State Considerations for the VW Settlement
Opportunity: $5 Billion for Vehicles and Infrastructure
February 23, 2017
Agenda for State Considerations for the VW Settlement Opportunity:
$5 Billion for Vehicles and Infrastructure—February 23, 2017

2:00-2:02  Rick Sapienza, NC State Clean Energy Technology Center—Welcome
2:02-2:15  Rick Sapienza, NC State Clean Energy Technology Center—VW Settlement Overview
2:15-2:30  Cassie Powers, NASEO—NASEO Perspective, Resources and Early Actions
2:30-2:45  Mary Sullivan Douglas, NACAA—Air Agency Perspective and Resources
2:45-3:00  Tom Brotherton, CALSTART—Voucher Programs
3:00-3:15  Colin Santulli, Center for Sustainable Energy—Incentive Administration Best Practices
3:15-3:30  Questions and Answers
Format

- Q & A at end
- Submit questions to “Panelists”
- Scheduled for 2p-3p
- Can go beyond, if interest remains
Presenter

Rick Sapienza

- Clean Transportation Program Manager NC Clean Energy Technology Center at NC State University
- 5 years with NC State
- 30 years experience including General Motors, Draper Lab and Great Lakes Pulp & Fibre in both engineering and business management roles

resapienza@ncsu.edu
Phone: 919-515-2788
VW Settlement Overview

Rick Sapienza
NC Clean Energy Technology Center
Clean Transportation Program
February 23, 2017
Overview

- $14.7 billion settlement covering 2.0L engines—475,000 US vehicles.
  - Consumers, ZEV Investment Program, and Mitigation
- $1.0 billion settlement covering 3.0L engines—85,000 US vehicles.
  - $225 million to mitigation
- $1.21 billion dealer settlement—652 dealers
- $4.3 billion fine and criminal charges (up to $34.1 billion)
- Up to 11 million vehicles worldwide
- EU litigation for stricter penalties to deter emissions cheating
VW Settlement Outline

- $15.7 Billion Civil Settlement
  - Consumer Compensation
  - Zero Emission Vehicle (ZEV) Investment Program
  - Environmental Mitigation Trust

- Possible Timeline
- Considerations
- Resources
Approved Settlement Breakdown

- $3.0 Billion Environmental Mitigation Trust
- $2.0 Billion Zero Emissions Vehicle Investment
- $10.8 Billion Vehicle Buyback & Modifications
ZEV Investment

- VW will spend $2 billion over 10 years on actions that will support increased use of zero emission vehicle (ZEV) technology in the U.S.
  - $1.2 billion will be used in areas of the U.S. other than California
  - $800 million in be used in California
ZEV Investment

- VW will develop a National ZEV and CA ZEV Investment Plan (4x30 month intervals)
- Approved by EPA and CARB
- Eligible expenses include:
  - Design/planning, construction/installation, and operation and maintenance of ZEV infrastructure (EV charging and/or hydrogen fueling)
  - Programs or actions to increase public exposure or access to ZEVs
  - Brand-neutral media activities that will provide education and raise awareness on ZEVs
Electrify America LLC

- VW has established Electrify America LLC for ZEV Plan
- Proposed 1st Round Plan Submission Feb. 22, 2017:
  1. Install EV charging infrastructure in 15 target cities across the US (300+) and DC fast charger nationwide network (200).
  2. Increase awareness and foster education.
  3. Green/smart city initiative, to be named CA city as pilot.
- Future rounds to consider hydrogen fueling stations or national ZEV car-sharing or ZEV ride-sharing services.
Environmental Mitigation Trust

- $3.0 Billion - The Trust will support projects that reduce NOx emissions where the VW vehicles were, are, or will be operated
  - Based on the number of impacted VW vehicles in their jurisdictions
## Environmental Mitigation Trust Allocations

<table>
<thead>
<tr>
<th>Eligible Beneficiary</th>
<th>Initial Allocations</th>
<th>Eligible Beneficiary</th>
<th>Initial Allocations</th>
<th>Eligible Beneficiary</th>
<th>Initial Allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td>$7,500,000</td>
<td>Louisiana</td>
<td>$18,009,993</td>
<td>Colorado</td>
<td>$61,307,576</td>
</tr>
<tr>
<td>North Dakota</td>
<td>$7,500,000</td>
<td>Kentucky</td>
<td>$19,048,080</td>
<td>Wisconsin</td>
<td>$63,554,019</td>
</tr>
<tr>
<td>Hawaii</td>
<td>$7,500,000</td>
<td>Oklahoma</td>
<td>$19,086,528</td>
<td>New Jersey</td>
<td>$65,328,105</td>
</tr>
<tr>
<td>South Dakota</td>
<td>$7,500,000</td>
<td>Iowa</td>
<td>$20,179,540</td>
<td>Oregon</td>
<td>$68,239,143</td>
</tr>
<tr>
<td>Alaska</td>
<td>$7,500,000</td>
<td>Maine</td>
<td>$20,256,436</td>
<td>Massachusetts</td>
<td>$69,074,007</td>
</tr>
<tr>
<td>Wyoming</td>
<td>$7,500,000</td>
<td>Nevada</td>
<td>$22,255,715</td>
<td>Maryland</td>
<td>$71,045,824</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>$7,500,000</td>
<td>Alabama</td>
<td>$24,084,726</td>
<td>Ohio</td>
<td>$71,419,316</td>
</tr>
<tr>
<td>Delaware</td>
<td>$9,051,682</td>
<td>New Hampshire</td>
<td>$29,544,297</td>
<td>North Carolina</td>
<td>$87,177,373</td>
</tr>
<tr>
<td>Mississippi</td>
<td>$9,249,413</td>
<td>South Carolina</td>
<td>$21,636,950</td>
<td>Virginia</td>
<td>$87,589,313</td>
</tr>
<tr>
<td>West Virginia</td>
<td>$11,506,842</td>
<td>Utah</td>
<td>$32,356,471</td>
<td>Illinois</td>
<td>$97,701,053</td>
</tr>
<tr>
<td>Nebraska</td>
<td>$11,528,812</td>
<td>Indiana</td>
<td>$38,920,039</td>
<td>Washington</td>
<td>$103,957,041</td>
</tr>
<tr>
<td>Montana</td>
<td>$11,600,215</td>
<td>Missouri</td>
<td>$39,084,815</td>
<td>Pennsylvania</td>
<td>$110,740,310</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>$13,495,136</td>
<td>Tennessee</td>
<td>$42,407,793</td>
<td>New York</td>
<td>$117,402,744</td>
</tr>
<tr>
<td>Arkansas</td>
<td>$13,951,016</td>
<td>Minnesota</td>
<td>$43,638,119</td>
<td>Florida</td>
<td>$152,379,150</td>
</tr>
<tr>
<td>Kansas</td>
<td>$14,791,372</td>
<td>Connecticut</td>
<td>$51,635,237</td>
<td>Texas</td>
<td>$191,941,816</td>
</tr>
<tr>
<td>Idaho</td>
<td>$16,246,892</td>
<td>Arizona</td>
<td>$53,013,861</td>
<td>California</td>
<td>$381,280,175</td>
</tr>
<tr>
<td>New Mexico</td>
<td>$16,900,502</td>
<td>Georgia</td>
<td>$58,105,433</td>
<td>Tribal Subaccount</td>
<td>$49,652,857</td>
</tr>
<tr>
<td>Vermont</td>
<td>$17,801,277</td>
<td>Michigan</td>
<td>$60,329,906</td>
<td>Trust Cost Subaccount</td>
<td>$27,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tribal Cost Subaccount</td>
<td>$993,057</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,700,000,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Mitigation Trust

- Each eligible beneficiary must file a single Certification Form no later than 60 days after the Trust Effective Date
  - Each form must include a designation of Lead Agency, certified by the Office of the Governor, indicating which agency, department, office or division will have the delegated authority to act on behalf of each state
  - Form is in Appendix D of Settlement Document
- 120 days from Trust Effective Date Trustee shall file list identifying certification requests with no objections -> deemed Beneficiary
Environmental Mitigation Trust

- After being deemed a Beneficiary, a “Beneficiary Mitigation Plan” needs to be submitted within 90 days.

- The Beneficiary Mitigation Plan must address:
  - Overall goal for use of funds
  - Categories of eligible mitigation actions the beneficiary anticipates are appropriate
  - Description for how the beneficiary will consider the potential beneficial impact of the selected eligible mitigation actions on air quality in areas that bear a disproportionate share of the air pollution burden in the state (NOx is the primary stated emission of concern)
  - Description of the expected ranges of emissions benefits the Beneficiary estimates would result from implementation of the plan
Environmental Mitigation Trust

- Possible Eligible Vehicle Classes/Equipment:
  - Class 8 Local Freight Trucks, Port Drayage Trucks
  - Class 4-8 School, Shuttle or Transit Bus
  - Freight Switchers
  - Ferries/Tugboats (marine)
  - Class 4-7 Local Freight Trucks (Medium Trucks)
  - Airport Ground Support Equipment
  - Forklifts
  - Ocean Going Vessels Shorepower
  - LD ZEV Supply Equipment
    - L1, L2 or fast charging equipment
    - LD hydrogen fuel cell vehicle supply equipment

Eligible vehicles/engines must be scrapped. Repower or replacement with new diesel, alternative fuel or electric option.
Environmental Mitigation Trust

- Varying percentages of funding:
  - Vehicles: government up to 100%, non-government up to 25-75%
  - ZEV infrastructure: up to 15% of allocation

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Project That Can Be Funded Through Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVSE - publicly available at government owned property</td>
<td>100%</td>
</tr>
<tr>
<td>EVSE - publicly available at non-government owned property</td>
<td>80%</td>
</tr>
<tr>
<td>EVSE - at workplace but not available to general public</td>
<td>60%</td>
</tr>
<tr>
<td>EVSE - at multi-unit dwelling but not available to general public</td>
<td>60%</td>
</tr>
<tr>
<td>FCVSE - publicly available and able to dispense at least 250kg/day</td>
<td>33%</td>
</tr>
<tr>
<td>FCVSE - publicly available and able to dispense at least 100kg/day</td>
<td>25%</td>
</tr>
</tbody>
</table>
Diesel Emission Reduction Act (DERA) Option

- Trust Funds used for their non-federal match or overmatch for DERA
  - Example A: If a state’s DERA allocation in FY2017 is $200,000 under the DERA Clean Diesel State Grant Program, the state may use $200,000 in trust funds as the 1:1 match. Then, the state will receive its bonus DERA funds equal to 50% of the base amount ($100,000), making $500,000 the total amount state receives—$300,000 from DERA & $200,000 from the trust.

- Allows use of Trust Funds for actions not specified in the settlement, but otherwise eligible under DERA
  - Example B: If a state’s DERA allocation in FY2017 is $200,000 under the DERA Clean Diesel State Grant Program, the state may use a larger amount—$1 million in this example—in trust funds to overmatch the 1:1 ratio. The state receives its bonus DERA amount of $100,000 and thus the total amount for the DERA Clean Diesel State Grant Program for FY2017 would be $1.3 million—$300,000 from DERA and $1 million from the trust

## Summary: Qualifying Mitigation Actions

<table>
<thead>
<tr>
<th>Qualified Mitigation Actions, Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)</th>
<th>Actions / Fuels</th>
<th>Target Years * 2000 or older</th>
<th>Funding Percentages Non-Government 40% / 25% / 75%</th>
<th>Funding Percentages Government 100%</th>
<th>Scrapping Required for Replacements Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 4-7 Local Freight Trucks (Medium Trucks)</td>
<td>Repower, Replace</td>
<td>2002 – 2006</td>
<td>40% / 25% / 75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Class 8 Local Freight Trucks (Eligible Large Trucks)</td>
<td>Repower, Replace</td>
<td>1997 – 2006 1992 - 2006</td>
<td>40% / 25% / 75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Class 8 Port Drayage Trucks (Eligible Large Trucks)</td>
<td>Repower, Replace</td>
<td>Pre-Tier 1</td>
<td>40% / 25% / 75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Freight Switchers</td>
<td>Repower, Replace</td>
<td>Unreg, Tier 1 or Tier 2 engines</td>
<td>40% / 75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Femes / Tugs</td>
<td>Repower,</td>
<td>NA</td>
<td>NA</td>
<td>25%</td>
<td>NA</td>
</tr>
<tr>
<td>Ocean Going Vessels Shorepower</td>
<td>NA</td>
<td>NA</td>
<td>100%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Airport Ground Service Equipment</td>
<td>Repower, Replace</td>
<td>Tier 0, 1 or 2 diesel, gasoline (could not read the printout)</td>
<td>75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Forklifts</td>
<td>Repower, Replace</td>
<td>8,001 lb. lift cap</td>
<td>75%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>LDV Zero Emission Supply Equipment (up to 15% of Trust Fund Allocation)</td>
<td>Repower, Replace</td>
<td>NA</td>
<td>25% - 80%</td>
<td>60 - 100%</td>
<td>NA</td>
</tr>
<tr>
<td>Diesel Emission Reduction Match Option</td>
<td>Repower, Replace</td>
<td>DERA details to be filed in later – see EPA DERA for more info.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Accessing and Spending Allocations

- Beneficiaries have up to 10 years to spend 80% of their allocation, and up to 15 years to spend 100% of their allocation
  - Beneficiaries may request up to one-third of its allocation during the first year, and up to two-thirds of its allocation during the first two years
- Beneficiaries can submit requests for Eligible Mitigation Action funding at any time
  - Funding must be approved, approved with modification, or denied within 60 days
- Beneficiaries may use its DERA proposal as its funding requests for Actions that are funded through the DERA option
- Two or more beneficiaries may submit a joint request for Eligible Mitigation Action funds
- Beneficiaries must submit a semiannual report
# Updated Timeline Steps

<table>
<thead>
<tr>
<th>Timing</th>
<th>Estimated Date</th>
<th>Consent Decree Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement Effective Date (SED)</td>
<td>October 25, 2016</td>
<td>Consent Decree entered into court</td>
</tr>
<tr>
<td>SED + 30 Days</td>
<td>November 24, 2016</td>
<td>Trustee candidates submitted</td>
</tr>
<tr>
<td>60-90 days after the SED</td>
<td></td>
<td>Selection of Trustee</td>
</tr>
<tr>
<td>Trust Effective Date (TED)</td>
<td></td>
<td>Finalization of Environmental Trust Agreement</td>
</tr>
<tr>
<td>TED + 15 days</td>
<td></td>
<td>Establishment of Environmental Trust</td>
</tr>
<tr>
<td>TED + 60 days</td>
<td></td>
<td>Trustee established trust account</td>
</tr>
<tr>
<td>TED + 120 days (note: proposed consent</td>
<td></td>
<td>Governmental entities file Certification Forms</td>
</tr>
<tr>
<td>decree includes the phrase “no later</td>
<td></td>
<td>Trustee approves /denies Beneficiary status</td>
</tr>
<tr>
<td>than,” so the Trustee may grant</td>
<td></td>
<td>Beneficiary Mitigation Plan submitted</td>
</tr>
<tr>
<td>Beneficiary status sooner than 120 days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TED + 210 days (not later than 90 days after</td>
<td></td>
<td></td>
</tr>
<tr>
<td>being deemed a Beneficiary)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prepared by NASEO
Considerations

Get involved—Have a voice

- Input to states:
  - RFI, webinars and public forums
- Contact/work with your Governor’s Office, legislators and other relevant state or regional organizations w/ clean transportation expertise, such as Energy Offices, DEQ, Air Quality, NC CETC & Clean Cities
Considerations

Maximize $$ to projects--cooperation & collaboration

- Efficiencies in administration
- Efficiencies in awareness, education and outreach—consistent message
- Group buying opportunities
  - Nissan
  - Charge Point
  - GE
  - NGA
Reference Resources

- NASEO website: http://www.naseo.org/volkswagen-settlement
- NACAA repository website: http://4cleanair.org/Volkswagen_Settlement_Information
- EPA website VW Clean Air Act partial settlement website: https://www.epa.gov/enforcement/volkswagen-clean-air-act-partial-settlement
- Electrify America website: https://www.electrifyamerica.com/
- EPA DERA & VW information: https://www.epa.gov/cleandiesel/volkswagen-vw-settlement-dera-option
Cassie Powers

- Senior Program Director for NASEO, leading transportation and State Energy Planning programs
- Prior work as an EV Program Coordinator with Georgetown Climate Center
- Master's Degree in Urban and Environmental Planning from the University of Virginia, and a Bachelor of Arts from the College of William and Mary

CPowers@naseo.org
Phone: 703-299-8800
Volkswagen Settlement:
Resources and Early Actions from States

Cassie Powers
National Association of State Energy Officials
February 23, 2017
About NASEO

- Formed by the states in 1986
- Membership includes the 56 Governor-designated energy policy officials from each state and territory, as well as private sector affiliates
- Facilitates peer learning across states to improve the effectiveness of energy programs and policies
- Serves as a resource for and about State and Territory Energy Offices
- Advocates on behalf of the State Energy Offices with Congress, federal agencies, and private-sector organizations
- Works through topical committees to facilitate peer learning across states to improve the effectiveness of energy policies and programs
- Visit www.naseo.org for more information
State Energy Offices and Alternative Fuels

- Set transportation energy goals through Comprehensive Energy Plans
- Advise Governors on alternative fuel vehicle policies
- Strong history of electric vehicle and alternative fuel vehicle program implementation
- Play lead or supporting role in Appendix D implementation
Resources – NASEO VW Website
www.naseo.org/volkswagen-settlement

- Timeline for Environmental Mitigation Trust
- PowerPoint presentation with information on the settlement
- Links to relevant Appendix D resources (e.g., links to final consent decree, EPA FAQ, etc.)

### VW Environmental Mitigation Trust Timing

<table>
<thead>
<tr>
<th>Timing</th>
<th>Estimated Date</th>
<th>Consent Decree Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement Effective Date (SED)</td>
<td>October 25, 2016</td>
<td>Consent Decree entered into court</td>
</tr>
<tr>
<td>SED + 30 Days</td>
<td>November 24, 2016</td>
<td>Trustee candidates submitted</td>
</tr>
<tr>
<td>Trust Effective Date (TED)</td>
<td>Spring-Summer, 2017</td>
<td>Establishment of Environmental Trust</td>
</tr>
<tr>
<td>TED + 15 days</td>
<td></td>
<td>Trustee established trust account</td>
</tr>
<tr>
<td>TED + 60 days</td>
<td></td>
<td>Governmental entities file Certification Forms</td>
</tr>
<tr>
<td>TED + 120 days (note: proposed consent decree includes the phrase “no later than,” so the Trustee may grant Beneficiary status sooner than 120 days)</td>
<td></td>
<td>Trustee approves /denies Beneficiary status</td>
</tr>
<tr>
<td>TED + 210 days (not later than 90 days after being deemed a Beneficiary)</td>
<td></td>
<td>Beneficiary Mitigation Plan submitted</td>
</tr>
</tbody>
</table>
Resources – Beneficiary Mitigation Plan Toolkit

- Upcoming resource from NASEO that provides:
  - Settlement overview and basic requirements for Beneficiaries
  - Summary of repower and replacement options
  - Overview of emissions quantification tools (e.g., AFLEET; Diesel Emissions Quantifier, etc.)
  - Breakdown of Eligible Mitigation Actions, including expected emissions reductions from range of fuels and technologies
  - Case studies for each Eligible Mitigation Action
  - Links to additional resources
Early Stakeholder Engagement from States: Tennessee

- Early actions include:
  - Launched website with basic info on settlement
  - Launched web-based form for stakeholders to submit comments on how state can use Environmental Mitigation Trust funds
  - Will hold public listening sessions throughout state
Early Stakeholder Engagement from States: Virginia

- Early actions include:
  - Developed draft Beneficiary Mitigation Plan
  - Held public comment period from November-December, 2017
  - Launched “Town Hall” email notifications that stakeholders can sign-up for to receive updates on meetings and actions related to plan
- [http://www.deq.virginia.gov/Programs/Air/VVMitigation.aspx](http://www.deq.virginia.gov/Programs/Air/VVMitigation.aspx)
Early Stakeholder Engagement from States: Michigan

- Early actions include:
  - RFI for ZEV Investment
  - ZEV Investment Plan submitted to Electrify America
    - [http://www.michigan.gov/energy](http://www.michigan.gov/energy)
  - RFI for Environmental Mitigation Trust (closes March 3)
    - [http://www.deq.state.mi.us/forms/RFI-VWBMP.html](http://www.deq.state.mi.us/forms/RFI-VWBMP.html)
Thank You

Cassie Powers
cpowers@naseo.org

www.naseo.org/volkswagen-settlement
State Considerations for the VW Settlement Opportunity
NC Clean Energy Technology Center Webinar

Mary Sullivan Douglas
NACAA
February 23, 2017
Presenter

Mary Sullivan Douglas

- Senior Staff Associate for NACAA, lead staff person for issues related to hazardous air pollutants, enforcement, and appropriations and air quality agency funding
- Prior work in the office of Rep. Robert Roe of New Jersey
- Bachelor of Arts degree in Government from Georgetown University

mdouglas@4cleanair.org
Phone: 202-624-7864
About the National Association of Clean Air Agencies (NACAA)

- National association of state and local air pollution control agencies in 45 states and territories
- Headquarters office located in Washington, D.C.
- Our mission is to serve as a liaison between our members and EPA, Congress and other important stakeholders.
- Primary focus has been on implementation of the federal Clean Air Act.
NACAA Members Were Very Concerned About VW Violations

- NACAA members responsible under the Clean Air Act for meeting the NAAQS for NO$_2$ (the indicator for NO$_x$).
- State and local air agencies already working very hard to address NO$_x$.
- VW violations could directly interfere with state and local efforts to protect the public’s health and welfare.
- NACAA pleased that consent decree included significant resources for states, earmarked directly for NO$_x$ emission mitigation activities.
NACAA Recommendations in Two Documents

- NACAA outlined recommendations in two documents:
Role of Local Air Quality Agencies

- NACAA members include local air pollution control agencies.
- Most local agencies are highly sophisticated, effective and experienced.
- Local air agencies may play a key role in planning NO\textsubscript{x}-reduction strategies.
- NACAA recommended that local agencies have a mechanism for obtaining Mitigation Trust Funds directly.
- Final Consent Decree did not provide for local agencies’ direct application for funds, so they must work with states.
- NACAA recommends that state and local air agencies work together and that local agencies be included in mitigation programs.
NACAA Repository of State and Local Agency Information

- NACAA developed online repository for state and local info and links on VW Mitigation Trust Fund activities.
- Contains state/local agency webpages, public outreach materials, drafts of documents, etc.
- Will be updated regularly with additional information.
- http://4cleanair.org/Volkswagen_Settlement_Information
## State and Local Agency Information (February 14, 2017)

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>LINKS</th>
<th>OTHER INFORMATION</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Click here</td>
<td>Basic information on the settlement and solicitation of comments on the development of the mitigation plan</td>
<td>Dale Hurst (334) 271-7882 <a href="http://www.adem.alabama.gov/">http://www.adem.alabama.gov/</a></td>
</tr>
<tr>
<td></td>
<td>Click here</td>
<td>AG’s statement when the settlement was initially announced (June 2016)</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>Click here</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td>Click here</td>
<td>Arkansas has established an email list for updates on state activities regarding the</td>
<td>Tricia Jackson Treece (501) 682-0055 <a href="mailto:treecep@adeq.state.ar.us">treecep@adeq.state.ar.us</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What NACAA Repository Shows

- 17 agencies have provided info or websites (AL, AZ, AR, CO, CT, IA, MN, NV, NH, OH, OR, RI, SC, TN, VA, WA, Puget Sound, WA).
- State websites provide general background info, FAQs, links, etc.
- Several include step-by-step timelines for action (AZ, CO, MN, NV, OH, OR, RI, SC).
- Several include details about public comment processes (AZ, CO, CT, MN, NH, OH, TX, VA, Puget Sound).
What NACAA Repository Shows (continued)

- Several have a mechanism for the public to join an email list serve for additional info (AR, CT, MN, NV, OR, VA, WA).
- One state includes maps of possible eligible counties (OH).
- One state provides its proposed mitigation plan (VA).
- In many cases, the lead agencies have not yet been identified.
- Local agency information will also be included (Puget Sound, WA).
Contact Info

Mary Sullivan Douglas
Senior Staff Associate
NACAA
444 North Capitol Street, NW
Washington, DC 20001
E-mail: mdouglas@4cleanair.org
Phone: (202) 624-7864
Website: www.4cleanair.org
Presenter

Tom Brotherton

• Based in CALSTART’s CO office, oversees their vehicle incentive programs for in CA, NY and Chicago and is involved in efforts to reduce vehicle emissions and petroleum use

• Previous Deputy Director of Colorado’s Energy Office and taught Architectural Engineering at the University of Colorado-Boulder

• BSE in Civil Engineering from Princeton, and a MS in Civil Engineering from University of Colorado. a registered PE in CO

*tbrotherton@calstart.org
Phone: 303-825-7550*
CALSTART
Voucher Incentive Programs

nyserda

NEW YORK TRUCK
Voucher Incentive Program®

drive clean
CHICAGO
Why Incentives?

- Help build markets sooner
- Ensure robust market in next decade
- Support growth of supply chain
- Offset trepidation with new technology
Why Voucher Incentives?

- Point of purchase discount
  - *Fleets get immediate discount*
- Dealers learn voucher system
  - *Fewer complications for fleets*
- Set-aside funding for each voucher
  - *Price certainty at time of request*
Program Flexibility

- Can use any vehicle technology
- New vehicles or retrofits
- Live funding status
- Web-based voucher processing center
- Database storage of documentation
- Can use multiple funding sources
Sample Programs

- Electric, hybrid, fuel cell, natural gas
- Trucks and buses
- New vehicles and retrofits
- 7 years
- 3,000+ vouchers
### California HVIP

**Zero-Emission trucks and buses:**

<table>
<thead>
<tr>
<th>GVWR (lbs)</th>
<th>Base Vehicle Incentive</th>
<th>1 to 100 vehicles</th>
<th>101 to 200 vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside DC</td>
<td>Within DC</td>
<td></td>
</tr>
<tr>
<td>6,001 – 8,500</td>
<td>$20,000</td>
<td>$25,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>8,501 – 10,000</td>
<td>$25,000</td>
<td>$30,000</td>
<td>$18,000</td>
</tr>
<tr>
<td>10,001 – 14,000</td>
<td>$50,000</td>
<td>$55,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>14,001 – 19,500</td>
<td>$80,000</td>
<td>$90,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>19,501 – 26,000</td>
<td>$90,000</td>
<td>$100,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>&gt; 26,000</td>
<td>$95,000</td>
<td>$110,000</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

**Hybrid trucks and buses:**

<table>
<thead>
<tr>
<th>GVWR (lbs)</th>
<th>Base Vehicle Incentive</th>
<th>1 to 100 vehicles</th>
<th>101 to 200 vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,001 – 8,500 (plug-in hybrids only)</td>
<td>$8,000</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>8,501 – 10,000 (plug-in hybrids only)</td>
<td>$10,000</td>
<td>$8,000</td>
<td></td>
</tr>
<tr>
<td>10,001 – 19,500</td>
<td>$15,000</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>19,501 – 33,000</td>
<td>$20,000</td>
<td>$12,000</td>
<td></td>
</tr>
<tr>
<td>33,001 – 58,000</td>
<td>$25,000</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>&gt; 38,000</td>
<td>$30,000</td>
<td>$20,000</td>
<td></td>
</tr>
</tbody>
</table>

**Low-NOx NG**

$8,500 to $15,000
New York State Electric Truck Voucher Incentive Program
Eligible Counties

[Map of New York State highlighting eligible counties]

nyserda | NEW YORK TRUCK Voucher Incentive Program®
NYT-VIP *E-trucks and E-buses*

- **For non-attainment counties in NY State**

**Zero-Emission Trucks and Buses**

- Voucher = 80% of incremental cost with caps based on GVWR

<table>
<thead>
<tr>
<th>GVWR (lbs.)</th>
<th>All-Electric Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,001 - 14,000</td>
<td>$60,000 Cap</td>
</tr>
<tr>
<td>14,001 - 19,500</td>
<td>$90,000 Cap</td>
</tr>
<tr>
<td>19,501 - 26,000</td>
<td>$100,000 Cap</td>
</tr>
<tr>
<td>26,001 - 33,000</td>
<td>$110,000 Cap</td>
</tr>
<tr>
<td>33,001 - 38,000</td>
<td>$120,000 Cap</td>
</tr>
<tr>
<td>&gt; 38,000</td>
<td>$150,000 Cap</td>
</tr>
</tbody>
</table>
NY City AFV Fund

- For fleets in New York City
- Natural gas, hybrid, electric trucks + buses
- Voucher = 80% of incremental cost with caps:
  - $40,000 Cap for Hybrid Trucks and Buses
  - $50,000 Cap for CNG Trucks and Buses
  - $60,000 Cap for All-Electric Trucks and Buses (starting July 2018)
Chicago Drive Clean Truck

- Incentives for *hybrid and electric trucks and buses*
- Must garage and operate in 6-county metro Chicago area
Chicago *E-trucks and E-buses*

- Incentive = 80% of incremental Cost
- Incentive caps based on GVWR:

<table>
<thead>
<tr>
<th>GVWR (lbs)</th>
<th>Zero Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,001 - 10,000</td>
<td>Capped at $55k</td>
</tr>
<tr>
<td>10,001 - 14,000</td>
<td>Capped at $60k</td>
</tr>
<tr>
<td>14,001 - 19,500</td>
<td>Capped at $90k</td>
</tr>
<tr>
<td>19,501 - 26,000</td>
<td>Capped at $100k</td>
</tr>
<tr>
<td>26,001 - 33,000</td>
<td>Capped at $110k</td>
</tr>
<tr>
<td>33,001 - 38,000</td>
<td>Capped at $120k</td>
</tr>
<tr>
<td>&gt; 38,000</td>
<td>Capped at $150k</td>
</tr>
</tbody>
</table>
Chicago *Hybrid Trucks and Buses*

- Incentive = 80% of incremental Cost
- Incentive caps based on GVWR:

<table>
<thead>
<tr>
<th>GVWR (lbs)</th>
<th>Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,001 - 10,000</td>
<td>Capped at $20k</td>
</tr>
<tr>
<td>10,001 - 14,000</td>
<td>Capped at $30k</td>
</tr>
<tr>
<td>14,001 - 19,500</td>
<td>Capped at $40k</td>
</tr>
<tr>
<td>19,501 - 26,000</td>
<td>Capped at $50k</td>
</tr>
<tr>
<td>26,001 - 33,000</td>
<td>Capped at $60k</td>
</tr>
<tr>
<td>33,001 - 38,000</td>
<td>Capped at $80k</td>
</tr>
<tr>
<td>&gt; 38,000</td>
<td>Capped at $100k</td>
</tr>
</tbody>
</table>
Colin Santulli

- Program Manager for the Center for Sustainable Energy's Transportation Programs Group
- Oversees CSE’s clean transportation programs including four statewide incentive projects in CA, MA, CT and NY and several regional incentive projects
- Frequently advises state and local governments, utilities and other entities on the design and implementation of clean transportation programs aimed at improving air quality and reducing GHGs

Colin.Santulli@energycenter.org
Phone: 858-244-1177
Incentives Programs for AFVs & Infrastructure

Designing a Program that Works

February 23, 2017
Colin Santulli, Director, Clean Transportation Programs
Center for Sustainable Energy (CSE)

Building Performance
Clean Transportation
Distributed Generation
Energy Efficiency
Energy Storage
Renewable Energy
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
CSE has processed more than:

176,000 vehicle rebates,
$380 million in incentives

California Clean Vehicle Rebate Project

<table>
<thead>
<tr>
<th>Month</th>
<th>BEV</th>
<th>PHEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BEV | Highway capable, four-wheeled, all-battery electric vehicle
PHEV | Plug-in hybrid electric vehicle (powered by electricity and gasoline)
Key Components of Successful Incentive Programs

- Accessible Website
- Outreach & Education
- Program Transparency
- Market Surveys
Key Features of Incentive Programs
Incentive Programs: Key Components

• Program Website and 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

• Program Surveys
  – Fleet surveys (technology adoption, vocation) and vendor surveys
Incentive Programs: Key Components

- **Program Website and 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 publicly available via online tools and datasets

- **Program Surveys**
  - Fleet surveys (technology adoption, vocation) and vendor surveys
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 RE
- Kia Optima Plug-in Hybrid

View all eligible vehicles
Application: Simplicity is Key

Step 1
Dealer visits program website

Step 2
Select vehicles and fills out application

Step 3
Submit supporting documentation

Step 4
Receive check in mail
Application: Simple and Automated

- Streamlined application process
- Upload documents online or send via email
- Frequent automated email communications
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
Incentive Programs: Key Components

- **Program Website and 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

- **Program Surveys**
  - Fleet surveys (technology adoption, vocation) and vendor surveys
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
  – Life-cycling analysis
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 through workshops and events
  – NGOs
  – Utility Programs
  – COGs/Air Districts
Incentive Programs: Key Components

• Program Website and 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

• Program Surveys
  – Fleet surveys (technology adoption, vocation) and vendor surveys
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
EV Incentive Programs: Key Components

• Program Website and 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

• Program Surveys
  – Fleet surveys (technology adoption, vocation) and vendor surveys
Program Surveys

• Fleet Surveys on variety of AFV-related topics:
  – Vocation
  – Fleet satisfaction
  – Anticipated return on investment
  – Purchase motivations
  – Driving/Fueling behavior and needs

• Voluntary vs. Mandatory

• Multiple surveys vs. one-time interaction
Contact:

Colin Santulli

colin.santulli@energycenter.org

(858) 244-1195
CSE Resources
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)