



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Policy Office



EVs Alt. Fuels, and VW

PA Alt Fuel Transportation Landscape and the Volkswagen Settlement

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Alternative Fuels Incentives

1. Volkswagen Settlement
2. AFIG Program
 - ✓ General overview
3. FAST Act Corridor Infrastructure Solicitation
 - ✓ What to know, why?
4. AFIG Rebates (Residential)
 - ✓ What to know, why?
5. Volkswagen Trust Effective, what's the plan?
6. Q & A

Everyone doesn't get one.....



VW Settlement

Federal litigation against Volkswagen concerning vehicles that violated emissions standards includes:

1. A vehicle recall/repair program to buy back or repair at least 85 percent of the unlawful vehicles.
2. “Appendix C” A commitment to invest in Zero Emission Vehicles (ZEV) and charging and refueling infrastructure (ZEV Fund).
3. “Appendix D” An Environmental Mitigation Trust Fund to be administered by states to reduce oxides of nitrogen (NOx) emissions from diesel mobile sources to mitigate the unlawful emissions. – Plus “BEV Rider”

VW Settlement

Appendix C – ZEV Fund

- **Infrastructure** – includes the design, construction/installation, operation and maintenance of infrastructure, such as Level 2 chargers at multi-unit dwellings, workplaces and public sites; direct current (DC) fast-charging facilities accessible to all vehicles utilizing nonproprietary connectors; and ZEV fueling stations.
- Brand-neutral **education and public outreach** that increases public awareness of ZEVs.
- Actions or programs to increase public exposure and/or access to ZEVs without requiring the consumer to purchase or lease a ZEV at full market value (for example, **ZEV car-sharing services; and ZEV ride-hailing services, including but not limited to ZEV autonomous vehicles**)

VW Settlement

Appendix C – ZEV Fund

- Opportunity to **competitively apply** for and receive funding from the \$1.2 Billion ZEV Investment Commitment
- Electrify America will build a nationwide network of workplace, community, and highway vehicle charging infrastructure that is convenient and reliable while contributing to a reduction in NOx emissions from vehicles.
- Volkswagen will spend \$300 million through four 30-month investment cycles

New: EA says: Infrastructure deployments begin in 2018.

- About to open up comment period – Cycle 2

VW Settlement

Appendix D - Mitigation Trust Fund

- Pennsylvania is allocated over **\$118 million** in the First and Second Partial Consent Decrees

New: Wilmington Trust is overseeing the Mitigation Trust Fund

- The Trustee, Wilmington Trust, is acting in two distinct roles: as the Trustee and as an Investment Manager.
- The Trust is a Delaware Statutory Trust and a Directed Trust.
 - Wilmington Trust doesn't check to see which projects fit within the eligibility list for projects as set forth in the Trust.
 - The States will direct the Trustee (as more of a payment agent) to release funding for the projects in reliance upon the States' certification of the projects as eligible.

VW Settlement

- Projects eligible for funding (Mitigation Trust):
 - Class 8 Local Trucks and Port Drayage Trucks
 - Class 4-8 School Bus, Shuttle Bus, or Transit Bus
 - Railroad Freight Switcher Locomotives
 - Ferries/Tugs
 - Ocean Going Vessels - Shorepower
 - Class 4-7 Local Freight Trucks**
 - Airport Ground Support Equipment
 - Forklifts
 - **Light-Duty Zero Emission Vehicle Supply Equipment (15% max)**
 - Matching funds for projects eligible under the **Diesel Emission Reduction Act**

New: Trust Effective Date Oct 2, 2017 –

- Timeline.....

EVs - Alt Fuels and VW

- How do you prepare for EV transition without just focusing on VW mitigation Trust and \$118 million and those projects listed?
 - Why not just focus on VW?
 - Why is being flexible a potential key to success?

EVs - Alt Fuels and VW

- Preparation for EV and Continued Alt. Fuel Expansion
 - What has been accomplished so far?
 - How does that influence public expectations?
 - What are our future expectations?
 - Diesel Emission Reduction Act (DERA)
 - Natural Gas Emission Development Program (NGV)
 - Alternative Fuel Incentive Grant Program (AFIG)

PA AFIG

Established in 2004 by the Alternative Fuels Incentive Act to improve Air Quality and provide economic development for new transportation technologies, by helping switch fleets to cleaner fuels that are competing in a space dominated by fossil fuels.

- \$5 million available each year for alternative energy transportation grants
- Available for school districts, local government agencies and authorities, nonprofits, and businesses
- Improving Pennsylvania's air quality and reduce consumption of traditional transportation fuels

Note: Originally created in 1992 and administered by the PEO through Chapter 72

AFIG Grant

Competitive Grant Program

- Rolling grant is open all year.
- Applications are **scored competitively**
- AFIG grants are **reimbursement** grants
- Applications are only accepted through the online DEP eGrants system.

AFIG 2016 Results

A total of 86 applications were received in the 2016 AFIG program

43 projects were awarded

- 32 vehicle projects
- 10 refueling infrastructure projects
- 1 innovative technology project
- Awards totaled \$5.9 million

Applications received in 2017 - 41 applications

VW Settlement

- Projects eligible for funding:
 - Class 8 Local Trucks and Port Drayage Trucks
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 - Ocean Going Vessels - Shorepower
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AFIG – Business

- **Businesses** purchasing natural gas and propane delivery trucks and tractor trailers for their fleets
- United Parcel Service – purchased 20 tractors and is planning on converting the rest of their fleet based at Willow Grove, PA



AFIG – Waste and Recycling

- **Trash haulers and recycling authorities** purchasing CNG collection trucks
- Centre County Recycling and Refuse Authority—
purchased 17 CNG trucks & installed a public CNG
fueling station



AFIG – School Districts



- **School Districts**
purchasing propane, compressed natural gas (CNG), or electric school buses
- Upper Mooreland School District – purchasing 41 propane school buses and installing a private fueling station

AFIG – Public Transit Authorities



- **Transit Authorities**
purchasing CNG buses
- Centre Area
Transportation Authority
(CATA)
- River Valley Transit (RVT)
- Cambria County Transit
Authority

AFIG Innovative Technology



AFIG – Fueling Stations

- Public or private CNG or propane stations
- Clean Energy, Gain Clean Fuel, American Natural, Shipley Energy, River Valley Transit, Dandy Mini Marts, Worley and Obetz



AFIG - Fueling Stations

- Electric charging stations (public or business chargers)
- The Philadelphia Parking Authority – installing an additional 4 chargers in Center City facilities and an additional 4 chargers at airport parking



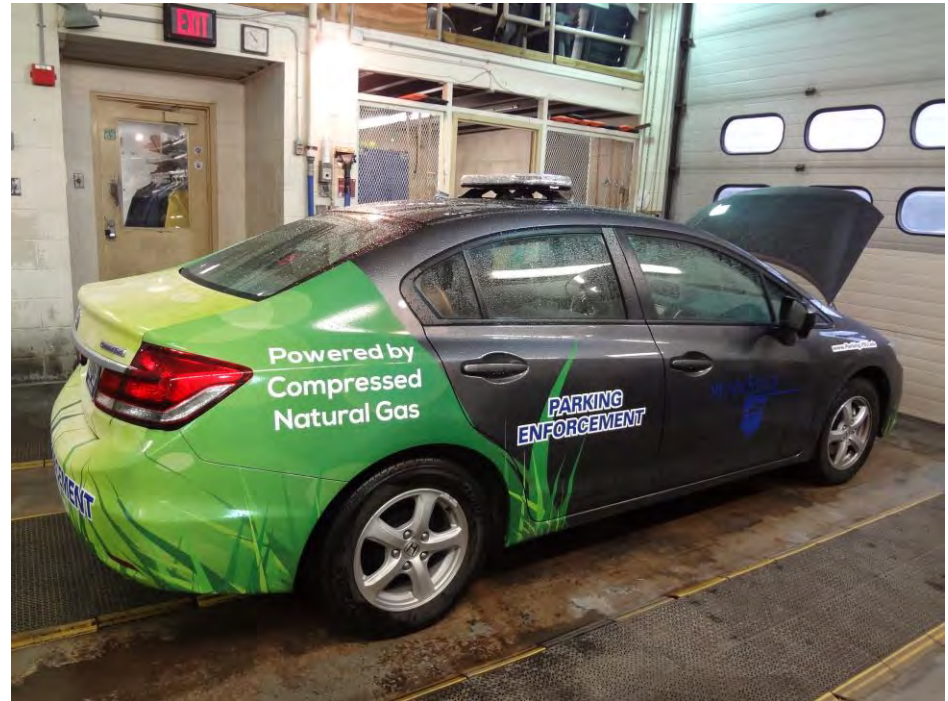
AFIG – Non Profit



- **Nonprofit agencies** making the switch to alternative fuels
- Clearfield County Agency on Aging
- More opportunities available with nonprofit sector. Help spread the word!

AFIG - Universities

- **Universities (not for profit)** purchasing electric or CNG vehicles for their fleets
- Penn State University purchased 4 CNG Honda Civics



AFIG – Local Governments

- **Local government** purchasing alternative fuel vehicles for municipal fleets
- City of Pittsburgh – purchasing 10 Nissan Leaf EVs
- Philadelphia Parking Authority – purchasing 4 Nissan Leaf EVs



AFIG – Small Business

- **Small businesses** purchasing electric vehicles for their operations
- Nelson Business Enterprises in Montgomery County
- New award to Sheeren Insurance in Armstrong County



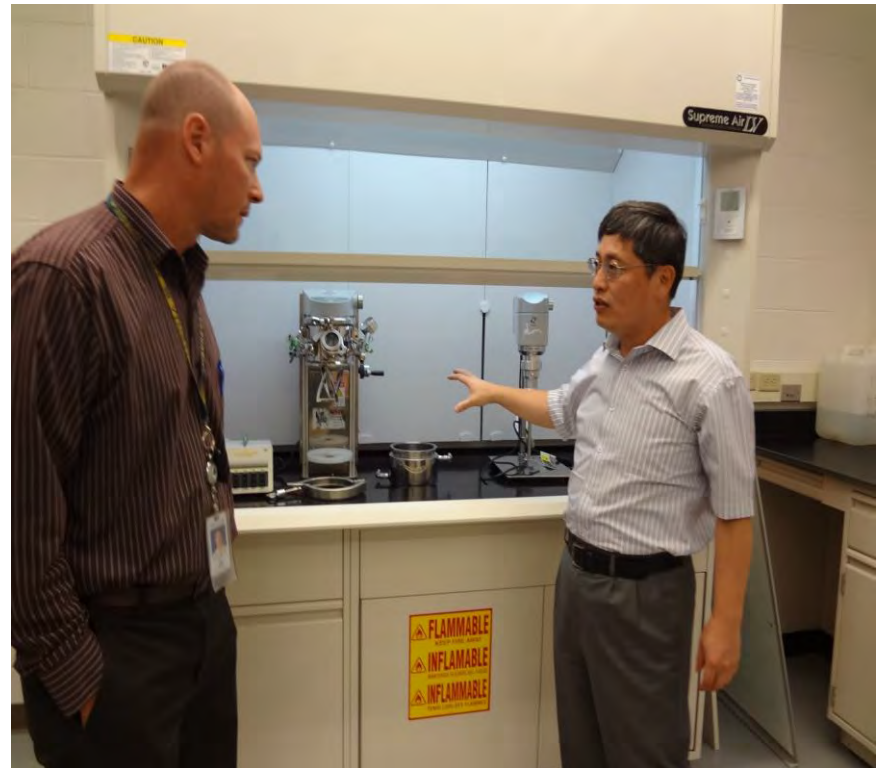
▶ AFIG – Innovative Technology



Innovative Technology

- R&D, demonstration, & pilot projects for alternative fuel technology
- Expected to directly result in commercialization
- Must be something new to PA (*innovative*)

AFIG – Innovative Technology



PSU Video: <https://youtu.be/tP7gKYRLwoU>

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PA FAST Act Corridor Solicitation

- Section 1413 of the Fixing America's Surface Transportation (FAST) Act
- The Federal Highway Administration (FHWA) seeks to create a national network of alternative fueling and charging infrastructure along National Highway System (NHS) corridors.
- In July 2016, the FHWA called on states to nominate national plug-in electric vehicle (EV) charging and hydrogen, propane and natural gas fueling corridors along major highways. The specific highway corridors were designated by Congress in the FAST Act as "Signage Ready" or "Signage Pending" based on fuel type.
- PA working to designate electric vehicle (EV) charging, hydrogen, propane, and natural gas fueling corridors.

PA FAST Act Corridor Solicitation

- Approx. \$1 million is available
- Individual grants are capped at \$500,000
- Designed to support the installation of alternative fuel infrastructure along PA's Interstate Highway Corridors
- Interstate highway systems designated as “signage ready” or “signage pending” by the Federal Highway Administration
- The exact highway segments eligible are listed in the grant guidelines. The segments vary by fuel type
- Applications may include a single station, or a series of stations within a single or multiple corridors
- Grants will provide a 50% reimbursement

PA FAST Act Corridor Solicitation

- Eligible Applicants include: Same As AFIG
- Fueling infrastructure must be publicly accessible 24/7 and feature a common payment platform and standardized nozzles
- All projects must be sited within approx. 5 miles of the eligible corridor segment. All projects must be completed within 24 months of the grant award.

Alternative Fuel Vehicle Rebates

History 2005 – 2017

2005 – 2010 – **Hybrids**, Natural Gas, Propane and Hydrogen Fuel Cell Vehicles.

– **\$5 Million** in rebates to PA residents for ~ **9,000 vehicles**

2011 – 2017 **PHEV, EV**, etc.....

– ~ **\$7 Million** in Rebates to PA Residents for **3000 + vehicles**.

March 2017: \$1,750 top tier rebate

- Transitioned to Online Applications
 - New rules **implemented in September**
 - 10 Vehicle Types (Chevy Volt & Bolt/BMW I3/Nissan Leaf/Tesla Model 3)
 - 547 rebates = \$809,000



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Alternative Fuel Vehicle Rebates

What's New

- New vehicles **Manufacturer's Suggested Retail Price of \$50,000** or less & less than 500 miles
- **Used Vehicles** (one time preowned) a **true market value of \$50,000 or less** and & 75,000 miles or less registered in Counties: Allegheny, Armstrong Bucks, Butler, Chester Delaware, Montgomery, Philadelphia, Washington and Westmoreland
- PA. applicants defined as a **low income** are eligible to receive a rebate for a used vehicle that is registered in any Pennsylvania county
 - Low income requirement: Eligible applicants must have a household income that is below 200 percent of the Federal Income Poverty level, as defined by the U.S. Department of Health and Human Services
<https://aspe.hhs.gov/poverty-guidelines>. Applicants are required to report and verify eligibility using either Federal or State tax returns

Alternative Fuel Vehicle Rebates

Rebate Amounts

Electric and Electric Hybrids

- **\$1,750 rebate** for a Plug-In Hybrid Electric Vehicle (PHEV) or Battery Electric Vehicle (EV) (battery system capacity must be equal/greater than 20 kWh)
 - Examples: Chevrolet Bolt, Nissan Leaf, Tesla Model 3
- **\$1,000 rebate** for a PHEV or EV (battery system capacity must be between 10 kWh and 20 kWh)
 - Examples: Audi A3 e-tron, Chevrolet Volt
- **\$750 rebate** for a PHEV or EV (battery system capacity less than 10 kWh)
 - Examples: Ford C Max Energi, Ford Fusion Energi

CNG and Propane

- **\$1,000 rebate** for a Natural Gas (CNG) fueled vehicle (new or conversions)
- **\$1,000 rebate** for a Propane (LPG) fueled vehicle (new or conversions)

Hydrogen

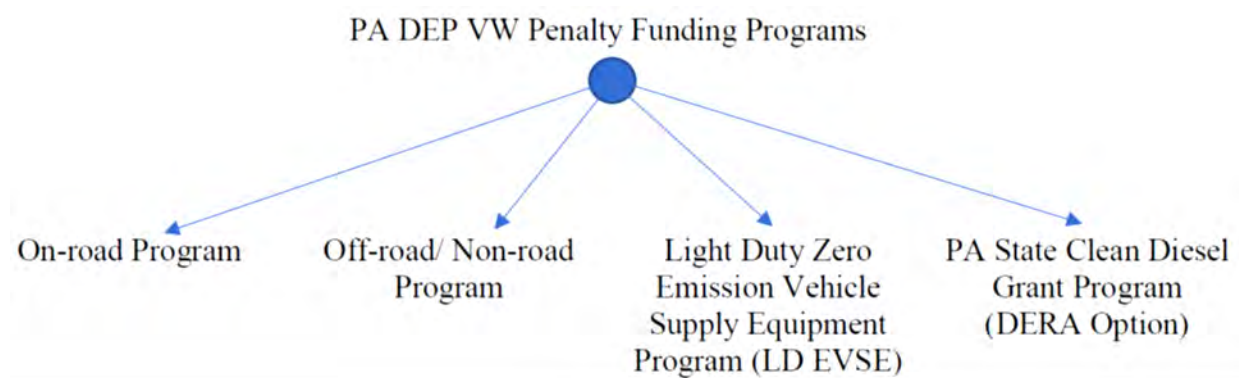
- **\$1,000 rebate** for a Hydrogen and/or Fuel Cell (FC) vehicles. (Mirai? Clarity?)

OK, What's the plan? Are you sure?

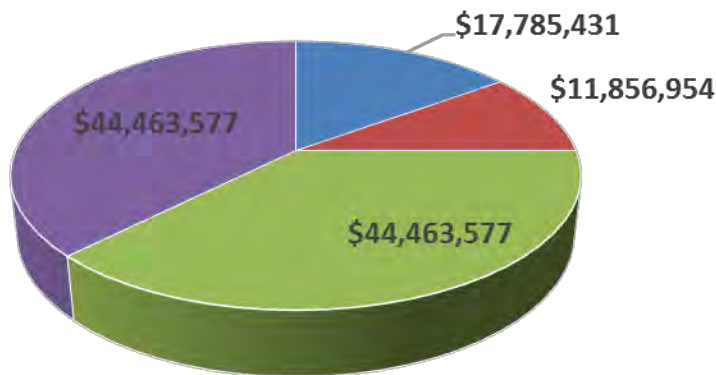


VW Settlement

- DEP Appendix D Plan which was circulated for Public Comment:

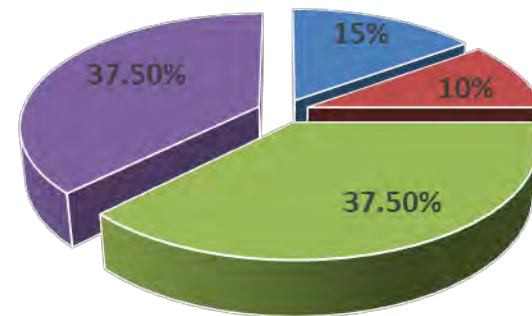


Dollar Allocations



■ LD EVSE ■ DERA ■ On Road ■ Off/Non Road

Percent Allocations



■ LD EVSE ■ DERA ■ On Road ■ Off/Non Road

VW Settlement

- Projects eligible for funding:

Category - crosswalk

- Class 8 Local Trucks and Port Drayage Trucks - **on road**
- Class 4-8 School Bus, Shuttle Bus, or Transit Bus – **on road**
- Railroad Freight Switcher Locomotives – **non road**
- Ferries/Tugs – **non road**
- Ocean Going Vessels – Shorepower -**off road**
- Class 4-7 Local Freight Trucks – **on road**
- Airport Ground Support Equipment – **non road**
- Forklifts – **non road**
- **Light-Duty Zero Emission Vehicle Supply Equipment (15% max)**
- Matching funds for projects eligible under the DERA - **both?**

VW Settlement

- Timeline!
 - Trust Effective date Oct 2nd
 - 60 days to file certification (signatures... signatures) Dec 1st.
 - By Jan. 30, 2018 Trustee posts status of certifying entities
- Projects, Activities, Programs....
 - DEP to submit final/current plan 30 days before accessing funds
 - Access to funds appears to mean
 - We have a projects, we certify they are eligible, please place funds into the account and allow withdrawal. (certain)
 - We have a program, it will be these project(s), please place funds into the account and allow withdrawal. (speculation)
 - Plans can be altered....
 - Funds cannot be spent faster than 3 years.
 - When do years begin and end?

VW Settlement

- What's happening now at DEP?
- Appendix C and D plans.
 - Certification. Incorporating comments from summer comment period into program designs, readying plan for submission/approval
 - Appendix D to meet NOx reductions
 - Aggregating shovel ready projects, current useful program designs
 - Also considering ideas for projects over the next 5 years
 - What projects will be ready in 2019, 2020, 2021...
 - How to make funding last, investments for tomorrow, design for the possible
- Thoughts and Ideas?
 - Contact us the Pennsylvania Department of Environmental Protection (DEP) at RA-EPPA-ZEVplans@pa.gov or 717.783.8411
 - Your proposed plans and projects.



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QUESTIONS?

