



Clean Transportation Incentives

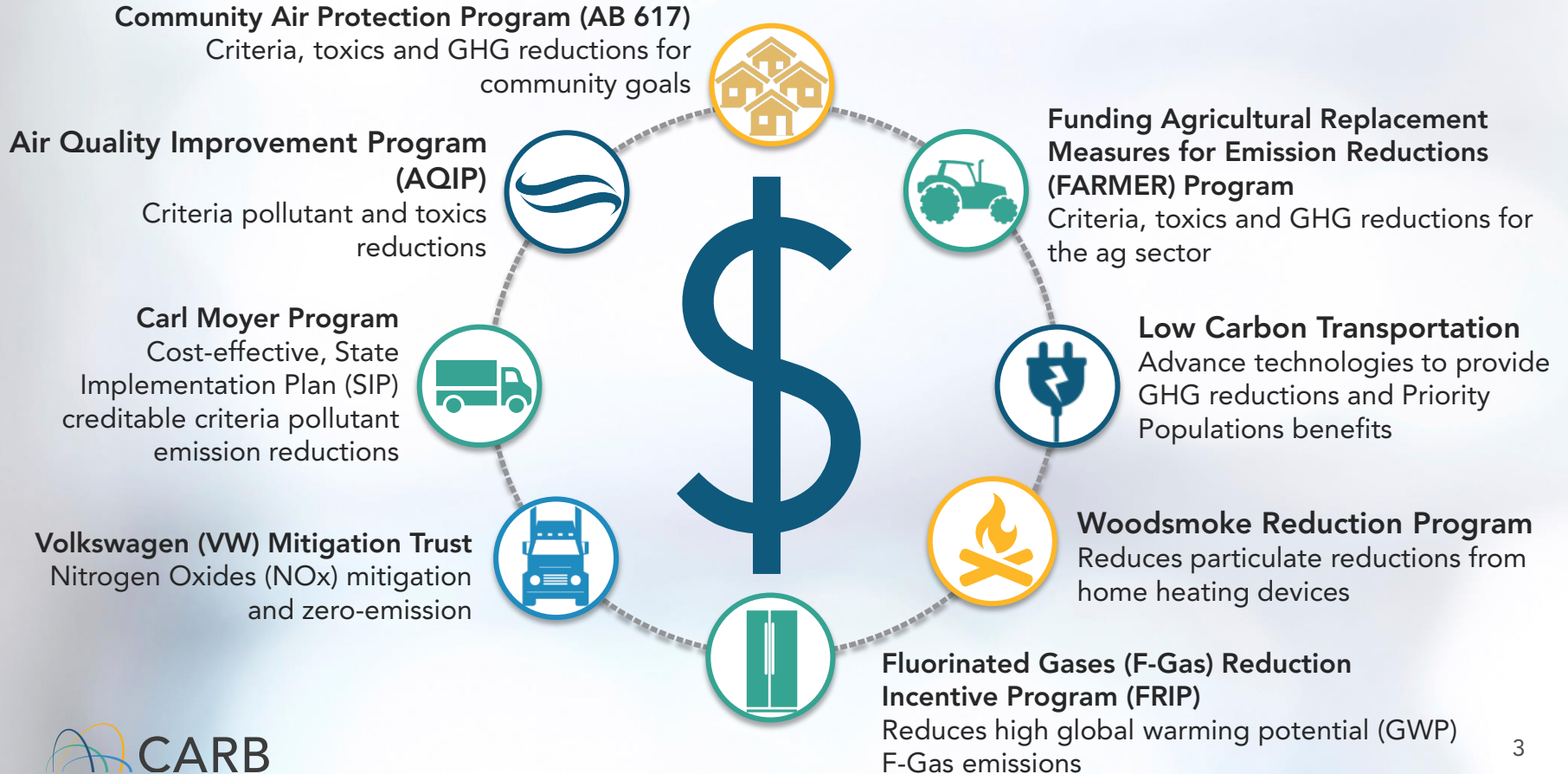
*For Low Carbon Transportation Investments and
the Air Quality Improvement Program*

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



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

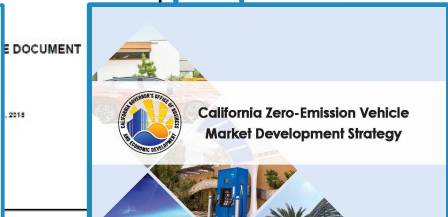
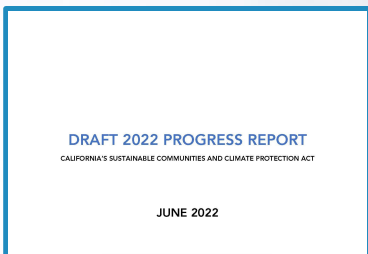
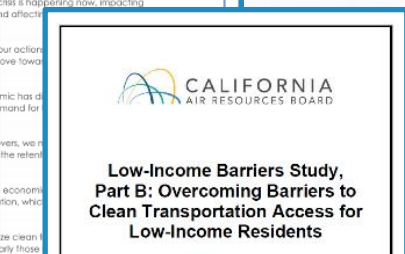
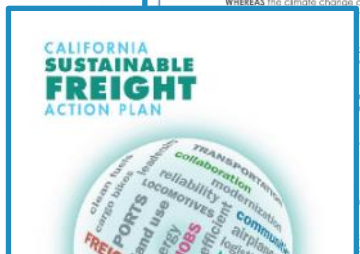
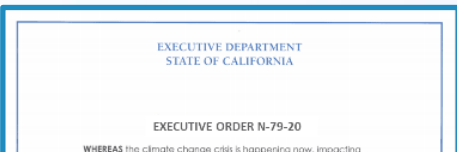
Original Zero Emission Vehicle (ZEV) Package

Totaled \$10B
across 5 budget
years

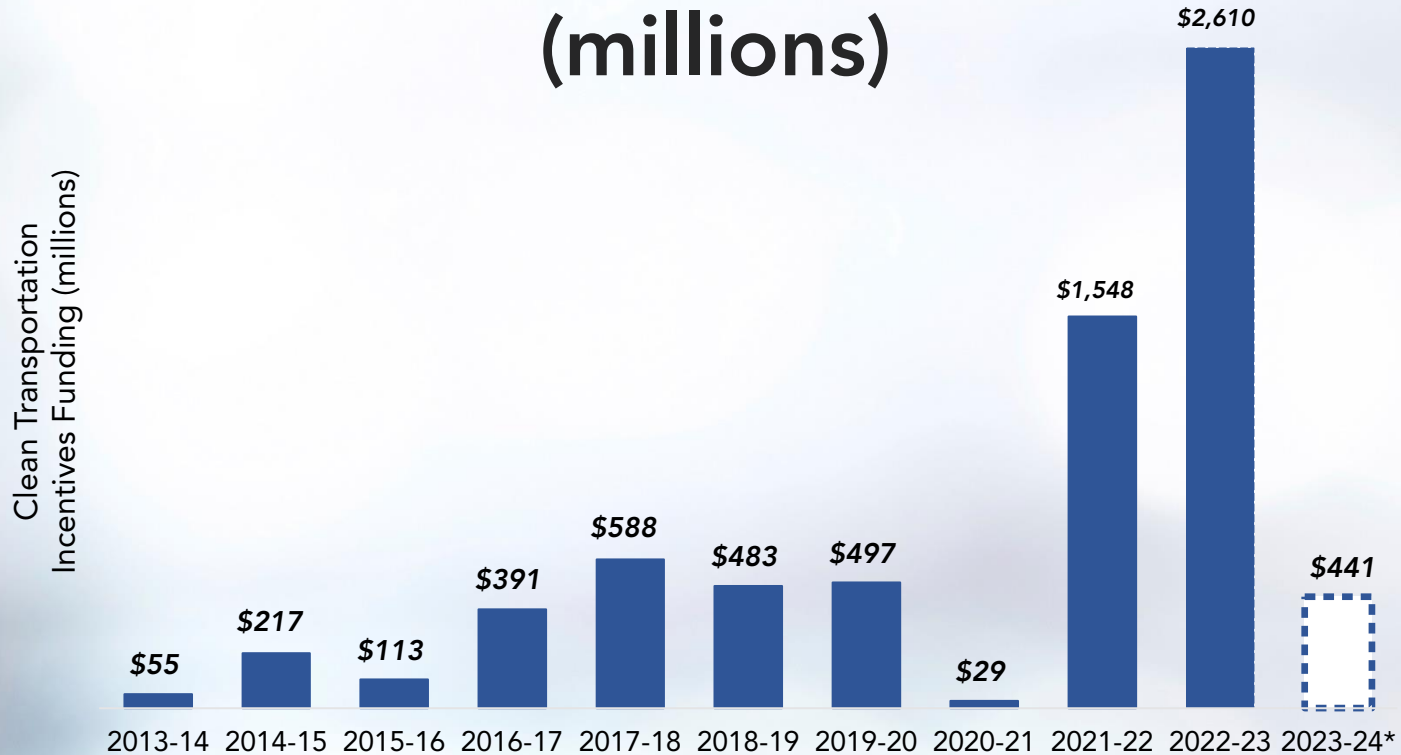
Included
appropriations to
various other
state agencies

- Governor's proposed budget maintains \$8.9 billion of \$10 billion 5-year, multi-agency 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 (millions)



*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
Subtotal	\$382	\$30	\$28.64
Total Funding	\$440.64		

AB 1550 Priority Population Investment Minimums

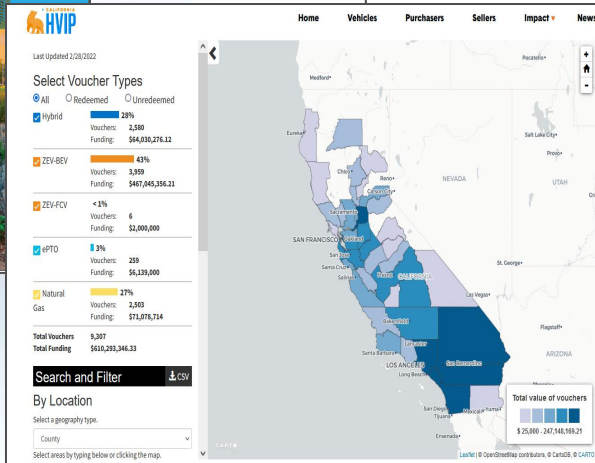
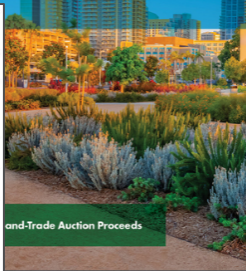
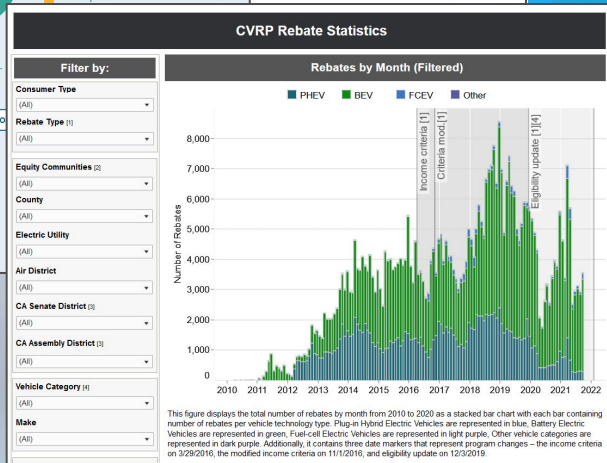
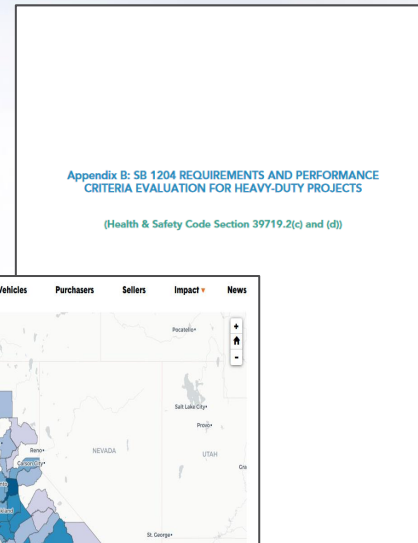
AB 1550 established new investment minimums for California Climate Investments

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



- 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
 - Project Pages: 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

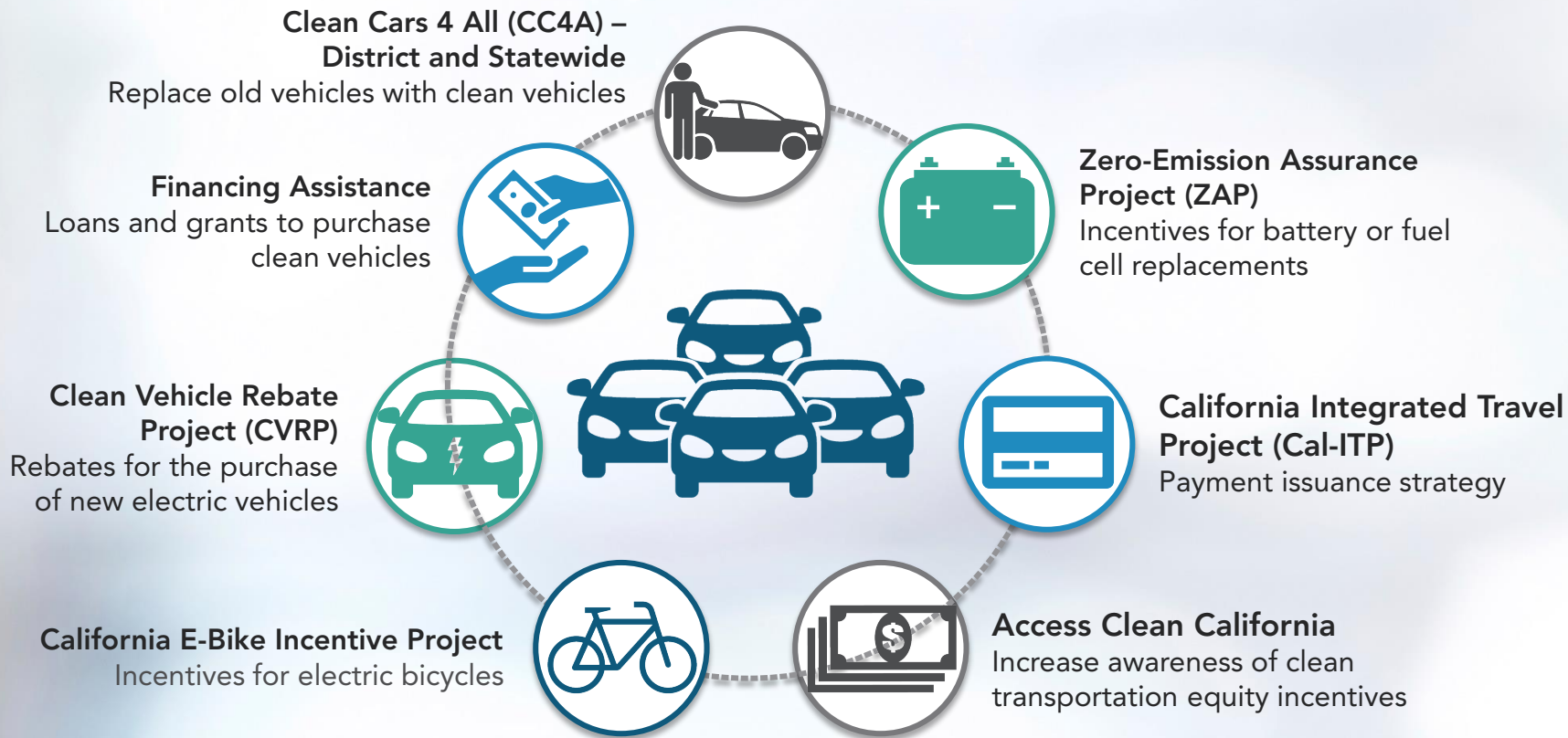
- Vehicle purchase incentives
- Clean mobility investments



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



Metrics of Success

Supporting Healthy Communities

\$440+
MILLION

PRIORITY POPULATIONS

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



\$3.2+
MILLION

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+
MILLION

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.



149+
MILLION

FUEL 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.



Growing the Green Economy

\$1.3+
BILLION

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.



1.5+
MILLION

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
FOR ALL**



**CLEAN CARS
4 ALL**

Clean Cars 4 All

Program Updates

- 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



clean vehicle
assistance program

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

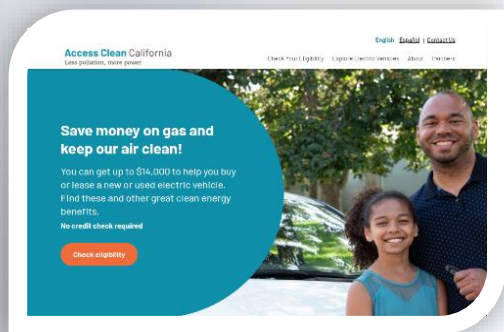
Funding Status

- 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

Program Updates

- 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

Program Updates

- \$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

Program Updates

- 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
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

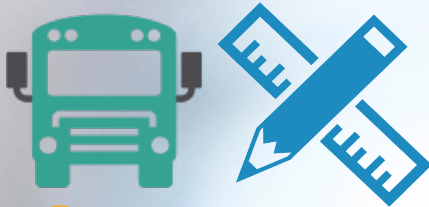
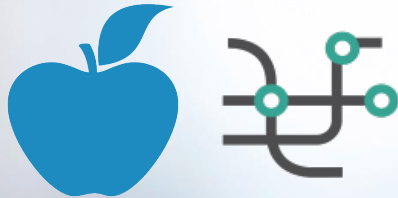
Total Funds Across Projects: ~\$24M

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

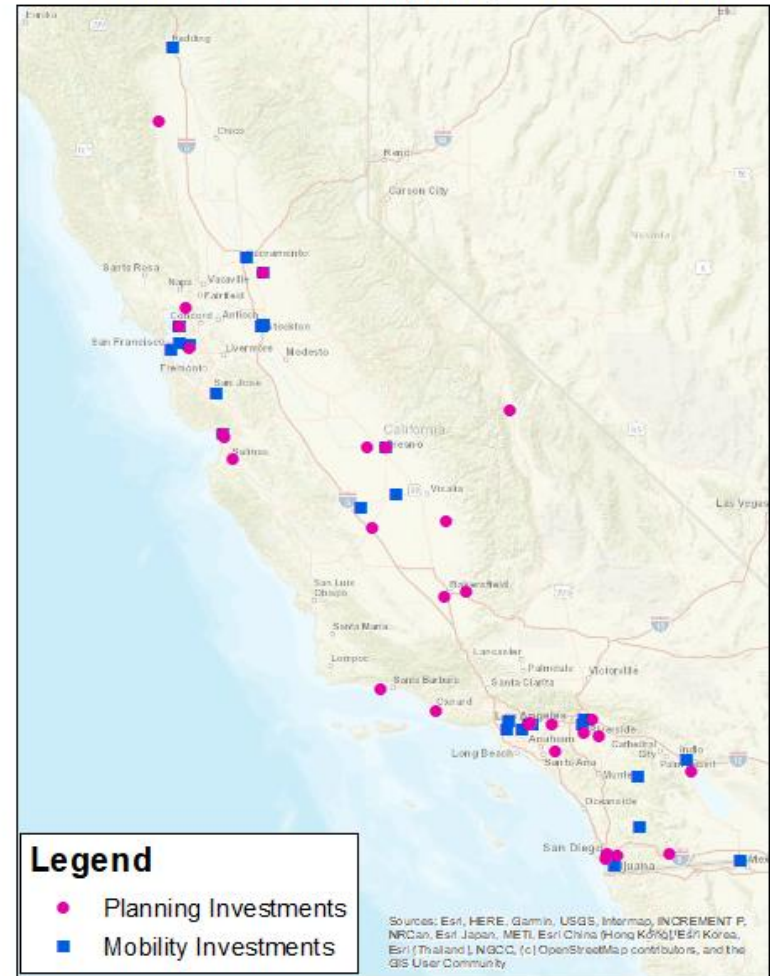
CARB Planning Investments include

- 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 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 community-based 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/hands-on training through California Community Colleges
- 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)



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

Long-Term Heavy-Duty Investment Strategy

Long-Term Heavy-Duty Investment Strategy

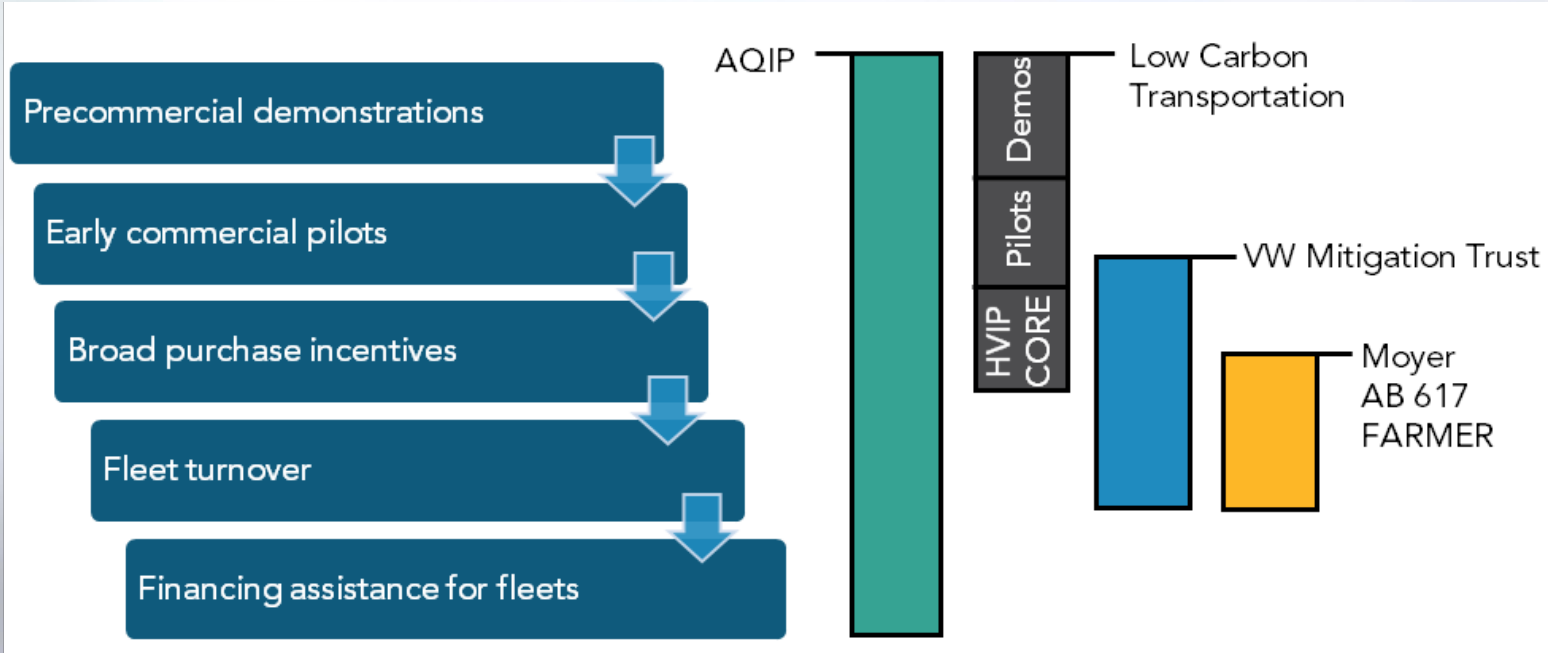
Annual three-year investment strategy for Clean Transportation Incentives

Roadmap for transforming the heavy-duty 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

56
PERCENT

DAC VOUCHERS

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



Supporting Technology Evolution

15+
THOUSAND

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.



Growing the Green Economy

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
MILLION

MILES TRAVELED

There were 345,000,000 cleaner-than-diesel 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: Zero-Emission

On-Road

Early Market

Transit



Transit Bus

Wave 1



Forklifts

Light lifts

Delivery



Cargo Van

Wave 2



Terminal Tractor

Medium terminal equipment



School Bus



H2 Range-Ext Transit Bus

Wave 3



Light Ag

Light site-specific



MD Truck



Drayage Truck



Light Construction



Railcar Mover

Light site-specific



Medium freight



Refuse Truck



Regional HD Truck



Electrified Facility

Wave 4



Electrified Facility



Harbor Craft



Container Handling Equipment (CHE)

Container handling equipment and marine

Heavy regional freight



High-Power Corridor Charging



Long Haul Truck



Hydrogen Corridor Charging

Wave 5



Mining



Switcher/ Locomotive



Heavy Construction



Heavy site-specific

Point-to-point corridor long haul

Vehicle Market Growth Over Time

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

Comments and Questions



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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

Looking Forward:

\$33 million available in August for projects for FY 2022-23

Continued demand for increased funding and innovative mechanisms

Continued focus on small fleets

Streamlining rules and processes

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



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Summary and Next Steps

Funding Plan Development Schedule

Milestone	Date
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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

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