



# Clean Transportation Incentives

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

Public Workshop on the Fiscal Year 2020-21 Funding Plan  
September 29, 2020

# Today's Agenda

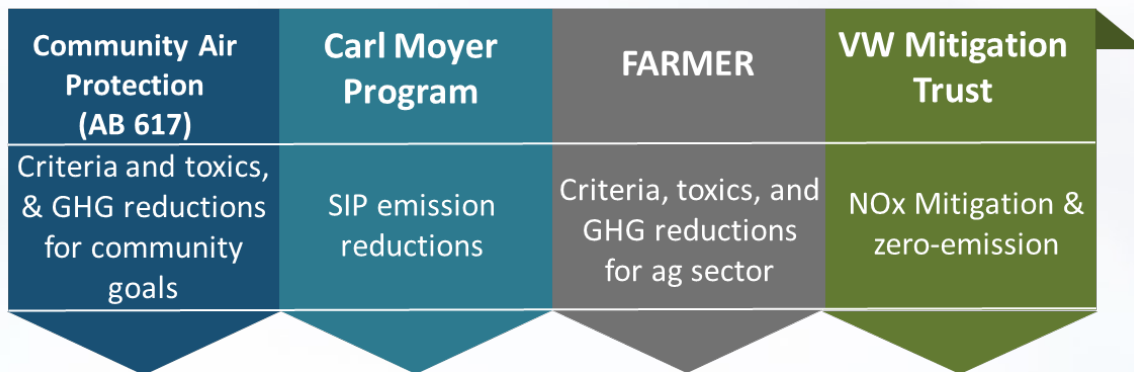
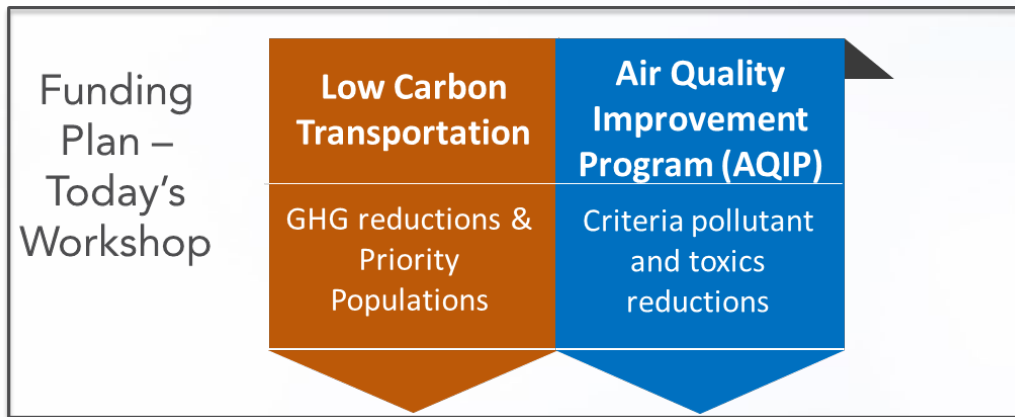
Approximate Start Time	Session
9:00 am	Introduction and Overview of Funding Allocations
9:45 am	Draft Changes to project criteria for CVRP, Financing Assistance, and Clean Cars 4 All
10:30 am	Break
10:45 am	Long-Term Heavy-Duty Investment Strategy
11:30 am	HVIP
12:30pm	Open Discussion

# Introduction and Overview of Funding Allocations

# Key Priorities of Clean Transportation Incentives

- Support the State's climate change, air quality, ZEV deployment, and petroleum reduction goals
- Accelerate the transition to advanced technology low carbon freight and passenger transportation
- Increase access to and awareness of clean transportation for priority populations
- Coordinate investments with Sustainable Communities Strategies
- Support economic growth and job training and apprenticeship opportunities

# Part of CARB's Larger Incentive Funding Portfolio



# Clean Transportation Incentives Projects

CVRP	Clean Vehicle Rebate Project (CVRP)*
Clean Transportation Equity Investments	<p>Clean Cars 4 All*</p> <p>Financing Assistance for Lower-Income* Consumers</p> <p>Zero-Emission Assurance Project Pilot</p> <p>Clean Mobility Options</p> <p>Clean Mobility in Schools</p> <p>Rural School Bus Pilot</p> <p>Sustainable Transportation Equity Project</p> <p>Outreach, Community Needs Assessments, Technical Assistance, and One-Stop-Shop</p>
Heavy-Duty Vehicle and Off-Road Equipment Investments	<p>Heavy-Duty Demonstration and Pilot Projects</p> <p>Clean Truck and Bus Vouchers (HVIP)*</p> <p>Clean Off-Road Equipment Vouchers (CORE)</p> <p>Truck Loan Assistance</p>

\*Projects being discussed today

# AQIP

- AQIP funding is primarily generated from vehicle registrations as part of the smog abatement fee
- \$28.64 million for projects focused on criteria pollutant and toxic emission reductions

# Low Carbon Transportation



- Annual budget appropriation as part of the Cap-and-Trade Expenditure Plan
- The Legislature has deferred action on the FY 2020-21 Cap-and-Trade Expenditure Plan



# Overview of the FY 2020-21 Funding Plan

- Proposed AQIP Allocation
- Program refinements for projects receiving funding this year and projects that have remaining funds from prior fiscal years
- Updates to SB 1275 Light-Duty ZEV Market Findings and SB 1403 Long-Term Heavy-Duty Investment Strategy

# Draft AQIP Allocations

Project Category	Dollars (millions)
Clean Truck and Bus Vouchers (HVIP)	\$25 M
Reserve for Revenue Uncertainty	\$3.64 M
<b>Total</b>	<b>\$28.64</b>

# Next Steps

- Post proposed Funding Plan for 30 day public comment by **November 6**
- Board considers Funding Plan at public meeting on **December 10-11**

# Questions?

# Draft Changes to Project Criteria

Financing Assistance | CVRP | Clean Cars for All |

# Long-Term Plan for Light-Duty ZEV Market Update

- SB 1275 long-term plan requirement
- Supplemental Report of the 2018-19 Budget Act
- Current health and economic crisis has changed the ZEV market landscape
- Incentives will continue to play a critical role in meeting ZEV deployment goals
- Update planned for upcoming Funding Plan

# Aligning Vehicle Purchase Incentives

CVRP | Clean Cars 4 All | Financing Assistance

- Low-Income Alignment –  $\leq 400$  percent FPL, based on household size.
- Household Definition – “Household members include you and your spouse and anyone you claim as a dependent on your tax form. If you are claimed as a dependent on someone else’s tax form, your household size includes the person who claimed you as a dependent, that person’s spouse, and all claimed dependents including yourself.”
- Income Definition and Calculation – Use annual gross income.
- Participation in One-Stop-Shop

# Potential Changes to CVRP

- Changing from using UDDS to U.S. EPA all-electric ranges
- Increasing the max. GVWR for vehicle eligibility from 8,500 to 10,000 pounds
- Align household and Income definitions with other equity projects
- Adjusting the outreach requirement for CVRP administrator



# Potential Changes to Clean Cars 4 All

- Updates to project guidelines (AB 630)
  - Increased funding amount for mobility option
    - E-bikes (SB 400)
- Align household and income definitions with other equity projects

# Questions?

# Break

SB 1204 & SB 1403

# Long-Term Heavy-Duty Investment Strategy

# Long-Term Heavy-Duty Investment Strategy

- Three-year roadmap built on beachhead concept
- Annual updates
  - Technology status snapshots
  - Three-year funding priorities
  - State school bus milestones
- Major updates and new additions
  - Metrics of success
  - Infrastructure assessment
  - Market readiness indicators

# Key Outcomes

- Market readiness indicators
- Metrics of success: new quantified indicators
- Updated technology status snapshots
- Infrastructure assessment: early lessons learned
- New industry examples / case studies
- State school bus incentives report

## LONG-TERM HEAVY-DUTY INVESTMENT STRATEGY UPDATE\*

	FY 2021-22	FY 2022-23	FY 2023-24
<b>Demos</b>	<b>\$50-\$90 Million</b> Focus: ZE Longer Range HD Goods Movement, ZE Ag-Construction Equipment, ZE/Hybrid Heavier Cargo Handling Equipment, ZE/Hybrid Marine	<b>\$50-\$90 Million</b> Focus: ZE Longer Range HD Goods Movement, ZE Ag-Construction Equipment, ZE Heavier Cargo Handling Equipment, ZE Rail, ZE/Hybrid Marine	<b>\$50-\$90 Million</b> Focus: ZE Longer Range HD Goods Movement, ZE Construction Equipment, ZE Heavier Cargo Handling Equipment, ZE/Hybrid Marine
<b>Pilots</b>	<b>\$200-\$325 Million</b> Focus: ZE Drayage and Regional Delivery, Advanced Powertrains, ZE/Hybrid Ag-Construction- Heavier Cargo Handling Equipment, ZE/Hybrid Marine, ZE Facilities	<b>\$200-\$325 Million</b> Focus: ZE Longer Range HD Goods Movement, Advanced Powertrains, ZE Ag-Construction-Heavier Cargo Handling Equipment, ZE/Hybrid Marine, ZE Facilities	<b>\$200-\$325 Million</b> Focus: ZE Longer Range Goods Movement, Advanced Powertrains, ZE Ag-Construction-Heavier Cargo Handling Equipment, ZE Rail, ZE/Hybrid Marine, ZE Facilities
<b>Commercial</b>	<b>\$396-\$475 Million</b> Focus: ZE Drayage and Regional Delivery, ZE Delivery, ZE Transit, ZE Heavier Cargo Handling Equipment, ePTOs	<b>\$490-\$680 Million</b> Focus: ZE Drayage and Regional Heavy-Duty Delivery, ZE Delivery, ZE Transit, ZE Heavier Cargo Handling Equipment, ZE/Hybrid Marine, ePTOs	<b>\$605-\$995 Million</b> Focus: ZE Drayage, ZE Regional Heavy-Duty Delivery, ZE Transit, ZE Heavier Cargo Handling Equipment, ZE/Hybrid Marine, ePTOs
<b>Total Funding</b>	<b>\$646-\$890 Million*</b>	<b>\$740-\$1095 Million*</b>	<b>\$855-\$1410 Million*</b>

*\*The vehicle and equipment types listed in the table above are a prioritized selection of the project types that CARB would invest in, given sufficient available funds. These focus areas are identified following the strategy laid out in this document and take into consideration a wide number of factors. This is not an exhaustive list of technologies or applications that Low Carbon Transportation would fund and indeed funding numbers are inclusive of a much broader set of vehicle and equipment investments CARB hopes to make.*

# Questions?



# Clean Truck and Bus Vouchers (HVIP)

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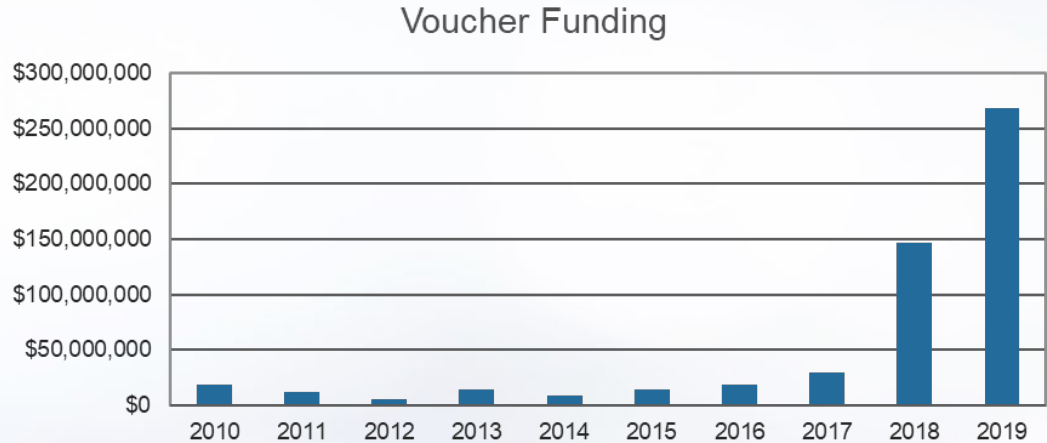
- Vouchers for California fleets on a first-come, first-served basis to lower the cost of clean trucks and buses
- No scrap required
- Encourage and accelerate the deployment of the cleanest advanced technologies
- Drive volume in beachhead applications, fortify nascent markets, build fleet acceptance
- Motivate additional investment and economic growth

# Guiding Principles

- Accelerate market transformation for the cleanest advanced technologies to support the State's climate, air quality, and petroleum reduction goals
- 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 caused by unpredictable funding availability
- Graduate established technologies

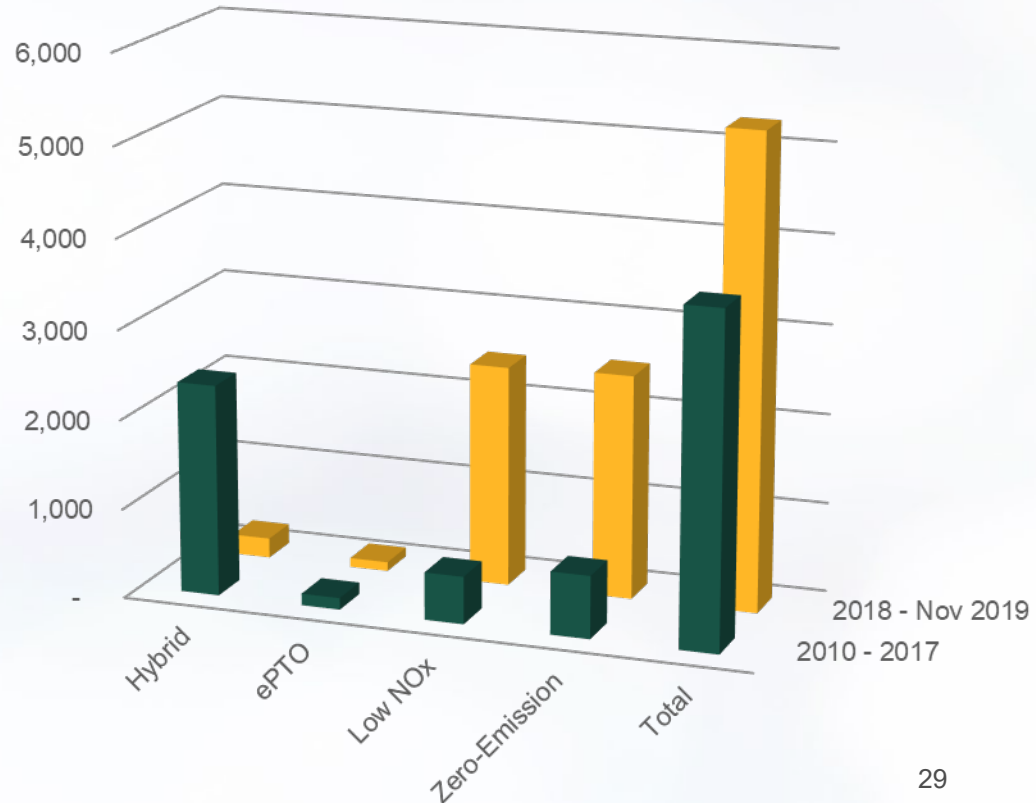
# Updates

- ~9,000 vouchers issued since inception, totaling \$510 million
  - Record-breaking final 24 months
  - \$220 million redeemed
- Waitlist closed November 2019
  - ~1,600 vouchers
  - Funding demand (\$140M) exceeded entire FY19-20 budget
  - Completed processing in April 2020
- Orders placed during closure are ineligible for future funding



# Updates

- Significant demand beginning in 2018
  - ~80% of total funding
- Variety of Vehicles
  - 30 manufacturers
  - Over 130 models
- Yard tractors transferred to CORE in March 2020
- Half of HVIP-funded deployments serving DACs
- Spurring investment 6:1



# Draft Funding Recommendation

- \$25M from AQIP
- Funds from cancelled vouchers
- Projected demand for FY 2020-21 is \$271-396 million
- Incorporating significant changes to HVIP could reduce demand to between \$167-209 million

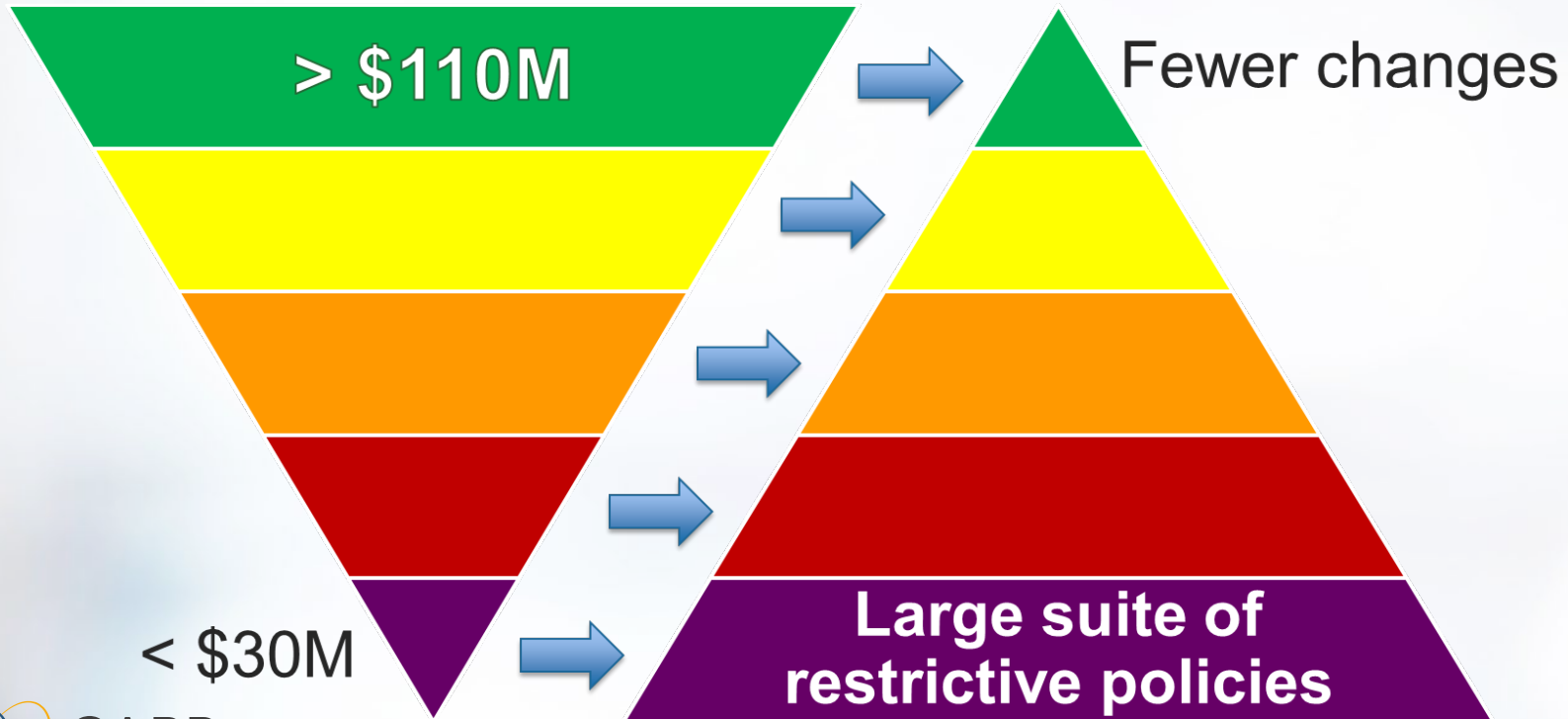
# Potential Changes

- Reduce voucher amounts
- Lower fleet voucher caps
- Introduce rolling manufacturer voucher caps
- Graduate all natural gas engines
- Raise minimum GVWR, modify transit bus distinctions

# Flexible Policies to Match Resources

**Budget**

**Policies**





# Questions?

# Summary and Next Steps

# Funding Plan Development Schedule

Milestone	Date
First Workshop	March 12, 2020
Category specific work group meetings*	March – September 2020
Second Workshop	September 29, 2020
Release Proposed Funding Plan	November 2020
Board Consideration of Proposed Funding Plan	December 2020
Start implementing 2020-21 projects	December 2020

Additional information available at:

<http://www.arb.ca.gov/aqip/>

<http://www.arb.ca.gov/msprog/aqip/meetings/meetings.htm>

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