



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Energy Programs Office



Overview of the Energy Programs Office (EPO) Transportation Initiatives

Climate Change Advisory Committee
April 23, 2019

Tom Wolf, Governor

Patrick McDonnell, Secretary

DEP's EPO Purpose and Mission

The Pennsylvania Department of Environmental Protection's Energy Programs Office (EPO), operating within DEP's Programs Deputate, is the primary entity under the Governor's jurisdiction for implementation of programs, conducting outreach and raising awareness for:

- The benefits of clean energy and energy efficiency programs in Pennsylvania
- Advocacy and deployment of clean alternative fuels
- Supporting a diverse energy portfolio that includes indigenous energy resources

The PA Energy Office supports energy policies and programs that prevent pollution, protect our environment, improve public health, and ensure access to affordable energy options for all Pennsylvanians.

DEP's EPO Mission Continued

Our shared approach to our mission focuses on:

- Conservation and Efficiency
- Advanced Technologies
- Energy Security and Resiliency
- Education and Outreach

DEP's Energy Office Responsibilities

Alternative Transportation

- The primary entity for the administration of programs to support and promote the use of alternative fuels to stimulate the use of domestically produced alternative fuels and innovative transportation technologies which reduce emissions from mobile sources.

DEP's Energy Office Program/Projects

Planning for the Future:

- **Transportation and Climate Initiative (TCI):** On December 18, 2018 Pennsylvania, along with eight other states and the District of Columbia announced plans to design a regional transportation policy which seeks to reduce carbon emissions from the transportation sector. Participating states include: Connecticut, Delaware, Maryland, Massachusetts, New Jersey, Pennsylvania, Rhode Island, Vermont, and Washington, D.C.



DEP's Energy Office Program/Projects

PENNSYLVANIA ELECTRIC VEHICLE ROADMAP

Prepared for the Pennsylvania Department of
Environmental Protection
February 2019



Planning for the Future:

- **Electric Vehicle Roadmap:** The Pennsylvania Electric Vehicle (EV) Roadmap serves as a tool for expanding the EV knowledge base, documenting baseline EV data, and identifying EV policies, plans, and programs for Pennsylvania. The Roadmap addresses the impacts, policy options, and possible market interventions regarding EV adoption and infrastructure construction throughout the state. Strategies outlined in the Roadmap assist DEP and the Drive Electric Pennsylvania Coalition in planning implementation measures to prepare Pennsylvania for a growing EV market.

DEP's Energy Office Program/Projects

Planning for the Future:

- **Drive Electric PA (DEPA) Coalition:** Efforts to promote electric vehicle adoption are increasing nationally, as more states and cities see the value of reduced greenhouse gas emissions and the potential for new economic opportunities. DEP began collaborating with stakeholders statewide in a planning process to increase the acceptance and adoption of electric vehicles by state government agencies, local governments, businesses, industry, and the general public in Pennsylvania.



*Drive Electric Pennsylvania
Coalition participants, November
2017 meeting*

DEP's Energy Office Program/Projects

Funding a Sustainable Future:

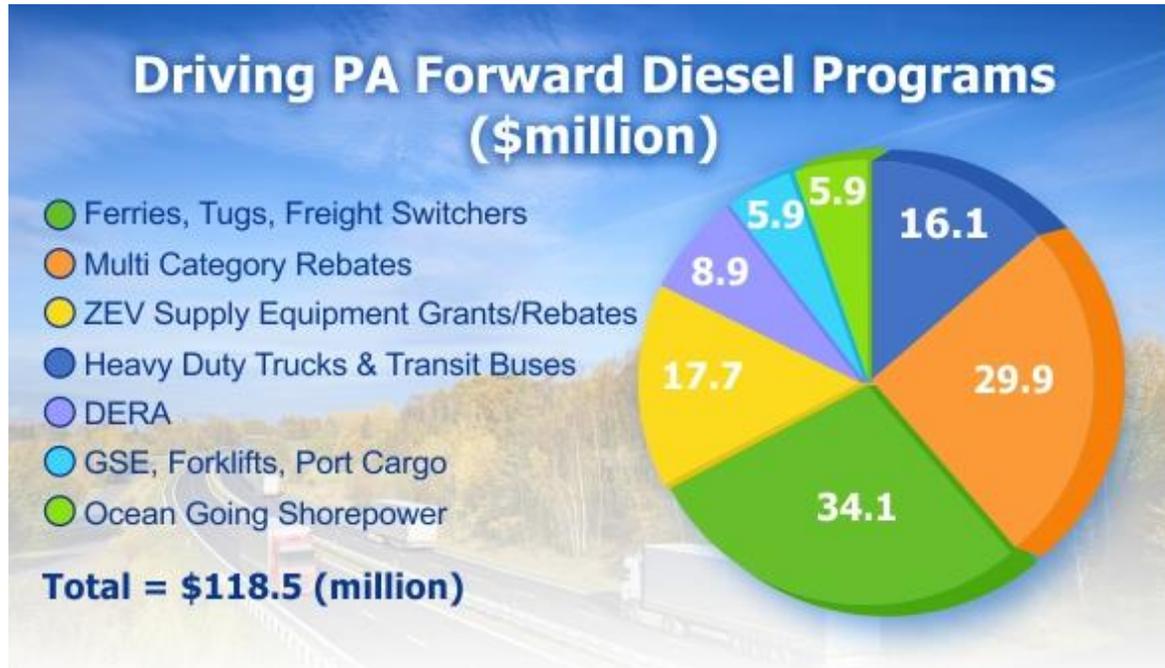
- **Driving PA Forward:** “Clean air is the cornerstone of a clean, healthy environment,” said Governor Tom Wolf as he announced the roll out of the new programs. “When Volkswagen cheated on its emissions equipment, it undermined that cornerstone. Through our new Driving PA Forward initiative, we will begin to remedy that by driving the transition towards advanced zero-emission and low-emission vehicles and accelerating the build-out of infrastructure necessary to support the next generation of transportation options.” Over \$118 million from the Volkswagen mitigation trust has been set aside for certain transportation related projects that reduce NOx emissions from diesel engines.



DEP's Energy Office Program/Projects

Funding a Sustainable Future:

- **Driving PA Forward:**
 - Over \$118 million from the Volkswagen mitigation trust has been set aside for certain transportation related projects that reduce NOx emissions from diesel engines.
 - 8 funding programs, including 2 for EV charging infrastructure



DEP's Energy Office Program/Projects

Funding a Sustainable Future:

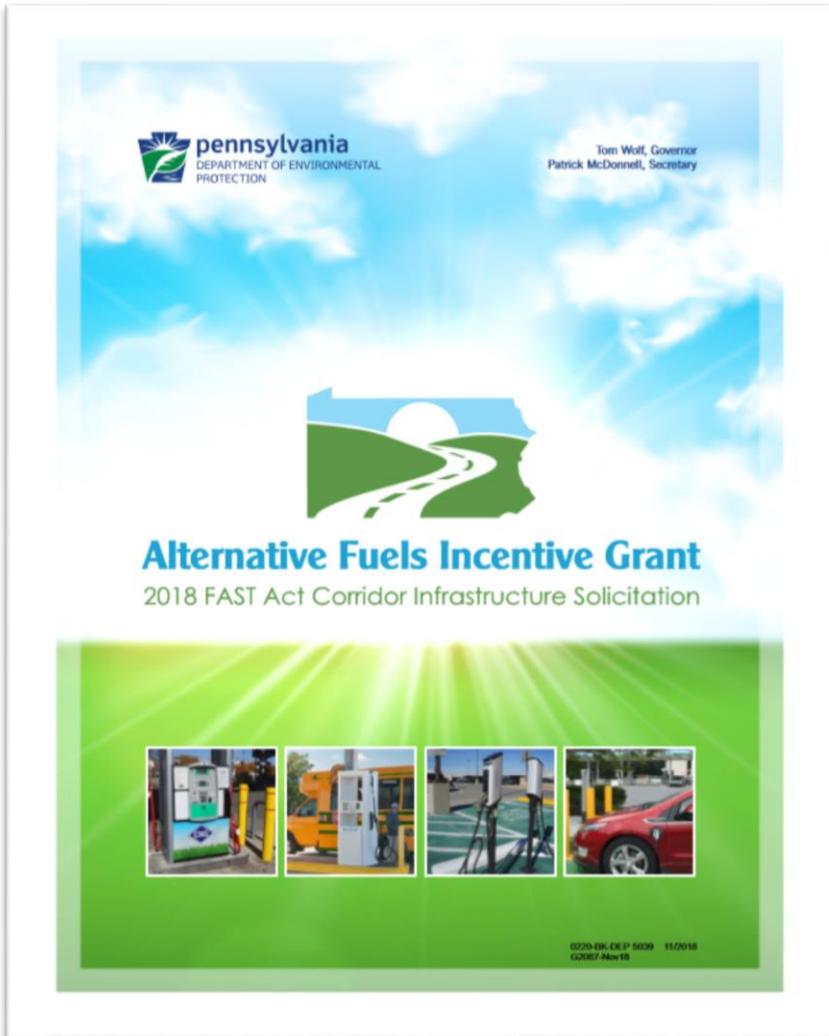
- **Alternative Fuels Incentive Grant Program (AFIG):** The AFIG Program helps to create new markets for alternative fuels in Pennsylvania which enhances energy security. An investment is being made not only in alternative fuels, but the deployment of alternative fuel vehicles, fleets, and technologies. Alternative Fuel Incentive Grant projects promote and build markets for advanced, renewable and alternative energy transportation technologies. The intent is to provide a stimulus for opportunities that better manage Pennsylvania's fuel resources in a way that also improves the environment, supports economic development and enhances the quality of life.



Eligible project categories include:

- Alternative fuel vehicle retrofit & new vehicle purchase
- Fleet or Workplace, home, or intermediary alternative fuel refueling infrastructure
- Innovative technology

DEP's Energy Office Program/Projects



Funding a Sustainable Future:

- **FAST (Fixing America's Surface Transportation) Act Corridor Infrastructure Grant:**
 - \$1 million in grants available for public-use electric, hydrogen, propane, and compressed natural gas refueling infrastructure
 - Designed to support and encourage installation of alternative fuel infrastructure along PA Interstate Highway Corridors
 - Focused on specific sections of interstates located in Pennsylvania designated "Signage Ready" and "Signage Pending" Alternative Fuel Corridors by the Federal Highway Administration
 - Includes I-76, I-276, I-376, I-476, I-79, I-90, I-95, and I-80

DEP's Energy Office Program/Projects

Funding a Sustainable Future:

- **Alternative Fuel Vehicle (AFV) Rebates:** The AFV Rebate Program provides rebates to consumers for the purchase or lease of plug-in hybrid, plug-in electric, natural gas, propane and hydrogen fuel cell vehicles. The program offers rebates of up to \$2,000 for plug-In hybrid electric vehicles, battery electric vehicles, and hydrogen fuel cell vehicles. Actual rebate amount is determined by vehicle battery system capacity. Certain natural gas and propane vehicles are eligible for a \$1,000 rebate. One-time preowned AFV with 75,000 miles or less are eligible to receive a rebate of \$750. An additional rebate of \$500 is available on all vehicles for applicants meeting low-income requirements.



DEP's Energy Office Program/Projects

DEP's Alternative Fuels Stations Interactive Mapping Application:

PA.GOV Tom Wolf, Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION Patrick McDonnell, Secretary

Introduction

This map displays electric vehicle (EV), compressed natural gas (CNG), liquefied natural gas (LNG), and Sheet E85 refueling stations. The CNG, LNG, and EV stations shown were supported with funding from the Pennsylvania Department of Environmental Protection (DEP) and the Commonwealth Finance Authority (CFA). Funding for the E85 stations was provided by the US Department of Agriculture (USDA). This map also displays privately funded stations accessible by the public. For more information about the projects, click on "Search" below. Go to "Layers" and click on the "CNG", "LNG", "CNG & LNG", "EV" & "E85" box to select (or deselect) the type of project(s) to view them on the map. Go to "Boundaries" and click on the "County" box to view them on the map. For more details, like project type, site address, funding source, project cost, and accessibility details, slide the cursor to the map and click on the icon.

Legend

Natural Gas Fueling Stations

- CNG Completed
 - Public
 - Public Limited Access
 - Private
- CNG Uncompleted
 - Public
 - Private
- LNG Completed
 - Private
- LNG Uncompleted
 - Public
- CNG & LNG Completed
 - Public
- CNG & LNG Uncompleted
 - Public

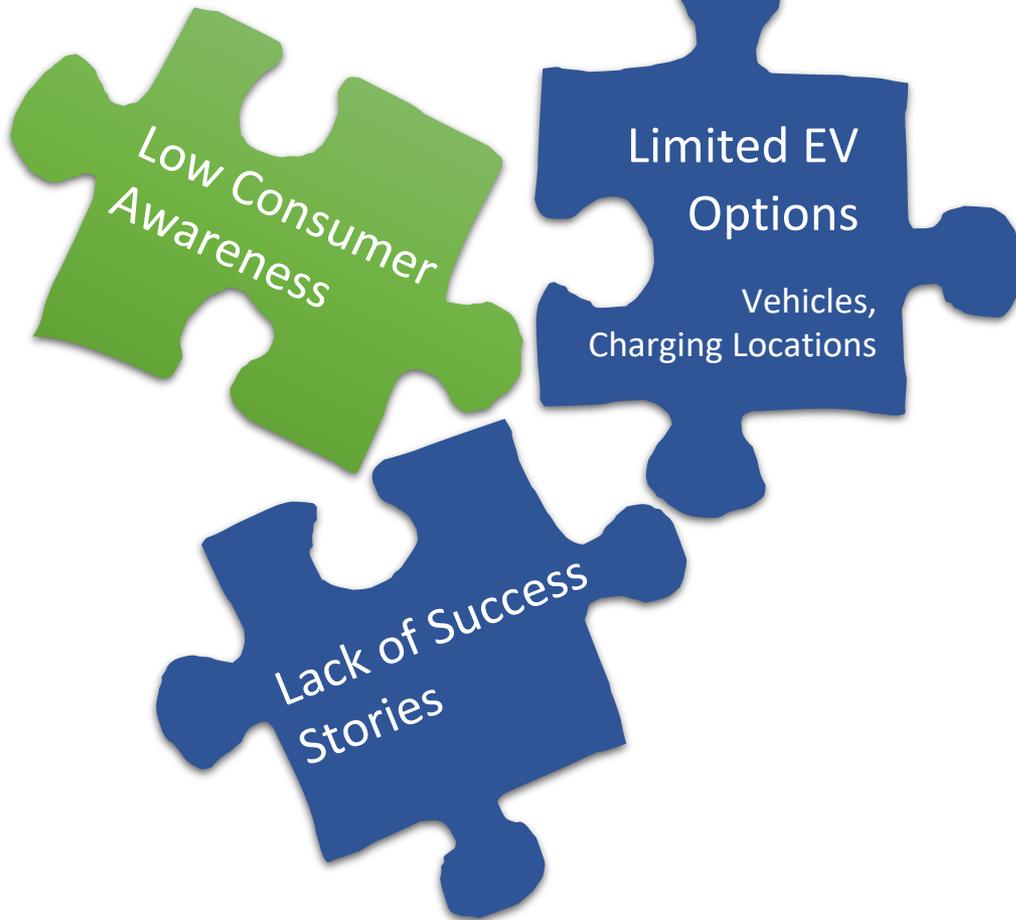
Basemaps

40km 30mi

powered by esri

Awareness/Cooperation/Confidence

Problems



Solutions

- ✓ Establish Goals
 - Meet them/Celebrate them
- ✓ Dealerships.... Outreach (Utilities?)
 - Deliver support/technical assistance - they sell these vehicles!
- ✓ Signs, Signs, Everywhere Signs!
 - ...and Marketing.
- ✓ EV Ready Regional Planning
 - Practical solutions from both outside your state and inside.



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Energy Programs Office



Thank you!

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DEP Website: www.dep.pa.gov