

City of Piedmont
COUNCIL AGENDA REPORT

DATE: May 4, 2026
TO: Mayor and Council
FROM: Rosanna Bayon Moore, City Administrator
SUBJECT: Receipt of an Informational Update on the City of Piedmont Home Electrification Rebate Program for Fiscal Year 2026-27

RECOMMENDATION

Receive an informational update on the City of Piedmont's Home Electrification Rebate Program for FY 2026-27. No action is required.

EXECUTIVE SUMMARY

The City's Home Electrification Rebate Program (the Program), launched in January 2023, provides cash rebates to support Piedmont property owners transitioning from natural gas to electric appliances. As natural gas consumption in Piedmont homes accounts for almost half of all greenhouse gas (GHG) emissions in the City, large scale adoption of electric appliances is critical for advancing the City's climate action goals of reducing GHG emissions to 50% below 2005 levels by 2030 and achieving carbon neutrality by 2045.

From January 2023 to April 2026, the City has distributed \$97,500 in rebates to 64 property owners for 90 electric appliance installations and electrical panel upgrades. In fiscal year (FY) 2025-26, the Program is on track to fully expend its \$35,000 budget, with approximately 80% distributed as of April 1, 2026, and total demand is projected to be in the range of \$37,000-\$40,000.

Overall, City permit data shows increasing adoption of electric appliances, with permits for heat pumps and heat pump water heaters both surpassing their natural gas appliance equivalents for the first time in 2025. Additionally, permit data suggests that Piedmont has above-average electric appliance adoption rates compared to regional and state benchmarks. Nevertheless, and as determined through the development of Piedmont's draft Home Electrification Strategy, greater property owner adoption of electric appliances and renewable energy is needed to meet the City's climate action goals.

Informed by program evaluation, cost analysis, peer practices, and local housing and income data, City staff have developed updates to the Program to begin July 1, 2026. These updates are intended to better target financial assistance, support comprehensive home electrification, and more broadly address cost and infrastructure barriers. 2026 Program updates include:

1. Establishing an application deadline,
2. Adding a new income-qualified tier based on 120% of Area Median Income,

3. Restricting heat pump rebates to income-qualified households, and
4. Introducing new incentives for gas meter removal, solar photovoltaic and battery systems, and smart electrical panels.

Before launching the FY 2026-27 Program update, this informational update seeks to provide the City Council with an update on current Program effectiveness and garner feedback on upcoming updates.

BACKGROUND

The City launched the Home Electrification Rebate Program (hereby referred to as the Program) on January 3, 2023. Through the Program, the City offers financial incentives directly to Piedmont property owners for installing heat pumps for space heating and cooling (hereby referred to as heat pumps) and heat pump water heaters, as well as necessary main electrical panel service upgrades.

Annual greenhouse gas (GHG) emissions inventories demonstrate that natural gas use in Piedmont homes, used primarily for space and water heating, remains consistently responsible for around half of community-wide emissions. Accordingly, the Program was developed to advance the adoption of electric appliances in direct support of achieving the City's climate action goals. In 2023, City Council updated the City's climate action goals to:

- Achieve municipal and community-scale carbon neutrality no later than the year 2045, and transition to a post-carbon community; and
- Establish an interim target of 50% emissions reductions from a 2005 baseline emissions level by the year 2030.

Local Electrification Trends

City permit data demonstrates that adoption of electric appliances is increasing, with heat pumps and heat pump water heaters outpacing natural gas equivalents in new installations for the first time in 2025 (See Figure 1 and Figure 2 and Exhibit A, Section 1.3). Additionally, Piedmont appears to be performing ahead of regional and statewide benchmarks for electric appliance adoption (See Exhibit A, Section 1.3). Even so, the 2023 Greenhouse Gas Emissions Inventory presented to Council on June 16, 2025, shows that the City is currently not on track to meet its 2030 climate action goal. Natural gas appliances continue to represent a significant share of installations, and electric appliance installations will need to increase substantially to meet the City's goals.

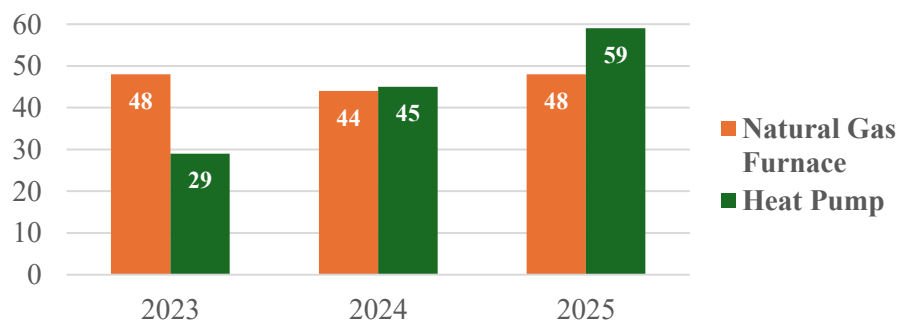


Figure 1. Gas Furnace vs. Heat Pump Installations by Year

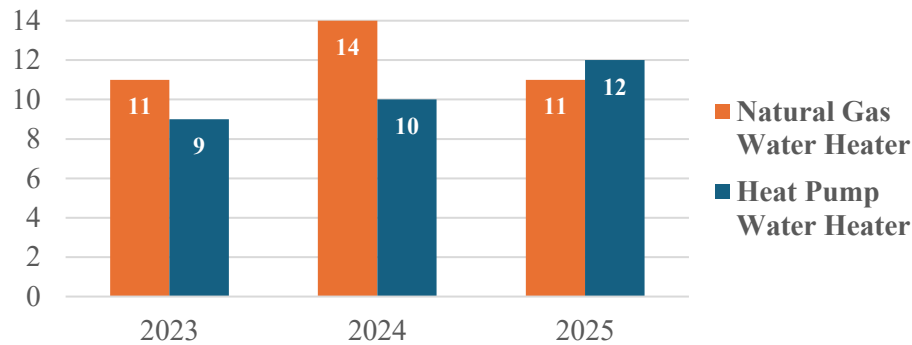


Figure 2. Gas Water Heater vs. Heat Pump Water Heater Installations by Year

Home Electrification Rebate Program Impact

From January 2023 to April 2026, the City has distributed \$97,500 in rebates to 64 Piedmont property owners (Exhibit A, Section 1.1). The Program continues to receive strong uptake and interest. In FY 2025-26, the City is projected to fully expend its \$35,000 budget. As of April 1, 2026, \$28,100 (80% of program funds) has been distributed, and total program expenditure is expected to be in the range of \$37,000-40,000 by fiscal year-end, based on the current application queue.

The Program has enabled 90 electric appliance installations and electric panel upgrades. Heat pumps for space heating and cooling have had the most uptake (See Figure 3), reflecting overall higher adoption rates according to City permit data.

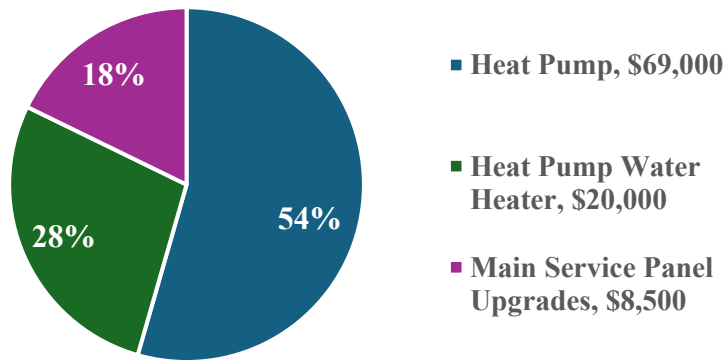


Figure 1. Number of Rebates Distributed by Rebate Type

DISCUSSION

Given program success in its inaugural three years, and through community engagement for the ongoing development of the City’s Home Electrification Strategy, City staff have identified an opportunity to update the Program to better align with community needs, expand program reach and impact, and respond to evolving market conditions.

In preparation for potential Program updates, City staff conducted a Program analysis, and best practices report in December 2025 that includes:

- 1. An evaluation of current Program performance,
- 2. An analysis of relevant permit, socio-economic, and project cost data, including the anticipated impacts of upcoming fee schedule changes, an assessment of household income and cost burden in Piedmont,
- 3. An analysis of City permitted solar and battery projects, including project costs, local adoption trends, the anticipated impact of expiring federal tax incentives, and an analysis of existing solar rebate programs, and
- 4. Interviews with peer Bay Area jurisdictions to identify local program best practices and lessons learned.

The report is provided in Exhibit A and was used to inform the following updates to the Program, which are planned to be implemented on July 1, 2026. Before launching the 2026 Program update, this informational update seeks to provide the City Council with an update on current Program effectiveness and garner feedback on upcoming updates.

2026 Program Update: Application Deadline Requirement

A time-bound eligibility requirement will be introduced to the Program, requiring rebate applications to be submitted within four months of permit issuance. This change will reduce uncertainty for both applicants and program administrators and ensure funds are distributed timely within each fiscal year. Additionally, this requirement will help ensure that rebates go to property owners who factor the incentive into their decision to electrify, rather than those who apply after they have already decided to invest or have already selected or installed equipment. In practice, this will prioritize funding for projects where the availability of rebate funds influences the decision to move forward with home electrification measures, which aligns program spending with its goal of advancing the adoption of electric appliances in Piedmont homes.

<i>Program Element</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Rebate Application Deadline Requirement	Applied for permit after January 2023.	Rebate applications must be submitted within four months of permit issuance.

2026 Program Update: Add 120% AMI Income Tier

The current program includes two financial tiers for each appliance/upgrade: a standard tier and an income-qualified tier based on California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance Program (FERA) eligibility, which applies to approximately 2% of Piedmont households (See Exhibit A, Section 4.1). As such, in the three years of the Program, the City has only distributed one rebate at the income-qualified tier. However, approximately 22% of

Piedmont households are considered cost-burdened (spending more than 30% of their household income on housing cost), indicating a broader population that may face financial barriers to electrification (See Exhibit A, Section 4.2).

To better capture Piedmont residents that face affordability constraints to electric appliance uptake, a third income-qualified tier will be added to the Program. This income tier is aimed at moderate-income households earning at or below 120% of Alameda County Area Median Income (AMI) (See Exhibit A, Section 4.3).

<i>Program Element</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Income-Qualified Rebate Tiers	One income-qualified tier based on CARE/FERA eligibility.	Two income-qualified tiers: one moderate-income tier based on 120% AMI, and one based on CARE/FERA eligibility, with increasingly greater financial offerings.

2026 Program Update: Heat Pump Rebates Restricted to Income-Qualified Households

City permit data indicates that in 2025 heat pump adoption outpaced natural gas furnaces. Nevertheless, between 2023 and 2025, approximately 35% of heat pump permit recipients applied for a rebate, compared to 74% for heat pump water heater permit recipients (See Exhibit A, Section 1.2). This suggests that many Piedmont property owners proceed with heat pump installations regardless of financial assistance, while more property owners need additional support for heat pump water heater projects.

To better target program funds, heat pump rebates will be restricted to income-qualified households, and standard (non-income-qualified) rebates will be sunset as of July 1, 2026. This change directs funding toward residents who face greater financial barriers and facilitates program expansion, as outlined below. In 2025, the City of Albany also reallocated funding from standard heat pump rebates to expand support for income-qualified households without increasing overall program costs (See Exhibit A, Section 5.1.1).

To facilitate a smooth transition, City staff will present information on the sunset of the standard rebate to the public as early as possible and ensure a grace period granted on a case-by-case basis after July.

<i>Appliance Type</i>	<i>Income Category</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Central Air Source Heat Pump/ 3+ Mini-Split Indoor Units	Standard	\$1,500	Not eligible
	120% AMI	N/A	\$1,500
	CARE/FERA	\$3,000	\$3,000
1-3 Mini-Split Indoor Units	Standard	\$750	Not eligible
	120% AMI	N/A	\$750
	CARE/FERA	\$1,500	\$1,500

No Change in 2026 Program Update: Heat Pump Water Heater Rebate

Of eligible appliances, switching from natural gas to heat pump water heaters has the greatest GHG emissions reduction potential in Piedmont homes. Given the significant GHG impact and strong utilization of the Program among heat pump water heater permit recipients, the standard rebate for heat pump water heaters will remain unchanged. The CARE/FERA rebate amount will be increased to maintain a clearly tiered incentive structure following the addition of the 120% AMI income tier, ensuring that CARE/FERA qualified households continue to receive the highest level of financial support across all rebate categories.

<i>Income Category</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Standard	\$800	\$800
120% AMI	N/A	\$1,600
CARE/FERA	\$1,600	\$2,000

2026 Program Update: Add Gas Meter Removal Incentive

A new rebate for gas meter removal will be introduced to the Program to encourage complete disconnection from natural gas service and the transition towards whole-home electrification. Fully electrified homes maximize residential GHG reductions and align with long-term regional and statewide decarbonization goals. This incentive will help offset costs associated with utility coordination, infrastructure removal, and any additional projects required to fully electrify a home. The City of Palo Alto also offers a rebate for gas meter removal.

<i>Income Category</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Standard	N/A	\$2,500
120% AMI	N/A	\$2,500
CARE/FERA	N/A	\$2,500

2026 Program Update: Add Solar and Battery Incentive

Incentives for solar photovoltaic (PV) panels and battery storage systems will be added to the Program, supporting a more comprehensive approach to home electrification while addressing both energy resiliency and affordability. On-site solar generation can help offset the potential financial impact of increased electricity demand for electric appliances. Battery storage systems enhance the benefits of solar PV by allowing households to store excess energy generated for use during peak pricing periods or grid outages.

Solar PV and battery rebates offset increased rising procurement and installation costs, particularly in the context of the recently expired federal tax credits and encourage local solar adoption, consistent with Council direction (See Exhibit A, Section 6). The City's adoption of a 100% cost

recovery model for solar permits resulted in increased the cost of solar PV panel permits. In adopting this fee structure, Council directed the allocation of funds for solar rebates as part of the Program in lieu of reducing solar permitting fees.

<i>Appliance Type</i>	<i>Income Category</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Solar PV Panels (Minimum system size of 4kW CEC-AC)	Standard	N/A	\$1,000
	120% AMI	N/A	\$1,500
	CARE/FERA	N/A	\$2,500
Battery Storage Systems (Minimum capacity of 5 kWh)	Standard	N/A	\$1,000
	120% AMI	N/A	\$1,500
	CARE/FERA	N/A	\$2,500

2026 Program Update: Add Smart Panel Eligibility to Electric Panel Upgrade Rebate

The existing main panel service upgrade incentive will be expanded to include smart electrical panels. As heard throughout engagement of the to-be developed Home Electrification Strategy, service upgrades in Piedmont homes can be costly, time-intensive, subject to utility infrastructure limitations, and, in some cases, unnecessary. Smart panels can be an effective alternative to dynamically manage electrical loads, enabling whole-home electrification without exceeding existing service capacity. Supporting this technology with rebate incentives provides a more flexible, cost-effective pathway to electrification while also reducing potential strain on the electrical grid.

<i>Income Category</i>	<i>Current Program</i>	<i>2026 Program Update</i>
Standard	\$500 (main panel service upgrades only)	\$900 (expanded to include smart panels)
120% AMI	N/A	\$1,800
CARE/FERA	\$1,000	\$2,250

CONCLUSION

The FY 2026-27 Home Electrification Rebate Program updates, effective July 1, 2026, are designed to address key opportunities to increase program effectiveness, better align with community needs, and respond to evolving market conditions. While the Program has demonstrated early success in supporting electric appliance uptake in Piedmont, further acceleration of whole-home electrification measures including energy efficiency, electric appliance uptake, and renewable energy upgrades is critical to achieve the scale of GHG emissions reductions required by 2030 and 2045 to meet the City's climate action goals.

Upon City Council’s receipt and discussion of this informational report, City staff will proceed with the next steps of implementing 2026 Program updates. Next steps include updating program and application materials, coordinating with the City Communications Division on promotion and information sharing, and finalizing internal processes for delivering Program updates. City staff will continue to actively monitor the financial and climate impact of the updates to ensure that the Program remains right-sized for available resources, while maximizing its effectiveness and impact.

FISCAL IMPACT

Due in part to enhanced public engagement, the FY 2025-26 program expenditure is expected to be around \$37,000-40,000. In addition, the FY 2026-27 program updates will expand and redirect the program to include a broader scope and more support for moderate and low-income groups. Moreover, Council has directed staff to allocate additional funding for solar incentives following the adoption of a 100% cost recovery model for Planning & Building permits and in consideration of the termination of federal solar tax credits.

Accordingly, City staff are proposing to increase the Program’s total budget from \$35,000 in FY 2025-26 to \$50,000 in FY 2026-27. This proposal is included in the draft FY 2026-27 Budget. City staff will monitor how updates impact budget and continue to make updates as needed.

ATTACHMENTS

Exhibit	Pages	City of Piedmont Home Electrification Rebate Program 2025
A	9 - 31	Assessment and Review

By: Kevin Jackson, Planning & Building Director
Deniz Ergun, Sustainability Program Manager
Emma Grossman, Climate Action Fellow



City of Piedmont

Home Electrification Rebate Program Assessment and Review

Prepared by: Emma Grossman, Climate Action Fellow

December 2025

Table of Contents

Glossary	2
1. Introduction	3
1.1. Rebate Distribution To-Date	4
1.2. Rebate Uptake: Permit-to-Rebate Ratio	4
1.3. The State of Home Electrification in Piedmont	6
2. Project Costs and Permit Fees	8
2.1. Standard Project Costs	8
2.2. Permit Fees	8
3. Time-bound Eligibility	10
4. Income-based Rebate Eligibility	12
4.1. Current Income-Qualified Rebate.....	12
4.2. Housing Cost Burden	14
4.3. Alternative Income-Qualifying Baselines	15
5. Local Comparables	17
5.1. Rebate Offerings.....	17
5.1.1. City of Albany.....	17
5.1.2. City of Palo Alto.....	18
5.2. Income-based Eligibility Requirements.....	19
5.2.1. City of Albany.....	19
5.2.2. City of Palo Alto.....	19
5.3. Application Process and Time-bound Eligibility	19
5.3.1. City of Albany.....	19
5.3.2. City of Palo Alto.....	20
6. Solar Panel Projects	20
6.1. Solar Panel Installations in the City of Piedmont	20
6.2. Solar Panel Project Costs and Uptake.....	20
6.3. Solar Permitting Fees	22
6.4. Federal Tax Incentives.....	22
6.5. City-led Solar Rebate Comparables.....	22

Glossary

Heat Pump Water Heater (HPWH)

Water heating appliances that function by moving heat from the surrounding air into the water tank rather than generating heat directly.

Heating, Ventilation and Air Conditioning (HVAC)

Systems that control indoor air temperature, humidity, and quality.

Air Source Heat Pump (HP HVAC)

Any HVAC system that functions by moving heat in the air outside of the home to heat or cool the home. Can refer to both central air source (ducted) and mini split (ductless) heat pump systems.

Central Air Source (Ducted) Heat Pump

A HP HVAC system that uses a network of ducts to move air throughout the entire home. Ducted heat pump systems consist of one or more outdoor units that connect to an indoor air handler which distributes heated or cooled air through homes ducts.

Mini Split (Ductless) Heat Pump

A HP HVAC system that uses one or more indoor air-handling units to heat or cool specific zones or rooms. Ductless heat pump systems consist of an outdoor unit and one or more indoor air-handling units, usually located in an exterior facing wall of the building, and are not connected to ductwork.

Permit Milestone

Steps in the permitting process:

- 1) Application Submission (“Applied”),
- 2) Application Approved by Planning and Building staff (“Approved”),
- 3) Permit Issued (“Issued”),
- 4) Permit Finaled (“Finaled”).

1. Introduction

On January 3, 2023, the City of Piedmont began accepting applications for the Home Electrification Rebate Program. This program provides rebates to residents who install heat pump water heaters (HPWH) and/or air source heat pump HVAC systems (HP HVAC), helping to offset the costs of such home electrification improvements. When an electrical panel upgrade is required to support these projects, residents may also qualify for an additional rebate. See Table 1 for an overview of the current rebate program.

Table 1. Rebate Program Overview, City of Piedmont

Eligible Equipment	Standard Rebate	Income Qualified Rebate
Heat Pump Water Heater	\$800	\$1,600
Central Air Source Heat Pump	\$1,500	\$3,000
Mini-Split Heat Pumps	\$750	\$1,500
Service Panel Upgrades	\$500	\$1,000

1.1. Rebate Distribution To-Date

Since program start date on January 3, 2023, and as of Dec 31, 2025, a total of \$94,400 in rebate funds has been distributed to 62 program participants that has enabled 86 electric appliance installations and electrical panel upgrades. Of the 86, 47 rebates were issued for Air Source Heat Pump (HP HVAC) systems and 23 for Heat Pump Water Heaters (HPWH). In addition, 16 “add-on” rebates were distributed for electrical panel upgrades¹. As of December 31, 2025, in FY 2025-26, the program has distributed \$22,900 in rebate funds across 15 rebate applications. As shown in Figure 1, most rebate applications received are for a single appliance, with HP HVAC being the most applied-for appliance type, while the others are a combination of appliances or appliances and electrical panel upgrades.

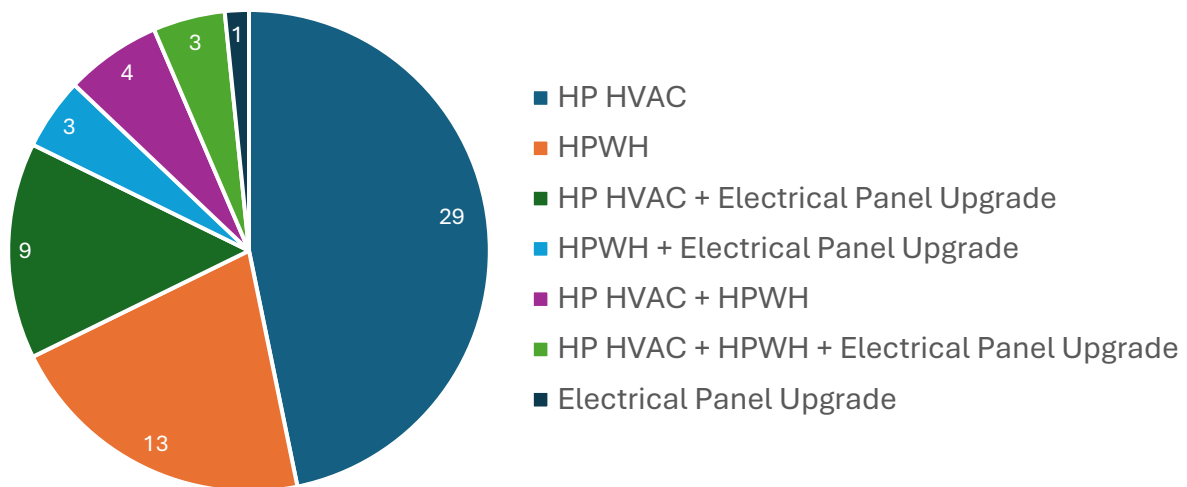


Figure 1. Projects per Rebate Application

1.2. Rebate Uptake: Permit-to-Rebate Ratio

As shown in Figure 2, of the 133 HP HVAC permits finalized by the Planning and Building Department since 2023, 47 (35%) projects applied and were approved for a rebate. Likewise, Figure 3 shows that of the 31 HPWH permits finalized since 2023, 23 (74%) projects applied for and were approved for a rebate. This difference indicates that rebates may be more significant in motivating uptake in HPWH projects than for HP HVAC projects.

¹ “Add-on” rebates for electrical panel upgrades are required to be attached to a HP HVAC or HPWH rebate application to be eligible.

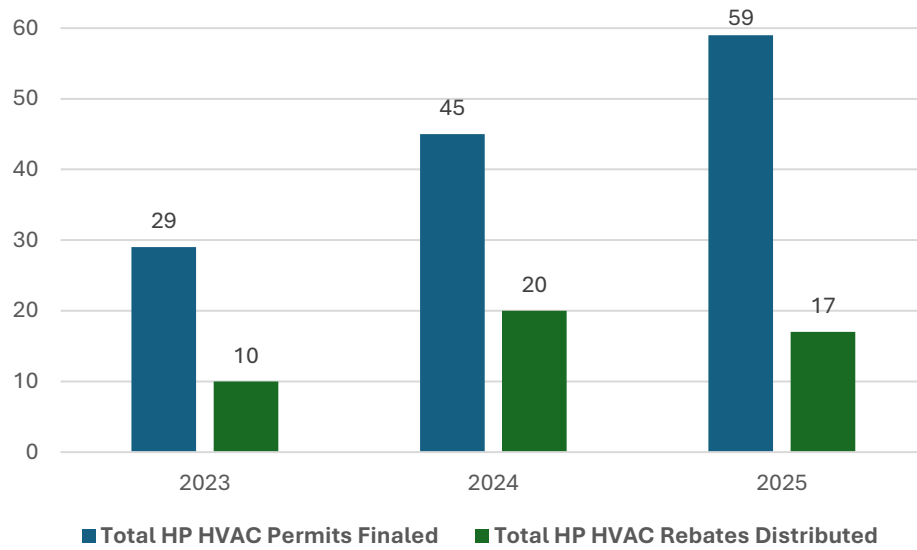


Figure 2. HP HVAC Permits Finaled vs. Rebates Distributed by Year

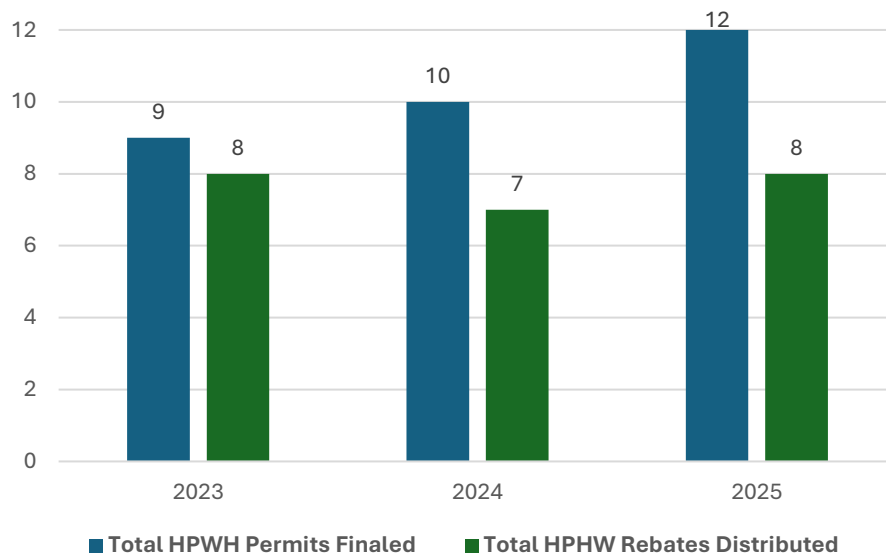


Figure 3. HPWH Permits Finaled vs. Rebates Distributed by Year

1.3. The State of Home Electrification in Piedmont

Overall, uptake of electric appliances in Piedmont homes has been encouraging, though additional progress is needed to meet the City's climate action goals. City permit data provides a clear picture of local home electrification trends in Piedmont. As shown in Figures 4 and 5, over the last 3 years, 49% of HVAC systems installed have been heat pumps and 45% of water heaters installed have been HPWH. In 2025, both HP HVAC and HPWH surpassed their natural gas equivalencies in new installations for the first time, with 55% of HVAC permits issued for HP HVAC installations and 52% of water heater permits issued for HPWH installations.

While additional uptake is necessary to meet City goals, Piedmont appears to be performing ahead of regional and statewide home electrification benchmarks. Comparable data is not available at the regional or state level as permits for HVAC and water heating projects are issued by individual cities, and there is no regional or statewide system that aggregates this information. As a result, direct comparisons between Piedmont and the Bay Area or California cannot be made using the same methodology. Instead, regional and state trends must be inferred from available proxy data. A 2023 BayREN survey estimated that around 4% of Bay Area single-family homes have HPWH and 15% have HP HVAC systems². In addition, statewide equipment sales data indicates that HPWH equipment accounts for approximately 3-5% of annual water heater sales, while HP HVAC systems account for approximately 20% of annual HVAC equipment sales³.

It should also be noted that water heater installation data likely understates actual replacement activity as water heater replacements often occur without permits; Permitting data from cities across the Bay Area shows that substantially fewer water heater permits are pulled each year than expected based on the projected annual water heater fail rate⁴.

²https://pda.energydataweb.com/api/view/4024/Water%20Heater%20Market%20Characterization%20Study%20PDA%20Draft1%20_8_25_2024.pdf

³ <https://www.canarymedia.com/articles/heat-pumps/california-unveils-first-state-plan-to-unleash-heat-pumps>

⁴ <https://www.spur.org/news/2024-10-21/smoothing-transition-heat-pumps-part-2-permitting-and-inspections?>

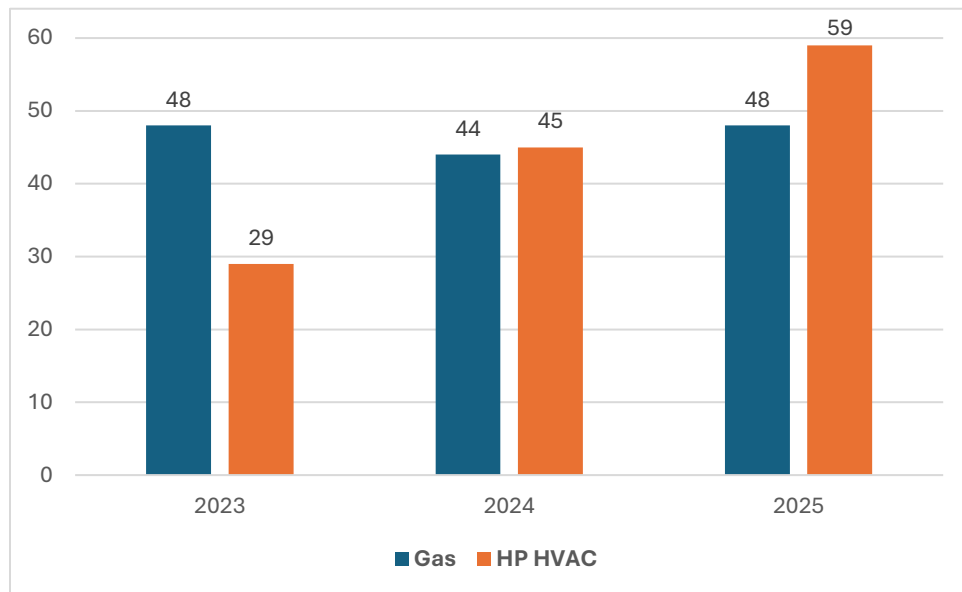


Figure 4. HVAC Permits Finaled by Year, Gas Furnace vs. Air Source Heat Pump HVAC.

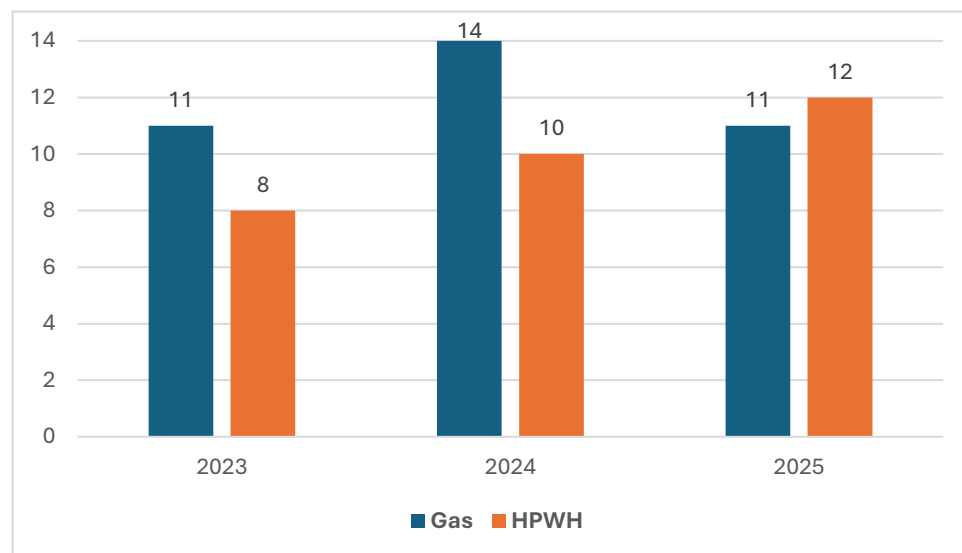


Figure 5. Water Heater Permits Finaled by Year, Gas Water Heater vs. HPWH.

2. Project Costs and Permit Fees

2.1. Standard Project Costs⁵

Among permits finalized in 2025, HPWH projects cost an average of \$7,042 while HP HVAC projects cost an average of \$26,688

Average HPWH project costs have risen 42% from 2023 to 2025. In the same time frame, average project costs for HP HVAC projects have risen only 18%. See Figure 6 for a cost comparison between HPWH and HP HVAC projects by year.

Project costs for Heat Pump HVAC projects are significantly higher than Heat Pump Water Heater projects. Despite the greater project cost, Heat Pump HVAC adoption remains strong in Piedmont.

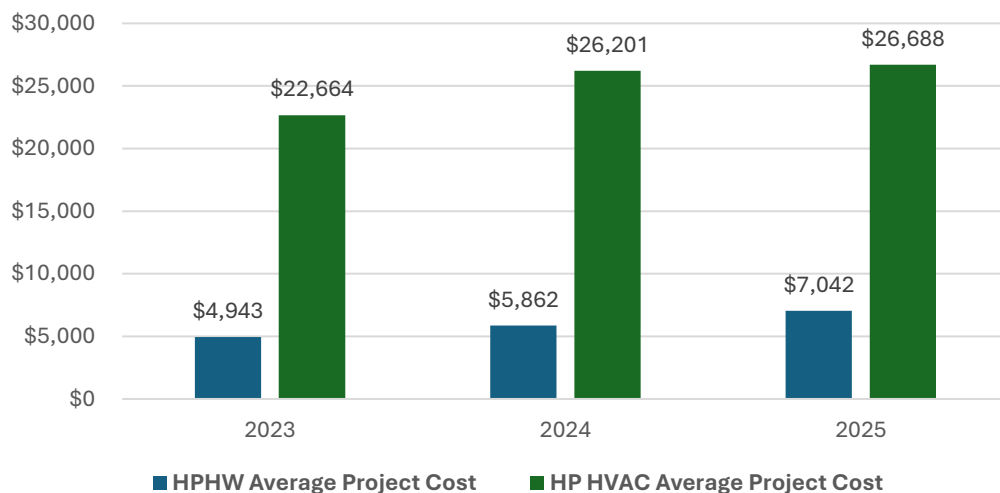


Figure 6. Average Project Cost by Year.

2.2. Permit Fees

Prior to January 1, 2026, the average permitting fees for HPWH Projects were \$520.44, representing approximately 7% of the average project cost. The average permitting fees for HP HVAC projects were \$1,416, which is about 5% of the average project cost.

⁵ Project cost data is derived from self-reported estimates provided by contractors at the time of permit application submission.

The newly adopted fee schedule, which went into effect on January 1, 2026, requires “Stand Alone/Over the Counter” permits (including water heater and mechanical permits) to be charged at a flat fee of \$436⁶. As shown in Figure 7, under the new fee schedule, permitting fees for HPWH projects will decrease by 16%, while permitting fees for HP HVAC projects will decrease by nearly 70%. As illustrated in Figure 8, the new permitting fees will represent roughly 6% of the average HPWH project cost and approximately 1.6% of HP HVAC project cost.

Because the fee reduction is substantially greater for HP HVAC projects, the new fee schedule will have a more significant impact on improving the affordability of HP HVAC installations in comparison to HPWH projects.

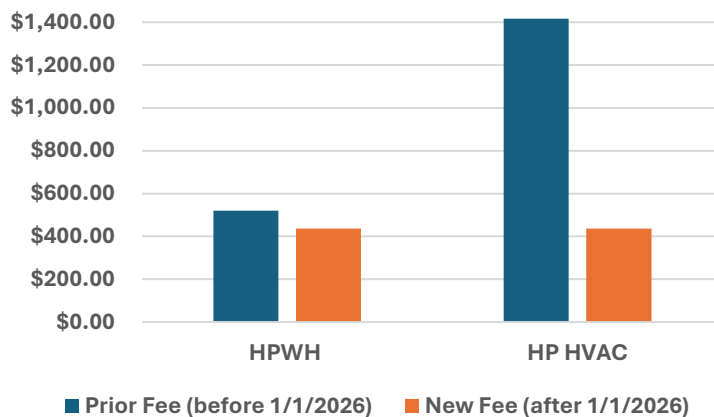


Figure 7. Permit Fee Comparison, HPWH vs. HP HVAC

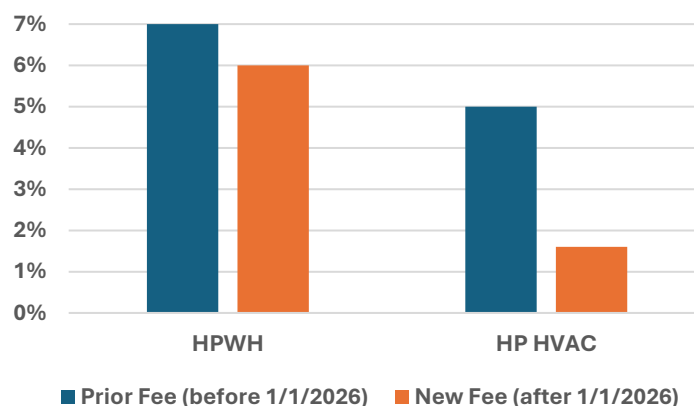


Figure 8. Permit Fee as Percent of Project Cost, HPWH vs. HP HVAC

⁶ There are no add-on or hidden fees. The flat fee is all-inclusive.

3. Time-bound Eligibility

The only time-bound eligibility restriction in place in the current rebate program is that residents must have applied⁷ for a permit on or after January 3, 2023, for their project to be rebate eligible.

To understand the relationship between permit milestones and rebate application date, the dates of each permit milestone (applied, issued, and finalized) were measured against the date that individuals first applied for their rebates. Table 2 details the average, shortest, and longest time between rebate application submission date relative to the permit milestone date. Table 2, as well as Figures 9, 10, and 11, demonstrates that while average values remain within an acceptable range, there is significant variation between the shortest and longest values. This suggests that, for some residents, the rebate program is likely a key motivator driving their decision to pursue HP HVAC and HPWH projects, while for others, it functions more as a post-project bonus discovered after installation.

While lengthy rebate application delays are relatively rare, introducing time-bound eligibility limits would better target rebate funds toward participants for whom the rebate serves as a meaningful incentive for home electrification, and reduce rebates distributed to applicants whose project decisions were not influenced by rebate availability.

Table 2. Time to Rebate Application from Permit Milestone Dates.

Permit Milestone	Average Time to Apply for a Rebate	Shortest Time to Apply for a Rebate	Longest Time to Apply for a Rebate
Applied	129 days after (appx 4.5 months)	17 days before (appx 2.5 weeks)	798 days after (appx 2 years)
Issued	91 days after (appx 3 months)	75 days before (appx 2.5 months)	668 days after (appx 2 years)
Finalized	7 days after (1 week)	219 days before (appx 7 months)	202 days after (appx 7 months)

⁷ Application date was set as the criterion because that is the date that sets the applicable code year and is also the only date an applicant has complete control over. January 3, 2023 was chosen because that was the first date after the 2022 code took effect.

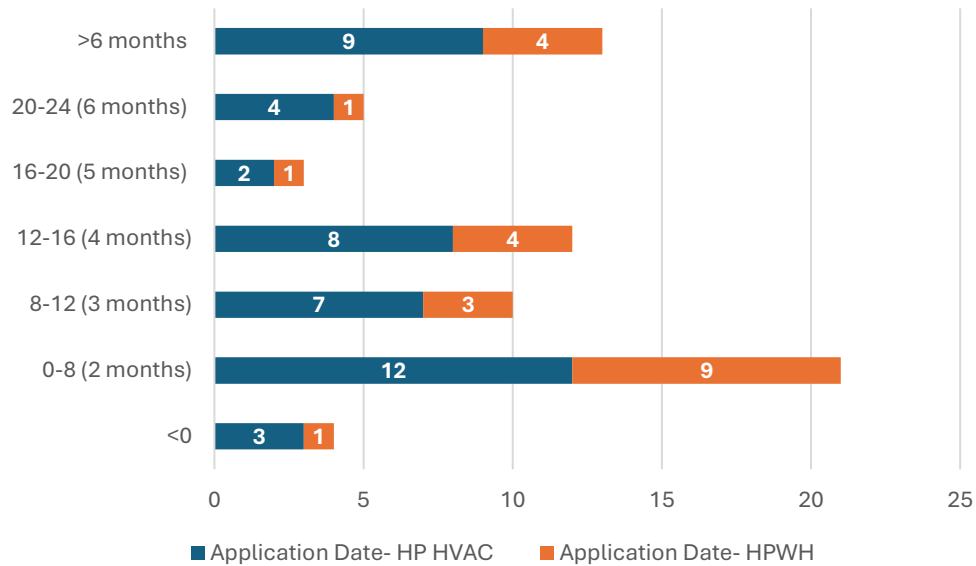


Figure 9. Time to Rebate Application from Permit Application Date.

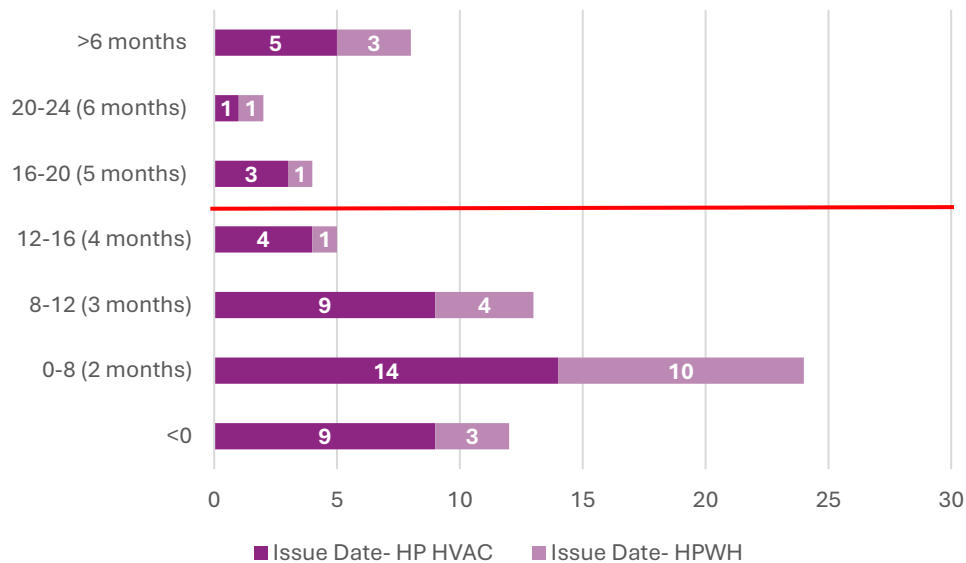


Figure 10. Time to Rebate Application from Permit Issue Date.

The red benchmark line in Figure 10 represents the time-bound eligibility requirement used by the City of Albany for their rebate program. Here, it is possible to see how many rebate applications would have been denied under this criterion. See more about the City of Albany rebate program in section 5. Figure 11 demonstrates that most rebate applicants have either already submitted a rebate application by the time their permit passes final

inspection or submit a rebate application less than 2 months after their permit is finalized. It is also evident that there are several applicants who applied more than three months after the fact, suggesting that the rebate was likely not an impactful part of their decision to install electric equipment in their home.

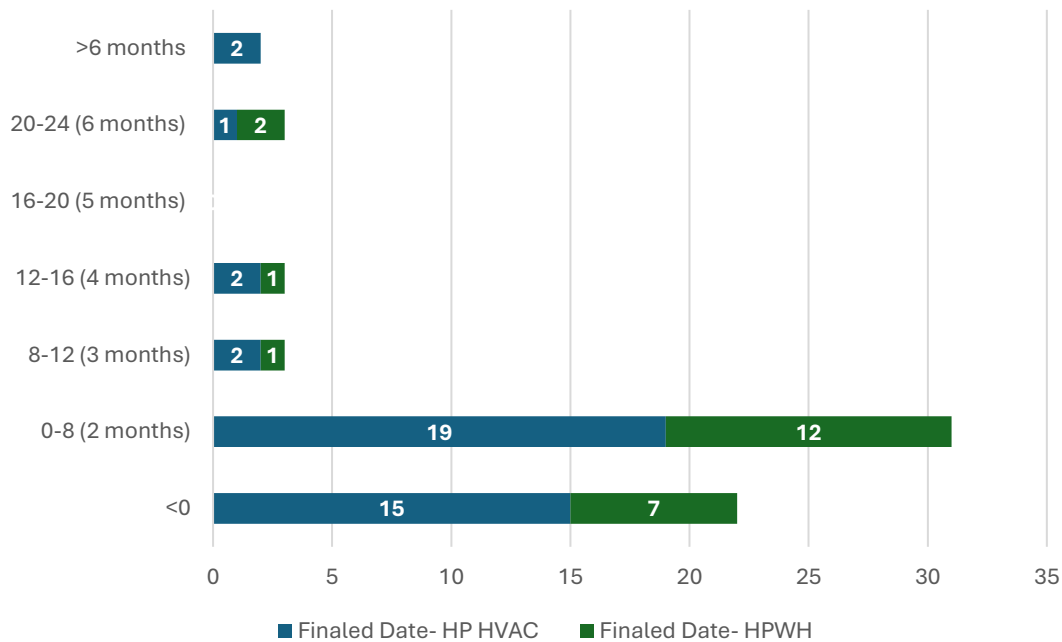


Figure 11. Time to Rebate Application from Permit Finalized Date.

4. Income-based Rebate Eligibility

4.1. Current Income-Qualified Rebate

Across comparable local rebate programs (see Section 5.2), income-based eligibility is a standard feature, with most programs using a tiered incentive structure based on income. The City's current rebate structure is consistent with this model, offering rebates of higher amounts to property owners who meet California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) eligibility requirements, which are set at 200% and 250% of Federal Poverty Guidelines (FPG), respectively. The program does not reserve or set aside funding specifically for income-qualified applicants. All applicants, regardless of income status, apply to the same application pool on a rolling basis, and rebates are distributed in the order in which complete applications are received. Additionally, the rebate structure and incentive amounts are designed with the expectation of lower overall uptake of the income-qualified incentives.

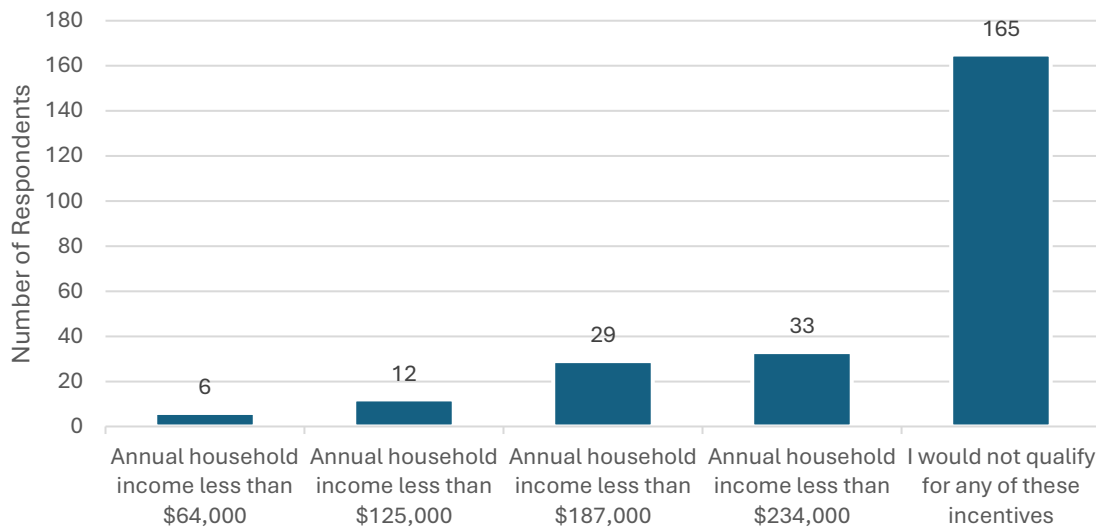


Figure 12. Survey Results: "Would you qualify for rebates with the following income limits? Select all that apply"

Since the launch of the rebate program in 2023, only one resident has applied for the income-eligible rebate. This low uptake is consistent with Piedmont's income distribution: an estimated 73 households qualify for CARE, representing approximately 2% of total households. This is consistent with data collected in a 2024 community survey assessing residents' perspectives on electrification opportunities and barriers: as shown in Figure 12, only six survey respondents (2.5%) reported that they would qualify for income-qualified incentives under CARE/FERA requirements. This data suggests that the current income thresholds capture only a very small portion of the community and do not reflect the broader set of households that may be experiencing financial barriers to home electrification.

4.2. Housing Cost Burden

The City of Piedmont has a high average household income of \$404,409 as of 2022⁸. Despite this, 12% of Piedmont renters and owners are cost burdened, spending between 30%-50% of income for housing, and 10% of Piedmont renters and owners are severely cost burdened, spending more than 50% of their income on housing. Figure 13 presents homeowner cost burden estimates.

Because some Piedmont residents experience significant financial strain driven not by income but by the share of income spent on housing, it is important to recognize that even higher-income households may face barriers to investing in home electrification projects. To ensure that home electrification is accessible to as many Piedmont residents as possible, relief measures must be responsive to the City's unique economic landscape.

Income is typically used to determine eligibility for incentive and rebate programs to increase equity and reduce access barriers. In Piedmont's case, however, income alone is an imperfect indicator of need among residents experiencing housing cost burden and does not fully capture barriers to home electrification.

At present, the City lacks practical tools to assess and verify housing cost burden without requiring extensive staff time and potentially invasive financial documentation. The City's current income verification process is straightforward and consistent with the practices of other rebate programs, requiring income-qualified applicants to submit standard income documentation (e.g. a copy of a utility bill showing participation in CARE/FERA, verification that the unit is deed restricted affordable housing, or a recent tax return), with property ownership verified through the permit associated with the project.

In contrast, verifying housing cost burden would likely require applicants to submit documentation of housing cost, such as mortgage statements, in combination with income documentation. Staff would then need to calculate the proportion of household income spent on housing while accounting for other relevant factors such as property taxes, insurance, and potential tax deductions. In the absence of an established framework used to verify housing cost burden or precedent among comparable programs, this approach would significantly increase administrative burden and raises potential privacy concerns given the extent of financial information required.

⁸ U.S. Census Bureau. "Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901, 2022.

Given these considerations, incorporating housing cost burden as an eligibility criterion is not currently practical, and the City remains reliant on income as the primary metric. Expanding income-eligible tiers beyond CARE/FERA eligibility, however, could capture a broader set of households facing financial barriers to electrification, increasing both accessibility and equity of the rebate program.

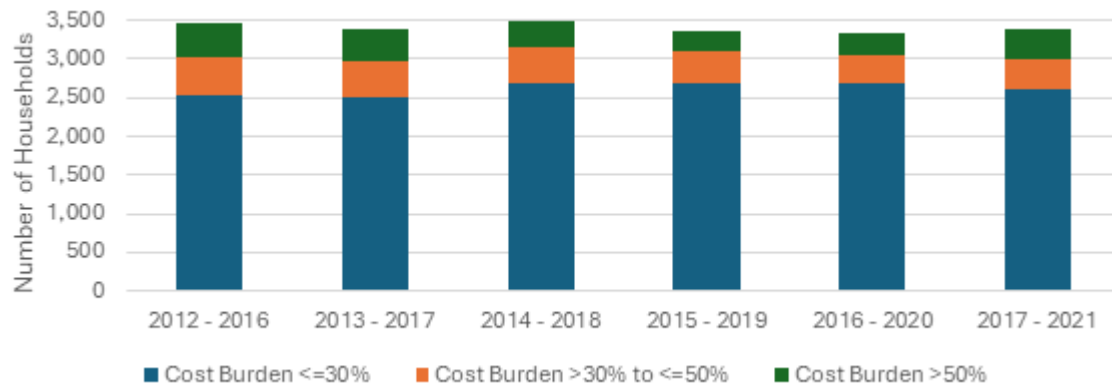


Figure 13. Homeowner Cost Burden Estimates from 2012-2021.

4.3. Alternative Income-Qualifying Baselines

One opportunity to better align income-qualified rebates with community need is to use Area Median Income (AMI) calculations for Alameda County, as shown in Table 3, to establish income eligibility limits and tiers, rather than relying on FPG. Although Piedmont's average household income is higher than the county average, it is still substantially closer to county-level benchmarks than to national income measures. As a result, AMI-based thresholds would more accurately reflect Piedmont's local economic context and better capture households facing housing cost burdens.

As shown in Figure 12 and Table 4, applying Alameda County AMI thresholds would place a significantly larger share of Piedmont households within commonly used eligibility tiers (80%, 100%, 120%) compared to the current CARE/FERA limits. This shift would expand eligibility to include many households that are currently excluded, thereby increasing accessibility and equity in the rebate program.

Table 3. 2025 Alameda County AMI (CARE/FERA limits shown for comparison).

Household Size	CARE/FERA Income Limits (250% FPG)	Low Income Limit (80% AMI)	Median Income Limit (100% AMI)	Moderate Income Limit (120% AMI)
1	\$52,875	\$87,550	\$111,850	\$134,250
2	\$52,875	\$100,050	\$127,850	\$153,400
3	\$66,625	\$112,550	\$143,800	\$172,600
4	\$80,375	\$125,050	\$159,800	\$191,750

Table 4. Piedmont Households by Income Bracket⁹.

Income Bracket	Estimated Number of Households	Estimated % of Households
Total	3,737	
Less than \$10,000	59	1.6%
\$10,000-\$14,999	44	1.2%
\$15,000-\$24,999	56	1.5%
\$25,000-\$34,999	37	1.0%
\$35,000-\$49,999	33	0.9%
\$50,000-\$74,999	153	4.1%
\$75,000-\$99,999	123	3.3%
\$100,000-\$149,999	269	7.2%
\$150,000-\$199,999	306	8.2%
\$200,000 or more	2,653	71.0%

⁹ U.S. Census Bureau, U.S. Department of Commerce. "Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars)." *American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901*, <https://data.census.gov/table/ACSST5Y2023.S1901?t=Income+and+Poverty&g=160XX00US0656938>. Accessed on 13 Nov 2025.

5. Local Comparables

The two City-led rebate programs that are most comparable to the City of Piedmont's are the City of Albany and the City of Palo Alto. The following sections outline the aspects of both City's programs relevant to the discussion of Piedmont's own rebate program.

5.1. Rebate Offerings

5.1.1. City of Albany

In early 2025, The City of Albany restructured their rebate program to expand targeted incentives while sunseting others. Table 5 provides an overview of Albany's rebate program. To accommodate these changes without increasing the program budget, the City eliminated the standard, non-income qualified rebate for all HP HVAC systems. At the same time, the City introduced a new rebate for HPWH and added enhanced rebates for income-qualified ductless HP HVAC systems, based on the number of indoor air-handling units installed.

Table 5. City of Albany Rebate Program

Appliance	Standard Rebate	Moderate Income (120% AMI)	Low Income (80% AMI)
HPWH	\$500	\$1,500	\$3,000
HP HVAC - Ducted	\$1,000 ¹⁰	\$3,000	\$6,000
HP HVAC - Ductless (1 unit)	\$500 ¹¹	\$1,000	\$1,500
HP HVAC - Ductless (2 units)		\$2,000	\$4,000
HP HVAC - Ductless (3 units)		\$3,000	\$6,000
Electrical Panel Upgrade (Add-on only)	\$500	\$1,000	\$2,000

¹⁰ Sunset on September 19, 2025. No longer available.

¹¹ Sunset on September 19, 2025. No longer available.

5.1.2. City of Palo Alto

The City of Palo Alto's rebate program was renewed in 2024 with many program updates. Table 6 contains an overview of Palo Alto's rebate program. Prior to the program's re-launch, the city had only offered rebates for HPWHs. The team developing Palo Alto's rebate program was motivated not only to encourage electrification projects, but also to support people whose project costs were very high due to electrical work, which was their main motivation for their comprehensive add-on rebates. City staff reported that the add-on rebates didn't necessarily push additional project uptake but that it did significantly support projects with complex electrical work. City staff also reported that around 10 participants had decided to add insulation because of the add-on rebate. Additionally, they decided to make the rebate for Heat Pump HVAC projects less than HPWH projects because they knew there was already high interest in Heat Pump HVAC projects.

Table 6. City of Palo Alto Rebate Program

Appliance	Maximum Rebate Amount	Income Eligible Rebate (80% AMI)
HP HVAC	\$2,500	\$5,000
HPWH	\$3,500 – when replacing gas water heater	N/A
	\$500 – when replacing electric resistance water heater	
Full Electrification Incentive	Maximum Incentive Amount	Income Eligible Rebate (80% AMI)
Gas Meter Removal	\$2,500	N/A
Add-On Rebates ¹²	Maximum Rebate Amount	Income Eligible Rebate (80% AMI)
Electrical Panel Upgrade	\$1,000	\$2,000
Attic/Roof Insulation	\$1,000 (\$0.75/sq ft.)	N/A
Pre-wiring/Wiring, Circuit Splitter/Pauser Devices, and Subpanel Installation	\$2,000 (\$500 per device per household)	N/A
Permit Fee	\$638 per eligible permit	\$1,000 for Electrical Panel Upgrade Permit Fee

¹² Can only apply for add-on rebates if also installing HP HVAC or HPWH equipment.

5.2. Income-based Eligibility Requirements

5.2.1. City of Albany

The City of Albany utilizes Alameda County's AMI to determine two additional income-based rebate tiers with escalating rebate values: low-income (80% AMI) and moderate-income (80-120% AMI). Refer to Table 3 for 2025 Alameda County AMI limits.

Albany city staff explained that their decision to add a moderate-income tier to their income-qualified rebate was intended to address high rent/mortgage burden among City of Albany residents, an economic landscape that mirrors Piedmont's. City staff reported that within a year and a half of adding a moderate-income-qualified rebate tier, rebates allocated to moderate-income residents accounted for nearly a quarter of rebate distributions, indicating success in capturing the unique financial constraints of City of Albany residents.

5.2.2. City of Palo Alto

The City of Palo Alto offers one income-qualified rebate tier, at or below 80% AMI, and the increased income-qualified rebate is only available in three appliance categories.

Applicants can meet eligibility requirements through:

- Enrollment in the City of Palo Alto's Utilities Rate Assistance Program,
- Tenancy in affordable housing with income limits of 80% AMI, or
- Enrollment in programs such as CalFresh, MediCal, SSI, WIC and more.

City of Palo Alto Staff reported that around 3 rebates, out of more than 100 distributed in total, have been income-eligible, though they do also have a separate program that offers HPWHs for no cost for income-qualified residents who meet one of the requirements outlined above.

5.3. Application Process and Time-bound Eligibility

5.3.1. City of Albany

In Albany, applicants must apply for rebates within four months of receiving a permit. If staff determine that the project(s) meet rebate program requirements, rebate funds are held for three months while the project is completed and passes final inspection.

Applicants can receive two one-month extensions for a total of up to five months. Once the applicant passes their final inspection and sends their W9, their rebate check is mailed to them. Additionally, applicants applying for electrical panel upgrades completed prior to installing heat pump equipment must have had the panel finalized within six months of receiving heat pump permit.

City of Albany staff highly recommend implementing a reservation system (where rebates funds are earmarked prior to beginning work on the project and sent to applicants upon project completion) to reduce financial concerns and confusion about whether applicants will be eligible to receive a rebate.

5.3.2. City of Palo Alto

Applicant submits a “rebate reservation application” prior to completing any work. Applications are reviewed by staff. Funds are confirmed and set aside if the rebate application is approved. Applicants then have 120 to install the equipment and then once their permit is finalized, applicants have 90 days to complete their rebate application.

6. Solar Panel Projects

6.1. Solar Panel Installations in the City of Piedmont

Since 2020, 630 solar permits¹³ have been finalized in the City of Piedmont¹⁴. Figure 14 shows that between 2020 and 2023, 465 permits were finalized, with the number of permits decreasing as of 2022.

6.2. Solar Panel Project Costs¹⁵ and Uptake

Solar projects finalized in 2025 cost an average of \$33,592. As shown in Figure 14, solar panel costs have been steadily increasing, especially over the past four years, hitting an all-time high in 2024 before decreasing just slightly in 2025. Moreover, as project costs have increased, the number of finalized permits has decreased, demonstrating an inverse relationship.

As shown in Table 7, the most expensive project type is combined solar and battery¹⁶ projects, while separate solar and battery projects cost nearly the same amount. Though it is significantly more expensive to pursue a combined project as opposed to solar panels alone, it is also significantly more cost effective to combine the two projects as opposed to installing solar panels and later installing an energy storage system.

While combined solar and battery projects historically represented the lowest percentage of project type, Table 8 shows that, in 2025, combined solar and battery projects increased

¹³ “Solar Projects” includes a wide variety of solar project types – some may be solar panel installations, panel or battery replacements, solar EV chargers, battery installations, or other smaller-scale projects.

¹⁴ As of November 11, 2025.

¹⁵ Project cost data is derived from self-reported estimates provided by contractors at the time of permit application submission.

¹⁶ “Battery Projects” refer to installing energy storage systems used to store solar energy for later use.

significantly, representing 65% of finalized permits related to solar. This could potentially be attributed to changes in California's Net Energy Metering (NEM) 3.0, which makes it more financially advantageous for residents with solar panels to store their excess power and sell it back to the grid at peak hours.

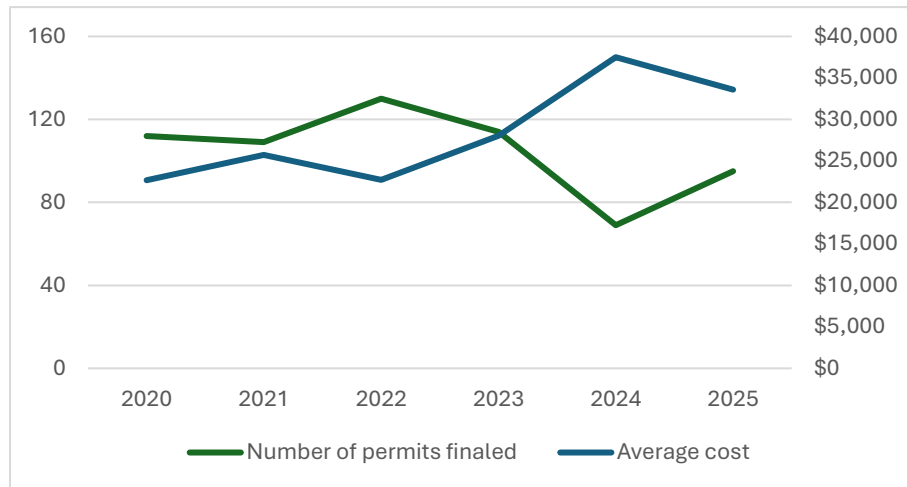


Figure 14. Solar Panel Project Cost vs. Permits Finaled Over Time

Table 7. Average Solar Project Cost by Project Type

Project Type	Total Number of Projects	Average Cost
Solar panels only	435 (69%)	\$25,704
Battery only	105 (17%)	\$26,053
Solar + Battery	90 (14%)	\$38,214

Table 8. Solar Project Type by Year

	Solar panels only	Battery only	Solar + Battery
2020	88	19	5
2021	85	22	2
2022	103	20	7
2023	107	5	3
2024	31	27	11
2025	21	12	62

6.3. Solar Permitting Fees

Prior to January 1, 2026, solar permitting fees were \$396 for Residential and Symbium¹⁷ permits alike. However, under the newly adopted Fee Schedule, effective January 1, 2026, Residential solar permits will be valued at \$559 (a 41% increase), while Symbium permits will be valued at \$343.

The newly adopted fee schedule follows a 100% cost recovery model for solar permits as set forth in the City staff report concerning the consideration of an updated fee schedule and cost recovery policy for the Planning and Building Department¹⁸. The staff report adopted by Council directed staff to pursue an increased budget for the rebate program to include solar rebates in lieu of reducing permitting fees to incentivize solar uptake in Piedmont.

6.4. Federal Tax Incentives

The Federal Tax Incentive for solar installation proved very effective at encouraging uptake. However, these incentives ended with the conclusion of 2025. The incentive was that United States residents who own a home on which they install solar panels would receive a tax credit that equals 30% of the total cost to install solar panels.

6.5. City-led Solar Rebate Comparables

Six cities across the United States were found to offer local rebates for solar projects.

Rebate Structures Observed:

- Wattage-based rebate (e.g. \$0.25/watt with a \$3,000 cap)
- Project-cost-based rebate (e.g. 20% of total project cost with a minimum rebate of \$500 and maximum rebate of \$5,000)
- Flat rebate (e.g. \$1,500 for systems that are 5kw or greater and are 17.5% or more efficient)

¹⁷ Symbium is the City of Piedmont's instant solar permitting platform.

¹⁸ <https://piedmont.ca.gov/common/pages/GetFile.ashx?key=czpAAczE>