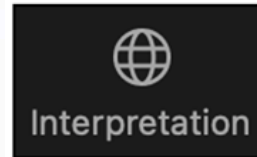


# Welcome! ¡Bienvenidos!

Simultaneous interpretation is being provided – English speakers may need to select English as their language.

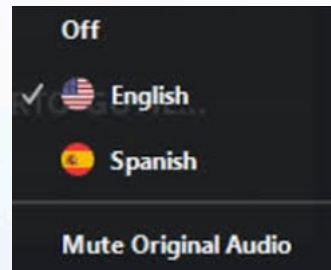
## Accessing Zoom from a computer

- Click the globe icon located at the bottom of the screen
- Choose **English**



## Accessing Zoom from a smart phone

- Click the **3 dots (more)** on the bottom right side of the screen
- Choose **Language Interpretation**
- Choose **English**
- Press **Done** on the top right side of the screen



Interpretación simultánea al español disponible – los hispanohablantes deben seleccionar su idioma.

## Entrando a Zoom por computadora

- Haga clic en el símbolo del globo terráqueo en la parte inferior de la pantalla
- Selecciona **Español**
- Apague el **Audio Original** (para solo escuchar una voz)

## Entrando a Zoom por un teléfono inteligente

- Haga clic en los **3 puntos** encima de la palabra **more o más** en la parte inferior derecha de la pantalla
- Selecciona **Interpretación**
- Selecciona **Español**
- Haga clic en **Done** o **Finalizar** arriba y de lado derecho de la pantalla



# **Evening Community Meeting: Clean Transportation Incentives for a Cleaner California**

Public Workgroup Meeting  
September 17, 2024

# Meeting Agreements

- Be respectful
- Take space, make space
- Listen to understand
- Strive to follow an equitable approach when helping to strategize solutions for our clean transportation incentive programs
  - Equity recognizes that advantages and barriers exist, and that, as a result, we do not all start from the same place

# Evening Community Meetings

- Monthly community meetings will provide a space for community members across the state to engage with California Air Resources Board staff.
- Community Meeting Goals
  - Hold a platform for community voices and their priorities
  - Brainstorm solutions for clean transportation needs
  - Highlight the most important information for communities
  - Continuous two-way communication between staff and communities

# Today's Agenda

Time	Session
5:00 – 5:10 p.m.	Introduction
5:10 – 6:00 p.m.	Review of the Clean Transportation Equity and Light-Duty Vehicle Investments
6:00 – 6:05 p.m.	Break
6:05 – 6:55 p.m.	Review of the Clean Truck and Bus Voucher Incentive Project, Innovative Small E-Fleet Pilot Project, Zero-Emission Truck Loan Pilot Project, Clean Off-Road Equipment Voucher Incentive Project, and Long-Term Heavy-Duty Investment Strategy
6:55 – 7:00 p.m.	Wrap-up and next steps

# Comments and Questions



Use the raised hand function (#2 if calling in by phone)



Please state your name and affiliation, if any, before asking a question or making a comment.



You may also email questions to [cleantransportationincentives@arb.ca.gov](mailto:cleantransportationincentives@arb.ca.gov)



# **Review of the Clean Transportation Equity and Light-Duty Vehicle Investments**



# Workgroup Topics

1. Zero-Emission Assurance Project
2. Vehicle Affordability Analysis
3. Driving Clean Assistance Program
4. Sustainable Community-Based Transportation Equity Projects
5. Metrics and Evaluation





# **Zero-Emission Assurance Project (ZAP)**

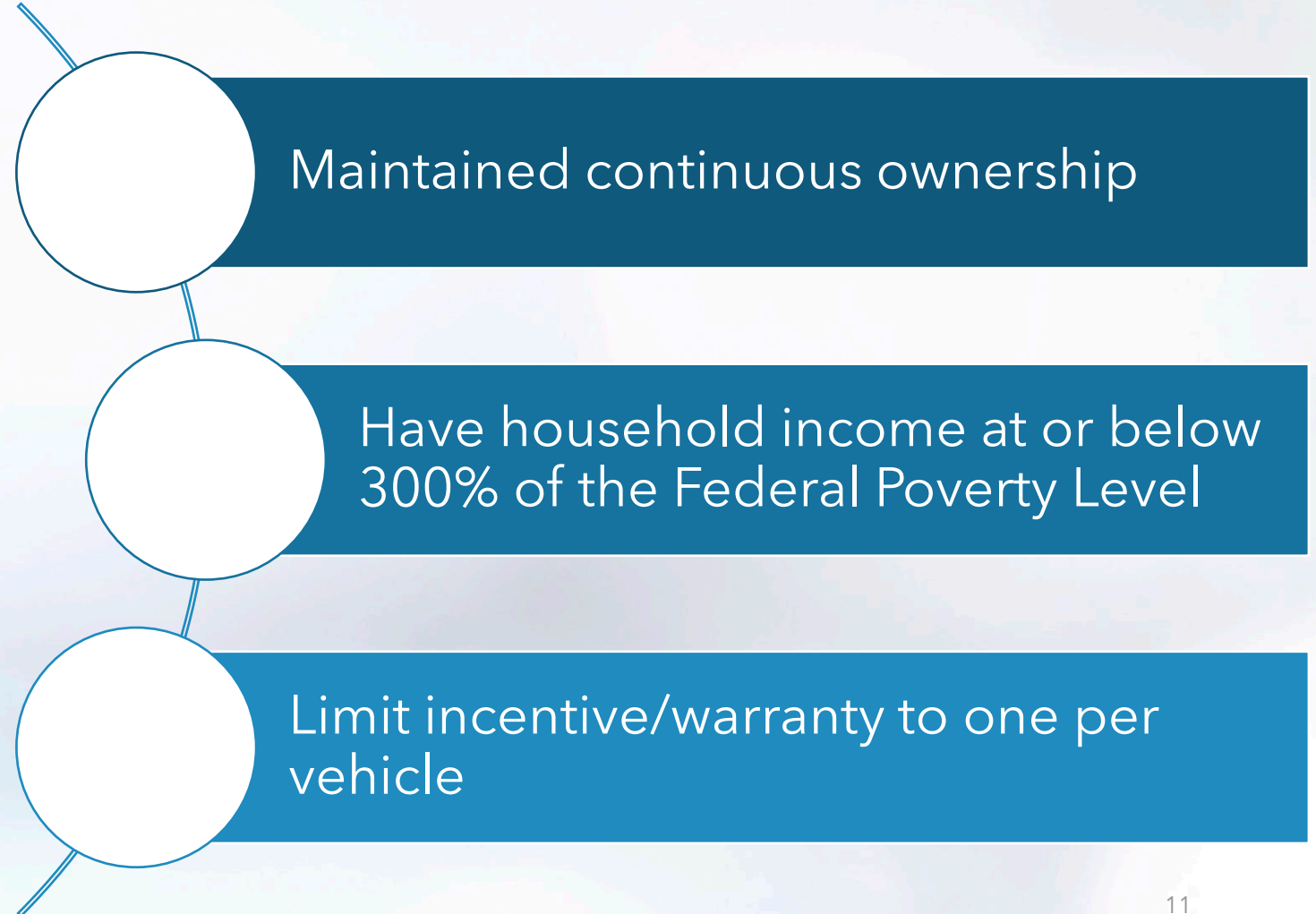
# Background on ZAP



- No funds appropriated in the Fiscal Year 2024-25
- Expected project launch in 2025

# Potential Zero-Emission Assurance Project (ZAP) Policies: Participant Eligibility

**Anyone who has participated in CARB's Clean Cars 4 for All or Financing Assistance projects are eligible if:**



# Potential ZAP Policies: Vehicle Coverage and Rebate Amount

- Fifteen years after the date of manufacture or up to 200,000 miles, whichever is later.
- Rebate up to \$7,500 to replace premature failure of batteries or fuel cell components, including labor, **or**
- Grant equivalent up to \$7,500 to purchase a new or used clean vehicle.
  - Stackable with any other local or federal incentive programs. Not stackable with CARB vehicle purchase incentive projects.
  - Older vehicle donated to community college automotive technician programs to assist with workforce training.



# Vehicle Affordability Analysis Update

# Key Takeaways

## New ZEVS

- CARB's cash incentives, 8% interest rate loan, and Federal Clean Vehicle Tax Credit reduce the costs of a new ZEV but do not enable affordable choices for lower-income households given the parameters of the analysis.

## Used ZEVs

- Few affordable used small ZEV options without CARB incentives (6 options).
- Factoring in the Clean Cars 4 All incentive, 8% loan, and the used Federal Clean Vehicle Tax Credit greatly increases the number of affordable options (88 options)
- Combined incentives provide diverse vehicle choice but larger vehicle options limited

## Summary

- While these results suggest that there are no affordable new vehicle options for lower-income households even when including incentives, we continue to see an increase in demand for new vehicle purchases through CARB incentive programs focused on lower-income consumers.
- With the expansion of the Clean Cars 4 All and Financing Assistance statewide through the Driving Clean Assistance Program, CARB staff will continue to analyze real-world data from these programs to inform future updates of this analysis.



# Updates to Driving Clean Assistance Program (DCAP)

Prior Funding Plans have established a financing loan cap of \$35,000.

In response to market analysis and comments in other workgroups, staff proposes to increase the financing loan cap to \$45,000.

Enables DCAP to be responsive to market conditions and will provide participants with greater opportunities to find a vehicle.

# Sustainable Community-Based Transportation Equity Projects

## Statewide Clean Mobility Options Voucher Pilot Program (CMO)

Small-scale, shared-mobility projects and community transportation needs assessments



## Regional Clean Mobility Options Pilot Projects

Early pilots to provide shared mobility services



## Sustainable Transportation Equity Project (STEP)

Holistic, equity-focused projects to address community mobility needs and reduce vehicle miles traveled



## Planning and Capacity-Building (Planning)

Community-led planning and capacity building projects



## Clean Mobility in Schools (CMIS)

Clean transportation and education projects at K-12 public schools



# Evaluating Needs-Based Models

## Background

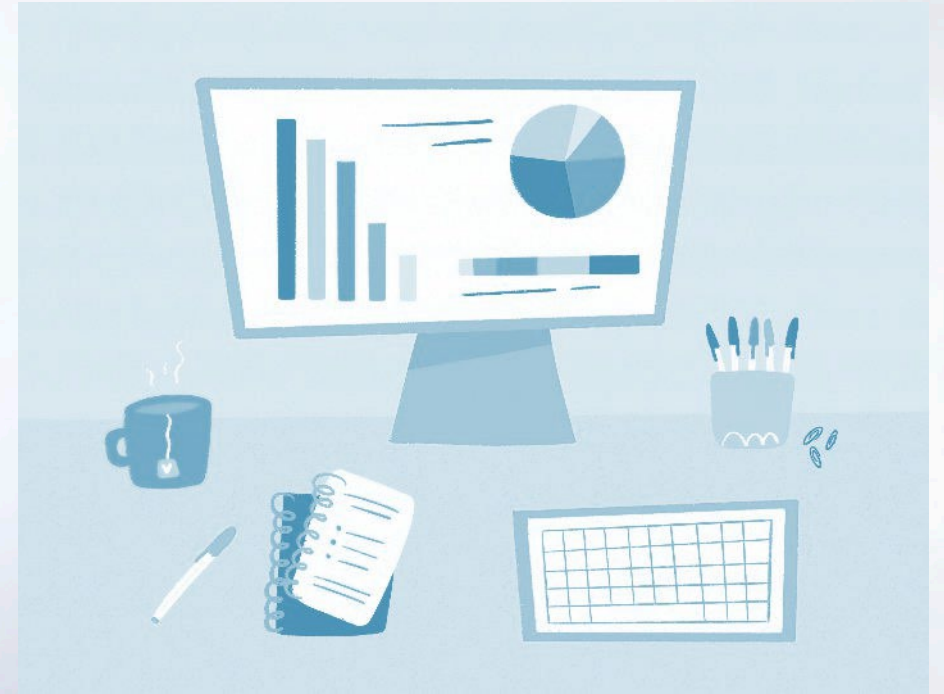
- Received feedback to implement a needs-based model across all investment projects
- Implementing a need-based model with launch of the Driving Clean Assistance Program (DCAP)
- Sustainable Community-Based Transportation Equity (Mobility) Projects currently implement needs-based models

## Next Steps

- Discuss alternatives to needs-based models for Mobility Projects through future public workgroups
- Evaluate current application processes across the Mobility Projects
- Evaluate findings from FY 2022-23 STEP/CMIS/PCB technical assistance survey for project improvements
- Collect data and lessons learned from DCAP

# Metrics and Evaluation

- CARB's metrics and evaluation goals
- Data and metrics currently collected
- Measuring socioeconomic benefits
- Challenges and opportunities



# CARB's Metrics and Evaluation Goals



- Evaluate project/program effectiveness
- Address audit findings
- Standardize data collection
- Identify gaps
- Data-sharing system



# Data and Metrics Currently Collected



# Categories of Metrics



1. Estimated (modeled) benefits
2. Participant information
3. Project- and program-level information
4. Outreach and engagement data



## 1. Estimated (Modeled) Benefits

- Outputs from California Climate Investments (CCI) Benefit Calculator Tools
- Examples: Emission reductions, vehicle miles traveled reductions, fuel use avoided, etc.
- Takeaway:
  - Based on *expected* project scope and performance. Publicly available on the CCI website.

## 2. Participant Information

- Data from incentive applications, surveys, and telematics
- Examples metrics: participant demographics, location of participant or service, vehicle information, trip information, etc.
- Takeaway: Data reporting varies across programs.
  - Purchase incentives have data dashboards and maps<sup>1</sup>, but demographic data is limited.
  - Mobility projects are early in the process of compiling and analyzing data.

<sup>1</sup><https://www.calzevinsights.org/>

### 3. Project-Level Information

- Collected by grantees or project administrators
- Examples: number of grants, enrollments, partners; monetary values (total and individual grant/incentive/voucher values), number of vehicles/equipment, etc.
- Takeaway:
  - Data is publicly available, but not in a single, centralized location. Some metrics are reported in the annual Funding Plan and on the California Climate Investments Data Dashboard.

### 4. Outreach and Engagement Data

- Data tracked by grantees and project administrators or collected via surveys
- Examples: Number and type of outreach events and partners, number and type of engagement interactions, community member feedback, etc.
- Takeaway:
  - Data is challenging to track and report but helps to illustrate successes and gaps in CARB's and partners' outreach efforts.

# Measuring Socioeconomic Benefits



**Above:** Shasta Living Streets hosts a celebration to mark the opening of the Shasta Bike Depot and Redding Bikeshare in downtown Redding, California, on Friday, May 12, 2023. The bikeshare project is funded by Clean Mobility Options.

# Measuring Socioeconomic Benefits

**Purpose:** Ensure that projects deliver intended socioeconomic benefits.

- **Step 1:** Identify metrics indicative of socioeconomic benefits

- Completed for Fiscal Year 2022-23 Funding Plan)

- **Step 2:** Develop a process to collect data

- Completed by fall 2023 and documented on CARB's website

- **Step 3:** Evaluate program/project effectiveness by analyzing metrics

- In progress





# Challenges and Opportunities

- Challenges:
  - Demographic data collection and reporting
  - Standardizing and systematizing metrics collection
  - Capacity to perform robust data/metrics analysis
- Opportunities:
  - Standardized user survey
  - Utilize available data to update policies



# Comments and Questions



Use the raised hand function (#2 if calling in by phone)



Please state your name and affiliation, if any, before asking a question or making a comment.



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**5-Minute Break**  
**Return at 6:05 p.m.**





**Review of the Clean Truck and Bus Voucher Incentive Project, Innovative Small E-Fleet Pilot Project, Clean Off-Road Equipment Voucher Incentive Project, and Long-Term Heavy-Duty Investment Strategy**

# Workgroup Topics

- Proposed updates to Fiscal Year (FY) 2024-25 Clean Truck and Bus Voucher Incentive Project (HVIP)
- Proposed updates to FY 2024-25 Innovative Small E-Fleet Pilot Project (ISEF)
- Proposed updates to FY 2024-25 Clean Off-Road Equipment Voucher Incentive Project (CORE)
- FY 2024-25 Long-Term Heavy-Duty Investment Strategy update



**Clean Truck and Bus Voucher Incentive  
Project  
(HVIP)**

# HVIP Principles

- Accelerate market transformation for the cleanest advanced technologies
- Support the goals laid out in CARB's Long-Term Heavy-Duty Investment Strategy
- Drive purchase decisions
- Maintain simplicity and a fleet-friendly process
- Support CARB regulatory programs
- Avoid market disruptions by unpredictable funding availability
- Graduate established technologies
- Support more equitable investments

# Clean Truck and Bus Voucher Project (HVIP)

- Support CARB regulatory programs
- Accelerate market transformation for cleanest technologies
- Support equitable investments



## Status:

\$144 Million in available funds

12,100+ vehicles funded  
2,000+ fleets participating

Vouchers may be exhausted by late 2024

## Staff Proposals:

Review Voucher amounts and simplify structure

Consider implementing MSRP cap

Explore issuance of vehicle Vouchers to fleets

[CaliforniaHVIP.org](https://CaliforniaHVIP.org)

# Contact Information

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Duong Trinh, Manager

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California HVIP webpage

- <https://californiahvip.org>
- [info@californiahvip.org](mailto:info@californiahvip.org)

# Comments and Questions



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# Innovative Small E-Fleet Pilot Project (ISEF)

# Background

- Accelerates market transformation by further reducing purchase price of zero-emission technologies for small fleets
- Provides fleets innovative solutions such as all-inclusive leases, truck-as-a-service, and other mechanisms
- Transactions have involved three primary parties – ISEF provider, HVIP approved dealer, and an eligible small fleet participant
- Small fleet participants own 20 or fewer vehicles and make less than \$15 million in annual revenue

# FY 2024-2025 Proposals

## Status:

\$21 million in available funds

Continued focus on small fleets & innovation



## Staff Proposals:

\$14.97 million of the AQIP appropriation

Future Options Being Explored:

Design Used Truck Voucher Pilot  
Fleet Management Assistance  
Insurance

# Contact Us

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# Comments and Questions



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# **Clean Off-Road Equipment Voucher Incentive Project (CORE)**



★ CALIFORNIA ★  
**CORE**  
Clean Off-Road Equipment

○ First Come, First Served

○ Offset Higher Zero-Emission Costs

○ CARB Determines Funding Amounts

○ Stacking Allowed - No Scrappage Required

○ Enhancements for infrastructure, small business, and disadvantaged communities

# Clean Off-Road Equipment (CORE) Voucher Update

## Staff Proposals:

Proposing \$14.97 million Air Quality Improvement Program

Funding focused solely on small businesses

Graduate terminal tractors

New voucher amounts for forklifts >54,001 lbs. lift capacity

Streamline equipment eligibility



# Contact Information

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California CORE webpage

- <https://californiacore.org/>
- [info@californiaCORE.org](mailto:info@californiaCORE.org)

# Comments and Questions



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**Fiscal Year (FY) 2024-25  
Long-Term Heavy-Duty Investment Strategy**

# Agenda

1. Introductions, Background, and Purpose
2. Heavy-Duty Investment Strategy Overview
3. Programmatic Metrics
4. Three-Year Investment Priorities



# Long-Term Heavy-Duty Investment Strategy

Annual three-year investment strategy for Clean Transportation Incentives

Roadmap for accelerating technology and market development

Outlines priorities for investment

Focus on equity and small businesses

Includes annual report on the State's school bus fleet

# CARB Incentive Programs and Regulations

- CARB's portfolio of investments support clean technologies from pre-commercial demonstrations through market scaling and assistance for small fleets
- The Long-Term Heavy-Duty Investment Strategy is specific to Low Carbon Transportation Investments (LCT) and the Air Quality Improvement Program (AQIP)
- Strategic investments work hand-in-hand with CARB's regulatory framework
  - Help prepare markets for regulation, prioritize equity, and support small businesses

# Metrics of Success 2024

## Supporting Healthy Communities

57  
PERCENT

### SMALL AND PUBLIC FLEET SUPPORT

Fifty-seven percent of 2021-2024 HVIP vouchers were given to public or small fleets (private entities with <\$10 million annual revenue or fewer than 50 employees).



## Supporting Technology Evolution

84  
PERCENT

### FUTURE ZEV PURCHASES

Eighty-four percent of HVIP voucher recipients surveyed plan to purchase additional medium- and heavy-duty zero-emissions vehicles within the next five years.



## Growing the Green Economy

447  
MODELS

### MANUFACTURERS

There are 114 HVIP- and/or CORE-eligible manufacturers offering 447 vehicle or equipment models.



353  
MILLION

### DAC MILES TRAVELED

HVIP-funded vehicles have traveled approximately 353 million miles in DACs, as identified in CalEnviroScreen.



123  
MODELS

### CORE NEW TECHNOLOGY

Since July 2023, 123 new off-road equipment models or model-year updates have been added to CORE's catalog.



\$4.4  
BILLION

### TOTAL INVESTMENT

Additional public and private spending toward these purchases totaled \$4.4 billion--over \$3 for every \$1 of voucher investment. Leveraged private spending represents purchases redirected from traditional technologies to clean technologies.



# FY 2024-25 Heavy-Duty Investment Priorities

	FY 2025-26	FY 2026-27	FY 2027-28
Demos and Pilots	<p>\$290-\$450 Million</p> <p>ZE Line-Haul Rail, AT Aviation, AT Ocean-Going, ZE/Hybrid Marine, ZE Ag/Construction/Mining/Heavier CHE, Emergency and Heavy Specialty Equipment, Hydrogen and Off-Road ZE Ecosystems, Green Zones</p>	<p>\$325-\$515 Million</p> <p>ZE Line-Haul Rail, ZE Light Aviation, AT Heavy Aviation, AT Ocean-Going, ZE Marine, ZE Ag and Heavier Construction/Mining/CHE, Emergency and Heavy Specialty Equipment, Hydrogen and Off-Road ZE Ecosystems, Green Zones</p>	<p>\$360-\$480 Million</p> <p>ZE Line-Haul Rail, ZE Light Aviation, AT Heavy Aviation, AT Ocean-Going, ZE Marine, ZE Heavy Ag/Construction, ZE Extra-Specialty, Hydrogen and Off-Road ZE Ecosystems, Green Zones</p>
Market Acceleration	<p>\$560-\$610 Million</p> <p>ZE Construction and Heavier CHE, ZE Switcher Rail, ZE/Hybrid Marine, Heavy/Specialty ePTOs, ZE Long Haul Trucks, Temp. Fueling</p>	<p>\$450-\$545 Million</p> <p>ZE Construction/Mining and Heavier CHE, ZE Switcher Rail, ZE/Hybrid Marine, Heavy/Specialty ePTOs, ZE Long Haul Trucks, Temp. Fueling</p>	<p>\$530-\$830 Million</p> <p>ZE Ag and Heavier Construction/Mining/CHE, ZE/Hybrid Marine, Emergency and Heavy Specialty Equipment</p>
Market Equity	<p>\$640-\$660 Million</p> <p>ZE Drayage/Small Fleets, ZE Forklifts, ZE School/Transit, Financing and Insurance Assistance, Secondary Market Support</p>	<p>\$620-\$655 Million</p> <p>ZE Drayage/Small Fleets, ZE Forklifts, ZE School/Transit, Financing and Insurance Assistance, Secondary Market Support</p>	<p>\$260-\$320 Million</p> <p>ZE Long Haul Trucks, ZE Drayage/Small Fleets, ZE Forklifts, ZE School/Transit, Secondary Market Support, ZE Switcher</p>
Total Funding	\$1,490-\$1,720 Million *	\$1,395-\$1,715 Million *	\$1,150-\$1,630 Million *

# Heavy-Duty Investment Strategy Contacts

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# Comments and Questions



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# Wrap-Up and Next Steps

# Moving Forward

Meeting/Item	Date
Proposed Funding Plan web-posted for 30-day public comment	October 11, 2024
Evening Community Meeting	October 15, 2024
Evening Community Meeting	No November Meeting
CARB Board Hearing on the Proposed Funding Plan	November 21, 2024
Evening Community Meeting	December 17, 2024

# Contact Us

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