

Bay Area Multifamily Building Enhancements Program (BAMBE)

Program Profile

Energy Efficiency in Multifamily Buildings

In 2013, the [Association of Bay Area Governments](#) launched the [Bay Area Multifamily Building Enhancements Program](#) (BAMBE), which is a ratepayer funded energy efficiency and electrification retrofit program administered by the [Bay Area Regional Energy Network](#) (BayREN) and regulated by the [California Public Utilities Commission](#) (CPUC). The BAMBE program provides technical assistance (TA) and rebates for energy upgrades in multifamily buildings that reduce or stabilize energy costs, lower greenhouse gas emissions associated with existing buildings' energy systems, and improve resident safety and comfort.

This program offers no-cost technical assistance to determine site-specific upgrades and referrals to financing options from a variety of lenders to fund energy upgrades in multifamily buildings. Upgrades that qualify for rebates include insulation, new windows, replacement HVAC systems, and heat pump water heaters. With these improvements, building owners can better serve their residents by reducing indoor air pollution and its harmful health impacts while lowering or stabilizing energy bills and reducing greenhouse gas emissions.

To qualify for BAMBE, a property must have an active account with Pacific Gas & Electric (PG&E) and have five or more units in the building(s) being upgraded. Two- to four-unit buildings can also qualify if they have shared central systems like hot water or air heating (e.g., steam or hydronic heating). The program prioritizes deed-restricted and unsubsidized affordable housing (UAH) or naturally occurring affordable housing (NOAH). Significantly increased incentives are available for buildings in census tracts experiencing disproportionate heat, health, and housing cost burdens.

BAMBE TA staff collaborate with program participants to create a tailored package of energy upgrades that achieve modeled site energy savings of 10 percent or more. Depending on a multifamily property's location and project scope, rebates can range from a minimum \$500 to over \$6,000 or more per unit. Participants have the flexibility to select their own licensed contractors and receive more incentives for installing in-unit and common area improvements.

Fast Facts

Program scope: Building energy upgrades that increase resident safety and thermal comfort while reducing greenhouse gas emissions and lowering or stabilizing energy costs.

Communities served: Multifamily building owners and residents in the Bay Area.

Funding: Utility ratepayer funds.

Key partners: Local counties and energy consultants.

Promising practices: Consulting services, site visits, reviews of needed upgrades, referrals to incentives and programs, and customized rebate packages.



Community History

BAMBE serves all nine Bay Area counties,¹ which contain 101 cities and over seven million people.² Despite the Bay Area having the second-highest median household income in the country, many households still struggle to meet basic needs due to the rapidly increasing cost of living. The region has high rates of labor force participation and job growth, but the Bay Area's Consumer Price Index (CPI) surged by 78 percent from 2000 to 2015—outpacing the 42 percent increase in national median household income during the same period. This has created significant affordability challenges for residents in the area.³

As a ratepayer funded program, BAMBE was first established to address the challenges of utility volatility and rising energy costs in the Bay Area. Today, the program's core mission is to address energy affordability challenges, improve resident safety and comfort, and reduce greenhouse gas emissions by implementing energy efficiency and electrification upgrades in multifamily buildings. BAMBE uses a customized yet streamlined approach that includes easy-to-calculate savings, a site-specific project scope, and an incentive structure that provides higher incentives for overburdened communities and for properties that undertake a greater number of upgrades.

Historically, energy efficiency programs funded by ratepayers are designed to reduce energy demand to avoid additional capital expenditures by utilities, thus helping to control rates. This approach often leads to prioritizing immediate payback and easily achievable measures and inadvertently neglecting more challenging upgrades. As an equity-focused program within the ratepayer context, BAMBE's approach is more comprehensive, requiring multiple measures for deeper savings and including in-unit measures that benefit residents. This approach prevents the “cherry-picking” of high-savings, low-cost measures that results from focusing solely on cost-effectiveness and simple paybacks.

BAMBE's no-cost TA and incentive structure can cover a substantial share of total upgrade costs, making the program not only effective but also a model that has been replicated by other organizations across the state and country. As a long-term, partnership-oriented program in the Bay Area, BAMBE engages property owners in discussions throughout the process, presenting them with a variety of upgrade options and empowering them and residents to continue making improvements beyond the initial program upgrades.

¹ Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, San Mateo, Solano, and Sonoma Counties.

² Association of Bay Area Governments website. [How We Govern.](#)

³ Bay Area Council Economic Institute. [The Cost of Living Continues to Rise for Bay Area Residents.](#)



Community Engagement

BAMBE is working to grow its community engagement efforts by gathering input from key stakeholders like property owners, managers, and residents. To date, the program has successfully engaged large market rate properties and deed-restricted affordable housing and is now seeking to better understand the needs of smaller properties with unsubsidized affordable units. The program strives for continuous program feedback through engagement with technical assistance staff, property managers, and owners. BAMBE also recently enhanced resident interaction by hosting listening sessions facilitated by community based organizations with unsubsidized affordable housing renters to learn more about their lived experience. A full dinner and \$50 gift cards to grocery stores were given out to stimulate participation and compensate participants for their valued input.

The program's outreach plan and program design center on addressing the needs of low-income and overburdened community members. Program administrators use census data and GIS mapping tools, including [CalEnviroScreen](#), to identify housing, heat, and health burdens in specific census tracts to inform the incentive structure for rebates.

Key Partners

BAMBE is led and managed by [StopWaste](#), a public agency serving Alameda County that is a county partner of BayREN. BAMBE's other key partners include:

- The [Association for Energy Affordability](#) (AEA) – A nonprofit energy program implementer and educator.
- [Community Choice Aggregators](#) (CCAs) – Local government agencies that procure clean power for communities from alternative suppliers while still receiving transmission and distribution service from existing utilities. CCAs often have their own energy upgrade programs with which BAMBE coordinates closely.
- [Frontier Energy](#) – A consultant that BAMBE relies on for assistance with regulatory compliance, database management, and research.

AEA has been a key implementation partner for BAMBE since the program began, delivering the program's TA to shepherd project from intake to scope development, bid procurement, install and rebate payment.



Funding Mechanism

While the majority of BayREN’s BAMBE program is funded by utility ratepayers through the California Public Utilities Commission, additional funding sources include the recently awarded [DOE Buildings Upgrade Prize](#) in partnership with 3C-REN, the Regional Energy Network (REN) representing the central California coast. This prize will be used to develop an implementation plan to increase electrification of multifamily housing and to consider electric vehicle charging. BAMBE has plans to scale up incentive funding, targeting \$5 million annually—up from \$3.75 million—from 2024 to 2027, with the aim to equitably electrify more Bay Area properties.

Program Impact

Since BAMBE’s inception, over 600 projects—including upgrades of over 45,000 housing units—have been completed, with over \$35 million in incentives provided to owners. Total incentives paid through the end of 2023 are projected to exceed \$40 million, with the program averaging 5,000 housing units per year before the pandemic.⁴ Since 2013, BAMBE projects have resulted in total energy savings of almost 21 million kWh and 1.6 million therms of natural gas.⁵

[Roulland Estates](#) revitalized the Galleria Apartments in Vallejo, California, through BAMBE. The retrofit included in-unit heat pumps and efficient water heaters that reduced environmental impact and improved resident comfort and wellbeing. This success led Roulland Estates to continue its partnership with BAMBE and it is now upgrading three additional properties.

Barriers and Challenges

According to BAMBE staff, property owners’ willingness to participate can be unpredictable; the staff emphasize the need for adaptability by maintaining flexibility in eligibility requirements for upgrade measures and building relationships with property owners over time. The program has experienced unanticipated challenges in communicating the benefits of complex energy efficiency products, especially with the evolving landscape of electrification technology.

To address these challenges, the program positions energy upgrades as marketable amenities for property owners, emphasizing safety improvements and enhanced air quality through the

⁴ Bay Area Regional Energy Network. [2022 Annual Report](#).

⁵ Miya Kitahara, Bay Area Multifamily Building Enhancements Program, 2023. Personal Communication.



removal of combustion equipment. BAMBE aims to resonate with both owners and renters by emphasizing the potential cost savings and improvements to comfort, health, and safety from energy efficiency upgrades and electrification.

Although transitioning to an equity program in January 2023 enabled bonus rebates to support communities overburdened by air quality, heat, and housing costs, BAMBE remains constrained to providing incentives for energy upgrades only (i.e., mainly heating and cooling, electrification, lighting and appliances, and weatherization). BAMBE cannot fund on-site renewable energy generation or storage technology.

Recommendations from the Field

- **Focus on decarbonization and health, not just energy efficiency.** BAMBE's initial goal was to achieve the greatest immediate incremental reductions in energy use and emissions. The program has since adapted to the need to design incentives that help transition buildings to complete decarbonization by focusing on deep energy efficiency and electrification while also addressing the challenges of energy affordability resident comfort, health, and safety.
- **Make it easy for owners to participate.** BAMBE provides building owners with a full suite of services to identify and implement energy upgrades in multifamily housing: no-cost technical assistance that includes site assessments, significant rebates, and referrals to additional incentives and financing. These services ease the time and energy burden on busy building owners, making the program an attractive option for them. Owners also have the freedom to choose their own licensed contractors.
- **Use energy upgrades to improve owner-tenant relations.** Tensions often exist between owners and renters of multifamily housing due to high housing and building operation costs. To address this concern, BAMBE incentivizes upgrade measures that appeal to both owners and residents. For example, the BAMBE program provides rebates for removing natural gas-fired equipment and upgrading to cleaner, more efficient technology—a measure that can greatly improve indoor air quality and the efficiency of the building's energy systems. The program advertises the cost savings of energy efficiency as a clear benefit to building owners but wants to ensure renters benefit as well by providing extra incentives for in-unit measures that lower tenant energy costs and improve comfort and livability. Lower energy costs can help to offset upward pressure on rents and can reduce energy cost burden for low-income residents.



- **Seek feedback from program participants.** Feedback from participants and prospective participants—including those facing barriers to full participation—helps programs like BAMBE identify and address challenges. Building relationships with all stakeholders—implementing partners, property owners and managers, contractors, and renter associations—takes time but is critical to running a successful program that maximizes positive environmental, economic, and equity outcomes for all.

For More Information

- [BAMBE Website](#)
- [BayREN Website](#)
- [Bay Area Regional Energy Network \(BayREN\) 2022 Annual Report](#)