



State of the Coalition 2015

February 18, 2015

Agenda



10:00- 10:25- Welcome, Introductions- Brian Keelen- Chairman - EP-ACT 10:25-10:45- State of the Coalition- Tony Bandiero- Executive Director- EP-ACT 10:45-11:00- The New Web-site/Social Media-**Doug Kripke-Program Coordinator-EP-ACT** Break 11:00-11:10 11:10-11:25- PA DEP's view on Alternative Fuels Technologies; Vehicles; and Projects **David Althoff- Manager, PA DEP Office of Pollution Prevention and Energy Assistance** 11:25-11:40- Department of Energy's Clean Cities, "A Look Back, and a Look Ahead..." Mark Smith- Vehicle Technologies Deployment Manager- DOE 11:40-12:05- Committees-"Keep us moving ahead..." Tony Bandiero- Fundraising; Charlie Stevenson Education & Outreach; Michelle Marsh- Marketing & Development; Christina Simeone- Legislative **Affairs**: Jay Canuso-Technical 12:00-12:15- Round Table Discussions/Stakeholder Announcements

Networking Luncheon

12:15-1:00

Brian Keelen-Chairman -EP-ACT





State of the Coalition

Who is EP-ACT?





































SOLUTIONS

PENN







West Chester University













AMERIgreen.







Mid-Atlantic













What & Where is: EP-ACT



EP-ACT is housed in one of our stakeholders offices

1818 Market Street, 13th Floor, Philadelphia, PA 19103

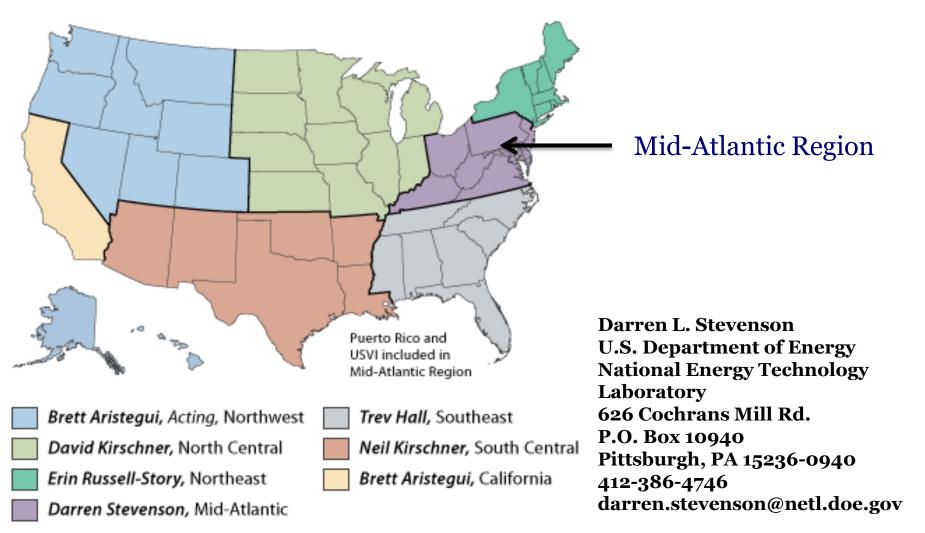
DOE Designated Territory:

Bucks; Delaware; Chester; Montgomery; Philadelphia; TIOGA; BRADFORD; SUSQUEHANNA; WAYNE; LYCOMING; SULLIVAN; WYOMING; LACKAWANA; PIKE; UNION; NORTH UMBERLAND; MONTOUR; COLUMBIA; LUZERENE; MONROE; SNYDER; SCHUYLKILL; CARBON; PERRY; DAUPHIN; LEBANON; BERKS; LEHIGH; NORTHAMPTON; FRANKLIN; CUMBERLAND; ADAMS; YORK; LANCASTER. Counties

- **❖** Board of Directors is comprised of 7 individuals
- **45 paying or in-kind donating stakeholders in 2014**

Where is: EP-ACT





When & Where is: EP-ACT?





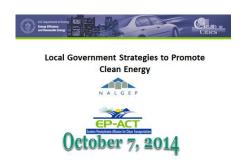


















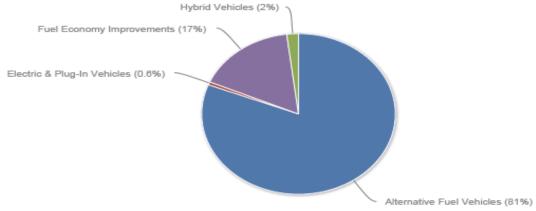
How is: EP-ACT?



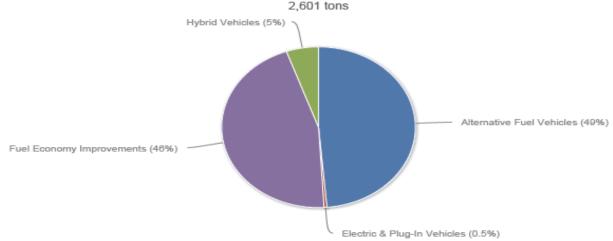
Snapshot of Performance

2013 Gallons of Gasoline Equivalent Reduced

581,315 gallons



2013 Greenhouse Gas Emissions Reduced



How is: EP-ACT?

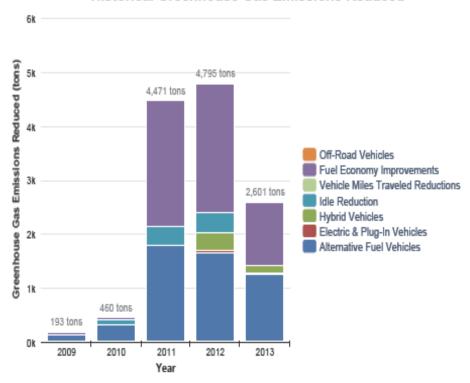


Snapshot of Performance

Historical Gallons of Gasoline Equivalent Reduced

800k 695,188 gal Gallons of Gasoline Equivalent Reduced 576,916 gal 581,315 gal 600k 400k 182,763 gal 200k 22,295 gal 2010 2011 2012 2013 Year

Historical Greenhouse Gas Emissions Reduced



Last Year's Goals

Expansion

- divide the state into East and West.
- Work with DEP regional Offices

Name Change

 To coincide with our planned expansion we will change our name that better serves our expanded territory.

■ Develop Partnerships

- Work in conjunction with Pittsburgh Clean Cities and the Commonwealth's DEP
 - Develop A Sponsored Natural Gas Conference/Tradeshow
 - Energy Road-map with PennFUTURE





Petroleum Displacement Strategies

Our strategies for increasing petroleum displacement by 20% per year over 3 years are as follows:

These strategies were developed by examining our history, noting current trends, and projecting future usage of alternative fuels within our state.

Projects that will help us obtain our objectives include:

- ACT 13 CNG Conversion Initiative (3 year Statewide project)
 - DEP Funded \$20mm over 3 years
 - Outreach to fleets from workshops
- Alternative Fuels Incentive Grant (AFIG)(annual)
 - DEP Funded solicitations for alternative fuel projects
 - Stakeholder involvement
 - Any type of Alt fuel project included

Expansion of the Coalition

- Marketing and Outreach
 - Work with New Chambers of Commerce
 - TMA's
 - MPO's





The Pennsylvania Partnership for Promoting Natural Gas Vehicles project will provide education and outreach to municipal and school district decision-makers to encourage the procurement and retrofitting of natural gas-fueled school buses and solid waste collection vehicles and develop a strategic plan for natural gas vehicle and infrastructure inspection training











The Montgomery County NGV Conversion Initiative

is a comprehensive conversion project which includes some of Pennsylvania's largest companies and a diverse set of business platforms. This project seeks to partner local transportation organizations; municipalities; public transportation; carting; construction; and service industries into one unique application, while simultaneously utilizing private investment in infrastructure to help spur the usage of Compressed Natural Gas (CNG) as an alternative to gasoline and diesel.

AWARDED MAY 2013-EXTENSION UNTIL JUNE 2015



The Eastern Pennsylvania Propane School Bus Conversion Initiative

seeks to help 6 counties in eastern Pennsylvania, utilize 50 new school buses that run on propane. The goals and the objectives of the project are to provide air quality benefits to school children who ride these buses and fuel cost savings to those districts who utilize propane to replace diesel in their vehicles. This project will be an aggregated project with 2 private bus companies and 2 school districts brought together by The Greater Philadelphia Clean Cities Program AWARDED NOV. 2013 (GPCCP).



The Keystone State LNG Conversion Initiative

seeks to help fleets convert to LNG for long haul applications. Our project will utilize our centralized location near the convergence of 3 interstate highways to help construct The Commonwealths 1st public LNG refueling site. Our project will consist of building a public LNG site that will be anchored by a fleet of 20 Class 8 tractors. This project will help stimulate the use of LNG as an alternative to gasoline and diesel for long haul applications

AWARDED FEB. 2015

The Northeast Extension CNG Conversion

Initiative seeks to spur the acceptance of utilizing compressed natural gas as a vehicle fuel. Our 2 project partner's unique application will convert 23 vehicles that will utilize a new CNG fueling station. This project will introduce CNG to the public and to private companies that run along the Northeast extensions of the interstate highways. The project will promote the economic and environmental benefits of CNG in the Northeastern part of Pennsylvania.

AWARDED FEB. 2014



The Southeastern PA CNG Vehicle Conversion Initiative

This project will introduce CNG to southeastern PA by showcasing some of the region's most recognizable companies and their own fleets utilizing CNG as a motor fuel. The strength of this application comes from the commitment by all project partners, even business competitors, to utilizing PA's abundance of natural gas. The aggregation of all of our partners into a single application will promote the acceptance and new opportunities possible when businesses of all types support natural gas as a conventional motor fuel.

AWARDED SEPT. 2014

The Tinicum Township Propane Vehicle Conversion Initiative seeks to convert 3 separate fleets in Tinicum Township from gasoline to propane fuel. The aggregation of these companies together will convert 34 vehicles ranging from Ford Crown Victoria Police Cruisers to dedicated E-450 shuttle buses.

AWARDED SEPT. 2014



The W.W. Transport and Easton PA CNG Vehicle Conversion Project

This project seeks to expand the usage of natural gas as a domestically produced reliable vehicle fuel. This project will help spur the usage of CNG to an undersubscribed area, in both the availability of regional infrastructure and vehicle conversions. Our project will help purchase and convert 30 Class 8 diesel tractors to CNG. The development of this project will be instrumental in helping Northampton county and more specifically Easton PA with its foray into using CNG as a vehicle fuel.

The Commonwealth Energy Group CNG Vehicle Conversion Initiative

is a project assembled by the Eastern Pennsylvania Alliance for Clean Transportation (EP-ACT) which aggregates 3 unique business platforms into a single application for CNG vehicle conversions. The project will commence around a newly planned CNG fueling station located at 1325 East Drinker Street, Dunmore, PA 18512, near Scranton Pennsylvania. Our 3 project partners; Road Scholar Trucking; DeNaples Auto Parts; DeNaples Sanitation combined will convert 19 vehicles from diesel to run on CNG. This project will be the stepping stone for each of our partners foray into utilizing the Commonwealth abundance of natural gas as a vehicle fuel.

Pending Applications



Initiative for Resiliency in Energy through Vehicles (iREV)

National Association of State Energy Officials (NASEO) (DOE Application)

iREV is a multi-partner, national effort to catalyze the acceptance and use of alternative fuel vehicles (AFVs) in preparing for and responding to emergencies. The driving principle behind iREV is to influence state and local response strategies by showcasing the role of AFVs in mitigating a weak link in disaster contingency planning: the vulnerability of petroleum supply during emergencies, including natural and man-made disasters.

ANGS Heavy-Duty CNG Truck Demonstration Program

American Natural Gas Solutions (DOE Application)

The proposed National CNG Demonstration Program for Enterprise Heavy-Duty Trucking Fleets will for the first time provide heavy-duty fleets the access to natural gas vehicles (NGV) and fueling necessary to test CNG in daily hauling operations for substantial trial periods. The project would dramatically increase the likelihood of increased adoption rates of NGV in the demonstration markets, and fundamentally improve the industry's ability to overcome CNG adoption barriers.

PENDING FEB. 2015

Pending Applications



Ford Plug-In Hybrid Electric Demonstration Program and Social Media Campaign (DOE Application)

EP-ACT will provide education and outreach workshops for Ford Plug-in Hybrids in order to accelerate public acceptance toward hybrid and electric vehicles. EP-ACT will help coordinate a social media campaign utilzing real-time data to show successful education and understanding to the value of utilizing hybrids to replace ICE's.

PENDING FEB. 2015

The Anti-Idling in School Zones Educational Development Project (TAISZED) (EPA Application)

will enhance students; faculty and bus driver's awareness to the environmental impact idling poses. The specific short term goal will be to implement a model of an anti-idling campaign at 12 middle schools across the United States; a minimum of one in every region of the EPA's designated regions. The goal and measurable outcomes at these schools will be the reduction of harmful Green House Gas (GHG's) emissions and particulate matter by implementing an idle reduction policy developed by students at each school.

Sustainability Strategies: Membership

We will institute the following strategies to increase active membership, retain current members and form new partnerships over the next 3 yrs:

- Strategy #1- Boundary expansion, introduction to the program/Outreach
- Strategy #2- Grant Partnerships
- Strategy #3- Committees / Development
 - Marketing & Development
 - Education & Outreach
 - Legislative Affairs
 - Fund Raising
- Strategy #4- Stakeholder Recommendations/Leads



What can we do?







Hi Tony,

Attached (and below) is some information on a bill that Senator Casey (D-PA) introduced in the 113th Congress that I am trying to get reintroduced in the 114th.

I'm reaching out to you to garner feedback on possible legislation, and to solicit other ideas.

I would greatly appreciate your input, additional references, etc. that you might have.

We can talk by phone or when we meet next week.

Sincerely,

Bob Bartolo IEEE Congressional Fellow Senator Robert P. Casey, Jr. 393 Russell Senate Office Building Washington, DC 20510

What can we do?





Clean Vehicle Corridors Act – Bill Summary

Establishes the Clean Vehicle Corridors program that will —

- (1) Provide a market to drive investment in cleaner transportation options;
- (2) Promote clean transportation technologies that—
- (A) Lead to increased diversity and deployment of cleaner-burning fuel options and
- (B) Enable the United States to become more energy independent; and
- (3) Facilitate clean transportation incentives that will—
- (A) Attract a critical mass of clean transportation vehicles that will give cleaner-burning fuel stations an assured customer base and market confidence;
- (B) Provide for ongoing increases in energy demands;
- (C) Support the growth of jobs and businesses in America; and
- (D) Reduce vehicle emissions and our Nation's use of foreign oil.

Summary:

- □ Secretary of Transportation, with approval from the Secretary of Energy and in consultation with the Secretary of Commerce, Secretary of Interior, and the Administrator of the Environmental Protection Agency, shall designate, within one year of enactment, not fewer than 5 "Clean Vehicle Corridors" routed along federal highways, interstates or other contiguous highways important to transportation and commerce. The Secretary shall seek input from Federal, State, Tribal, and local entities, in addition to non-governmental organizations, businesses, and the public, to gather information as to where they should be located.
- o Clean Vehicle Corridors would encourage promotion of CNG, LNG, LPG, plug-in electric, advanced biofuels, hydrogen and/or other clean fuels as designated by the Secretary.
- o Clean Vehicle Corridors will facilitate the development of policies and planning needed to put into place cleaner alternative fuel infrastructure for clean vehicles, such as fueling stations, rest stops, travel plazas, or other service areas on federal or private property that are found to be most practically located along a Clean Vehicle Corridor, that would be available to all users of the fuels, including privately-owned or publically-owned vehicles.
- o To promote Clean Vehicle Corridors and incentivize their use, DOT may grant waivers to cleaner alternative fuel projects and vehicles along the corridor such as: \Box Modifying HOV/HOT lane restrictions to accommodate vehicles using
- cleaner alternative fuel. \square Modifying weight limits to accommodate additional weight to vehicles caused by some cleaner alternative fuel technologies.

What can we do?



GET INVOLVED







Tony Bandiero Executive Director

director@phillycleancities.org

www.phillycleancities.org

215-990-8200





The New Web-site/Social Media



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WELCOME TO EP-ACT

EP-ACT is one of nearly 90 coalitions in the U.S. sponsored by the U.S. Department of Energy (DOE) Vehicle Technologies Program.

We are Comprised of public, private, utilities and municipal stakeholders tasked to reduce petroleum consumption within the transportation sector.

Learn More

Support

OUR PROJECTS

EP-ACT is on the forefront of putting alternative fuels, technologies and

JOIN A COMMITTEE

Help EP-ACT reach our programmatic goals, come see



STAKEHOLDER SPOTLIGHT

Since 1980 **Transnet** has provided transportation



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Doug Kripke Change password

Admin view | Log out

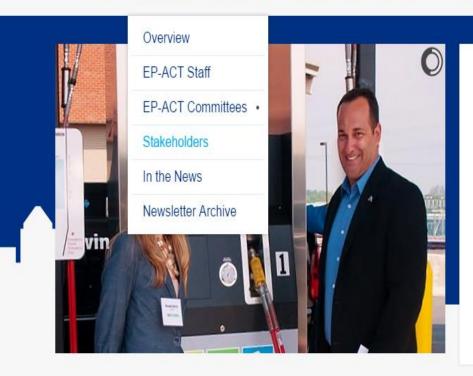
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Since 1980 Transnet has provided transportation services throughout



Sustaining Level Members



























ZARWIN • BAUM • DEVITO
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ATTORNEYS AT LAW



Gold Level Members



















Silver Level Members

- ACE Solutions
- American Alternatives for Fleets
- AMERIgreen
- Chesapeake Energy
- CNG of New Holland
- Enterprise CarShare
- Great River Energy
- Johnson Controls Inc.

- KING Limousine
- Meshoppen Stone
- OXFORD Engineering
- Philadelphia Gas Works
- Roush Clean Tech
- Sharp Energy
- Shipley Energy
- UGI Performance Solutions



Bronze Level Members

Bayshore Ford

· Mobile Fueling Solutions

Municipal, School & Non-profit Members

- GVF TMA
- · Lower Merion School District
- Penn Future
- Temple University

- The Partnership TMA of Montgomery County
- TMA Bucks
- TMACC
- West Chester University





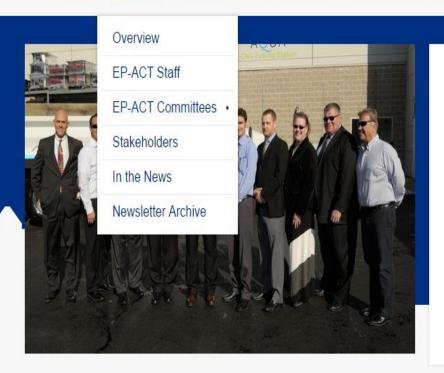
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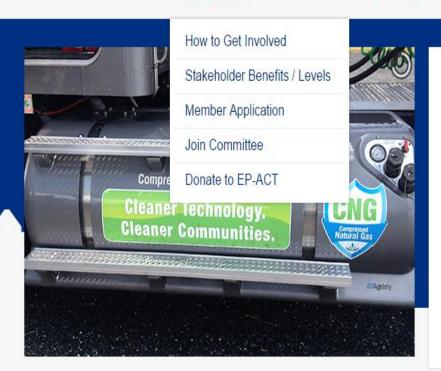


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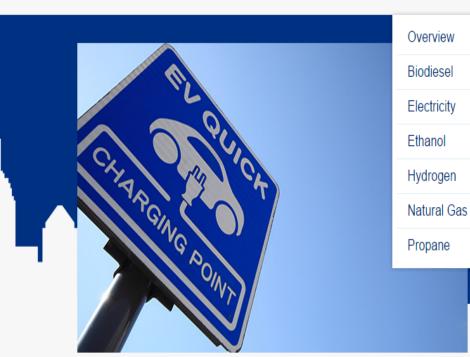




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ep-act.org/Alternative-Fuels-Overview



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This area is designated for companies who show support for EP-ACT throughout the year. This section is for our stakeholders and partners to find out useful information pertaining to projects; grants and to suggest potential project ideas.







Your **Project**



Grant Opportunities



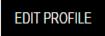
Submit a Project Idea

Member's Lounge

Links

- Alternative Fuel Data Center
- · Alternative Fuel Station Locator
- Clean Cities
- EcoCAR Challenge
- Fuel Economy Information

My Stakeholder Profile



My directory profile

Profile Privacy Email subscriptions Member photo albums Invoices and payments



Membership details

Membership level Hidden - Free

Subscription period: Unlimited

Membership status Active

Member since Tue, January 20, 2015

Renewal due on Never

Member ID 26254253

First name Doug





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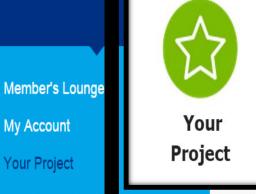
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Your Project

- The Southeastern PA CNG Vehicle Conversion Initiative
- The Tinicum Township Propane Vehicle Conversion Initiative
- The Keystone State LNG Conversion Initiative
- The Northeast Extension CNG Conversion Initiative
- The Eastern Pennsylvania Propane School Bus Conversion Initiative
- The Montgomery County NGV Conversion Initiative

Go to Summary of Current Projects

Go Back to Member's Home Page



My Account

Your Project

Grant Opportunitie

Links

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- EcoCAR Challenge
- Fuel Economy Information

- Fuel Comparison Calculator
- Stay tuned for more to come!





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Grant Opportunities

Since 2009 the former Greater Philadelphia Clean Cities Program and EP-ACT has been involved in or spearheaded nearly 20 winning grant applications. Our success rate is highly dependent on the projects we part take in, the commitment of our partners and our non-bias fuel neutrality. Below is a list of current state and federal opportunities. If you have a project idea, feel free to contact us for guidance and assistance...

State Grant Opportunities

Federal Grant Opportunities

Go Back to Member's Home Page

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Your Project

Grant Opportunities

Links

- Alternative Fuel Data Center
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- EcoCAR Challenge
- Fuel Economy Information

Tool Box

- Fuel Comparison Calculator
- Stay tuned for more to come!

ep-act.org/members/grant-opportunities



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Submit a Project Idea

Submit a Project Idea

EP-ACT keeps a database of project ideas, if a solicitation or project application matches your idea we will contact you for more information.

Name

First Last

Title

Business Name

Website

Email *

Phone Number

####

Have a Project Idea? Please Share



it with us. *

Contact Us

Submit a Project Ide



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- Fuel Comparison Calculator
- Stay tuned for more to come!

Survey



Wednesday, 18th February, 2015

Quick Survey

State of the Coalition Meeting 2015

1. Did you find the website easy to navigate?

2. Would you like any additional features in the membership section of the website?

3. Are there any workshops or programs that you would like EP-ACT to conduct?





Break





PA DEP



Department of Energy's Clean Cities, "A Look Back, and a Look Ahead..."

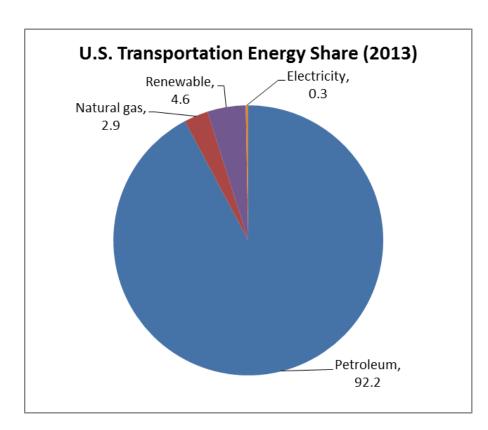


Eastern Pennsylvania Alliance for Clean Transportation

Sate of the Coalition Meeting 2015

Mark S. Smith
Vehicle Technologies Office/ Clean Cities Team
February 18, 2015

We are Highly Dependent on Oil



Source: Transportation Energy Data Book, ed. 33, Table 2.2, http://cta.ornl.gov/data/chapter2.shtml

- Transportation is responsible for 2/3 of our petroleum usage
- On-road vehicles responsible for ~85% of transportation petroleum usage and 1/3 of GHG emissions
- In 2012 the U.S. economy lost \$116 billion due to dislocation losses, temporary reductions in GDP due to oil price shocks.
- Over the past ten years, U.S. regular conventional retail gasoline prices have fluctuated from below \$1.50 to more than \$4 per gallon.



Historical Gasoline Prices

Historical Gasoline Prices



US DOE Clean Cities Primary Goal and Results

PRIMARY GOAL:

Mass market adoption of alternative fuel and advanced technology vehicles and smarter driving habits

Reduced Petroleum Use in Transportation

Reduced Greenhouse Gas Emissions

PRIMARY GOAL RESULTS

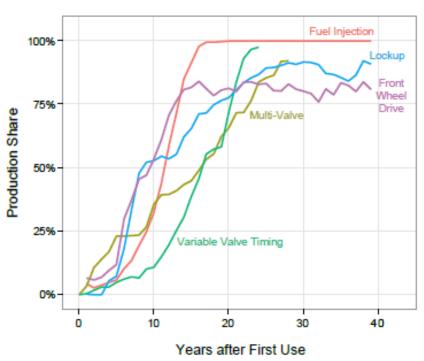
Reduced Dependence on Oil

Improved US Energy, Economic, and Environmental Security

Realizing Benefits of Vehicle Technology Takes Time

Vehicle Technology Penetration

Years After Initial Significant Use



U.S. Vehicle Market

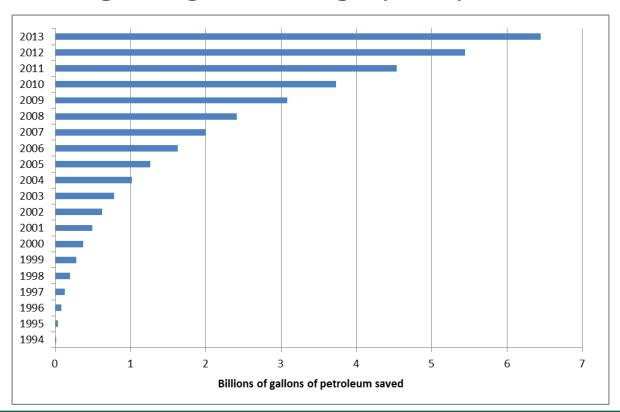
- About 240 million light-duty vehicles on the road
- Approximately 14.5M new cars & light trucks sold in 2012; ~15.5M for 2013.
- Hybrid vehicles comprise ~3% of LDV sales (~5.5% of car sales) – June 2014
- PEV sales have topped 220,000 total.

It has taken about 15 – 20 years for a technology to reach maximum market penetration.

Alternative Fuel use during Clean Cities 20+ year history

Nearly 6.5 Billion Gallons of Petroleum Reduction since 1993

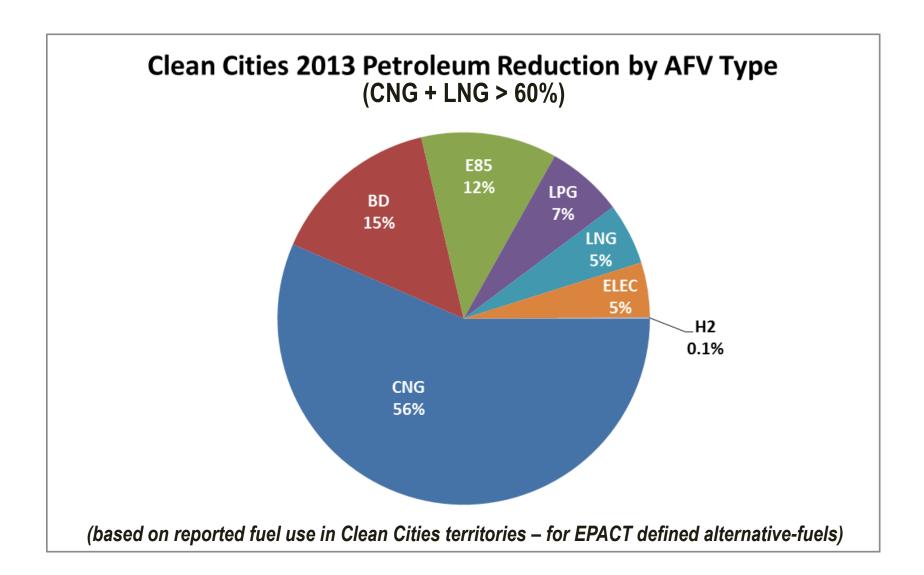
- Nearly 600,000 AFVs on the road in the US
- Over 14,500 alternative fueling and charging stations
- Long term goal of 2.5B gal/year by 2020





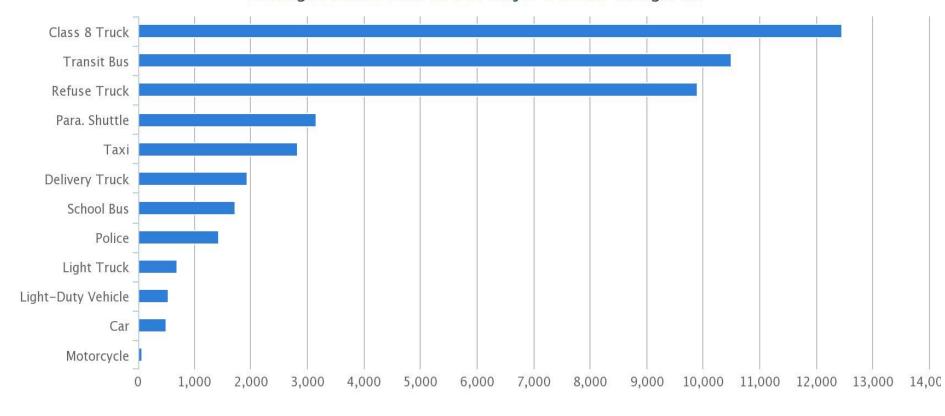
U. S. Department of Energy

Natural Gas dominates current alt-fuel use



Fuel Consumption and Efficiency

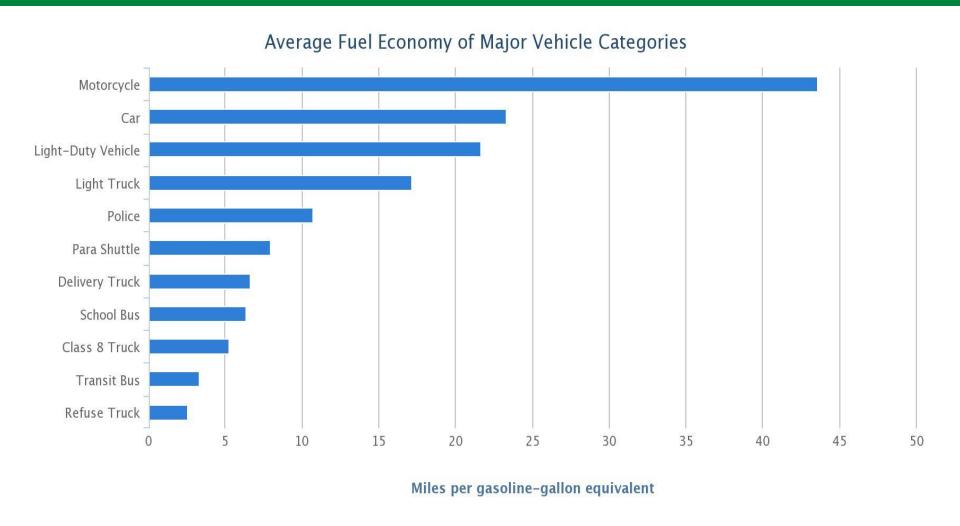




GGEs per year

Source: Federal Highway Administration Table VM-1 and American Public Transit Association's Public Transportation Fact Book Tables 8, 16, and 21.

Fuel Consumption and Efficiency



Source: Federal Highway Administration Table VM-1 and American Public Transit Association's Public Transportation Fact Book Tables 8, 16, and 21.

Sector-Specific Applications: Current Vehicle and Technology Offerings

	Biodiesel	CNG	E85	Electricity/ Hybrid Electric	Hydrogen H ₂	LNG	Propane	Idle Reduction
Class 8 Truck	1					✓		✓
Transit Bus	✓	1		✓	1	1	✓	✓
Refuse Truck	✓	1		✓		1		✓
Shuttle	✓	1		√	√		✓	√
Delivery Truck	✓	1		✓			√	√
School Bus	√	1		✓			✓	√
Police		✓	1	✓			✓	✓
Light Truck	✓	1	1				√	√
Passenger Car		1	1	√	√			✓

Nearly every domestic truck/bus/car OEM now has AFV models serving important niche markets















The Clean Cities Model

Leveraging national policies and resources at the local level to facilitate change



Local

Franchise model - coalitions adapt consistent approaches and messages to local market conditions and priorities



National

Conduct mass media and online outreach for consumers and fleets

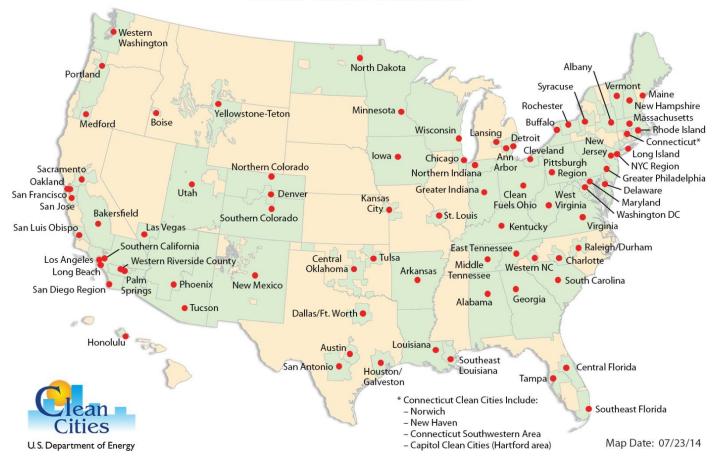
Provide unbiased tools and experts for technical assistance

Develop national partnerships with industry and corporate fleets

Provide financial assistance to incentivize private investment

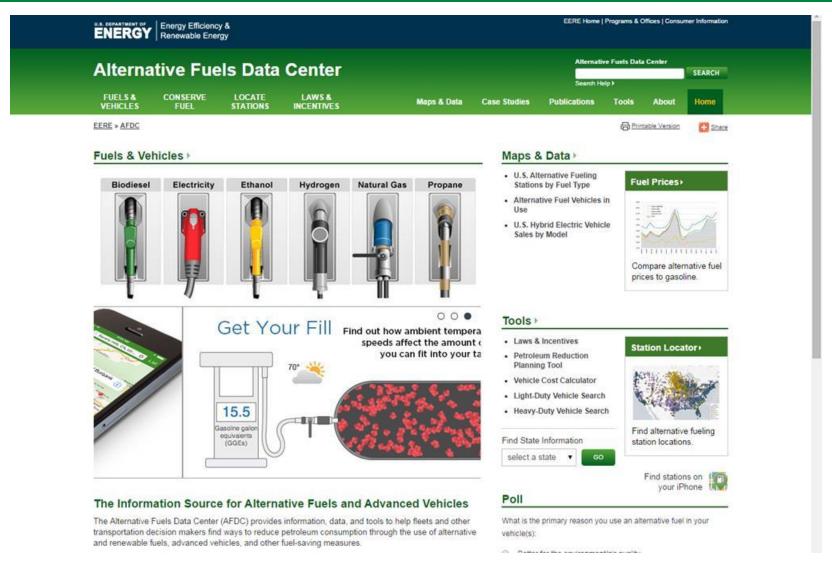
Local Community Partnerships

Clean Cities Coalitions



Nearly 100 coalitions with thousands of stakeholders

Alternative Fuels Data Center



afdc.energy.gov

Alternative Fuels Data Center: Tools



Case Studies Search: Find videos and Web stories that document how businesses, fleets, government agencies, and others have successfully deployed alternative fuels and advanced vehicles. Explore case studies at afdc.energy.gov/case.



Alternative Fueling Station Locator: Obtain addresses, maps, and driving directions for charging stations and alternative fueling stations; map a driving route with stations identified along the way; determine the total number of stations in a particular state or nationwide.



Light-Duty Vehicle Search: Find and compare light-duty alternative fuel vehicles, electric vehicles, and hybrids.



Heavy-Duty Vehicle Search: Find and compare heavy-duty alternative fuel vehicles, engines, and hybrid propulsion systems.



Incentives and Laws Search: Search our database of state and federal laws and incentives related to alternative fuels and vehicles, air quality, fuel efficiency, and other transportation topics.



Petroleum Reduction Planning Tool: Evaluate options and develop a strategy to reduce conventional fuel use and emissions in fleet and personal vehicles.



Vehicle Cost Calculator: Enter basic information about your driving habits to compare total cost of ownership and emissions for most vehicle models, including those that run on alternative fuels or electricity.



Publications Search: Find publications about alternative fuels and advanced vehicles in this extensive document database. Search for publications at afdc.energy.gov/publications.



JOBS Model

Estimate economic impacts of natural gas, hydrogen, or fuel cell infrastructure.

Consumer Information: Video





- > 150 professionally produced segments to date
- Bi-weekly Clean Cities success stories
- Clean Cities YouTube channel nearly 300 videos



Clean Cities Funding Projects

- (2009 to present) \$300 M Clean Cities ARRA Awards 20 Awards in 36 states
 (~\$10 \$15M per award); helped deploy over 1500 AFV stations and over 8500 AFVs (Projects included EVs, CNG, LNG, LPG, H2, E85, and Biodiesel).
- (2012) \$11 M Clean Cities Alternative Fuel Implementation Awards 20 projects in 30 states + DC (~ \$500k \$1M per award); to help communities establish action plans, implement sustainable policies, address barriers, and develop incentives (Projects included EVs, CNG, LNG, LPG, H2, E85, and Biodiesel did not fund vehicle costs or hardware).
- (FY14 FOA) \$4.5M current funding opportunity for three topic areas
 - 1: Alternative Fuel Vehicle Demonstration and Enhanced Driver Experience Projects
 - 2: Alternative Fuel Training for First Responders, Public Safety Officials, and Critical Service Providers
 - 3: Incorporating Alternative Fuels into Emergency Response and Preparedness Operations.
- Notice of Intent Aggregated Purchasing



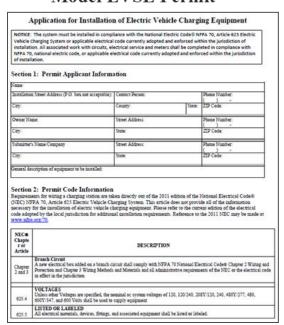
Technical and Problem Solving Assistance

- Capture lessons learned and develop best practices
- Technical Forums and User Groups
- Address unforeseen permitting and safety issues
- Identify chronic vehicle or infrastructure field problems
- Incident investigations





Model EVSE Permit





National Clean Fleets Partnership

The 100 largest commercial fleets account for more than 1 million vehicles. Every 2,000 vehicles converted to alternative fuel = 1M gal/year petroleum displacement.



(photo courtesy of White House)

Challenge to top fleets across the country:

- Adopt alternative fuels, advanced vehicles, petroleum reduction plans
- Be pace-setters for others to follow

26 Partners



































Coca Cola



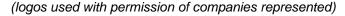












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Contact Information & Important Links

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Clean Cities Website: www.cleancities.energy.gov

<u>Clean Cities Coordinators:</u> <u>www.eere.energy.gov/cleancities/progs/coordinators.php</u>

Alternative Fuels & Advanced Vehicles Data Center: www.afdc.energy.gov





Committees- "Keep Us Moving Ahead..."





Roundtable Discussions Stakeholder Announcements





Networking Luncheon

Thanks for your support!