Innovative Clean Transit

Incentive Funding for Zero-Emission Transit Buses

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Technology Implementation Manager
South Coast AQMD

October 2019
### VW Mitigation Funds for California

<table>
<thead>
<tr>
<th>Category</th>
<th>1st Installment</th>
<th>Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-Emission Transit, School, and Shuttle Bus</td>
<td>$65M</td>
<td>$130M</td>
</tr>
<tr>
<td>Zero-Emission Class 8 Freight and Port Drayage Trucks</td>
<td>$27M</td>
<td>$90M</td>
</tr>
<tr>
<td>Combustion Freight and Marine Projects</td>
<td>$30M</td>
<td>$60M</td>
</tr>
<tr>
<td>Zero-Emission Freight and Marine Projects</td>
<td>$35M</td>
<td>$70M</td>
</tr>
<tr>
<td>Light-Duty Zero-Emission Infrastructure</td>
<td></td>
<td>$10M</td>
</tr>
</tbody>
</table>

**Total VW Mitigation Funds for California:** $423M
Zero-Emission Transit, School, and Shuttle Buses – Key Points

Total Statewide Funds: $130M

Zero-Emission Transit, School, and Shuttle Bus

Who Can Apply?
Public and private organizations statewide

Type of Solicitation:
First-Come, First-Served

1st Installment
$65M available
Opens October 2019

Priority Funding:
Disadvantaged or low income communities

To be administered by: San Joaquin Valley APCD
## Project Funding Table

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Vehicle Class</th>
<th>Replacement Technology</th>
<th>Applicant</th>
<th>Maximum Funding Percentage (of Total Cost)</th>
<th>Maximum Funding Limit (per Vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Bus</td>
<td>4 to 8</td>
<td>Zero Emission</td>
<td>Government</td>
<td>100%</td>
<td>$400,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-Government</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Transit Bus</td>
<td>4 to 8</td>
<td>Battery Electric</td>
<td>Government</td>
<td>100%</td>
<td>$180,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-Government</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fuel Cell</td>
<td>Government</td>
<td>100%</td>
<td>$400,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-Government</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Shuttle Bus</td>
<td>4 to 8</td>
<td>Zero Emission</td>
<td>Government</td>
<td>100%</td>
<td>$160,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-Government</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspection</td>
<td>Old and new engine/vehicle will need to be made available for inspections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation</td>
<td>“Grant-funded” engine/vehicle needs to be operated in accordance with contract requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>Submit request for grant funds AFTER receiving grant award and project completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>Submit annual reports for the term of the contract (expected contract term is 3 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scrapping</td>
<td>Old engine/vehicle needs to be scrapped and replaced with “grant-funded” engine/vehicle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tentative Schedule

2019
- Q2-Q3 2019: Program Development
- Q4 2019: Solicitation Open

2019-2023
- 2019-2023: Implementation & Reporting

2020
- Q4 2019: Begin Awards and Contracting

2021
- Late 2021: Cycle 2 Program Development

Cycle 2 Program Development

2019-2023

Implementation & Reporting
Administrator of VW Bus Category:

San Joaquin Valley APCD:
http://vwbusmoney.valleyair.org/
Carl Moyer Program
Funding Opportunities for Transit Buses and Infrastructure
THE CARL MOYER PROGRAM GUIDELINES
2017 Revisions

VOLUME I: PROGRAM OVERVIEW, PROGRAM ADMINISTRATION AND PROJECT CRITERIA

Approved by the Board: APRIL 27, 2017

Carl Moyer Program : General Information

- Carl Moyer Program Announcement expected to open March 2020
- Competitive process
- Project selection will be based on cost effectiveness ($/tons reduced)
- Priority given to zero emission technologies (pending availability of funds and Board direction)
Carl Moyer Program: Funding Caps

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Project Type</th>
<th>Replacement Technology</th>
<th>State Funding Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit Bus</td>
<td>Replacement</td>
<td>Optional Low NOx</td>
<td>$25,000</td>
</tr>
<tr>
<td></td>
<td>Repower</td>
<td>Optional Low NOx</td>
<td>$20,000</td>
</tr>
<tr>
<td></td>
<td>Replacement / Conversion</td>
<td>Zero-Emission</td>
<td>$80,000</td>
</tr>
</tbody>
</table>
Carl Moyer Program: General Requirements

- Maximum project life is 12 years (dependent on regulatory requirements)
- Emission reductions must be surplus to the Transit Bus Regulation
- Grant amounts will be based on the minimum of two 12-month periods of California mileage during the previous 24-months
- Replacement engine must be CARB-certified to meet the emissions levels of 0.10 g/bhp-hr NOx or cleaner
  - South Coast AQMD may restrict Carl Moyer funding to those transit buses meeting the lowest optional low NOx standard of 0.02 g/bhp-hr.
• Applicant must be the owner of the existing vehicle (demonstrated by clean vehicle title)
• Applicant must have owned and operated the existing vehicle for the previous 24 months
• The existing vehicle must be currently operational and roadworthy
• Existing vehicle must be scrapped
Carl Moyer Program: Infrastructure
Carl Moyer Program Infrastructure: Eligible Projects

- Infrastructure for zero or near-zero emission heavy-duty vehicles
- New, conversion or expansion of existing stations
- Battery charging station
- Alternative fuel station (renewable natural gas, hydrogen fueling)
## Carl Moyer Program Infrastructure: Funding Table

<table>
<thead>
<tr>
<th>Maximum Percentage of Eligible Cost *</th>
<th>Infrastructure Project Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>All Project Types (electric charging, hydrogen fueling or renewable natural gas)</td>
</tr>
<tr>
<td>60%</td>
<td>Publicly Accessible Projects</td>
</tr>
<tr>
<td>65%</td>
<td>Projects with Solar/Wind Power Systems</td>
</tr>
<tr>
<td>75%</td>
<td>Publicly Accessible Projects with Solar/Wind Power Systems</td>
</tr>
</tbody>
</table>

* Additional funding criteria may apply, as determined by South Coast AQMD’s Governing Board.
Carl Moyer Program Infrastructure: Eligible Costs

- Limited to the purchase and installation of the equipment for power delivery or fueling directly related to the infrastructure project.
- Must utilize commercially available technologies.
- Equipment and parts must be new.
- Eligible project costs include:
  - Cost of design and engineering (i.e., labor, site preparation, Americans with Disabilities Act accessibility, signage).
  - Cost of equipment (e.g., charging/fueling units, parts for electrical upgrade, energy storage equipment, materials).
  - Meter/data loggers.
  - On-site power generation system that fuels or powers covered sources (i.e., solar and wind power generation equipment).
Carl Moyer Program Infrastructure: Ineligible Costs

- Existing station enhancement
- Fuel and energy costs
- Operation cost (e.g., operational fees, maintenance, repairs, improvements, spare parts)
- Extended warranty
- Insurance
- Data collection and reporting
- Travel/lodging

- Travel/lodging
- Employee training and salaries
- Legal fees
- Real estate property purchase/leases
- Security costs
- Testing and soil sampling
- Hazardous materials, including permitting, handling and disposal
Contact Information: South Coast AQMD

For more information, please visit:


Carl Moyer: [http://www.aqmd.gov/moyer](http://www.aqmd.gov/moyer)

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VW Mitigation Program
- Combustion Freight and Marine Projects
- Zero-Emission Class 8 Freight and Port Drayage Trucks

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