

Addressing Multifamily Hesitance to Participation in Energy Efficiency Programs

*Dr. Elizabeth Kelley, Michael Li, Matt Galport, Shannon Kahl,
ILLUME Advising, LLC.*

ABSTRACT

It is well established that energy efficiency program participation by rental units, and particularly multi-unit rental buildings, lags that of owner-occupied units. Given the historic levels of unpaid energy bills (McGeehan, P. 2022), in part driven by the COVID-19 pandemic, combined with ambitious carbon reduction targets, improving the energy efficiency of rental units, particularly those among households with low incomes, is as important as it ever has been.

This paper will build from the research and experience in three northeastern states: Connecticut, Rhode Island, and Massachusetts to identify barriers to participation related to housing stock issues, as well as barriers for landlords and renters. The findings are based on two large nonparticipant studies and the regulatory initiatives in Connecticut.

The paper concludes with recommendations on how to increase the program participation by landlords and property managers and renters as well as broader strategies to address housing stock issues. By employing these strategies, program administrators can improve participation from rental units, support energy affordability for renters, and help us meet our climate goals.

Introduction

Buildings account for 40% of the energy consumption in the U.S. and 72% of electricity consumption. Over half of that consumption is in the residential building sector (US Energy Information Administration 2015). Residential buildings are also responsible for approximately 20-25% of greenhouse gas (GHG) emissions (Nassen, Holmberg, Wadeskog, Nyman 2007). Energy accounts for 13% of total monthly housing costs and 4% of household income for the average renter. This can be up to 15% of total income for low-income families (American Housing Survey 2011). These averages, while informative, can be misleading. According to a report from the Connecticut Department of Energy and Environmental Protection (CT DEEP), using DOE's Low-Income Energy Affordability Data (LEAD) tool that maps energy burden at the state, county, census tract, and city level, while Connecticut has an average energy burden of 3 percent, below the affordability threshold, there are 106 census tracts with average energy burdens of 6 percent or higher, which is an often-used threshold for energy affordability. The COVID-19 public health crisis exacerbated energy affordability issues across the country. In New York and New Jersey alone, residents owe more than \$2.4 billion to utility companies (McGeehan, P. 2022). In Connecticut, customers owed \$280 million in utility bills (Crowley, B. 2021), prompting Governor Lamont to record a robocall with information on the UniteCT

program which provides assistance for unpaid electric utility bills (State of Connecticut, Governor Ned Lamont. 2021). The need for deep energy efficiency retrofits, particularly those with high energy burdens, has never been greater and more must be done to lower the energy burdens for the most vulnerable and increase program participation of rental units and renters. In this paper, we discuss research on three categories of barriers to participation: challenges related to housing stock issues, barriers to renter participation, and barriers to landlord participation. We then discuss strategies to address barriers in each of these categories.

Research Scope and Methods

ILLUME Advising (or ILLUME) is a research and evaluation consultancy. We recently conducted two studies with program nonparticipants to better understand who is not participating in the energy efficiency programs offered by their state and/or utilities and why not.

The Massachusetts study, “Residential Nonparticipant Market Characterization and Barriers Study,” (or “Massachusetts Nonparticipant study”) was designed to better understand residential customers who have not participated in Mass Save programs. Mass Save¹ is an umbrella brand for the energy efficiency programs offered in the state of Massachusetts. The program is co-funded by 8 participating utilities, including Eversource, Berkshire Gas, Cape Light Compact, Liberty, National Grid, and Unitil. The ILLUME team is part of a broader evaluation team led by Guidehouse to support the program administrators through evaluation of the residential program portfolio. The goal of the nonparticipant study was to 1) characterize nonparticipants, 2) investigate barriers to participation, and 3) identify engagement opportunities. One customer group of particular interest was renters. The study included 1609 surveys with customers, 89 interviews with customers, and 19 surveys and interviews with property managers and owners (Guidehouse 2020).

ILLUME also conducted a nonparticipant market barriers study for Rhode Island Energy, formerly National Grid with a goal of understanding how to reach more customers. Through this study, ILLUME characterized the customer segments that have historically participated less in the utility residential programs, assessed barriers to their participation, and identified opportunities to engage them. The study consisted of 1,462 surveys with customers, 24 interviews with customers, 18 interviews with community organizations, and 11 interviews or surveys of landlords and property managers.²

Like Massachusetts, Connecticut has a statewide energy efficiency program, EnergizeCT.³ This program offers a portfolio of programs for residential and business customers across the state. Connecticut took a slightly different approach than the others we discuss here to identify and address barriers to participation but covered similar topics and led to similar findings. The CT DEEP initiated the Equitable Energy Efficiency (E3) Proceeding⁴ to review the program portfolio through an equity lens. CT DEEP’s priorities in this effort were to:

- Alleviate high energy burdens for low-income and underserved households

¹ See Mass Save: <https://www.masssave.com/>

² The study will be publicly released once it has been finalized, but to date is not yet available publicly.

³ See EnergizeCT: <https://energizect.com/>

⁴ See <https://portal.ct.gov/DEEP/Energy/Conservation-and-Load-Management/Equitable-Energy-Efficiency>

- Recognize and remediate past harm by prioritizing historically under-resourced communities
- Mitigate and eliminate barriers to low- to moderate-income participation in energy efficiency programs
- Drive accessible and transparent process to incorporate residents' priorities and lived experiences into program design and decision-making
- Ensure equitable access to the benefits of energy efficiency

The E3 Proceeding, in total, ran for almost a year. The proceeding included a series of stakeholder meetings to identify opportunities to improve the equity of the EnergizeCT portfolio. The Proceeding was launched in September 2020, followed by an Initial Determination in May of 2021. In July 2021, CT DEEP issued a final determination which outlined eight goals (Connecticut DEEP Bureau of Energy and Technology Policy 2021). The goals most relevant to this paper are:

Goal 7: Address health and safety barriers to low-income weatherization access

Goal 8: Address and remove barriers to participation among renters.

In the next section, we look across these two nonparticipant studies (in Massachusetts and Rhode Island) and the Connecticut proceedings about equity to discuss findings related to barriers to participation in energy efficiency programs.

Findings from the Research: Barriers to Participation

In the sections below, we present the findings from research across Massachusetts, Rhode Island, and Connecticut. We highlight specifically barriers to participation in three different categories, the first relates to housing stock and the structural issues that might prevent participation in energy efficiency programs. Next, we discuss barriers to renter participation followed by a section on the landlord perspective and barriers to landlord participation.

Housing Stock issues

Especially in the northeast, housing stock is often quite old. Data from the 2019 American Community Survey (ACS) shows that New York, Massachusetts, and Rhode Island have the oldest average housing stock in the nation.⁵ In landlord and property manager interviews conducted as part of the Rhode Island nonparticipant study, respondents reported managing buildings constructed as long ago as 1804 and as recently as 2016.

Older homes and buildings often have other maintenance needs that prevent energy efficiency upgrades, such as lead paint and lead pipes, older wiring, mold, or moisture problems. One landlord interviewee in the Rhode Island study noted that older housing stock is often in need of upgrades that are beyond what utility programs cover. Even with braiding health care funding and other funding streams, repairs such as older wiring are not eligible for utility funding. Furthermore, due to harsh seasonal changes, weatherizing homes is a perennial concern for buildings in the northeast. Vacant, unsafe, or poor housing structures are, and will continue to

⁵ See <https://eyeonhousing.org/2021/03/age-of-housing-stock-by-state-3/>

be, potentially challenging barriers for participation. In Massachusetts, the team conducted in-person surveys in locations where we had not had success through other methods of outreach (email/web, phone, and mailed surveys). During this in-person survey outreach, the team encountered 65 homes that appeared vacant or were identified as unsafe for researchers to approach (e.g., residents arguing, structurally unsafe conditions).

Across the country, weatherization and other energy efficiency programs are often limited in the number of homes they can serve because of health and safety concerns (e.g., mold and asbestos) that many programs require to be remediated prior to upgrading (National Renewable Energy Laboratory [NREL] 2011). This is a challenge nationally, with many utility Weatherization Assistance Program (WAP) trade allies reporting between 10 and 15% of homes are ineligible because of health and safety issues (NREL 2011). The prevalence of nonparticipation due to health and safety issues in otherwise eligible homes hints at the deeper and interconnected nature of generational poverty, historically disadvantaged (and underinvested) communities, and structural racism that has resulted in poor housing infrastructure (Bailey, Feldman, and Bassett 2020).

Historic practices of discrimination and disinvestment have resulted in a complex array of infrastructure needs in disadvantaged communities. Indeed, Black households are 60% more likely to be living with inadequate housing conditions than white households, according to US Census data (USCB 2017, cited in Hayes and Denson 2019). Low-income communities and communities of color are also more likely to be exposed to air pollution and to experience chronic diseases such as asthma and high blood pressure (Mikati et al. 2018; Oates et al. 2017). According to a Center for Disease Control (CDC) analysis of 2016 – 2018 National Health Interview Survey Data, Black children experience asthma at more than twice the rate of white children (14.2% among Black non-Hispanic children compared to 6.8% among white non-Hispanic children (CDC 2020). This is compounded by the fact that Black, American Indian and Alaska Native, and Native Hawaiian and Pacific Islanders continue to receive poorer health care than white patients across 40% of the quality measures included in the 2018 National Healthcare Quality and Disparities assessments (Agency for Healthcare Research and Quality 2018). Furthermore, many low-income households experience energy insecurity—lacking consistent access to electricity or natural gas in one’s home—as well as food insecurity, which has been correlated with an increased risk of chronic disease (Hernandez 2016).

Broader solutions that intervene at a policy level are necessary to address the matrix of issues facing disadvantaged communities. As Diana Hernandez notes in her study on energy security and the non-energy impacts of energy efficiency programs, “while the energy efficiency upgrades were largely beneficial to participants, they alone may not be sufficient to address all of the energy insecurity issues facing low-income households. In most cases, the systemic nature of the cited problems is beyond the reach of energy efficiency upgrades and would require more intensive housing and policy interventions” (Hernandez and Phillips, 2015). Weatherization and energy efficiency programs are not a comprehensive solution to this challenge as they only treat one facet of a broader issue.

However, among utility programs, weatherization offerings do provide an opportunity to couple energy efficiency with health and safety interventions to improve both. Weatherization improvements yield both cost-savings and health benefits in a compounding fashion, whereby the cost benefits, e.g., lower bills, may have indirect health benefits, such as a greater ability to

afford prescription medications (Tonn et al. 2017). Similarly, the health benefits, such as reduced asthma symptoms and better rest/sleep, may have indirect financial benefits, e.g., fewer missed days of work. At a broader level, an ACEEE study found that a reduction of annual electricity consumption nationally (which could be achieved through energy efficiency) would result in saving up to \$20 billion in avoided health harms and nearly 30,000 fewer asthma attacks (Hayes and Kubes 2018). In some jurisdictions, weatherization programs have been enhanced to create “Weatherization + Health” offerings. These include health and safety strategies outside the realm of typical energy efficiency programs, such as removing bedroom carpeting, which can be a trigger for asthma (Vermont Department of Health 2018). Such examples of programs that creatively address what have been called health and safety burdens is one way that programs across the country are addressing barriers to participation related to housing stock issues.

The Renter Perspective: Barriers to renter participation

In this section we discuss barriers to participation from the renter perspective and draw on the Massachusetts and Rhode Island nonparticipant studies. In both studies, the ILLUME team found that the relationship between renters and landlords can present a challenge and may be a barrier to participation in energy efficiency programs that conduct outreach to renters as many renters prefer to minimize or avoid contact with their landlord.

Expectation that energy efficiency is only for homeowners

Renters expressed a common perception that energy efficiency and home improvement are the responsibility of the landlord, not the tenant. In interviews with Massachusetts nonparticipants, most renters were surprised that they could or should participate, as they believed it is not their responsibility to improve the unit. Survey respondents agreed with interviewees; when asked why they have not participated, 31 respondents said it was because they did not own the building and/or they were unable to get their landlord to complete the work (Guidehouse 2020). Other renters saw energy efficiency upgrades as only applicable to homeowners and were unaware of the direct install measures (such as lighting, smart strips, and hot water measures) that they could install without landlord consent. Most of the renters surveyed report paying for their electric and natural gas bills (96% and 70%, respectively). “Anything that requires a permanent change is a homeowner thing,” one renter told us in an interview. Furthermore, we found that nonparticipants often expressed a lack of trust in the government and their landlords, and many had a fear of scams. They prioritized their time and resources on needs that they considered more critical, including food and shelter. We discuss this further below.

In Connecticut, through the Equitable Energy Efficiency (E3) Proceeding, one of the issues raised by stakeholders was the lack of responsiveness of landlords to inquiries from their tenants regarding participation in the Home Energy Solutions (HES) and Home Energy Solutions – Income Eligible (HES-IE) programs. The HES⁶ and HES-IE are a typical whole house retrofit / Home Performance with ENERGY STAR-type program. One difference from the comparable

⁶ <https://energizect.com/your-home/solutions-list/home-energy-solutions-core-services>; HES Program Overview: <https://www.eversource.com/content/ct-c/residential/save-money-energy/energy-efficiency-programs/home-energy-solutions>

program in Massachusetts is that in Connecticut the audit visit includes services such as duct and air sealing, and an initial Home Energy Score. There is a co-pay for the HES program, but there is no copay for the HES-IE⁷ program. The copay for the HES program has changed over the years, but over the last few years it has typically been between \$50 and \$100. According to the Energize CT marketing materials, on average, services are valued at \$1,000 and customers save \$180 a year on energy bills.⁸

Given the economics of the program, even renters on a one-year lease would typically save money over the course of the year if they paid the copay themselves. However, program rules require that landlords approve participation in the program given that certain things like air and duct sealing cannot be undone, unlike unscrewing a light bulb or a faucet aerator. Certain stakeholders in the E3 Proceeding advocated for a removal of the landlord requirement on the grounds that a) the housing unit is being improved and therefore the landlord will not object, and b) Connecticut statute only prohibits renters from making “structural” changes to a property. To date, there has been no determination as to what constitutes a “structural” change, and the landlord requirement has not changed.

Skepticism and distrust of landlords:

As part of the Massachusetts nonparticipant study, the ILLUME team found that “many renters believed it was unlikely their landlords would do anything beyond making the minimum repairs to their properties” (Guidehouse 2020: 18). In the Rhode Island survey of nonparticipants, the team found that most renters (over 70%) did not think their landlords would be willing to make energy efficiency improvements. This skepticism that landlords would make changes beyond the minimum was reflective of a broader distrust of landlords, often borne from poor past experiences. In the same study, renters we spoke with shared their fears that if they raised a question or concern with the landlord they would be retaliated against and/or evicted. We also heard in that study experiences of being disempowered and even reprimanded by landlords for participating in energy efficiency programs. One person described how they received a more efficient refrigerator through the statewide energy efficiency program and the program removed the older, less efficient appliance. However, when the landlord found out about the new refrigerator, he demanded that the renter replace the old, recycled refrigerator as it was the landlord’s property. Experiences such as this can increase hesitancy among renters to participate in any energy efficiency program, even if landlord approval is not required.

Fears of being evicted or priced out of their home:

Some respondents in the Massachusetts study noted that they were uncomfortable talking to their landlord about things the landlord “needs” to do, for fear of repercussions from the landlord – either of being evicted or of having the rent raised and effectively being priced out of their home. The team recently replicated these findings in research with nonparticipants in Rhode Island. Through interviews and surveys with nonparticipants, the team found that renters tend not to want to attract the attention of their landlords and are therefore hesitant to contact them. We

⁷ <https://energizect.com/your-home/solutions-list/save-energy-and-money-all-year-long>;

<https://www.eversource.com/content/ct-c/residential/save-money-energy/energy-efficiency-programs/home-energy-solutions/home-energy-solutions-income-eligible>

⁸ <https://www.eversource.com/content/ct-c/residential/save-money-energy/energy-efficiency-programs/home-energy-solutions>

also found that some renters expressed concerns and fears of being evicted if they raised concerns about the condition of their unit or of being priced out of their homes should the landlord make any upgrades (including energy efficiency upgrades) that might enable the landlord to increase the rent. Some were also worried that making energy efficient improvements in their home would increase their rent (37%) or that their landlord would retaliate in some way if they requested that improvements be made to their home (22%). Representatives from community organizations shared similar experiences, one noted that “Many landlords would rather just evict; they aren’t allowed to retaliate but they do.”

Tenants interviewed in Rhode Island also expressed a fear of getting priced out of their homes. Three interviewees mentioned fears of rate hikes after speaking with landlords or landlords making improvements to their property that increase the value. As one renter noted, seeing her landlord make investments in the property increases her fears that she will no longer be able to afford her rental. Renters may also worry that participating in an income-qualified program could have repercussions: there is a risk to a landlord knowing of a tenant’s participation in an income-qualified program because this could create a discrepancy between demonstrating low income for program qualification and wanting to show high income to a landlord.

In all states, tenants could potentially proceed without landlord approval, but doing so could put the tenant at risk with the landlord, though the level of risk is debated. Some advocates have said that there are legal aid resources available to renters who face repercussions from landlords, but there are often long wait times to get assigned pro-bono legal aid, and landlord-tenant disputes can easily drag on for months and years, leaving the renter in limbo. Tenants are often the recipients of retaliatory actions taken by landlords, creating additional strain.

In his ethnography of rental housing in Milwaukee, *Evicted*, Matthew Desmond describes a dispute between a tenant and a landlord where the landlord does evict the tenant after her mother calls the building inspector (who indeed finds multiple code violations) (Desmond 2016:15-18). This kind of retaliatory relationship can contribute to renter hesitance to participate in programs that would invite an auditor into the building, even if energy auditors do not report other code violations.

The Landlord Perspective

Research with landlords and property managers (referred to in this section as “landlords”) can also highlight barriers to participation—and opportunities to increase participation in energy efficiency and other programs. The Massachusetts Nonparticipant study included interviews with landlords and found that they often view themselves primarily as investors, suggesting that outreach about the program to landlords may be more successful by prioritizing the possible return on investment over other benefits (Guidehouse 2020: 26). Those same interviews revealed that, at least for landlords in Massachusetts, property owners who had not yet participated had limited comprehension of what the program comprised. By contrast, two of the property owners who had already participated in the program said that they would be likely to do so again. In Connecticut, as part of a directive from the CT DEEP, Eversource, UI, SCG, and CNG held landlord roundtables to better understand the barriers to participation. Many of the landlords were unaware of the program and did not know that there is typically no cost to landlords when their tenants qualify for the HES-IE program. Landlords were more open to participation in this

program because the homes received improvements such as duct sealing, air sealing, LED lightbulbs, faucet aerators, and an energy audit, which can increase the value of their properties (e.g., Institute for Market Transformation 2015). Another particularly attractive feature of the HES-IE program is that in a small multi-unit building, such as an old Victorian house in New Haven that is split into three units, if two of the three units qualify for HES-IE, then all the units would receive the services at no cost.

We also interviewed property managers and landlords as part of the Rhode Island nonparticipant market barriers study. Interviewees understood the benefits of energy efficiency to include lower operating costs, lower utility bills for tenants, increased comfort, and higher apartment value. Those who participated (seven interviewees) in utility energy efficiency programs did so to get incentives, get recommendations (for savings), save energy and costs, respond to tenant requests, and free up money for other projects. Most who had participated in National Grid's program have recommended it to others or would do so if the opportunity arose, but a few were less certain of the benefits from participating in the program.

Concerns about uncovering possible code violations may also be a deterrent to property owner and landlord participation in energy efficiency programs. In both the Massachusetts and Rhode Island nonparticipant studies, the team conducted interviews with community organizations. According to several of those organizations, property owners may have concerns about potential repercussions for code violations that result in a reluctance to participate in programs affiliated with the utility, due to concerns that program staff will report the violations. Such violations could include the general condition of the building, electrical systems not up to code, and using ineligible attics and basements as rental spaces.⁹ In these cases, providing clarity around the limits of what the assessors do or do not look at during an energy audit, and the kind of health and safety violations that they might report (and to whom) could provide reassurance to those landlords who may be hesitant to invite an 'auditor' into their property.

Across these studies, we have identified the following barriers:

- **Cost and Financing.** Costs and financing of upgrades was by far the most frequently mentioned reason for not making efficiency investments in general. Landlords and Public Housing Authorities have limited and sometimes unpredictable (year to year) budgets and all landlords must balance resources available for timely replacement of aging equipment with those needed for emergencies and other maintenance priorities. One PHA director said it was very difficult to compare competing bids for work through the program because contractors use different bid formats making it hard to compare apples-to-apples.
- **Workforce and Contractor Issues.** Several mentioned challenges finding good, qualified, and reliable contractors who are available to do work, or qualified maintenance personnel to hire. These uncertainties combined with the daily demands of their jobs and added pandemic workforce issues made exploring energy efficiency options a low priority.
- **Aging Buildings Add Additional Costs to Improvements.** Several interviewees mentioned that they would need to address aging equipment in their buildings before

⁹ Indeed, one organization that previously would provide housing support (in the form of rental assistance) to the people they served had become so frustrated with the prevalence of what they termed 'slumlords,' that they had recently invested in a small multifamily property and were retrofitting the building for use for their clients to rent out.

making energy efficient upgrades or expressed concerns that the necessary retrofits would be expensive because the buildings were older, or the current equipment was old. We heard that maintaining and finding parts for aging equipment was a challenge. Some landlords who owned very old properties noted that making changes to HVAC and building shell for these older buildings tends to be more expensive than more modern buildings, increasing the cost of improvements.

- **Split Incentive Between Bill Payers and Equipment Users.** There can be a disconnect between landlords and renters on energy efficiency options because often the owners of equipment and those who pay the energy bills are not the same. This means those who pay more for energy efficient equipment may not benefit directly from the energy savings. One landlord said “... where landlords aren’t paying any utilities, what is the huge incentive to upgrade for efficiency?”
- **Landlords and Property Managers are Difficult to Identify and Reach.** Landlords and property managers were difficult to reach and convince to participate in an interview, particularly those who had not participated in energy efficiency programs in the past. Even when the team connected with a landlord, their priorities were first solving urgent problems at their properties, getting their units rented, and then meeting the needs of tenants. During the interview recruiting period, the pandemic and related workforce issues applied additional stresses and added duties to their daily workload.
- **Lack of Program Information.** One landlord complained that they had a hard time finding information on program offerings and, when they did find out about it in the past, it was too late to qualify. Others wanted a fuller understanding of the program processes and expected timeline so they can plan for future projects. One said it “seemed like too time-consuming a process and complicated” to apply for rebates.
- **Past Experience with the Program.** Some of the interviewees had filed for incentives through the program in the past and decided it was not worth the effort. One landlord applied for incentives to replace a boiler system in a 25-unit building (of which they own hundreds). Their rebate was equal to about two percent of the cost of the project, which they felt was not enough to justify the time spent on the application. Another landlord observed that some rebates are “super easy” while others are not. For the latter, it seems like “by the time you get all the information (needed to apply), it’s become too late to get the rebate, which is frustrating.” They noted “We tried applying for something at a property before COVID and still haven’t seen anything.” Then went on to say, “if it moved faster, people would take advantage of the opportunity.”
- **Timing Upgrades During Unoccupied Periods.** Six interviewees noted that, for most changes to residential equipment, they prefer to make them when the units are unoccupied. Because these are limited windows for them to make equipment purchases and install, they are sensitive to any possible delays that participating in the program may cause. Also, they prefer to avoid making equipment changes or upgrades during winter months.
- **Distrust in Energy Saving Measure Suitability.** One landlord and manager of many properties said the utility program estimates of potential savings do not always match the real world because measures are not always received favorably. They gave an example of getting free smart thermostats for one of their buildings from a utility program. Then

when their residents could not figure out how to use them, they had to buy and install all new thermostats for the building. They also gave an example of installing low-flow showerheads that people hated and removed.

Addressing these barriers:

In this section, we provide suggestions for how utility programs can address these renter and landlord barriers to participation. There is no proverbial silver bullet, but with some new approaches and a concerted effort, utility programs may be able to increase participation by renters in whole house retrofit programs.

Overall: Identify Local Barriers to Participation

The sections above outlined many barriers to participation. While there is likely to be significant overlap on the barriers regardless of jurisdiction, it is worth investing time and money to unearth any particular issues that are unique to a particular state or service territory. These may include barriers driven by statute or regulation, as well as nuances of housing stock or other features specific to communities. For instance, the case studies referenced in this paper all were states in the northeast where there is older housing stock. Barriers and challenges related to the age of housing stock might be different in a place with more recent development.

Addressing housing stock issues:

Create Solutions to Address Non-Energy Investments Needed in the Home

One of the persistent fears raised by renters is that landlords are hesitant to have people in their homes because they are concerned that they will identify code violations that will trigger the need to make improvements. In Connecticut, CT DEEP, who serves as the regulator for the utility efficiency programs, took \$7 million in federal funds from the American Rescue Plan Act (ARPA) to create a complimentary program to address health and safety barriers to weatherization. This new program allows these issues to be addressed so that the home can participate in the HES-IE program. CT DEEP recently issued a request for proposals for a program administrator and is currently in the process of bringing on the administrator.

While \$7 million is a good start, in the long run, funding needs to come from another source. Potential future funding could come from the federal Low Income Home Energy Assistance Program (LI-HEAP), which allows a portion of the funds typically used for bill assistance to be used for pre-weatherization services. Alternatively, there could be statutory changes that would allow certain ratepayer efficiency funds to be exempt from the cost effectiveness test. Connecticut already uses a different cost test for low-income programs, using the total resource cost test instead of a modified utility cost test that is used for other programs. In California, the California Public Utilities Commission issued a decision in Docket #: R.13-11-005 that separated equity programs into a separate category from resource acquisition programs. Only the resource acquisition programs have to pass a cost test.

Code Enforcement & Licensing

Although jurisdictions have building codes, these housing codes are not always enforced, and, due to budget shortfalls and staffing shortages, code enforcement is often a reactive rather than a pro-active process (Hester Street 2019: 5; see also Desmond 2016). That is, in many places, code enforcers respond to complaints, rather than making a regular census of buildings, which would be prohibitively costly. As a result, in some neighborhoods, particularly neighborhoods which have been historically disinvested, many units are not up to code. If housing units were up to code, some of the barriers to participation would be obviated. Hester Street, an urban planning, design, and development nonprofit, is actively working with is attempting to reimagine code enforcement with an eye towards equity as part of a New York initiative Cities for Responsible Investment and Strategic Enforcement (Cities RISE), which was launched in 2017 by the New York State Attorney General’s office to build the capacity of municipalities to deal with the aftermath of the housing crisis by using housing and community data in order to better address and transform problem properties. Hester Street “worked to better understand the way equity choices play out in different code enforcement scenarios and city contexts, and how they affect the way in which the city addresses issues like foreclosure, abandonment and the disparate impacts of code enforcement on low-income communities of color.” As part of this effort, the Hester Street team conducted primary research and developed a framework for identifying equity choice points in cities’ code enforcement processes and systems for advancing equitable community engagement in housing and code enforcement work (<https://hesterstreet.org/projects/cities-rise/>; Hester Street 2019).

Some cities are incorporating code compliance into their rental licensing process. Baltimore City and other jurisdictions have a rental property licensing program that requires in-person home inspections which can operate as a de facto code enforcement program. The city of Baltimore allows third parties to conduct the inspections, so it does not require a substantial increase in city employees. In addition, the State of Maryland requires in-person lead inspections for rental properties for all properties built before 1978. These inspections are also conducted by third parties who are licensed by the Maryland Department of the Environment.

Beyond merely meeting baseline building codes, some jurisdictions, such as Boulder, Colorado, require that landlords meet energy requirements to maintain a rental license.¹⁰

Addressing Landlord Barriers:

Ease Program Participation Burden

The process of participating in energy efficiency programs is not always seamless or straightforward for participants to move through the application, approval, and incentive processing. Specifically, we heard from two Rhode Island landlords that the application process was too time-consuming. Another landlord in Rhode Island who had participated in a National Grid program said they would like the program processes to be more “time-efficient” and have the program representatives proactively keep customers informed on where their project is in the approval and incentive process. Another said the “only negative [with participating] was quite a bit of paperwork that had to be put together and submitted.” If the financial ROI is not significant

¹⁰ For more information, see this newsletter:
https://archives.huduser.gov/scrc/sustainability/newsletter_120612_1.html

enough to warrant the additional time and investment, landlords may decide it isn't worth their time to participate.

Engage Landlords

Engaging landlords on various levels is critical. By interviewing landlords, program administrators can understand their barriers and hesitancy, and address these issues through program design or outreach strategies.

Instead of, or in addition to mass market outreach, one-on-one outreach to willing landlords is a good starting place. If a landlord has a good experience, they may schedule other their units for participation, particularly in the case of income eligible properties where there is often no cost to the landlord. In Maryland, St. John Properties is a consistent participant in the energy efficiency programs offered by Pepco and Baltimore Gas & Electric. This was also reiterated by one of the landlords interviewed in the nonparticipant study.

We include here references to two case studies where programs in Missouri and Ohio effectively identified barriers to landlord participation and, through community-based, collaborative approaches, were able to boost participation:

The first is a Missouri case study of the Green Impact Zone, a community-based approach to overcoming participation barriers in low-income residential EE. This study describes deep discounts on weatherization and provided by property owners, tools for approaching landlords about making improvements, and community-led strategies for addressing distrust and other social barriers (Reames 2016).

The second is an Ohio case study of a similar approach to a weatherization program that sought to reduce barriers to landlord participation by dramatically reducing investment from landlords (total \$500 max investment). This study highlights the importance of engaging with landlords and the value of a collaborative approach to recruitment and program participation (Andrews and Poe 2018).

Share Testimonials About Program Experiences

Landlords we interviewed in Rhode Island wanted more information on experiences of past participants including program process (i.e., timing, cost to participate, requirements), expected cost savings, and rebate amounts. Both groups stressed the high value of testimonials saying they would “help very much” or would be “huge.” One option interviewees offered is to increase frequency or use more targeted communication of program offerings, processes, and benefits. Public Housing Authorities s mentioned splitting out energy savings for the agency and the tenant, and landlords were interested in ROI or cash flow analysis and effects on housing appreciation.

Promote the Program Through Professional Groups

In other interviews, a landlord who was also a realtor suggested that promoting the program through the Board of Realtors would be a great way to connect to landlords of rental properties and through them, connect with people in the process of moving into a new home. This would enable buyers to assess properties and make upgrades. Similarly, some landlords named trade organizations they work closely with and suggested that the program work with

them because it is the “best way” to connect with professional property owners and managers like them.¹¹

Incentivize or Recognize Non-Bill-Payers for Efficiency Investments

Interviewees pointed out the ongoing issue with rental properties is that landlord investment in energy efficient equipment is not always obvious to, or appreciated by, tenants. One suggested that, for situations where renters pay the electric bill and landlords invest in electricity saving equipment, the tenants receive notice on their bill showing what they saved because of the landlord investment. Conversely, if landlords pay the electric bill, the program could look for ways to incentivize tenants to invest in efficient equipment.

Addressing Barriers to Renter participation

Improved Communication and Outreach

Many of the barriers to renter participation, such as concerns about being evicted, are well beyond the purview of utility energy efficiency programs to address. However, focusing on addressing housing stock issues and landlord barriers might enable more renters to participate.

One way that programs could increase renter participation directly is through increased outreach and messaging clarifying what renters are eligible for, given the lack of clarity about renter or tenant eligibility we heard in our studies. Specific outreach that outlines what programs renters could participate in without the consent of the landlord (e.g., purchasing rebated lightbulbs at a hardware store; energy audit with direct install measures) versus what programs require the consent of landlords would be valuable.

Leverage Community Resources and Gain Community Trust

In the Missouri case study referenced above, Reames discusses the importance of addressing social barriers to participation, including distrust of public services and previous disinvestment in a community (2016). In that case study, he describes the efforts of the Green Impact Zone staff to cultivate relationships with community stakeholders, listen to community concerns and needs, and integrate and address them in the framework they subsequently adopted (Reames 2016: 1455-1456).

Conclusion

Low participation rates from renters and landlords have persisted for far too long. Fortunately, there are ways to boost participation in this market segment. This paper has outlined three major categories of barriers to participation: housing stock issues, barriers to rental participation, and barriers to landlord participation, and identified several ways that programs could work to address these barriers. Through improved code enforcement and creative program structures, programs might address housing stock issues, while collaborative and community-based outreach could engage more landlords. Streamlining participation processes and providing

¹¹ For instance, the Institute of Real Estate Management (IREM), National Apartment Association (NAA), Providence Apartment Association, and National Association of Housing and Redevelopment Officials (NAHRO) which also has state level groups

alternative incentive mechanisms could make it easier for landlords to participate and get acknowledgment for that investment. Outreach directly to renters and clarification about what renters are eligible for could encourage renter participation. Policymakers and regulators should consider all of these areas. For efficiency program administrators, the research has identified several areas where changes to program design, marketing and outreach could more effectively attract renters and property owners to their programs, enabling more equitable participation.

References

- Agency for Healthcare Research and Quality. 2018 National healthcare quality and disparities report (AHRQ publication no. 19-0070-EF). Rockville, MD: Department of Health and Human Services, 2019 (<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrd/2018qdr>)
- Andrews, Adrian, and Sarah Poe. 2018. “Reaching the Underserved: A Collaborative Approach To Serving Income Qualified Customers.” Proceedings of the ACEEE Summer Study on Building Efficiency. 2018:p 13-1 – 13-12.
- American Housing Survey for the United States. 2011.
- Bailey, Zinzi, Justin Feldman, and Mary Bassett. 2020. “How Structural Racism Works – Racist Policies as a Root Cause of U.S. Racial Health Inequities.” *New England Journal of Medicine*. DOI: 10.1056/NEJMms2025396. https://www.nejm.org/doi/full/10.1056/NEJMms2025396?fbclid=IwAR3_3GE9rS-tP76K71Z4vWc00OvxIKoK2df4kd-cVQapRBQIqqD1OeGhmrk
- Center for Disease Control. 2020. “Current Asthma Prevalence by Race and Ethnicity (2016-2018). https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm
- Connecticut Department of Energy and Environmental Protection. <https://portal.ct.gov/DEEP/Energy/Conservation-and-Load-Management/Equitable-Energy-Efficiency>, last modified May 2022.
- Connecticut’s DEEP Bureau of Energy and Technology Policy. 2021. *Final Determination: Equitable Energy Efficiency*. <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-E3-Phase-I-Determination.pdf>
- Crowley, B. 2021. *As Residents Pile Up \$280 Million in Utility Bills, Aid Organizations Scramble to Help*. <https://ctexaminer.com/2021/09/15/as-residents-pile-up-280-million-in-utility-bills-aid-organizations-scramble-to-help/>
- Desmond, M. 2016. “Evicted: Poverty and Profit in the American City.” *New York: Penguin Random House*. (15 – 18)

- Efficiency Vermont. 2018. Healthy Homes Vermont 2018: EFFICIENCY VERMONT PROGRESS REPORT. <https://www.efficiencyvermont.com/Media/Default/docs/white-papers/Healthy%20Homes%20Vermont%202018.pdf>
- Eversource. “Home Energy Solutions for Income Eligible Customers.” <https://www.eversource.com/content/ct-c/residential/save-money-energy/energy-efficiency-programs/home-energy-solutions/home-energy-solutions-income-eligible>, Last modified 2021.
- Eversource. “Home Energy Solutions.” <https://www.eversource.com/content/ct-c/residential/save-money-energy/energy-efficiency-programs/home-energy-solutions>, last modified 2021.
- Guidehouse. *Residential Nonparticipant Market Characterization and Barriers Study*. 2020. <https://illumeadvising.com/files/Residential-Nonparticipant-Market-Characterization-and-Barriers-Study.pdf>
- Hayes, Sara and Ronald Denson, Jr. 2019. Protecting the Health of Vulnerable Populations with In-Home Energy Efficiency: A Survey of Methods for Demonstrating Health Outcomes. ACEEE. <https://www.aceee.org/research-report/h1901>
- Hayes, Sara and Cassandra Kubes. 2018. Saving Energy, Saving Lives: The Health Impacts of Avoiding Power Plant Pollution with Energy Efficiency. ACEEE Report H1801. <https://www.aceee.org/sites/default/files/publications/researchreports/h1801.pdf>
- Hernandez, Diana. 2016. Understanding ‘energy insecurity’ and why it matters to health. *Social Science and Medicine*. 167:1-10. <https://doi.org/10.1016/j.socscimed.2016.08.029>
- Hernandez, Diana and Phillips, Douglas. 2015. Benefit or burden? Perceptions of energy efficiency efforts among low-income housing residents in New York City. <https://doi.org/10.1016/j.erss.2015.04.010>
- Hester Street. 2019. “The Power and Proximity of Code Enforcement: A Tool For Equitable Neighborhoods.” https://hesterstreet.org/wp-content/uploads/2019/07/CR_Phase-I_Equitable-Code-Enforcement-report_FINAL-JUNE-2019.pdf
- Hester Street. 2021. “Reimagining Code Enforcement and Equity.” https://hesterstreet.org/reimagining-code-enforcement-and-equity/?utm_source=rss&utm_medium=rss&utm_campaign=reimagining-code-enforcement-and-equity
- Institute for Market Transformation 2015. “Multifamily Housing: CheckMate Realty and Development, Chicago.” [IMT_ValuingEE_CheckMate_FINAL.pdf](#)
- Mikati, I., A. Benson, T. Luben, J. Sacks, and J. Richmond-Bryant. 2018. “Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status.” American

Journal of Public Health 108(4) 480-485.
ajph.aphapublications.org/doi/10.2105/AJPH.2017.304297.

McGeehan, P. 2022. *Utility Bills Piled Up During the Pandemic. Will Shut-offs Follow?* <https://www.nytimes.com/2022/03/19/nyregion/ny-utility-bill-moratorium.html>

Nässén J, Holmberg J, Wadeskog A, Nyman M. 2007. “Direct and Indirect Energy Use and Carbon Emissions in the Production Phase of Buildings: an Input-Output Analysis.” *Energy Journal* 32(9):1593–602.

NREL. 2011. Healthy Housing Opportunities During Weatherization Work.
<https://nchh.org/resource-library/Health%20Opportunities%20During%20Weatherization%20Rpt.pdf>

Oates, G., B. Jackson, E. Patridge, K. Singh, M. Fouad, and S. Bae. 2017. “Sociodemographic Patterns of Chronic Disease: How the Mid-South Region Compares to the Rest of the Country.” *American Journal of Preventative Medicine* 52(1 Suppl 1): S31–S39.
www.ncbi.nlm.nih.gov/pmc/articles/PMC5171223/.

Reames, T. 2016. “A community-based approach to low-income residential energy efficiency participation barriers.” *Local Environment*. [tps://www.researchgate.net/profile/Tony-Reames/publication/292673752_A_community-based_approach_to_low-income_residential_energy_efficiency_participation_barriers/links/5ffca8be299bf140888c6cd5/A-community-based-approach-to-low-income-residential-energy-efficiency-participation-barriers.pdf](https://www.researchgate.net/profile/Tony-Reames/publication/292673752_A_community-based_approach_to_low-income_residential_energy_efficiency_participation_barriers/links/5ffca8be299bf140888c6cd5/A-community-based-approach-to-low-income-residential-energy-efficiency-participation-barriers.pdf)

State of Connecticut, Governor Ned Lamont. 2021. “Governor Lamont Announces Electrical Utility Customers Will Soon Receive Robocall with Information on Assistance for Unpaid Bills.” Press Release. <https://portal.ct.gov/Office-of-the-Governor/News/Press-Releases/2021/10-2021/Governor-Lamont-Announces-Electrical-Utility-Customers-Will-Soon-Receive-Robocall>

Tonn, Bruce, Erin Rose, Beth Hawkins, and Michaela Marincic. 2017. “Health and Household Benefits Attributable to the Knoxville Extreme Energy Makeover (KEEM) Project: Preliminary Results” Conference presentation: Behavior Energy and Climate Change 2017.

U.S. Energy Information Administration. 2015 Energy factbook-energy use source. U.S. Department of Energy, Washington D.C., U.S.A.

Zhao, N. 2021. *Age of Housing Stock by State*. <https://eyeonhousing.org/2021/03/age-of-housing-stock-by-state-3/>