

Multifamily Electrification Case Study – Lincoln Avenue

Modernizing an apartment building with all-electric heat pump technology



The entrance to the 1440 Lincoln Ave apartments in San Rafael, CA

All-electric heat pumps are a healthier and more efficient alternative to traditional gas wall furnaces and window air conditioners. Here’s how BayREN helped one multifamily property owner make the switch.

When Janna Weir purchased an 8-unit apartment building in 2015, it was clear that it would require some significant investment to live up to her goal of modernizing the property while maintaining affordable rents for the building’s primarily low-to-moderate income residents. The building, which was constructed in the 1960s, still had its original gas wall furnaces, which in addition to being loud and inefficient were becoming a health and safety hazard. There was also undisclosed dry-rot, and the residents complained about the single-pane windows doing very little to keep them warm or block out noise from the nearby freeway.

Janna knew the furnaces and windows would have to be replaced, but she couldn’t afford to do so without increasing rents. So when she attended a workshop put on by **BayREN** and the **Marin County**

PROPERTY PROFILE	
Location	1440 Lincoln Ave San Rafael, CA 94901
Owner	Lincoln Sr LLC
# of Units	8
# of Buildings	1
Sq ft	3,780
Year Built	1962

“I could have never done all the marvelous upgrades to my property without the substantial rebate I received through BayREN.” – Janna Weir, Owner

Community Development Agency, she was excited to hear about how a similar property had upgraded its outdated systems with help from the **Bay Area Multifamily Building Enhancements (BAMBE) program**. The BAMBE program, which has been administered by BayREN since 2013, offers no-cost technical consulting and cash rebates to multifamily properties making energy efficiency and electrification improvements.

Janna decided to enroll, and within several weeks a technical advisor with the **Association of Energy Affordability (AEA)** visited the property to identify the biggest opportunities for energy savings. The advisor compiled their findings into an easy-to-understand report and worked with Janna to come up with a comprehensive scope of work for the property that would save energy and money while improving living conditions for her residents.

It was clear from the start that the old gas wall furnaces needed to go, but Janna was not sure what to replace them with. Her advisor explained that the most effective and climate-friendly alternative is an electric mini-split heat pump, which works like a two-way air conditioner by extracting heat from the outside air and moving it indoors. Not only are heat pumps quieter, more effective at maintaining a stable temperature, and 3-5 times more efficient than traditional gas furnaces, but the residents of 1440 Lincoln Ave would gain access to air conditioning during the increasingly frequent extreme heat days. To round out the project, Janna also elected to install double-pane windows and sliding doors as well as both in-unit and exterior LED lighting. BAMBE participants are free to hire any licensed contractor to complete their project, but in this case AEA referred Janna to several contractors who had previously worked with the program, and within 2 months the entire project was complete.

Although heat pumps have higher upfront installation costs than traditional gas furnaces, the cash rebates from BAMBE help to make up the difference and allow an independent small property



Janna Weir, owner and manager of 1440 Lincoln Ave apartments

UPGRADE AT A GLANCE	
Energy Savings	47.4% modeled energy savings
Total BayREN Rebate	\$ 12,000
Measures Included	<ul style="list-style-type: none"> • Ductless mini-split heat pumps • Double-pane windows and sliding doors • Hardwired in-unit LED fixtures • Exterior LED lighting
Benefits	<ul style="list-style-type: none"> • Lower utility bills • More stable indoor temperatures • Added cooling capacity • Reduced noise pollution • Improved system reliability

Bay Area Multifamily Building Enhancements

Rebates & Free Consulting for Energy Savings

owner like Janna to invest in a cutting-edge technology. The program offers a flat rebate of \$750 per unit to properties that install a comprehensive package of 3 or more measures to improve energy efficiency. In 2020, BAMBE introduced the Clean Heating Pathway, which offers additional incentives for participants that replace existing fossil fuel-powered equipment with high-efficiency electric alternatives. By installing heat pumps and qualifying for the **Clean Heating Pathway**, Janna was able to double her rebate to \$1,500 per unit, for a total BABME rebate of \$12,000. The project also qualified for additional funding through a partnership with **MCE**, Marin County’s local clean energy provider, which brought the overall incentive to nearly \$50,000.

In the 2 years since the project completed, the property’s common area energy bills have been reduced by roughly a third. Furthermore, Janna reports that her residents “love having A/C and effective heat” and that “their quality of life in their units is greatly enhanced with double-pane windows and doors.”

Interested property owners can learn more and get started by visiting www.bayren.org/multifamily or calling (855) 213-2838.



A newly installed ductless mini-split heat pump, which provides residents with heating and cooling

BAMBE Clean Heating Pathway	
Standard BAMBE rebate	Rebate
Reduce >0.25 tonnes CO2 per unit	\$750 per apt in building
Electrification Adders	Rebate
In-unit Measures (rebate is per apartment upgraded)	
In-unit Heat Pump Water Heater	\$1,000
In-unit Heat Pump HVAC	\$1,000
In-unit Laundry Dryer	\$250
In-unit Electric Cooking	\$350
Central System Measures	
Central Heat Pump Water Heater	\$800 per apt served*
Central Heat Pump HVAC	\$800 per apt served
Common Area Measures	
Common Area Heat Pump HVAC	\$1,000
Laundry/Common Area HP Water Heater	\$1,000
Heat Pump Pool Heater	\$1,500



The new double-pane windows save energy and reduce noise pollution



Kitchen faucet aerators and low-flow showerheads save energy and water