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<tr>
<td><strong>Document Title:</strong></td>
<td>Clean Transportation Incentives FY 2020-21 Funding Plan Workshop Presentation</td>
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<td>October 24, 2019</td>
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<td>19-47</td>
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<td><strong>Programs</strong></td>
<td>CONTACTS</td>
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<tr>
<td><strong>RELEASE NUMBER</strong></td>
<td>Melanie Turner</td>
</tr>
<tr>
<td><strong>October 24, 2019</strong></td>
<td>Office of Communications</td>
</tr>
<tr>
<td><strong>19-47</strong></td>
<td><a href="mailto:melanie.turner@arb.ca.gov">melanie.turner@arb.ca.gov</a></td>
</tr>
<tr>
<td><strong>CONTACTS</strong></td>
<td>(916) 322-2990</td>
</tr>
<tr>
<td><strong>Melanie Turner</strong></td>
<td>CATEGORIES</td>
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<tr>
<td><strong>Office of Communications</strong></td>
<td>Air Pollution, Airborne Toxics, Climate Change</td>
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<td><strong>Filer:</strong></td>
<td>Raquel Kravitz</td>
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<tr>
<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
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<tr>
<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
<td>11/18/2020 11:17:15 AM</td>
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<td><strong>Docketed Date:</strong></td>
<td>11/18/2020</td>
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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

Funding Plan – Today’s Workshop

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

- **Community Air Protection (AB 617)**: Criteria and toxics, & GHG reductions for community goals
  - $200M for FY 20-21

- **Carl Moyer Program**: SIP emission reductions
  - $94M for FY 20-21

- **FARMER**: Criteria, toxics, and GHG reductions for ag sector
  - $50M for FY 20-21

- **VW Mitigation Trust**: NOx Mitigation & zero-emission
  - $423M for 2017+

CARB
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

<table>
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<th>Milestone</th>
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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/aqip/)
- [http://www.arb.ca.gov/msprog/aqip/meetings/meetings.htm](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>
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<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
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SB 1275

Clean Transportation Equity Projects
Clean Transportation Equity Projects

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

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

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

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

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

- **Our Community CarShare**
  - SMAQMD
  - Total: $7.4M

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

- **Clean Mobility in Schools**
  - Total: $24.5M

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

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

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

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

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

**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
Clean Mobility Options Projects

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

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  - Community Bridges
  - $0.5M

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

- **STEP**
  - TBD
  - $22M
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>
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<tr>
<td>Clean Cars 4 All (EFMP Plus-Up)</td>
<td>$112</td>
<td>$38</td>
<td>$30-50</td>
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<td>Financing Assistance</td>
<td>$47</td>
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<td>Clean Mobility Options</td>
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<td>$49</td>
<td>$0-15</td>
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<td>Ag Worker Vanpools</td>
<td>$6</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>Rural School Bus Pilot</td>
<td>$63</td>
<td>$25</td>
<td>$5-15</td>
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<tr>
<td>Sustainable Transportation Equity Project (STEP)</td>
<td>$22</td>
<td>$22</td>
<td>$0-20</td>
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<tr>
<td>Clean Mobility in Schools</td>
<td>$25</td>
<td>$25</td>
<td>$0-10</td>
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<tr>
<td>One Stop Shop</td>
<td>$10</td>
<td>$7</td>
<td>$0-5</td>
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<tr>
<td>Outreach &amp; Technical Assistance</td>
<td>$2</td>
<td>$2</td>
<td>$0-2</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$343</strong></td>
<td><strong>$205</strong></td>
<td><strong>$75</strong></td>
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</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

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
Questions?

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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

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<tr>
<th>Pre-Commercial Stage</th>
<th>Early Market Entry</th>
<th>Market Scale</th>
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<tr>
<td>Demos and Pilots</td>
<td>Deployment Incentives</td>
<td>Fleet Turnover Incentives</td>
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<td>Low Carbon Transportation (<em>Demos and Pilots</em>)</td>
<td>Low Carbon Transportation (<em>HVIP, CORE</em>)</td>
<td>VW Mitigation Moyer CAPP FARMER</td>
</tr>
</tbody>
</table>

*HVIP, CORE*
Ongoing Zero- and Near Zero-Emission Freight Facilities Projects

- **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
- **SCAQMD**: Next Generation Fuel Cell Delivery Van, $5.8M
- **SJVAPCD**: Volvo LiIGHTS, $44.8M
- **POLA**: ZE Freight "Shore to Store", $41.1M
- **SJVAPCD**: ZE & NZE Enabling Freight Project, $22.6M

Approximately $200M invested in FY 17/18 and FY 18/19
Ongoing Heavy-Duty Demonstration Projects

- POLB Off-Road $5M
- CTE Off-Road $7M
- GTI On-Road $5M
- Project Clean Air Off-Road $1M
- Calstart On-Road $7M
- BAAQMD Off-Road $3M
- POLA Multisource $15M
- SBCTA Multisource $9M
- SCAQMD Drayage $24M
- SJVAPCD Off-Road $1M

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

Approximately $80M invested from FY 14/15 and FY 16/17

- **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
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

<table>
<thead>
<tr>
<th>Recommendations for Investment Priorities</th>
<th>FY 2020-21</th>
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<tbody>
<tr>
<td>Demos</td>
<td>$60-$85 Million</td>
</tr>
<tr>
<td>Focus: ZE/PHEV Heavy-Duty Regional Delivery, ZE/Hybrid Ag-Construction Equipment, ZE/Hybrid Heavier Cargo Handling Equipment, ZE/Hybrid Marine</td>
<td></td>
</tr>
<tr>
<td>Pilots</td>
<td>$185-$310 Million</td>
</tr>
<tr>
<td>Focus: ZE/PHEV Drayage and Regional Delivery Trucks, Advanced Powertrains, ZE/Hybrid Heavier Cargo Handling Equipment, ZE Facilities</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>$220-$320 Million</td>
</tr>
<tr>
<td>Focus: ZE Delivery, ZE Transit, Ground Support Equipment, ZE/Hybrid Heavier Cargo Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>Total Funding</td>
<td>$465-$715 Million*</td>
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Questions?

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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>
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*Includes $25 million for increased rebates for low-income consumers*
## Funding Plan Development Schedule

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