



Heavy-Duty Vehicle and Equipment Policy Workgroup

August 6, 2024

Agenda

Time	Topic Session
1:30- 1:45pm	Meeting Overview
1:45 - 2:30pm	Clean Truck and Bus Voucher Incentive Project (HVIP)
2:30 - 2:45pm	Innovative Small E-Fleet Pilot Project (ISEF)
2:45 - 3:00pm	Zero-Emission Truck Loan Pilot Project
3:00 - 3:45pm	Clean Off-Road Equipment Voucher Incentive Project (CORE)
3:45 - 4:30pm	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:

\$165 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

Contact Information

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California HVIP webpage

- <https://californiahvip.org>
- info@californiahvip.org



Innovative Small E-Fleet Pilot Project (ISEF)

Proposal: Used Truck Voucher ISEF Pilot

- **What:** The goal is to collect data, support residual values, and spur a secondary vehicle market.
- **Why:** A used vehicle voucher program will provide another innovative solution to small fleets in making the switch to a zero-emission vehicle.
- **How:** Seller would submit a request to CARB - voucher amounts to be determined.

Comments



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



Please state your name and affiliation before asking a question or making a comment

Contact Us

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Zero-Emission Truck Loan Pilot Project

Zero-Emission Truck Loan Pilot

- Uses a loan loss reserve system
- Eligibility:
 - On-road ZEVs class 2b & up
 - Fleets up to 20
 - Contribution rate is set at 25%
- Administrator: California Pollution Control Financing Authority
- Partners: CA Energy Commission & Southern California Edison

Status:

Opened
May 1, 2024

\$5 million
from Fiscal
Year 2022-23

\$4 million
from legacy
project

Staff Proposals:

\$5 million
allocation for
Fiscal Year 2024-25

No policy changes
recommended

Comments



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



Please state your name and affiliation before asking a question or making a comment

Contact Us

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Clean Off-Road Equipment Voucher Incentive Project (CORE)



○ 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 Project

Staff Proposals:

Proposing \$14.97 million Air Quality Improvement Program

Graduate terminal tractors

Increase voucher amounts for forklifts >36,001 lbs. lift capacity

Funding focused solely on small businesses

Streamline equipment eligibility



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California CORE webpage

- <https://californiacore.org/>
- info@californiaCORE.org



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

Overview

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

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

Creating 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 *

Next Steps

- [Draft Funding Plan](#) expected Aug. 19
- [Final Funding Plan Workshop](#) on Aug. 29
- Final Proposed Funding Plan and Heavy-Duty Investment Strategy posted in October
- Board consideration likely in November

Heavy-Duty Investment Strategy Contacts

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