

# Climate Finance Needs Assessment Houston, TX Region

June 2025



# Introduction and Purpose

## **Summary:**

This report is based on a place-based needs assessment of Houston, TX, and parts of Harris County by Green Coast Enterprises and Fifth Ward Community Redevelopment Corporation, conducted from December 2024-June 2025. Assessment activities included a market and policy review, industry and community 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:

- Houston and Harris County are **a major homebuilding market with a growing population**, though most new construction is in single-family homes.
- Houston and Harris County have suffered from repeated natural disasters and **are focused on resilience efforts**.
- **Lower wages in the residential sector** mean less interest in training for those jobs.
- 85% of the affordable housing stock in Houston is in **Naturally-Occurring Affordable Housing (NOAH) multifamily properties**.
- NOAH properties are typically 40-60 years old and need investment; but **these properties typically cannot take on new debt**.
- One possible solution, unique to Texas, is to **utilize Tax Increment Reinvestment Zone (TIRZ) partnerships** to “convert” GGRF funding into grants for NOAH improvements.

# Local Partners

**Green Coast Enterprises (GCE)** develops real estate and provides real estate services focusing on urban and coastal areas in need of community renewal. Since its founding in 2007, **GCE** has helped developed over \$200 million of real estate and certified over 3,000 housing units for green building certifications.



**Fifth Ward Community Redevelopment Corporation (Fifth Ward CRC)**, a NeighborWorks America affiliate, catalyzes resources to build and preserve an inclusive 5th Ward Community by developing places and opportunities to live, work and play. Fifth Ward CRC seeks to enhance the quality of life for individuals and families in the community, eliminate blight, attract investment and resources, encourage commercial and business development, coordinate government and public service, and offer a sense of destination and creative place-making.



# 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 Houston 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
- In-depth interviews with key stakeholders
- Analysis of training resources
- Research into existing projects that already include building decarbonization

# Market Research

**Houston and Harris County are a major homebuilding market with a growing population.**

- 2023 saw more than 68,000 housing starts in the Houston-the Woodlands-Sugar Land MSA; more than 50,000 of these were single-family homes.

**Much of the labor for homebuilding goes into new construction, especially single-family homes.**

- Very little capacity focused on retrofitting existing buildings, except in the case of disaster recovery and repair.

**Existing NOAH properties provide much affordable housing and are in need of investment.**

- The existing multifamily stock in Houston and Harris County was predominantly constructed in the late 1960s - early 1980s and is now 40-60 years old. According to a 2021 report from the Kinder Institute of Urban Research, there are 315,000 total units of naturally occurring affordable housing (NOAH) in Harris County, which represent 40% of the total multifamily stock and 85% of the affordable housing stock.



# Market Research, *continued*

## **Houston has suffered from repeated natural disasters.**

- Hurricane Harvey in 2012 damaged more than 150,000 homes in Harris County and caused over \$125 billion in damage. Other more recent disasters included Winter Storm Uri (2021), the 2024 Derecho, and Hurricane Beryl (2024).
- According to research from the University of Houston, residents affected by Hurricane Harvey are 15% more likely to have additional home damage protection 14% more likely to have alternative power supplies.

## **Flood insurance rates in Houston have risen up to 75% on a year-over-year basis.**

- Homeowners', flood, and windstorm insurance rates are rising in response to recent disasters.
- Some CDCs have had to sell their previously-preserved NOAH properties due to significant insurance rate hikes. And some insurance companies have decided not to write new policies in Texas at all.

# Local Policy Context

## **The Houston Climate Action Plan (Feb 2020)**

- Calls for new programs dedicated to increasing building energy efficiency.
- Calls for Houston to adopt the 2021 IECC code by 2025
- Calls for the promotion of clean energy financing programs.
- Calls for expansion of existing utility energy financing and incentive programs.
- However, metrics tracked through the Kinder Institute for Urban Research do not focus on residential buildings.

## **The Harris County Climate Justice Plan (April 2025)**

- Calls for commitment to a clean and renewable energy transition to reduce greenhouse gas emissions and pollution.
- Focuses on solar energy adoption, improving housing resilience and affordability, and improving resilience of the electric grid as key goals.

# Stakeholder Engagement

## **Stakeholders expressed strong interest in disaster resilience measures**

- Houston has experienced repeated disasters since Hurricane Harvey (2012) which have kept resilience as a top-of-mind concern for stakeholders. Additional disasters included Winter Storm Uri (2021), the 2024 Derecho, and Hurricane Beryl (2024).
- Resilience encompasses flood prevention and a resilient energy grid. While there is some familiarity with the FORTIFIED building standard, there is less understanding of what resilience looks like at the building level.

## **On-site power sources are of interest to keep power on when the electric grid goes down**

- Stakeholders did not express much familiarity with energy efficiency. Electrification can be perceived as a negative due to grid reliability issues and the nature of the local energy economy. But on-site generation (solar + battery storage, and natural gas generators) is of most interest.

## **Ensuring that buildings can repair equipment after a disaster is important**

- In addition to traditional concerns about operating more energy efficient equipment, stakeholders expressed concerns about repairing equipment after a disaster, particularly solar/pv.

# Stakeholder Engagement, *continued*

## **NOAH property owners typically cannot take on additional debt**

- In most cases, NOAH properties can't support additional debt. Even where they can, NOAH properties typically have Fannie Mae or Freddie Mac mortgages, and the GSEs will not allow projects to take on subordinate financing with hard debt like GGRF.
- In addition to supporting new debt, lenders often have insurance requirements that can be difficult to maintain.

## **Lower wages in the residential sector mean less interest in training for those jobs.**

- Local trade unions would be willing to introduce new trainings, but they currently have a very small share of multifamily and residential construction due to the lower wages in this sector. After Hurricane Harvey, wage requirements and a community workforce agreement (Build Houston Better) provided an hourly base wage of \$15; workers' compensation insurance; and OSHA construction certification training.

*“We are so susceptible to hurricanes. And I have no idea what the market in Houston is for people who can repair solar.” – local government staff*

# Existing Training Resources

Strengths	Weaknesses
<ul style="list-style-type: none"><li>• Ample workforce trainings on solar, HVAC, envelope, refrigeration, electrical, welding offered by academia and professional associations</li></ul>	<ul style="list-style-type: none"><li>• Knowledge gaps on energy efficiency in hot/humid climates, green certifications, and heat pump installations</li></ul>
	<ul style="list-style-type: none"><li>• Apprenticeship training offerings biased towards commercial, industrial, and institutional projects</li></ul>

- Key Takeaways
  - Houston has little experience with energy efficiency retrofits, especially in a multifamily context
  - There is a need to socialize the benefits of energy efficiency to building managers, property owners, and homebuyers to drive market demand

# Example Project: St. Elizabeth Place

St. Elizabeth Place is an adaptive reuse of an historic hospital into 85 units of mixed-income housing, plus new construction of a 94-unit residential building.

Developer: Fifth Ward CRC & Cloudbreak Communities  
Architect: Van Meter Williams Pollack

The project pursued National Green Building Standard "Bronze" certification, including Energy Star appliances, Energy Star certified roofing, proximity to public transportation, and a range of water efficiency measures.

Financing for the \$31.7 million project includes Historic Tax Credits, Low Income Housing Tax Credits, CDBG Disaster Recovery funds (\$14.9m), and private loans.



Source: Alex Miller / Jackie Dadakis

# Needs Assessment Findings: Recommendations



# Recommendations Outline

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

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



# Project Pipeline

## **Developers with projects already in the GGRF pipeline:**

- New Hope Housing - 103 units, new construction LIHTC, awarded GGRF \$\$ from LISC

## **Developers with potential upcoming GGRF-eligible projects:**

- Pleasant Hill CDC – existing senior complex, interested in solar pv/storage or offsite solar
- Fifth Ward CRC
- Developers utilizing CDBG-DR funds from the City of Houston (required to attain a green standard)

## **Additional outreach should prioritize the following associations:**

- Houston Building Owners and Managers Association (BOMA)
- Houston Apartment Association
- Houston Housing Collaborative (HHC)
- Texas Association of Community Development Corporations (TACDC)

# Policy Solutions

## **Examine opportunities to utilize Tax Increment Reinvestment Zone (TIRZ) partnerships**

- TIRZ is the Texas term for a Tax Increment Financing (TIF) district. TIRZs are governed by Redevelopment Authorities (RDAs) with powers to set up affordable housing funds. One example is TIRZ 24, which set aside 25% of its increment for affordable housing across the county.
- Because property owners of NOAH properties are generally unable to utilize even low-interest loans, TIRZ-funded affordable housing funds may offer a mechanism to “convert” GGRF funding into grants for NOAH improvements.
- This proposal would need to be legally vetted and examined to ensure that this approach would make financial sense for a TIRZ when compared to the costs of issuing bonds

## **Advocacy at Public Utilities Commission during energy efficiency docket opening in fall 2025**

- There is a unique opportunity to increase budgets for utility energy efficiency programs statewide (last similar opportunity was in 2011). This should be a focus of advocacy.
- CenterPoint has an active local utility program in the Houston area for multifamily energy efficiency improvements, and increasing incentives for this program would help improve interest in energy efficiency among multifamily property owners.

# Training and Resource Needs

Content	Target Audience	Delivery Org	Reason
Case Studies	Owners Developers	Houston Apartment Association Houston BOMA GHBA Houston Association of Realtors	Case studies from similar hot, humid climates that have instituted successful workforce programs
Technology Primers	Landlords/owners/managers Developers Trades	Trade Unions Houston Community College Lone Star College	Current energy code below GGRF standards for new construction Few heat pump installers in the region, but a necessary solution for the climate DOAS / outdoor air systems
Policy & Regulation Briefs	Advocates Developers	Relay Network	Information on upcoming opportunities with energy efficiency docket Information on what's needed to attain GGRF financing
Energy efficiency and green certifications for multifamily properties	HVAC, electrician, plumbing, other trades	Local trade unions NEW Houston	Lower wages in the residential sector have limited trainings

# Training and Resource Needs, *continued*

## **Stakeholders expressed that training and resource content could include:**

- Case studies from similar hot, humid climates that have instituted successful workforce programs.
- Technology and energy systems primers, particularly related to heat pumps
- Materials quantifying the connections between energy savings and reduced utility bills.
- Policy and regulation briefs - particularly around the energy efficiency docket

## **Recommended partners for training developers and property owners include:**

- Houston Apartment Association
- Texas Association of Community Development Corporations
- Houston Housing Collaborative
- CEER Houston

## **Recommended partners for training and resource delivery in the trades include:**

- Houston Community College and Lone Star College
- The JP Morgan Resilience Workforce Collaborative
- Fortis College (a private trade school)
- SER Jobs for Progress

# Market Coordination

## Building Performance Hub

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

A Houston Building Performance Hub would work to create a community-of-practice across siloed parts of the development, design, construction, management, and financing of buildings. The Hub would do this 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

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