

Volkswagen Settlement and Funding Opportunities for Vehicle Electrification

Cassie Powers National Association of State Energy Officials August 9, 2017

+ Agenda

Overview of NASEO and State Energy Offices

Settlement Overview

Zero Emission Vehicle (ZEV) Investment Program

- Environmental Mitigation Program
- Other Funding Mechanisms
- Examples from States



+ 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 <u>www.naseo.org</u> 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









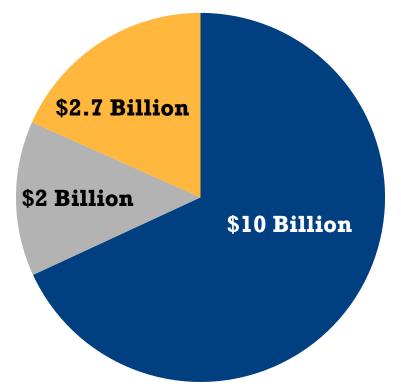
Maryland Electric Vehicle Infrastructure Council





+ Settlement Overview

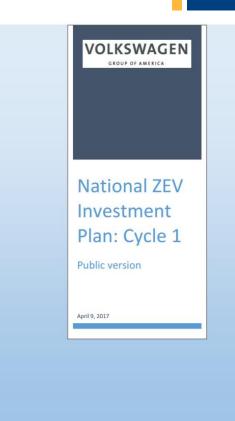
Volkswagen agreed to spend up to \$14.7 billion to settle allegations of cheating emissions. Settlement funds will be used to buyback and/or modify vehicles, and to support national- and state-level projects to reduce NOx emissions.



Settlement Breakdown

- Vehicle buyback and modification (consumers)
- Zero Emission Vehicle investment (national and CA)
- Environmental Mitigation Trust (states)

- Electrify America (EA) released their National ZEV Investment Plan in April
- The plan describes \$300 million of National ZEV Investments that will be implemented over the first 30 months. Eligible expenses include:
 - Design/planning, construction/installation, and operation and maintenance of ZEV infrastructure
 - Programs or actions to increase public exposure or access to ZEVs
 - Brand-neutral media activities that will provide education and raise awareness on ZEVs



EA has selected 11 metropolitan areas for "community charging" investments over the first 30 months

All metro areas in **Eligible metro** B Refine list based on local List of markets to prioritize scope areas using key regulatory environment, utility feedback, and potential demographic Rest of USA synergies with long-distance metrics 1. New York buildout 2. Washington DC 3. Chicago Portland Key demographics 5. Boston Population 6. Seattle Govt. incentives and 7. Philadelphia Income levels regulations All major Local awareness of ZEVs 8. Denver Educational metropolitan 9. Houston Qualitative considerations. attainment areas in the US i.e. utility feedback and 10. Miami levels (~70% of US regional importance 11. Raleigh Hybrid sales population) relative to long-distance Forecast ZEV network sales Number of 100 +25 11 metro areas

Overview of metropolitan area selection methodology

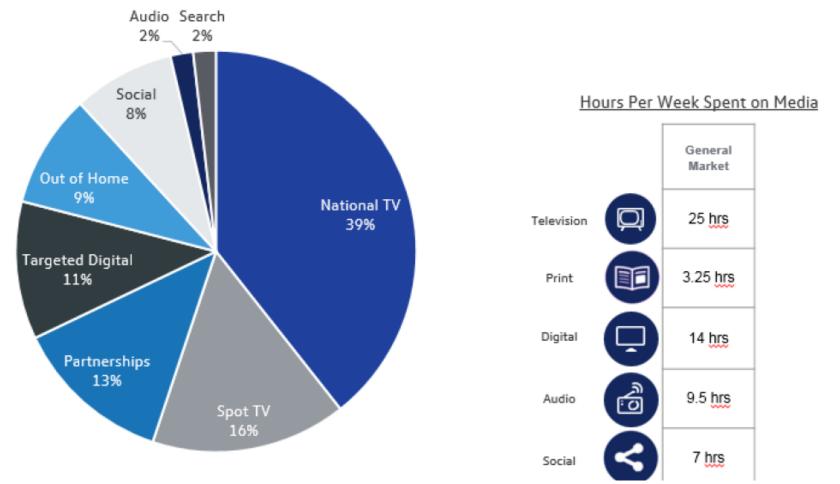
www.naseo.org/volkswagen-settlement

EA plans to install DC fast chargers at approximately 240 highway sites across 39 states in the first investment cycle.

Overview of long-distance highway and community-based local networks (excluding California)

	Long-distance highway network	Community-based metro network		
Number of stations	240*	300+		
Primary technologies	320 kW and 150 kW	150 kW, 50 kW, and L2		
Number of highways/metros	~35 highways across the US	11 metro areas across the US		
Approximate spend	\$190 million	\$40 million		

EA will invest \$25 million in "brand-neutral" education and awareness activities



+ Environmental Mitigation Trust

- \$2.7 billion will be placed in an Environmental Mitigation Trust, and will be allocated to beneficiaries (states, tribes, and certain territories) based on the number of impacted VW vehicles in their jurisdictions
- The Trust will support projects that reduce NOx emissions where the VW vehicles were, are, or will be operated

This table reflects the amount of funds included in the 2.0 liter settlement. An additional \$225 million was added to the Environmental Mitigation Trust from the 3.0 liter settlement and allocated to states using the same formula as the 2.0 liter settlement.

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

+ Environmental Mitigation Trust Updates

- Wilmington Trust announced as Environmental Mitigation Trust trustee
- Trustee can request changes to the consent decree before the trust effective date is set

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

+ Environmental Mitigation Trust: Eligible Mitigation Actions

- Eligible Mitigation Actions must result in decreased NOx emissions.
- State "beneficiaries" may invest in the following action areas:
 - Large Trucks
 - Class 8 local freight or drayage
 - Medium Trucks
 - Class 4-7 local freight trucks
 - Buses
 - Class 4-8 school buses, shuttle buses, or transit buses
 - Freight Switchers
 - Ferries/Tugs
 - Ocean Going Vessels (OGV) Shorepower
 - Airport Ground Support Equipment
 - Forklifts
 - Light Duty Zero Emission Vehicle Supply Equipment
 - Diesel Emission Reduction Act (DERA)-eligible projects







+ Eligible Mitigation Action 1 – Eligible Large Trucks

- For each action, Toolkit provides summary of eligible vehicles;
- Illustration of typical emissions impact of repower or replacement of eligible vehicles;
- Summary of the percentage of project that can be funded through the trust;
- Case study highlighting successful implementation of project.

Port Repower or Replacement Equipment – Port Drayage Truck Hybrid Drayage New Diesel CNG/LNG Plug-In Hybrid All-Electric Truck Old Vehicle Year Pre-1991 -1,282 -1,298 -1,326 -1,298-1,301 1991-1993 -1,061 -1,077-1,077-1,080-1,105 1994-1997 -1,061 -1,077 -1,077 -1,080 -1,105-856 -859 1998-2003 -840 -856 -884 2004-2006 -398 -413 -414 -417 -442 2007-2009 -221 -237 -237 -240 -265 2010+ -15 -16 -19 -44

Table 1: Typical Emissions Impact of a Port Drayage Truck per Year - NO_X pounds⁵⁷

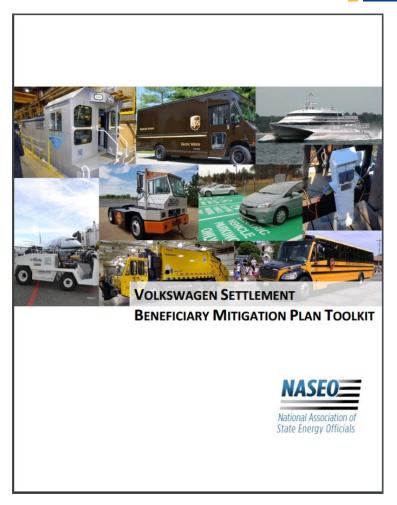
Table 2: Percentage of Project that can be funded through Trust – Class 8 Local Freight Trucks and Port Drayage Trucks

	Government Owned	Non-Government Owned
Repower with new diesel or alternate fueled engine	Up to 100%	Up to 40%
Replace with new diesel or alternate fueled vehicle	Up to 100%	Up to 25% (local freight)
		Up to 50% (drayage)
Repower with all-electric engine (includes infrastructure)	Up to 100%	Up to 75%
Purchase new all-electric vehicle (can include	Up to 100%	Up to 75%
infrastructure)		



+ NASEO's VW Beneficiary Mitigation Plan Toolkit

- Reference for state agencies
- Provides overview of the settlement
- Highlights plan considerations for beneficiaries
- Highlights repower and replacement options, and tools states can use to calculate NOx emissions
- Summarizes each eligible mitigation action and ranges of expected NOx reductions
- Showcases successful implementation of technologies
- Authored by NASEO and Vermont Energy Investment Corporation



+ Additional Funding Mechanisms

- Congestion Mitigation and Air Quality (CMAQ) Funds
- Diesel Emission Reduction Act
- Department of Transportation awards
 - E.g., TIGER
- Department of Energy awards
 - E.g., Clean Cities Program
- State-specific loan programs or other awards



+ New York

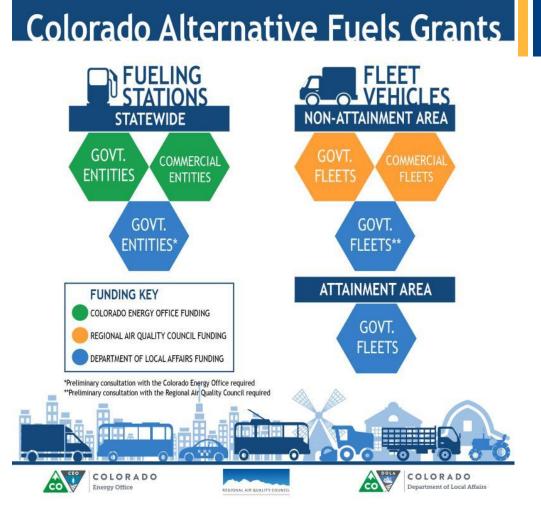
- Charge NY providing tax credits, infrastructure support, technical assistance
- Heavy Duty AFV Voucher Program
- Clean Energy Fund
 - \$7.5 million for transportation programs



+ Colorado

- AFV infrastructure grants
- CNG school bus matching grants
- Technical assistance –
 Refuel Colorado
 Fleets

WorkplaceChargingEvaluation





Thank You

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www.naseo.org/volkswagen-settlement