

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: MARCH 10, 2025

<u>SUBJECT</u>: INCREASE RESIDENTIAL HEAT PUMP REBATE PROGRAM ANNUAL BUDGET TO \$750,000

ISSUE:

Consider recommending that the City Council approve increasing the residential Heat Pump Rebate Program annual budget to \$750,000.

RECOMMENDATION:

The Board of Public Utilities recommend that the City Council approve:

- 1. Increasing the heat pump program annual budget to \$750,000; and
- 2. Maintaining the current rebate of amount of \$750/ton for the remainder of Fiscal Year 2024/25 and reducing it to \$600/ton for future years.

LEGISLATIVE HISTORY:

Assembly Bill (AB) 1890 (Brulte, 1996) requires that 2.85% of electric revenue be utilized to fund public benefits programming and that it must be used in at least one of four areas: demand side management (energy efficiency), renewable energy, low-income assistance, research, development, and demonstration.

Senate Bill (SB) 1037 (Kehoe, 2005) sets ambitious energy conservation policies and goals requiring publicly owned utilities (POU' s) to report annually kilowatt hour (kWh) savings to the California Energy Commission (CEC) and to its customers.

SB 350 (De Leon, 2015) establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by January 1, 2030. The bill requires local POU's to establish annual targets for energy efficiency savings and demand reduction consistent with this goal.

BACKGROUND:

Riverside Public Utilities (RPU) is required by state law to establish energy efficiency goals and administer energy efficiency programs funded through the state-mandated Public Benefits

Heat Pump Program – Page 2

Charge. On December 7,1999, the City Council approved a dual Air Conditioning/Heat Pump Rebate Program offering electric customers an incentive to replace older, inefficient central electric air conditioners or heat pumps with new high-efficiency units. On July 1, 2010, the Air Conditioning/ Heat Pump Rebate Program guidelines were revised and changed from a 10% of project cost rebate to a flat rebate, which was based on the tonnage and the unit's Seasonal Energy Efficiency Ratio (SEER) rating. SEER is set by the U.S. Department of Energy, the higher the SEER rating, the more energy efficient the unit.

The original program was established as a dual program with the same incentives for air conditioning and heat pump units, however, staff were unable to determine which part of the program was utilizing the rebates, making the program difficult to optimize. To improve the opportunity to incentivize customers, staff proposed separating the air conditioning from the heat pump program to increase focus on the uptake of more efficient heat pump units and implement a more effective means to measure the benefits from and performance of each of the programs.

On June 25, 2024, the City Council approved the separate heat pump program specifically for electric heat pump air conditioners. The rebate amount was set at a fixed \$750 per ton, with an annual program budget of \$375,000. The Air Conditioning and Heat Pump programs both remain available to customers.

DISCUSSION:

Since the launch of the new Heat Pump Program, participation has been steady and has surpassed what staff had anticipated. The program is experiencing almost double the participation seen in the standard air conditioning rebate program. The table below compares both program's participation numbers since the Heat Pump Program was implemented in August 2024. More customers are choosing to purchase and apply for rebates for all-electric, more efficient heat pumps.

Table 1: Residential	Participation in	the A/C and	Heat Pump	Programs for	Calendar `	Year
2024						

	Heat Pump	Gas/Electric A/C
August	22	23
September	17	7
October	21	14
November	35	7
December	29	14
TOTAL	124	65

Program Status

At present, the program's success has meant that all funds budgeted for the first year have been exhausted and the program is currently paused until additional funding can be allocated. Staff have reviewed the current participation rates and project that with summer approaching, and with customers being more focused on cooling their homes efficiently, demand for this program will likely increase. Staff recommend increasing the annual program funding to \$750,000 to meet

program demand.

Program Benefit – Recommended Changes

Additionally, staff recommends changing the program's rebate benefit. The program initially established the rebate at \$750/ton to incentivize early adopters of the technology, which has proven successful. So that the rebate is enhanced to early adopters but can be made available to more customers as the program matures, staff recommend maintaining the \$750/ton through the remaining fiscal year and reducing the rebate to \$600/ton beginning fiscal year 2025/26.

Program cost effectiveness

When comparing a 5-ton, 16 SEER heat pump, at the current rebate of \$750 per ton, the heat pump is slightly more cost effective than the same 16 SEER air conditioner for annual kWh savings. As the Heat Pump program incentive level reduces to \$600/ton increased cost effectiveness of the program will be realized and will allow more customers to participate in the program each year. The table below highlights each program savings cost and the costs under the two rebate structures.

	Heat Pump \$750/ton	Heat Pump \$600/ton	Gas/Electric A/C
First year kWh savings cost	\$0.96/kWh	\$0.77/kWh	\$1.04/kWh
Lifetime kWh savings cost	\$0.064/kWh	\$0.05/kWh	\$0.069/kWh

Table 2: Cost per Kilowatt-hour for the Heat Pump and Gas/Electric A/C Rebate Programs

STRATEGIC PLAN ALIGNMENT:

The Heat Pump Program aligns with Strategic Priority 4, Environmental Stewardship. Program deliverables will assist the City in providing proactive and equitable climate solutions based in science to ensure clean air and a vibrant natural world.

- 1. **Community Trust** This program supports RPU's customers by increasing the number of energy efficient heat pumps installed, which will in turn benefit the local community by decreasing energy use and increasing sustainability.
- 2. **Equity** The Heat Pump Program is available to all RPU electric customers in the service territory.
- 3. **Fiscal Responsibility** The cost of the program, coupled with the achieved energy savings reflects a fiscally prudent approach to meeting energy efficiency goals.
- 4. **Innovation** Modern heat pump technology is very efficient, and the program will support customers benefit from current heating and cooling technology in homes.
- 5. Sustainability & Resiliency The Heat Pump Program encourages a reduction in energy required for cooling and heating and will help to reduce greenhouse gas emissions compared with other options.

FISCAL IMPACT:

The total annual fiscal impact to augment this program is \$375,000 for a total annual impact of \$750,000. Upon Council approval, a budget adjustment of \$375,000 will be made from the Electric Public Benefits Program Unprogrammed Funds (6020100-453001) to the Public Utilities Residential Heat Pump (6020100-456108).

Prepared by:	Tracy Sato, Utilities Assistant General Manager/Strategic Initiatives
Approved by:	David A. Garcia, Utilities General Manager
Certified as to	
availability of funds:	Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by:	Rafael Guzman, Assistant City Manager
Approved as to form:	Jack Lui, Interim City Attorney

Attachment: Presentation