included?
- What are barriers to entry that should be considered in off-road projects?



#### **Zoom Comments**

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## Concept 4

**ZEV Port Infrastructure** 

Presenter: Claudia Eyzaguirre, Air Pollution Specialist



- This solicitation will fund the deployment of MDHD ZEV charging or hydrogen refueling infrastructure for California ports; with a focus on building out grid capacity and onsite energy generation to power the ZEV infrastructure in the timeframe aligned with California port zero-emission goals.
- Up to \$40 million available



## **Eligible Applicants**

The solicitation is open to all California ports and all public and private entities\* serving or supporting a California port.

Applicants will be evaluated in two groups:

- 1. Smaller ports with less than 5 million tons of cargo transported annually;
- 2. Larger ports with over 5 million tons of cargo transported annually



## **Eligible Projects**

- Install and deploy new CEC-funded electric vehicle chargers and infrastructure, and/or new CEC-funded hydrogen fueling dispensers and hydrogen refueling equipment and infrastructure to support current and future deployment of zero-emission MDHD vehicles, and/or off-road equipment (e.g. gantries, cargo handling equipment, etc.).
  - This includes hardware and equipment costs, as well as utility upgrades (if not covered by existing utility programs) at a California port.
- All infrastructure must be utilized by eligible MDHD ZEVs that serve at or support a California port.



## **Eligible Projects**

#### Eligible Projects must deploy at a minimum:

Applicant Group	Minimum chargers per awarded project	Minimum hydrogen dispensers per awarded project	Minimum Award Amount	Maximum Award Amount
<5M tons transported annually	20	5	\$3M	\$5M
>5M tons transported annually	30	8	\$5M	\$10M



## **Possible Scoring Criteria**

- Volume of chargers and/or dispensers at a site
- Projects addressing building out grid capacity and onsite zero-emission energy generation will receive additional points in the scoring criteria (criteria TBD)
- Grid capacity expanding technologies that will enhance the amount of electricity that can be transmitted through the current electrical grid. These technologies could include sensors, power flow control devices, and analytical tools that support new or an expansion of charging infrastructure for ZEVs



## **Solicitation Timeline**

Activity	Tentative Action Date
Pre-Solicitation Workshop	July 16, 2024
Solicitation Release	November 2024
Deadline to Submit Applications	January 2025
Anticipated Notice of Proposed Awards Posting	April 2025
Anticipated CEC Business Meeting Approval	June 2025
Agreement Execution	July 2025



### **Discussion Questions**

Do the requirements for minimum chargers/dispensers align with the funding amounts offered?

Does this concept capture projects that will assist ports in meeting their zero-emission goals?



#### **Zoom Comments**

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## Concept 5

Light-Duty Vehicle Hydrogen Refueling Infrastructure

Presenters: Mark Johnson, Air Pollution Specialist



## **Purpose (Funding Lane 1)**

#### **Funding Lane 1:**

- Provides \$10 million to develop light-duty or mixed-use hydrogen refueling stations in San Francisco and Sacramento Counties.
- Mixed-use stations would primarily be light-duty focused but would also be able to support medium- and heavy-duty fuel cell vehicles
- Capital Expenditure (Cap-X) maximum award amount: \$1.5 million per station
- Operation and Maintenance (O&M) maximum award amount: \$500,000 per station
- Total maximum award amount: \$2 million
- Match Requirements: 50 percent



## **Purpose (Funding Lane 2)**

#### **Funding Lane 2:**

- Provides \$5 million in O&M funding for planned or operational stations where progress has stalled due to cost constraints.
- Maximum award amount: \$500,000 per station
- Match Requirements: 50 percent
- There will be a single applicant cap of 45 percent on the total award amount for this solicitation.



## **Eligible Applicants**

- Funding Lane 1 is open to applicants seeking to build light-duty or mixeduse stations located in Sacramento or San Francisco counties.
- Funding Lane 2 is open to any station developer who has paused development of their stations due to cost constraints.



## Eligible Projects (Funding Lane 1)

#### All projects must:

- The project shall construct one or more new light-duty hydrogen refueling stations or mixed-use stations. Each station must be installed within San Francisco County or Sacramento County.
- 50 percent of awarded funds must be used in disadvantaged communities.
- Each proposed station shall have a minimum of two Society of Automotive Engineers (SAE) International J2601 H70-T40 fueling positions.
- Each proposed station must meet the Minimum Technical Requirements for Open Retail Hydrogen Refueling Stations listed in Section II.E.
- The Applicant or a key project partner must operate each proposed station and maintain its open retail status for a minimum of five years.



## Eligible Projects (Funding Lane 1)

 Each light-duty fueling position of each proposed station shall meet the minimum 24-hour fueling capacity of 225 kilograms based on the Hydrogen Station Capacity Evaluation (HySCapE) model, counting only H70-T40 fills that achieve 95% state of charge (SOC).

#### For Mixed-Use Hydrogen Refueling Infrastructure:

- Stations shall serve fuel-cell electric trucks (FCETs) or fuel-cell electric buses (FCEBs) via public or private access at separate fueling positions from light-duty FCEVs. The public light-duty FCEV customer experience must not be compromised.
- Optional:
  - Fueling positions may provide H35 fueling in addition to H70-T40.



## Eligible Projects (Funding Lane 2)

#### **Funding Lane 2 will provide reimbursement for:**

- maintenance
- insurance on hydrogen refueling station and related equipment
- hydrogen production or procurement costs
- hydrogen fuel delivery costs
- utility costs
- rent or lease payments.

#### Ineligible costs include:

- property taxes
- interest
- penalties
- indirect costs
- non-cash expenses (such as amortization, depreciation, bad debt, etc.)



## **Solicitation Timeline**

Activity	Tentative Action Date
Pre-Solicitation Workshop	July 16, 2024
Solicitation Release	September 2024
Deadline to Submit Applications	November 2024
Anticipated Notice of Proposed Awards Posting	March 2025
Anticipated CEC Business Meeting Approval	June 2025



### **Discussion Questions**

#### **Funding Lane 1:**

- Is the proposed reimbursable capital expenditure of \$1.5 million per station adequate to build new stations in San Francisco and Sacramento counties?
- Is the proposed O&M of \$500,000 per station sufficient?
- Should the 50 percent match requirement be adjusted?

#### **Funding Lane 2:**

- Will the proposed O&M funding of \$500,000 per station be sufficient to continue operation of hydrogen stations?
- Should the 50 percent match requirement be adjusted?



#### **Zoom Comments**

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  - Keep questions under 3 minutes to allow time for others.

- 2. Type questions in the Q&A Box in Zoom:
  - Please provide name and affiliation.



## Other CEC Funding Opportunities

- Zero-Emission Heavy Duty Infrastructure Loan Pilot Project
- EnergIIZE Commercial Vehicles (MDHD block grant incentive project)



## Zero-Emission Heavy-Duty Infrastructure Loan Pilot Project

Presenter: Marc Perry, Energy Commission Specialist



# **Zero-Emission Heavy-Duty Infrastructure Loan Pilot Project**

Opened for applications on May 1, 2024

Loan loss reserve program

- Administered by the California Pollution Control Financing Authority
- Initial \$4.5 million approved to serve as a credit enhancement for participating financial institutions providing loans for ZEV infrastructure projects
- Contribution rate is set at 20% of each loan
- Coordinating with the California Air Resources Board



# Zero-Emission Heavy-Duty Infrastructure Loan Pilot Project (continued)

- Eligibility includes:
  - Construction of new ZEV charging and hydrogen fueling infrastructure to support MDHD ZEVs
  - Maximum fleet size of 20 vehicles
- For more information, visit:

https://www.treasurer.ca.gov/cpcfa/calcap/index.asp



# **EnergIIZE Commercial Vehicles**

Presenter: Sebastian Serrato, Air Pollution Specialist



## **EnergIIZE Commercial Vehicles**



#### **EV Fast Track Lane**

Electric vehicle (EV) commercial fleet users who are currently participating in a vehicle incentive project with a vehicle purchase order and/or have procured medium- or heavy- duty (MD/HD) battery electric vehicles may be eligible for the EV Fast Track Funding Lane.



#### **EV Jump Start Funding Lane**

Electric vehicle (EV) commercial fleet users who are located in or operate 50 percent of fleet operation in a disadvantaged or low-income community; are transit agencies; operate school bus fleets; are small fleet owners; or run small business enterprises may be eligible under the EV Jump Start Funding Lane.



#### **EV Public Charging Station Funding Lane**

Commercial fleet users or station owners interested in deploying publicly accessible charging infrastructure for commercial medium- and heavy-duty (MD/HD) electric vehicles (EVs) may be eligible under the EV Public Charging Station Funding Lane.



#### **Hydrogen Funding Lane**

Commercial fleet users or station owners who seek to deploy hydrogen refueling infrastructure for medium- and heavy-duty (MD/HD) hydrogen fuel cell vehicles may be eligible under the Hydrogen Funding Lane.



## **EnergIIZE Commercial Vehicles**

#### **EnergIIZE Quick Stats**

- 449 Applications reviewed
- 251 Awards
- \$132 M Incentives Awarded
  - \$112.3M DAC/LIC\* Incentives
- \$439 M Match Share\*\*
- 3,470 Chargers & 40 H2 Dispensers





www.energiize.org



## **EnergIIZE Commercial Vehicles**

#### **Active funding lanes**

- Transit Set-Aside Opened 04/30/2024 Closes Q1 2025 (up to \$15M available)
- Drayage Set-Aside Opened 04/30/2024 Closes Q1 2025 (up to \$50M available)

#### **Upcoming funding lanes**

- EV Jump Start Opened at 9 AM on July 16, 2024
- EV Public Charging Opening October 2024

#### **Recently closed lanes**

- EV Fast Track Opened/Closed 02/07/2024 (\$20M offered)
- Public School Bus Set-Aside Closed 04/26/2024 (up to \$17M offered)
- Hydrogen Opened 04/17/2024 Closed 05/01/2024 (up to \$16M offered)



## **Public Comment**



#### **Zoom Comments**

#### Two ways to provide comments:

- 1. Use the raise hand function in Zoom:
  - Zoom Phone Controls:
    - \*6 Toggle mute/unmute.
    - \*9 Raise hand.
  - Please introduce yourself by stating your name and affiliation.
  - Keep questions under 3 minutes to allow time for others.

- 2. Type questions in the Q&A Box in Zoom:
  - Please provide name and affiliation.



**Docket #: 19-TRAN-02** 

E-Commenting System:

https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=19-TRAN-02

Email Docket Unit: <a href="DOCKET@energy.ca.gov">DOCKET@energy.ca.gov</a>

Reference: "MDHD Infrastructure Concepts"

All comments due by 5:00 p.m. on July 30, 2024.



## Thank You!