

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

Public Workshop on the
Fiscal Year 2016-17 Funding Plan

Sacramento, California
January 27, 2016

California Environmental Protection Agency
 **Air Resources Board**



Workshop Overview

- Background
- Summary of Governor's Proposed 2016-17 Budget for Low Carbon Transportation and AQIP
- Light-duty vehicle projects
- Heavy-duty vehicle and equipment projects
- In-state production of low carbon fuels
- Open discussion

Auction Proceeds Investments for Low Carbon Transportation



- Budget appropriations consistent with 3-year Investment Plan
- Priorities in December 2015 Investment Plan
 - Reduce greenhouse gases
 - Continue benefiting disadvantaged communities
 - Maximize health, environmental, economic co-benefits
 - Increase rural community participation
 - Fund integrated projects in communities

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ARB Low Carbon Transportation Funding To Date

Fiscal Year	Low Carbon Transportation Appropriations to ARB
2013-14	\$30M
2014-15	\$200M
2015-16	\$95M
Total	\$325M

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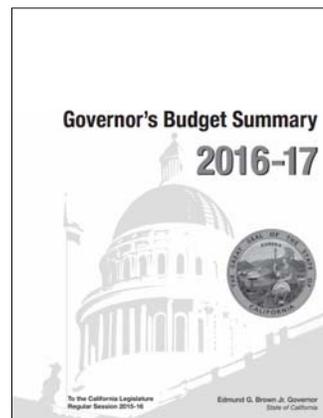
AQIP

- Created by Assembly Bill (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

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Governor's 2016-17 Low Carbon Transportation Proposal

- \$500 million to accelerate transition to low carbon freight and passenger transportation
 - \$460 million for low carbon vehicles and equipment
 - \$40 million for new low carbon fuels incentive program
- Continue disadvantaged community investment commitments



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Governor's 2016-17 AQIP Budget Proposal

- \$28.6 million proposed appropriation to ARB
 - Slightly higher than recent years' available funding based on higher revenue projections
 - Staff recommends \$3+ million reserve to address revenue uncertainty
 - \$25 million available to allocate to projects

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Key Issues for 2016-17 Funding Plan

- Addressing lower 2015-16 funding level
 - Limited heavy-duty funding in 2015-16
 - Recommend carrying forward unfunded project categories from 2015-16 Funding Plan
- Developing long-term plan for Clean Vehicle Rebate Project (CVRP)
- Developing new fuel production incentive program

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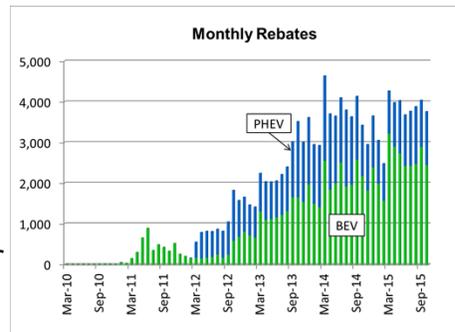
Light-Duty Vehicles (SB 1275)

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CVRP



- 130,000 rebates, \$280 million invested since 2010
 - \$75 million allocated for 2015-16 budget cycle
- Demand relatively flat over past year
- Changes in early 2016
 - Income cap
 - Higher rebates for lower income consumers



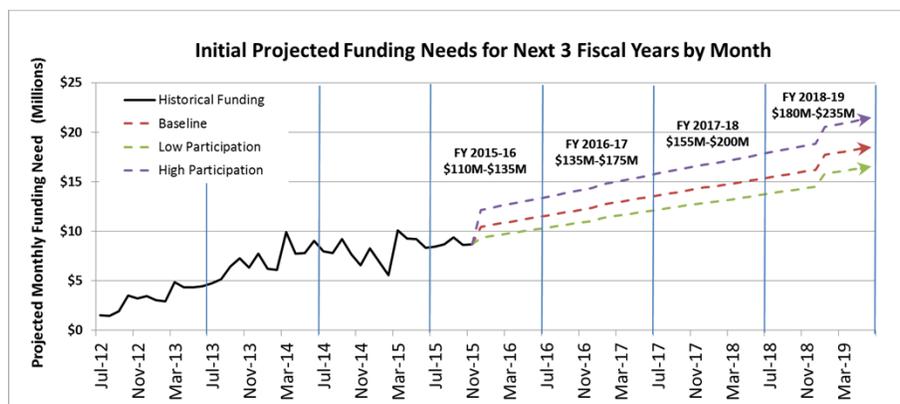
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CVRP Challenges for 2016-17

- Funding for remainder of 2015-16 cycle
 - Waiting list may be needed
 - Complicates launch of higher rebates for lower-income consumers
- Developing long-term plan required by SB 1275
 - 3 year forecast of funding needs
 - Market and technology assessment
 - Assessment of when self-sustaining market is expected
- Not considering other project changes at this time

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3-Year Forecast – Initial Projections



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Initial CVRP Funding Recommendations for 2016-17

- \$185-225M allocation
 - ~\$50M to fulfill 2015-16 demand through September 2016
 - ~\$135-175M for October 2016-September 2017
- Income cap and higher rebates for lower-income consumers adds uncertainty to projections
 - Will refine estimates over next 4 months

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ZEV Technology and Market Assessment

- Evaluate technology costs through 2023
- Use National Academy of Science Vehicle Cost Summary model (2013)
 - Well-known / accepted model
 - Cost inputs reviewed and updated
- Conduct sensitivity analysis
- Market assessment developed as part of 3-year forecast

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Long-Term Sustainability of ZEV Market

- Define a sustainable ZEV market
 - Literature review
 - Evaluate various market indicators
- Consider future adjustments to CVRP
- Evaluate other incentive structures

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Pilot Projects to Benefit Disadvantaged Communities

- Designed to increase access to clean vehicles and transportation options for lower income households and disadvantaged communities



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2014-15 Disadvantaged Community Projects: \$9M Awarded

Category	Funding	Status
EFMP Plus-up (car scrap and replace)	\$2M	<ul style="list-style-type: none"> • Launched in South Coast and San Joaquin Valley in Summer 2015
Increased Public Fleet Incentives	\$3M	<ul style="list-style-type: none"> • Launched in February 2015 • Implemented through CVRP
Car Sharing	\$3M	<ul style="list-style-type: none"> • Grants awarded for Los Angeles, San Diego, and Sacramento projects • Under development, 2016 public launch
Financing Assistance	\$1M	<ul style="list-style-type: none"> • Grant awarded for Bay Area project • Under development, 2016 public launch

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Status of 2015-16 Disadvantaged Community Projects

- Funding Plan included \$37M for 5 projects
 - Pending appropriation of funding
- ARB received partial appropriation in Sept 2015
 - \$10M allocated to continue EFMP Plus-up in South Coast and San Joaquin Valley
- Remaining \$27M on hold
 - Public fleets, car sharing, financing assistance, and new project for agricultural worker vanpools in San Joaquin Valley

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Initial Recommendations for 2016-17

- \$40-50M allocation for light-duty projects to benefit disadvantaged communities
- Carry forward and expand unfunded 2015-16 projects
 - Expect largest allocation for EFMP Plus-up
 - Fund public fleet incentives from CVRP allocation
- Request ideas for new pilot projects
- Increase outreach to disadvantaged communities

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Heavy-Duty Vehicle and Off-Road Equipment (SB 1204 & AQIP)

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2014-15 Heavy-Duty Projects: \$95 million

Category	Funding	Status
HVIP	\$10M	<ul style="list-style-type: none"> • 2014-15 funds nearly expended • \$86M allocated since 2010
Truck Loans	\$10M	<ul style="list-style-type: none"> • 2014-15 funds expended, program continuing with 2015-16 funds
Zero-Emission Drayage Truck Demonstration	\$25M*	<ul style="list-style-type: none"> • Project selection made • Pending grant agreement
Multi-Source Facility Demonstration	\$25M*	<ul style="list-style-type: none"> • Project selections made • Pending grant agreements
Zero-Emission Truck and Bus Pilot Deployments	\$25M*	<ul style="list-style-type: none"> • Solicitation released October 1, 2015 • Solicitation closes January 29, 2016

*Includes funds for data collection and analysis

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Status of 2015-16 Heavy-Duty Projects

- Funding Plan included \$148M for Low Carbon Transportation heavy-duty projects
 - Only \$5M for HVIP allocated due to partial budget
 - \$143M on hold: zero-emission truck and bus pilot, rural school buses, demonstration projects, and zero-emission freight equipment pilot
- AQIP funding not impacted by budget delay
 - Truck loan program continuing
 - Ag tractor trade up solicitation closed January 25, 2016
 - Low NOx engine incentives to launch in HVIP in 2016

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Priorities for Heavy-Duty

- Continue and expand funding for early commercial deployments
- Prioritize demonstration funding to achieve long-term goals and support California Sustainable Freight Action Plan
- Continue disadvantaged community benefit focus
- Consider new Auction Proceeds Investment Plan priorities

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Initial Recommendations for 2016-17: Low Carbon Transportation

- \$170-200M allocation for heavy-duty and off-road projects
- Carry forward unfunded 2015-16 projects
 - Refine and expand as appropriate
 - Consider incorporating zero-emission truck and bus pilots into HVIP
 - Coordinate demonstration funding with Sustainable Freight pilot project effort
- Ensure some investment in rural areas while meeting disadvantaged community targets

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Initial Recommendations for 2016-17: AQIP

- \$25M available for projects
- Focus on projects that primarily provide criteria pollutant and toxics benefits
 - Expect largest allocation for Truck Loan Program
 - Scale up agricultural tractor trade-up pilot project
 - Continue funding for low NOx trucks
- Do not have recommended project level allocations yet

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In-State Production of Low Carbon Fuels

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Low Carbon Fuels Overview

- New budget proposes \$40M to incentivize production and use of low carbon fuels
- Would apply to bio-based fuels production in California
- Would complement other State greenhouse gas reduction funding
 - Energy Commission's AB118 Program
 - Proposed CalRecycle and Department of Food and Agriculture waste diversion and dairy digester funding

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Low Carbon Fuels Incentive Goals

- Maintain existing levels of production and stimulate new investment in ultra-low carbon fuels
- Reduce greenhouse gas emissions, criteria pollutants, and air toxics
- Accelerate the transition to low carbon fuels

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Summary and Next Steps

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\$500M Low Carbon Transportation: Range of Potential Project Category Allocations

Low Carbon Vehicles and Equipment : \$460M proposed in budget	
Light-Duty Vehicles	
• CVRP – Fulfill 2015-16 demand	\$50M
• CVRP – 2016-17 demand	\$135-175M
• Disadvantaged Community Pilots	\$40-50M
Heavy-Duty Vehicles and Off-Road Equipment	\$170-200M
State Operations	\$5M

Low Carbon Fuels: \$40M proposed in budget

Will refine and develop project level allocations over next several months with public input

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Funding Plan Development Schedule

Milestone	Date
Category specific work group meetings*	Feb – March 2016
Final Workshop <ul style="list-style-type: none"> • Discussion document with draft project allocations, project details, and draft long-term plan for CVRP 	April 2016
Release proposed Funding Plan	May 20, 2016
Board consideration of proposed Funding Plan	June 23-24, 2016
Start implementing 2016-17 projects	July 2016

*Handout lists preliminary work group meeting schedule

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

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Comments and Discussion

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