Incentives Programs for AFVs & Infrastructure

Launching a Volkswagen Funded Program that Works

December 10, 2017
Michael Terreri, Fleet Projects Manager
Center for Sustainable Energy (CSE)

- Building Performance
- Clean Transportation
- Distributed Generation
- Energy Efficiency
- Energy Storage
- Renewable Energy
CSE has processed more than:
176,000 vehicle rebates, $380 million in incentives
CSE Clean Transportation Activities

- Incentives Design & Administration
- Consumer & Dealer Outreach
- Stakeholder Engagement
- Fleet Assistance & Clean Cities
- PEV, Alt.-Fuel, & ZEV Planning & Implementation
- 2nd Life Battery Research & Vehicle-Grid Integration
VW Overview
Sections of VW Funding

- $2.9 Billion
- $2 Billion
- $10 Billion

- Vehicle Buyback and Modification (consumers)
- Zero Emission Vehicle investment (ZEV)
- Environmental Mitigation Trust (States)
### Appendix C (by state)

<table>
<thead>
<tr>
<th>Eligible Beneficiary</th>
<th>Mitigation Allocation</th>
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<th>Eligible Beneficiary</th>
<th>Mitigation Allocation</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>$25,480,968</td>
<td>Maine</td>
<td>$21,053,064</td>
<td>Pennsylvania</td>
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<td>Iowa</td>
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<td>Kentucky</td>
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<td>$19,848,805</td>
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Appendix C Eligible Equipment

10 Possible Eligible Vehicle Classes/Equipment: Commercially Proven & Available

1. Class 8 Local Freight Trucks, Port Drayage Trucks
2. Class 4-8 School, Shuttle or Transit Bus
3. Freight Switchers
4. Ferries/Tugboats (marine)
5. Class 4-7 Local Freight Trucks (Medium Trucks)
6. Airport Ground Support Equipment
7. Forklifts
8. Ocean Going Vessels Shorepower
9. LD ZEV Supply Equipment--L1, L2 or fast charging equipment or LD hydrogen fuel cell vehicle supply equipment
10. DERA option (e.g. locomotives)

Eligible vehicles/engines must be scrapped. Repower or replacement with new diesel, alternative fuel or electric option.
Latitude to fund variety of types of fleets too

- Local Government
- State Agencies
- Transit
- Universities
- Private (many types)
Key Components of Successful Incentive Programs

• Application
• Outreach & Education
• Program Transparency
Key Features of Incentive Programs
Incentive Programs: Key Components

• Program Application
  – Online applications and program information
  – Program funding transparency (real time funding ticker)

• Education and Outreach
  – Technical assistance
  – Fleet events, dealer training and support, ride and drive events

• Program transparency
  – Online program data publically available via online tools and datasets
Project Website: Accessibility

Drive clean and save

California residents get up to $5,000 for the purchase or lease of a new, eligible zero-emission or plug-in hybrid light-duty vehicle.

Vehicles and eligibility

Apply within 18 months of purchase/lease of an eligible vehicle and before rebate funds are exhausted. See complete eligibility guidelines.

- Ford Focus Electric
- Hyundai Sonata Plug-in Hybrid
- Ford C-MAX Energi
- BMW i3 REx
- Kia Optima Plug-in Hybrid

View all eligible vehicles
Website: Available Funding Tracking

- Real-time funding easily accessible
- Funding trackers let fleets determine urgency
Website: Funding tracking

- Real-time funding easily accessible
- Funding trackers let fleets determine urgency to get purchase orders in (e.g. City Council approval)
Application: Simplicity is Key

Step 1: Fleet visits program website

Step 2: Applies for vehicles in bulk & is contacted by fleet technical assistance team

Step 3: Submit supporting documentation

Step 4: Receive check in mail

Possible Step 5: Submit Usage Data After 12 mo.
Incentive Programs: Key Components

• Program Website and Application
  – Online applications and program information
  – Program funding transparency (real time funding ticker)

• Education and Outreach
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• Program Surveys
  – Fleet surveys (technology adoption, vocation) and vendor surveys
Outreach & TA: Public Partnerships

Leveraged partnerships:
• DOE Clean Cities Coalitions
• Public and Private Utilities
• Land Grant/Extension Universities

Activities:
• General awareness events
• Fleet workshops
• Technical assistance
  – Vehicle replacement consultations
  – Infrastructure assessments
  – Utilization benchmarking
Outreach: Industry Support

Industry partnerships:
• OEMs
• Upfitters/aftermarket providers
• Trade press
• Equipment dealers

Activities:
• Trade shows participation
• Case studies in trade press
  – Show real-world, practical implementation
• Sales staff education
Outreach: Non-attainment and Underserved Areas

Target Audience Examples:
• Disadvantaged communities (DACs)
• EPA Non-Attainment/Maintenance Areas

Activities:
• Establish eligible geofences/ZIPs/Census Tracts for tracking purposes
• Integrate messaging into community based organizations and other agencies though workshops and events
  – NGOs
  – Utility Programs
  – COGs/Air Districts
Incentive Programs: Key Components

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• Education and Outreach
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Program Surveys

- Targeted technical assistance
- Training support
- Benchmarking resources
CSE Transparency Tools

- Public, online, interactive dashboards facilitate informed action
  - Data characterizing >175,000 EVs and consumers
  - ~$380M in incentives processed
  - >19,000 survey responses statistically represent >90,000 consumers
Incentives Dashboard

Results by:

• Rebated vehicles and funds:
  – Life-of-project (grey headings) vs. filtered selection (black)

• Rebated vehicles:
  – By month
  – By vehicle category
  • Filtered totals and %

• Downloads:
  – Images
  – Raw data (incl. Census tract)

[cleanvehiclerebate.org/eng/rebate-statistics]
Fleet Survey Dashboard

- All incentive recipients invited to take a survey
- +35,000 CVRP responses
- Topics include:
  - Demographics
  - Information channels
  - Purchase motivations and enablers
  - Dealership experience
  - Utility rate awareness
- Filter by: vehicle category, buy/lease, make, region
- Survey results weighted to program participants by county, model, and purchase/lease

[cleanvehiclerebate.org/eng/survey-dashboard]
Questions?

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CSE Incentive Program Evaluation Examples

- **Target Consumer Segments:** Converts, Incentive Essentials  
  *(BECC pres 2016 and forthcoming Jan 2017 paper)*
- **Progress in Disadvantaged Communities** *(AEA pres 2016)*
- **Information Channels** *(EV Roadmap pres, 2016)*
  - Exposure & importance of various channels, consumer time spent researching various topics
- **Infographics**
  - Overall *(CVRP infographic, 2016)*
  - Disadvantaged Communities *(CVRP infographic, 2017)*
- **Characterization of Participating Vehicles and Consumers** *(CVRP research workshop pres, 2015)*
- **Program Participation by Vehicle Type and County** *(CVRP brief 2015)*
- **Dealer services:** Importance and Prevalence *(EF pres 2015)*
  Also:
- **Evaluation of the CT Dealer Incentive** *(AEA pres, 2016)*