



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Energy Programs Office

Alternative Fuels Incentive Grant Program 2022

August 16, 2022

Tom Wolf, Governor

Ramez Ziadeh, Acting Secretary

Welcome

Tips for participating:

- To ask questions, click on the Chat icon in the lower-right of your screen.
- Set your chat to “All Panelists.”
- Questions welcome! Type your questions and comments into the box at any time.
 - Questions will be answered at the end of the presentation.
- Note: Webinar is being recorded and will be posted online afterward.



Josh Dziubek
DEP Energy Programs Office

- AFIG Overview
- AFIG Project Categories
- How to Apply
- Q & A

What Is AFIG?

- The Alternative Fuels Incentive Grant (AFIG) program is a competitive grant program offering approximately \$3 million in funding to help transition to cleaner fuel transportation.
- Supported alternative fuels include electricity, compressed natural gas, liquefied natural gas, propane, hydrogen, hythane, biodiesel, ethanol, methanol, and other advanced biofuels.

AFIG – Eligible Project Categories

- Vehicle Purchase Projects:
 - Covers the incremental cost of purchase of new alternative fuel vehicles.
- Alternative Fuel Refueling Infrastructure Projects:
 - Covers the cost to purchase and install refueling equipment servicing light and medium duty alternative fuel vehicle fleets.
- Innovative Technology Projects:
 - These are projects that include research, development and demonstration of new applications or next phase technology related to alternative transportation fuels and alternative fuel vehicles.



Photo Courtesy College Township

Vehicle Purchase

- If a portion of existing PA fleet has already been converted to alternative fuels, the following grant amount may be requested:
 - 1–25% of existing fleet converted = up to 75% of max award/vehicle.
 - 26–50% of existing fleet converted = up to 50% of max award/vehicle.
 - 51–75% of existing fleet converted = up to 25% of max award/vehicle.
 - 75% or more of existing fleet converted = up to 10% of max award/vehicle.

Refueling Infrastructure

- Sole focus on funding vehicle refueling projects that service medium-duty (class 3-6) and light-duty (class 1-2) vehicle fleets.

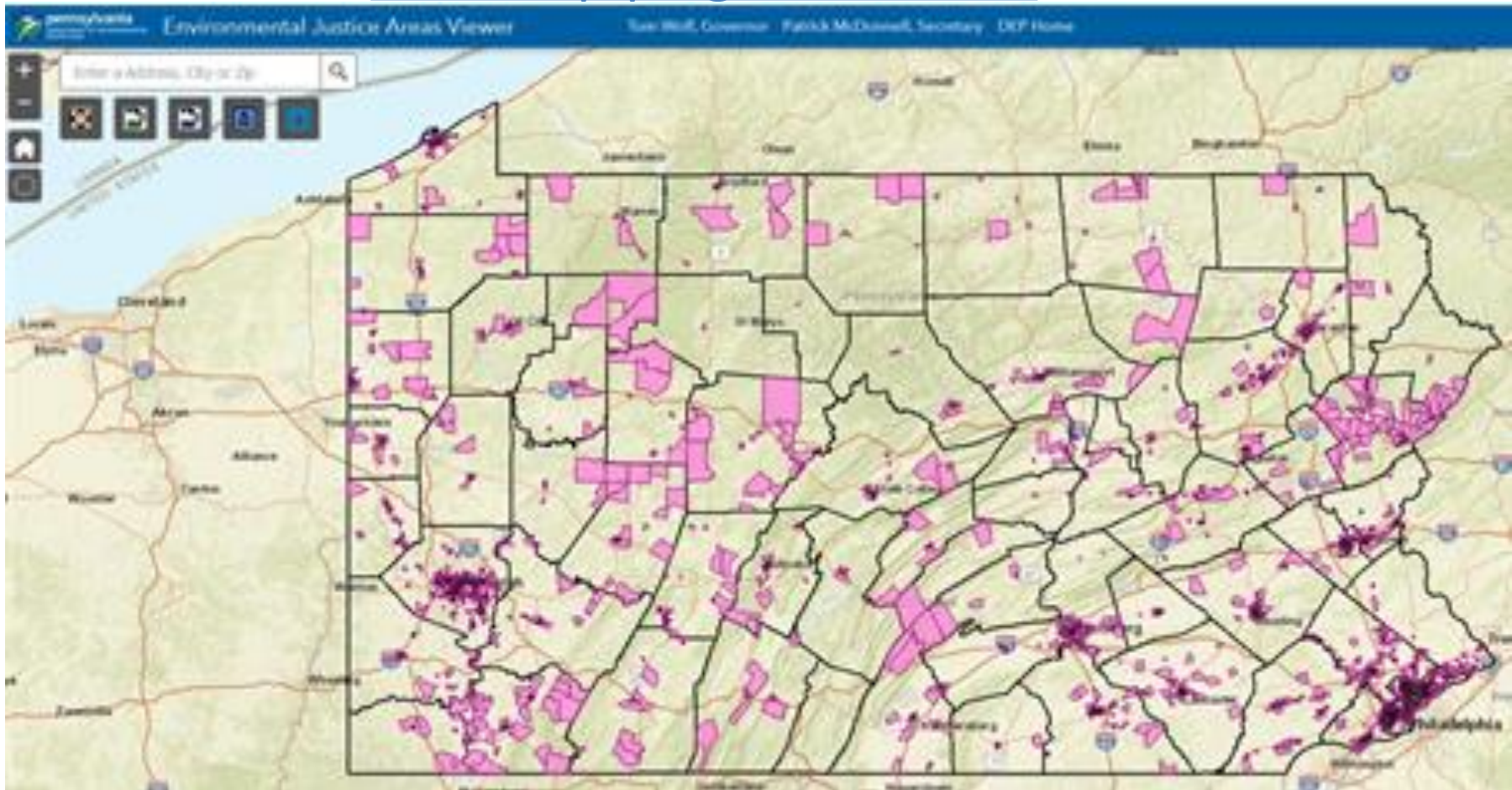
AFIG – Priorities for Funding

- Businesses whose headquarters or principal place of business are located in Pennsylvania;
- Counties, townships, municipalities, or municipal authorities;
- School districts;
- Minority-, veteran-, or woman-owned businesses;
- Organizations that provide services to seniors, low-income individuals and families, individuals with disabilities, veterans, or medical services of any type;
- Zero emission vehicle projects;
- Medium-duty and light-duty fleet refueling infrastructure projects;
- Renewable natural gas vehicle and infrastructure projects; and
- Projects located in or predominantly serving environmental justice areas;

Environmental Justice

Find out if your project serves an EJ area:

www.dep.pa.gov/EJviewer



AFIG – Who Is Eligible?

- School districts
- Municipal authorities
- Political subdivisions
- Incorporated nonprofit entities
- Corporations
- Limited liability companies or partnerships registered to do business in the Commonwealth

Examples of Projects Funded

Class 1 & 2 Vehicle Purchase – City of Scranton was awarded an AFIG grant for the incremental cost to purchase 10 class 1 electric vehicles for the City’s Code Enforcement fleet.

Class 3-8 Vehicle Purchase – The Philadelphia School District was awarded two AFIG grants for the incremental cost to purchase six fully electric school buses.

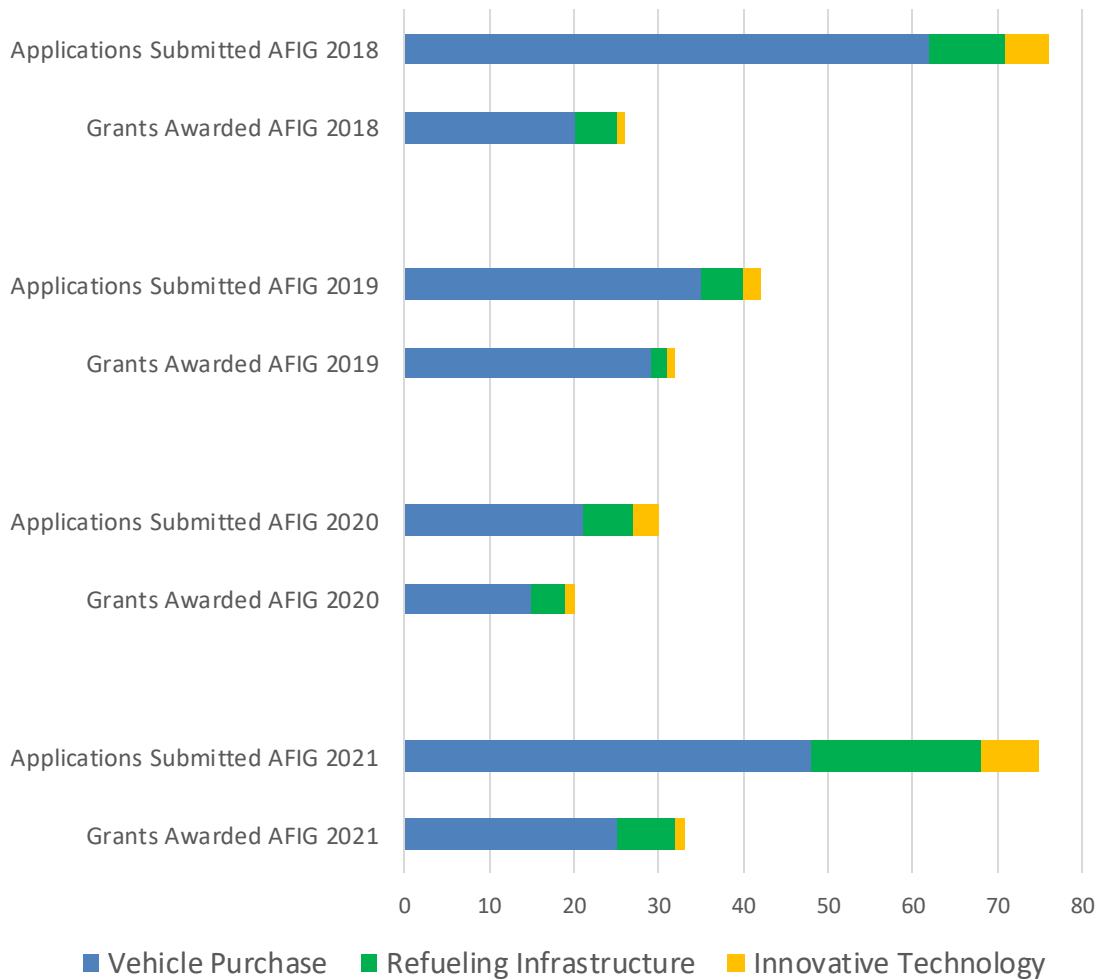
Refueling Infrastructure – City of Scranton was awarded an AFIG grant to purchase and install 10 Level 2 chargers for use by the City’s Code Enforcement fleet.

Innovative Technology – EC Power was awarded an AFIG grant for the development of a thermally modulated lithium iron phosphate (LFP) battery that will offer high performance, extended life, fast recharge, and a low manufacturing cost.

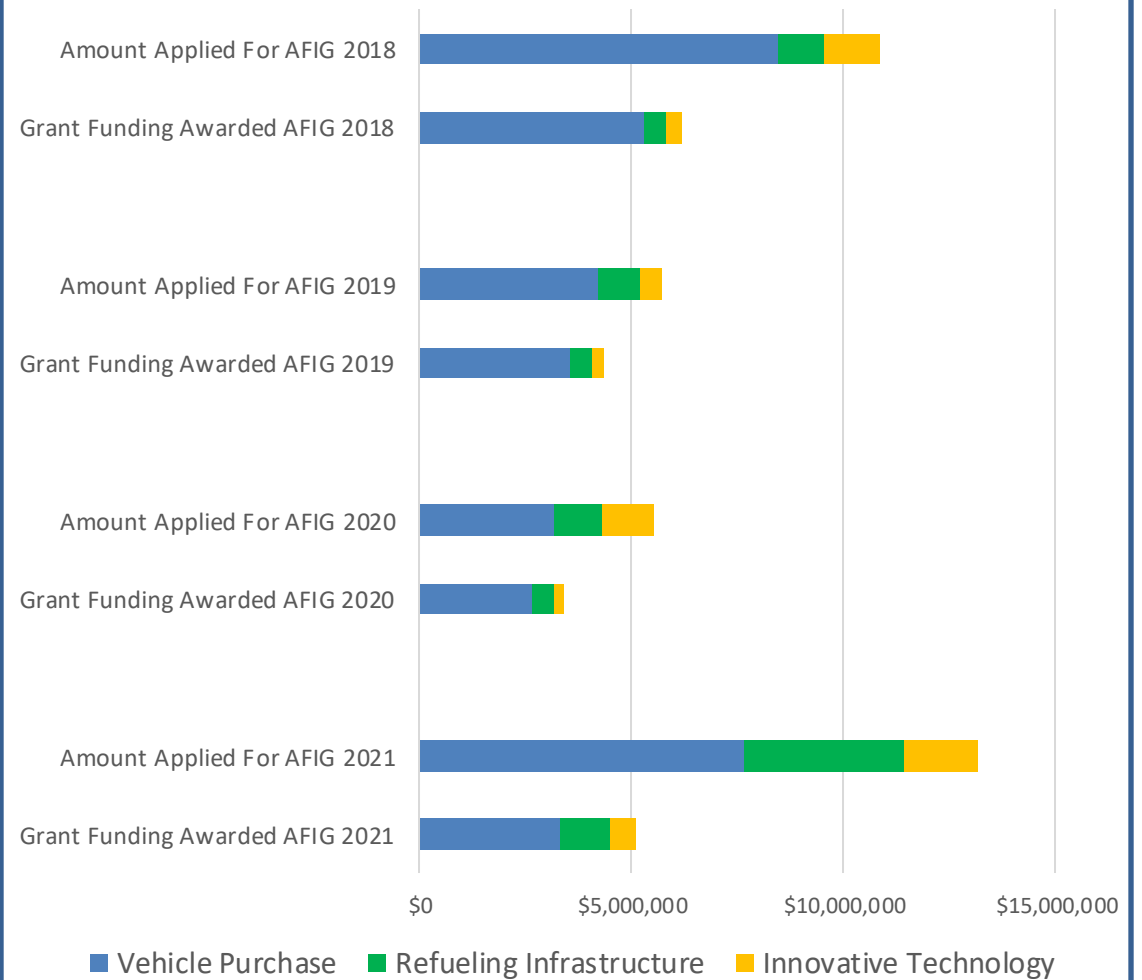
“Scranton is known as the Electric City, and we strive to earn that name again over the coming years. We're grateful for these DEP funds, which will help us build toward our goal of a more sustainable energy future.” - Mayor Paige Cognetti, on the first AFIG funding provided to the City of Scranton for electric vehicles and chargers

AFIG Applications and Awards 2018-2021

AFIG Applications and Awards 2018-2021



AFIG Funds Applied For and Awarded 2018-2021



Vehicle Purchase Projects

- AFIG will fund the incremental cost to purchase new alternative fuel vehicles:
 - The difference in cost between the base price of a conventional model vehicle and its alternative fuel model
 - AFIG does not fund the total vehicle purchase cost
- No GVWR limits on eligible vehicles.
- No scrappage requirement.



Photo courtesy Lancaster Solid Waste Management Authority

Vehicle Grant Awards

Battery Electric Vehicles (BEV):

| Vehicle Class | Battery System Capacity | % of Incremental Cost Eligible for Grant Request | Maximum Grant Award (per new vehicle) |
|--|--|--|---------------------------------------|
| Class 1 and 2 | All BEV with capacity under 50 kWh | N/A | \$2,000 |
| | BEV with capacity above 50 kWh | N/A | \$7,500 |
| Class 3-7 (excluding School and Transit Buses) | BEV with capacity between 50 and 100 kWh | 100% | \$30,000 |
| | BEV with capacity above 100 kWh | 100% | \$40,000 |
| School and Transit Buses | BEV with capacity between 50 and 100 kWh | 100% | \$75,000 |
| | BEV with capacity above 100 kWh | 100% | \$100,000 |
| Class 8 | BEV with capacity between 50 and 200 kWh | 75% | \$75,000 |
| | BEV with capacity above 200 kWh | 75% | \$100,000 |

Vehicle Grant Awards

Other Alternative Fuel Types:

| Alternative Fuel Type | Vehicle Class | % of Incremental Cost* Eligible for Grant Request | Maximum Grant Award (per new vehicle) |
|-----------------------|---------------|---|---------------------------------------|
| CNG | Class 1 and 2 | Up to 100% | \$7,500 |
| | Class 3-8 | Up to 100% | \$40,000 |
| RNG | Class 3-8 | Up to 100% | \$40,000 |
| LNG | Class 1 and 2 | Up to 100% | \$7,500 |
| | Class 3-8 | Up to 100% | \$40,000 |
| Propane | Class 1 and 2 | Up to 100% | \$7,500 |
| | Class 3-8 | Up to 100% | \$40,000 |
| Biodiesel (>B20) | Class 1 and 2 | Up to 100% | \$7,500 |
| | Class 3-8 | Up to 100% | \$40,000 |
| Hydrogen Fuel Cell | Class 1 and 2 | Up to 100% | \$7,500 |
| | Class 3-8 | Up to 100% | \$40,000 |

Refueling Infrastructure Projects

- Medium- and light-duty fleet refueling projects are eligible
- 50% minimum cost share
- 24-month period of performance
- \$300,000 maximum award for the cost to purchase and install refueling equipment
- New stations as well as the expansion of existing stations are eligible (expansions must result in increased use of the facility)
- Stations must be located in PA
- Public accessibility will be taken into consideration



Fleet Refueling Projects:

- Must service at least one existing fleet of alternative fuel vehicles by the end of the period of performance.
- A medium-duty fleet of alternative fuel vehicles must be a group of **ten or more** vehicles with a Gross vehicle weight rating of between 10,000 to 26,000 lbs. (Class 3 through Class 6 vehicles)
- A light-duty fleet of alternative fuel vehicles must be a group of at least two vehicles with a Gross vehicle weight rating of below 10,000 lbs. (Class 1, Class 2a and Class 2b vehicles)

Innovative Technology Projects

- R&D, demonstration, & pilot projects for alternative fuel technology
- Expected to directly result in commercialization
- Maximum grant award of \$300,000
- Requires 50% minimum cost share
- All grant-funded work to be performed in PA
- Must be something new to PA (*innovative*)
- Innovative fueling equipment will be considered

Application Periods

- AFIG is currently open for applications
 - Details can be found on the AFIG web page at www.dep.pa.gov/AFIG
- First Application Submission period ends August 26, 2022, at 4 PM EDT
 - All applications submitted by this time will be reviewed and evaluated
 - Recommendations for awards will be made
 - If a project is not selected for award in this round, they may apply for the second round
- Second Application Submission period ends December 16, 2022, at 4 PM EDT

How to Apply

- ALL applications need to be submitted online using the Commonwealth's eGrants system: Electronic Single Application
<https://www.esa.dced.state.pa.us/login.aspx>
 - First time users must create a Keystone Login Account (username and password)
 - Search for the programs using keyword "alternative fuels"
 - Fill in all required fields marked with a red diamond
 - Refer to step-by-step instructions



Application Best Practices

- Invest time up front to review all the grant program materials carefully, before starting the application
- Read the Grant Program Guidance document and any instructions thoroughly
- Make certain you are applying to the correct category
- Provide all information requested
- Label attachments clearly
- Ask for assistance before applying—not after
- Give yourself plenty of time to apply correctly – don't wait until the last minute

AFIG General Project Narrative Tips

- All applicants are required to submit a detailed Project Narrative
- Focus on the items identified in the general and specific evaluation criterion
- Make certain all requested information as outlined in the Project Specific Instructions is provided
- Be clear and concise – don't provide unnecessary details
- Clearly explain how any fuel displacement and environmental benefit numbers were calculated

AFIG Application Forms

These are the required application forms for each project type.

- [Supplemental Application Form](#) – Vehicle Purchase
- [Vehicle Summary Table](#)
- [Supplemental Application Form](#) – Refueling Infrastructure
- [Detailed Budget Form](#) – Refueling Infrastructure/Innovative Technology
- [Supplemental Application Form](#) – Innovative Technology
- [Detailed Budget Form](#) – Innovative Technology

All required documents are provided on the Addenda Page of the eGrants System

AFIG Tools

- Alternative Fuels Data Center Tools – <https://afdc.energy.gov/tools>
- Argonne National Laboratory AFLEET Online – <https://afleet.es.anl.gov/afleet/>
- EPA Greenhouse Gas Equivalencies Calculator – <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>
- FuelEconomy.gov – <https://www.fueleconomy.gov/>



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Questions?

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www.dep.pa.gov/AFIG