

Volkswagen Settlement: Overview and Opportunities

Cassie Powers National Association of State Energy Officials June 6, 2017

+ Agenda

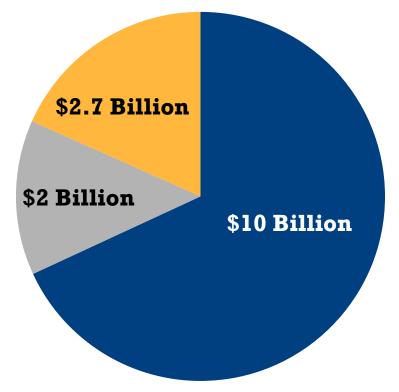
- Introduction to NASEO
- Settlement overview
- Electrify America's ZEV Investment Plan
- Environmental Mitigation Trust summary
- Opportunities and challenges for EVs under the settlement

+ 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 Officials
- Advocates on behalf of the State Energy Officials 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

+ 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)

- 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.
- VW subsidiary Electrify America (EA) released their National ZEV Investment Plan in April
- The plan describes \$300 million of National ZEV Investments (non-California) 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 List of markets to prioritize A Eligible metro B Refine list based on local areas using key regulatory environment, utility scope demographic feedback, and potential Rest of USA metrics synergies with long-distance 1. New York buildout 2. Washington DC 3. Chicago 4. Portland Key demographics 5. Boston - Population 6. Seattle Govt. incentives and 7. Philadelphia Income levels regulations All major Local awareness of ZEVs Denver Educational metropolitan Qualitative considerations. 9. Houston attainment areas in the US i.e. utility feedback and 10. Miami levels (~70% of US 11. Raleigh regional importance Hybrid sales population) relative to long-distance Forecast ZEV network sales montal Number of 100 +25 11 metro areas

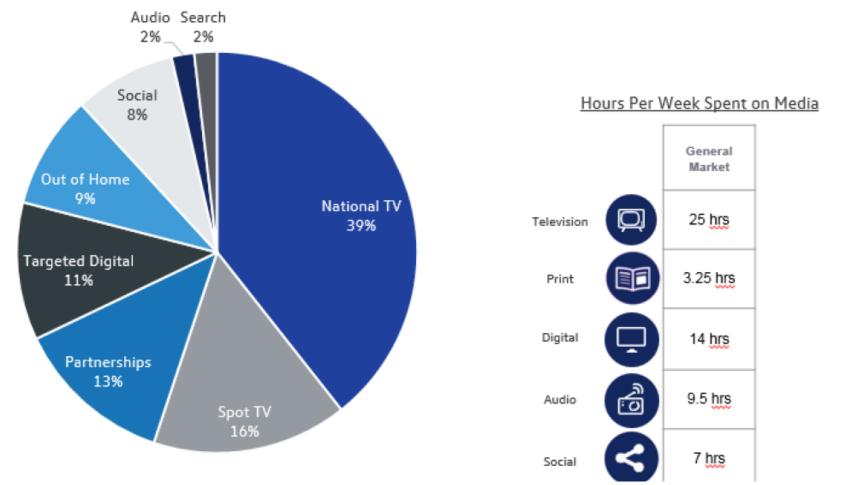
Overview of metropolitan area selection methodology

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	y Initial Allocations		Eligible Beneficiary	Initial 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: 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







+ Environmental Mitigation Trust: Eligible Mitigation Action #1

Eligible Large Trucks

- 1992-2006 model year Class 8 Local Freight or Drayage
- Eligible Large Trucks must be scrapped, and may be Repowered or replaced with any new diesel, alternative fueled, or all-electric engine

	Percentage of Project That Can Be Funded Through Trust			
	Government-Owned Eligible Large Trucks	Non-Government Owned Eligible Large Trucks		
Repower with new diesel or AFV engine	100%	40%		
Purchase new diesel or AFV vehicle	100%	25% (50% for drayage trucks)		
Repower with all-electric engine, including infrastructure	100%	75%		
Purchase new all-electric vehicle, including infrastructure	100%	75%		

+ Environmental Mitigation Trust Timeline

- 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					

+ Vehicle Electrification: Opportunities and Challenges

Opportunities

- \$2 billion for ZEV infrastructure and education/awareness activities – Electrify America
- Potentially \$438 million for light-duty ZEV infrastructure – States
- Additional funds for mediumand heavy-duty vehicle electrification – States
- Market transformation opportunity and catalyst for action

Challenges

- 320kW+ EV charging stations deployed in next few years – rate cases will be filed in most states
- VW settlement may be used as "excuse" to pull additional public or utility support for EV programs
- Public/private investment will need to be coordinated; regional cooperation encouraged



- NASEO's Volkswagen Settlement Website: <u>http://www.naseo.org/volkswagen-settlement</u>
- NASEO's Beneficiary Mitigation Plan Toolkit: <u>http://www.naseo.org/publications</u>
- National Association of Clean Air Agencies VW Repository: <u>http://4cleanair.org/Volkswagen_Settlement_Information</u>
- Alternative Fuels Data Center: <u>http://www.afdc.energy.gov/</u>
- Clean Cities Coalition Contact Directory: <u>https://cleancities.energy.gov/coalitions/contacts/</u>



Thank You

Cassie Powers cpowers@naseo.org

www.naseo.org/volkswagen-settlement