Housing Equity Repair and Electrification 4 Climate Justice

Convenors: Philly Climate Works and Green Building United

Introduction

As the COVID-19 pandemic continues to ravage frontline communities across Philadelphia, the need to be "safer at home" is essential. Unfortunately, "safer at home" is not possible for many Philadelphia families, particularly Black, Brown, and poor residents who have faced deep economic and structural inequities resulting in housing disrepair, job losses, displacement, and looming utility shut-offs. At this critical moment, we must advance healthy housing for all and support the leadership and vision of the Philadelphia community, as signaled by Philadelphia's Emergency Housing Protection Act and recent expansion of the Housing Trust Fund. Despite these important steps, the fact remains that the current economic and health crisis only exacerbates the long-term intersecting crises of gentrification; a changing climate that will intensify urban heat islands, rising energy costs, poorer air quality; and an extractive economy that fails to invest in the people of Philadelphia. Investing in home repairs that also create long-term solutions to these crises is a critical intervention that we must advance now.

To achieve scalable solutions that address affordability, health, workforce, and a changing climate, we must bring together community members, environmental and climate justice leaders, housing rights advocates, building engineers, workforce development partners, CDC implementers, and finance experts together to identify barriers and key solutions. Together, Philadelphia Climate Works (PCW) and Green Building United (GBU) propose a working group: Housing Equity, Repair and Electrification 4 Climate Justice (HERE4CJ) to do the following:

- 1. **Provide a thorough case** for why electrification + home repairs is critical for the health, environment, and economy of Philadelphians and is an essential anti-displacement strategy
 - a. Identify the barriers in the way of success
 - b. Identify the opportunities to make this happen
- 2. **Design and implement pilot projects** to make the case for healthy home repairs and equitable electrification.
- 3. **Develop a robust analysis on job creation** to create pathways for living-wage workforce development.
- 4. **Identify and Recommend policy and finance solutions** to scale this work across Philadelphia.

Background:

Despite gains by the City of Philadelphia on building energy efficiency and clean transportation, the single family residential sector remains a challenging space to achieve scaled impact, and is by a number

of different measures the building sector with greatest need and opportunity for improvement. Philadelphia has several different residential programs that target energy efficiency, indoor environmental quality, and basic systems upgrades. However, none of these programs are focused on beneficial building electrification. Many of these programs could be effective vehicles to advance this, and in turn help achieve the city's near term climate objectives.

At present, residential building electrification efforts face several barriers. While none of these are unique to Philadelphia, a program that effectively solves for many if not all of them will need to be tailored to the specific built environment, workforce, and political context. The HERE4CJ will conduct a robust characterization of the barriers to residential electrification in Philadelphia to design a residential electrification pilot program, to be launched within the next 12 months. The pilot will set the stage for scaling residential electrification efforts in Philadelphia within the framework of existing retrofit programs.

Key research by the HERE4CJ will include, but not be limited to:

- Analysis and community conversation on Philadelphia's energy burden
 - Identify opportunities for a residential building electrification program to alleviate existing inequities in the complete cost and quality of housing for energy burdened Philadelphians.
- Assessment of Philadelphia's building stock/climate
 - Segment and analyze Philadelphia building stock to identify technical/cost barriers and solutions for scaled electrification/heat pump deployment. Overlay climate impact maps (heat sensitivity and vulnerability).
- Workforce/equipment
 - Survey contractors on perception of electrification technologies, financing, and consumer preferences.
 - Identify and address issues in supply chain, training of current workforce, and expansion of future workforce to meet needs.
 - Assess specific opportunities for M/W/DBE in training and workforce development efforts.
- Alignment with existing efforts
 - Identify existing programs and stakeholders with common goals and encourage collaboration or integration, where possible.
 - Engage peer cities on their approach to residential building electrification.
 - Evaluate existing financing opportunities including utility incentive programs.

Potential Working Group Expectations, Roles, and Members

PCW and GBU are the convenors of the Working Group. Expectations, roles and responsibilities will be determined after the initial meeting. Initial concept is monthly gatherings, with work being done

in-between. This project is currently unfunded, however, GBU and PCW are looking to secure resources to provide HERE4CJ with stipends for participation as well as long-term funding for research, analysis and pilot implementation and evaluation. We envision that partners will play different roles, intended to be supportive to their current work. These roles could include:

- Community conversations and surveys on energy burdens, housing needs, and electrification barriers and opportunities;
- Technical research for building electrification;
- Workforce Development research, analysis, and strategies;
- Pilot design and implementation;
- Long-term financing and policy solutions