Bridging the Equity Gap for Utility Energy Efficiency Programs

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ABSTRACT

Utility energy efficiency programs that serve low-income populations are an essential tool for reducing energy waste, ensuring energy affordability, and enabling effective and equitable electrification and decarbonization of homes. In addition to bill assistance programs, energy efficiency programs are one of the most direct ways to reduce household energy burdens, while also improving health, safety, and comfort. Yet, substantial gaps remain between the percentage of spending on low-income programs by utilities compared to the low-income percentage of the population. In this paper, we determine that a 14.4% average "equity gap" remains between utility investment in low-income programming and low-income percentage of total population, based on 2024 spending and savings data collected for 48 major utilities serving communities in 31 states. First, we detail utility spending and savings trends for low-income programs relative to broader energy efficiency portfolios, to benchmark program investment levels. We also describe program approaches across utilities that have successfully reduced their equity gap and highlight state policy drivers of more equitable program implementation. Secondly, we summarize and share a handful of high-priority strategies, gathered from interviews, case studies, and the literature, that can help utilities to address challenges to program delivery and design to reach challenging market segments (e.g. multifamily buildings and renters, manufactured housing, rural populations), and achieve deeper energy savings. These strategies provide a "menu" of options for utilities and program implementers to choose from, to close equity gaps in their territories and scale low-income program investment in line with population need.

Introduction

Investing in utility energy efficiency programs that serve low-income[1] households is a core strategy for program administrators seeking to deliver durable bill savings, reduce energy burdens, and advance equitable decarbonization. For income-limited households, high upfront costs remain a primary barrier to adopting efficiency upgrades and replacing inefficient electric resistance or fossil fuel–based heating and cooling equipment. Well-designed utility programs can help to overcome these barriers by covering costs, coordinating comprehensive retrofits, and ensuring that savings persist over time. When implemented at scale, low-income efficiency programs not only lower bills for participating households but also deliver broader system and societal benefits, including reduced emissions of climate- and health-harming air pollutants (Fadali et al. 2024).

High energy usage, energy burden, and energy insecurity remain key drivers of program need. Low-income households are more likely to be energy burdened, with an average energy

[1] We use "low-income" throughout this paper but more broadly cover any income-limited programs that utilities run, which can include "moderate" income levels as well.

burden of 6%, three times higher than the estimated average 2% energy burden of households with higher income (U.S. Department of Energy 2024). Low-income households also consistently spend a disproportionate share of income on energy and are more likely to experience energy insecurity. This can lead to unsafe energy-limiting behaviors with documented negative health impacts, such as setting thermostats at a lower temperature in the winter than is safe (Cong et al. 2022). For program administrators, these conditions underscore the importance of prioritizing deep, whole-home savings that lead to meaningful bill reductions and improved health and safety outcomes and targeting customers with high energy burdens coupled with higher energy usage – the customer segment that would stand to benefit the most from efficiency upgrades. In some cases, however, energy usage may be low in energy burdened households because residents are keeping heating or cooling set at dangerously low levels out of affordability concerns. Households in this scenario would also benefit from efficiency investments.

Utility efficiency programs also play an increasingly important role in supporting cost-effective electrification for low-income households. Evidence shows that pairing electrification incentives—such as heat pumps—with weatherization and envelope upgrades significantly improves household bill outcomes (Specian 2023). Integrating efficiency and electrification therefore represents a critical design consideration for administrators planning future low-income portfolios. For example, a recent study demonstrated that combining heat pump installations with home weatherization and/or retrofits would expand the proportion of households in New York that would save money on their heating bills, post-heat pump, from 34% of residents to 85% of residents – more than doubling the proportion of the population who could affordably electrify (Smith et al. 2025). As electricity rates continue to rise, however, careful assessments are needed to determine the impact of electrification on household energy bills.

Program administrators must also address structural challenges related to differences in building stock and home ownership: while most households with income of greater than $50,000 per year own their homes, less than half of households making less than $50,000 own their homes (Board Of Governors of the Federal Reserve System 2025). An inability to successfully scale efficiency programs for renters and multifamily buildings disproportionately impacts low-income populations. Additionally, half of the residents of manufactured homes are low-income, and need programs especially targeted to this building segment (Bell-Pasht 2023).

This paper examines how utilities are currently allocating resources to low-income energy efficiency programs relative to market-rate portfolios and identifies where gaps remain between program investment and population need. The analysis is intended to support utility program administrators and implementers in benchmarking spending and savings performance, assessing equity outcomes, and identifying opportunities to scale or redesign programs. The first section presents 2024 utility spending and savings data for low-income programs, highlighting variation across utilities, program types, and enabling state policy environments. These findings provide a basis for setting or evaluating program targets in relation to the share of customers who qualify as low income. The second section identifies common barriers to scaling low-income program participation and performance. The paper concludes with a menu of proven strategies—drawn from interviews, case studies, and prior research—that utility program administrators can use to close equity gaps within their service territories.

Section 1: Benchmarking Equitability of Utility Energy Efficiency Investment

We compiled quantitative data on program spending and savings using publicly available sources, targeted data requests to utilities, and interviews with program staff. The analysis focuses on major utilities included in the most recent ACEEE Utility Scorecard (Specian et al. 2023) and is limited to electric energy efficiency programs; for dual-fuel utilities, only electric program data were analyzed. All results are based on 2024 program-year reports, the most recent year with complete data for most utilities in the Scorecard. In total, we collected low-income–specific data from 48 utilities. For a fuller analysis of the findings and access to the utility dataset, please see Johnson et al. (2026).

We calculated three metrics to assess the scale and outcomes of low-income program investment across utilities:

1. **Spending per low-income household**[2], based on the estimated share of low-income customers in each utility's state (Figure 1)
2. **Energy savings per dollar invested** in low-income programs, using incremental annual savings where reported and lifetime savings for a subset of 10 utilities; and
3. **Relative investment in low-income versus market-rate programs**, measured as the share of total utility energy efficiency spending directed to low-income programming.

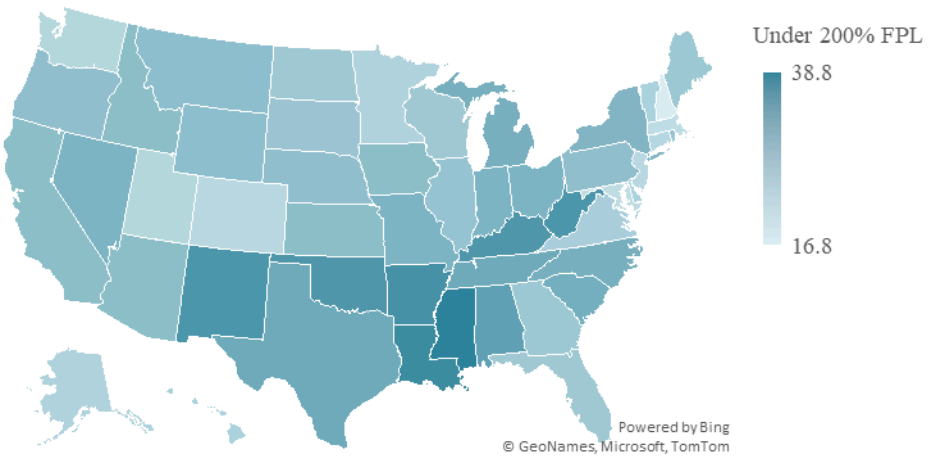

Figure 1. Across the U.S., 27.3% of the population falls at or below 200% federal poverty level (FPL), but there is substantial variation in this proportion between states. Based on data from the 2024 American Community Survey (Benson et al. 2025).

[2] We used a standardized approach which calculated the overall state-level percentage of the population at or below 200% of the federal poverty level (FPL). We then estimated the number of low-income households within a utility service territory, based on the utility estimate of total residential households served. Some states and utilities may cap low-income programs at higher or lower levels (e.g. 300% or 150% FPL) or use area median income (AMI) as a metric instead of FPL. We chose 200% FPL for measuring proportional low-income populations, as this level is also a common benchmark used to determine eligibility for energy assistance programs such as weatherization assistance programs (WAP) and the Low-Income Home Energy Assistance Program (LIHEAP).

Defining the "equity gap" in utility energy efficiency spending

Utility energy efficiency programs for low-income households are critical energy affordability tools, particularly given chronic underfunding of federal assistance programs such as the Low Income Home Energy Assistance Program (LIHEAP) and the Weatherization Assistance Program (WAP). Although roughly 36 million households are eligible for WAP, only about 100,000 households are served annually (Graham 2022). When low-income households contribute to utility energy efficiency budgets through system benefit charges or bill riders but do not receive proportional program benefits, they effectively subsidize efficiency investments for higher-income households. Prior research shows that without targeted program design and outreach, efficiency program participation skews whiter, wealthier, and more highly educated than the general population due to selective barriers such as buy-in costs, English-only materials, and limited access for renters. We define this mismatch as the "**equity gap**"—the difference between low-income households' proportional contributions to utility budgets and utility investment in low-income programming. We also recognize that this metric captures only part of a broader set of cumulative inequities rooted in decades of housing and infrastructure disinvestment (Mohai and Lee 2026; Reames et al. 2019) .

Spending on low-income programs relative to the broader energy efficiency portfolio

On average, utilities spent 13.4% (median spending was 11.7%) of their overall energy efficiency portfolio on low-income energy efficiency programming in 2024 (Figure 2). But, this spending level still is much lower on average than the national average of low-income households, which is 27.3% of the population, despite increasing steadily over the last decade.

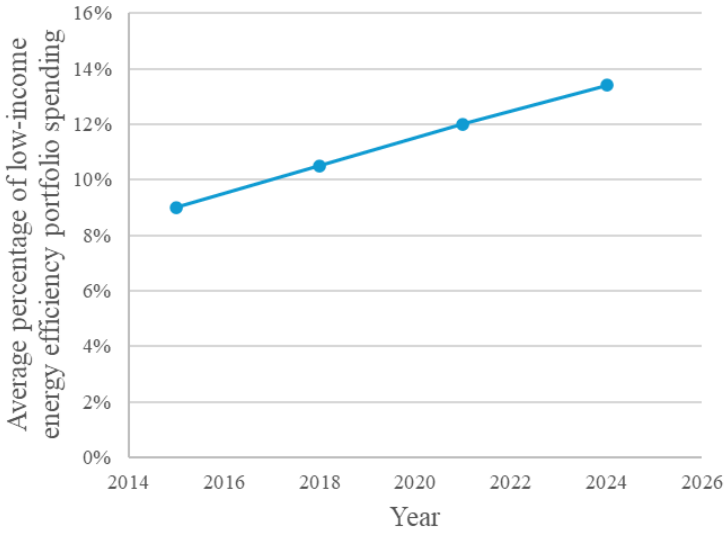

Figure 2. In 2024, electric utilities on average spent more on low-income programs than in previous years. Data sources: three ACEEE utility scorecards, published based on program data from 2015, 2017, and 2021.

Low-income proportional spending also varied with respect to total utility energy efficiency budgets. We identified utilities with "high" low-income energy efficiency spending or "high" energy efficiency spending per customer as being in the top 25% across utilities surveyed.

- Some utilities invest more in energy efficiency budgets relative to their overall residential customer base and also invest more in low-income budgets. Utilities that fall into this "**high efficiency spending/high low-income program investment**" category include National Grid (MA), Eversource (MA), Eversource (CT), and Ameren (IL).
- Some utilities have relatively high energy efficiency budgets but invest less, proportionally, in low-income programming. This category of "**high efficiency spending/moderate low-income spending**" include utilities such as LADWP (CA), PSE&G (NJ), ComEd (IL), Xcel (MN), BGE (MD), and PSE (WA).
- Other utilities did not have especially high energy efficiency budgets overall but invested more of those smaller budgets into low-income programming. Utilities that fell into this category of "**lower overall efficiency spending/high low-income spending**" included Dominion (VA), DTE (MI), We Energies (WI), PG&E (CA), SDG&E (CA), and CPS (TX).

Estimating the equity gap on a per-household basis across utilities

To estimate the "equity gap"—defined as the difference between utility investment in low-income energy efficiency programs and the share of the population eligible for those programs—we compared the proportion of total energy efficiency spending directed to low-income programming with the estimated share of income-qualified households within the state each utility operates within. Because utilities use different eligibility standards, we applied a consistent threshold of 200% of the federal poverty level (FPL). Using this benchmark, most utilities are investing below levels proportional to the need of the population they serve (Figure 3). Across the utilities assessed, we estimate an average **14.4%** gap between proportional utility investment in income-limited programs and population need, with very few utilities surveyed investing at or above parity. These include PECO (PA), PG&E (CA), CPS (TX), Ameren (IL), NG (MA), We Energies (WI), Dominion (VA), and Eversource (MA). Of these utilities, however, We Energies, Dominion VA, CPS, and PG&E are all utilities with lower overall energy efficiency budget investments.

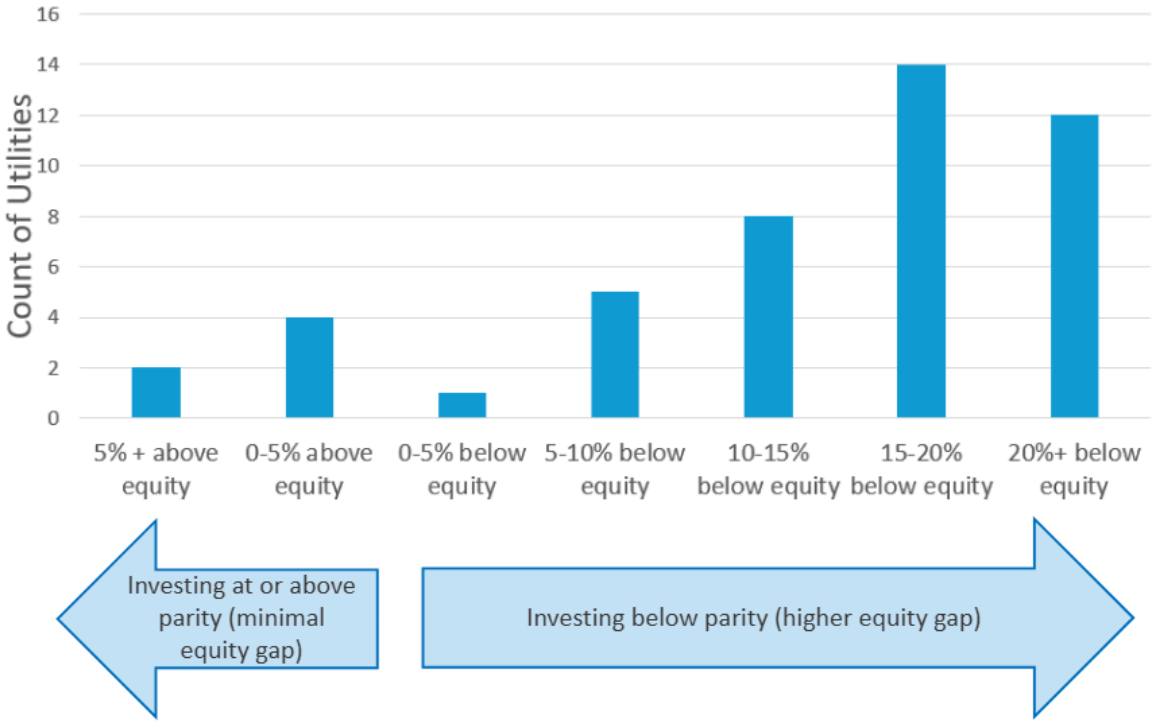

Figure 3. Most utilities still carry an equity gap in their investment into low-income programs, with the average equity gap across utilities surveyed at 14.4%.

Benchmarking Utility Spending and Savings per Low-Income Customer

Spending among leading electric utilities varies considerably. Table 1, below, presents the top quartile (25%) of utilities in our sample based on low-income energy efficiency spending per low-income customer. All these utilities spent well above the average of $39 (median $18) per low-income customer annually.

Table 1. Utilities in top quartile of low-income efficiency spending per customer per year

Utility	Low-income Utility Program Spending per Customer
National Grid Massachusetts	$245
San Diego Gas & Electric	$177
Eversource Massachusetts	$167
Ameren Illinois	$152
We Energies	$83
Pacific Gas & Electric	$79

Dominion Virginia	$79
Eversource Connecticut	$77
DTE Electric	$74
Consumers Energy	$64
Baltimore Gas & Electric	$61
CPS Energy (formerly City Public Service Board of San Antonio)	$56

In Table 2, we depict the upper quartile for incremental annual savings per low-income customer, as reported by utilities. Only 5 of the 12 utilities with higher annual incremental savings also fell into the top low-income spending per customer category (Table 2). Utilities that allocate a larger share of budgets to deeper retrofits or health and safety (H&S) improvements are likely to report lower near-term energy savings. The tradeoff, however, is that these investments can deliver more durable long-term and non-energy benefits to a broader participant base, by addressing underlying structural barriers to efficiency. For the subset of utilities with available lifetime savings data, Consumers Energy (MI) achieved lifetime savings costs comparable to broader energy efficiency programs ($51/MWh), while lifetime savings costs for most other utilities exceeded $100/MWh, much higher than the cost of efficiency for overall utility efficiency portfolios (Specian and Aquino 2026).

Table 2. Utilities in the top quartile of incremental low-income- energy efficiency savings per customer. Utilities also in the top quartile for spending denoted with an *.

Utility	Low-income Utility Incremental Annual Savings per Customer (kWh)
Baltimore Gas & Electric (BGE)*	799
Commonwealth Edison (ComEd)	528
Ameren Illinois*	330
Consumers Energy*	155
CPS Energy (formerly City Public Service Board of San Antonio)*	98
DTE Electric *	76
Ameren Missouri (Union Electric Company)	63
Xcel Colorado (Public Service Company of Colorado)	60
Duke Energy Carolinas - South Carolina (Duke SC)	55
PECO Energy	54
Tampa Electric (TECO)	52
Oklahoma Gas & Electric (OG&E)	48

From a portfolio management perspective, these programs highlight key tradeoffs between savings, cost, and access. Utilities that prioritize direct-install measures can achieve higher near-term savings at scale: for example, Baltimore Gas & Electric (BGE) devotes roughly 75% of low-income spending to direct-install measures, with the remainder split between weatherization (16%) and HVAC upgrades (10%), achieving balanced savings across single-family and multifamily buildings. Commonwealth Edison similarly balances depth and scale, with LED lighting and air sealing accounting for 60% of first-year low-income savings in 2024, while market-rate savings rely more heavily on air sealing and heat pumps, which deliver roughly three quarters of savings. In contrast, utilities with higher low-income budgets but lower per-customer savings—such as National Grid, Eversource (MA), and Dominion Virginia—prioritize weatherization, electrification, renter access, and health and safety or multifamily investments, accepting lower near-term savings in exchange for broader access by priority demographics and durability of savings.

State policies that impact investment in low-income utility energy efficiency programs

The dollars spent on low-income households by utilities in states which mandate low-income programs are substantially greater than in states which do not mandate these investments. On average, utilities within states that set low-income investment targets spent $49.74 per low-income customer, more than double the $18.86 spent per low-income customer in states without low-income investment standards. Having low-income investment standards is also highly correlated with having established energy efficiency resource standards (EERS), a state policy tool setting specific, long-term targets for energy savings. Of the 31 states that host utilities examined in this study, 20 had EERS in place, and of those, 15 also mandated investment in low-income programs.

Section 2: Barriers to Achieving Low-Income Program Budgets and Impacts

Absent intentional program design, energy efficiency upgrades disproportionately serve higher-income homeowners, leaving lower-income renters and many racial and ethnic minority–headed households underserved (Jacobsen 2024; Frank and Nowak 2016). This pattern reflects persistent structural barriers, including upfront or “buy-in” costs, the need for pre-weatherization health and safety investments, and landlord–tenant split incentives that are more prevalent among renter households. Historical racial discrimination in housing and inequitable infrastructure investment has further contributed to uneven energy burdens across communities. As a result, significant barriers remain to delivering low-income utility programs at the scale needed to reduce equity gaps and meaningfully alleviate energy burdens. Delivering these programs well is both more complex and more costly than delivering market rate programs. In this section, we highlight some of the most common challenges utilities face in achieving core program objectives.

Program disincentives and administrative constraints.

Utility administrators are often tasked with maximizing energy savings at the lowest cost, which can conflict with the design needs of low-income programs that require higher

per-household investment than market-rate rebates. In the absence of clear low-income investment targets or performance metrics tied to equity outcomes, low-income programs are more likely to be inconsistently designed, under-scaled, or deprioritized relative to lower-cost savings opportunities. Administrators also face enrollment barriers that limit program growth, including fragmented funding streams, differing eligibility rules across programs, and a lack of streamlined or centralized enrollment processes—particularly where funding sources vary in their ability to cover health and safety or pre-weatherization costs.

Challenges reaching priority customer segments.

There is no single outreach strategy that effectively reaches all low-income households within a utility service territory. Program administrators must design and manage multiple outreach approaches to serve diverse populations, including renters, rural households, immigrant communities, seniors, households with medical needs, and households with young children, all of whom tend to experience higher energy burdens. Trust barriers further complicate delivery, as some customers are skeptical of utility-sponsored programs, uncertain that services are truly free, or do not view utilities or contractors as trusted messengers (Durand 2018).

Balancing participation scale and depth of savings.

Administrators must navigate tradeoffs between programs that maximize participation and those that deliver deeper household-level savings. Low-cost, wide-reaching programs—such as home energy report behavioral programs—are relatively easy to scale but typically deliver only 1–2% average savings per household (Sussman et al. 2025, Allcott 2010). In contrast, comprehensive retrofits and weatherization can achieve as high as 20–25% savings per home. Such programs, however, are more expensive to run and reach fewer households (Turek-Hankins et al. 2026).

Restrictive cost-effectiveness policies that exclude non-energy benefits can further limit administrators' ability to invest in health and safety or pre-weatherization measures that enable deeper savings over time. Older and poorly maintained housing stock frequently requires repairs before efficiency upgrades can proceed, yet utility programs are often not funded or authorized to address these needs. Even when utility programs can cover these costs, higher per-home expenditures reduce the number of households served and can lead to under-spending of approved budgets without supplemental funding sources (e.g., state appropriations) or support from and coordination with federal programs (Ridlington 2023; Drehobl et al. 2020).

Need for targeted programs to serve renters, multifamily, and manufactured housing.

Utilities without targeted programs for renters, multifamily buildings, and manufactured housing struggle to serve a large share of income-qualified households. Administrators face persistent challenges related to split incentives, landlord engagement, large project financing needs, and the limited availability of scalable retrofit solutions—particularly for small multifamily units—often requiring complex funding stacking and pilot-scale program designs.

Uncoordinated energy affordability strategies

While efficiency investments can lead to long-term reduction in customer energy bills, utilities may not be able to reach all homes in need of efficiency upgrades. A lack of alignment between efficiency programs and other forms of energy assistance support (e.g. bill payment assistance programs) can lead to households continuing to suffer under high energy burdens, even after participating in efficiency programs. Or, conversely, those who receive bill assistance may not also complete an energy audit to identify strategies for concurrently reducing energy usage.

Section 3: Strategies for Closing the Equity Gap

Pulling from the literature, interviews, and case studies, we share a set of highest-priority strategies that can enable utility program administrators and implementers to overcome these challenges and advance specific program goals (Table 3). For a more comprehensive list of potential pathways to scaling low-income efficiency programs, please see our more in-depth report (Johnson et al. *in preparation*).

Table 3. Select high-priority strategies that utility administrators and implementers can employ to close program equity gaps and meet specific program goals.

Program Goal	Priority Strategy
Expanding efficiency program investments	Use categorical eligibility and automatic enrollment to streamline customer administrative effort and scale participation
Reaching target demographics	Partner with trusted community-based organizations
Achieving deeper savings	Braid funding from multiple sources to support health and safety upgrades
Better serving renters, multifamily and manufactured housing	Develop targeted programs for multifamily housing
Enhancing energy affordability	Combine energy efficiency programs with bill assistance to reduce energy burdens

Use categorical eligibility to streamline enrollment and scale participation

For utility program administrators looking to expand efficiency program investments, categorical eligibility is a practical tool for reducing administrative costs and increasing participation in low-income energy efficiency programs. Categorical eligibility is the process of automatically enrolling customers who already qualify for other assistance programs, in an effort to reduce application friction, improve program awareness, and accelerate program delivery. LIHEAP categorical eligibility opportunities are enabled in 20 states and three territories in 2026, allowing enrollment based on participation in programs such as SNAP (LIHEAP Clearinghouse 2025). At the state level, Maryland's Office of Home Energy Programs (OHEP)

implemented categorical eligibility in 2024 and achieved a 70% increase in applications relative to the prior ten-year baseline; after adjusting for duplicate applications, participation in 2025 remained 22% above baseline levels (Baker 2025).

Partner with trusted community-based organizations

Partnering with trusted community-based organizations (CBOs) can improve utility outreach effectiveness to target demographics, reduce trust barriers, increase participation among hard-to-reach customers, and also to improve coordination between efficiency programs and energy bill payment assistance programs. In Massachusetts, the Community First Partnership supports Mass Save efficiency program implementation by coordinating utilities, municipalities, and CBOs to reach environmental justice communities and nonnative English speakers, connecting with 52 communities and delivering more than 27,500 weatherization and 35,000 heating and cooling upgrades from 2022 to 2024 (Mass Save 2025; Samarripas et al. 2024). This community partnership led to a substantial increase in low-income interest in participating in Mass Save programs, and a 130% growth in income-eligible program budgets as a result, to meet new demand in that period. Similarly, the Energy Trust of Oregon works with 34 CBOs through its Community Partners Funding Network to target communications and direct funding to priority populations, including tribal nations, seniors, and immigrant communities, improving equitable access to efficiency services (Rubado 2025).

Braid funding from multiple sources to support health and safety upgrades

Whole home retrofits to support weatherization can unlock pathways to deeper savings. However, weatherization readiness repairs can be quite costly, with estimates ranging from $13,649–$14,091 per home (Farrell et al. 2025). To address these costs, utilities often braid funding from multiple sources—including federal, state, and local government funds, utility funds, philanthropy, and health-related programs such as Medicaid (Hayes and Gerbode 2020). For example, Detroit's Renew Detroit Home Repair program leveraged American Rescue Plan Act and state funds to build a $45 million budget focused on roof and window replacements through 2026 (City of Detroit, n.d.). As utility rates rise and cost-effectiveness pressures increase, braiding public funds with ratepayer resources offers program administrators a practical way to expand access to low-income efficiency upgrades without excluding households with the greatest need for efficiency upgrades.

Develop targeted programs for multifamily housing

While most utilities have programs that can serve multifamily buildings and renters, these programs may not be crafted to maximize savings opportunities in this key underserved sector. Because many utility energy efficiency programs are structured primarily for homeowners and single-family homes, this can present a barrier to renters and residents of multifamily buildings to access more comprehensive upgrades. For utility program administrators, successful

multifamily housing programs requires designs that engage both tenants and building owners, align incentives across parties, and reduce administrative complexity. Larger multifamily projects often face financing and coordination barriers that require streamlined programs capable of braiding multiple funding sources. To address these challenges, some utilities have consolidated multifamily offerings across income tiers, enabling a shared contractor pool and a single point of contact for building owners (e.g. Ameren IL has run a consolidated multifamily program since 2020, Jackson et al. 2023). These "one-stop shop" models reduce administrative burden, support the more complex funding structures which multifamily buildings often require, and improve delivery efficiency by ensuring contractors are experienced with larger, multifamily buildings and challenges specific to dealing with rental units.

Combine energy efficiency programs with bill assistance to reduce energy burdens

Energy efficiency is most effective at reducing energy burdens for low-income households when coordinated with bill assistance and other affordability programs (Rosenbach and Daniel 2025, Hernández and Bird 2010). In New York, the Energy Affordability Program automatically enrolls customers at or below 60% of state median income into budget billing to keep energy burdens below 6%, while the Energy Affordability Guarantee (EAG) Pilot pairs targeted bill assistance with low-income electrification upgrades. Using state-appropriated funds, the pilot ensures that approximately 1,000 households that electrify space and water heating through Empower+ maintain affordable electricity bills after participation. Many states are also jointly scaling low-income efficiency programs while they pursue equitable utility rate reforms. While requiring an energy audit or efficiency upgrade prior to accessing a low-income discount rate is likely to deter customers from participating, offering efficiency services at the same time that customers are enrolled in discount rates can be an effective way of reaching eligible households and maximizing the affordability impacts of bill assistance programs.

Conclusions

Utilities have increased investment in low-income energy efficiency programs over the past decade; however, most still underinvest relative to the share of income-qualified customers in their service territories. Across the utilities analyzed, we estimate an average 14.4% gap between the proportion of total energy efficiency spending directed to low-income programs and the prevalence of low-income households in the customer base.

Utilities that have closed this equity gap are largely located in states with strong energy efficiency resource standards that include statutory low-income investment requirements. While such policies are effective drivers of equitable investment, this analysis also demonstrates that utilities and regulators can make meaningful progress independent of new legislation by adopting proven program designs and delivery practices implemented in other jurisdictions. These utilities tend to implement diversified low-income portfolios, deploy through multiple delivery channels, target persistent participation barriers in multifamily and rental housing, invest in deeper and longer-lived measures, and integrate health and safety interventions alongside efficiency upgrades.

For utility program administrators, understanding the primary barriers to equitable low-income program delivery is essential for improving program performance and customer outcomes. Effective program design requires tailoring strategies to local market conditions, building stock, and customer needs within each service territory. This report presents a selection of high-priority actionable strategies that utility administrators can use to expand participation, achieve deeper savings, reach underserved customer segments, and better align program investment with population need.

As energy prices and system demand continue to rise, energy efficiency remains a cost-effective resource for utilities and a critical affordability tool for households. For low-income customers, efficiency upgrades deliver immediate and durable bill savings, improve health and safety, and enable more affordable electrification—but only when programs are intentionally designed to reach them and meet their needs. Strategically designed low-income energy efficiency programs, supported by enabling policy and strong utility leadership, are essential tools for reducing energy burdens, managing system costs, and ensuring equitable access to the benefits of a clean energy transition.

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