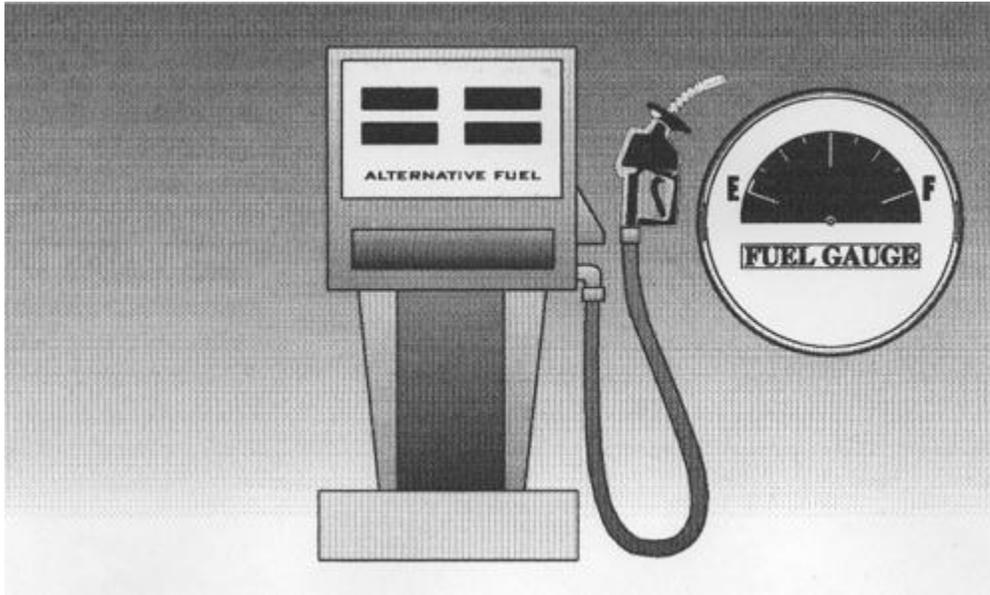


**2012-13 ANNUAL REPORT TO THE  
PENNSYLVANIA LEGISLATURE  
ALTERNATIVE FUELS INCENTIVE ACT PROGRAM**



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

## **Executive Summary**

The DEP has prepared this Alternative Fuels Incentive Act Program Annual Report, as required by law, for submission to designated legislative committees. This report details Pennsylvania's continuing progress in growing a market for alternative fuels such as natural gas, electricity and biofuels through the development of alternative fuel fleet vehicles, and alternative fuel storage and refueling systems, to deliver alternative fuels to Pennsylvanians. The report summarizes the activities of the alternative fuels incentive grant and alternative fuel vehicle rebate programs, including the grant solicitation, rebate awards, notable grant projects completed, and program and grant project expenditures during the July 1, 2012 to June 30, 2013 fiscal year.

DEP did not award the projects in program year 2012. New AFIG projects will be awarded in program year 2013. Several notable AFIG projects were completed within the program year. A sampling of notable projects are briefly described in the report. The Alternative Fuel Vehicle (AFV) rebate program supports Pennsylvania residents who purchased a new, qualified, AFV which is registered in Pennsylvania. The rebate program provided 503 rebates during the 2013 program year.

## **INTRODUCTION**

DEP administers a grant and rebate program to promote the use of alternative fuels in Pennsylvania under the Alternative Fuels Incentive Act (Act of Nov. 29, 2004, P.L. 1376, No. 178). This program was originally created in 1992 and administered by the Pennsylvania Energy Office through Chapter 72 of the Vehicle Code. The Alternative Fuels Incentive Grant (AFIG) Program was expanded and transferred to DEP for administration in 2004. In addition, an Alternative Fuel Vehicle (AFV) Rebate Program was created.

## **PROGRAM OVERVIEW**

The AFIG and AFV Rebate programs have helped to reduce Pennsylvania's dependence on imported oil and improve air quality by reducing vehicle emissions of carbon monoxide and particulate matter (the pollutants that contribute to the formation of ground-level ozone), as well as carbon dioxide (a principle greenhouse gas).

The AFIG Program has fostered economic development in Pennsylvania by encouraging the transfer and commercialization of innovative energy technologies and the use of the state's indigenous fuels. The fuels promoted by the program include ethanol, biodiesel, compressed and liquefied natural gas (CNG and LNG), hydrogen, hythane (a combination of compressed natural gas and hydrogen), liquefied petroleum or propane gas (LPG), electricity and fuels derived from coal and biomass.

The AFIG and AFV Rebate programs support DEP's objectives of reducing emissions from mobile sources to improve air quality and stimulating the use of domestically produced fuels. DEP has encouraged the development of partnerships among Pennsylvania businesses, the alternative fuel providers and key local, state and federal government agencies to accomplish the objectives of the Alternative Fuels Incentive Act. The AFIG Program also offers compliance incentives to fleet operators impacted by the federal energy policy acts of 1992 and 2005.

The Alternative Fuels Incentive Act requires DEP to establish a formula and method to award AFIG Program grants. DEP is also required to establish a method to prioritize the grant applications to achieve identified goals and criteria, including the following:

1. The improvement of Pennsylvania's air quality.
2. The fulfillment of Pennsylvania's responsibilities under the Clean Air Act (69 Stat. 322, 42 U.S.C. § 7401 et seq.).
3. The protection of Pennsylvania's natural environment, including land, water and wildlife.
4. The advancement of economic development in Pennsylvania and the utilization of the State's indigenous resources.
5. The reduction of Pennsylvania's dependence on imported crude oil and other petroleum products.
6. The most cost-effective use of private and public funding.

7. The transfer and commercialization of innovative alternative energy technologies.

The AFIG and AFV rebate programs are funded with an annual allocation from the General Fund equal to 0.25 mills of the utilities' gross receipts tax and has ranged over the years between \$5 and \$6 million dollars annually. Up to 1.5 percent of the funds may be used to administer these programs, and up to 0.5 percent may be used for program education and public outreach. The unspent portion of the annual allocation does not lapse and can be used for projects on a continuing basis.

The Alternative Fuels Incentive Act provides incentive grants that pay a percentage of each applicant's eligible project costs. The remaining project costs are paid by the grantee from other sources.

The AFIG programmatic year is the 12-month period from July 1, of each year through June 30, of the following year. Prior to each AFIG Program application solicitation, DEP announces the grant program guidelines and the selection criteria in the Pennsylvania Bulletin. DEP must receive a completed application within the application period, typically 45 to 60 days. Project costs cannot be incurred prior to July 1 of the calendar year the application is submitted. Project costs may be expended over the total grant period of performance.

The AFIG Program typically offers at least one yearly competitive solicitation. All applications are evaluated at the close of an application period. The review, selection and grantee announcements take approximately eight to ten weeks.

The following limitations apply to the AFIG and AFV rebates programs:

1. A single funding recipient can receive no more than ten percent of the funds available in any one funding year.
2. The total dollar amount of awards to recipients operating within and including any county cannot exceed 15 percent of the funds available in any one funding year.
3. If the total funding to be awarded in a funding year is less than the amount available for that year, then DEP may increase the established 10 percent and the 15 percent funding levels in (1) and (2) above, not to exceed 40 percent of the fund.
4. DEP reserves the right to not award any additional funds to applicants that have not completed projects funded by the AFIG program.
5. Applicants who have received grants and completed projects through the AFIG program, but have failed to submit the proper reporting forms, may not be considered for funding.

## **2012 PROGRAM YEAR REVIEW**

The following is a report on programs which were available to receive funding requests during the period of this report, July 1, 2012 through June 30, 2013:

### **Annual Competitive Grant Solicitation**

DEP did solicit for competitive grant applications in program year 2012; however, DEP did not award the projects in program year 2012. New AFIG projects will be awarded in program year 2013.

Eligible project categories included the following:

- Vehicle Purchase or Retrofit - The incremental cost of retrofit of new or existing vehicles to operate on alternative fuels. Eligible vehicles include, but are not limited to:
  - Dedicated, bi-fuel, and dual-fuel LNG or CNG vehicles with a Gross Vehicle Weight Rating less than 14,000 lbs.; and
  - Vehicles with no weight limit operating on dedicated liquid propane gas, alcohol, hydrogen, hythane (any combination of CNG and hydrogen), biofuel (B100 or straight vegetable oil) or electricity.
- Innovative Technology - Projects that include research, training, development and demonstration of new applications or next phase technology related to alternative transportation fuels and alternative fuel vehicles.

### **Alternative Fuels Vehicle Rebate Program**

The AFV Rebate Program was redefined in January 2013. The rebate program supports Pennsylvania residents who purchase a new qualified alternative fuel vehicle which is registered in Pennsylvania and powered by CNG, electricity, fuel cells (FC) or LPG. The rebate program was revised to provide \$3,000 rebates for qualified large format battery electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs) (down from \$3,500), as well as \$1,000 for all other qualified AFVs. Electric motorcycles and scooters could also receive rebates of \$500.

Specifically, the following rebates were offered beginning in January 2013:

- \$3,000 rebate for a PHEVs or EVs with battery system capacity equal/greater than 10 kWh (limited to first 500 qualified applicants)
- \$1,000 rebate for a PHEVs or EVs with battery system capacity less than 10 kWh, CNG vehicles (Original Equipment Manufacturer/Certified Retrofit), LPG vehicles, hydrogen and/or FC vehicles
- \$500 rebate for electric motorcycles/scooters (EMC)

DEP processed 503 rebates for alternative fuel vehicles purchased and then registered in Pennsylvania (see details below) from July 1, 2012 through June 30, 2013.

#### Large Battery Electric

- 258 – Chevrolet Volt
- 76 – Tesla
- 68 – Nissan Leaf
- 13 – Mitsubishi MI-EV
- 8 – Ford Focus
- 4 – Fisker Karma
- 2 – Think City
- 1 – Toyota Rav-4

#### Small Battery Electric

- 41 – Toyota Prius
- 13 – Ford C-max
- 10 – Ford Fusion
- 1 – Honda Accord

#### CNG new vehicles

- 6 – Honda Civic GX
- 1 – Chevy Silverado
- 1 – conversion - truck

### **Notable AFIG Projects Completed**

The following is a brief sampling of notable AFIG projects awarded during prior program years but completed during the period of this report (July 1, 2012 through June 30, 2013):

**Air Star Transportation – Allegheny County:** Air Star purchased equipment to convert 31 transportation fleet vehicles to operate on propane instead of gasoline. Air Star also installed, at their fleet facility, a state of the art propane refueling station with an integrated fuel management system. The propane vehicles deployed by Air Star are expected to displace 121,042 gallons of gasoline per year.

**WallyPark at Philadelphia International Airport – Delaware County:** Clean Energy successfully constructed Philadelphia's first public access CNG station. The new CNG fueling station is adjacent to Philadelphia International Airport on property owned by off-airport shuttle operator WallyPark. The station provides CNG fueling services to Airport Authority-operated vehicles, taxis, varied off-airport parking shuttle fleets and the general public. The project also deployed 20 CNG shuttles. Warfield Philadelphia, LP and Central Parking partnered to deploy 12 shuttles. WallyPark deployed eight CNG shuttles with assistance from this AFIG grant.

**Bucks County CNG Vehicle Deployment – Bucks County:** Bucks County constructed a public access CNG station at 451 Tyburn Road; Fairless Hills, to service heavy duty CNG shuttle buses to provide public transit services for citizens in the Bucks County area. This project is expected to displace 26,800 gallons of petroleum and reduce 11.33 metric tons of criteria pollutants and greenhouse gas (GHG) emissions each year.

**Giant Eagle, Inc. – Allegheny County:** Giant Eagle replaced ten diesel trucks with ten CNG powered trucks, placed into service one CNG passenger vehicle, installed ten Level II Electric

Vehicles Charging Stations (six public and four private), and placed into service two PHEVs and two EVs for use in highly visible supermarket and pharmacy operations. Giant Eagle also retrofitted their vehicle maintenance garage to safely repair CNG vehicles and had six technicians/mechanics trained by the National Alternative Fuels Training Consortium on safety, service procedures, vehicle systems and the nature of gaseous fuels.

**City of Philadelphia – Philadelphia County:** The Philadelphia Electric Vehicle Micro-Community incorporated 18 Chevy Volts into an existing, successful local car sharing operation. The cars are charging at a network of 20 Level II EV chargers deployed at nine locations placed strategically throughout Philadelphia with two chargers also available for public use. Three of the project locations are on college campuses (Temple University, Drexel University and the University of Pennsylvania) providing EV access to students who make up a substantial portion of car share users. Educational and promotional information was also developed to educate users on the operation and adoption of the alternative fuel vehicle technology.

**AMERIGreen Energy, Inc. – Multiple Counties:** AMERIGreen partnered with four landowners to complete a total of 15 240 Volt Level II Electric Vehicle Supply Equipment (EVSE) installations. The EVSE was installed at eight locations in office buildings, hotels and gas station/convenience stores. Four locations are in Lancaster County; and one each Dauphin (Susquehanna Township), Berks, Delaware and Montgomery counties. The EVSE at all locations is available 24/7 for public use and free of charge.

**Republic Services of PA, LLC – South Central PA:** This project helped Republic Services of PA, LLC to purchase and deploy 64 heavy-duty CNG refuse trucks that will provide refuse collection services throughout York, Dauphin, Cumberland and Adams counties. This project is displacing 640,572 gallons of diesel and reducing 159,991 pounds of criteria pollutant and GHG emissions each year.

## STATEMENT OF REVENUES AND EXPENDITURES

FUND BALANCE JULY 1, 2012	\$22,159,202
REVENUES	
Augmentation from General Fund (May 2013)	\$5,983,120
<b>TOTAL REVENUES</b>	<b>\$28,142,322</b>
EXPENDITURES	
Personnel	\$59,367
Operational	\$5,932
Grants	\$6,133,169
Rebates	\$1,517,500
<b>TOTAL EXPENDITURES</b>	<b>**\$7,715,968</b>
FUND BALANCE JUNE 30, 2013	*\$20,426,354

\*The fund balance on June 30, 2013, contains \$5,730,547 of committed grant contract obligations yet to be expended. This leaves an uncommitted balance of \$14,695,807. This uncommitted balance includes the \$5,983,120 of revenue received in May 2013, which could not be committed nor expended during this program year.

Note: The remaining uncommitted available balance is planned to be utilized in competitive grant solicitations to be offered in 2013 and 2014, as well as for alternative fuel vehicle rebates, administrative and operation costs.

\*\*Expenditures

<b>Project Type</b>	<b>Expenditures</b>
Fleet Purchase	\$2,860,160
Biodiesel Incremental Buy-down	\$286,486
Innovation	\$571,313
Fleet Retrofit	\$794,384
Fleet Refueling Equipment	\$1,638,375
Salary/Benefits	\$59,367
Operational costs	\$5,932
AFV Rebate Program	<u>\$1,517,500</u>
<b>Total</b>	<b>\$7,715,968</b>

## 2013-2014 ACTIVE PROJECTS

The following are current active AFIG projects:

FUNDING RECIPIENT	COUNTY	PERCENT COMPLETE	TOTAL AFIG FUNDING	TOTAL AMT INVOICED	REMAINING BALANCE
Momentum Dynamics Corporation	Chester	90	\$586,900	\$515,483	\$71,417
Daniel L Heath d/b/a Venango Leasing Co	Venango	85	\$362,500	\$0	\$362,500
Cranberry Taxi, Inc. d/b/a Veterans Taxi	Allegheny, Butler	70	\$269,000	\$166,200	\$102,800
Western PA Operating Engineers Jt Apprenticeship & Training Fund	Westmoreland	60	\$466,381	\$281,387	\$184,995
Pittsburgh Region Clean Cities	Allegheny, Washington	55	\$238,467	\$22,958	\$215,509
Fossil Free Fuel LLC	Allegheny	50	\$600,000	\$330,565	\$269,435
Williamsport Bureau of Transportation River Valley Transit	Lycoming	50	\$400,000	\$0	\$400,000
Talon Logistics, Inc.	Allegheny	35	\$500,000	\$0	\$500,000
Energy Cooperative Association of Pennsylvania	Philadelphia	35	\$1,057,647	\$329,842	\$727,805
350Green LLC	Multiple	20	\$470,000	\$190,000	\$280,000
CCGI/Pa Turnpike	Multiple	15	\$1,000,000	\$0	\$1,000,000
Sheetz, Inc.	Cumberland	10	\$47,000	\$0	\$47,000
350Green LLC	Multiple	0	\$450,000	\$0	\$450,000