



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Energy Programs Office

# ***Building Auditor Training and Revolving Loan Fund Optimization***

**2022 NASEO Energy Policy Outlook Conference  
Thursday, February 10<sup>th</sup>, 2022  
4:15 pm – 5:15 pm**

# Programs

## **Energy Auditors Training Program: \$40 Million**

- Maximum grant request of **\$2 million** to provide energy auditor training assistance – essentially workforce development for energy efficiency sector.

## **Energy Efficiency Revolving Loan Fund: Formula \$3.7 Million (PA)**

- New funding to capitalize or support a revolving loan fund for commercial & residential energy efficiency loans and audits.

## **Building Codes Assistance/Training: \$225 million**

- Funds to be made available nationally over the next five years to be used for energy code workforce training, codes updates, implementation, and compliance.
- State Energy Offices apply in partnership with other eligible entities to support energy code workforce development.

# Programs

## **State Energy Program:**

- **\$18.5 (PA)** million to help implement programs and initiatives to address energy efficiency and renewable energy sources—energy emergency and resilience planning, industry, buildings, transportation, electric power and renewable energy, energy education, and policy, planning, and energy security.

## **Energy Efficiency and Conservation Block Grant Program:**

- **\$4.7 (PA)** million to support small local governments and nonprofits programs with grants/rebates/financing for energy efficiency, renewable energy, and zero-emission transportation.

## **Competitive Funding Opportunities**

- (Insert your own state priorities)

# Investment Priorities

**Use Bipartisan Infrastructure Law funds to deliver a more equitable clean energy future.**

## **Areas of focus:**

- Energy conservation and efficiency
- Advanced energy technologies
- Energy security and resilience
- Clean Energy Workforce
- Climate change mitigation and adaptation
- Investing in environmental justice communities to reduce energy burden

## **Projects will:**

- Increase the generation of reliable, clean, and affordable power
- Expand access to energy efficiency solutions and measures for families, communities, and businesses.
- Support innovative transportation and industrial clean energy solutions
- Develop a clean energy workforce and manufacturing capabilities.

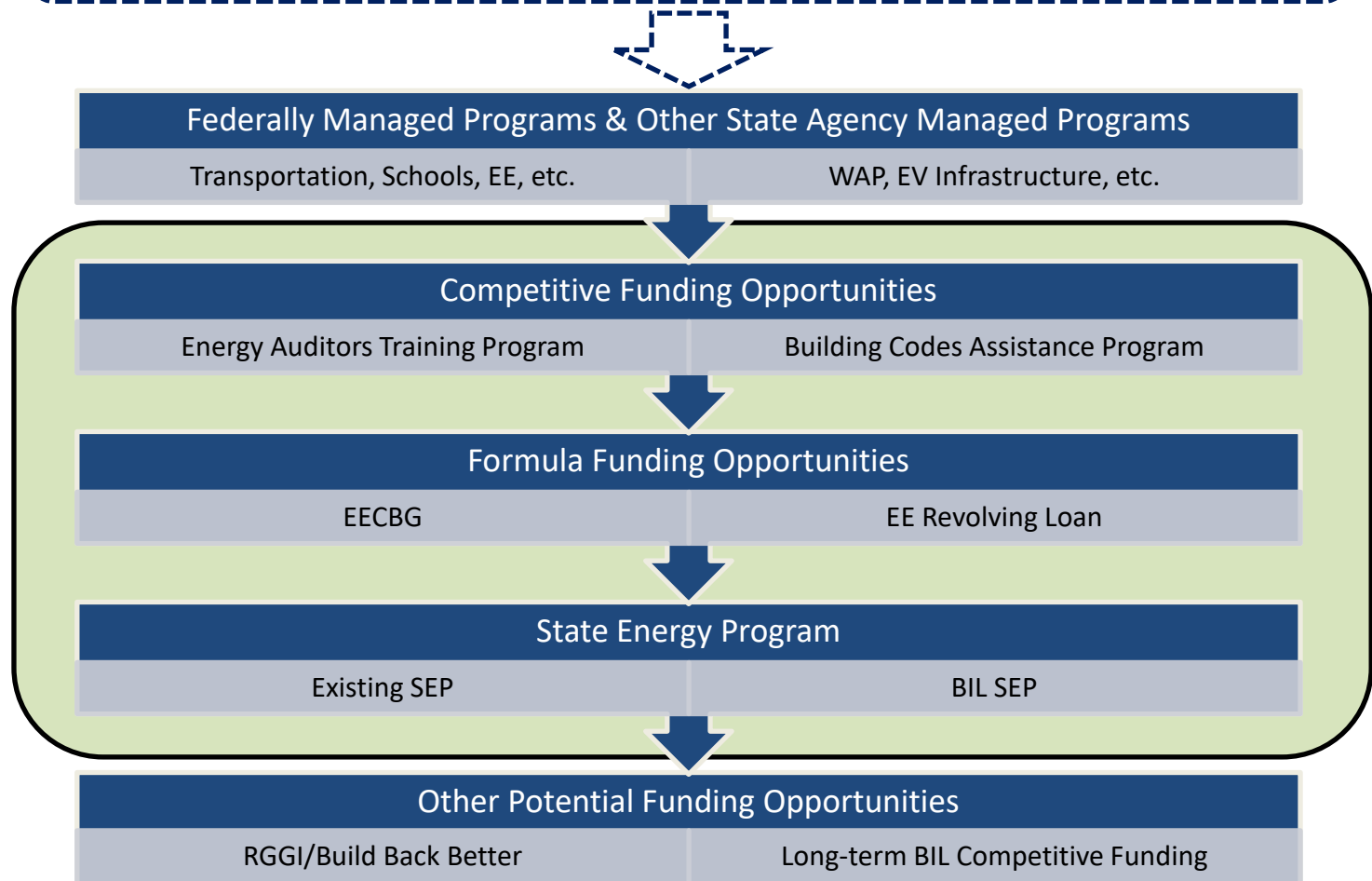
# Guiding Principles

## Investing in environmental justice communities to reduce energy burden

- Apply EJ 40 Principles to guide investment of infrastructure funds in environmental justice communities, while meaningfully considering input in making decisions related to the design and implementation of programs.
- Ensure that all investment programs protect public health, safety, and welfare, mitigating any adverse impacts on human health, especially in environmental justice communities.
- Work to ensure environmental and structural racism are not replicated in gathering input or deploying engagement processes.
- Work with intentionality to distribute environmental and economic benefits of the investments in communities that have been disproportionately impacted by climate change and pollution.

# Decision-Making Process

Investment priorities, goals, and ideas from Clean Energy Program Plan, Climate Action Plan, RGGI Investment discussions, etc.



# Decision-Making Process

## Current analysis of investment opportunities

Incorporating ideas from recent reports, programs, experiences and discussions:

- 2020 PA Clean Energy Program Plan
- 2021 PA Climate Action Plan
- 2021 RGGI Investment Roundtables and Draft Investment Plan
- Current, and past successful programs
  - **Green Energy Loan Fund**
  - Alternative Fuels Incentive Grants and Act 13 Programs
  - Drive PA Forward Programs (VW Mitigation Penalty Funds)
  - Pennsylvania Energy Development Authority Grants
  - Local Climate Action Planning & Strategic Energy Manager Program
  - Industrial Energy Assessment Program
  - ARRA Green Energy Works! & Conservation Works! & **Home Heat Rebate**
  - Small Business Advantage Grant Program
  - **KeystoneHELP**
  - PA Sunshine Program
  - Energy Harvest Program

# Review - Learn

## Energy Efficient Appliance Rebate Program

Replaced old, outdated, less energy-efficient, non-electric hot water heaters, furnaces and boilers in homes with new, more energy-efficient models.

- \$11.3 million
  - 16,574 Projects (equipment removed, replaced and recycled as appropriate)
- Had a **qualified contractor** installation requirement insured that EE jobs would be created/supported within the Commonwealth.
  - Spurred job growth for
    - Contractors and Installation Technicians.
    - Manufacturers, Distributors and Retailers

## Comprehensive Network of Program Partners

- Utilities
- Sears, Lowes
- KeystoneHELP Contractor Network

✓ **Program lacked audit/measurement**



# Review - Learn

## Keystone Home Energy Loan Program (Keystone HELP®) Home Energy and Geothermal Loan Program: (ARRA 2014 data – \$12 Million)

### Keystone HELP

- 6,056 consumer loans valued at \$52.9 Million
- PHFA Renovate and Repair 408 loans valued at \$8.7 Million

### Geothermal

- 542 loan, valued at \$7.5 million

### Outcomes:

- 21.2 MWh of electricity saved
- 153,592 MMBTU reduction in heating fuel consumption
- 11,2687 tons of CO2e emissions
- 11 million sq ft
- 218,000 job hours

### \*Data points

- 2011-2012 \$219,000; 394 persons trained: BPI Analyst, Envelope, Home Perf
- 396 Prequalified Projects, 327 Onsite Inspections, 268 Participating Contractors

# GREEN ENERGY LOAN FUND

The Department of Environmental Protection (DEP) launched a clean investment program called GELF in 2010—and it's been nothing but success ever since.



## \$13 MILLION INVESTMENT

DEP created GELF by investing \$12 million dollars of federal funds into energy efficiency projects for businesses, schools, multi-family housing, and healthcare buildings.



## LEVERAGING ADDITIONAL INVESTMENT

**15:1** Leverage Ratio

GELF funds are partnered with over \$350 million of addition capital, meaning for every dollar GELF provided, another fifteen dollars was invested into the projects.

## REVOLVING FUND

The original funds continue to be reinvested, allowing for a total of \$30 million invested into clean energy projects across PA. There have been zero losses in the program since it began.



## GELF PROJECTS SAVED OVER 100,000 TONS OF CARBON DIOXIDE

Equivalent of taking 22,000 cars off of the road for an entire year.



## 18 PROJECTS

### Reducing Emissions

GELF helps communities invest in projects to reduce emissions & utility costs—increasing the bottom line and combating climate change.

## INVESTMENTS IN LOW-TO-MODERATE INCOME COMMUNITIES

Over half of funded projects have been located in low-income census tracts.

## LEARN MORE ABOUT GELF

<https://www.dep.pa.gov/Business/Energy/OfficeofPollutionPrevention/FinancialOptions/Pages/Green-Energy-Loan-Fund-.aspx>

# Implementation Options Summary

## *Increase the generation of reliable, resilient, clean, and affordable power*

- Clean energy project grants and financing
- Increase Energy Storage potential and Microgrids
- Renewable energy site assessment & development as a part of redevelopment
- Transmission & Energy Assurance planning

## *Expand access to energy efficiency solutions for families, communities, and businesses*

- Industrial, commercial, and residential EE programs
- Financing and grants for local governments in EJ communities that assists with RE and EE projects
- EE Rebates for residents, business to save energy and mitigate/adapt to climate change.
- Assist local governments with limited capacity to apply and receive federal funding
- Increase opportunities for Shared Energy Manager Program, Pooled Procurement of EE, & Local Climate Action Planning

## *Identify and deploy Innovative Transportation, and Industrial Clean Energy Solutions*

- Support PennDOT EV Infrastructure funding initiatives
- Hydrogen CCUS Opportunity Assessments

## *Develop a clean energy workforce and manufacturing capabilities*

- Energy Auditor Training & Building Codes Training Programs focused in EJ and Traditional Energy Communities
- Clean energy apprenticeships & workforce analysis research



Energy Programs Office

# Thank you!

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Director

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DEP Website: [www.dep.pa.gov](http://www.dep.pa.gov)

DEP Climate Website: [www.dep.pa.gov/climate](http://www.dep.pa.gov/climate)

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