Low Carbon Transportation Investments and Air Quality Improvement Program (AQIP)

Public Workshop on the Fiscal Year 2017-18 Funding Plan
Sacramento, California
February 10, 2017

Today’s Agenda

Kickoff presentation
• Background
• Governor’s 2017-18 budget proposal
• Priorities for the year
• 2016-17 Funding Plan implementation status
• Initial funding need projections

Open discussion

Break

Presentation on 3-Year Plan for Heavy-Duty Vehicles and Off-Road Equipment

Open discussion
Auction Proceeds Investments for Low Carbon Transportation

- Annual budget appropriations consistent with Administration’s 3-year Investment Plan
- Priorities in Administration’s Investment Plan
  - Reduce greenhouse gases and benefit disadvantaged communities
  - Maximize health, environmental, economic co-benefits
  - Continue Low Carbon Transportation investments
- Assembly Bill (AB) 1550 (2016) adds new requirements

AB 1550

- Revises disadvantaged community investment requirements
- Establishes new low-income household and low-income community investment requirements
- Guidance for State agencies under development
- 2017-18 Funding Plan will incorporate these new provisions
## Low Carbon Transportation Funding To Date

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Low Carbon Transportation Appropriations (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>$30</td>
</tr>
<tr>
<td>2014-15</td>
<td>$197</td>
</tr>
<tr>
<td>2015-16</td>
<td>$90</td>
</tr>
<tr>
<td>2016-17</td>
<td>$363</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$680</strong></td>
</tr>
</tbody>
</table>

## AQIP

- Created by AB 118 (2007); updated and reauthorized by AB 8 (2013)
- Provides foundation and framework for Low Carbon Transportation investments
  - Many projects initially funded under AQIP
- Annual funding plan guides investments
- Focus on criteria pollutant and toxics projects
Governor’s 2017-18 Low Carbon Transportation Proposal

- $363 million to accelerate transition to low carbon passenger and freight transportation
  - Same project funding as final 2016-17 budget
  - Builds on previous years’ investments
  - Identifies incentives for electric vehicles and in-state low carbon biofuel as possible investments

- Supports Governor’s climate pillars
  - 50 percent reduction in petroleum use
  - Short-lived climate pollutant reductions

Governor’s 2017-18 AQIP Budget Proposal

- $28.6 million proposed for AQIP
  - Based on revenue projections
  - Same funding level as 2016-17
Key Issues for 2017-18 Funding Plan

- Demand significantly higher than proposed funding
- Addressing new disadvantaged community and low-income investments requirements (AB 1550)
- Developing 3-year plan for heavy-duty vehicle and off-road equipment investments
- Incorporating findings from SB 350 study on low-income barriers to clean transportation
- Coordinating investments with other funding sources including Volkswagen settlement funds

Findings from SB 350 Barriers Study

- Long-term, permanent funding and consumer awareness are keys to overcoming barriers
  - Ensure funding for zero-emission and near zero-emission transportation and mobility options (cars, public transit, school buses, active transportation, etc.)
  - Continue to prioritize funding to low-income households and disadvantaged communities
- Continue studying transportation barriers by expanding community-based needs assessments
Volkswagen California Investments

• $800 million Volkswagen ZEV investment
  – Infrastructure, education/public awareness, ZEV access improvements, Green City initiative

• Over $400 million NOx Mitigation Trust
  – Primarily heavy-duty vehicle/off-road equipment replacement

• $25 million to ARB for:
  – “the ZEV-related aspects of the EFMP Plus Up Program or the ZEV-related aspects of similar vehicle replacement programs”

Light-Duty Vehicles (SB 1275)
CVRP Status Update

• 175,000 rebates issued since 2010
• 2016-17 CVRP budget
  – $133 million allocation, should last through June 2017
  – Legislature mandated lower income cap and increased rebates for low-income consumers
• Continuing to implement higher rebates for lower income consumers
• Prequalification mechanism under development
• Starting increased outreach effort with added equity focus

CVRP Demand Projections

• Initial projection: 55,000–70,000 rebates / $140-185 million for 2017-18 (assuming no project changes)
CVRP Challenges for 2017-18

- Projected demand higher than available funding
- Public fleet pilot moving to CVRP for 2017-18
- Addressing AB 1550
  - Will evaluate whether CVRP changes needed
- Work groups to address these issues

Initial CVRP Funding Recommendations for 2017-18

- $120-130 million allocation
  - Compared to forecasted demand of $140-185 million
  - Will consider changes to align demand with allocation
- Retain legislatively set income cap and rebate levels for low-income consumers
- Possible changes to consider
  - Reducing per-vehicle rebates (exempting low-income)
  - Limiting consumers to a single CVRP rebate
  - Request input on other potential changes
Light-Duty Equity Projects

- Innovative strategies designed to increase access to clean vehicles and mobility options for lower income households and disadvantaged communities

<table>
<thead>
<tr>
<th>Category</th>
<th>Funding (million)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrap and replace (EFMP/EFMP Plus-up)</td>
<td>$60</td>
<td>• South Coast/San Joaquin program implementation ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Working with new air districts</td>
</tr>
<tr>
<td>Car Sharing and Mobility Options</td>
<td>$8</td>
<td>• Solicitation under development, anticipate February 2017 release</td>
</tr>
<tr>
<td>Agricultural Worker Van Pools in SJV</td>
<td>$3</td>
<td>• Solicitation under development, anticipate March 2017 release</td>
</tr>
<tr>
<td>Increased Public Fleet CVRP Incentives</td>
<td>$3</td>
<td>• Grant in place, anticipate February 2017 relaunch</td>
</tr>
<tr>
<td>Low-Income Financing Assistance</td>
<td>$6</td>
<td>• Solicitation under development, anticipate February 2017 release</td>
</tr>
</tbody>
</table>
EFMP/EFMP Plus-up Current Status

- As of December 2016, 1,700 vehicles replaced in South Coast and San Joaquin Valley air districts
  - 1,700 used EFMP Plus-Up funds
  - $6 million Plus-Up project funds spent
- First $30 million of $60 million the 2016-17 allocation awarded
- 3 new air districts developing implementation plans
  - Bay Area, Sacramento, and San Diego
  - Expected to launch programs in summer of 2017

Challenges for 2017-18

- Incorporating SB 350 study findings
- Refining equity projects to incorporate AB 1550 requirements
- Scaling up projects beyond initial pilot phase
- Incorporating $25 million in Volkswagen funds into equity projects
**Equity Projects: Funding Needs Identified in 2016-17 Funding Plan**

<table>
<thead>
<tr>
<th>Project Category</th>
<th>2016-17 Long-Term Plan Funding Need Projections</th>
<th>2016-17 Budget</th>
<th>Remaining Need 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016-17</td>
<td>2017-18</td>
<td>2-Yr Total</td>
</tr>
<tr>
<td>EFMP/EFMP Plus-up</td>
<td>$30</td>
<td>$30-50</td>
<td>$60-80</td>
</tr>
<tr>
<td>Car Sharing/Mobility Options</td>
<td>$8</td>
<td>$20-25</td>
<td>$28-33</td>
</tr>
<tr>
<td>Public Fleet CVRP Incentives</td>
<td>$3</td>
<td>-</td>
<td>$3</td>
</tr>
<tr>
<td>Ag Worker Vanpools</td>
<td>$3</td>
<td>$3</td>
<td>$6</td>
</tr>
<tr>
<td>Financing Assistance</td>
<td>$6</td>
<td>$20-25</td>
<td>$26-31</td>
</tr>
<tr>
<td>Potential New Projects</td>
<td>-</td>
<td>$0-5</td>
<td>$0-5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$50</strong></td>
<td><strong>$70-110+</strong></td>
<td><strong>$120-160+</strong></td>
</tr>
</tbody>
</table>

**Initial EFMP Plus-Up Recommendations for 2017-18**

- Roll over $20 million reserve funding from 2016-17
  - Unless there is demand prior to June 2017
- Staff estimates $40-50 million need for 2017-18
  - Also continue carrying $20 million reserve
- Concepts to develop in work groups
  - Funding for program oversight and assessment (data management and/or independent auditor)
  - Incorporating Volkswagen consent decree funds
  - Opportunity for further program expansion
Initial Equity Project Recommendations for 2017-18

- Evaluate best ways to support used ZEV market
  - Including need for used ZEV battery assurance strategy
- Financing assistance
  - Evaluate how to grow project and best coordinate with CVRP and EFMP Plus-up
- Car sharing and mobility options
  - Increase focus on mobility options
  - Consider statewide administrator for small projects
- Consider new project concepts

Initial Equity Project Funding Recommendation for 2017-18

- $60-80 million Low Carbon Transportation allocation
- Additional $25 million in Volkswagen funds to integrate into EFMP Plus-up, financing assistance, or other programs consistent with consent decree
- Work groups to develop project level allocations and project details
**Heavy-Duty Vehicle, Freight, and Off-Road Equipment (SB 1204 & AQIP)**

**2016-17 Heavy-Duty Vehicle, Freight, and Off-Road Equipment Projects**

<table>
<thead>
<tr>
<th>2016-17 Project Category – Low Carbon Transportation/AQIP</th>
<th>Funding (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Technology Freight Demonstrations</td>
<td>$34</td>
</tr>
<tr>
<td>Zero-Emission Freight Equipment Pilot Commercial Deployments</td>
<td>$5</td>
</tr>
<tr>
<td>Zero-Emission Truck Pilot Commercial Deployments</td>
<td>$18</td>
</tr>
<tr>
<td>Zero-Emission Bus Pilot Commercial Deployments</td>
<td>$42</td>
</tr>
<tr>
<td>Rural School Bus Pilot</td>
<td>$10</td>
</tr>
<tr>
<td>Low NOx Engine Incentives with Renewable Fuel Use</td>
<td>$23</td>
</tr>
<tr>
<td>HVIP</td>
<td>$18</td>
</tr>
<tr>
<td>Truck Loans (AQIP)</td>
<td>$22</td>
</tr>
<tr>
<td>Agricultural Equipment Trade-up in San Joaquin Valley (AQIP)</td>
<td>$3</td>
</tr>
<tr>
<td><strong>TOTAL ($150M Low Carbon Transportation/$25M AQIP)</strong></td>
<td><strong>$175</strong></td>
</tr>
</tbody>
</table>
Status of 2016-17 Heavy-Duty Projects

- Advanced Technology Freight Demonstrations
  - Solicitations under development, anticipate February or March release
- Zero-Emission Freight Equipment Pilot
  - Solicitation under development, anticipate Summer release
- Zero-Emission Truck and Bus Pilots
  - Funding awarded, grant agreements in progress
- Rural School Bus Pilot
  - Funding available, applications from school districts will be accepted March 1-30

Status of 2016-17 Heavy-Duty Projects (continued)

- HVIP
  - 2016-17 funds already spent; waiting list open
- Low NOx Engines incentives
  - Funds available
- Truck Loan Assistance Program
  - Ongoing funding available
- Ag Equipment Trade-Up for San Joaquin Valley
  - 2015-16 funds spent, 2016-17 solicitation under development
Priorities and Challenges for 2017-18

• Demand greater than available funding
• Developing a 3 year heavy-duty plan to help guide our investments
• Continue and expand funding for early commercial deployments
• Prioritize demonstration funding to achieve long-term goals
• Support key investments from the California Sustainable Freight Action Plan

Initial Recommendations for 2017-18: Heavy-Duty Low Carbon Transportation

• $140-150 million allocation

<table>
<thead>
<tr>
<th>Heavy-Duty Vehicle and Equipment Project Category</th>
<th>Funding (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Truck and Bus Vouchers</td>
<td></td>
</tr>
<tr>
<td>• Hybrid</td>
<td></td>
</tr>
<tr>
<td>• Zero-emission</td>
<td></td>
</tr>
<tr>
<td>• Low NOx with Renewable Fuel</td>
<td>$45-75*</td>
</tr>
<tr>
<td>Freight Focused Pilot Commercial Deployment and Rural School Bus Pilot</td>
<td>$20-60</td>
</tr>
<tr>
<td>Freight Focused Advanced Technology Demonstrations</td>
<td>$35-65</td>
</tr>
</tbody>
</table>

*Combined with $10-15 million AQIP funding for overall Clean Truck and Bus Voucher allocation of $55-90 million
Initial Recommendations for 2017-18: AQIP

- $28.6 million available for AQIP

<table>
<thead>
<tr>
<th>AQIP Project Category</th>
<th>Funding (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck Loans</td>
<td>$10-15</td>
</tr>
<tr>
<td>Clean Truck and Bus Vouchers</td>
<td></td>
</tr>
<tr>
<td>• Hybrid</td>
<td>$10-15*</td>
</tr>
<tr>
<td>• Zero-emission</td>
<td></td>
</tr>
<tr>
<td>• Low NOx with Renewable Fuel</td>
<td></td>
</tr>
<tr>
<td>Agricultural Equipment Trade-Up in San Joaquin Valley</td>
<td>$3</td>
</tr>
<tr>
<td>Other Ideas</td>
<td>?</td>
</tr>
<tr>
<td>Reserve for Revenue Uncertainty</td>
<td>$0-1</td>
</tr>
</tbody>
</table>

*Combined with $45-75 million Low Carbon Transportation funding for overall Clean Truck and Bus Voucher allocation of $55-90 million

Development of In-State Low Carbon Biofuels
Low Carbon Biofuel Incentives

- 2016-17 Funding Plan included $40 million very low carbon fuels production incentives
  - Based on Governor’s budget proposal
- Legislature did not approve fuels funding in 2016-17 budget
- Governor’s 2017-18 Budget proposal identifies in-state low carbon biofuels for potential funding

Initial Recommendations for 2017-18

- $15-30 million Low Carbon Transportation allocation for in-state low carbon biofuels
- Will discuss possible approaches at work groups
### Summary and Next Steps

**$363M Low Carbon Transportation:**

<table>
<thead>
<tr>
<th>Potential Project Category Allocations</th>
<th>2016-17 Allocation (million)</th>
<th>2017-18 Initial Range (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVRP</td>
<td>$133</td>
<td>$120-130</td>
</tr>
<tr>
<td>Light-Duty Equity Projects*</td>
<td>$80</td>
<td>$60-80*</td>
</tr>
<tr>
<td>Heavy-Duty Vehicles, Freight, and Off-Road Equipment (+$28 million AQIP funding)</td>
<td>$150</td>
<td>$140-150</td>
</tr>
<tr>
<td>Low Carbon Biofuels Incentives</td>
<td>$0</td>
<td>$15-30</td>
</tr>
<tr>
<td><strong>Low Carbon Transportation Funding</strong></td>
<td><strong>$363</strong></td>
<td><strong>$363</strong></td>
</tr>
</tbody>
</table>

*The $25 million in Volkswagen funds for ZEV-related elements of vehicle replacement will also be integrated into Funding Plan development.*

Volkswagen NOx Mitigation Trust funds will also be invested in heavy-duty sector.
**Funding Plan Development Schedule**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category specific work group meetings*</td>
<td>Feb – April 2017</td>
</tr>
<tr>
<td>Final Workshop</td>
<td></td>
</tr>
<tr>
<td>• Discussion document with draft project allocations, project details,</td>
<td>April 2017 (tentatively April 6)</td>
</tr>
<tr>
<td>and draft long-term heavy-duty plan</td>
<td></td>
</tr>
<tr>
<td>Release proposed Funding Plan</td>
<td>May 19, 2017</td>
</tr>
<tr>
<td>Board consideration of proposed Funding Plan</td>
<td>June 22, 2017</td>
</tr>
<tr>
<td>Start implementing 2017-18 projects</td>
<td>July 2016</td>
</tr>
</tbody>
</table>

*Handout lists preliminary work group meeting schedule

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)

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**Comments and Discussion**

Webcast email address:
coastalrm@calepa.ca.gov