

Climate Finance Needs Assessment: Pittsburgh, PA Region

June 2025



Introduction and Purpose

Summary:

This report is based on a place-based needs assessment of Pittsburgh and Allegheny County, PA, by New Ecology, Inc. and ACTION-Housing, conducted from December 2024-June 2025. Assessment activities included a market and policy review, industry and community surveys, stakeholder interviews, and a review of existing training resources and delivery. This assessment is part of a larger effort covering four additional locations and intended to advance nationwide efforts to build support and capacity to implement energy efficiency and decarbonization building projects, including those meeting requirements of the EPA's Greenhouse Gas Reduction Fund (GGRF).

Key Goals:

- Identify areas of current strengths and policy alignment
- Recommend particular areas of training needs and specific policy opportunities
- Build relationships to advance energy efficiency and decarbonization projects
- Identify a potential pipeline for short- and medium-term projects

Key Conclusions and Recommendations

A number of actionable recommendations are described throughout these slides, but our key conclusions and recommendations include:

- Over 70% of Pittsburgh homes rely on natural gas heat. Programs need to address concerns about **increased fuel cost** of switching from gas to electric heat, even with highly efficient heat pumps.
- **Workforce training exists for single-family residential contractors**, but folks are concerned about the value and longevity of the work when compared to traditional union jobs.
- A key action to increase energy efficiency and demonstrate support for single-family contractors would be to **fund the state's popular Whole-Home Repairs Program**.
- **Pittsburgh has strong existing networks** of nonprofits, contractors, and government agencies to support energy efficiency in buildings.
- Pittsburgh also has strong philanthropic support, but this is lacking regionally and **all of Southwest PA could benefit from more CDFI And community lenders**.

Local Partners

New Ecology (NEI) seeks to achieve high performing, healthy, resilient housing and communities that are affordable and sustainable and, through our work, support good jobs and wealth creation, with a focus on equity. We've spent over 25 years as sustainability consultants to a range of community development, affordable housing, non-profit, government, arts, education, and commercial projects.



ACTION-Housing is a nonprofit based in southwest Pennsylvania with a mission to empower people to build more secure and self-sufficient lives through the provision of decent, affordable housing, essential supportive services, asset building programs, and educational and employment opportunities. Since 1985, ACTION-Housing has developed or assisted in the development of over 4,500 units of housing, both single- and multifamily, making ACTION-Housing Pittsburgh's largest nonprofit developer.



National Partners

This project was conducted in partnership with the **Relay Network**, a national network of energy efficiency implementers who promote knowledge sharing, facilitate collaborative partnerships, and encourage joint innovation. As an alliance of mission-based non-profit organizations, we leverage each other's expertise to extend our collective reach to the buildings, residents and communities that we serve.

National partners who contributed to the Pittsburgh needs assessment include **Institute for Market Transformation (IMT)** and **Building Energy Exchange (BE-Ex)**.

Funding for this project was generously provided by **Invest in Our Future**.



Needs Assessment Findings: Regional Priorities



Needs Assessment Components

This needs assessment included:

- Market research on demographics and housing
- Analysis of state and local policy context
- Surveys of key stakeholders
- In-depth interviews with key stakeholders
- Analysis of training resources
- Research into existing projects that already include building decarbonization

Market Research

Most housing in Pittsburgh is single-family and owner-occupied

- Of the approximately 1 million housing units in the Pittsburgh MSA, 71% are owner-occupied.

Most housing is over 45 years old, and requires structural upgrades

- 71.7% of housing units were built before 1980—with fully 48% built before 1960. Health, safety, and structural upgrades are often required before or alongside energy upgrades, especially in older homes occupied by low-income households. Additionally, high precipitation rates and hilly terrain make costly moisture, mold, and foundation problems common.

Over 70% of Pittsburgh homes rely on natural gas heat

- Residential homes in Pittsburgh are primarily heated by natural gas (71.6%) or fuel oil (5.8%). While the carbon impact of combined efficiency and electrification may be significant, the increased costs of electricity will reduce or perhaps even eliminate any savings to pay for the initial improvements.

Local Policy Context

Pittsburgh 2030 Climate Targets

- 50% reduction in greenhouse gas (GHG) emissions citywide by 2030
- 50% reduction in energy and water use in city facilities by 2030
- 100% renewable energy for municipal operations by 2030
- Pittsburgh 2030 District aims for existing buildings to achieve a 50-65% reduction in carbon emissions and new construction to be zero carbon by 2030.

Allegheny County C-PACE

In 2019, Allegheny County adopted a Commercial Property Assessed Clean Energy (C-PACE) program that allows owners of commercial properties to apply for lost-cost, long-term financing for clean energy and water efficiency projects. Multifamily commercial properties (>4 units) were included in 2023.

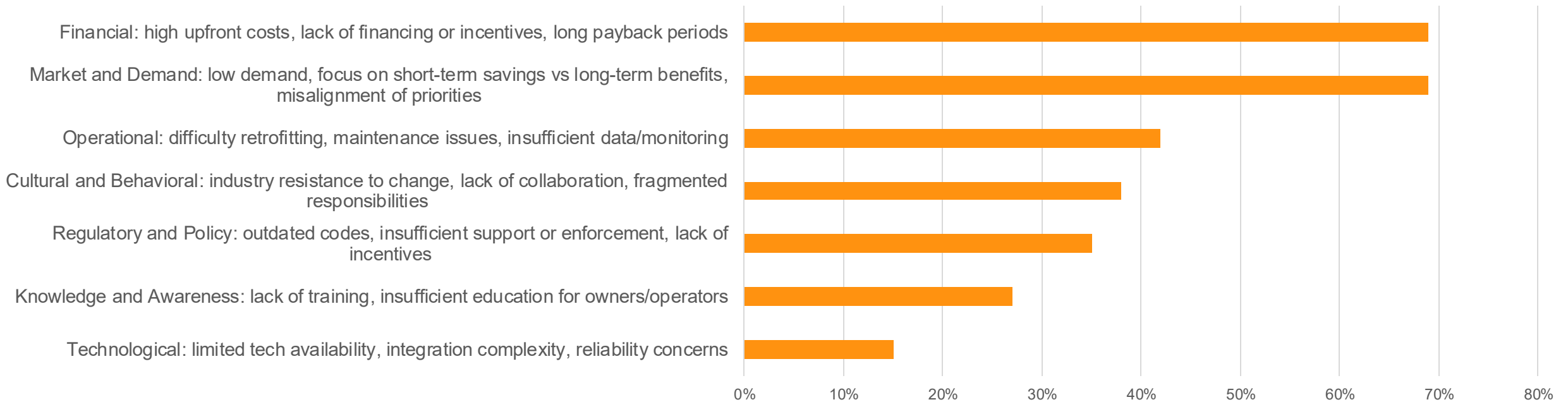
Act 129: Statewide Electric Utility Energy Efficiency Programs

- Duquesne Light, local utility, administers PUC-regulated program
- Planning for next phase of program design happening now

Survey Results

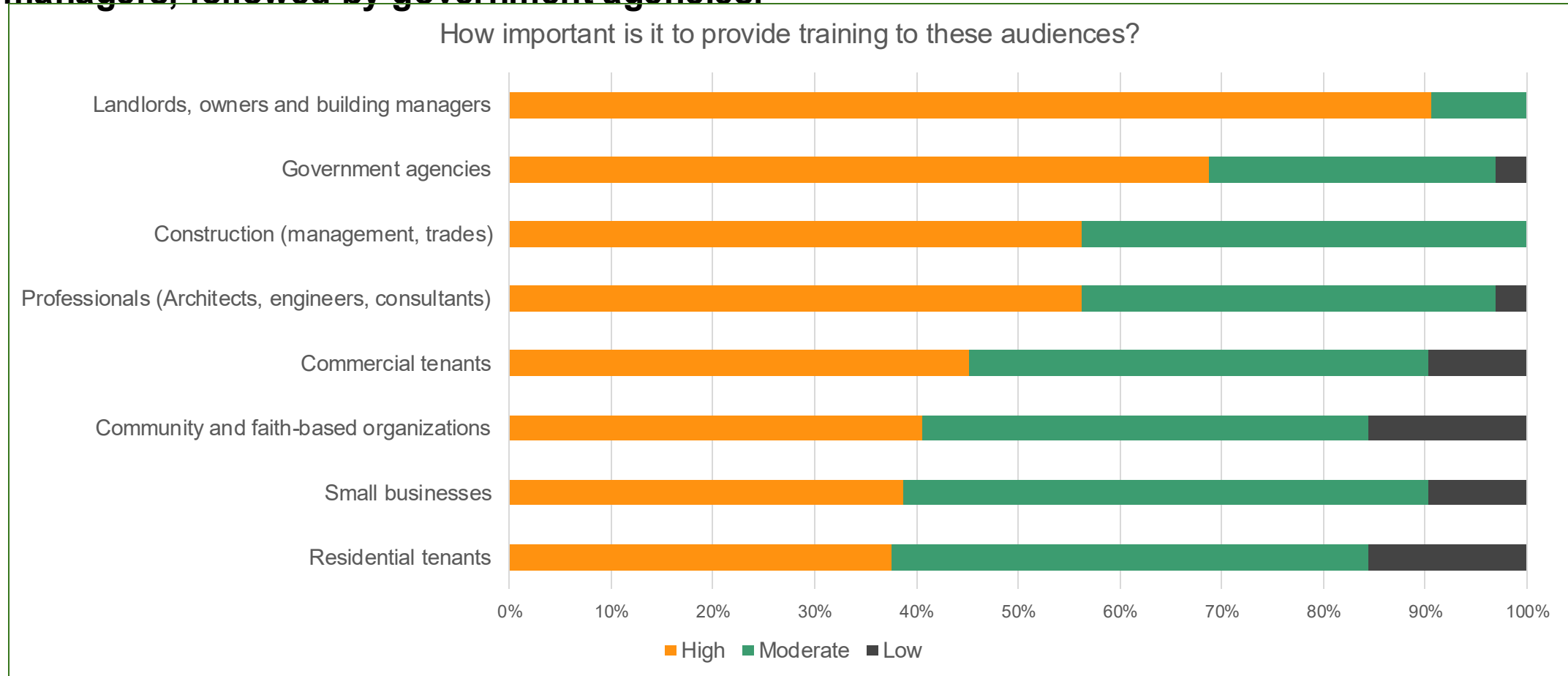
The top barrier to decarbonization was financial--high costs, limited funding, and long payback periods--and low market demand.

What are the top barriers to advancing energy efficiency?



Survey Results, *continued*

The most important audiences for training were landlords, property owners, and building managers, followed by government agencies.



Stakeholder Engagement

Broad regional support and networks exist for energy retrofits and decarbonization

- While the building stock is mostly owner-occupied single-family, there are also numerous advocates, related program managers, and workforce experts focused on those properties already.
- Stakeholders noted their experience with an aging building stock that needs health, safety, and structural upgrades alongside energy efficiency and electrification investments.

And Pittsburgh has significant philanthropic resources which can further drive innovation

- Rich philanthropic sector with significant resources in Pittsburgh. Foundations hold significant influence in the region due to their financial support and can drive progress in key initiatives, but there is limited funding availability in Western PA beyond the Pittsburgh region.
- Relatedly, interviewees reported that southwest Pennsylvania has a low number of CDFIs and other community lenders focused on real estate.

Stakeholder Engagement, *continued*

Experience with single-family building stock, and opportunities to expand to MF

- While the building stock is mostly owner-occupied single-family, there are also numerous advocates, related program managers, and workforce experts focused on those properties already.
- The SW Pennsylvania region boasts strong experience and technical capacity to design, build, and retrofit high-performance affordable multifamily housing, and seeks to scale work in this sector.

But grants and other funding models are needed to serve low-income households

- Local actors emphasize the need for grants to serve low-income households, noting that low-interest debt alone is insufficient.
- In addition to paying hard costs that debt cannot support, grants can help developers with pre-development (technical and financial planning assessments) as well as project implementation technical assistance and certifications.

Stakeholder Engagement, *continued*

Pittsburgh has a long history of effective workforce training and career pathways

- Multiple training centers exist, such as the Clean Energy Center and the Pittsburgh Workforce Development Hub
- A new workforce training center focused on energy and building science in the residential market is opening in summer 2025.

However, Pittsburgh also has a strong union presence which competes with single-family opportunities

- Stakeholders expressed concerns about meeting demand for trained and career pathway jobs in the historically non-union residential construction sector.

“We need to excite participants about ‘building better’ by incorporating building science, health, and wellness into construction practices.” - local workforce development director

Existing Training Resources

Strengths	Weaknesses
<ul style="list-style-type: none">Numerous local entities offer building science trainings to wide array of building professionals	<ul style="list-style-type: none">Concerns about the long-term prospects for scaling clean energy work without increased funding and more policies to create demand
<ul style="list-style-type: none">Trainings focus on single-family projects, but most SF workers are independent or contract	<ul style="list-style-type: none">Concerns about the value of career opportunities in clean energy improvements in single-family homes as compared to union jobs
<ul style="list-style-type: none">Keystone Energy Efficiency Alliance prioritizing energy auditors as a high-need occupation	<ul style="list-style-type: none">Lack of case study projects showcasing successful examples.
<ul style="list-style-type: none">New weatherization training center opening summer 2025, looking to expand to solar and heat pump commissioning and installation	

Key Takeaways

- Residential sector relies heavily on contract-labor and so has not invested in labor development
- Clean energy jobs must show clear value, demand, and career opportunities akin to unions

Example Project: McKeesport Downtown Housing

McKeesport Downtown Housing is the renovation of an historic YMCA into an 84-unit SRO which includes a cold-weather shelter, emergency housing, and 40 section 8 rental units.

Owner / developer: ACTION Housing, Inc.

The project was renovated to meet Passive House standards, including replacing a gas boiler system with an electric geothermal system, upgrades building envelope and new ventilation. Project achieved a 68% reduction in energy use despite the addition of air conditioning.

Financing for the \$10.6M renovation included a private loan and 9% LIHTCs.



Source: ACTION Housing

Example Project: Greenfield Terrace

Greenfield Terrace is a renovation of a 40-unit Section 202 senior building built in 1994. This project was identified by the owner as having the highest EUI in the owner's multifamily portfolio.

Owner / developer: ACTION Housing, Inc.

Recommended improvements include a new roof, chiller, elevator, and will be coupled with energy upgrades that align with the DOE Zero Emissions Building definition. These investments are expected to reduce site energy use by 57% and annual owner-paid utility costs by \$27,000.

Financing for the project is based on a PRAC to RAD conversion, supporting private debt, state funding from the Public Housing Affordability and Rehabilitation Enhancement (PHARE) Fund, and additional local sources.



Source: ACTION Housing

Needs Assessment Findings: Recommendations



Recommendations Overview

Recommendations are designed to support the overall climate finance ecosystem in the Pittsburgh region:

- Project Pipeline
- Policy Solutions
- Training and Resource Needs
- Market Coordination

Project Pipeline

Developers with projects already in the GGRF pipeline:

- ACTION Housing

Developers/owners with potential upcoming GGRF-eligible projects:

- Beacon Communities
- The Community Builders
- McCormack Baron Salazar
- National Church Residences
- Pennrose
- Trek Development
- Regional public housing authorities (Pittsburgh, McKeesport, and Allegheny County)

Additional outreach should prioritize the following organizations:

- Rising Tide Partners
- Energy Efficiency Empowerment

Project Pipeline: Public housing in Pittsburgh and Allegheny County

HACP



Northview Heights

Units	455
Decarb ROM Total	\$21.6M

GHG Reductions
2025 - 2050

33,360 MTCO₂e



Bedford Dwellings

Units	303
Decarb ROM Total	\$2.1M*

GHG Reductions
2025 - 2050

17,555 MTCO₂e

*delta to construction to fully electrify and solarize both phases



Mapleview

Units	30
Decarb ROM Total	\$2.9M

GHG Reductions
2025 - 2050

3,250 MTCO₂e



Springdale

Units	90
Decarb ROM Total	\$2.3M

GHG Reductions
2025 - 2050

3,059 MTCO₂e



Blawnox

Units	90
Decarb ROM Total	\$3.4M

GHG Reductions
2025 - 2050

3,230 MTCO₂e



Uansa Village

Units	37
Decarb ROM Total	\$3.9M

GHG Reductions
2025 - 2050

4,572 MTCO₂e

ACHA

Policy Solutions

Fully fund the state's Whole-Home Repairs Program

- This program was established in 2022 to address habitability and safety concerns, provide measures to improve energy or water efficiency and provide funding to counties for construction-related workforce development. 18,000 families statewide are on a waiting list for this support, but the legislature has rejected the Governor's \$50m budget request to continue this program since 2023.

Enforce current codes and update the residential building code to IECC 2021

- Pittsburgh's residential energy code is based on IECC 2018, and interviews noted that enforcement could be improved. Additionally, Pittsburgh could follow Philadelphia and adopt IECC 2021 for residential and commercial properties.

Invest in existing partnerships led by public agencies

- Local city staff is interested in supporting decarbonization with a specific investment in downtown Pittsburgh through the Pittsburgh Division of Sustainability and Resilience and Urban Redevelopment Authority.
- A broad coalition of local agencies and nonprofits have mobilized through Pennsylvania United to identify public housing properties in the region that could benefit from GGRF funds.

Training and Resource Needs

Content	Target Audience	Delivery Org	Reason
Case Studies re: finance and implementation	Landlords/owners/managers Government agencies CDFIs and community lenders	Action Housing	Demonstrate proof of concept
Webinars & In-Person Events	Landlords/owners/managers Government agencies Construction managers and trades	Green Building Alliance	Raise broad awareness of general building science
Solar-only lending case studies and trainings	Landlords/owners/managers Construction managers and trades CDFIs and community lenders	Pennsylvania Solar Center; SWPA Hub	Specialty knowledge needed to augment energy efficiency
Trainings to connect efficiency, health, and wellness	Homeowners Contractors	Penn College; Pittsburgh Gateway Corporation	Raise awareness and build a market for SF and training
Step-by-step guide to help understand eligibility	Landlords/owners/managers Design professionals	Green Building Alliance	Help projects to be more aggressive early in the process

Market Coordination

Building Performance Hub

To facilitate training and resource development on energy efficiency across the building industry, we recommend that localities develop or identify and resource a Building Performance Hub. Hubs can be separate nonprofits, programs of existing nonprofits or universities, or offices within local government.

The Southwest PA Municipal Project Hub and the City of Pittsburgh Workforce Development Hub are existing local examples of similar efforts focused on economic development and workforce development. Additionally, the Green Building Alliance and related non-profits are active parts of an existing ecosystem. These could be models or perhaps expand their services to create a community-of-practice across siloed parts of the development, design, construction, management, and financing of buildings.

A Pittsburgh Building Performance Hub would advance energy efficiency by:

- Convening industry stakeholders
- Offering locally-relevant training and resources that fill identified gaps
- Connecting projects with experienced contractors and vendors
- Compiling and advising on available federal, state, and local financial incentives

Market Coordination

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