



CITY OF ALBANY CITY COUNCIL AGENDA STAFF REPORT

Agenda Date: February 5, 2024
Reviewed by: NA

SUBJECT: Heat Pump Rebate Program

REPORT BY: Michelle Plouse, Community Development Analyst

SUMMARY

The action before the Council is consideration of providing additional funding for the heat pump rebate program and increasing rebate amounts for low- and moderate-income households.

STAFF RECOMMENDATION

That the Council approve to amend the heat pump HVAC (heating, ventilation, and air conditioning) rebate program budget to provide an additional \$75,000 in funding and increase the rebate amounts for ducted heat pumps to \$3,000 for moderate-income households and \$6,000 for low-income households.

CLIMATE ACTION COMMITTEE RECOMMENDATION

Amend the heat pump HVAC (heating, ventilation, and air conditioning) rebate program budget to provide an additional \$75,000 in funding and increase the rebate amounts for ducted heat pumps to \$3,000 for moderate-income households and \$6,000 for low-income households.

BACKGROUND

The City of Albany Climate Action and Adaptation Plan (CAAP) established the objective of 70% greenhouse gas (GHG) emissions reductions by 2035, and net zero emissions by 2045. The CAAP focuses on reducing emissions from the City's largest emissions sectors, including new and existing buildings. An estimated 40% of GHG emissions in Albany result from the building sector, specifically from the use of natural gas appliances. The main strategy for decarbonization of the building sector is electrifying new and existing buildings and increasing carbon-free content of electricity. HVAC systems are a priority for electrification as they often use more natural gas than other home appliances. Heat pump HVACs are all-electric, incredibly efficient alternatives to traditional gas furnaces.

In 2020, voters approved Measure DD, which raised utility taxes for water, electricity, and natural gas, and included language stating that "the City Council will endeavor to expend at least one-third of the additional revenue..." to fund action items in the CAAP and additional

environmental sustainability programs as may be authorized by the City Council. Revenue raised by Measure DD is considered general fund revenue, however certain projects, including the rebate program, have been described as “funded by Measure DD” to assist in keeping track of the Council’s goal to spend one-third of the increased revenue on CAAP actions.

On October 20, 2021, staff presented a proposal for a heat pump heating, ventilation, and air-conditioning (HVAC) rebate program to the Climate Action Committee. The Committee unanimously recommended that it be adopted by the City Council. On March 7, 2022, the program was approved by the Council with a budget of \$40,000. The program launched on June 1, 2022. On February 6, 2023, Staff requested additional funds for the program, as the initial budget had run out. Council approved increasing the program budget by an additional \$65,000 and made a few changes to the funding levels, including adding an increased amount for moderate-income households. The details of the current program are described below.

DISCUSSION

Program Details

The program offers rebates in the following amounts:

	Standard Rebate	Moderate-Income	Low-Income
Ducted Heat Pump	\$1000	\$2000	\$3000
Ductless Heat Pump	\$500	\$1000	\$1500
Electric Panel Upgrade (with heat pump)	\$500	\$1000	\$2000

In order to be eligible, heat pump installations must be in the City of Albany, receive a building permit, and apply for the rebate within 4 months of receiving a permit. A low-income household is defined as below 80% of the median income for the county or metro area. Moderate-income households are between 80% and 120% of the area median income (AMI). The exact income amounts per household are listed on the program website.

The program also offers a \$750 signing bonus to contractors who register with the Bay Area Regional Energy Network (BayREN). BayREN encourages licensed contractors in the region to register as BayREN contractors and receive energy efficiency training, and in return, BayREN lists the contractors in a “Find a Contractor” database on their website and conducts marketing and outreach for contractors.

After receiving a permit, residents or contractors can fill out a simple online application for the City’s heat pump rebate. Once staff confirms eligibility, the rebate funds are reserved for three months while the project is completed. The applicant must send proof of a complete building inspection, at which point staff will mail the rebate funds to the homeowner.

Results

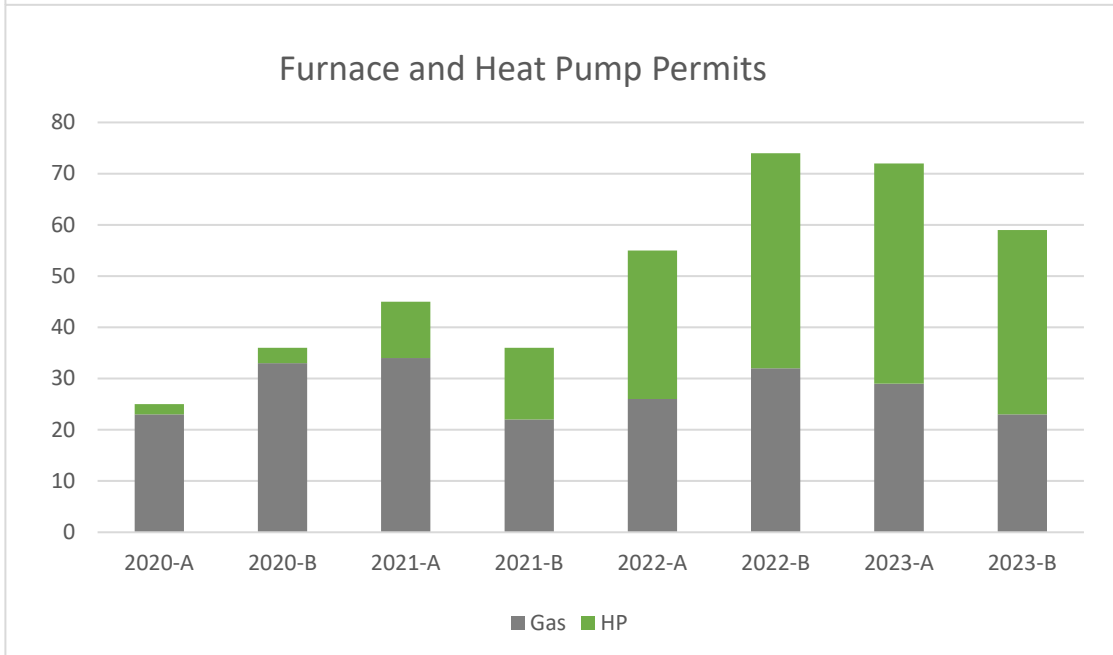
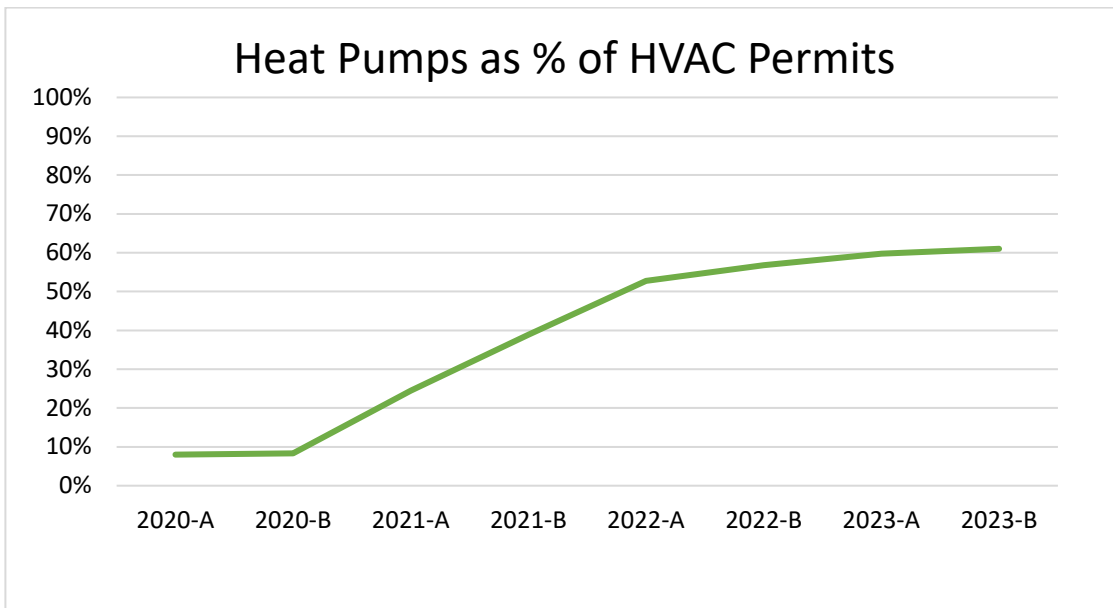
As of January 26th, 2024, 15% (\$15,750) of the program funds are remaining. Of the original \$105,000 approved by Council in 2022 and 2023, \$76,500 have been paid to homeowners who have successfully installed heat pumps, and \$12,750 is reserved for planned installations. A total of 65 projects have been funded with an average rebate amount of \$1,375. Forty of those

rebates were funded after the change in funding levels in February 2023. Rebates have ranged from \$500 to \$5000. Since the change in rebate amounts, two applicants received the low-income rebate and four received the moderate-income rebate. One contractor received a BayREN signing bonus.

ANALYSIS

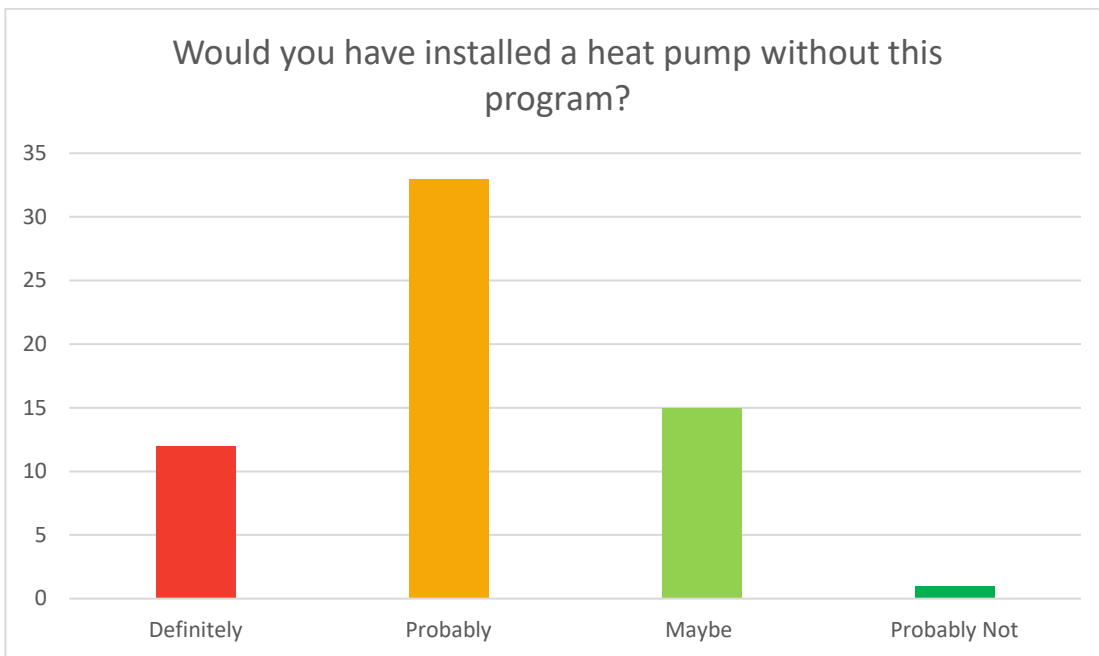
Impact

Overall, the program has been effective at increasing the installation of heat pumps in the City. The number of heat pumps and heat pumps as a percentage of HVAC have both increased consistently. Last year, heat pumps made up 60% of all HVAC permits.



It's difficult to determine exactly what impact the rebate itself has made with such a small sample size and without a non-rebate scenario to compare to. However, we have seen clear growth in the raw number and percentage of heat pump installations. Staff have seen a slowing in growth recently and expects this to continue in coming months as many homeowners put off their installations until the launch of the federal incentives later this year.

We also have data on the program impact from the participants themselves. Over a third of the participants said that they only knew a little bit about heat pumps before hearing about the City's rebate program. The application asks whether they would have installed a heat pump without the City's program, and the responses are shown in the graph below.



This data demonstrates that the program has been effective at making Albany residents more aware of heat pumps and in convincing those who are on the fence to go all-electric for heating. It has built on the natural market growth that can be seen over the last few years and increased the momentum of and attention to electrification.

Rebate Amounts

As described above, it does seem that the rebate amounts are generally effective. However, there has been relatively low uptake among low and moderate-income households, suggesting that it may be valuable to raise those rebate amounts. Of the 40 rebates since our funding shift in February, only 2 were low-income and 4 were moderate-income.

The average cost of a heat pump is \$17,000 and the average cost of a gas furnace is \$8,000, leaving an incremental cost of \$9,000. There other rebate programs that help cover some of this cost. The Technology and Equipment for Clean Heating (TECH) program offers \$1,000 for a heat pump and there is now a federal tax credit of \$2,000. BayREN offers \$400 for ductless heat pumps or ducted heat pumps when replacing an AC, however these circumstances are both rare in Albany so few are eligible for this rebate.

For an average Albany home then, there is \$4,000 available in rebates for a heat pump; \$5,000 for moderate-income households and \$6,000 for low-income households. Based on the low uptake among these groups, it seems that the incremental cost is still too high for many low- and moderate-income households to consider switching to a heat pump. An HVAC replacement is already somewhat expensive, so several thousand dollars extra may be too much to spend. For this reason, staff recommend increasing the rebate amounts for a ducted heat pump to \$3,000 for moderate-income households and \$6,000 for low-income households. This increase, combined with more targeted outreach, may help improve the equity outcomes and reach of this program. For low-income households, it would create price parity between a new furnace and heat pump.

Staff has found that on average, ductless heat pumps cost the same or possibly slightly less than a ductless gas furnace and ductless HVACs are uncommon in Albany, so increasing that amount would be less impactful.

Recommended Funding

Staff recommends that the Council approve an additional \$75,000 of funding for the program. Federal High Efficiency Electric Home Rebate Act (HEEHRA) rebates are expected to launch mid-2024 and will change the incentive landscape dramatically. That program will cover 50% of project costs for moderate-income households (defined as up to 150% AMI) and 100% of project costs for low-income households up to \$8,000 for a heat pump and \$4,000 for panel upgrades. This amount would effectively eliminate the incremental cost of a heat pump in most cases. When this program launches, Albany's \$1,000 rebate will be fairly minimal in comparison and will likely be much less impactful on homeowner's decision making. Staff expect that it may be strategic to end the program at that time and focus funds on other electrification strategies. However, staff believes that keeping the program running until that time will help maintain the momentum towards electrification and stabilize the market in this period of shifting incentives.

Staff estimates that an additional \$75,000 would last until the summer or fall of 2024. At this point we expect the HEEHRA program to have launched or to be imminent, and the Council can consider whether to extend, change, or end the program at that time.

SUSTAINABILITY CONSIDERATIONS

This program has reduced the number of new gas furnaces installed in the City, and thereby reduced carbon emissions. Over its lifespan, each heat pump HVAC installed will reduce CO² emissions by approximately 17 metric tons.

SOCIAL EQUITY AND INCLUSIVITY CONSIDERATIONS

This program makes heat pump HVACs and panel upgrades accessible to more residents. The increased rebate amounts for moderate-income and low-income households will help make access to electrification more equitable.

CITY COUNCIL STRATEGIC PLAN INITIATIVES

The electrification rebate program advances City Council Strategic Plan Initiative Goal 1, Objective 1 to “Advance Climate Action and Adaptation.”

FINANCIAL CONSIDERATIONS

No additional appropriation is necessary for the recommended additional funding of \$75,000. The program expenditures are within the approved Community Development Department budget. The program expenditures will be tracked for the purposes of reporting climate action projects utilizing Measure DD revenue.

Measure DD raised \$515,000 of new general fund revenue in fiscal year 21/22 and \$810,000 in fiscal year 22/23. The Measure states that Council will endeavor to spend one-third of the revenue, equaling \$440,000 in the past two years, on climate action projects. So far, the Council has approved three such projects: the Heat Pump Rebate Program, the Multifamily Electric Vehicle Charging Pilot Program and funding to remove the fee for street tree installations. A summary of Council action regarding Measure DD funds to date is provided as follows:

Project	Date of Council Action	Expense Budget
Street Tree Planting	Oct 18, 2021	\$30,000
EV Charging Pilot	Oct 18, 2021	\$50,000
Heat Pump Rebate Program	March 6, 2022	\$40,000
Heat Pump Rebate Program additional funding	February 6, 2023	\$65,000
		Total: \$185,000

If the additional funding is approved, the street tree, EV pilot, and rebate programs would total \$260,000.