Clean Transportation Incentives
For Low Carbon Transportation Investments and the Air Quality Improvement Program

Public Workshop on the Fiscal Year 2020-21 Funding Plan
March 12, 2020
## Today’s Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00am – 10:30am</td>
<td>Introduction and Overview of Project Category Funding Allocations</td>
</tr>
<tr>
<td>10:30am – 12:30pm</td>
<td>Vehicle Purchasing Incentives and Clean Mobility Investments: CVRP &amp; Clean Transportation Equity Projects</td>
</tr>
<tr>
<td>12:30pm – 1:30pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:30pm – 3:00pm</td>
<td>Heavy-Duty Vehicle and Off-Road Equipment Investments</td>
</tr>
<tr>
<td>3:00pm – 4:00pm</td>
<td>Open Discussion</td>
</tr>
</tbody>
</table>
Part of CARB’s Larger Incentive Funding Portfolio

<table>
<thead>
<tr>
<th>Funding Plan – Today’s Workshop</th>
<th>Low Carbon Transportation</th>
<th>Air Quality Improvement Program (AQIP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG reductions &amp; Priority Populations</td>
<td>$350M for FY 20-21</td>
<td>Criteria pollutant and toxics reductions</td>
</tr>
<tr>
<td>$28M for FY 20-21</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
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<tr>
<th>Community Air Protection (AB 617)</th>
<th>Carl Moyer Program</th>
<th>FARMER</th>
<th>VW Mitigation Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria and toxics, &amp; GHG reductions for community goals</td>
<td>SIP emission reductions</td>
<td>Criteria, toxics, and GHG reductions for ag sector</td>
<td>NOx Mitigation &amp; zero-emission</td>
</tr>
<tr>
<td>$200M for FY 20-21</td>
<td>$94M for FY 20-21</td>
<td>$50M for FY 20-21</td>
<td>$423M for 2017+</td>
</tr>
</tbody>
</table>
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
  – Support job training and apprenticeship opportunities
Policy Drivers and Guiding Documents
Governor’s 2020-21 Low Carbon Transportation Proposal

• $350 million to accelerate transition to low carbon passenger and freight transportation in three main categories:
  – Clean Vehicle Rebate Project (CVRP)
  – Clean Transportation Equity
  – Heavy-Duty Vehicles and Equipment

• Key investments to meet our long-term air quality and climate goals
Low Carbon Transportation Funding

2013-14: $30
2014-15: $197
2015-16: $90
2016-17: $363
2017-18: $560
2018-19: $455
2019-20: $485
2020-21: $350*

*Proposed Appropriation in Governor’s Budget
AB 1550 Priority Population Investment Requirements

• Established priority population investment requirements
  – Low Carbon Transportation targets exceed minimum

• Projects must provide direct, meaningful, and assured benefits that addresses a community or household need

• 2020-21 Funding Plan will continue to incorporate guiding provisions
AQIP

• 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
• About $28 million proposed for FY 2020-21
Key Priorities for 2020-21 Funding Plan

• 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 and mobility options for priority populations
## Funding Plan Development Schedule

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*Handout lists preliminary work group meeting schedule; subject to change

Additional information available at:
http://www.arb.ca.gov/aqip/
http://www.arb.ca.gov/msprog/aqip/meetings/meetings.htm
Questions?

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SB 1275

Clean Vehicle Rebate Project
CVRP Status Update

• 365,000 rebates issued since 2010
  – 343,000 Standard Rebates
  – 17,000 Increased Rebates for low-income consumers

• 2019-20 CVRP budget
  – $213 million for all rebate types; should last to July 2020
  – $25 million for low-income rebates; last through Fall 2020

• Monthly application totals have stabilized since 2018
  – Now average 6,000-7,000 applications a month
FY 2019-20 Program Changes

• Vehicle Eligibility
  – Increased all-electric range requirement for PHEVs
  – Base MSRP cap of $60k for BEVs and PHEVs

• Participant Eligibility
  – Decreased lifetime rebate limit to one per person
  – Shortened application window to 3 months

• Rebate Amounts
  – Decreased standard rebate amounts
    ○ -$500 for FCEVs, BEVs, and PHEVs
    ○ -$150 for ZEMs
### Prior CVRP Demand Projections

<table>
<thead>
<tr>
<th>FY 2019-2020 Program Changes</th>
<th>FY 20-21 need</th>
<th>FY 21-22 need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Need with No Changes</td>
<td>$301M</td>
<td>$337 M</td>
</tr>
<tr>
<td>Funding Need with Changes</td>
<td>$217 M</td>
<td>$243 M</td>
</tr>
</tbody>
</table>

- Table taken from the FY 2019-20 Funding Plan, Appendix C
- **Bottom row**: Projected funding need given the program changes implemented December 2019
Initial CVRP Options to Consider for 2020-21

• $125 million initial proposed allocation
  – $100 Million for Standard Rebates (will not meet forecasted demand)
  – $25 Million for Increased Rebates
• Considerations for 2020-21
  – A “limited time offer” program for standard rebates
  – Low and moderate income program only
  – Review income eligibility process and align where possible with other clean transportation equity programs
  – Align fuel cell incentives with battery electric vehicle incentives
Plan for FY 2020-21

• Goal for the year: balance market support with funding allocation
  – Consider scenarios for various potential budget appropriations
• Work Group Plan:
  – Monday, March 16: To focus on limited time offer and other key lever options, build scenarios
  – Wednesday, April 8: Projections
  – Mid April (If needed): TBD
Questions?

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SB 1275

Clean Transportation Equity Projects
Clean Transportation Equity Projects

- **Clean Cars 4 All**
  - Multiple air districts: $112M

- **Financing Assistance**
  - Local: CHDC
  - Statewide: BSF: $46.8M

- **BlueLA CarShare**
  - City of LA: $4.7M

- **One Stop Shop**
  - Grid Alternatives: $10M

- **Valley Air ZEV Mobility**
  - SJVAPCD: $0.9M

- **Clean Mobility in Schools**
  - Needs Assessments & Technical Assistance: TBD: $2M
  - Ecosystem of Shared Mobility: $3.1M

- **CarSharing & Mobility Hubs**
  - MTC: $3M

- **Ecosystem of Shared Mobility**
  - SJVAPCD: $3.1M

- **Ag Worker Vanpools**
  - CALVANS: $6M

- **Statewide Clean Mobility Options**
  - CALSTART: $37M

- **STEP**
  - TBD: $22M

- **Rural School Bus Pilot**
  - NCUAQMD: $63M

- **Lift Line Paratransit**
  - Community Bridges: $0.5M

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**Car Ownership Projects**
- Clean Mobility Projects
- Outreach
Car Ownership Projects

Clean Cars 4 All
Multiple air districts
$112M

Financing Assistance
Local: CHDC
Statewide: BSF
$46.8M
Outreach Projects

- **One Stop Shop**
  - Grid Alternatives
  - $10M

- **Needs Assessments & Technical Assistance**
  - TBD
  - $2M
Equity Project Progress

• Established programs are maturing and expanding
• Projects continue to overcome various implementation challenges
• Focused on advancing equity goals and guiding projects toward long-term sustainability
• Strong interest and participation in newly launched projects
Applying Equity Principles

- Continue to implement SB 350 Barriers Report recommendations
- Expand funding opportunities for community transportation needs assessments and technical assistance
- Develop and enhance One-Stop-Shop
- Continue to identify metrics to evaluate equity projects and outreach efforts
Path Forward for Equity

• Identify potential funding allocations and policy changes for existing projects
• Increase capacity-building with community-based organizations
• Further align projects and refine coordination strategies
• Implement AB 193 through pilot in local financing
• Incorporate workforce training and development opportunities into existing projects
# Equity Project Funding for 2020-21

(Millions)

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Allocations to Date</th>
<th>Remaining Funding*</th>
<th>Preliminary FY 2020-21 Allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Cars 4 All (EFMP Plus-Up)</td>
<td>$112</td>
<td>$38</td>
<td>$30-50</td>
</tr>
<tr>
<td>Financing Assistance</td>
<td>$47</td>
<td>$39</td>
<td>$0-15</td>
</tr>
<tr>
<td>Clean Mobility Options</td>
<td>$57</td>
<td>$49</td>
<td>$0-15</td>
</tr>
<tr>
<td>Ag Worker Vanpools</td>
<td>$6</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Rural School Bus Pilot</td>
<td>$63</td>
<td>$25</td>
<td>$5-15</td>
</tr>
<tr>
<td>Sustainable Transportation Equity Project (STEP)</td>
<td>$22</td>
<td>$22</td>
<td>$0-20</td>
</tr>
<tr>
<td>Clean Mobility in Schools</td>
<td>$25</td>
<td>$25</td>
<td>$0-10</td>
</tr>
<tr>
<td>One Stop Shop</td>
<td>$10</td>
<td>$7</td>
<td>$0-5</td>
</tr>
<tr>
<td>Outreach &amp; Technical Assistance</td>
<td>$2</td>
<td>$2</td>
<td>$0-2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$343</strong></td>
<td><strong>$205</strong></td>
<td><strong>$75</strong></td>
</tr>
</tbody>
</table>

*Allocated funding not spent as of March 1, 2020
Columns may not add to the total due to rounding
Questions?

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12:30-1:30pm

Lunch Break
SB 1204 & SB 1403

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

• Roadmap on how the portfolio of CARB incentives:
  – Fund across the commercialization arc
  – Fund rapid technology advances by supporting beachhead technologies
  – Establish funding needs for Low Carbon Transportation investments over the next three fiscal year cycles
Heavy-Duty Technology Progression Through CARB Incentive Programs

- Pre-commercial demonstrations
- Early commercial pilots
- Broad purchase incentives
- Fleet turnover
- Financing assistance for fleets

Low Carbon Transportation

- HVIP CORE
- Demos

- VW Mitigation Trust
- Moyer AB 617 FARMER
- AQIP
Heavy-Duty Investment Strategy for Vehicles and Off-Road Equipment

• The Strategy includes:
  – Technology status updates
  – Beachhead strategy discussion
  – State school bus incentives update per SB 1403

• Incorporates new elements this year:
  – Metrics of success
  – Expanded consideration of off-road equipment
  – Infrastructure assessment
Heavy-Duty Investment Priorities for FY 2020-21

• Support SB 350, SB 375 and AB 617 goals
• Continue to update and build on project momentum
• Address fiscal crisis
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SB 1204, SB 1403 & AQIP

Heavy-Duty Trucks, Buses, and Off-Road Freight Equipment
Heavy-Duty Trucks, Buses, and Off-Road Freight Equipment

Pre-Commercial Stage

Demos and Pilots
Low Carbon Transportation (Demos and Pilots)

Deployment Incentives
Low Carbon Transportation (HVIP, CORE)
VW Mitigation CAPP

Market Scale
Fleet Turnover Incentives
VW Mitigation
Moyer CAPP
FARMER

Financing Assistance
Truck Loan Assistance
Ongoing Zero- and Near Zero-Emission Freight Facilities Projects

Approximately $200M invested in FY 17/18 and FY 18/19

- **POLB**: Sustainable Terminals $50.0M
- **GTI**: Zero Emissions for California Ports $5.8M
- **CTE**: ZE Beverage Handling & Distribution $5.5M
- **CTE**: Fuel Cell Hybrid Delivery Van $4.3M
- **SJVAPCD**: Frito Lay Diesel-Free Freight Facility $15.4M
- **CTE**: Next Generation Fuel Cell Delivery Van $5.8M
- **SCAQMD**: Volvo LiIGHTS $44.8M
- **POLA**: ZE Freight “Shore to Store” $41.1M
- **SJVAPCD**: ZE & NZE Enabling Freight Project $22.6M
- **Clean Air**: Net Zero Farming and Freight Facility $3.3M
Ongoing Heavy-Duty Demonstration Projects

Approximately $80M invested in FY 14/15 and FY 16/17
Ongoing Truck and Bus Pilot Commercial Deployment Projects

- **Sunline Transit**: Fuel Cell Electric Buses $13M
- **City of Porterville**: Battery Electric Buses $22M
- **CTE**: Fuel Cell Electric Buses $13M
- **SMAQMD**: ZE school buses with local districts $7M
- **SJVAPCD**: Battery Electric Buses with local transits $13M
- **SJVAPCD**: Battery Electric Step Vans with USPS $5M
- **BAAQMD**: Electric Delivery Trucks with Goodwill $3M

Approximately $80M invested from FY 14/15 and FY 16/17
Truck Loan Assistance Program Updates

• Contribution Rate Increase
  – Addresses increased risk from changes in market and economic trends for participating lenders
  – Effective March 2, 2020

• California Registration Requirement
  – Focus assistance on truckers impacted by Department of Motor Vehicles compliance verification
CORE is Now Open

- Project launch in December 2019
- 14 equipment eligibility applications received as of February 24, 2020
- $44.2 million in funding
- ZE terminal trucks transferring from HVIP
• Over 50% of GGRF-funded deployments serving priority populations

• Nearly 9,300 vouchers issued since inception, totaling $555 million
  – Including waitlist
  – Record breaking last 24 months

• Waitlist closed November 2019
  – ~1,600 vouchers
  – Funding demand ($140M) exceeded entire FY19-20 budget
HVIP Funding Shortfall

- Record demand has deepened a fiscal crisis
- Current program projections at ~$200 million
- Policy changes needed to provide savings while meeting program goals
- Staff considering a wide array of options
Potential Options To Address Fiscal Crisis

• Five categories for consideration:
  – Technology/vehicle graduation
  – Vehicle and fleet eligibility
  – Reduce voucher amounts
  – Lower voucher request caps
  – Consider upcoming regulations

• Waitlist improvements
• Encourage shorter vehicle delivery timelines
• Work group meeting to discuss changes April 7, 2020
Key Program Impacts of Funding Shortfall

• Initial proposed appropriation of $150M will only partially fund recommended level of funding for HVIP
• Current level insufficient to fund CORE or Demos and Pilots

Recommendations for Investment Priorities

| FY 2020-21 | Demos | $60-$85 Million  
Focus: ZE/PHEV Heavy-Duty Regional Delivery, ZE/Hybrid Ag-Construction Equipment, ZE/Hybrid Heavier Cargo Handling Equipment, ZE/Hybrid Marine |
| --- | --- | --- |
| Projects | Pilots | $185-$310 Million  
Focus: ZE/PHEV Drayage and Regional Delivery Trucks, Advanced Powertrains, ZE/Hybrid Heavier Cargo Handling Equipment, ZE Facilities |
| Commercial | Commercial | $220-$320 Million  
Focus: ZE Delivery, ZE Transit, Ground Support Equipment, ZE/Hybrid Heavier Cargo Handling Equipment |
| Total Funding | Total Funding | $465-$715 Million* |
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Summary and Next Steps
$430M Clean Transportation Incentives: Proposed Project Category Allocations

<table>
<thead>
<tr>
<th>Category</th>
<th>2019-20 Allocation (millions)</th>
<th>2020-21 Initial Recommendation (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVRP</td>
<td>$238</td>
<td>$125*</td>
</tr>
<tr>
<td>Transportation Equity Projects</td>
<td>$65</td>
<td>$75</td>
</tr>
<tr>
<td>Clean Trucks, Buses, and Off-Road Freight</td>
<td>$182</td>
<td>$150</td>
</tr>
<tr>
<td>AQIP</td>
<td>$48</td>
<td>$28.64</td>
</tr>
<tr>
<td><strong>Total Clean Transportation Incentives Funding</strong></td>
<td><strong>$533</strong></td>
<td><strong>$378.64</strong></td>
</tr>
</tbody>
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*Includes $25 million for increased rebates for low-income consumers
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