



ALLEVIATING ENERGY POVERTY IN PHILADELPHIA

A strategy for improving quality of life for all Philadelphians and advancing a greener city with economic opportunity for all

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CONSULTANT TEAM

AECOM, Lead Consultant
Connect the Dots, Stakeholder Engagement
SAY / DO, Equity Advisor
Maskar Design, Report Design and Layout

ACKNOWLEDGMENTS

The Philadelphia Office of Sustainability (OOS) is grateful to the many community members, program providers, and other stakeholders whose contributions form the core of this strategy. We thank the members of the following agencies and organizations, listed in alphabetical order, who generously contributed their time, expertise, and lived experience to this effort through participation in focus groups and the Energy Poverty Alleviation Strategy Steering Committee:

- Clarifi
- Community Legal Services
- Energy Coordinating Agency
- Green Building United
- HERE 4 Climate Justice
- Hunting Park CDC
- Local Initiatives Support Corporation
- PECO
- Pennsylvania CDFI Network
- Pennsylvania Department of Community and Economic Development
- Pennsylvania Department of Environmental Protection – Energy Programs Office
- Pennsylvania Department of Environmental Protection – Office of Environmental Justice
- Pennsylvania Department of Health and Human Services
- Pennsylvania Utility Law Project
- Philadelphia Department of Planning
- Philadelphia Department of Public Health
- Philadelphia Energy Authority
- Philadelphia Gas Works
- Philadelphia Green Capital Corp
- Philadelphia Housing Development Corporation
- Philadelphia Industrial Development Corporation
- Philadelphia Managing Director’s Office
- Philadelphia Office of Community Empowerment and Opportunity
- Philadelphia Office of Homeless Services
- Rebuilding Together

Finally, we thank all the Philadelphia residents who have shared their perspectives and lived experiences with the OOS team. The residents quoted in this document shared their thoughts as part of the Energy Burden Focus Groups conducted by OOS in 2020. Their ideas are central to our approach to alleviating energy poverty in Philadelphia.

LETTER FROM THE DIRECTOR



Dear Friends,

Mayor Cherelle L. Parker envisions Philadelphia as the safest, cleanest, greenest, big city in the United States with economic opportunity for all. Her vision aligns well with the Office of Sustainability's mission to improve quality of life for all Philadelphians by advancing environmental justice, reducing the city's carbon emissions, and preparing for a hotter and wetter future.

Reliable, affordable access to energy is essential to securing a fundamental quality of life: it ensures that basic needs such as heating, cooling, and access to electricity are met while promoting social stability and well-being. Today, too many Philadelphians experience energy insecurity, which excessively impacts historically underserved communities. These Philadelphians pay a disproportionate share of their income toward utility bills but often lack access to the resources to lower these costs.

This Energy Poverty Alleviation Strategy lays out a stakeholder-informed, actionable roadmap to address the challenge of energy insecurity in Philadelphia, prioritizing the energy needs of the city's most vulnerable residents. It calls for supporting, strengthening, and scaling up our energy ecosystem to protect and improve the city's dwellings, making them safer, healthier, and more energy secure and resilient.

While addressing energy poverty is vital to improving daily quality of life, it also plays an extremely important part in the long-term work to reduce our city's carbon emissions and to ensure an equitable, sustainable, and just clean energy transition in our city. We look forward to working with our partners to deliver on Mayor Parker's vision and to advance our office's mission to ensure that all Philadelphians can access and afford energy that is clean, healthy, and safe.

A handwritten signature in blue ink, appearing to read 'Elizabeth Lankenau'.

Elizabeth Lankenau, AICP
Interim Director
Office of Sustainability

EXECUTIVE SUMMARY

Mayor Parker's 100-Day Action Plan calls for a "safer, cleaner, greener Philadelphia, with economic opportunity for all."

Energy use in the city's buildings accounts for a significant share of the city's greenhouse gas emissions. To achieve Mayor Parker's vision, all buildings including single-family houses, multi-family buildings and commercial buildings large and small, must use energy as efficiently as possible and begin the transition to clean sources of energy. The Philadelphia Office of Sustainability (OOS) is tasked with setting and implementing the strategy and vision for Philadelphia's clean energy transition and to ensure that it is equitable and just. Small, residential buildings account for a large share of the city's building square footage. Given the significant challenges many Philadelphia households face in accessing and affording energy retrofits and clean energy upgrades, alleviating energy poverty is key not only to achieving carbon neutrality but also for ensuring an equitable and just clean energy transition in Philadelphia.

Compared to other cities in the United States, Philadelphia faces some of the highest energy costs relative to residents' income. This crisis is caused by interrelated factors such as poverty, Philadelphia's aging housing stock, insufficient resources to invest in building repairs and energy upgrades, and a history of disinvestment in communities. High energy burden, or a high ratio of energy costs to income, has profound effects on quality of life; it is associated with indebtedness, poverty, poor health outcomes, and increased risk of eviction, homelessness, and displacement. High energy burden disproportionately affects renters as well as low-income and Black, Indigenous, People of Color (BIPOC) households. This energy insecurity also leaves many Philadelphians singularly vulnerable to the impacts of climate change; energy needs are expected to increase as the city gets hotter.

To achieve Mayor Parker's vision of a healthy and sustainable Philadelphia, with "affordable luxury" housing for all, Philadelphia's energy-burdened communities must be prioritized and resourced to participate in and benefit from the city's clean energy transition.

Philadelphia benefits from a strong landscape of energy programs which strive to assist households with a high energy burden. State and federal agencies, Philadelphia utilities, community-based organizations (CBOs), and City departments offer programs and services that seek to alleviate energy poverty. However, the need for these services exceeds the current capacity of these programs.

The Energy Poverty Alleviation Strategy is an implementation-focused, near-term action plan for OOS to guide energy poverty alleviation in Philadelphia, reduce the city's emissions and achieve our vision of a city where all Philadelphians can access and afford energy that is clean, healthy, and safe.

The strategy is an actionable framework to increase the scope, scale, and participation in the city's clean energy transition for Philadelphia's most energy-burdened communities. It reflects community and programmatic perspectives on key needs, barriers, and challenges to reducing energy burden, as well as stakeholder recommendations for opportunities, solutions, and approaches to address these barriers and challenges.

Our strategy outlines three approaches to alleviate energy poverty for Philadelphia's income-constrained, marginalized, and vulnerable households:

1. Support Philadelphia's existing energy ecosystem to address barriers and challenges in access, delivery, programmatic gaps, and scaling.

We will provide research, technical assistance, convening and planning support to alleviate barriers to program access and delivery, close programmatic gaps, and scale delivery and access.

2. Implement and advocate for enabling legislation and incentives at the local and state level.

We will identify opportunities at the local level to fund and finance Philadelphia's equitable clean energy transition, implement local enabling legislation and policies, and advocate for greater Commonwealth support for energy poverty alleviation.

3. Strengthen and support the partner network.

We will build the capacity of our community and stakeholder partners to increase program and service delivery through education, engagement, and collaboration.

Together, these approaches will help Philadelphia achieve our vision of a city where all Philadelphians can access and afford energy that is clean, healthy, and safe.

DEFINITIONS

Community solar laws allow groups of residents who cannot install solar on their own property (such as renters or residents of apartment buildings) to subscribe to a portion of an offsite solar panel installed on behalf of the group.¹

Energy burden is the percentage of gross household income spent on energy costs.² A household is typically considered to be facing a high energy burden if their energy burden is more than 6%.³

Energy insecurity, as defined by the Office of Sustainability (OOS), is experienced by households that struggle to afford the energy needed for daily life and sufficient human comfort.

Energy poverty, as defined by OOS, is experienced by households that are limited in their ability to access solutions and resources to ensure energy security.

Heat pumps are a type of heating and cooling technology that allows houses to be heated and cooled efficiently using electricity, instead of on-site use of fossil fuels such as fuel oil and natural gas.

The **split incentive** is when landlords do not have an incentive to invest in energy upgrades in a property because the tenant, who pays the power bill, would experience the benefit of the resulting cost savings.

Universal Services describe a set of programs that utilities are required to offer to help customers in need pay their utility bills, including Low-Income Usage Reduction Programs (LIURPs), Customer Assistance Programs (CAPs), Customer Assistance and Referral Evaluation Services (CARES), and Hardship Funds.

Weatherization describes the process of improving a building's energy efficiency through measures such as air sealing, insulation installation, and duct sealing.

1 INTRODUCTION

The Philadelphia Office of Sustainability (OOS) is responsible for advancing Philadelphia's clean energy transition and preparing the city to adapt to climate change, driven by our values of equity and environmental justice.

Mayor Parker's 100-Day Action Plan, released in January 2024, calls for a "safer, cleaner, greener Philadelphia, with economic opportunity for all." The Plan lists initiatives to improve housing quality and economic prosperity for Philadelphians, including proposals to create "One Front Door" as a unified point of entry to City home improvement programs, and to launch a vision of "Affordable Luxury," or the availability of housing with quality finishes for low- and moderate-income households. Many of these initiatives are connected to improving energy security for Philadelphians. Energy security and housing are deeply connected. Energy efficient houses, with affordable and clean heating and cooling, are a fundamental aspect of housing quality and achieving emissions reductions.

"Our winter costs are three to four times as high as our summer bills."

"We can't afford to run the air conditioning, but [the heat] makes our asthma worse."

– Residents

Many Philadelphians experience energy insecurity: they are unable to afford the energy needed for daily life. As climate change accelerates, this insecurity will likely grow worse. These Philadelphians also experience energy poverty, which we define as being limited in the ability to access solutions and resources to ensure energy security, such as weatherization to reduce energy costs, electrification to increase access to high-efficiency clean energy technologies, and solarization to increase energy independence and resilience and reduce emissions.

These limitations are rooted in the insufficiency of available solutions and resources to meet the needs of Philadelphia's energy insecure and climate-burdened residents.

Addressing energy poverty also supports the City's goal to be carbon neutral by 2050. Almost 70% of Philadelphia's greenhouse gas emissions come from buildings and industry.⁴ To achieve the housing, sustainability, and economic goals established by Mayor Parker while meeting our climate goals, we must accelerate the clean energy transition across the building sector, especially the small residential sector, and we must do so equitably and justly.

For Philadelphia's clean energy transition to be equitable and just, those with limited access to this transition and being made increasingly vulnerable as climate change accelerates must be prioritized and appropriately resourced to participate in and benefit from this transition.

In 2023, we initiated a multi-stakeholder strategic planning process to identify needs, barriers, opportunities, and solutions to ensure that Philadelphia's clean energy transition is accessible to the city's most vulnerable communities. *This process is described in Appendix 1.* This Energy Poverty Alleviation Strategy captures multi-stakeholder perspectives on these solutions and approaches and establishes a strategy and implementation roadmap to alleviate energy poverty in Philadelphia.

2 PHILADELPHIA'S ENERGY BURDEN CHALLENGE

Philadelphia is one of the most energy-burdened cities in the United States. Energy burden is defined as the percentage of gross household income spent on energy costs.⁵

High energy burden plays a significant role in energy insecurity, leading to “heat or eat” dilemmas. Households with a high energy burden are more vulnerable to unsafe living conditions and poor health outcomes due to inadequate heating and cooling.

19% A quarter of low-income households in the Philadelphia metropolitan area are spending more than 19% of their income on energy.

This is almost six times higher than the median energy burden, making Philadelphia one of only five metro areas nationwide where low-income households are so severely burdened.⁶

High energy burden is disproportionately experienced by low-income and Black, Indigenous, People of Color (BIPOC) households.

53% In Philadelphia, the median energy burden for Black households is 53% higher than non-Hispanic white households.⁷

National data show that renters tend to face a higher energy burden. Nationwide, the median energy burden for renters is 13% higher than that of owners, and nearly half of Philadelphia households rent their homes.^{8,9} Renters have limited agency to implement upgrades to reduce their energy costs, and landlords are not incentivized to invest in upgrades that only reduce energy costs for tenants. Furthermore, landlords of small rental dwellings, which make up a large share of Philadelphia’s rental housing, often do not have the resources to make these investments.

Philadelphia’s high energy burden is caused by several factors, including income, historical disinvestment, and characteristics of the housing stock. According to 2022 Census data, Philadelphia has a high poverty rate, with 22% of the population living in poverty.¹⁰ In addition, more than half of residential buildings in Philadelphia are more than 80 years old, requiring increased investment for upkeep and maintenance.¹¹

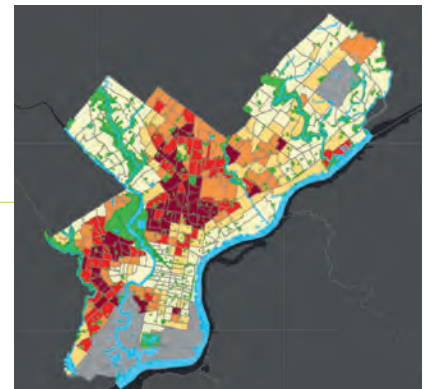
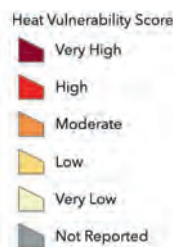
70% Almost 70% of single-family homes are not well sealed, causing these households to have higher energy costs due to wasted energy.^{12*}

*Data are modeled, not actual, and may change over time.

The needed support for improvements to Philadelphia housing underscores the need for Mayor Parker’s vision of Affordable Luxury for Philadelphia’s low- and moderate-income households.

High energy burden has profound impacts on quality of life. It can lead to indebtedness, poverty, poor health outcomes, and increased risk of eviction, homelessness, and displacement. In Philadelphia, the most energy-burdened neighborhoods are also some of the most vulnerable to high temperatures.¹³ Low-income Philadelphia neighborhoods can have average temperatures that are 22 degrees Fahrenheit warmer than other neighborhoods.¹⁴

Philadelphia Heat Vulnerability Index, Department of Public Health, City of Philadelphia



These neighborhoods have less tree cover, less access to air conditioning, dark roofs, older buildings with deferred maintenance, more vehicle traffic, and proximity to more industrial facilities due to historic redlining and decades of disinvestment.¹⁵ The inability of these communities to afford energy to stay cool is a key concern for quality of life, especially as Philadelphia grows hotter due to climate change.

3 VISION

We envision a city where all Philadelphians can access and afford energy that is clean, healthy, and safe.

Philadelphia has a robust ecosystem of programs and services to address energy burden.

These programs are summarized in Appendix 2.

Philadelphia's electric and gas utilities, PECO, and Philadelphia Gas Works (PGW), offer state-mandated programs to help customers afford utility services.

These programs, known as **Universal Services**, include:

- **Low-Income Usage Reduction Programs (LIURPs):** Offer free energy audits and energy-saving measures to qualifying households.
- **Customer Assistance Programs (CAPs):** Offer payment assistance and debt forgiveness for low-income households.
- **Customer Assistance and Referral Evaluation Services (CARES):** Offer social service and referral programs.
- **Hardship Funds:** Offer cash grants for qualifying households to assist in the payment of outstanding energy debt.

Additionally, both community-based organizations (CBOs) and City departments offer services to support households with energy burden and related challenges.

- **The Philadelphia Energy Authority (PEA):** Offers innovative programs such as Built to Last (BTL), a "one stop shop" whole home repair program that incorporates energy efficiency as well as clean energy upgrades, and Solarize Philly, a citywide group buying program aimed at making solar energy affordable to all Philadelphians.
- **The Energy Conservation Agency (ECA):** Runs the Neighborhood Energy Centers (NECs), trusted grassroots organizations providing energy services in burdened communities and administers the federal Weatherization Assistance Program (WAP) as well as the Heater Hotline program, which offers free emergency heater repairs for eligible households.
- **The Philadelphia Housing and Development Corporation (PHDC):** Has programs targeted at both homeowners and renters. These programs include the Basic Systems Repair Program (BSRP), which offers free emergency repairs related to health and safety concerns, and the Rental Improvement Fund (RIF), which offers zero-interest loans to small landlords of affordable housing.

"I would explore weatherization, solar, and electrification if the NECs could help me manage the process."

"The Neighborhood Energy Centers are our trusted messengers."

- Residents



Despite these programs, many residents, particularly members of historically marginalized groups, face significant barriers to addressing their high energy burden.

Residents face significant barriers to program enrollment. These challenges include language and technology barriers and burdensome documentation requirements, particularly related to proof of homeownership. Residents may not be aware of relevant programs or may struggle to access these programs due to the complexity of the energy and housing program landscape. Utility disconnections (shutoffs) are particularly impactful for the elderly, children, and other vulnerable populations. The "split incentive" affects renters because landlords who do not pay the utility bills do not have an incentive to participate in programs or invest in energy saving upgrades because they are not receiving the energy cost savings.

In addition, program providers experience barriers and challenges in expanding the scale and scope of program delivery. Programs face high administrative burdens due to state and federal programmatic processes and the lack of coordination between the many energy and housing programs. Many CBOs do not have the capacity to meet the magnitude of need in their communities. Existing energy programs are underfunded, and many have long wait lists.

"The main problem is that those of us who would benefit the most from these programs have never heard of them."

- Resident

Funding for adjacent services, such as housing repair, is similarly inadequate when compared to the need for these services. Furthermore, Philadelphia's housing stock is in poor condition, which increases the cost of and need for energy retrofits, while the existing workforce is limited, with inadequate training pipelines and insufficient capacity in the contractor network.

While programs exist to support under-resourced landlords in implementing energy upgrades in multi-family dwellings, these programs are new. Programming for landlords requires significant resources to ensure that tenants are protected from pass-through costs of energy upgrades, which can result in displacement.

The Energy Poverty Alleviation Strategy is an actionable framework to address these barriers and challenges through actions that support and strengthen Philadelphia’s energy ecosystem to increase the scope, scale, and participation in programs and services for Philadelphia’s most energy-burdened communities.

The strategy has four key goals:

1. Increase participation in programs that protect energy affordability and security such as utility bill assistance.
2. Reduce energy burden and emissions by increasing weatherization of residential dwellings.
3. Reduce energy costs and emissions by increasing adoption of high-efficiency, clean energy technologies such as heat pumps.
4. Increase energy independence and resilience by increasing access to distributed solar technologies such as rooftop solar, focusing on income-constrained households, including both homeowners and tenants.

This strategy seeks to address programmatic barriers to access and delivery; close programmatic gaps; and identify, implement, and strengthen mechanisms to support scaling, such as funding, financing, policy tools, and partnerships. The strategy captures and reflects community and programmatic perspectives on key needs, barriers, and challenges to reducing energy burden, as well as multi-stakeholder recommendations for opportunities, solutions, and approaches to address these barriers and challenges.

The strategy reflects OOS’s policy and planning role in advancing Philadelphia’s equitable clean energy transition. Our role includes setting the strategy and vision for this transition; providing research and technical assistance to partners; using policy tools; engaging in community; and convening, coordinating, and supporting partners. In advancing this strategy, we will collaborate with community, partners, and stakeholders to identify and implement actions to strengthen their capacity to serve the city’s most vulnerable residents.



4 STRATEGY

We will implement a three-pronged approach to reduce energy burden, alleviate energy poverty, and increase energy affordability and energy security for Philadelphia’s income-constrained, marginalized, and vulnerable households:



1 Support Philadelphia’s existing energy ecosystem to address barriers and challenges in access, delivery, programmatic gaps, and scaling;



2 Implement and advocate for enabling legislation and incentives at the local and state level; and



3 Strengthen and support the partner network.

Further details on the actions within each strategy area is provided in Section 5.

Strategy 1:

SUPPORT PHILADELPHIA’S EXISTING ENERGY ECOSYSTEM TO ADDRESS BARRIERS AND CHALLENGES IN ACCESS, DELIVERY, PROGRAMMATIC GAPS, AND SCALING

Strategy 1 seeks to strengthen Philadelphia’s existing ecosystem of energy programs by:

- Easing access and boosting enrollment in existing utility and non-utility programs related to housing repairs and energy affordability.
- Scaling up existing weatherization programs.
- Strengthening and supporting current electrification efforts.
- Addressing barriers to adoption of solar.
- Supporting energy retrofits in rental housing.
- Building the capacity of Philadelphia’s energy workforce.

Philadelphia has a strong ecosystem of energy programs and services. To further strengthen this ecosystem, we will provide policy and planning support to alleviate barriers to access and delivery, close programmatic gaps, and scale delivery and access.

ENROLLMENT

While utility programs are well-established, enrollment can be increased. The Public Utility Commission (PUC)'s annual reports show that both of Philadelphia's utilities have room for improving enrollment based on Census estimates of low-income residents qualified to participate in Customer Assistance Programs.¹⁶ State and federal funding is also not fully spent in some years, with more than half of Pennsylvania's 2021 Low Income Home Energy Assistance Program (LIHEAP) funding carried over to the following year.¹⁷ Approaches to increase enrollment will be developed in collaboration with utilities and stakeholders, and will seek to identify equitable mechanisms to support the cost of increased enrollment.



WEATHERIZATION

Weatherization is a key need in Philadelphia and is foundational to reducing energy burden and ensuring efficient electrification and solarization. Weatherization can save residents an average of 18% on their annual heating bills.¹⁸ Existing weatherization programs are constrained primarily by funding and workforce capacity. Weatherization efforts also require additional funding to support whole-home repairs that prevent deferrals; poor housing conditions due to poverty, age, and disinvestments are a leading cause of weatherization deferrals as many pose a risk to occupant health and safety.

It is essential to address weatherization and home repair in tandem because home repair often must precede weatherization.

Between 20 and 60% of weatherization program applicants may be deemed ineligible for energy incentive programs because they must first address these repairs, which perpetuates existing inequities.¹⁹

PEA's innovative whole-home repair program, Built to Last (BTL), is fully subscribed and funded to reach only a limited number of houses. Program providers also face high administrative burdens due to the inefficiencies in implementation of state and federal programs.

ELECTRIFICATION

Efforts to reduce dependence on fossil fuels through electrification are emerging in Philadelphia. However, these efforts need support to achieve implementation at scale. Many Philadelphians, particularly those using fuel oil or electric resistance heating, can significantly lower their energy costs by replacing their heating system with a high-efficiency electric heat pump. Heat pumps also offer an important opportunity to add efficient cooling to homes and rental dwellings, a key need in the city's old housing stock. However, heat pumps remain inaccessible to many Philadelphians due to the high cost of electrification, despite financial incentives from the Inflation Reduction Act (IRA). Additional funding is required to close cost gaps and make electrification affordable and accessible for income-constrained households and landlords. In addition, education is needed to raise awareness of the important health and efficiency benefits of this technology.

"Everything here needs to begin with repair: fixing the roof, addressing mold, etc. We need to prepare homes for electrification even if we're not electrifying."

—HERE 4 CJ member



Photo: Solar States

SOLAR

Solarize Philly, administered by PEA, is the city's premier rooftop solar installation program. However, adoption could be further strengthened by addressing systemic barriers such as streamlining utility interconnection processes, increasing local incentives for adoption, providing bridge funding to close funding gaps, and advocating for enabling legislation such as Community Solar. Community solar laws allow groups of residents who cannot install solar on their own property (such as renters or residents of apartment buildings) to subscribe to a portion of an offsite solar panel installed on behalf of the group.²⁰

ENERGY RETROFITS

Efforts to bring energy retrofits and upgrades to the rental sector are emerging but insufficient. While many programs exist to support landlords in making upgrades to their dwellings, these programs often do not incorporate energy retrofits.

Increased support for energy retrofits in rental housing is a core need in Philadelphia. Programming must be accompanied by tenant protections so that the costs of upgrades are not passed through to tenants via higher rents.

Philadelphia is particularly challenged by the characteristics of its rental housing sector: the majority of rental buildings in the city are small²¹ and likely owned by individual landlords rather than large property management companies. Small buildings, particularly in the rental context, require additional resources to support small landlords in implementing energy retrofits and upgrades. Mechanisms must also be in place to protect tenants from the costs of these upgrades being passed through to them in the form of increased rents. Without adequate support, these landlords lack both the resources and the incentive to implement energy upgrades in rental buildings and requirements to do so may increase risks of housing unaffordability.

"The split incentive is a huge challenge. We often find that even when we are offering free work, [landlords] still don't want us in there sometimes."

– Program provider

WORKFORCE CAPACITY

Finally, increased workforce capacity is fundamental to expanding all existing programs. Improving the housing quality and energy affordability for low- and moderate-income residents could require thousands of locally sourced jobs. Challenges include a limited weatherization workforce, worker preference for more flexible or higher-paying jobs, barriers to entry created by administrative requirements, and limited contractor network and capacity.

Proposed actions in Strategy 1 focus on strengthening utility programs; streamlining program delivery; increasing access to local, state, and federal programs; addressing programmatic gaps; and supporting workforce development. The actions in this strategy's three focus areas explore ways to strengthen Philadelphia's existing programs, as well as opportunities to implement new or expanded programs to alleviate energy poverty.

Focus Area 1.1

Utility Programs: Boost utility participation in energy poverty alleviation

Utility programs play a vital role in alleviating energy poverty in Philadelphia. This focus area seeks to strengthen utility participation in energy poverty alleviation by reducing barriers to access in utility programs and scaling utility clean energy programming. Actions include collaborating with stakeholders and the utilities to explore solutions to lower enrollment burdens, addressing utility disconnection, which has a profound impact on health and safety for residents, and collaborating with PECO to scale adoption of high-efficiency electric heat pumps and streamline utility processes such as solar interconnection to support increased adoption of clean energy technologies.

Focus Area 1.2

Non-Utility Energy Programs: Streamline delivery and access, address programmatic gaps, and support scaling

Local, state, and federal energy programs also play a crucial role in reducing energy burden. Through collaboration with partners and stakeholders, this focus area seeks to increase the scaling and capacity of these programs and increase participation. Actions include supporting partners in streamlining local program delivery, reducing enrollment and administrative burden, and scaling program delivery with a particular focus on weatherization and whole-home repairs. **Emphasis on home upgrades is part of a holistic approach to deeply integrate energy with efforts to improve housing in Philadelphia.**

As part of this effort, OOS and our partners will also advocate for reduced barriers in delivery and access to state and federal programs. This focus area also seeks to address programmatic gaps, particularly for electrification and the rental sector, by supporting partners in implementing potential pilot projects and engaging with key stakeholders.

Focus Area 1.3

Clean Energy Workforce Development

The lack of a sufficient clean energy workforce is a key limitation in scaling energy programs. While clean energy workforce development programs are offered in the city, support is needed to scale up these programs. In focus groups, stakeholders identified a need for more education for contractors on existing technologies. Additionally, stakeholders called for workforce development programs that include mentorship and professional development, along with technical training. Focus group members also noted opportunities for partnerships to increase marketing for energy efficiency careers, as well as a need to streamline processes to simplify contractor paperwork and licensing. The actions in this focus area include developing a comprehensive clean energy workforce strategy using philanthropic and federal funds and convening stakeholders to develop solutions to address barriers in clean energy workforce development.



Strategy 2:

IMPLEMENT AND ADVOCATE FOR ENABLING LEGISLATION AND INCENTIVES AT THE LOCAL AND STATE LEVEL

Strategy 2 aims to expand funding and financing availability by:

- Identifying funding opportunities at the local level, including private financing mechanisms.
- Implementing local enabling legislation and policies.
- Advocating for greater Commonwealth support for energy poverty alleviation.

The scale and scope of resources needed to alleviate energy poverty in Philadelphia is immense. Philadelphia’s existing energy program ecosystem provides innovative programs to support low-income households in accessing energy affordably and securely. However, to address the magnitude of need, the city’s energy programs need policy and funding support. While the federal Inflation Reduction Act (IRA) is a historic investment in this work, it is widely understood to be insufficient in its ability to fully fund the work that needs to be done in Philadelphia. Furthermore, heavy reliance on competitive grants is not a long-term solution as this funding is not ongoing; without the assurance of ongoing funding, program providers and contractors are unable to build organizational capacity to provide services for a multi-decadal transition. Federal and state support must be supplemented by local incentives, policies, financing, and dedicated funding. In addition, enabling legislation and increased funding support from the Commonwealth is needed.

Actions in this strategy seek to identify funding opportunities at the local level, implement local enabling legislation and policies, and advocate for greater Commonwealth support for energy poverty alleviation. While stakeholders also discussed federal programs, the proposed actions seek to create changes primarily at the local and state level.

Local incentives, policies, financing, and dedicated funding are essential to alleviating energy poverty in Philadelphia. While federal funding plays an important role in addressing energy poverty, the available federal funding is not adequate to meet the scale of need in Philadelphia, and barriers exist to accessing this funding.

Focus Area 2.1

Implement local enabling legislation, incentives, and funding

This focus area seeks to identify and implement mechanisms to facilitate energy poverty alleviation, such as local legislation, incentives, and funding to advance energy poverty alleviation in Philadelphia.

Stakeholders prioritized the need for a Small Rental Dwellings Energy Disclosure Policy (Disclosure Policy). Given the small size of most rental buildings, this policy is particularly relevant in the Philadelphia context. A low-cost, disclosure-based mechanism such as a Small Rental Dwelling Energy Disclosure Policy is a valuable tool to help tenants make informed choices about the impact of energy costs on their income when leasing or negotiating lease renewals. Research by the American Council for an Energy-Efficient Economy found that participants were 21% more likely to select rental properties with high efficiency ratings than they were to select the same properties absent of energy labelling.²² Such a policy can also incentivize small landlords to improve the energy performance of rental dwellings through market competition for more efficient housing.

Furthermore, the Disclosure Policy would facilitate the adoption and expansion of additional policy tools to advance retrofits in the small rental housing sector. These additional policy tools include a rental energy performance standard, a policy that grants renters the right to make efficiency upgrades to their properties, and the expansion of existing state and utility rental efficiency programs. Policies that require retrofits to rental units must include tenant protections and be paired with supportive funding to ensure that the cost of retrofits are not passed through to the tenant as rent or utility increases. Protecting tenants is critical to avoiding displacement. Incentives such as point-of-sale rebates, which reduce the upfront costs of energy retrofits and do not require the reimbursement wait times typical of traditional rebate programs, may further incentivize action by landlords.

This focus area also aims to identify funding mechanisms across the financial ecosystem to support energy burden reduction programs. These funding mechanisms include City funding sources, local incentives, private and philanthropic financing, and Community Development Financial Institutions (CDFIs). CDFIs may offer zero-interest or low-cost loans, as well as opportunities to build the capacity of small, community-based lenders to finance energy retrofits.

Policies such as Building Performance Standards that require energy improvements in the city's large buildings are another potential source of funding. While these policies are too burdensome for small landlords, stakeholders noted that fees from Building Performance Standards enforcement and other large building policies could serve, if feasible based on a number of factors, as a potential source of funding to support energy retrofits in under-resourced communities.

Focus Area 2.2

Advocate for enabling legislation, incentives, and funding at the state level

The Commonwealth plays an important role in energy poverty alleviation programming. Actions in this focus area advocate for State support for legislation and incentives that would alleviate energy poverty in Philadelphia. This area of work will continue to advocate for vital funding for the Whole Home Repairs Program and LIHEAP, as well as additional initiatives such as community solar enabling legislation, Alternative Energy Portfolio Standards, and State participation in the Regional Greenhouse Gas Initiative.

Strategy 3:

STRENGTHEN AND SUPPORT PARTNER NETWORK

Strategy 3 seeks to strengthen Philadelphia's energy burden partner network and build the network's capacity to scale up by:

- Strengthening the NECs.
- Implementing a resource hub.
- Supporting community-scale efforts to reduce energy burden and alleviate energy poverty.

Education and awareness about energy programs are vital in reducing energy burden and alleviating energy poverty in Philadelphia. While the City has multiple mechanisms to provide this education, coordinating and expanding these efforts is necessary to reach more residents. This effort would also incorporate education on emerging technologies such as electrification and solarization. Philadelphia's unique network of 16 Neighborhood Energy Centers (NECs) is one of the city's strongest community resources for residents who struggle with energy security. However, many NECs lack the capacity to scale up their services. Approximately 75% of NECs report that more funding is required to increase staffing, upgrade equipment, provide technical assistance training, and increase community engagement.²³

This strategy seeks to strengthen Philadelphia's energy burden partner network and build the network's capacity to scale up. This work will focus on strengthening the NECs, implementing a resource hub, and supporting community-scale efforts to reduce energy burden and alleviate energy poverty. Actions in this focus area include working with partners to implement coordinated outreach campaigns using accessible educational materials. Additionally, this strategy proposes to increase collaboration with other community-serving organizations such as the Neighborhood Advisory Committees, through co-marketing with other low-income programs such as the Supplemental Nutrition Assistance Program (SNAP) and various housing programs. Further barriers can be addressed by strengthening language access, offering direct education through community workshops, and increasing education for landlords. This strategy seeks to provide ongoing education, outside of periods of crisis, that is tailored to address the unique concerns of residents living in different types of housing, including single-family, multi-family, owner-occupied, and rental housing.

Neighborhood Energy Centers (NECs) are trusted grassroots organizations that provide energy desk services to low-income Philadelphia communities. Energy desk services include program intake, counseling, and help with applications for utility bill assistance and weatherization assistance programs.

5 IMPLEMENTATION

The Energy Poverty Alleviation Strategy is a near-term action plan for OOS that is focused on implementation. Each strategy and focus area of work contains stakeholder-informed actions to be implemented in the next four to five years, described in the table below. These actions comprise a roadmap for our implementation of the Strategy.

Actions labeled **underway/ongoing** have already begun. **Immediate** actions will start in the next year, while **short-term** actions will start within one to two years. Actions labeled **mid-term** will start within three to four years.

#	Potential Projects/Actions	Priority
STRATEGY 1: SUPPORT PHILADELPHIA'S EXISTING ENERGY ECOSYSTEM TO ADDRESS BARRIERS AND CHALLENGES IN ACCESS, DELIVERY, PROGRAMMATIC GAPS, AND SCALING.		
FOCUS AREA 1.1 Utility Programs: Boost utility participation in energy poverty alleviation		
1.1.1	Low-income program enrollment: Work directly with utilities to increase enrollment in low-income programs, considering factors such as the role of community partners/NECs in supporting outreach, enrollment process burden, and the potential to increase referrals between programs and improve program coordination. Coordinate with local stakeholders, the State, utilities, and the PUC to support streamlined processes for enrollment while ensuring data privacy. These processes may include data sharing, automatic pre-qualification / "opt-out", and unified applications. OOS has been a part of the ongoing effort by the PUC to create a common application for Universal Services programs and ease other administrative burdens.	Underway/ Ongoing
1.1.2	Utility disconnection: Disconnection can result in eviction and homelessness in cases when the landlord is named on the utility bill and renters pay utilities to the landlord. This risk is particularly high for low-income and elderly residents. Chapter 14 in the Public Utility Code defines actions that Pennsylvania's utility companies can take when customers get behind on their bills. Expiring in 2024, its reauthorization by state lawmakers is a valuable opportunity to set state disconnection policy for the next decade.	Immediate
1.1.3	PECO assessments and incentives: Work with PECO to increase enrollment in their Energy Assessment PLUS program, which offers advanced energy audit measures for electric heating customers. When cost-effective, qualifying low-income residents may even receive free measures such as the service or replacement of heating and cooling equipment, new insulation, duct sealing and more. Explore mechanisms such as on-bill tariff financing to help make upgrades to more efficient systems such as heat pumps more accessible to middle-income residents and landlords, while ensuring that costs of improvements and investments are not passed on to tenants.	Short-term
1.1.4	Streamlining solar: Collaborate with PECO to reduce barriers to adoption of rooftop solar such as streamlining solar interconnections. Address challenges presented by master-metering in multi-family dwellings. Investigate increasing the adoption of opt-in smart-grid-enabled programs to reduce energy costs.	Mid-term

#	Potential Projects/Actions	Priority
FOCUS AREA 1.2 Non-Utility Energy Programs: Streamline delivery and access, address programmatic gaps, and support scaling		
1.2.1	Streamlining: Identify opportunities to increase access to local energy and housing programs such as by streamlining eligibility criteria and enrollment processes. Ease enrollment burdens by improving coordination between programs through mechanisms such as single enrollment gateways, data sharing or pre-qualification and universal applications.	Underway/ Ongoing
1.2.2	Scaling weatherization: Identify opportunities to scale weatherization by integrating weatherization and clean energy with existing local housing programs for single-family and rental dwellings. Explore opportunities to expand PGW's Home Comfort program to scale weatherization and energy efficiency measures for gas customers.	Immediate
1.2.3	Heat pump bulk purchasing: Explore a heat pump bulk purchasing and installation program to reduce the costs of heat pumps for consumers. Stakeholders recognized opportunities in bulk purchasing, but also described barriers and challenges such as contractor preferences to purchase equipment from known suppliers and vendors.	Immediate
1.2.4	Fuel oil conversion: Pursue funding sources for a Fuel Oil to Heat Pump Conversion Program. Fuel oil conversions would save residents money, increase heating reliability, improve indoor air quality, and give residents access to air conditioning.	Immediate
1.2.5	Pennsylvania Housing Authority (PHA) energy retrofits: Support PHA in adopting energy efficiency / clean energy technologies in PHA buildings. Advocate for stronger efficiency-related and clean energy standards for new construction and retrofit projects, such as Enterprise Green Communities.	Immediate
1.2.6	Cool roofs: Pilot a cool roofs program. Cool roofs absorb less solar energy than traditional roofs, reflecting more sunlight. Upgrading to a cool roof can reduce energy bills in the summer and reduce heat vulnerability.	Immediate
1.2.8	Federal advocacy: Advocate at the federal level to reduce barriers to participation in energy programs such as by reducing administrative burden for the WAP.	Mid-term
FOCUS AREA 1.3 Clean energy workforce development		
1.3.1	Clean energy workforce strategy: Implement a multi-stakeholder process to identify barriers, challenges, needs, opportunities, strategies, approaches, and actions to scale up clean energy workforce development in Philadelphia, focusing on the workforce needed to decarbonize the city's buildings. This effort must be centered on values of equity and economic opportunity for all. This process will result in a comprehensive, holistic strategy to develop a robust clean energy workforce ecosystem in Philadelphia, supporting vital upstream jobs such as energy audits, weatherization, electrification and solarization jobs and jobs in adjacent professions such as home repairs.	Underway/ Ongoing

#	Potential Projects/Actions	Priority
STRATEGY 2: IMPLEMENT AND ADVOCATE FOR ENABLING LEGISLATION AND INCENTIVES AT THE LOCAL AND STATE LEVEL		
FOCUS AREA 2.1 Implement local enabling legislation, incentives, and funding		
2.1.1	Small Rental Dwellings Energy Disclosure Policy: Research an energy disclosure policy requiring small landlords to evaluate and disclose the energy use and profile of rental properties (similar to other disclosures such as for lead). Include protections for current tenants to address the risk of displacement from costs of compliance with the policy.	Immediate
2.1.2	City funding and incentives: Investigate City funding sources for energy projects and programs, such as the Housing Trust Fund, green bonds, and additional rebates such as rebates for rooftop solar installation for low- and moderate-income households. Investigate the feasibility of integrating weatherization, energy efficiency, and/or clean energy into the property tax abatement program. Ensure that policies for large buildings (such as Building Performance Standards) are equitably designed to also support energy-burdened communities in accessing the benefits of energy upgrades and clean energy technologies. Identify private financing options to support local funding and incentives.	Immediate
2.1.3	Point-of-sale rebates for rental housing: Explore point-of-sale rebate programs for landlords completing energy upgrades, with added incentives for those who rent to tenants who hold Housing Choice Vouchers or receive LIHEAP. Landlords may prefer rebates at the time of sale instead of traditional rebates, which may require weeks for a rebate payment to be issued. There are currently no rebate programs geared toward single-family renters, who are more likely to experience high energy burden due to split incentives.	Immediate
FOCUS AREA 2.2 Advocate for enabling legislation, incentives, and funding at the state level		
2.2.1	State Community Solar: Advocate for state-level enabling legislation for Community Solar. Community Solar is key enabling legislation to expand access to rooftop solar and energy affordability, security, and resilience. Community Solar further enables access to distributed energy sources, easing barriers and constraints that impact rooftop installations such as roof conditions, limited space, and limited solar exposure. Advocacy efforts are currently underway to advance this policy at the State.	Immediate
2.2.2	LIHEAP expansion: Work with the Commonwealth to increase State funding for the LIHEAP and/or expand access to include cooling. LIHEAP funds are routinely not fully expended, and past attempts to facilitate full LIHEAP expenditure have not succeeded. ²⁴ Expand the air conditioning grant pilot programs to renters and offer funding to cover increased electric bills.	Immediate
2.2.3	LIHEAP Crisis Interface expansion: Work with the Commonwealth to expand the LIHEAP Crisis Interface program to include a heat pump/electric panel upgrade instead of status quo replacement.	Short-term
2.2.4	Alternative Energy Portfolio Standards: Advocate for updates to the Commonwealth's Alternative Energy Portfolio Standards Act. The Act, last updated in 2020, requires a certain share of Pennsylvania's electricity to come from renewable sources. ²⁵ Increasing the required share of renewable energy would incentivize utilities to expand solar installation and incentive programs.	Mid-term
2.2.5	Whole-Home Repairs funding: Support state-level advocacy for year-over-year funding for the Whole-Home Repairs program. The state of poor repair of many Philadelphia homes harms residents' health and must be addressed before energy upgrades are made.	Mid-term

#	Potential Projects/Actions	Priority
STRATEGY 3: STRENGTHEN AND SUPPORT PARTNER NETWORK		
3.1.1	Community program knowledge hub: Create a centralized knowledge or activation hub for community program providers. The hub should provide education, support, and technical assistance for residents, tenants, landlords, contractors, and financial lenders and serve as a “one-stop shop” for residents in accessing energy programs and services.	Immediate
3.1.2	Expand NEC capacity: Strengthen the NECs by building capacity to increase program education and awareness; improving language and Americans with Disabilities Act access (including through mobile units for home visits); developing Community Energy Assessments and Community Energy Plans; increasing coordinating with Neighborhood Advisory Committees; and taking other steps to be identified by the NECs through ongoing engagement.	Immediate
3.1.3	Community-scale projects: Work with and support partners in implementing community-scale projects to address energy burden, focusing on the city’s historically marginalized and vulnerable communities.	Immediate
3.1.4	City program co-marketing: Coordinate with City departments to increase awareness and education across programs, such as by providing education for landlords through the Office of Homeless Services’ Landlord Gateway Program.	Ongoing
3.1.5	Engagement: Continue engaging with partners and stakeholders to inform policy and decision-making.	Ongoing

6 NEXT STEPS

We will prioritize the following areas of work to support the implementation of the actions defined in this strategy:

RESEARCH:

Implement multiple research projects to inform next steps in the implementation of prioritized actions. These projects include research on utility shutoffs, funding gap analyses, and design recommendations to strengthen, streamline, and integrate energy and housing programs. Research efforts will set output-based targets and identify metrics and key performance indicators to measure implementation progress.

FUNDING:

Continue to work with partners to connect projects identified in this strategy with IRA funding opportunities and prioritize identifying sustainable local and private financing and funding mechanisms to support Philadelphia’s energy ecosystem.

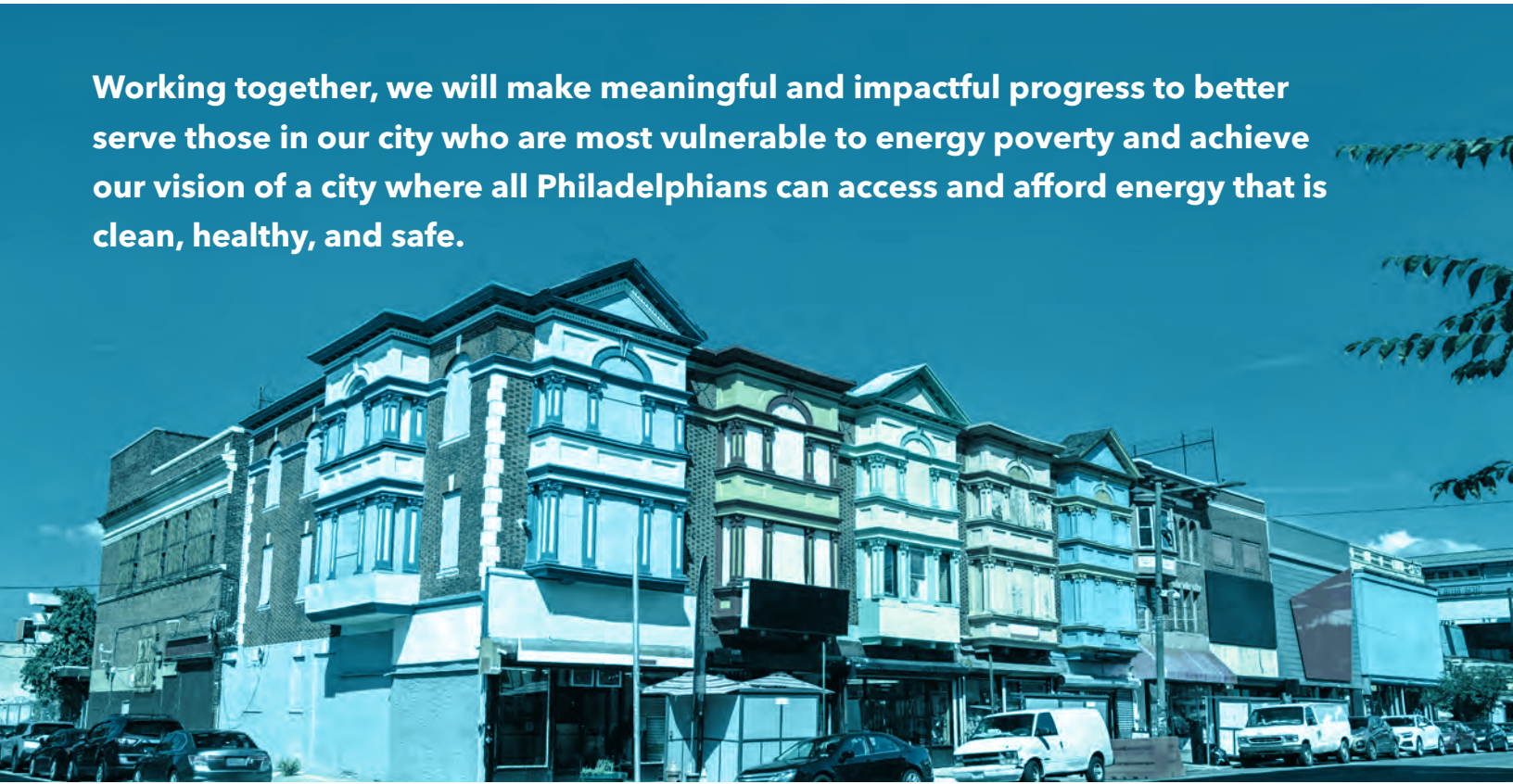
STRENGTHENED ENGAGEMENT:

Collaborate with stakeholders, including Philadelphia residents, City agencies, the Mayor’s Office, City Council, local program providers, utilities, and decision-makers at the local, state, and federal level. Strengthen engagement with stakeholders by developing working groups to guide strategy implementation.

TRANSPARENCY AND ACCOUNTABILITY:

Explore approaches to strengthen accountability and transparency, such as creating community accountability boards, reporting publicly on implementation progress, or establishing a level of community decision-making ability.

Working together, we will make meaningful and impactful progress to better serve those in our city who are most vulnerable to energy poverty and achieve our vision of a city where all Philadelphians can access and afford energy that is clean, healthy, and safe.



APPENDICES

APPENDIX 1: Strategy Development Process

To develop the Energy Poverty Alleviation Strategy in Philadelphia, we collaborated with stakeholder groups and built upon years of community input and research focused on addressing Philadelphia's energy burden. Stakeholders guided the development of the strategy and worked with us to identify and prioritize key actions and implementation considerations.

This work began in 2021 with a series of Energy Burden Focus Groups held across six of the most energy-burdened communities in Philadelphia. Participants spoke about their experiences of energy poverty and their priorities for addressing this challenge during 18 discussions facilitated by the Philadelphia Office of Sustainability (OOS). During these sessions, community members provided insight into the experience of living with high energy burden, and service providers shared perspectives from the front lines of energy poverty alleviation. A key outcome from the Energy Burden Focus Groups was that community members asked to be presented with actionable solutions to address energy poverty and a plan for implementation. The Energy Poverty Alleviation Strategy was developed in direct response to this request. Strategy development began in May 2023 and concluded in March 2024.

To develop the Energy Poverty Alleviation Strategy, OOS convened a Steering Committee that met monthly through the development process to shape the development approach, guide stakeholder engagement, and provide feedback on the strategies and actions in this document. The Steering Committee also helped to identify and prioritize near and mid-term solutions and actions for the strategy's implementation roadmap, building upon priorities identified through the multi-stakeholder engagement process, described below. The Committee included representatives from City departments and partner agencies that administer programs and policies related to energy poverty, housing, and public health.

In September 2023, we convened three technical stakeholder focus groups as part of a multi-stakeholder process to inform the strategy. These conversations focused on three topics:

- 1. Strengthening Programs:** identifying programmatic gaps as well as approaches to address challenges faced by existing energy programs and services.
- 2. Funding and Financing:** identifying policy solutions to support scaling of energy programs and services.
- 3. Education and Engagement:** identifying approaches to strengthen community capacity and partner networks to increase awareness and access to energy programs and services.

Focus group participants represented over 20 different organizations working on topics related to energy affordability, public health, and housing, including single-family and rental dwellings. These organizations included utilities, City agencies, energy and housing program providers, social service providers, community-based organizations (CBOs), organizations providing funding and financing, and representatives from relevant State offices.

Following the technical focus groups, OOS sought advocates' input on the strategies and actions identified by technical stakeholders. We engaged a coalition of community organizations, workforce and community development groups, home repair providers, and climate justice organizations dedicated to advocating for safe, healthy, affordable housing that does not depend on fossil fuels. Coalition members provided feedback on the draft strategies and actions and identified additional considerations for implementation.

The Steering Committee worked with OOS to prioritize identified actions to form the near and mid-term implementation roadmap, incorporating stakeholder and community feedback.

APPENDIX 2: Table of Energy Programs

UNIVERSAL SERVICES PROGRAMS

(mandated by PUC, offered by PGW and PECO)

PROGRAM TYPE OR NAME	DESCRIPTION
Customer Assistance Program (CAP) <ul style="list-style-type: none"> PGW Customer Responsibility Program (CRP) PECO CAP Percentage of Income Payment Plan (PIPP) 	Payment assistance and debt forgiveness for low-income households.
Low-Usage Reduction Programs (LIURPs) <ul style="list-style-type: none"> PECO LIURP PGW Home Comfort 	Free energy audits and energy-saving measures to qualifying households.
Health and Safety Program	Allocation of LIURP program designated to address health and safety concerns that prevent weatherization.
Customer Assistance and Referral Evaluation Services (CARES)	Social service and referral programs.
Hardship Funds	Cash grants to qualifying households to assist in the payment of outstanding energy debt.

ADDITIONAL INCOME-QUALIFIED UTILITY PROGRAMS

UTILITY	PROGRAM NAME	DESCRIPTION
PGW	Affordable EnergySense	Rebates for energy-saving measures.
PGW	Low-Income Smart Thermostat Program	Free installation of EnergyStar thermostats for income-eligible homes.
PECO	Free Energy Checkup (income-qualified) Energy Assessment [PLUS]	Energy assessment and installation of low-cost energy-saving measures. Additional benefits for electric heat customers.

LOCAL NON-UTILITY ENERGY AND SUPPORTING PROGRAMS AND SERVICES

PROGRAM/SERVICE	IMPLEMENTING ORGANIZATION	DESCRIPTION	LINK
WEATHERIZATION AND REPAIR PROGRAMS			
Weatherization Assistance Program (WAP)	Energy Conservation Agency (ECA) implements this federal program in Philadelphia	Free weatherization upgrades for qualifying homes.	https://dced.pa.gov/programs/weatherization-assistance-program-wap/
Basic System Repair Program (BSRP)	Philadelphia Housing Development Corporation (PHDC)	Provides emergency repairs related to health and safety including plumbing, electric, roofs, minor structural.	https://phdcphila.org/residents-and-landlords/home-repair-and-improvements/basic-systems-repair-program/
Built to Last (BTL)	Philadelphia Energy Authority (PEA)	“One-stop shop” for home repairs addressing health and safety, accessibility, and energy efficiency.	https://philaenergy.org/programs-initiatives/built-to-last/
Heater Hotline	ECA, funded by Philadelphia Division of Housing and Community Development (DHDC)	Urgency-based heater repairs for income-qualified homeowners.	https://www.ecasavesenergy.org/heater-hotline
GRANTS AND LOANS			
UESF Grant	UESF (local CBO)	Grant offered to households facing utility shut-offs (grants matched through utility hardship funds).	https://uesfacts.org/our-programs/utility-grant-program/
Homeowners Energy Efficiency Loan Program (HEELP)	Philadelphia Housing Finance Agency (PHFA)	Fixed rate loan of 1% for 10 years. \$1,000 to \$10,000 for energy efficiency repairs. Household must be at or below 80% of area median income.	https://www.phfa.org/programs/heelp.aspx
Rental Improvement Fund	PHDC	Forgivable low-interest loans for small landlords of affordable units to make building repairs.	https://phdcphila.org/residents-and-landlords/landlords/rental-improvement-fund/
SOLAR			
Solarize Philly	Philadelphia Energy Authority (PEA)	A citywide group buying program to help all Philadelphians go solar at their homes or businesses.	https://solarizephilly.org/

LOCAL NON-UTILITY ENERGY AND SUPPORTING PROGRAMS AND SERVICES *continued*

PROGRAM/SERVICE	IMPLEMENTING ORGANIZATION	DESCRIPTION	LINK
ASSISTING SERVICES AND RESOURCES			
Neighborhood Energy Centers (NECs)	Local CBOs, overseen by ECA, funded in part by DHDC	Local hubs providing assistance with bill payment and enrollment in available energy programs and services.	https://www.ecasavesenergy.org/community-programs
Landlord Gateway Program	PHDC	Centralized resources to help both current and prospective landlords navigate the City's processes, requirements, and guidance through a single location.	https://www.phila.gov/programs/landlord-gateway/

FEDERAL AND STATE FUNDING SUPPORT

FUNDING PROGRAM NAME	DESCRIPTION	VISIT TO LEARN MORE
Low-Income Home Energy Assistance Program (LIHEAP)	Household-level grant to help pay for heating costs (up to \$1,000 per year).	https://www.dhs.pa.gov/Services/Assistance/Pages/LIHEAP.aspx
Crisis Grants	Household-level grant to assist with heating costs for homes with broken heaters or facing a shut-off (up to \$800 per year).	https://www.dhs.pa.gov/Services/Assistance/Pages/LIHEAP.aspx https://uesfacts.org/our-programs/utility-grant-program/
Whole Home Repairs (WHR)	State funding allocated to existing home repair programs, including BTL and BSRP. <i>Note: funding for Fiscal Year 2023 WHR Program was not approved</i>	https://phdcphila.org/residents-and-landlords/home-repair-and-improvements/whole-home-repair-fund/

APPENDIX 3: Abbreviations

Below are common terms and their abbreviations used throughout this document.

BIPOC	Black, Indigenous, People of Color	PEA	Philadelphia Energy Authority
BSRP	Basic Systems Repair Program	PGW	Philadelphia Gas Works
BTL	Built to Last	PHA	Pennsylvania Housing Authority
CAP	Customer Assistance Program	PHDC	Philadelphia Housing and Development Corporation
CARES	Customer Assistance and Referral Evaluation Services	PUC	Public Utility Commission
CBO	Community-based organization	RIF	Rental Improvement Fund
CDFI	Community Development Financial Institution	SNAP	Supplemental Nutrition Assistance Program
DHDC	Philadelphia Division of Housing and Community Development	WAP	Weatherization Assistance Program
ECA	Energy Coordinating Agency	WHR	Whole Home Repairs
IRA	Inflation Reduction Act		
LIHEAP	Low Income Home Energy Assistance Program		
LIURP	Low-Income Usage Reduction Program		
NEC	Neighborhood Energy Center		
OOS	Philadelphia Office of Sustainability		

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