



Pennsylvania Energy Programs Office

Building Pennsylvania's Future: Harnessing Federal Investments to Drive Economic Growth

August 18, 2023

Josh Shapiro, Governor

Richard Negrin, Secretary

DEP's Energy Programs Office (EPO)

Mission

We will work as partners with individuals, organizations, governments and businesses to achieve a balance in the energy sector for deploying energy technologies that prevent pollution, protect our natural resources while ensuring affordable and abundant energy resources for Pennsylvanians that supports economic growth.

Our shared approach focuses on:

Reducing energy consumption, expanding use of solar, wind, biogas, biomass and other renewable energy sources, investing in microgrids and storage technologies, alternative transportation fuels, increased electrification of transportation, energy efficiency upgrades, encouraging the expansion of combined heat and power, zero-emission baseload power and distributed resilient energy systems.

EPO in DEP

.....Because Pennsylvania has a diverse energy mix and a rich set of indigenous resources that are inextricably linked to our environment and our economy.....

- The Energy Office/DEP's Energy Programs Office leverages our non-regulatory partnerships to assist Pennsylvanians with priority level energy choices
 - Describe the outcomes of those choices on the environment, the economy, and support our public policy systems.
- The Energy Office/DEP's Energy Programs Office is able to incentivize planning and deployment of measures.
 - Optimize an energy resource or energy using system such that it adds value to the environment, the economy and our energy resource sustainability.

Program Examples

Alternative Fuels Incentive Grant Program (AFIG) approximately \$5 Million/yr.

- Vehicle Purchase (Incremental Incentive)
- Alt. Fuel Fleet Refueling Infrastructure
- Innovative Technologies
- Consumer Rebates

Driving PA Forward (VW Settlement Funds - \$118M)

- \$17.7 Million for Light Duty EVSE
 - Utilized the full 15% carve out
- Class 8 Truck and Bus
 - (Alt fuel and Clean Diesel) (Elec. w/ refueling)
- Class 4-7 Trucks and Busses (rebate)
 - (Alt fuel and Clean Diesel) (Elec. w/ refueling)
- \$12.7 Medium and Heavy-Duty Fleet Pilot Grant

Program Examples

Green Energy Revolving Loan Fund

- ARRA Program started with \$12 Million in Investment in 2010
 - Helps communities/businesses invest in projects to reduce energy costs, emissions and revitalize.
 - Energy savings measures beyond code.
- Has revolved almost 3X (\$32 Million)
 - Zero losses.
- Leveraged 13 to 1 (Over \$420 Million)
- 20 projects
 - Half of the projects have been located in low-income census tracts
 - Estimated to have saved over 100,000 tons of CO₂s

[Green Energy Loan Fund \(pa.gov\)](http://pa.gov)

Program Examples

Green Energy Revolving Loan Fund

- Leon H. Sullivan Human Services Center (formerly known as Progress Human Services Center)
 - The 67,000 SF 1978 two-story office building is owned and operated by the Leon H. Sullivan Charitable Trust was designed and constructed as a one-stop human services center.
 - The center was vision of civil rights leader, the late Reverend Dr. Leon H. Sullivan
 - The Trust looked to fund numerous energy upgrades to their building including retrofitting of lighting and HVAC systems,
 - Received a GELF loan for slightly over \$293,000.
 - Total project cost \$1.8 Million
 - Retrofits completed in 2022.

Funding for Climate and Energy

Energy Programs Office (EPO): Receiving approximately \$67 million in formula funding from IJA and over \$261 million in formula funding from IRA:

- Predetermined and noncompetitive but must be applied for by EPO and approved.
- For existing or new energy/climate programs managed by EPO, funds to be provided as subgrants for local government or nonprofit energy efficiency programs or invested into clean energy/energy efficiency revolving loan programs.

Required objectives:

- Invest in environmental justice communities to reduce energy burden.
- Expand access to energy efficiency solutions and measures for families, communities, and businesses.
- Increase the generation of reliable, clean, and affordable power.
- Deploy clean and resilient energy infrastructure to combat the effects of climate change.
- Develop a clean energy workforce and manufacturing capabilities.
- Plan for and support the deployment of the technologies of tomorrow to reduce GHGs.

Program Examples – Deploy 2023

Preventing Outages and Improving the Resiliency of the Electric Grid

- Grid Resiliency Grants - \$8 million of IJA formula award funding per year for 5 years to help in improving the all-hazards resilience of the electric grid and to prevent outages through: hardening of assets, real time control and coordination of system assets, and provision of tools for support modeling and analysis efforts.
 - \$16 million available via competitive applications from EPO fall 2023

Microgrids

- Microgrid Analysis – Using State Energy Program IJA funding we are expanding opportunities to examine municipal operations, especially drinking water and emergency services and shelter locations, for clean microgrid suitability.

Municipal Assessments

- Shared Energy Manager Program – Using State Energy Program IJA funding we are providing engineering assessment services to communities to actionize climate plans and deploy energy saving and clean energy generation projects.

Program Examples – Deploy 2024

PA MORE – Municipal Opportunities for Retrofits and Energy Efficiency

Energy Efficiency Revolving Loan Fund: (IIJA)

- **\$3.3 million** in new funding to capitalize or support a revolving loan fund for commercial (includes gov't and nonprofits) & residential energy efficiency loans.
 - Application submitted May 2023
 - DOE award expected later this year

Energy Efficiency and Conservation Block Grant Program: (IIJA)

- **\$3.0 million** to support small local governments and nonprofits programs with grants/rebates/financing for energy efficiency, renewable energy, and zero-emission transportation.
 - Application submitted July 2023
 - DOE award expected later this year
 - Program availability 1Q 2024

Program Examples Deploy 2024

Climate Pollution Reduction Grants

\$5B available to state energy offices to develop and implement plans to reduce greenhouse gas emissions and other pollutants

- Phase 1: Planning grants
 - \$3M to state energy office for statewide Priority Climate Action Plan
 - \$1M to each Phila., Pittsburgh, Lehigh Valley
- Status:
 - DEP awarded \$3M and proceeding with PCAP (due March 2024)
 - Developing stakeholder engagement plan
 - Waiting on federal guidance on Implementation Grant process

Program Examples Deploy 2024 - 25

Climate Pollution Reduction Grants Cont'd

- Phase 2: Implementation grants
 - \$4.6B nationwide, competitive
 - In September 2023, EPA will issue a notice of funding opportunity
- Implementation Grants
 - Eligible to those who received planning grants and developed a Priority Climate Action Plan, OR
 - Collaborating partners who developed joint plans or regionally based plans would be eligible to apply for implementation funds, regardless of who administered the planning grant, as long as they are an eligible entity under the program (i.e., state, municipality, air pollution control agency, tribe or territory).
 - Municipalities and air pollution control agencies will also be eligible to apply for funding for measures identified in their states or metropolitan area's plan for implementation at their level.

- Contact: Lindsay Byron lbyron@pa.gov

Program Examples Deploy 2024 - 25

IRA Home Efficiency Rebates and Home Electrification and Appliance Rebates.

PA to receive approx. \$129 million for each program = \$258 million over 10 years.

HOMES – Full home energy rebates

- State Energy Offices to offer rebates for residential building energy efficiency improvements.
- Whole house energy efficiency modeled or measured programs: single family or multifamily
- Higher rebate amounts (2x) for Low to Moderate Income households.

HEAR - Home Electrification and Appliance Rebate Program

- State Energy Offices to offer rebates for electric appliances & heat pumps
- Point of Sale program only to moderate and low income households
- Discrete list of appliance and energy saving measures plus necessary electrical upgrades and install.

Status:

- DOE guidance published 7/27/23
- PA DEP preparing to apply
- Program availability in PA not expected until 2024

Program Examples Deploy 2024 - 25

IRA Greenhouse Gas Reduction Fund

- **\$27 Billion, competitive** funding for financial and technical assistance to enable zero-emission technologies and projects that reduce or avoid greenhouse gas emissions and other air pollution, including low-income and disadvantaged communities.
 - **\$7 billion Solar for All competition** will provide up to 60 grants to States, Tribal governments, municipalities, and nonprofits to expand the number of low-income and disadvantaged communities that are primed for residential and community solar investment
 - EPO/Pennsylvania Energy Development Authority Notice of Intent (NOI), July 31, 2023
 - Full application due September 26, 2023
 - Deploy Solar for > 30,000 moderate to low income households in 4 years.
 - Award notification expected spring 2024
 - **\$14B National Clean Investment Fund - due Oct. 12th**
 - **\$6B Clean Communities Investment Accelerator – Due Oct 12th**
 - EPO/PEDA not an applicant, potential sub recipient.



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Energy Programs Office



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