

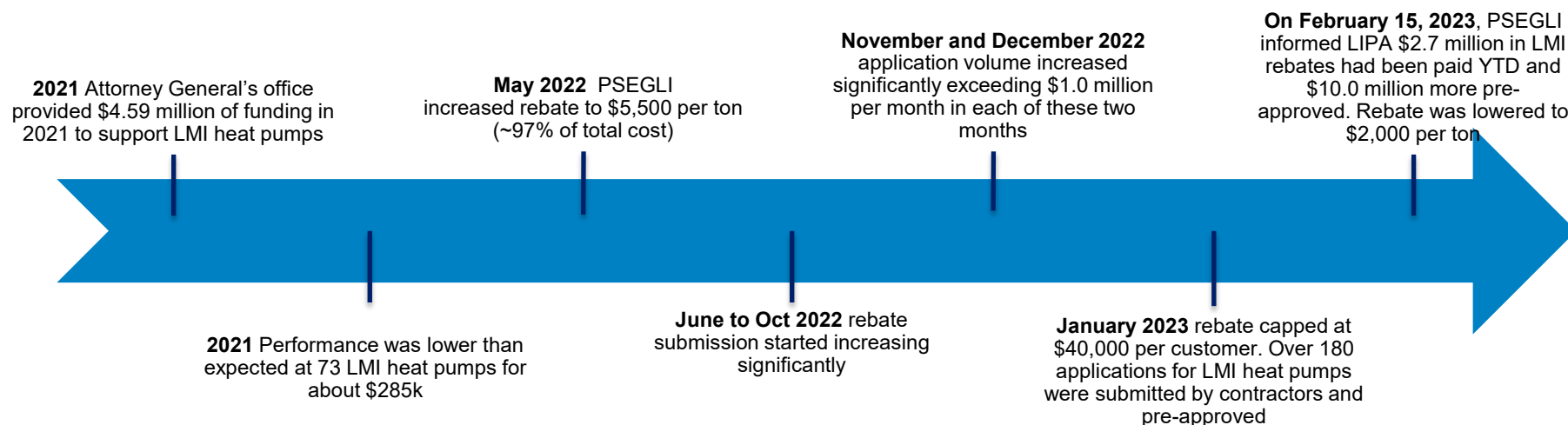
LOW-TO MODERATE-INCOME HEAT PUMP PROGRAM UPDATE

March 29, 2023

CURRENT LMI HEAT PUMP PROGRAM

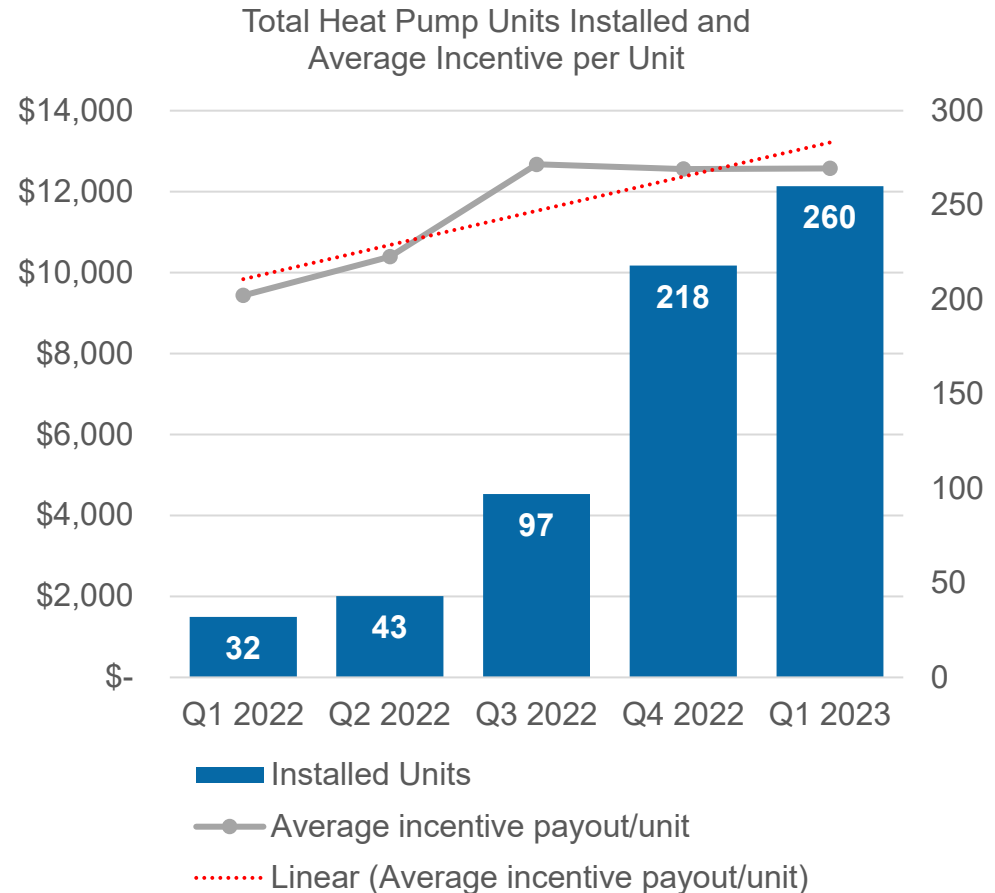
Rebate Program History

- LIPA is the only utility in New York that offers an enhanced heat pump rebate for low-and moderate-income (LMI) customers
- On February 15, 2023, PSEGLI lowered the rebates to \$2,000/ton without consulting LIPA in response to a forecasted \$5 million gap between the PSEGLI-requested 2023 program budget and pre-approval commitments
 - Non-LMI customers receive \$1,000/ton
- PSEGLI is honoring the \$5,500/ton rebates for customers who submitted applications by February 14
- Separately, the Inflation Reduction Act recently enacted a federal heat pump tax credit of up to \$2,000, with an LMI tax credit of up to \$8,000



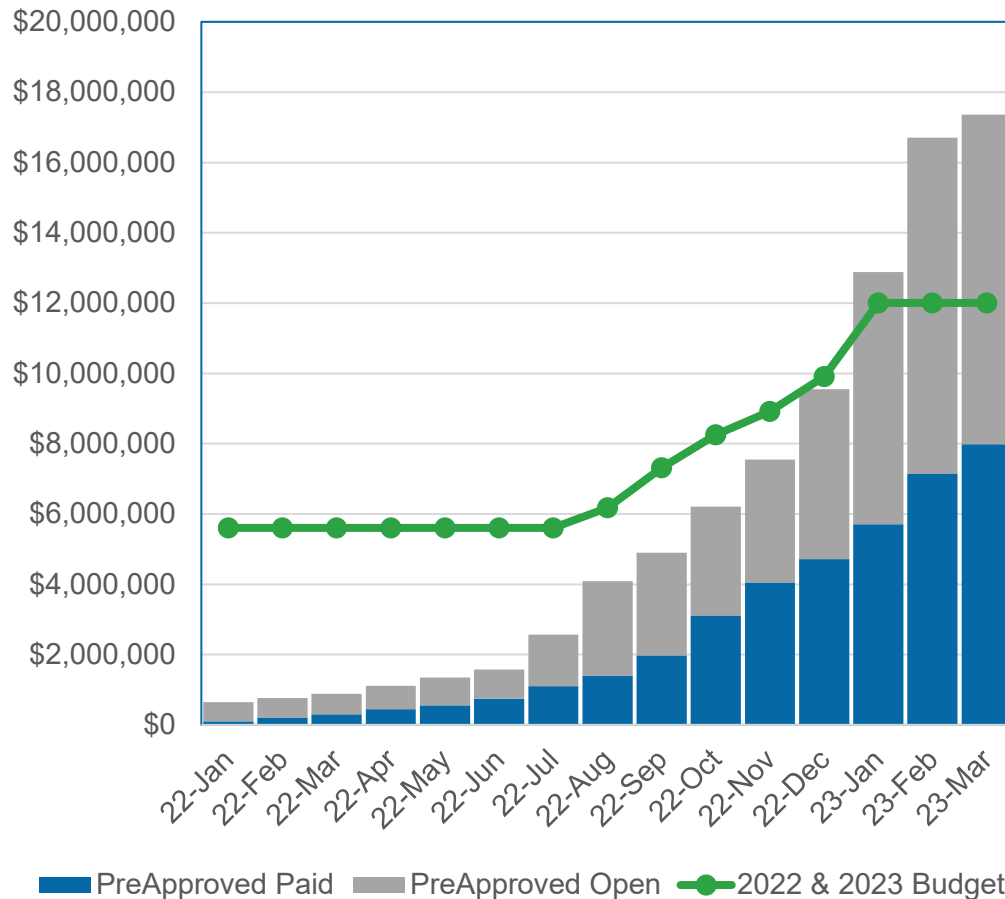
KEY STATISTICS ON LMI HEAT PUMP PERFORMANCE

- Con Edison suspended heat pump program and PSE&G increased rebate to \$5,500 per ton in May 2022
- From May 2022, program volume increased 2x in June, 3x in July, 4x in September, and 5.5x to 9x in Oct-Dec
- The average household rebate increased from \$12,500 in Q1 2022 to nearly \$29,000 by Q1 2023 due to:
 - Average incentive per installed unit increased from about \$9,500 to \$12,600
 - Average number of installed units increased from 1.5 to 2.5 units
- The average total project cost for top contractors was \$401/MMBTU, the median cost was \$393/MMBTU. New outlier contractors averaged \$500-600/MMBTU
- One new contractor accounting for \$2.8 million in projects had the highest average cost



LMI HEAT PUMP BUDGET TO ACTUAL

Cumulative Total Funding Committed and Paid Out to Heat Pump Applications in 2022 and 2023



- The 2022 LMI heat pump budget was fully committed by October 2022 with about \$1.2 million in 2022 program activity lagging into 2023
- PSEGLI manages the energy efficiency budget in total and utilized \$2.5 million in other energy efficiency funds for the 2022 overspend in the LMI heat pump program
- LIPA provided an additional \$3.9 million for the 2023 LMI heat pump program
- 2023 LMI heat pump budget was fully committed by January 2023 at the new higher program activity levels
- Existing pre-approvals as of March is \$5 million more than the 2023 budget

ROOT CAUSES ANALYSIS

Root cause impacting current state:

Generous incentives and inadequate rebate design guiding principles

- Generous rebates without capacity caps risk some contractors oversizing systems as LIPA funds most of the cost
- Sizing requirements have subjectivity and require additional assessment for effective management
- Incentives were applied without consideration to system type—a focus on central systems would provide more value to the program
- Rebate incentive and cap needs a more defined system for changes and planned impact assessment forecast

Inadequate evaluation of Con Edison program suspension reasons and impact

- Four contractors that developed a lot of projects with higher cost came into Long Island program during Q4 2022
- Con Edison program ending because of budget impact and sizing issue caused contractors to migrate to LIPA territory
- While the increase is an overall positive, the issue is controlling project structure and cost-effectiveness
- Historical unspent funds and budget management practice

Lagging proactive monitoring and control of program

- Monitoring mechanisms were not robust enough to effectively identify overspending risk in a more-timely basis
- Better tracking and reporting of drivers and forecasts to LIPA are required

Other factors assessed but deemed as not impacting current state:

- Increases in oil prices
- Addition of the Inflation Reduction Act tax credit

SUGGESTED ACTIONS AND NEXT STEPS

Overall assessment:

- A sustainable long-term approach to increasing LMI heat pump project volume and controlling for oversizing is needed
- Leading indicators around application increase, contractor increases, increasing cost per project, and the Con Edison heat pump program pause should have led to earlier detection and management of the problem
- The February 2023 LMI heat pump rebate of \$2,000/per ton puts PSEGLI's rebate at higher than all other NY utilities except for Con Edison which is comparable for a 4-ton system

Immediate Actions:

- PSEGLI to enhance transparency of monitoring and reporting of heat pump application flow to LIPA
- Work with PSEGLI to develop guiding principles for program design and budget
- Evaluate current project cap effectiveness to restrain contractor oversizing

Additional next steps for future program improvement:

- PSEGLI to work with LIPA to optimize the LMI and non-LMI incentives to manage cost and encourage heat pump installation to meet the state goals; evaluate sustainable program budget levels
- Establish daily real-time visibility into received applications, pre-approved application, and paid applications with drivers and trigger points to determine early when changes should be considered
- Enhance the quality review process of system sizing
- Expand program sizing requirements
 - Evaluate possible rebate capping mechanisms
 - Consider adding a requirement that weatherization be completed ahead of the Manual J and heat pump sizing approval, to improve system effectiveness
 - Require contractors to prioritize central heat pump systems as a means of avoiding oversizing
 - Audit larger projects as a priority for those who are oversizing units in order to remain a preferred partner

A photograph of a technician in a white shirt and safety glasses working on an outdoor air conditioning unit. The technician is using a pair of blue-handled pliers to work on the internal wiring of the unit. The unit is white and has a large circular fan grille on the left side. The background is a brick wall. The entire image is covered with a semi-transparent blue overlay.

DISCUSSION

Questions?