

Guidelines for Creating Community-Driven Building Retrofit Programs

A Guidance Document for Local
Governments



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Overview

Cities in the United States can unlock unprecedented federal funding from the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) to spur building upgrades for low- and moderate-income (LMI) households.

Through collaboration, cities and communities can co-create building retrofit programs. Having frontline communities play an active role in shaping local building decarbonization programs ensures the needs and priorities of these communities are centered and addressed. Engaging LMI homeowners, renters, building owners, and contractors will help deliver a host of benefits for communities.

Community-driven building retrofit programs channel funding and technical assistance to the buildings and communities that need it most.

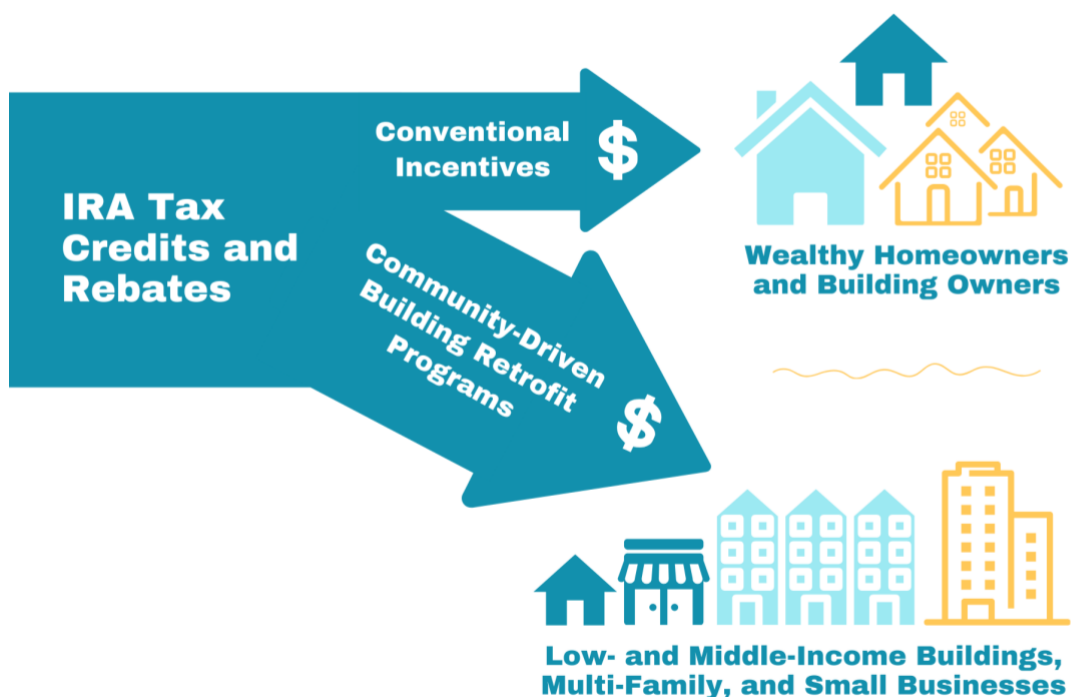


Figure 1: Community Driven Building Retrofit Programs

Image Source: Building Electrification Institute

What is a Community Driven Retrofit Program?

Background

Buildings are often one of the largest sources of greenhouse gas (GHG) emissions in cities. To achieve their climate goals, cities must transition fossil fuels out of their buildings. This will require retrofitting existing buildings with high-efficiency all-electric equipment—which can be powered by clean electricity—and ending the use of fossil fuels in new buildings. This guide focuses on designing programs to accelerate the retrofitting of existing buildings. [Previous C40 resources](#) outline a comprehensive approach to building electrification, focusing on the phase-out of gas appliances and setting targets for this transition.

Building electrification or **building decarbonization** is the process of replacing appliances and equipment that burn fossil fuels on-site in a building (such as gas-fired furnaces, water heaters, or stoves) with high efficiency, all-electric equipment (such as air source heat pumps, heat pump water heaters, and induction stoves). This conversion enables buildings to be powered with electricity, which is increasingly derived from clean, renewable sources in many parts of the U.S. and North America. Building decarbonization may also include weatherization and insulation for energy efficiency; rooftop solar and battery storage for onsite renewable energy; as well as any health, safety, or structural upgrades that may be necessary to prepare the building for electrification.

What is a Building Retrofit Program?

A **building retrofit program** is any program that helps building owners and decision-makers implement energy efficiency and electrification upgrades in their buildings. Building retrofit programs can provide a range of support services and funding, like incentives, rebates, and financing for energy efficiency measures and all-electric equipment. Building retrofit programs can also provide technical assistance for completing retrofits, marketing and outreach to building decision-makers and communities, support for contractors who complete equipment installations, and coordination with other available programs.

A **community-driven building retrofit program** can provide some or all of the services mentioned above, while also incorporating a broader set of community priorities and needs in the development, delivery, and outcomes of the program. Community priorities may include training local residents to help complete the retrofits or addressing urgent health and safety concerns in participating buildings, such as persistent leaks, mold, fire hazards, or structural problems.

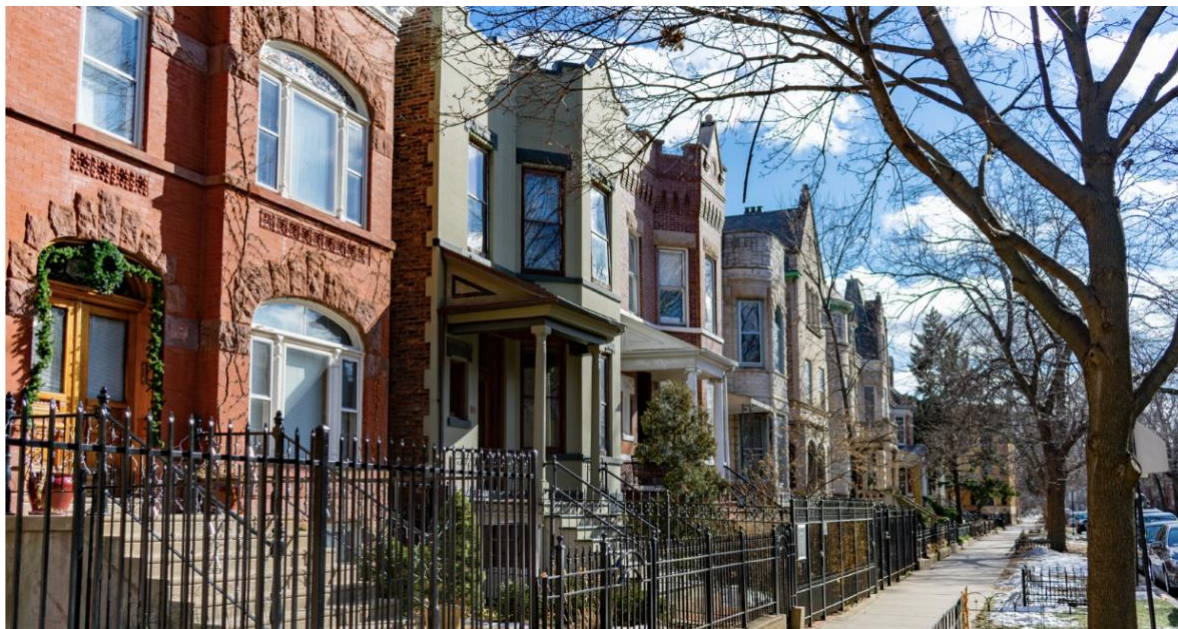


Image Source: James Andrews via Canva.com

Building retrofit programs can improve communities by reducing energy use and lowering utility bills, adding cooling as summers become increasingly hot due to climate change, and removing gas-burning equipment that is proven to cause asthma and developmental delays in children (see for example [here](#) and [here](#)).

Despite these benefits, the number of retrofits happening each year is not at the scale necessary to reach crucial climate goals. Too often, aged-out gas equipment is replaced with new gas equipment – prolonging our reliance on fossil fuels. Moreover, existing building retrofit programs are primarily benefiting higher income households and leaving low and moderate-income (LMI) households behind – particularly single-family and multifamily rental properties and unregulated or “naturally-occurring” affordable housing.¹ (Sources: [LA Times](#), [Washington Post](#), [The Hill](#)).

In light of these shortcomings, this document outlines a new approach to building retrofit program design that addresses climate goals by centering the needs and priorities of the historically disadvantaged communities that are most likely to be left behind in the decarbonization transition.

Cities play a critical role in making sure the influx of building retrofit funding from the IRA and IIJA reaches the communities that need the most support to access clean energy programs. Building retrofit programs – designed and implemented in partnership with the communities a city aims to serve – are essential for advancing enduring and equitable decarbonization solutions.

¹ Unregulated or “naturally occurring” affordable housing is currently affordable to residents, but is not subject to regulations on rents or incomes. This housing is often located in previously redlined neighborhoods that may be gentrifying, posing a threat to continued affordability, and often have significant deferred maintenance and health, safety, or structural upgrade needs.

Table 1: Creating Building Retrofit Programs: the Old Way vs. the Community-Driven Way

Old Way	Community-Driven Way
Create programs for communities.	Co-create programs with communities – specifically LMI and historically disadvantaged communities that are most likely to be left out of the clean energy transition.
Solely prioritize energy or GHG reductions, often based on “ cost-effectiveness .”	Prioritize community benefits alongside energy and GHG reductions, including priorities such as housing affordability, workforce development, job creation, public health, and economic development.
Prioritize “low hanging fruit” and “easy to reach” customers, who are often wealthier homeowners.	Prioritize LMI households by integrating the program with other support mechanisms and engaging in culturally appropriate outreach. Deliver measures that address holistic building needs, including structural, health, and safety upgrades that frequently occur in LMI housing stock, while also protecting tenants and preserving housing affordability.
Many different programs, including state and utility-funded programs, are often siloed and serve different audiences.	Create an umbrella program that coordinates across multiple programs and directs customers to the right offerings.
Drive down labor costs to reduce overall program costs.	Drive the creation of high quality, family-sustaining jobs for retrofit workers while driving down costs in other ways, such as through bulk purchasing, flat rate pricing, and streamlined quality assurance processes.

Best Practices

Community-driven building retrofit programs are best designed at a community, city, or regional level to adequately account for the differences in building stock, climate, and community needs that occur between cities and regions. “One-size-fits all” state-wide or national programs – which are often geared toward smaller residential buildings in suburban areas – will not be appropriate for rental properties or the larger, multifamily properties that are more common in cities. These buildings have different mechanical systems, ownership structures, and resident considerations that affect participation in a building retrofit program. Additionally, programs designed for sophisticated commercial, institutional, and industrial buildings will not serve the needs of small and mid-sized commercial buildings or small businesses.

When developing a new program, cities should define a cohesive local or regional jurisdiction and aim to coordinate across existing programs, avoid duplicative costs, and reduce complexity within that jurisdiction. Collaboration with existing program administrators and state energy offices, utility commissions, and other state policymakers may be necessary to ensure that cities design programs that are locally relevant.



Image Source: Welcomia va Canva.com

When developing a community-centered building retrofit program that aims to reach LMI households, cities should consider these design elements:

- **Identify community-based organizations (CBOs) to provide targeted outreach** in LMI communities in multiple languages and with culturally sensitive messaging.
- **Create a pipeline of projects that will create economic opportunities for local contractors** by leveraging funding sources, including new IRA funding sources. For a summary of available IRA funding, see [this guide for local leaders](#).
- **Provide free, personalized services that streamline the retrofit process through a one-stop shop approach.** Personal advisors serve as a single point of contact to building owners and decision-makers, offering guidance on:
 - Selecting projects
 - Identifying and selecting contractors
 - Stacking sources of financing and incentives (including IRA funding)
 - Ensuring necessary health, safety, and structural repairs are completed
 - Providing ongoing support through project completion
- **Create guides on specific measures** (e.g., windows, insulation, ventilation, air leakage, heat pumps) that help building owners know what solutions are appropriate for their context and climate and to inform conversations with their contractors.
- **Qualify local contractors** to ensure high-quality retrofits and connect local workers to training.
- **Partner with utilities, associations, and training institutions to provide training and professional development opportunities** to contractors – including minority- and women-owned firms – so they can take advantage of new economic opportunities.
- **Strongly encourage or require contractors to create more inclusive access to high-road jobs** in exchange for receiving programmatic support, supporting the goal of a well-paid, diverse workforce (see callout box on page 10).
- **Offer all services in multiple languages**, based on prevalence in the local community.

A community-driven building retrofit program could also provide:

- **Income verification to determine whether property owners are eligible for state and federally-funded programs.** Pre-approval could happen via existing income qualification programs.
- **State-level consumer and tenant protections to guard against abuse.**
- **Local tenant protections**, co-created with local CBOs and stakeholders, to mitigate against rent increases and risks of displacement resulting from retrofits.



Figure 2: Example of a Community Driven Retrofit Process

Image Source: Elevate

Creating Inclusive Access to Good Jobs

A **community-driven building retrofit** program can stimulate the creation of “high road” jobs, which provide family-sustaining wages, employee benefits, and pathways for career growth. For this to occur, cities must help ensure that the retrofit market competes on the basis of quality, rather than lowest costs, for example by defining and enforcing skills and labour standards for workers. (As an example, see Emerald Cities Collaborative’s [High-Road Contracting Standards](#)). Some populations – typically women and people of color – have historically been excluded from the jobs that building retrofit programs can generate. Cities can take steps toward more inclusive job access by investing in targeted outreach and training for those populations. However, care must be taken to not train more workers than are needed for retrofits, as an oversupply of workers can depress wages.

Protecting Tenants and Preserving Affordable Housing

Housing affordability is a growing concern across the U.S., with home prices and rents far outpacing wage growth. A minimum-wage worker cannot afford a one-bedroom rental in [95% of U.S. counties](#). Nearly every state has lost low-rent housing stock since 2011 – some [as much as 40%](#). A community-driven building retrofit program must avoid exacerbating housing unaffordability. To prevent building owners from passing retrofit costs on to their tenants through rent increases, program incentives should cover a significant portion of the retrofit costs, including essential safety and structural upgrades. Cities can also make public funding contingent on owners retaining rents at certain levels or complying with a just cause eviction policy. Enforcement will be key to ensuring these benefits reach renters.

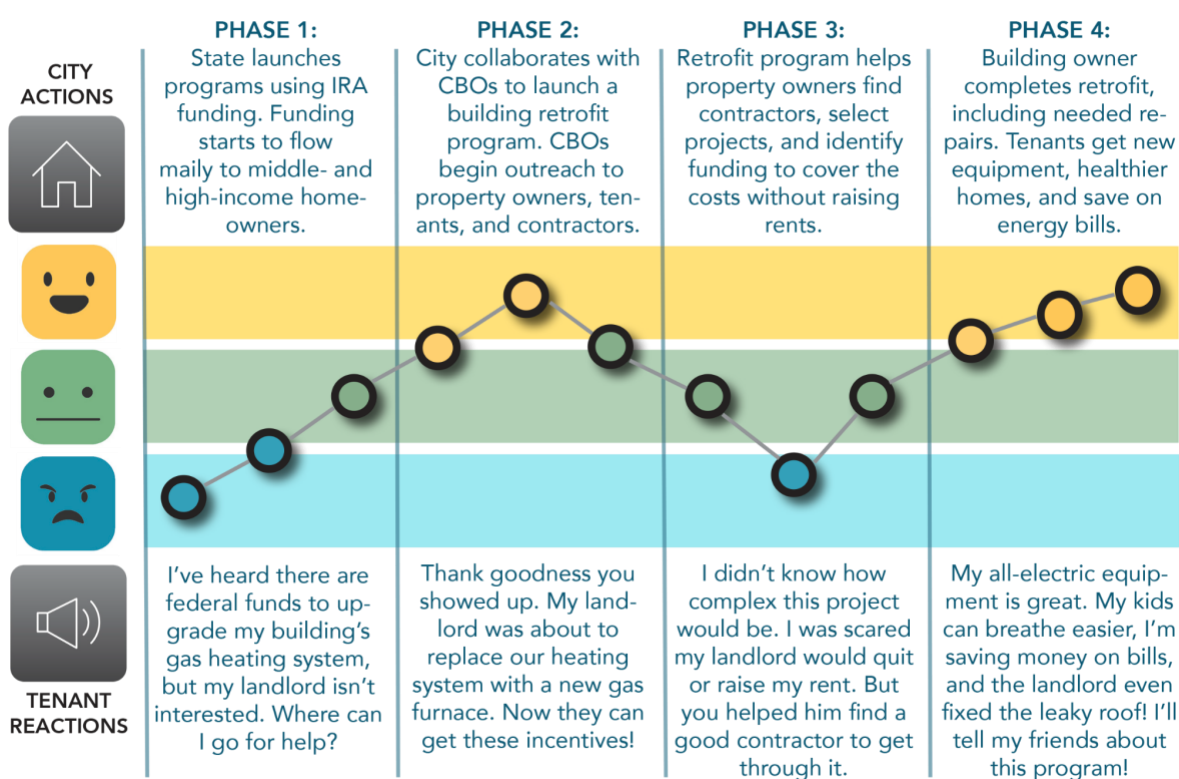


Figure 3: Example Tenant Journey through a Community-Driven Retrofit Program

Image Source: Building Electrification Institute (BEI)

The One-Stop Shop Approach

A successful community-driven building retrofit program uses a “one-stop shop” approach, with its suite of services centralized in one location. To reduce complexity for customers, a single point of contact is available to help property owners and LMI households with every step of the building retrofit process. The single-contact structure has been shown to result in [up to seven times more uptake](#) in multifamily building retrofits than more traditional program models.



Figure 4: The One-Stop Shop Approach
Image Source: Building Electrification Institute (BEI)

Why Create Community-Driven Retrofit Programs?

The Challenge

In the U.S., new federal funding sources offer unprecedented funding to decarbonize buildings. The IRA makes available \$9 billion in rebates for energy efficiency and electrification of buildings through Home Energy Rebates Programs. Another \$27 billion is available through the Greenhouse Gas Reduction Fund, which provides funds for local lenders to finance upgrades. A range of other funding programs could also be used to accelerate building decarbonization.

A significant portion of these investments are intended to reach LMI and historically under-served communities thanks to the Biden Administration's [Justice40 goals](#), but are at risk of falling short because structures do not yet exist to effectively channel the funding to LMI communities. These households and communities face multiple barriers to building decarbonization, including:

Affordability

- High upfront costs for electric appliances and efficiency measures
- Inaccessible tax credits that only cover partial costs
- Limited awareness of or access to zero-interest or low interest loans to help cover funding gaps after incentives
- No streamlined processes for combining funding sources
- No or very limited support for upgrades that must precede retrofits, such as electric service upgrades or health, safety, or structural repairs
- The risk that building owners may raise rents or pass the costs of upgrades on to tenants, exacerbating unaffordability or displacing them during or after retrofits

Economic Impact

- A lack of local, trusted contractors from the community who are adequately trained, supported, and ready to deploy high-quality installations at scale
- Low quality job conditions in the residential construction industry, making it challenging to recruit workers

Equity

- Limited access to cultural or language-appropriate information about funding opportunities
- No streamlined state income verification process to determine rebate eligibility
- A lack of consumer protections to avoid potentially harmful loans
- No tenant protections to prevent displacement or increased housing and energy costs
- A lack of cultural sensitivity and language accessibility during program outreach and implementation

To address these barriers, cities need to design their programs with input from partners within LMI and historically disadvantaged communities. CBOs, local contractors, building owners, and residents will all need to participate in order for a retrofit program to succeed. In doing so, programs will be more likely to achieve their energy and carbon goals and address community priorities such as health, safety, and job opportunities.

Four Essential Stakeholders to Engage in Program Design

Understanding the needs and barriers of the community you aim to serve helps create a more effective and equitable program. Cities should engage four primary participants when designing and implementing community-driven building retrofit programs:

- **Property owners**, particularly of unregulated or “naturally occurring” affordable housing, which can include single-family and multifamily properties. This housing is currently affordable to residents, but is not subject to regulations on rents or incomes, and is often located in previously [redlined neighborhoods](#) that may be gentrifying. This housing typically has significant deferred maintenance and need for health, safety, or structural upgrades. Property owners may not be aware of funding or incentive programs or have the capacity to take advantage of them.
- **Renters** in LMI communities, who may be living in substandard housing or are experiencing rapidly rising rents and other housing costs, and who in some cases may be facing discrimination or harassment by their building owner.
- **Contractors**, particularly minority- and women-owned contractors, who may be looking for economic opportunities to expand their services and create high quality jobs for local workers.

- **CBOs and Residents** of LMI communities, who may have a range of social and health priorities that could be addressed through building retrofit programs.



Image Source: Drazin Zigic via Canva.com

Optimizing Outcomes

When cities give frontline communities an active role in shaping local building decarbonization programs, it ensures the needs of these communities are addressed. Prioritizing community engagement in the design process of retrofit programs will help:

- **Create equitable access to clean energy** and deliver on federal [Justice40 goals](#) by spurring upgrades for LMI households, who in the past have been left out of the clean energy transition.
- **Upgrade affordable housing and address substandard housing**, which is a social determinant of health that disproportionately affects low-income communities of color.
- **Preserve housing affordability and prevent risks to tenant displacement** through the co-creation of anti-displacement strategies on the ground with local CBOs.
- **Reduce energy poverty** by ensuring lower energy bills for LMI households.
- **Create accessible, high road job opportunities** for disadvantaged communities by stimulating economic activity.
- **Improve health and environmental justice** by prioritizing indoor air quality improvements and cooling for those who face disproportionate environmental burdens.
- **Address climate pollution** by reducing GHG emissions and accelerating progress toward a fossil fuel-free future.

Grounding Your Approach in Climate Justice

The generous federal funding from the IRA in the U.S. will not deliver equitable results unless distribution programs are intentionally designed to reach LMI communities and be continually improved through iteration. Market-driven approaches and mapping eligibility are not sufficient to achieve the Biden Administration's [Justice40 goals](#), which aim to direct 40 percent of the overall benefits of certain federal investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. Many cities have created their own climate justice and racial equity goals. Both Justice40 and a city's specific goals should be used in tandem to guide equity-driven program design.

Foundational Research

To ensure LMI communities receive the benefits of these investments, it is crucial that cities understand which residents, building types, and neighborhoods they need to engage to design their retrofit programs to reach. By conducting a building and housing stock analysis, cities can map where the least resourced, most burdened people and buildings are located and clustered. By conducting a funding gap analysis, cities can research and identify existing programs, funding sources, and gaps in the market to understand who is not being adequately served by existing programs. Gathering this information lays a solid foundation for program design. The next step is to reach out to community groups and CBOs already working in these target neighborhoods and invite them to co-create the program design.

Community Co-creation

Community co-creation is a process of deep, iterative collaboration between government staff and community leaders that is rooted in and accountable to historically marginalized communities. It is essential that cities co-create building retrofit programs with communities in order to accurately understand their existing benefits and burdens, align program design with their most pressing needs, and to shift toward a culture of shared decision-making power (see the Spectrum of Community Engagement to Ownership below).

Spectrum of Community Engagement to Ownership

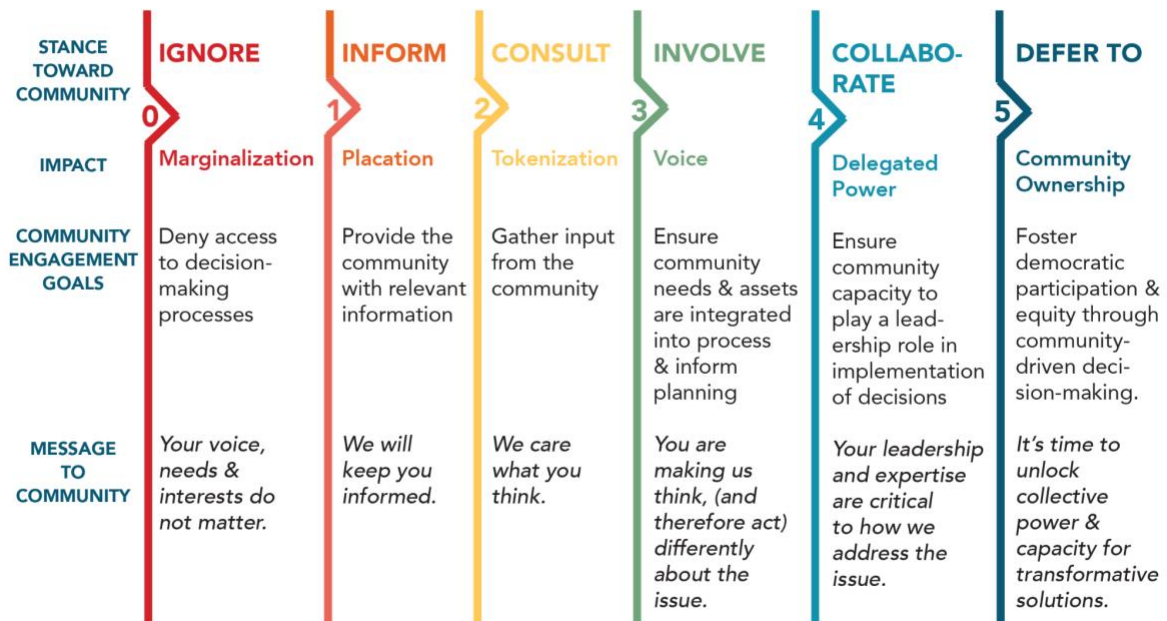


Figure 5: The Spectrum of Community Engagement to Ownership

Image Source: [The Spectrum of Community Engagement to Ownership](#), developed by Rosa Gonzalez of Facilitating Power for the Movement Strategy Center

The following best practices set the stage for meaningful city-community collaboration, leading to more successful community buy-in and project uptake:

- **Host targeted education and listening sessions for LMI community members.** Meetings should be accessible, provide background and context, and have ample time for community feedback across multiple sessions. Community members should be resourced to ensure they can participate, for example, with stipends and free childcare.
- **Use multiple platforms to help community members stay engaged,** including both in-person meetings and easy-to-use digital platforms for program planning, development, implementation. These can also serve as a conduit for feedback or concerns throughout the process.
- **Meaningfully incorporate community feedback into the final program design.** Transparency in addressing community priorities and concerns is critical to a successful program launch and maintaining community buy-in.
- **Incorporate structures of accountability at every step of the planning, development, and implementation phases** to ensure programs are responsive to the residents they are serving. This should include ways for community members to file grievances and have them addressed.
- **Create procedures for identifying and mitigating any unintended consequences.** These should be discussed with community members, who should play an active role in determining how they will be addressed.

By centering community input from stakeholders like CBOs, local contractors, and representatives of LMI neighborhoods, cities can ensure that building retrofit programs are custom fit to the community's needs. Cities should build into their budgets resources to compensate CBOs for the time they dedicate to program design or implementation.

Depending on desire and capacity, CBOs might play various roles such as:

- Co-designing program strategies to determine what services are offered and which communities to target.
- Identifying which contractors and vendors can deliver the services and which trusted organizations can reach the target communities.
- Identifying the type of workforce development programs or strategies are needed to increase inclusive access to high road jobs (like first-hire agreements between contractors and training programs) and what kind of labor or employment standards might spur high-road job creation.
- Providing proactive outreach and network-building in high-priority neighborhoods during program implementation to increase awareness of program services and funding opportunities through trusted messengers and relevant channels.
- Advising local or regional policymakers on community-wide policies that may be needed for effective program implementation, such as such as tenant protection policies.
- Providing households with information on tenants' rights and potentially serving as a reporting authority for violations.
- Providing oversight to ensure that the program delivers on community priorities and its strategies are finetuned over time.

Designing Your Retrofit Program

Below is a step-by-step guide for designing a community-driven building retrofit program in a city or a region.

Step 1: Define Your Goals to Optimize Outcomes

The first step in designing a building retrofit program is to define your goals. Co-creation with the LMI and historically disadvantaged communities must start here – listening and understanding their needs and priorities, then identifying the cross-cutting goals that a retrofit program might advance. The community should also play an active role in determining how any unintended consequences will be addressed – such as increased energy or housing costs that may result from retrofits.

Examples of program goals include:

- Reducing utility costs
- Decarbonizing buildings and removing fossil fuel appliances
- Improving occupant health and comfort
- Preserving affordability
- Preventing tenant displacement
- Increasing wealth in disadvantaged communities and communities of color
- Creating good-paying jobs
- Increasing home ownership
- Providing youth education and skills training
- Enhancing digital access
- Increasing financial literacy
- Creating climate resilient buildings



Image Source: South_agency via Canva.com

Step 2: Identify Your Target Market

With input from tenants and residents of LMI neighborhoods, small businesses, and minority- and women-owned contracting firms, identify the buildings most in need of improvement and which buildings the retrofit program should target.

Table 2: Considerations to Identify Target Market

	Residential Building Examples	Commercial Building Examples
INCOME or DEMOGRAPHIC	Occupant Income: Above or below area median income Housing Market: Public housing, subsidized affordable housing, unregulated or “naturally - occurring” affordable housing, market rate	Building Market: Distressed Census Tract, Disadvantaged Business Entities
BUILDING TYPE	Single family homes, Small apartments, large multifamily buildings	Small business, retail, older commercial buildings
OWNERSHIP or AUTHORITY STRUCTURE	Owner-occupied, tenant-occupied (rental), cooperative or condominium, community land trust, homeowners association	Owner-occupied, tenant-occupied, Downtown Development Authority owned or managed

Step 3: Select Types of Upgrades

In this step, identify what kind of building upgrades to include in the community-driven retrofit program, considering the community’s stated needs, an assessment of the targeted building stock, and the available funding and financing resources. Upgrades can include:

- Energy Efficiency and Weatherization
- Water Efficiency Upgrades
- Renewable Energy (e.g. rooftop solar)
- Energy Storage (e.g. battery storage)
- Electrification
- Smart Devices (e.g. programmable thermostats and wifi-enabled appliances)
- Health & Safety Upgrades and Building Repairs (e.g. mold abatement, asbestos remediation, roof repairs)
- Electric Readiness (e.g., electrical panel upgrades, electric wiring replacement)
- Electric Vehicle Charging



Image Source: bee32 via Canva.com

Step 4: Design Program Services and Integrate Complementary Programs

A “one-stop shop” approach for technical and financial assistance reduces complexity, improves coordination across existing resources, and results in significantly increased project uptake. Cities should work with community partners to design the specific services that the retrofit program will provide within the “one-stop shop.”

These services should include several basics, including: culturally appropriate outreach to LMI communities; free guidance to help building owners select projects, find contractors, access stacked funding, and complete retrofit projects; qualifying contractors to ensure high-quality retrofits; and connecting workers to training (see more information above).

Other existing programs can also be integrated into the retrofit program. In the design process, stakeholders can help cities identify those opportunities (see table below).

Table 3: Existing Programs to Integrate

Sources of Capital	
GRANTS	Federal, state, and foundation grants
INCENTIVES	Utility programs, CCA programs, state IRA rebates
LOW-COST LOANS	CDFIs, green banks, Greenhouse Gas Reduction Fund
ALTERNATIVE FINANCING	Bonds, TIF, or Revolving Funds
Economic Development Programs	
WORKFORCE TRAINING	Community colleges, apprenticeships, pre-apprenticeships
CONTRACTOR SUPPORT	Contractor associations and accelerator programs
WEALTH BUILDING	Financial literacy, banking and credit support
COMMUNITY OWNERSHIP	Community land trusts, mixed-income neighborhood trusts, community development corporations
INNOVATION	Clean tech incubators, accelerators, and pilot projects with technology companies
Community Service and Programs	
DISASTER & EMERGENCY	Heating and cooling centers, resilience hubs, emergency management and disaster relief
MOBILITY	EV car sharing or mobility hubs co-located with housing and community anchor buildings
OTHER	Digital access, financial literacy, environmental justice

Step 5: Maximize Resources

Cities must identify resources to:

- 1) Fund the retrofit program infrastructure, and
- 2) Fund or finance the building retrofit projects that the program helps building owners or decision-makers to undertake (also referred to as the “capital stack” for customers).

Funding Program Infrastructure

As with any city-run program, resources are required to provide adequate services to the community. Cities should consider what funds are needed to build the infrastructure for a community-driven retrofit program. This is likely to include hiring and training program staff to understand complex retrofit projects and how to stack funding or financing for customers, delivering services that align with community priorities, and iterating on the program design and services to adapt to community needs. Funding for these services is expected to be higher for a successful community-driven building retrofit program than for a traditional retrofit program.

To fund the infrastructure for retrofit programs at the local or regional scale, U.S. cities can consider these IRA and IIJA opportunities:

- **Climate Pollution Reduction Grants**: \$5B for planning and implementation activities to lower greenhouse gas emissions
- **Home Energy Rebate Programs**: Funding for states to design programs to equitably distribute \$9B in electrification and efficiency rebates
- **Environmental and Climate Justice Block Grant program**: \$3B in grants and technical assistance to accelerate community-led environmental justice efforts, including Community Change Grants and Environmental Justice Thriving Communities Grantmaking Program
- **Future Greenhouse Gas Reduction Fund Loan Programs**: \$20B for fund administrators and local lenders, who will need to invest in pre-development, technical assistance, and pipeline development activities
- **Solar For All**: \$7B for residential solar programs, which can include funding for electrification, efficiency, and structural upgrades
- **Energy Efficiency & Conservation Block Grants**: \$550M in grants to states, local governments, and Tribes to reduce energy use, reduce fossil fuel emissions, and improve energy efficiency
- **YouthBuild** and **Building Pathways to Infrastructure Jobs Grants**: U.S. Department of Labor funding that supports workforce development and good paying jobs in renewable energy and energy efficiency sectors.

C40's [Climate Action and the Inflation Reduction Act: A guide for local government leaders](#) describes the funding opportunities above in detail and provides guidance to cities on what the funding can be used for, how it will flow, and the process and timeline for accessing the resources.

Stacking Funding for Building Owners

To minimize the financial burden for those least able to pay for building retrofits and ensure that federal funding reaches LMI communities, retrofit programs should develop a “capital stack” for their customers. This will require identifying the growing number of funding sources for building retrofits and assessing opportunities to stack them while accounting for eligibility restrictions. Retrofit programs will also benefit from devising methods to streamline the program application process, so a single property owner can access multiple funding sources at once without having to navigate multiple complex application processes.

Cities and program staff should establish relationships with local, state, and federal programs to collectively fund retrofit projects and minimize retrofit costs and application hurdles for the LMI community.

Multiple programs provide billions in direct rebates, tax credits, and incentives to building owners, including new IRA and IIJA programs:

- **[Home Energy Rebate Programs](#)**: \$9B for homeowners, property owners with LMI tenants, and potentially renters to be distributed via state programs
- **[Clean Energy and Energy Efficiency Tax Credits](#)**: At least \$37B for homeowners and renters in tax credits for clean energy investments
- **[Greenhouse Gas Reduction Fund](#)**: \$27B in grants and loans for clean energy solutions (including funds for the National Clean Investment Fund, Clean Communities Accelerator, and Solar for All programs)
- **[Weatherization Assistance Program](#)**: \$3.5 billion to assist low-income households to make energy efficiency upgrades to their homes
- **Plus existing state, local, and utility incentive programs**, which vary and tend to operate at a local or regional level

Conclusion

With community-driven building retrofit programs, cities can unlock investments in building retrofits that can increase community health, wealth, and climate resilience while also driving down their fossil fuel use and associated GHG emissions. Unprecedented federal funding in the U.S. from the IRA and IIJA can help spur upgrades for LMI households, but structures must be designed to effectively channel the available funding to these communities. Through collaboration, cities and communities can co-create their building retrofit programs with frontline communities to ensure that their needs and priorities are centered – and as a result create more equitable and effective building retrofit programs that help ensure no one is left out of the clean energy transition.

Case Studies

