



# THE VW SETTLEMENT A \$25.5 MILLION OPPORTUNITY FOR SCHOOL SYSTEMS IN ALABAMA!



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# Presentation Topics

- VW Settlement Overview
- Status of Mitigation Trust
- School Buses – An Opportunity
- Next Steps

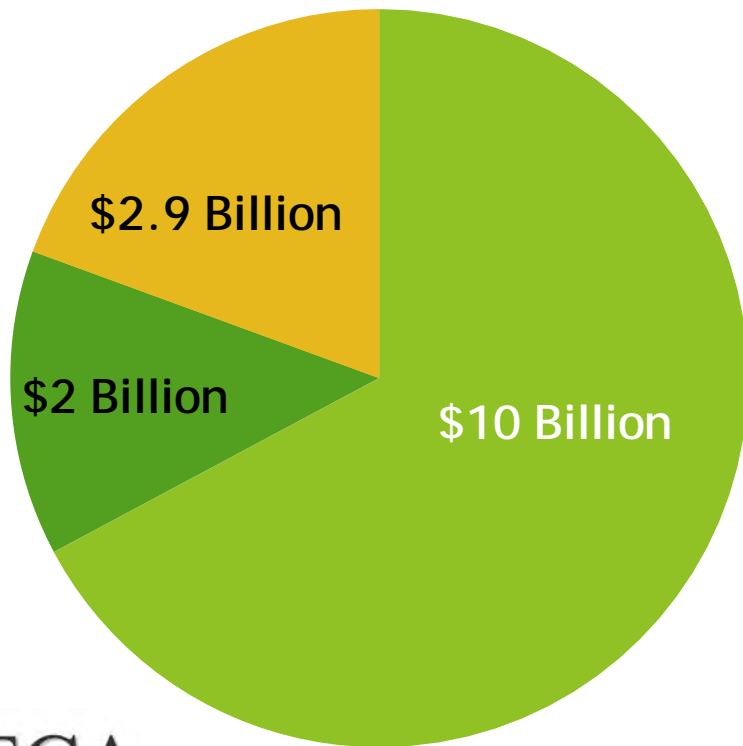
# Background

- ▶ The German automaker, Volkswagen AG, admitted fault and settled a civil complaint which alleged that VW violated the Clean Air Act by installing software in approximately 590,000 model year 2009-2016 vehicles with 2.0 and 3.0 liter diesel engines with deliberate intent to disable emission controls under normal use and turn on emission controls only when the vehicles were undergoing emission testing.
- ▶ These “defeat devices” allowed the vehicles to easily pass emissions testing yet emit highly unacceptable levels of NOx during normal operation.
- ▶ In October 2016 and May 2017, the U.S. District Court, Northern District of California approved two partial settlements related to the affected 2.0 and 3.0 liter vehicles, totaling \$14.9 billion.
- ▶ In April 2017, a third partial settlement, addressing civil penalties and injunctive relief was approved by the Court. VW paid a \$1.45 billion civil penalty to the U.S. Treasury under this third partial settlement.

# Settlement Overview

- ▶ The \$14.9 billion VW agreed to pay under the first and second partial settlements 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 Settlement – Summary

	ZEV Investment Commitment (Appendix C)	Environmental Mitigation Trust (Appendix D)
<b>Amount</b>	\$2 billion	\$2.9 billion
<b>Allocation</b>	40% (\$800 million) for CA 60% (\$1.2 billion) for rest of U.S.	Allocated to states according to subject vehicle population
<b>Timing</b>	10 years (four 30-month cycles)	Min. 3 years, max 15 years
<b>Entity</b>	Spent by VW, subject to approval of EPA and CARB	Administered by a Trustee and lead agencies within each state
<b>Qualified Activities</b>	Investments <ul style="list-style-type: none"> <li>▪ Infrastructure to support on-road vehicles (ZEVs)</li> <li>▪ Education and outreach</li> <li>▪ Other activities that increase ZEV access</li> </ul>	Actions <ul style="list-style-type: none"> <li>▪ On- and off-road transportation applications (retrofit or replace)</li> <li>▪ ZEV infrastructure for passenger cars (up to 15%)</li> <li>▪ Diesel Emissions Reduction Act (DERA) projects</li> </ul>

# Environmental Mitigation Trust

- ▶ \$2.7 billion (2.0 liter settlement) and an additional \$225M (3.0 liter settlement) is being placed in an independently administered Environmental Mitigation Trust to 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.
- ▶ **Alabama's Allocation: \$25,480,968**
- ▶ ADECA has been designated by Governor Ivey to be the "Lead Agency" in Alabama to administer the state's Trust allocation.

# Environmental Mitigation Trust

1. Large Freight Trucks
2. School, Shuttle, and Transit Buses
3. Freight Switchers
4. Ferries/Tugs
5. Shorepower
6. Medium Freight Trucks
7. Airport Ground Support Equipment
8. Forklifts and Port Cargo Handling Equipment
9. Light Duty Charging Infrastructure
10. Diesel Emission Reduction Act (DERA) option

Initial Subaccounts	Initial Allocations (million \$)	Initial Subaccounts	Initial Allocations (million \$)
Puerto Rico	\$8.1	Indiana	\$40.9
North Dakota	\$8.1	Missouri	\$41.2
Hawaii	\$8.1	Tennessee	\$45.8
South Dakota	\$8.1	Minnesota	\$47.0
Alaska	\$8.1	Connecticut	\$55.7
Wyoming	\$8.1	Arizona	\$56.7
District of Columbia	\$8.1	Georgia	\$63.6
Delaware	\$9.7	Michigan	\$64.8
Mississippi	\$9.9	Colorado	\$68.7
West Virginia	\$12.1	Wisconsin	\$67.1
Nebraska	\$12.2	New Jersey	\$72.2
Montana	\$12.6	Oregon	\$73.0
Rhode Island	\$14.4	Massachusetts	\$75.1
Arkansas	\$14.6	Maryland	\$75.7
Kansas	\$15.7	Ohio	\$75.3
Idaho	\$17.3	North Carolina	\$92.0
New Mexico	\$18.0	Virginia	\$93.6
Vermont	\$18.7	Illinois	\$108.7
Louisiana	\$19.8	Washington	\$112.7
Kentucky	\$20.4	Pennsylvania	\$118.6
Oklahoma	\$20.9	New York	\$127.7
Iowa	\$21.2	Florida	\$166.3
Maine	\$21.1	Texas	\$209.3
Nevada	\$24.9	California	\$422.6
<b>Alabama</b>	<b>\$25.5</b>	<i>Tribal Allocation</i>	\$54.4
New Hampshire	\$30.9	<i>Trust Administration</i>	\$29.3
South Carolina	\$33.9	<i>Tribal Administration</i>	\$1.1
Utah	\$35.2	<b>Total</b>	<b>\$2,925.0</b>

Qualified Mitigation Actions* *(Refer to Appendix D-2 for more details of eligibility) replaced engines must be scrapped	Eligible Actions any diesel or any alt fuel e.g: CNG, LPG or all-electric engine	Target Years	Funding % Non-Gov.	Funding % Government	Scrapping Required for Replacements
Class 8 Local Freight Trucks (Eligible Large Trucks) Class 8 Port Drayage Trucks (Eligible Large Trucks)	Repower (Including Installation cost) Replace vehicle	1997 - 2009*	Up to 75%	Up to 100%	Yes
Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)	Repower (Including Installation Cost) Replace	2009 or Older*	Up to 75%	Up to 100%	Yes
Freight Switchers	Repower (Include Install Cost) Replace	Pre-Tier 1	Up to 75%	Up to 100%	Yes
Ferries / Tugs	Repower, Replace	Unreg, Tier1 or Tier2 engines	Up to 75%	Up to 100%	Yes
Ocean Going Vessels Shorepower	Install systems that power vessel's main/aux. engine so it's off at berth	NA	Up to 25%	Up to 100%	NA
Class 4-7 Local Freight Trucks (Medium Trucks)	Repower (Including Installation Cost), Replace	1992 – 2009*	Up to 75%	Up to 100%	Yes
Airport Ground Service Equipment	Repower, Replace	Tier 0, 1 or 2 diesel/gas	Up to 75%	Up to 100%	Yes
Forklifts (>8000lb) and Port Cargo Handling Equipment	Repower, Replace	8,001 lb. lift cap.	Up to 75%	Up to 100%	Yes
Electric Vehicle Charging Equipment (up to 15% of Trust Fund Allocation)	Install, Operate & Maintain	NA	Up to 80%	Up to 100%	NA

(\*If state has existing upgrade requirements to 2009, 2010 - 2012 MY diesel vehicles are eligible)

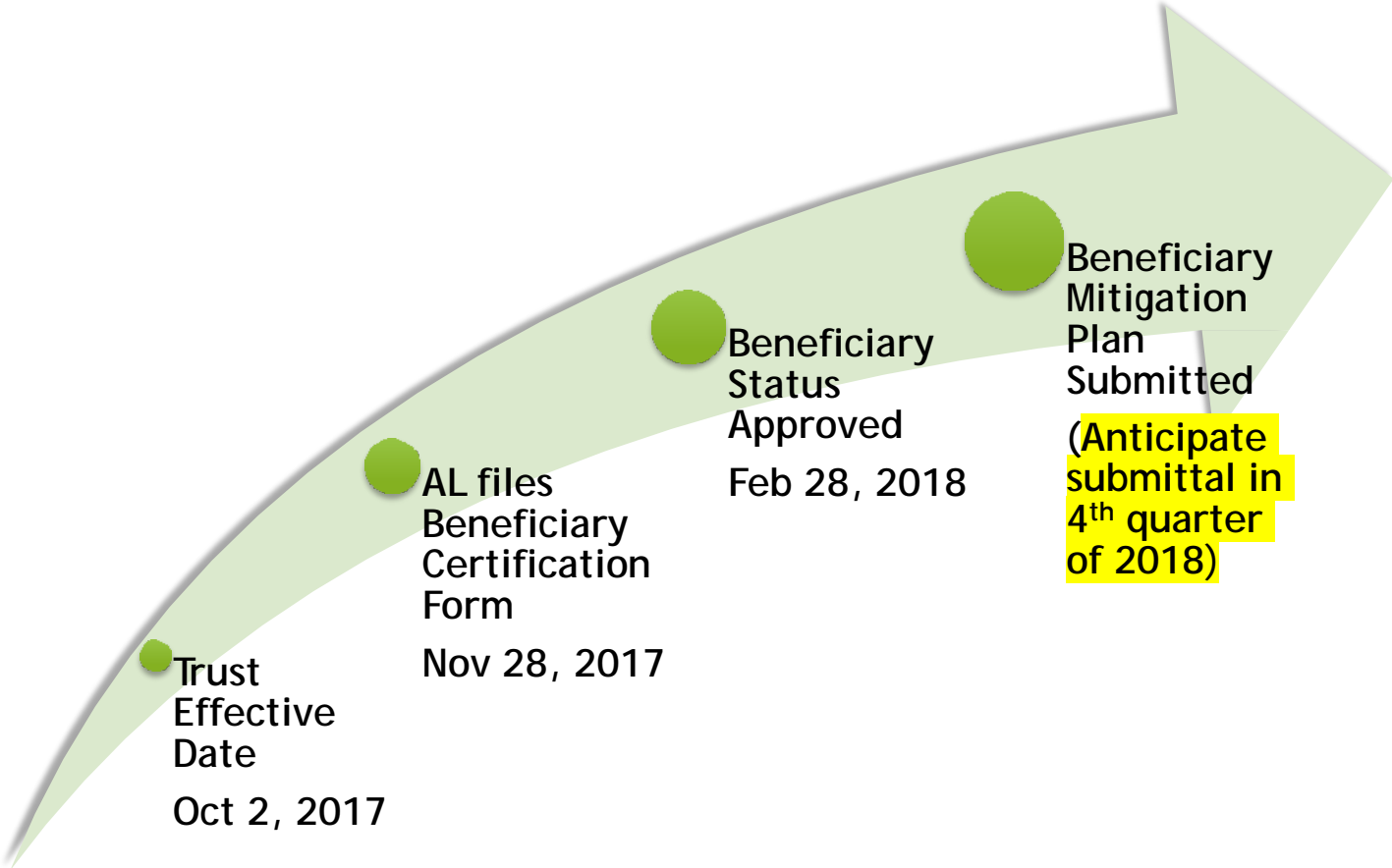




# Spending Trust Allocations

- ▶ Beneficiaries have up to 10 years to spend 80% of their allocation, and up to 15 years to spend 100% of their allocation.
- ▶ If at least 80% of the state's allocation is expended within the ten years, we may be eligible to receive a supplemental weighted share of the remaining balance in any unused funds. States eligible to receive such supplemental funding will be granted 5 years of additional time to select and implement appropriate Eligible Mitigation Actions.
- ▶ Up to 1/3 of the state's allocation may be requested during the first year and up to 2/3 of the allocation during the first two years.
- ▶ The state must develop and submit a **"Beneficiary Mitigation Plan"**.
  - ▶ A high-level summary of how the state intends to spend the Trust fund
  - ▶ Must be submitted at least 30 days before the first funding request
- ▶ States may adjust their goals and spending plans at their discretion but must provide the Trustee with updates to their Beneficiary Mitigation Plan.

# Environmental Mitigation Trust Timeline



# Beneficiary Mitigation Plan

The Plan is intended to provide the public with insight into the state's vision for use of the mitigation funds and will address the following:

- ▶ Overall Goal for use of the Funds
- ▶ Categories of Eligible Mitigation Actions (including % of funds allocated)
- ▶ Potential Beneficial Impact on Air Quality in areas that bear a disproportionate share of air pollution burden
- ▶ Expected Ranges of Emission Benefits
- ▶ Process by which the state shall seek and consider public input on its Beneficiary Mitigation Plan

# Eligible Mitigation Actions

- ▶ Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)
- ▶ Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)
- ▶ Freight Switchers
- ▶ Ferries/Tugs
- ▶ Ocean Going Vessels (OGV) Shorepower
- ▶ Class 4-7 Local Freight Trucks (Medium Trucks)
- ▶ Airport Ground Support Equipment
- ▶ Forklifts and Port Cargo Handling Equipment
- ▶ Light Duty Zero Emission Vehicle Supply Equipment
- ▶ Diesel Emission Reduction Act (DERA) Option

# Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)

- ▶ Eligible class 4-8 school buses, shuttle buses or transit buses must have a 2009 engine model year or older and a GVWR greater than 14,001 pounds.
- ▶ Eligible Buses **must be scrapped**.
- ▶ Eligible Buses **may be repowered** with any new diesel or alternate fueled engine or all-electric engine, or may be replaced with any new diesel, alternate fueled or all-electric vehicle with an engine model year in which the Eligible Large Trucks Mitigation Action occurs or one engine model year prior.



# Eligible Busses - % of Project that can be funded through the Trust



	Non-Government owned Busses	Government owned Busses
Repower with a new diesel or alt fuel engine (includes installation cost)	Up to 40%	Up to 100%
New diesel or alt fuel vehicle	Up to 25%	Up to 100%
Repower with new all-electric engine (including installation and charging infrastructure)	Up to 75%	Up to 100%
New all-electric vehicle (including installation and charging infrastructure)	Up to 75%	Up to 100%

- Propane
- Electric
- Compressed Natural Gas

# Light Duty Zero Emission Vehicle Supply Equipment

- ▶ Light duty electric vehicle supply equipment includes Level 1, Level 2 or fast charging equipment (or analogous successor technologies) that is located in a public place, workplace, or multi-unit dwelling and is not consumer light duty electric vehicle supply equipment (i.e., not located at a private residential dwelling that is not a multi-unit dwelling).
- Light duty hydrogen fuel cell vehicle supply equipment includes hydrogen dispensing equipment capable of dispensing hydrogen at a pressure of 70 megapascals (MPa) (or analogous successor technologies) that is located in a public place.
- Limited to 15% allocation of Trust Funds



# Light Duty Zero Emission Vehicle Supply Equipment - % of Project that can be funded through the Trust

	Available to the public at a Government Owned Property	Available to the public at a Non-Government Owned Property	Available at a workplace, but not to the general public	Available at a multi-unit dwelling, but not to the general public
Purchase, install and maintain eligible light duty <b>electric vehicle</b> supply equipment	Up to 100%	Up to 80%	Up to 60%	Up to 60%

	Equipment capable of dispensing at least 250 kg/day and available to the public	Equipment capable of dispensing at least 100 kg/day and available to the public
Purchase, install and maintain eligible light duty hydrogen fuel cell vehicle supply equipment	Up to 33%	Up to 25%

# Diesel Emission Reduction Act (DERA) Option

- ▶ Trust Funds may be used for non-federal voluntary match, pursuant to Title VII, Subtitle G, Section 793 of the DERA Program in the Energy Policy Act of 2005 (codified at 42 U.S.C. § 16133), thereby allowing Beneficiaries to use such Trust Funds for actions not specifically enumerated in this Appendix D-2, but otherwise eligible under DERA pursuant to all DERA guidance documents available through the EPA.
- ▶ Trust Funds shall not be used to meet the non-federal mandatory cost share requirements, as defined in applicable DERA program guidance, of any DERA grant.

# Definitions

- ▶ “Repower”

- ▶ To replace an existing engine with a newer, cleaner engine or power source that is certified by EPA to meet a more stringent set of engine emission standards.

- ▶ “Scrapped”

- ▶ To render inoperable and available for recycle, and to cut a 3-inch hole in the engine block for all engines. If a vehicle is to be replaced, “scrapped” shall also include the disabling of the chassis by cutting the vehicle’s frame rails completely in half.

- ▶ “Government”

- ▶ State or local government agency (including a school district, municipality, city, county, special district, transit district, joint powers authority, or port authority, owning fleets purchased with government funds), and a tribal government or native village.

# What the Environmental Mitigation Trust **CANNOT** Fund

- ▶ Research and development
- Refueling infrastructure for diesel, natural gas or propane-powered vehicles
  - The only allowable infrastructure costs are the cost of infrastructure associated with eligible All-Electric engines, vehicles, or equipment **and** the cost of acquisition, installation, operation and maintenance of new Light Duty ZEV Supply Equipment (Level 1, Level 2, and fast charging EV infrastructure, and hydrogen dispensing equipment).
- The repower or replacement of light-duty, passenger vehicles
  - The Environmental Mitigation Trust is focused on the repower or replacement of medium and heavy-duty vehicles, vessels, and equipment only.
- Anything that does not fit in one of the listed “eligible mitigation action” categories

# Evaluating Beneficial Impacts of Mitigation Actions

The VW Trust Agreement requires that the Beneficiary Mitigation Plan include a *“description of 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 within its jurisdiction.”*

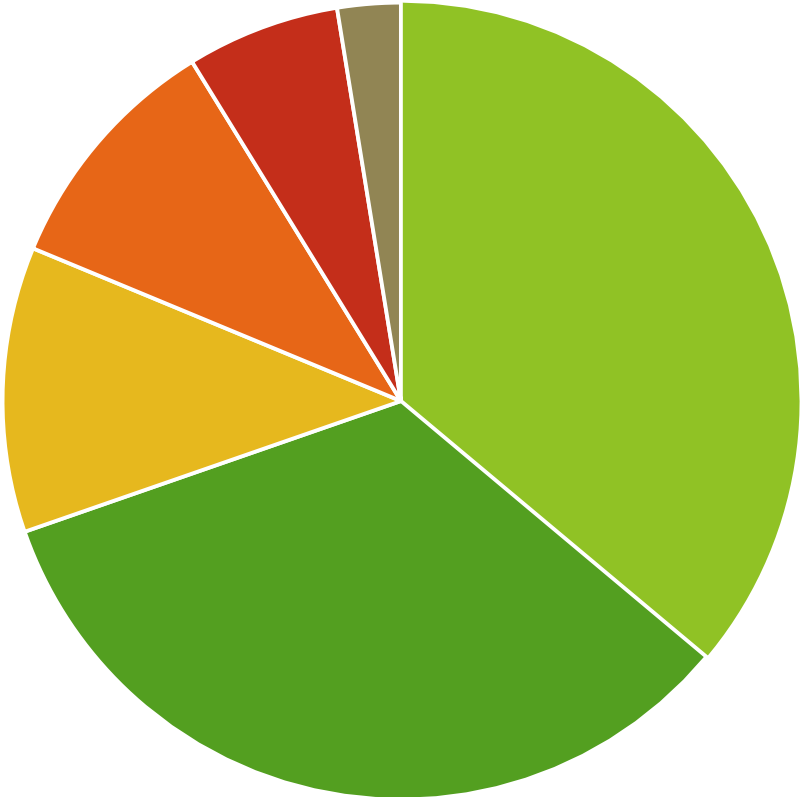
- Possible considerations:
  - EPA designated non-attainment or maintenance areas for air quality
  - Populations most vulnerable to negative impacts from emissions
  - Areas near busy highways, rail yards, or ports
  - Other suggestions?

# What is NOx?

- ▶ NOx (Nitrogen Oxides) - harmful compounds released by combustion processes, including diesel engines
- ▶ Reacts with Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs) in sunlight to form tropospheric or ground-level ozone, the major component of smog, which is a significant air pollution problem in the U.S.
- ▶ NOx and particulate matter from diesel emissions and other sources is linked to serious health effects including asthma, respiratory system irritation, allergen sensitivity, respiratory infections, and premature death.
- ▶ Peer-reviewed research estimates that over the sales period for the affected 2.0 liter VW vehicles, 59 deaths will be caused in the U.S. by the excess emissions from the vehicles.
- ▶ NOx poses other significant environmental risks contributing to acid precipitation that can damage forests, crops, and waterways.
- ▶ Reducing the use of petroleum-based fuels in transportation is an important mechanism to reduce NOx emissions.

# NOx in Alabama

Mobile Source Tons of NOx



- On-road Light Duty Vehicles
- On-road Heavy Duty Vehicles
- Non-road Equipment
- Locomotives
- Commercial Marine Vehicles
- Aircraft

# Emission Calculation Tools

- ▶ Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool
  - Estimates petroleum use, greenhouse gas emissions, air pollutant emissions, and cost of ownership of light-duty and heavy-duty vehicles using simple spreadsheet inputs.
- Diesel Emissions Quantifier
  - Evaluates clean diesel projects and upgrade options for medium-heavy and heavy-heavy duty diesel engines. Provides an interactive, web-based tool for users with little or no modeling experience.
- Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET)
  - A full life-cycle model to evaluate various vehicle and fuel combinations on a full fuel-cycle/vehicle-cycle basis.
- MOtor Vehicle Emission Simulator (MOVES)
  - Estimates emissions for mobile sources at the national, county and project level
- Shore Power Technology Assessment and Emissions Calculator
  - Estimates environmental benefits of shore power by vessel type in an area where shore power is being considered.



# Plan Considerations

- ▶ Primary Goal: Reduce NOx Emissions
- ▶ Benefits to Vulnerable Populations
- ▶ Benefits to Areas Bearing a Disproportionate Share of Air Pollution
- ▶ Economic Development Potential
- ▶ Fuel Security and Energy Assurance
- ▶ Getting the most “Bang” for the “Buck”
- ▶ Cost to Repower vs. Cost to Replace
- ▶ Life Cycle Costs
- ▶ Cost of Scrappage
- ▶ Availability of Fueling Infrastructure and Fuel Price Volatility
- ▶ Opportunities to Leverage Other Funding

# Alabama Clean Fuels Coalition

## Member/Stakeholder Next Steps

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- Clean Cities Coalitions, like ACFC, working with their stakeholders, have the opportunity to work closely and assist the Lead Agency in our state
- ACFC has formulated and submitted recommendations and has offered to provide assistance with development and implementation of the plan
- If not already on our distribution list – sign up
  - Like us on Facebook and follow us on Twitter
- Review list of the projects listed as eligible and let us know your interests
  - Send the info to us for review and analysis of potential NOx emission offsets
- Identify specific projects that can be implemented and the associated timeframe
- Call with questions

# 2018 Propane "Autogas Answers" Workshop

**July 18<sup>th</sup> • 8am - 2pm**

**Lawson State Community College  
Bessemer Alabama Campus**

Join Local, State and National fuel experts on July 18th to learn why Propane Autogas is an excellent transportation fuel. Many vehicles, fueled by Propane will be on display.

**Seating is limited – Please Register Today!**

**\$20 Registration - Includes Great Lunch**

Directions and agenda will be provided after registration

**Learn Why Propane Autogas is the "Right Here, Right Now" solution for your fleet!**

- Learn how you can save 30-40% on your fueling costs
- Realize the energy security benefits of propane as a motor fuel
- Learn what on and off road propane products are available today
- Learn how the \$25.5 Million Alabama VW Settlement may help add propane vehicles to your fleet
- Discover how to prepare a cost-saving analysis for your fleet
- Ride and Drive in Autogas fueled vehicles

**Register Today at: <https://tinyurl.com/PropaneWorkshop>**

# Your Portals for Information

- ▶ Website: [www.adeca.alabama.gov/vwsettlement](http://www.adeca.alabama.gov/vwsettlement)  
[www.alabamacleanfuels.org](http://www.alabamacleanfuels.org)
- ▶ Email: [vwsettlement@adeca.alabama.gov](mailto:vwsettlement@adeca.alabama.gov)

## For Additional Information

Vehicle Buyback and Modification

ZERO Emission Vehicle Investment:

[www.electrifyamerica.com](http://www.electrifyamerica.com)

- U.S. District Court Docket:  
<http://www.cand.uscourts.gov/crb/vwmdl>
- NASEO Website: <http://www.naseo.org/volkswagen-Settlement>
- Electrify America Website: <https://www.electrifyamerica.com>

# Questions





[www.alabamacleanfuels.org](http://www.alabamacleanfuels.org)

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THANK  
YOU

