



Preparing Communities to Electrify at Scale

April 22, 2025

The Community Choice Energy Agency for 13 Santa Clara County communities

Mission: Reduce dependence on fossil fuels by providing carbon free, affordable, and reliable electricity and innovative programs for the SVCE community.



Campbell | Cupertino | Gilroy | Los Altos | Los Altos Hills



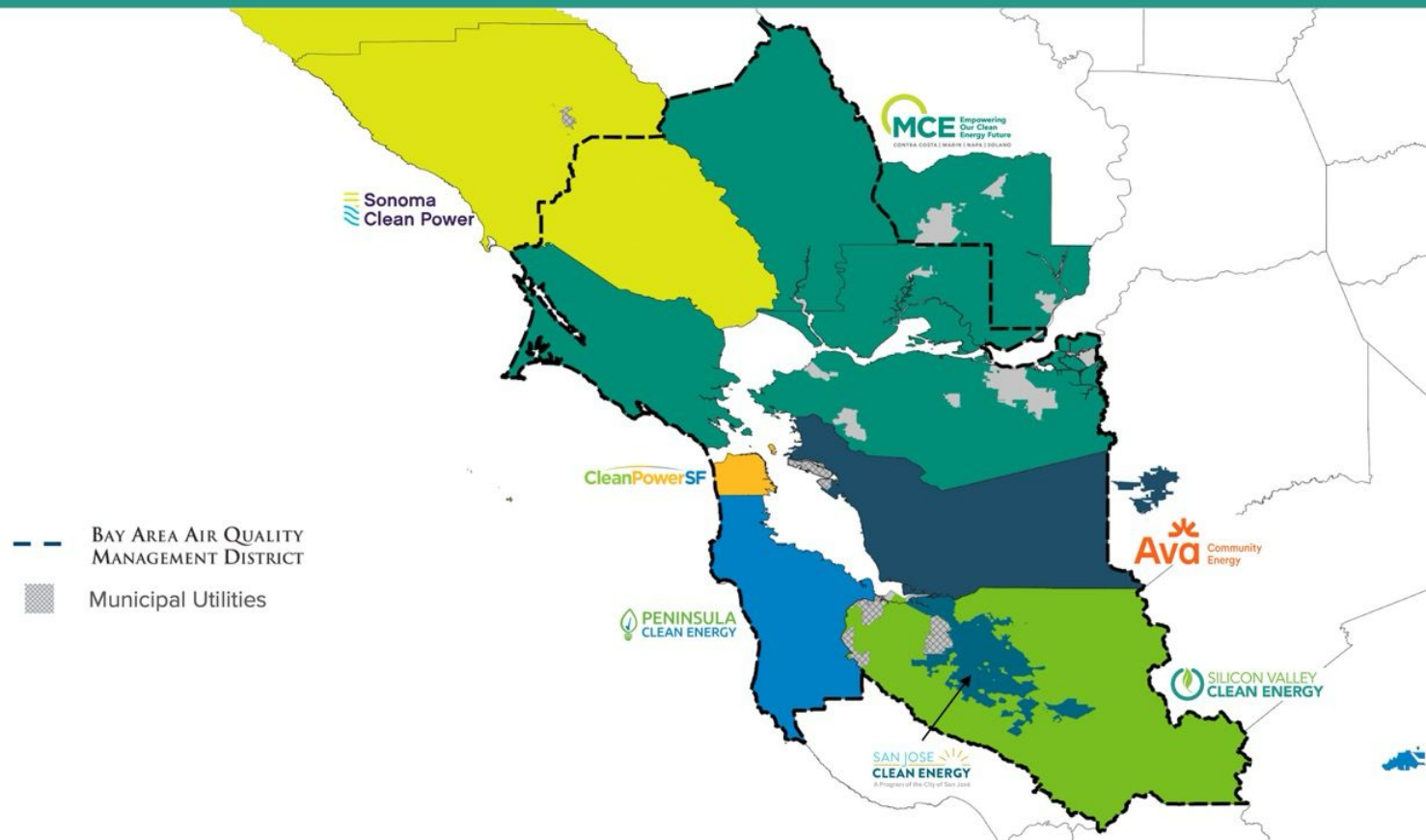
Los Gatos | Milpitas | Monte Sereno | Morgan Hill



Mountain View | Santa Clara County | Saratoga | Sunnyvale



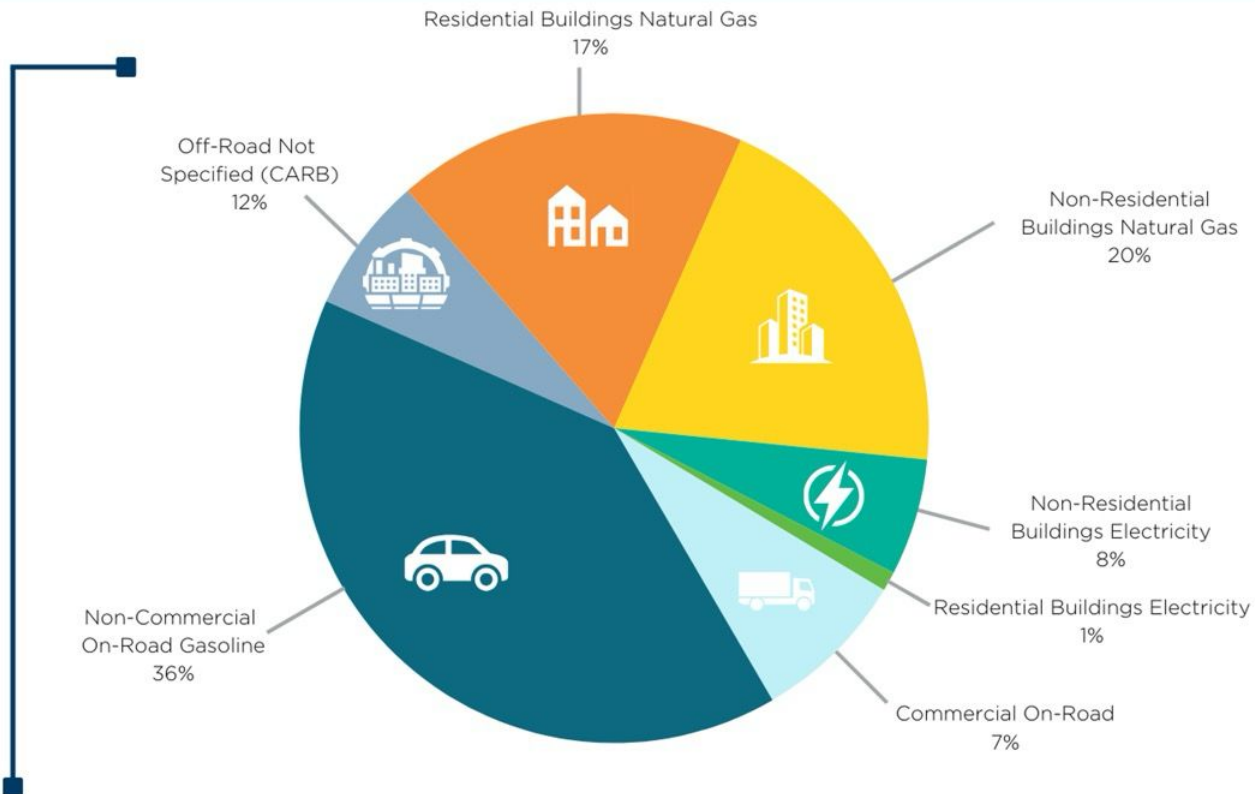
CCAs in BAAQMD Territory





Major Emission Sources

**2023 Total:
2.92 Million
MT CO₂e**





Creating Culture of Movement

1. Regulatory requirements create a clear market signal to ensure everyone starts marching in the same direction with the same timing.
2. Program providers and community organizations are developing and implementing solutions to barriers, but we have to scale.
3. Sensible incremental actions will, over time, lead to transformation with less disruption.



Clear Rules Catalyze Transformation



Contractors will train when it is clear jobs are coming.



Manufacturers will ramp up production to meet demand.



Homeowners will have a reason to pre-wire and prepare.

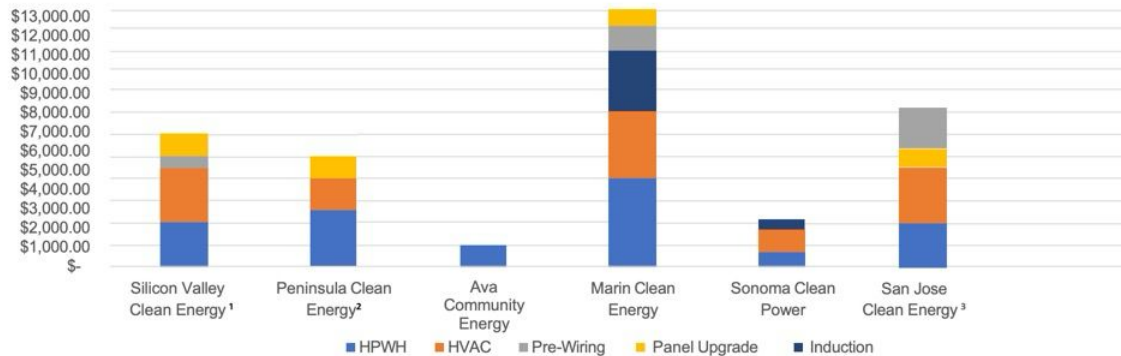


Entrepreneurs and investors will seize the opportunity to make better products.



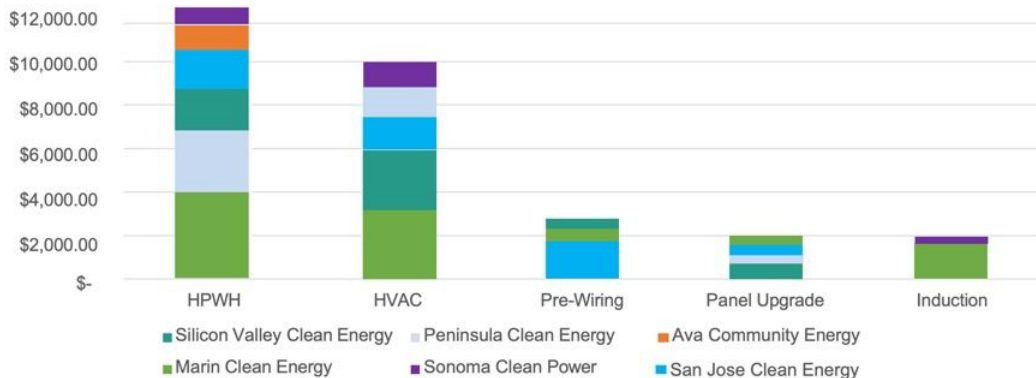
Bay Area CCAs Support Electrification

Single Family Home Residential Rebates



- 90% of CCAs have HP HVAC rebates
- Average of ~\$3,500 in rebates per home.

Single Family Home Rebates by Appliance



Program Approaches Tackle Most Pressing Issues

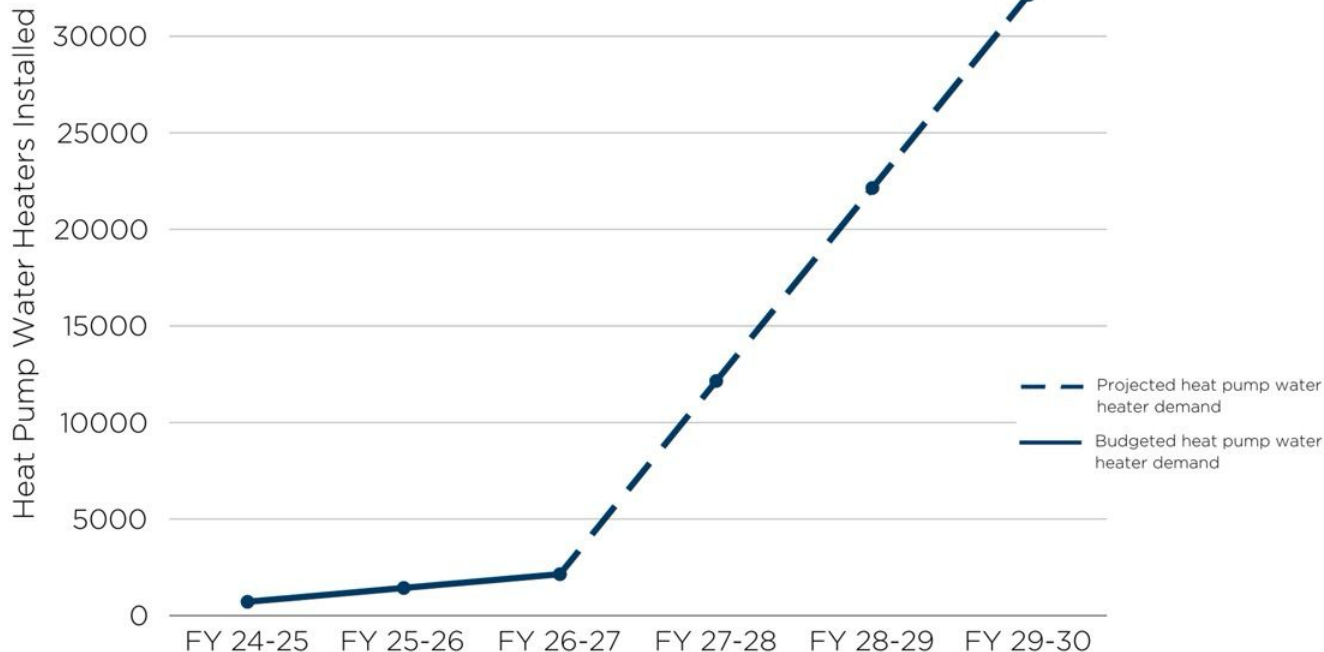


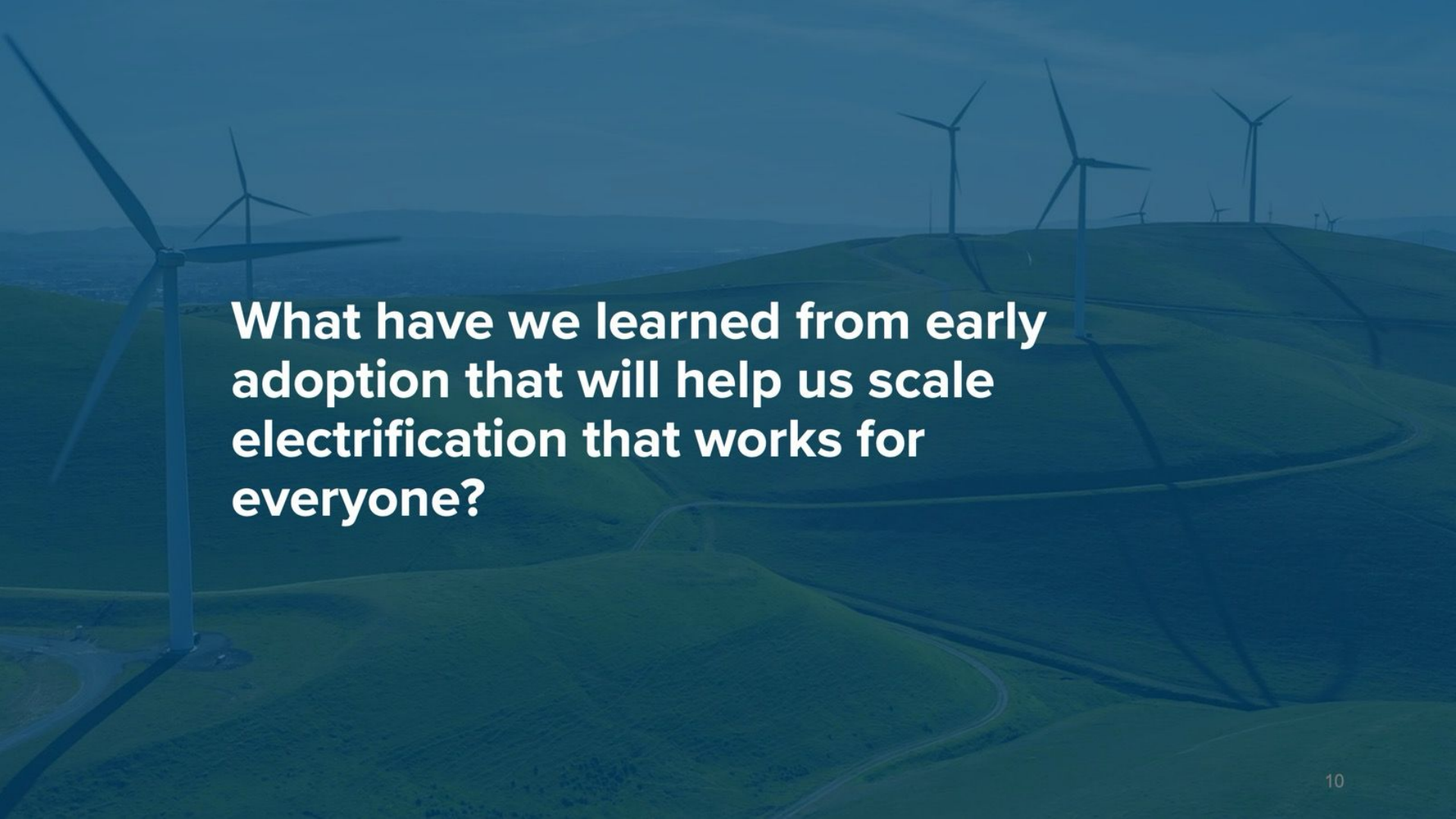
- **Peninsula Clean Energy – How can we finance electrification?**
 - 0% financing up to \$10,000
- **Silicon Valley Clean Energy – How can customers figure out what's what????**
 - Go Electric Advisor offers tailored, comprehensive home electrification guidance that can meet customers where they are.
- **Marin Clean Energy – What about emergency replacements?**
 - *Emergency Water Heater Loaner program*
\$1500 midstream program to incentivize contractors to switch from gas to HPWH replacements at time of burnout
- **Sonoma Clean Power – What about multifamily needs?**
 - Supports multifamily home electrification through \$500 per unit for any necessary in-unit electrical panel upgrades (\$750 for low-income units) and \$5,000 for central panel upgrades.



The Big Scaling Challenge

- SVCE provides rebates for ~300 HPWHs a year.
- In 2027 HPWH demand is expected to increase to ~10,000 annually due to Air District rules
- The majority of installs will be for regular people, without tolerance for cost or risk



A photograph of a wind farm on a rolling green hill. Several white wind turbines are visible, with one in the foreground on the left and others further up the hill. The sky is a clear, pale blue. The entire image has a semi-transparent dark blue overlay.

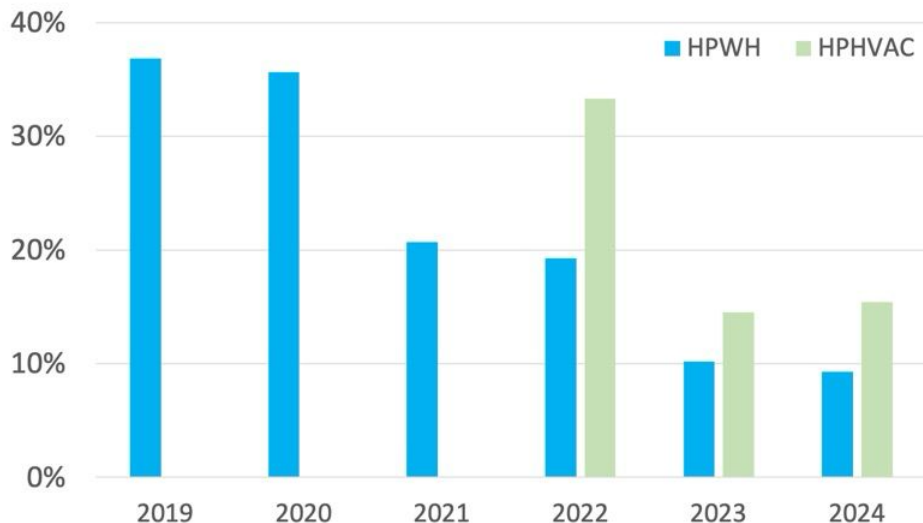
What have we learned from early adoption that will help us scale electrification that works for everyone?



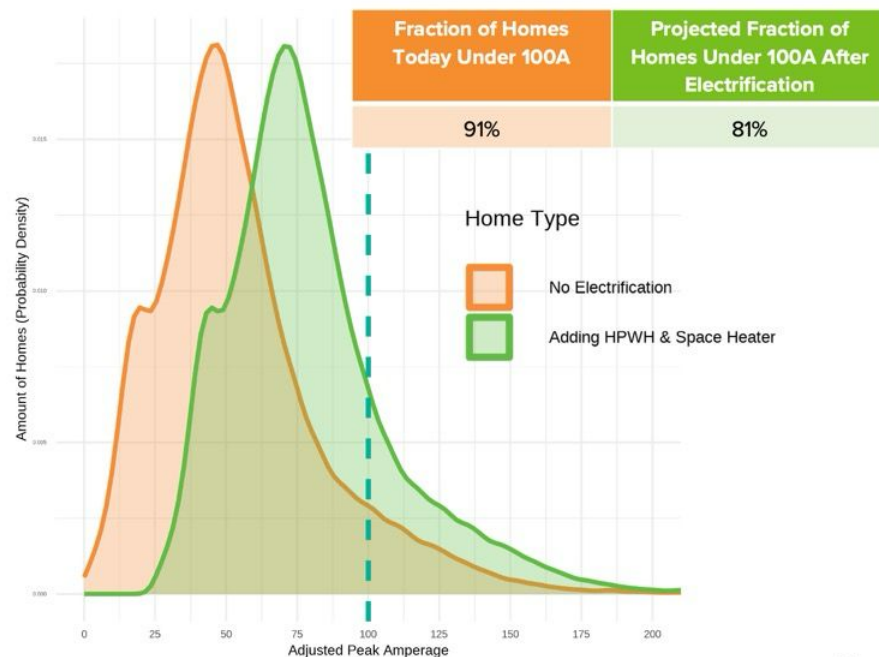
Avoiding Service Upgrades Could Save ~\$750M



SVCE Rebate Programs: % Panels Upsized



Distribution of Household Peak Energy Usage

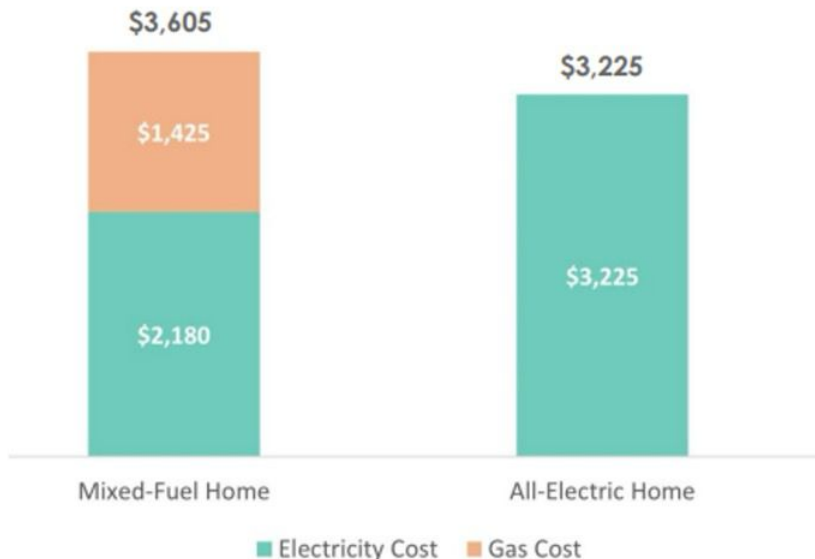




Electrifying Reduces Bills



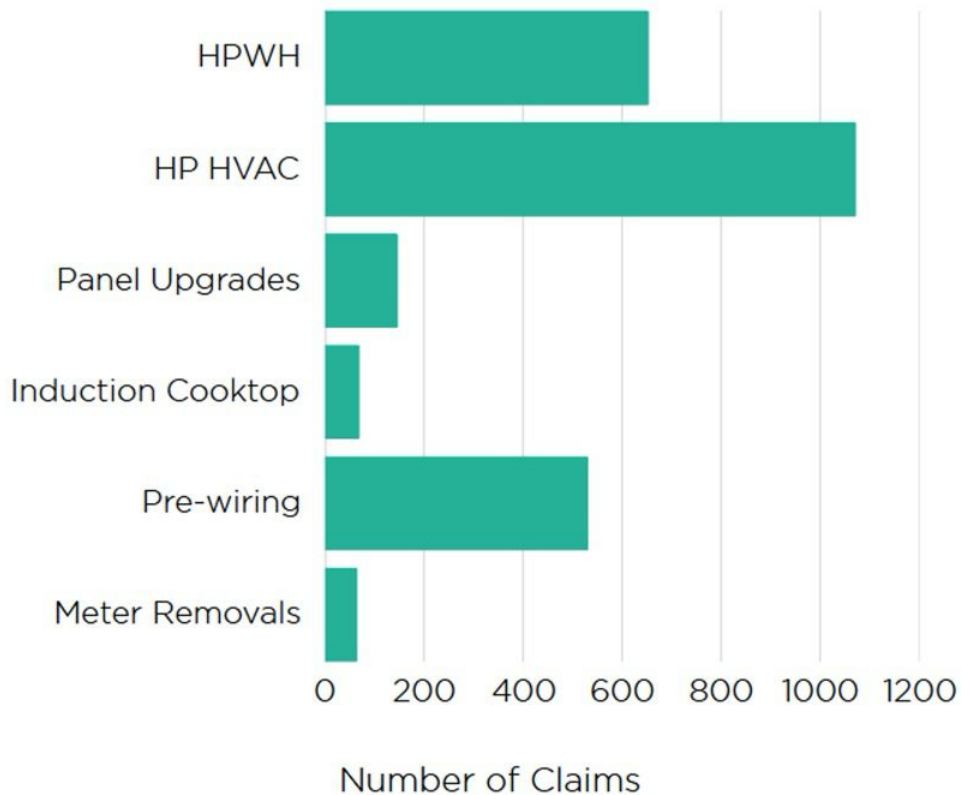
Annual Energy Costs of Mixed-Fuel vs.
All-Electric Single-Family Home




- Analysis shows \$32/month for all-electric – requires customers switch to an electrification-friendly rate
- Early HPWH analysis showed ~\$20/month savings – under very different rate structures
- Varies by customer



SVCE Rebate Trends



A photograph of a wind farm on a rolling green hill. Several white wind turbines are visible, with one in the foreground on the left and others receding into the distance. The sky is a clear, pale blue. The entire image is overlaid with a semi-transparent dark blue filter.

The most successful programs will incorporate program participants in designing the structure – we are starting to do this.



Multifamily Property Owners Feedback & Proposed Solutions

Feedback	How might SVCE address?
Staffing: Provide stipend to staff for their time and effort on projects, similar to the SOMAH program	<ul style="list-style-type: none"> • AEA to develop stipend model for SVCE review • \$5-10,000 per project
Vendors: <ul style="list-style-type: none"> • Prefer contractors that are women, minority, or disadvantaged businesses • Prefer working with vendors that they have pre-existing agreements with (e.g. Blink for EVSE) 	<ul style="list-style-type: none"> • AEA will be screening and prioritizing these contractors, especially in Santa Clara County • AEA and Ecology Action will determine what manufacturers or installers the program will include
Maintenance: <ul style="list-style-type: none"> • Provide training, manuals, and tutorial videos for on-site staff and tenants • Include O&M, especially for EVSE 	<ul style="list-style-type: none"> • AEA and Acterra will develop bilingual training resources • AEA and Ecology Action to consider O&M service contracts as a part of offering
Bill impacts: Need clear understanding of bill impacts and how this might affect property's utility allowances	<ul style="list-style-type: none"> • AEA to analyze Santa Clara County utility allowances and determine impact on projects • If policy change is needed, explore ways to coordinate with Santa Clara County Housing Authority



Tenants Feedback & Proposed Solutions

Feedback	How might SVCE address?
Familiarity with Electrification: most attendees were unfamiliar with building electrification	<ul style="list-style-type: none">SV BEST – Engage CBOs to provide education/awareness campaigns
Confusion in program specifics: Residents were unclear on how tenants would qualify for installation services	<ul style="list-style-type: none">SV BEST - Engage CBOs on how to best communicate services to their clientsHost another listening session to provide more program details (qualifications, enrollment, etc.)
Affordability: Concerns with increased rents, higher utility costs, and overall cost of electrification	<ul style="list-style-type: none">Explore bill protectionsInclude language in participation agreements
Displacement: Concerns with current displacement and electrification might exacerbate	<ul style="list-style-type: none">Explore rental protection language in agreements (just cause eviction, right to return, etc.)
Relocation costs: Participants highlighted the need to provide relocation costs, especially in homes that have major remediation	<ul style="list-style-type: none">Explore how tenant relocation can be avoided (construction staging, gift cards, etc.)Explore how to implement relocation costs with LegalExplore SVCE's contribution in program design
CBO's role: participants highlighted role for CBOs as a trusted agency to enroll participants	<ul style="list-style-type: none">SV BEST – Engage CBOs to canvass and perform other marketing activities



Key Learnings

- Property owners want education/training to learn how to maintain equipment
- Property owners want to know what bill impacts of electrification are
- Tenants are unfamiliar with what building electrification is and don't always care about program specifics
- Tenants are distrusting of “free” (no-cost) programs and of government programs; they trust CBOs
- Tenants are very concerned about high bills and increased rents (renoviction risk)



- To ensure future programs meet the needs and styles of diverse customer groups, SVCE is putting together a panel of CBO experts who will provide input on program design, implementation, and outreach.
- The RFP will go out later this spring



Direct Install Program Starting

- Two sites this fall – contractor selection this week!
- Whole building electrification – not just space and water heating
- Success will lead to expanding programs if resources continue to be available



Key Points

1. We have to do this.
2. We can do this.
3. Small steps are powerful and more equitable.