



Clean Transportation Incentives

For Low Carbon Transportation Investments and the Air Quality Improvement Program

Public Workshop on the Fiscal Year (FY) 2023-24 Funding Plan June 8, 2023

Today's Agenda

Time	Session
10:00 a.m. – 10:30 a.m.	Introduction and Overview
10:30 a.m. – 10:40 a.m.	Break
10:40 a.m. – 12:45 a.m.	Light-Duty and Clean Transportation Equity Projects
12:45 p.m. – 1:30 p.m.	Break
1:30 p.m. – 2:00 p.m.	Long-Term Heavy-Duty Investment Strategy
2:00 p.m. – 2:50 p.m.	Heavy-Duty Vehicle and Off-Road Equipment Investments
2:50 p.m. – 3:00 p.m.	Next Steps



CARB Incentive Programs

Community Air Protection Program (AB 617)

Criteria, toxics and GHG reductions for community goals



Criteria pollutant and toxics reductions



Cost-effective, State Implementation Plan (SIP) creditable criteria pollutant emission reductions



Volkswagen (VW) Mitigation Trust Nitrogen Oxides (NOx) mitigation and zero-emission





Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program

Criteria, toxics and GHG reductions for the ag sector



Low Carbon Transportation

Advance technologies to provide GHG reductions and Priority Populations benefits



Woodsmoke Reduction Program

Reduces particulate reductions from home heating devices



Reduces high global warming potential (GWP) F-Gas emissions



Air Quality Improvement Program

- Created by AB 118 (2007); updated and reauthorized by AB 8 (2013)
- Provides the foundation and framework for Low Carbon Transportation Investments
- Annual funding plan guides investments
- Focuses on criteria pollutant and toxics projects
- Proposed FY 2023-24 budget: \$28.64 million

Auction Proceeds Investments for Low Carbon **Transportation**

Annual budget appropriation guided by the priorities in the Cap-and-Trade Auction Proceeds Investment Plan

- •Facilitate greenhouse gas reductions
- Benefit priority populations
- •Maximize health, environmental, economic co-benefits
- •Continue investments in existing programs
- •Provide funding certainty over multiple years when possible
- •Support job training and apprenticeship opportunities

Governor's ZEV Package

Original Zero Emission Vehicle (ZEV) Package

Totaled \$10B across 5 budget years

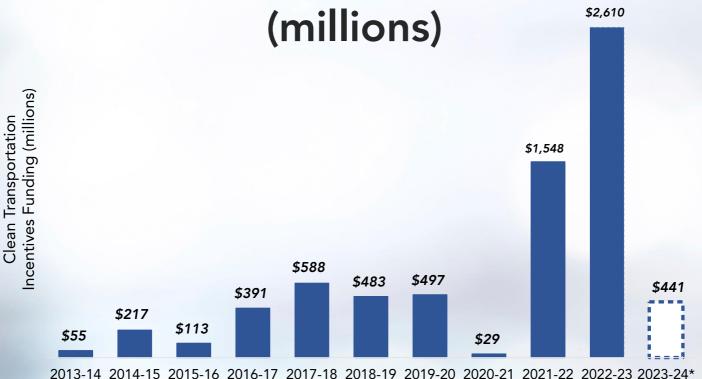
Included appropriations to various other state agencies

- Governor's proposed budget maintains \$8.9 billion of \$10 billion 5-year, multiagency ZEV package approved last year
- Proposal includes \$412 million for CARB in fiscal year (FY) 2023-24

Policy Drivers and Guiding Documents



Clean Transportation Incentives Funding



*Proposed FY 2023-24 Allocations



FY 2023-24 Proposed Budget (millions)

Project Category	Greenhouse Gas Reduction Fund	General Fund	Air Quality Improvement Fund	
Clean Transportation Equity Programs Established Under SB 1275				
Purchase Incentive Equity Programs	\$125	-	-	
Sustainable Transportation and Mobility Equity Projects	\$30	\$30	-	
Heavy-Duty Zero-Emission (ZE) Programs				
ZE Drayage Trucks	\$165		-	
ZE Transit Buses	\$62	-	-	
Air Quality Improvement Program	-	-	\$28.64	

\$382

\$30

\$440.64

\$28.64

Subtotal

Total Funding

AB 1550 Priority Population Investment Minimums

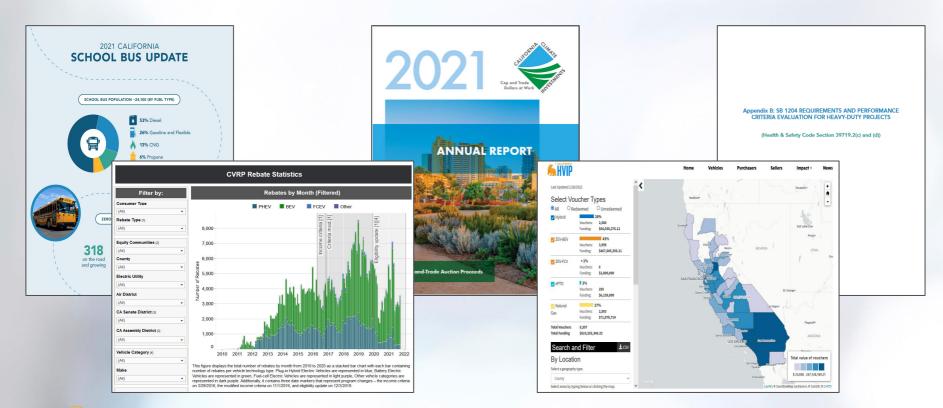
AB 1550 established new investment minimums for California Climate Investments

Projects must provide direct, meaningful, and assured benefits that addresses an important community need

Low Carbon Transportation targets greatly exceed investment minimum

2023-24 Funding Plan will continue to incorporate guiding provisions

Reporting Progress





Key Changes to the FY 2023-24 Funding Plan Process



Shortened Timeline



Streamlined Public Process



Strategic Document Content



Streamlined and Expanded Webpage Support





Shortened Timeline

February November

June November

- New timeframe will be June November
- June start date allows staff to work with more concrete budget numbers
- Work groups will be combined to cover topics and themes





Streamlined Public Process

- Project-specific implementation work groups year-round no major change
- Funding Plan meetings would be over a shorter time period and consolidated for more effective use of the public's and staff's time
- Evening Community Meetings would be offered on a set schedule and cover specific pre-determined topics, commensurate with work groups held that month





Strategic Document Content

- Executive Summary, introduction, and background will be shortened
- Project chapters will include:
 - Proposed allocations
 - Necessary projections
 - Proposed changes
 - Impacts of proposed changes
 - Necessary reporting requirements from the audit





Streamlined and Expanded Webpage Support

- Redesign webpage resources and streamline access to all program information
 - Overview Landing and Summary Pages: Targeted toward Community Members, Legislators
 - <u>Project Pages</u>: Targeted toward Individuals, Businesses, Legislators, Researchers
- Consolidate current webpages to remove duplication
- Leverage CARB's Events Calendar



Funding Plan Development Schedule

Milestone	Date
Daytime Work Group Meetings	July – Oct 2023
Evening Community Meetings	June – Oct 2023
Second Workshop	Aug 31, 2023
Release proposed Funding Plan	October 2023
Board Consideration of Proposed Funding Plan	November 2023
Start implementing projects	December 2023



Comments and Questions



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.



10-Minute Break Return at 10:40 a.m.



Light-Duty and Clean Transportation Equity Projects



Overview

CARB light-duty vehicle investments

- Vehicle purchase incentives
- Clean mobility investments



Goals

- Achieve GHG reductions and improve air quality
- Support long-term transformation of the State's fleet and accelerate ZEV deployment
- Bring ZEVs and Clean Mobility Options to priority populations
- Support complementary community protection efforts AB 617 and SB 375



Vehicle Purchase Incentive Programs

Clean Cars 4 All (CC4A) –
District and Statewide
Replace old vehicles with clean vehicles

Financing Assistance

Loans and grants to purchase clean vehicles



Incentives for battery or fuel cell replacements

Clean Vehicle Rebate Project (CVRP)

Rebates for the purchase of new electric vehicles





California Integrated Travel Project (Cal-ITP)

Payment issuance strategy

California E-Bike Incentive Project

Incentives for electric bicycles





Access Clean California

Increase awareness of clean transportation equity incentives



Metrics of Success

Supporting Healthy Communities

\$440+

PRIORITY POPULATIONS

Over \$440 million, or nearly 34 percent, of all vehicle purchase incentive funds have supported clean vehicle purchases benefiting priority populations.



PUBLIC FLEET SUPPORT

Over \$3.2 million in CVRP funds have supported over 730 light-duty electric vehicles for public fleets operating in Disadvantaged Communities, as identified in CalEnviroScreen 4.0.



Supporting Clean Air Goals

6.2+

GHG REDUCTIONS

CARB's light-duty vehicle purchase incentive programs have resulted in a reduction of over 6.2 million metric tons of carbon dioxide equivalent.



Growing the Green Economy

\$1.3+

VEHICLE PURCHASE

CVRP, Clean Cars 4 All, and Financing Assistance programs have funded \$1.3 billion toward the purchase of over 525.000 clean vehicles since 2010.



149+

FUFL USE AVOIDED

An estimated 149+ million gallons of fuel use avoided as a result of the clean vehicles funded through CARB's vehicle purchase incentive programs.



1.5+

ELECTRIC VEHICLE SALES

There have been over 1.5 million light-duty electric vehicles sold in California with 35 percent of these purchases supported by CARB's vehicle purchase incentive programs.



Clean Cars 4 All

Program status

- Funded more than 14,000 vehicle replacement projects
- South Coast, Bay Area, and Sacramento air district programs are open
- San Joaquin's program is temporarily closed
- San Diego's program is coming soon.
- \$435M allocated to-date including \$245M in FY 2022-23







Clean Cars 4 All

- Statewide Administrator to be announced Summer 2023
 - Joint administration with Financing Assistance
 - Needs-based approach
- Continued district program continuation and expansion
- Increased incentive amounts for DACs
- Improved surveys & SB 1382
 - Collecting demographic data
 - Identifying barriers to Clean Cars 4 All

Financing Assistance Project

Background and Status Updates

Incentive Type	Incentive issued	
Vehicle Grants	5,190	
Charging Grants	3,248	
Number of Secured Loans	280	
Total Fund Spent	\$35.5M	

Funding Status: Reopening Current Programs as a Stopgap

- Clean Vehicle Assistance Program reopened on May 17th with remaining reservation funds (~\$4.5M)
- Driving Clean Assistance Program reopened on May 22nd with an additional \$1M

New Joint Program

Statewide Financing Assistance and Statewide CC4A joint program will be launched later in 2023 and will implement the needs-based model











CVRP

Rebates Issued Through January 2023

Rebate Type	Rebates Issued	Funding Total
Standard Rebate	462,150	\$993,004,236
Increased Rebate	43,455	\$186,999,908
Rebates for Public Fleets in DACs	752	\$3,189,500
TOTAL	506,357	\$1,183,193,644

Funding Status

- FY 2021-22 Multi-Year Allocation: \$525M: \$515M for CVRP, \$10M for E-bikes
- Changes to be implemented in 2023 for low- and moderate-income applicants
 - Increased incentive amounts (February 2023)
 - Additional \$2,000 prepaid card for charging & expansion of prequalification statewide (Summer 2023)
- Updated end-of-funding estimate: As early as November 2023



California E-Bike Incentives Project

- \$13 million allocated over past two years
- Will provide \$1,000-\$2,000 to help low-income residents to purchase electric bikes
- Soft launch at end of June
- Statewide launch later this year



Access Clean California



Program Status

- \$15 million allocated to-date
- Supporting a growing network of 23 outreach partners (OPs) with focus on CBOs
- Centralized application and case management system helps impacted community members stack incentives across multiple programs

- Expand OP network to include more CBOs in underserved communities
- Scale-up outreach and streamlined access across incentives in underserved communities
- Support needs-based implementation of new statewide Financing Assistance and CC4A joint program



California Integrated Travel Project

Program Overview

- Effort by California State
 Transportation Agency, Caltrans,
 and other partners
- Strives to make travel simpler and cost-effective by providing easy and accessible travel planning and payment methods across California

- \$1M allocated through FY 2022-23 to support work in progress
- New contract signed and Cal-ITP will start demonstration work with current projects



Zero Emission Assurance Project (ZAP)

Program Background

Established by Assembly Bill 193 (Cervantes, Chapter 363, Statutes of 2018) to help lower-income Californians reduce the risk of buying a used zero-emission vehicle by providing a rebate or vehicle service contract for the replacement battery or fuel cell component

- ZAP 18-month data collection pilot began in April 2022
- \$10M allocated in FY 2022-23



Clean Mobility Pilot Projects Highlights



Our Community CarShare



Car Sharing and **Mobility Hubs**



Ecosystem of Shared Mobility



Lift Line CARB Paratransit



BlueLA Car Share

Regional Clean Mobility Options Projects Funding and Status

Project Name	Fiscal Year	Total Awarded (Approx.)	Status
BlueLA Car Share	2014-15	\$4.6M	Active
Our Community CarShare	2014-15	\$5.8M	Active
Lift Line Paratransit	2016-17	\$516,000	Active
Car Sharing and Mobility Hubs	2016-17	\$3M	Active
Valley Air ZEV Mobility	2016-17	\$749,000	Inactive
Ecosystem of Shared Mobility	2016-17	\$3M	Inactive
Agricultural Worker Vanpools	2016-17	\$6M	Inactive



Clean Mobility Options Voucher Pilot Program (CMO)

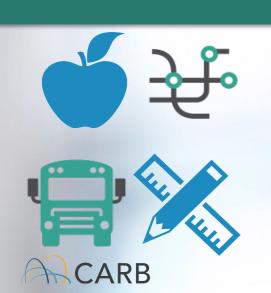
- \$75 million allocated to date
- First round of funding includes:
 - 24 clean transportation needs assessments projects completed
 - 20 mobility projects have or will launch by end of 2023
- Second round of funding launched in 2023
 - 12 clean transportation needs assessments awarded
 - Mobility project applications currently being evaluated







Clean Mobility in Schools (CMIS)



- \$34.4M implemented at four school districts
 - El Monte Union High, San Diego Unified,
 Stockton Unified, and Twin Rivers Unified
- Piloting zero-emission mobility, planning, and education to school communities
- New \$32M Joint Solicitation with STEP and Planning and Capacity Building
 - \$15M allocated to CMIS

Sustainable Transportation Equity Project (STEP)

- \$44.5M awarded to date
 - 8 Planning and Capacity Building Grants
 - 5 Implementation Grants
 - Implementation is ongoing
- New \$32M Joint Solicitation with CMIS and Planning and Capacity Building
 - \$14.85M allocated to STEP
- For more information, visit:
 https://ww2.arb.ca.gov/lcti-step-pcb-cmis



City of Commerce celebrates the launch of new zero-emission shuttles funded through STEP.



CARB Clean Mobility Projects

CARB Planning Investments include

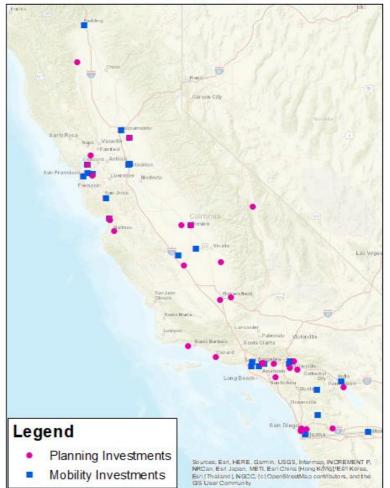
- Clean Mobility Options Voucher Pilot Program -Community Transportation Needs Assessment Vouchers
- STEP Planning and Capacity Building Grants

CARB Mobility Investments include

- Regional Clean Mobility Options Projects
- Clean Mobility Options Voucher Pilot Program -Mobility Project Vouchers
- Clean Mobility in Schools grants
- STEP Implementation Grants

CARB

CARB Clean Mobility Project Locations



Community Transportation Needs Assessments and Planning Grants

\$3.9M invested to date through CMO and STEP

- \$1.15M for CMO Window #1 vouchers
- \$1M for future CMO vouchers
- \$1.75M for STEP Planning and Capacity Building Grant

Contract with UC Berkeley Othering & Belonging Institute

- Evaluation of planning efforts and funding approach
- Recommendations to improve processes and outcomes

New \$32M Joint Solicitation with STEP and CMIS

\$3M allocated to Planning and Capacity Building



Capacity Building through Technical Assistance

- Capacity building, administrative, implementation support to Planning, CMIS and STEP projects
- Builds on lessons from ongoing efforts
 - STEP Planning grants and technical assistance contracts
 - CMO technical assistance and Clean Mobility Equity Alliance
 - Access Clean California communitybased outreach efforts

- Exploring a regional approach
 - Foster place-based partnerships
 - Provide community-specific technical assistance needs
- Upcoming solicitation for \$5 million
 - \$3 million for 6-15 community-led planning/capacity building projects
 - \$2 million to administer Planning efforts and provide regional technical assistance



Workforce Training and Development

- \$3.78M allocated to date
 - \$1M contributed to CEC for IDEAL ZEV Workforce Pilot Project
 - \$1.5M for partnering with adult and vocational schools
 - \$1.28M for a new pre-apprenticeship program with CEC
- Address SB 350 Barriers Report community needs
- Expand workforce training and development investments and opportunities
- Support the transition to a zero-emission transportation workforce
- Advance workforce equity

Addressing Community Concerns

Who we've heard from

- Lower income individuals
- Priority communities
- African-American communities
- Tribal representatives

What we are addressing

- Higher incentive amounts
- Improved outreach
- Improvements for public participation



Comments and Questions



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.



Lunch Break 45-minutes Return at 1:30 p.m.



Long-Term Heavy-Duty Investment Strategy



Long-Term Heavy-Duty Investment Strategy

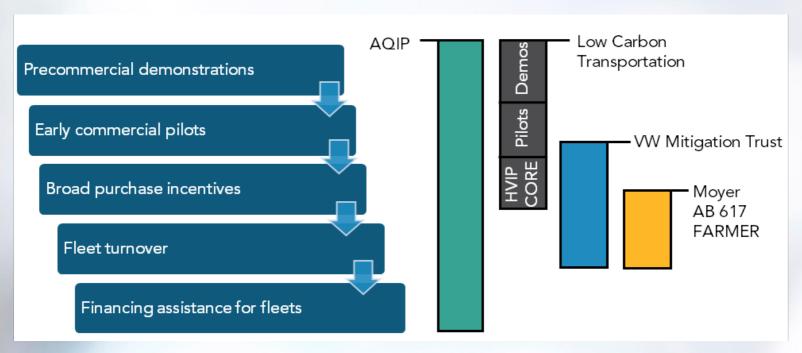
Annual three-year investment strategy for Clean Transportation Incentives

Roadmap for transforming the heavyduty transportation sector

Outlines priorities for investment

Includes annual report on the State's school bus fleet

Heavy-Duty Technology Progression Through CARB Incentive Programs





Metrics of Success

Creating Healthy Communities

Supporting Technology Evolution Growing the Green Economy

56 PERCENT

DAC VOUCHERS

Fifty-six percent of vouchers (HVIP and CORE combined) have funded vehicles and equipment deployed in DACs, as identified in CalEnvironScreen 3.0.



JOBS CREATED

The incentive dollars spent through HVIP have created nearly 3,500 jobs and spurred ~12,000 jobs from private investment, totaling nearly 15,500 jobs.

320 MODELS

MANUFACTURERS

There are 67 HVIP- and/or CORE -eligible manufacturers offering 321 vehicle or equipment models.





41
PERCENT

SMALL AND PUBLIC FLEET SUPPORT

Forty-one percent of 2022 HVIP vouchers were given to public or small fleets (private entities with <\$10 million annual revenue or fewer than 50 employees).

345

MILES TRAVELED

There were 345,000,000 cleaner-thandiesel miles traveled in California by HVIP-funded vehicles between 2010 and 2022



\$3.4 BILLION

TOTAL INVESTMENT

Additional public and private spending toward these purchases totaled \$3.4 billion--over \$3 for every \$1 of voucher investment. Leveraged private spending represents purchases redirected from traditional technologies to clean technologies.



Beachheads: Point-to-point corridor long haul Heavy regional freight **Zero-Emission** High-Power Corridor Charging Medium freight Refuse Truck On-Road Delivery Drayage MD Truck Transit Long Haul Regional HD Truck Cargo Van Truck Vehicle Market Growth Over Time School Bus Transit g g g Hydrogen Corridor Bus Electrified Charging H2 Range-Ext Transit Bus Early Market Facility Wave 1 Wave 2 Wave 3 Wave 4 Wave 5 Electrified Heavy Forklifts Facility Light Construction Mining Terminal Harbor Craft Light lifts Tractor Light Ag Medium terminal Heavy equipment Construction Railcar Mover Container Light site-specific Switcher/ Handling Locomotive Equipment (CHE) Container handling equipment and marine Heavy site-specific



Heavy-Duty Investment Strategy for Vehicles and Off-Road Equipment

The strategy includes:

Beachhead strategy discussion

Technology status updates

Market readiness indicators

Metrics of success

Industry examples

3-year recommendations for investments

Heavy-Duty Investment Priorities

	FY 2024-25	FY 2025-26	FY 2026-27
Demonstrations	\$55-\$95 Million	\$65-\$100 Million	TBD
	Focus: ZE Construction and Mining Equipment, ZE Heavier Cargo Handling Equipment, ZE Line- Haul Rail, ZE Marine, ZE Aviation	Focus: ZE Construction and Mining Equipment, ZE Heavier Cargo Handling Equipment, ZE Line- Haul Rail	
Pilots	\$200-\$325 Million	\$225-\$350 Million	TBD
	Focus: ZE Ag-Construction-Heavier Cargo Handling Equipment, ZE/Hybrid Marine, Strategic Range Extenders, ZE Facilities/ Communities/Corridors	Focus: ZE Longer Range Trucking, ZE Ag- Construction-Heavier Cargo Handling Equipment, ZE/Hybrid Marine, Strategic Range Extenders, ZE Facilities/ Communities/Corridors, ZE Aviation	
Commercial	1,210-\$1,815 Million	\$1,460-\$2,170 Million	TBD
	Focus: ZE Drayage, ZE Long Haul Trucks, ZE Transit, ZE Heavier Cargo Handling Equipment, ZE Switcher Rail, ZE/Hybrid Marine, ePTOs	Focus: ZE Drayage, ZE Long Haul Trucks, ZE Transit, ZE Heavier Cargo Handling Equipment, ZE Switcher Rail, ZE/Hybrid Marine, ePTOs	
Total Funding	\$1,465-\$2,235 Million*	\$1,750-\$2,620 Million*	TBD



Comments and Questions



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.



Heavy-Duty Vehicle and Off-Road Equipment Investments



Advanced Technology Demonstration and Pilots: Overview

- Demonstration projects
- Pilot projects
- Wide array of demonstration and pilot projects have been funded
- Heavy focus on zero-emission and freight





Advanced Technology Demonstration and Pilot Projects

- Demonstration and Pilot Project Third-Party Administrator Selection Update
 - Selected in grant agreement phase
- Status of FY 2022-23 Funding
 - Final Implementation workgroup meeting May 31st
 - Combined with FY 2021-23 funding and teaming with CEC for a \$225 million opportunity
 - Solicitation release in June close in September



Advanced Technology Demonstration and Pilot Projects

Eligible Project Categories

- Municipal Green Zones
- Zero-emission commercial harbor craft and infrastructure projects Modular zero-emission cargo handling equipment
- Ocean going vessel emission reduction projects
- Zero-emission locomotives
- Zero-emission port vehicles and equipment
- Zero-emission aviation and ground support equipment
- Zero-emission off-road and agricultural equipment
- Commercial harbor craft regulatory compliance projects



HVIP Updates and Changes

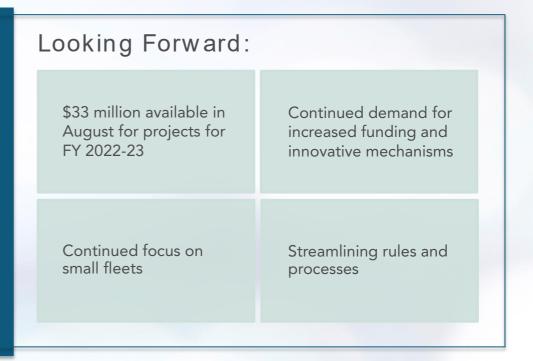


- \$300M in standard HVIP, plus set-asides for transit, schools, drayage and small fleets
- Recent changes to focus on equity and reflect ACF regulation
 - All fleets with 10 or fewer 15% voucher increase plus stacking
 - Fleet size limit of 50 or fewer effective Jan. 1, 2024.
 Until then:
 - Voucher amounts adjusted based on fleet size and public vs. private
 - Bulk purchase of 30 for private fleets over 500
 - Maximum annual purchase 30, drayage trucks 50
- Set aside for Innovative Small eFleets (iSEF) Pilot
- Voucher amounts re-evaluated annually

Innovative Small e-Fleet (ISEF)

Increased incentives for small fleets to access zero-emission technologies

Encourages fleets to explore all-inclusive leases, peer-to-peer truck sharing, truck-as-a-service, straight purchases and other mechanisms





Senate Bill 372

Medium - and Heavy-Duty Fleet Zero-Emission Vehicle Purchasing Support

Non-Financial Support Highlights

Next-Stop to Zero education series

Cal Fleet Advisor technical assistance program

Web tools and materials, technical advisory committees, rule trainings, and more Financial Support Highlights

Increased funding to underserved communities

Innovative funding opportunities for small fleets

Researching risk reduction options

Next Steps

Highlights

Education to lenders and insurance providers

Collecting and sharing data

Increased outreach and technical assistance



CORE Overview

First come – First served

Offset higher zero emission cost

CARB determines funding amounts

Stacking allowed and no scrappage required

Enhancements for infrastructure, small business, and DAC



Truck Loan Assistance Program Updates

- Fleets are enrolling loans until remaining program funds are exhausted
- We expect current enrollments to use up remaining allocation
- About \$251 million has been expended providing over \$3 billion in financing for 41,000 loans



Zero-Emission Truck Loan Pilot

- A project designed to support financing of heavy-duty ZEVs and charging or fueling infrastructure
 - CARB partner with CPCFA, CEC, and lenders
 - \$5 million FY 2022-23 funding from CARB and matching \$5 million from CEC for charging or fueling infrastructure
- No one program will be the answer for all fleets
 - This pilot is one of several CARB is exploring to provide support to fleets as they transition to ZE
- Program under development with prospective participating lenders, CPCFA, and CEC



Comments and Questions



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.



Summary and Next Steps



Funding Plan Development Schedule

Milestone	Date
Daytime Themed Work Group Meetings	July – Oct 2023
Evening Community Meetings	June – Oct 2023
Final Workshop	August 31, 2023
Release proposed Funding Plan	October 2023
Board Consideration of Proposed Funding Plan	November 2023
Start implementing projects	December 2023



Contact Us

Dianne Sanchez Lead Outreach Staff <u>Dianne.Sanchez@arb.ca.gov</u> Stephanie Parent Lead Strategy Staff <u>Stephanie.Parent@arb.ca.gov</u>

Jason Crow— Manager Jason.Crow@arb.ca.gov

Team Email <u>cleantransportationincentives@arb.ca.gov</u>



