

An Overview of Affordable Multifamily Programs: Best Practices and Context for Utilities

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Introduction

Low-income residents of multifamily buildings have high energy burdens, meaning they spend a significant share of their income on energy bills. The proportion of income that low-income multifamily households spend on energy is 2.3 times the proportion spent by the median multifamily household (Drehobl, Ross, and Ayala 2020). These high energy burdens typically result from multiple factors, one of which is that property owners may not make energy-saving improvements such as weatherizing or replacing old, inefficient appliances. Affordable housing providers, in particular, face significant resource constraints and may be unable to make capital improvements to their properties, leaving many older affordable buildings in need of repairs, maintenance, and upgrades (Samarripas and York 2019). Deferring this work also leads to increased utility costs for building owners.

For these reasons, affordable multifamily properties hold significant energy savings opportunities. Recognizing this potential, utilities are increasingly offering targeted energy efficiency programs designed to support building owners pursuing retrofits in affordable multifamily properties. These programs can achieve substantial energy savings, help preserve affordable housing, and lower residents' energy burdens. Affordable multifamily energy efficiency programs can also provide non-energy benefits to low-income residents, such as improved indoor air quality and more comfortable home environments.

This brief presents best practices for providing energy efficiency services to affordable multifamily customers through utility programs. We then identify three program models for administering affordable multifamily programs and provide the local and state context in which each program best operates. Finally, we highlight successful utility program examples for each model.

Strategies for Serving Affordable Multifamily Customers

The following section highlights foundational best practices that any multifamily program should pursue to serve target customers better, as summarized in figure 1. We also provide best practices specific to the affordable multifamily sector.

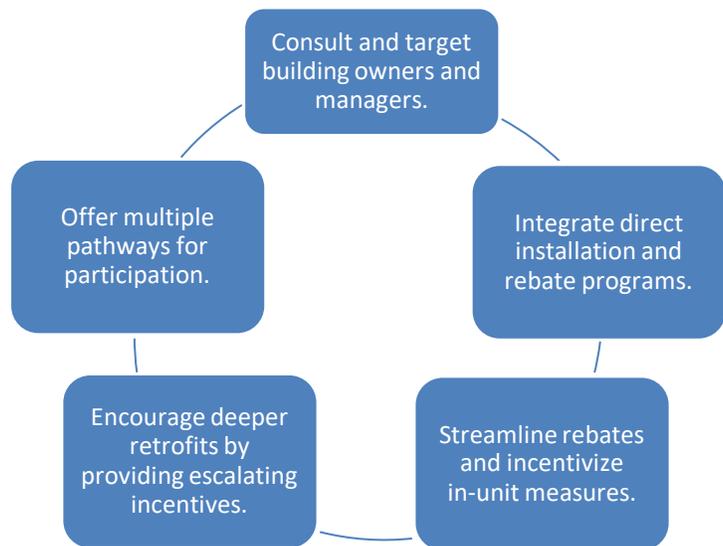


Figure 1. Foundational best practices for multifamily energy efficiency programs

FOUNDATIONAL MULTIFAMILY BEST PRACTICES

ACEEE has identified several best practices for implementing and marketing effective multifamily programs (Johnson 2013; Ross, Jarrett, and York 2016).

Consult and target building owners and managers. Utilities should engage with their target customers before designing programs to ensure that program offerings meet their needs. Program administrators should use established networks to reach building owners or managers and motivate them to improve their properties by demonstrating the financial savings potential from energy efficiency upgrades. Programs can ease building owners' and managers' uncertainty by communicating information about energy savings, energy cost reductions, and non-energy benefits resulting from energy efficiency improvements. Utilities can target building owners and managers through local housing trade associations or trade ally organizations. Both groups typically have established networks within the multifamily sector that program administrators can leverage to reach more potential customers.

Integrate direct installation and rebate programs. Programs can offer direct installation measures, which are no-cost energy efficiency upgrades that often result in low but immediate energy savings. Direct installation measures include upgrades such as light-emitting diodes (LEDs) and low-flow showerheads. A program that offers a combination of direct install measures and rebates is more likely to encourage building owners to pursue more comprehensive, whole-building upgrades. Besides enabling deeper savings, this

approach allows utilities to address both common areas, like lobbies and hallways, and residential units.

Streamline rebates and incentivize in-unit measures to overcome split incentives. Split incentives occur when owners invest in energy efficiency upgrades while tenants reap the benefits of lower energy bills and increased comfort; this situation can make owners hesitant to invest. Programs should provide incentives to building owners to encourage them to pursue energy efficiency in their tenants' spaces by bundling measures that target common areas, for which owners are responsible, with in-unit measures. Combining commercial and residential rebates and incentives in one program eases the burden on building owners.

Encourage deeper retrofits by providing escalating incentives to achieve greater savings. Programs can encourage building owners to pursue more extensive energy-saving projects by offering strategic incentive structures. ACEEE found that utility multifamily energy efficiency programs typically employ one of three incentive strategies to encourage more comprehensive retrofit projects. Utilities can 1) provide an incentive bonus for customers to install more than one type of energy-saving measure, 2) set per-unit incentive amounts if projects achieve a certain level of whole-building energy savings, or 3) design pay-for-performance program incentives. These strategies result in higher energy savings and provide building owners with more certainty around the project's success. In addition to offering incentives, programs can provide flexibility in financing options to encourage comprehensive projects. We discuss financing further in the following section.

Offer multiple pathways for participation to reach more buildings. Offering multiple pathways for participation allows programs to build relationships with building owners who are interested in less extensive projects but may consider deeper retrofits in the future. A program can cater to more participants by combining prescriptive rebates with performance-based custom incentives for major projects. Utilities should also maximize the flexibility of program offerings available to multifamily customers to increase participation. State housing finance agencies or other local organizations can provide additional funding to create more pathways for upgrades or increase incentives for the affordable multifamily market.

AFFORDABLE MULTIFAMILY BEST PRACTICES

The following practices, summarized in figure 2, are important for all multifamily energy efficiency programs but are proven to be critical for affordable multifamily programs (Samarripas and York 2019).

Create a one-stop shop. This type of program model coordinates technical assistance through a single point of contact to assist property owners with project planning and implementation. Many affordable multifamily housing providers lack experience and resources to allocate toward building retrofit projects.

One-stop shops help address such challenges. A single point of contact, either through a utility or a partner organization, helps participating owners and managers navigate a program's application process and manage a project's energy assessment, design, financing, measure installation, and savings verification. Partnering with an existing program, such as those offered by state housing finance agencies, local nonprofit organizations, or other local utilities, may present the opportunity to implement a one-stop shop or better provide technical assistance throughout the project process.

Coordinate and partner with relevant stakeholders to implement programs and better support projects.

Establishing partnerships with local organizations, state agencies, or other utilities (see figure 3) will increase participation and reduce costs for affordable multifamily programs. Utilities can incorporate additional utility customer funds into existing state programs to cover the incremental cost of installing more efficient



Figure 2. Affordable multifamily energy efficiency program best practices

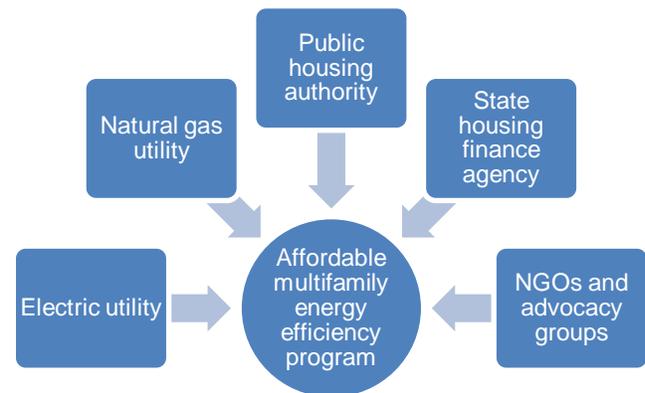


Figure 3. Examples of stakeholder partnership opportunities for affordable multifamily programs

equipment or providing increased incentives. Joint programs can collaborate with other community stakeholders to help fill existing gaps in services. Partnerships also bring together multiple groups with different areas of expertise, allowing each party to apply specific knowledge to various program elements. Such coordination enables customers to take advantage of multiple funding streams to yield greater and more comprehensive energy efficiency improvements.

Help owners identify and combine all available incentives for retrofit projects.

Participating in separate electricity, natural gas, and water efficiency programs can be burdensome for building owners. Coordinating program incentives simplifies the process for owners or managers, allowing them to benefit from more significant overall savings, and minimizes disruption to tenants. If marketing but not partnering with a local organization, state agency, or other utility, it is critical to align program incentives with those available from other sources. This way, utility programs can complement or fill gaps in incentives offered by other existing programs.

Monitor and evaluate program outreach continuously. Tracking outreach and communication efforts is an important element of program success and allows programs to identify and address issues early. Effective internal strategies may include assigning dedicated administrative staff to work on outreach, meeting regularly with implementers, and creating performance metrics to monitor program progress toward a goal. Utilities can also partner with housing organizations or trade allies to leverage established networks in promoting energy efficiency programs. Coordinating with local organizations, state agencies, or other utilities will help reduce program costs such as those associated with marketing and outreach. Keeping these costs low will enable the program to offer more comprehensive measures and dedicate more funding to the program's mission.

Help building owners finance energy efficiency projects. To ensure robust program participation, affordable multifamily program administrators should target housing providers during major capital events such as renovations or refinancing. Property owners have greater access to capital to cover the upfront cost of energy efficiency upgrades at these times. While this is an effective strategy for administrators, it may not be sufficient to maximize participation. Many affordable housing providers experience difficulties in obtaining project financing or funding. Program administrators can pursue several strategies to help building owners plan and finance retrofit projects. Utilities can:

- **Build relationships and partner with lenders that are active in the local housing market, such as state housing finance agencies (HFAs) or community development financial institutions (CDFIs).** HFAs serve as essential partners for affordable multifamily programs, as they are a common source of financing for many

affordable housing construction and renovation projects. Consequently, they can identify funding providers that have upcoming projects and market efficiency programs to them.

- **Offer on-bill financing for affordable multifamily energy efficiency measures.** On-bill financing allows customers to repay a utility that covers a retrofit project's upfront costs through their utility bill.
- **Help applicants find other companies offering to finance energy savings.** Utilities can use resources such as the U.S. Department of Energy's Financing Navigator, which provides comprehensive guidance for financing energy efficiency and renewable energy projects (DOE 2021).¹

Utilities can pursue the above strategies for independent programs or in partnership with other organizations. Regardless of the path chosen, utilities should build relationships with state HFAs that provide beneficial financing and marketing services and CDFIs that finance housing projects.

Program Models and Examples

The following section provides an overview of different approaches to delivering affordable multifamily energy efficiency programs. These models serve affordable multifamily customers through programs administered by one utility, programs offered by a partnership of multiple utilities, or programs run by statewide organizations. Ultimately, there is no single approach that works best for all utilities and their customers; the most appropriate structure is dependent on local and state context. We highlight the context in which each approach best performs, operational challenges associated with each one, and key elements for success in table 1. We follow this with a discussion of each approach's advantages and provide examples of successful affordable multifamily programs for each model.

¹ Find more information about the Department of Energy's Financing Navigator [here](#).

Table 1. Affordable multifamily models and contextual background

Model type	Local and state context	Challenges	Key elements for success
Individual utility	State or local circumstances that impede other model types	Reaching target customers due to bandwidth limitations	External partnerships with key stakeholders
Jointly administered	Strong energy efficiency regulations Policies that support combined programs	Administrative difficulties, including imbalanced capabilities and reporting differences	Effective institutional relationships Dedicated administrative capacity Streamlined reporting processes
Utility-funded statewide	Interest in energy efficiency from utilities Desire and ability within state to administer program Availability of local stakeholders and organization to provide or support energy efficiency offerings	Lack of support due to dearth of local organizations or talent within state	Program development based on state-specific circumstances

INDIVIDUAL UTILITY PROGRAMS

Programs administered by a single utility are a common model for market-rate and affordable multifamily energy efficiency services. Individual utility programs are successful because utilities are trusted by customers and have established relationships. Utilities are designed to serve large numbers of customers and manage energy services, and they possess expertise in energy use (Nowak, Kushler, and Witte 2014).

The individual administrator approach can succeed for any electric or natural gas utility. This model may be best for individual utilities that are not able to pursue the joint program or statewide program approach described below. Individually administered programs have the opportunity to partner with local stakeholders such as housing agencies or local nonprofit

organizations, as described in the best practices section. These external partnerships are critical for single utility programs seeking to expand their reach, increase offerings, and yield high savings while enhancing customer experiences. Below, we profile two examples of the individual utility approach to affordable multifamily programs.

National Grid offers the Income-Eligible Multifamily Program to its electric and natural gas affordable multifamily customers in Rhode Island. The program aims to provide a comprehensive approach to energy efficiency upgrades for common areas and tenant units (National Grid 2021). The program encourages deeper retrofits by offering comprehensive upgrades at no cost. National Grid offers a whole-building energy assessment during which technicians provide direct installation measures—including individual unit lighting, smart power strips, thermostats, showerheads, and aerators—at no cost. Assessors also identify deeper savings opportunities during home audits. Depending on the results, multifamily buildings may be eligible for retrofit measures within the common areas and individual units. Deeper savings measures include common area lighting, air sealing, insulation, appliance upgrades, demand controls, and outdoor reset controls. National Grid also focuses on heating system improvements, such as boiler replacements or in-unit heat pumps, when cost effective. Multifamily properties are eligible for the program if at least one of these three criteria is met:

- A public housing authority or community development corporation owns the property.
- The owner receives low-income funds or tax credits.
- Most residents qualify as low-income.

National Grid works with multiple groups of external stakeholders to enhance its multifamily service. It partners with key entities in the housing market, such as state housing authorities, financial institutions, and community development organizations (Samarripas and York 2019). Such organizations advocate for both low-income and multifamily housing on Rhode Island's Energy Efficiency Resources Management Council, a public board responsible for guiding and developing state energy policies.

Puget Sound Energy (PSE), an electric and gas utility, offers the Multifamily Retrofit program to market-rate and affordable multifamily customers. The program provides prescriptive and custom energy efficiency incentives for electric and gas customers (Puget Sound Energy 2021). PSE conducts free energy assessments of multifamily buildings to identify savings opportunities. Based on the results, PSE will provide no-cost direct installation measures or incentives for more intensive upgrades. Direct installation measures include showerheads and LEDs, while comprehensive upgrades may consist of window

replacements, insulation, and air sealing. The program addresses common split incentive issues by offering incentives for in-unit upgrades, common area measures, and whole-building retrofits. Using these strategies, PSE provides comprehensive upgrades and achieves deep energy savings.

PSE partners with external stakeholders, including housing associations and contractor networks. The utility reaches its target population by joining multifamily housing associations (Ross, Jarrett, and York 2016). The program also invites its contractors to join PSE's Contractor Alliance Network, which streamlines contracting and marketing by providing contractors with customer referrals and allowing them to co-brand their services with the utility (Ross, Jarrett, and York 2016). This partnership has encouraged building owners and managers to pursue more comprehensive energy efficiency projects.

JOINTLY ADMINISTERED UTILITY PROGRAMS

Multiple utilities, often a natural gas utility and an electric utility, can administer a single program to streamline energy efficiency offerings for customers. This cross-fuel coordination provides opportunities to deliver energy and cost savings to customers more efficiently while increasing customer satisfaction (Nowak, Kushler, and Witte 2014). The approach can increase the impact of energy savings and reduce internal costs for the utilities.

Successful joint programs are those run by utilities with organized internal operations, a commitment to communication and cooperation, and effective institutional relationships with their partners. Jointly administered programs operate best in states with strong energy efficiency regulations and policy structures that support combined programs. Joint programs may face challenges from state regulations, however, as they add complexity to the regulatory process related to program development, reporting, jurisdiction, and timing (Nowak, Kushler, and Witte 2014). Programs may also face administrative challenges, including imbalanced capabilities and differences in measuring and reporting processes. Below, we profile two examples of the joint administration approach to affordable multifamily programs.

Los Angeles Department of Water and Power (LADWP) and Southern California Gas (SoCalGas) partnered to administer the Energy Savings Assistance Program (ESAP). The program, no longer active, provided low-income multifamily customers with several electric direct install measures (SoCalGas 2021). These were offered in addition to natural gas weatherization and equipment upgrades provided by SoCalGas. ESAP contractors working with SoCalGas conducted energy audits and verified the incomes of renters before any in-unit work was conducted. Simultaneously, LADWP's Commercial Direct Install program provided owners a no-cost audit of common areas for potential electric efficiency upgrades.

To coordinate, the two utilities held regular program management meetings; in fact, consistent coordination between LADWP and SoCalGas proved to be of critical importance for the partnership.

Xcel Energy and CenterPoint Energy administer the Multifamily Building Efficiency (MFBE) program to multifamily customers who receive electricity from Xcel or natural gas from CenterPoint or Xcel in Minnesota (CenterPoint Energy and Xcel Energy 2021). The program offers direct install incentives and bonus incentives for making recommended upgrades to all multifamily customers, but affordable multifamily properties are eligible for more significant incentives. MFBE provides a one-stop shop with assistance throughout the project process. The program includes a whole-building energy assessment, comprehensive energy audit, no-cost direct installation of energy-efficient measures, comprehensive retrofit analysis, contractor bid reviews, and energy-saving tips. Xcel Energy is primarily responsible for administering energy audits for customers. To encourage deeper savings, the utility provides performance-based incentives structured in tiers and pays a higher percentage of the costs for qualified measures that achieve higher energy savings. This structure rewards customers for implementing high-efficiency measures.

UTILITY-FUNDED STATEWIDE PROGRAMS

Utility-funded statewide programs use ratepayer funds to finance energy efficiency offerings for state residents. These programs can be administered through a state agency, such as the state energy office or public utility commission, or by a third-party program administrator chosen by the state.

State-run programs provide many benefits to residents by streamlining program administration. Benefits include better coordination between customers and program managers, greater consistency, and more efficient program delivery to customers (Brown 2009). Such programs also allow the alignment of program goals with statewide energy policy goals and prioritize energy efficiency as the single focus. Statewide programs are successful when developed for the state's specific circumstances. Factors that may determine whether a state-administered energy efficiency program is the best choice can include the level of interest in energy efficiency programs among the utilities, the desire and ability of state entities to administer programs, and the availability of local stakeholders and organizations to provide or support efficiency offerings (Brown 2009). Below, we profile two examples of utility-funded statewide programs.

Maryland's Department of Housing and Community Development (DHCD) administers the Multifamily Energy Efficiency and Housing Affordability Program (MEEHA). This utility customer-funded program is available across multiple utility service territories, including

those of Baltimore Gas and Electric (BGE), Delmarva Power, Potomac Edison, Potomac Electric Power Company, Southern Maryland Electric Cooperative, and Washington Gas. MEEHA provides affordable multifamily owners with low-cost loans and grants to install energy efficiency improvements identified by an energy audit. The program offers incentives for whole-building upgrades that affect both individual units and shared spaces (Maryland DCHD 2021). MEEHA designs its offerings to complement DHCD's other affordable housing programs. DHCD acts as the state's housing finance agency, providing affordable housing owners with financing and incentives to construct or renovate affordable properties. Working closely with DHCD allows MEEHA to quickly reach out to property owners who are already interested in pursuing renovation or retrofit projects and are likely to have resources available to cover the upfront cost of upgrades.

Both the state and the utilities support DHCD's program implementation. DHCD began implementing the Maryland EmPOWER programs, including MEEHA, in 2012. Originally the state's utilities administered low-income energy efficiency programs, but due to low participation the Maryland Public Service Commission tasked DHCD to take over due to the department's long history of implementing affordable housing programs and experience running weatherization initiatives (Samarripas, Ross, and Bailey 2017). In addition to providing funding to MEEHA, some participating utilities offer supplemental programs. For example, BGE offers the Multifamily Quick Home Energy Check-Up Program, which provides an energy assessment walk-through and no-cost direct install measures for low-income multifamily customers (BGE 2021). DHCD continues to convene stakeholders through working groups to identify concerns and improve program performance (Samarripas, Ross, and Bailey 2017).

Energy Outreach Colorado, a nonprofit organization focused on reducing low-income household energy burdens, administers the Affordable Housing Rebate Program (Energy Outreach Colorado 2021). The program offers a low-cost, one-stop shop for property owners by providing applicants with a single point of contact to assist with the initial walk-through and energy audits. The single point of contact also connects owners with contractors and offers information on incentive and financing options. Energy Outreach Colorado can pursue this one-stop shop approach at a lower cost than other programs due to partnerships that supplement utility funding, including funding from federal, state, and local grants and philanthropic donations.

Energy Outreach Colorado's desire and ability to support energy efficiency programs are critical attributes for statewide program administrators. Additionally, Energy Outreach Colorado has worked with state and local energy offices to secure and manage funding opportunities. Local utilities also support the nonprofit's work. The Affordable Housing

Rebate Program is a partnership between Energy Outreach Colorado and utilities including Black Hills Energy, Platte River Power Authority, Xcel Energy, Atmos Energy, and Colorado Natural Gas (Energy Outreach Colorado 2021).

Conclusion

Affordable multifamily energy efficiency programs can achieve significant energy savings and reduce energy bills for residents. They can also provide non-energy benefits to low-income residents, such as healthier indoor environments, improved comfort, reduced utility bill arrearages, and preservation of affordable housing. Utilities can offer one-stop shops, identify and combine funding and financing resources, and coordinate or partner with local stakeholders to reach their target market and create successful energy efficiency services. Three models exist for energy efficiency programs, including individual utility programs, jointly administered programs, and ratepayer-funded state-administered programs. Ultimately, there is no best model for affordable multifamily programs. State utility regulators and energy efficiency program administrators should consider their state and local context when designing and implementing programs.

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