

Future-Proof Your Multifamily Property



May 19, 2026

11:00 am – 3:00 pm



Agenda



Time	Item
11:10 - 11:15 am	Welcoming and Agenda Review
11:15 - 11:25 am	Regulatory Overview
11:25 - 11:50 am	Electrification 101 & Steps to Electrification
11:50 - 12:05 pm	<i>Lunch</i>
12:05 - 1:05 pm	Case Studies Panel: Menlo Spark, BAMBE, Multifamily All-Electric Technology, WestLight Energy EV Ready
1:05 - 2:05 pm	Resources Panel: CalMTA & Gradient, BayREN, WestLight Energy, GoGreen Financing
2:05- 2:15 pm	Closing
2:15 - 3:00 pm	Networking



Our Speakers



Regulatory Overview & Electrification 101



Amy Dao
Bay Area Air District



Sheetal Chitnis
Association for Energy Affordability

Panel 1: Case Studies



Angela Evans
Menlo Spark



Preeti Tibrewala
BAMBE Participant
Prime Diamond Realty LLC



Shannon Allison & Brian Croshal
Alter Engineers



Melanie Jasper
Peninsula Clean Energy

Panel 2: Resources



Alex Wurzel
California Market



Samantha Lamos
Gradient



Natalia Guerrero
StopWaste



Melanie Jasper
Peninsula Clean Energy



Kevin Nakano
GoGreen Financing



Introduction to Electrification





Zero-NO_x Building Appliance Rules Overview

Futureproof Your Multifamily Building Workshop

Amy Dao

Advanced Projects Advisor

Bay Area Air District

May 19, 2026



Bay Area Air District

- Formed in 1955 by the California Legislature
- Regulates stationary sources of air pollution in the 9-county Bay Area
- Governed by Board of Directors
 - 24 locally elected representatives from each county



Air Pollution and Public Health

Air pollutants include:

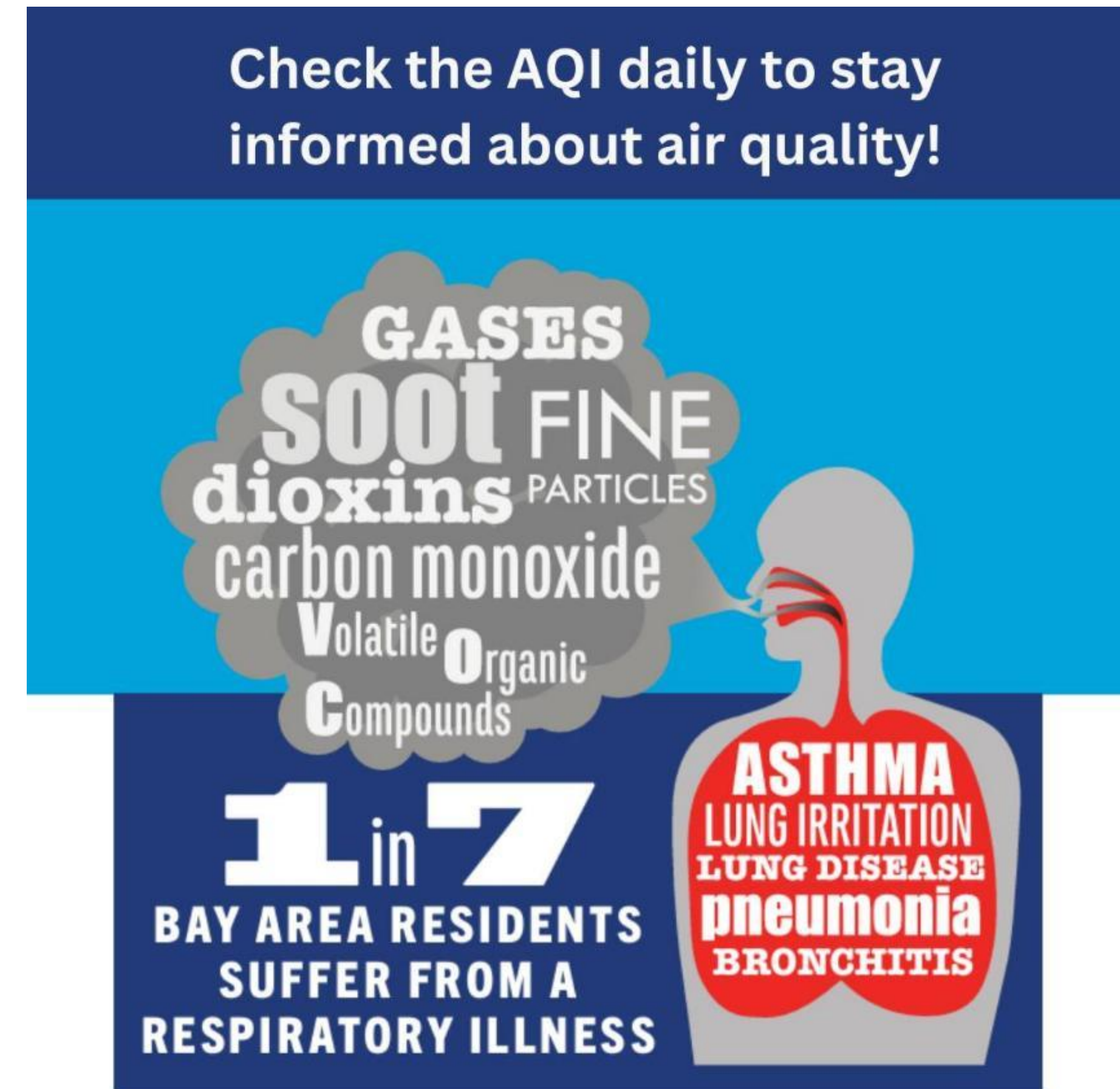
- Particulate matter
- Toxic air contaminants
- Chemicals that form ozone

Air pollution has been linked to:

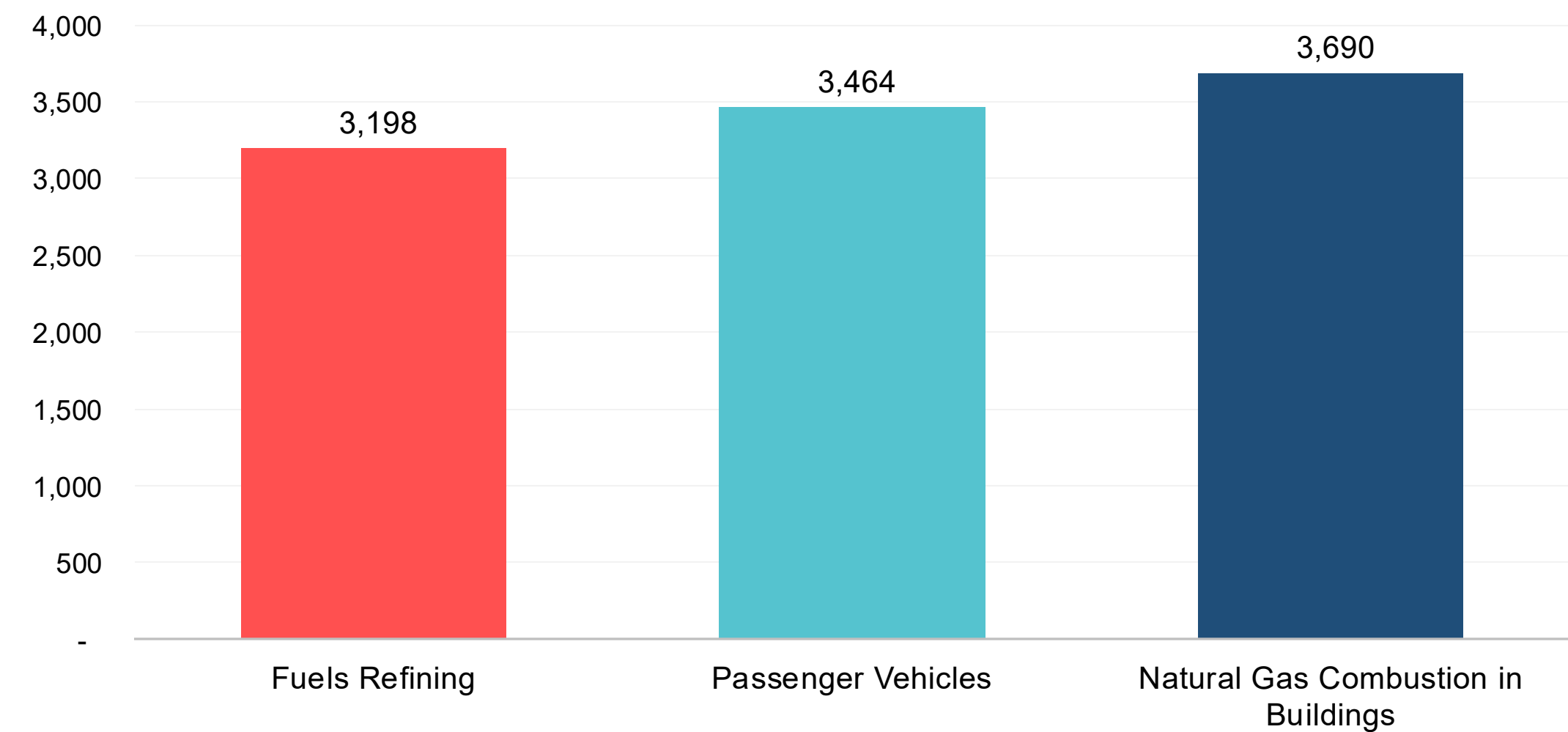
- Asthma
- Bronchitis
- Emphysema
- Heart attacks and strokes

Increasing evidence of a link to:

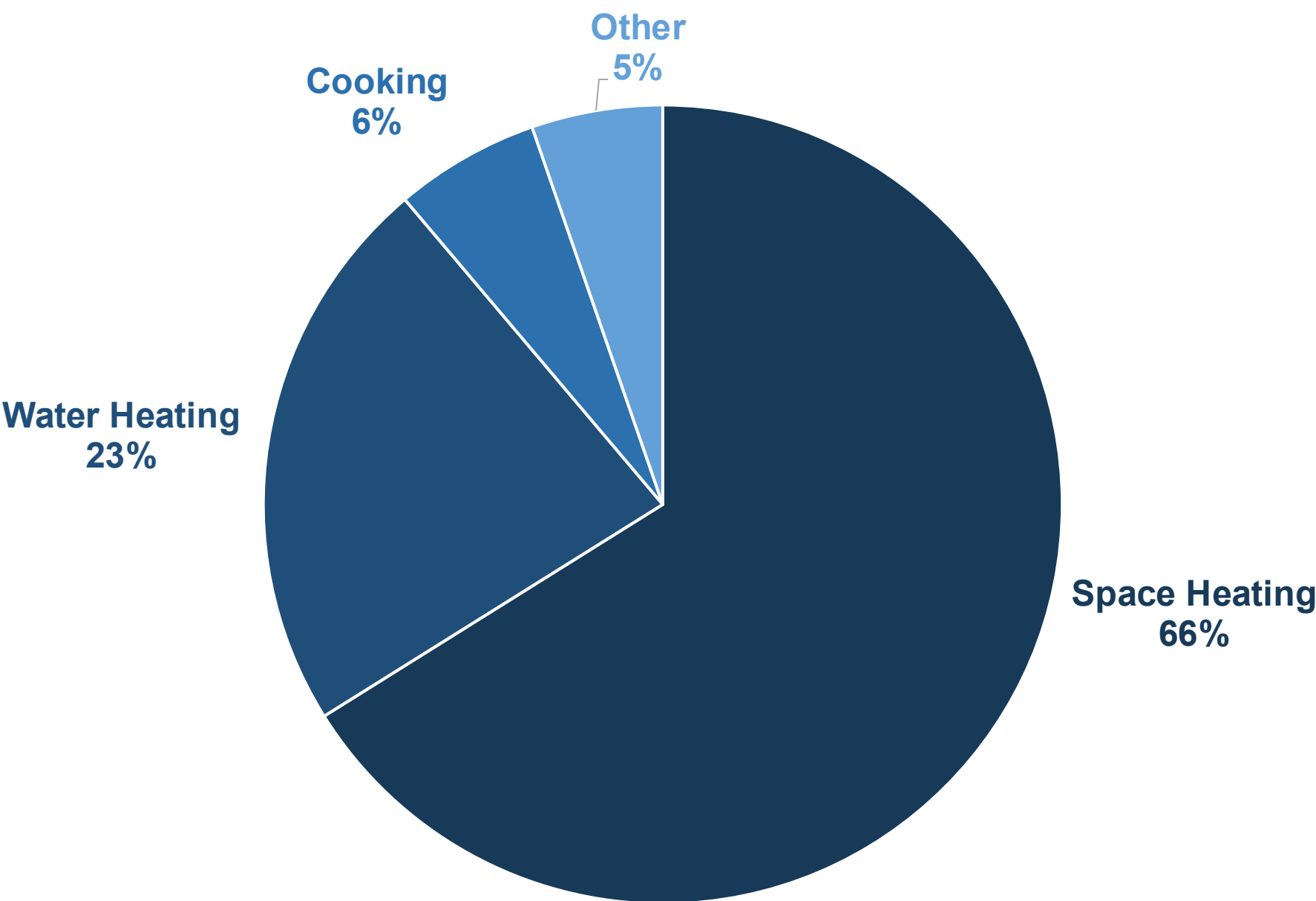
- Diabetes
- Dementia



Residential Appliance Emissions



2019 Air District NOx Emissions (tons)



2019 Air District Residential Natural Gas Combustion NOx Emissions

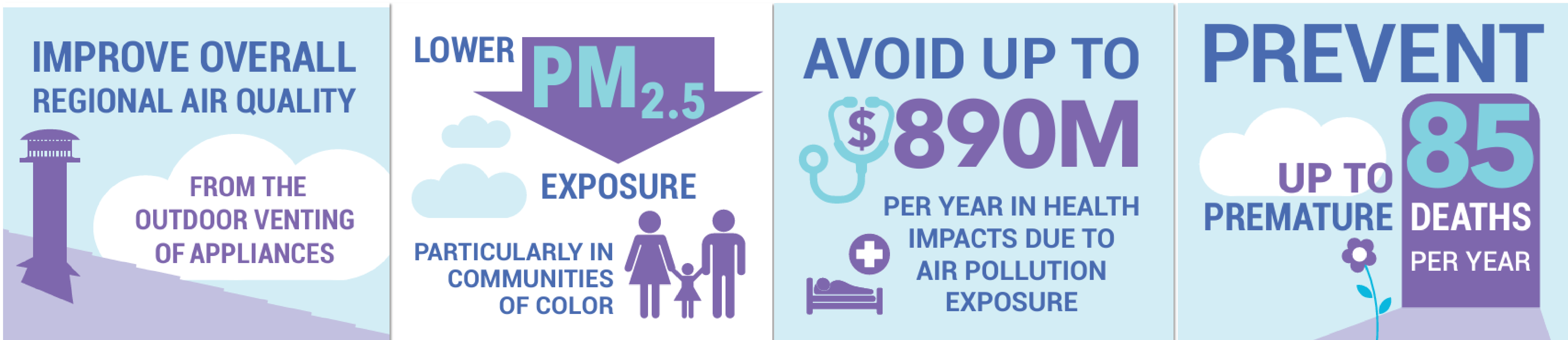
Rule 9-4 and 9-6 Zero NOx Amendments (2023)

- Rules 9-4 (furnaces) and 9-6 (water heaters) have been in place for almost four decades
- Zero NOx standards have **gradual phase-in**: all new sales or installations of units manufactured after compliance dates

1/1/2027*	Water heaters less than 75,000 BTU/hr
1/1/2029	All applicable natural gas-fired furnaces (e.g. residential and commercial; including direct-vent units)
1/1/2031	Water heaters 75,000 to 2 million BTU/hr

- Staff update to the Board due two years prior to each compliance date

Zero Nitrogen Oxides (NO_x) Appliance Rules: Health Benefits



Board and Committee Timeline

Date	Venue	Summary
March 2023	Board of Directors	Adoption of zero NOx amendments to Rules 9-4 & 9-6 Board directed staff to convene working groups and come back with implementation report two years prior to each compliance date.
December 2024	Board of Directors	Informational report on staff's research and a summary of Implementation Working Group (IWG) findings for Rule 9-6 Small Water Heaters implementation
October 2025 through May 2026	Public Comment Period Stationary Source Committee Board of Directors	Public Release of Rule 9-6 Small Water Heaters Draft Concepts Paper (flexibility and exemption options) Presentations on potential flexibility amendment concepts.
October 2026	Board of Directors	Rule 9-6 Small Water Heaters vote on rule language for flexibility amendments, including delay of implementation until October 2027
December 2026	Board of Directors	Informational report on staff's research and a summary of Implementation Working Group (IWG) findings for Rule 9-4 (furnaces) implementation

9-6 Small Water Heaters Proposed Flexibilities

- Continued sales of 30 gal. tanked and smaller (until 2031)
- Self-certified exemption for:
 - Project or building constraint (space, electrical)
 - Hydronic system (until 2031)
 - Low-income qualified property owners
 - Limited purchases for licensed contractors to use as loaners
- Proposed delay of start date to **October 2027**

Regulatory Overview



- Highlights steps taken since the adoption of the 2023 amendments to Rule 9-6
- Additional background information and details on flexibility and affordability amendments
- Released April 13, 2026

Thank you

Email: ruledevelopment@baaqmd.gov

Plugging into Multifamily Electrification

An At-a-Glance Overview

San Mateo Multifamily Electrification Summit

Sheetal Chitnis, Senior Program Manager

May 19, 2026



Sustainable Housing for Everyone

Programs

Technical Services

Policy

Research

Training

www.aea.us.org

Why Electrify?

Why go all-electric?

Safety

- Eliminate NOx & CO
- No more gas piping in buildings

Health

- Gas cooking linked to respiratory illness, especially in children

Climate

- Electricity reduces GHG emissions vs. gas

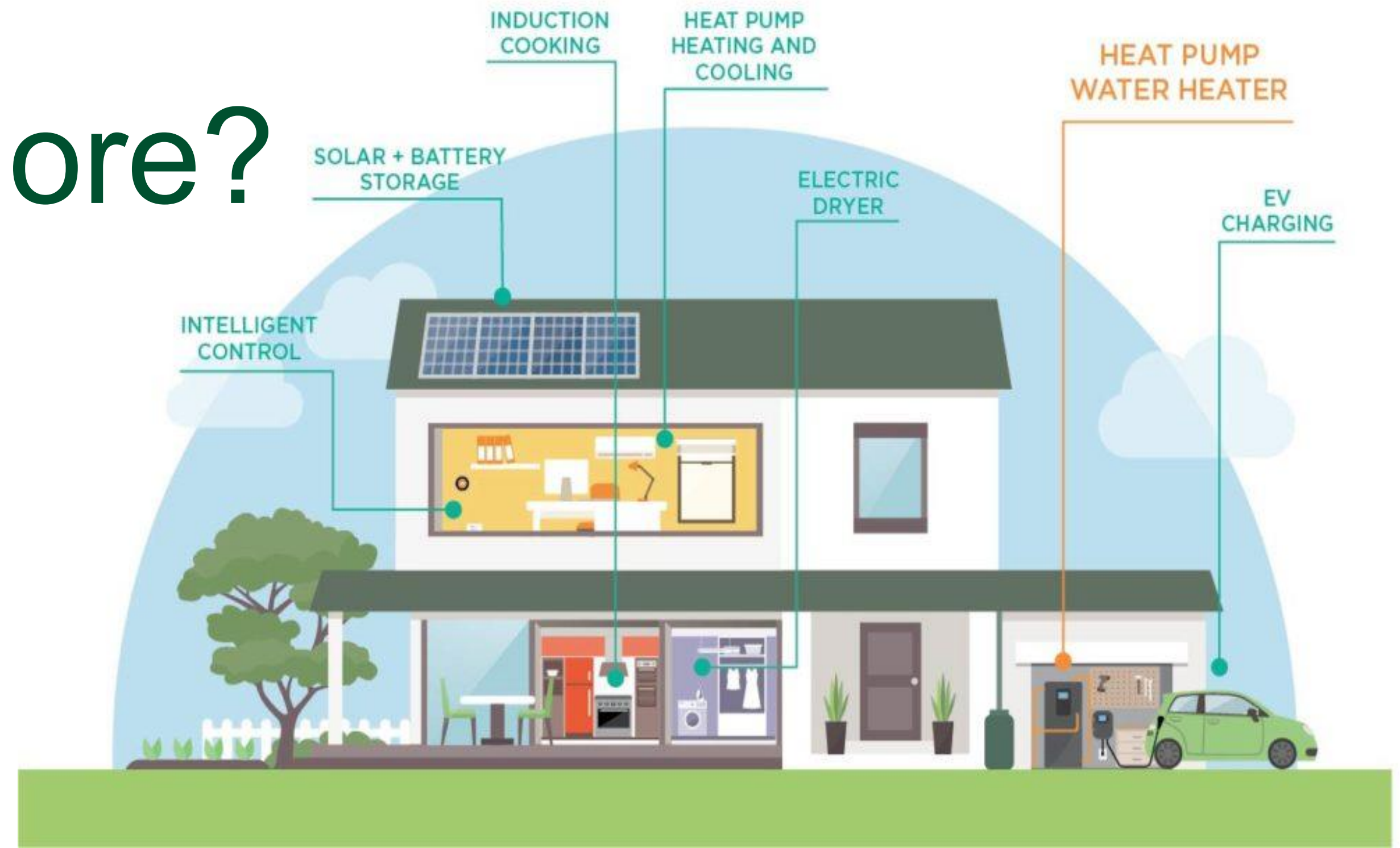
Resilience

- All modern gas equipment uses electricity, and electricity is restored faster after disaster-related outages

Cost

- New all-electric buildings usually cheaper to build and operate
- Building electrification is a relatively low-hanging climate strategy

Why are we seeing more?



- State Goals
- Building Code
- Local Ordinance
- Incentives, Tax Credits and financing
 - Often include carve out for Low Middle Income (LMI) households, Disadvantage communities, and/or equity targeted budget
 - Statewide programs for HVAC and WH Heat pumps – TECH
 - Federal Funding – Incentive through HOMES, HEEHRA, Tax Incentive for owners
 - Utility Programs: Investor owned utilities (i.e PG&E), Municipal (i.e Alameda)
 - Regional Programs: CCA (community choice aggregators), Regional Energy Networks, Air Districts, etc.

California Multifamily Landscape

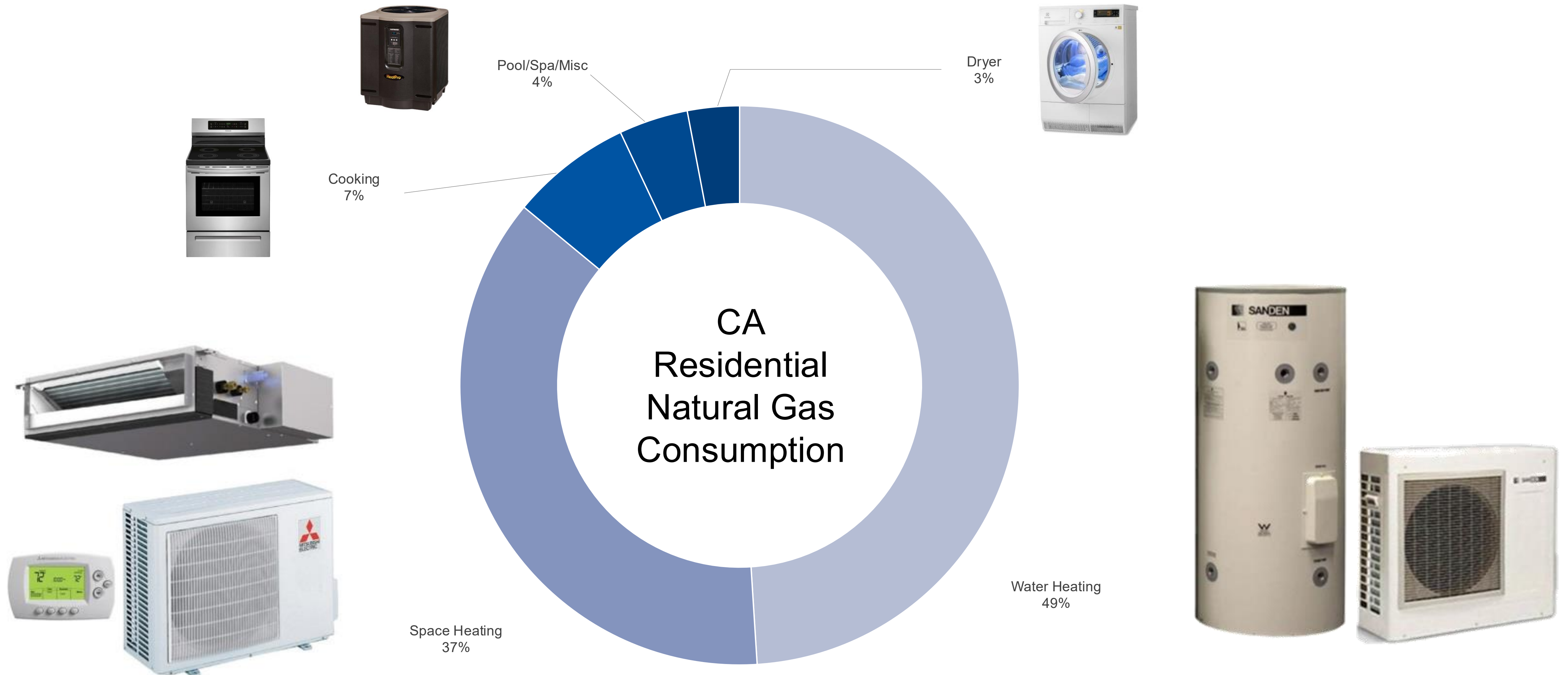
- ~Half of low-income households in California live in multifamily properties and majority are rentals
- Common system configuration:
 - Majority have in-unit HVAC
 - About 50/50 split between in-unit and central domestic hot water
- Heat pump retrofits not yet business as usual, but have strong policy and program support



Can you really do it all with electricity?

YES

Can you really do it all with electricity?



Source: 2010 California Residential Appliance Saturation Survey

Heat Pump Basics

What is a Heat Pump?



What is a Heat Pump?

A device that moves heat from one place to another using refrigerant.

Just like an air conditioner or refrigerator.

What's so great about heat pumps?

- Hyper-efficient (3-5x gas/electric resistance)
- Enable zero-emissions buildings via carbon-free electricity
- Improve air quality – no local emissions
- Improve safety – no gas lines
- Deliver heating and cooling with a single system
- Work in different climates

What About Electric Resistance?

Key Considerations:

- **3x less efficient** than heat pumps.
- Much **higher heating bills** than heat pumps.
- Considerable **T24 compliance penalty or not be allowed**.
- Would require a separate cooling system.



In an era of **rising temperatures and heat waves**, should we continue to build without cooling?

Electric Space Conditioning

Heat Pumps – Individual Split Systems



Ducted Heat Pump



Mini-Split Heat Pump
(Ducted or Ductless)



Vertical Terminal
Heat Pump
(VTAC)

Heat Pumps – Individual Packaged Systems



Traditional



Modern/ Emerging

Packaged Terminal Heat Pump (PTHP) / Room Heat Pump

Heat Pumps - Central



Variable Refrigerant
Flow



Packaged Rooftop
Heat Pump



Heat Recovery
Chiller

Electric Water Heating- Heat Pump Water Heating

Heat Pump Water Heaters - Individual



Split Heat Pump Water Heater



Integrated Heat Pump Water Heater

Heat Pump Water Heaters – Central



Monoblock / Built-Up

Integrated Tank

Multifamily HPWH Configurations

- **Individual** – One HPWH per unit
- **Central** – HPWH plant serving whole building; w/ recirculation
- **Cluster** – 1-3 residential HPWHs serving multiple units; no recirculation

HPWHs Key Considerations

- Optimal sizing will likely have more storage than gas-based system
 - Engineer should NOT use same sizing parameters as gas hot water system
 - Engage with heat pump manufacturer to obtain sizing recommendations
- Individual systems may be locatable inside
 - Always confirm with manufacturer
- Larger or central systems will need access to outside/garage air
 - Many can be ducted if space is tight

Electric Cooking

Electric Cooking Types



Induction



Radiant



Resistance

Induction Cooking



Induction



Radiant



Resistance

Induction: What's so great about it?

- Fastest response time of any heating type (faster than gas)- Boils water in ½ the time
- Extremely precise heat control down to very low levels
- Less waste heat = less overheating of kitchen
- No open flames, and only pan gets hot = SAFER



Figure 12: Resistance Coil Cooktop

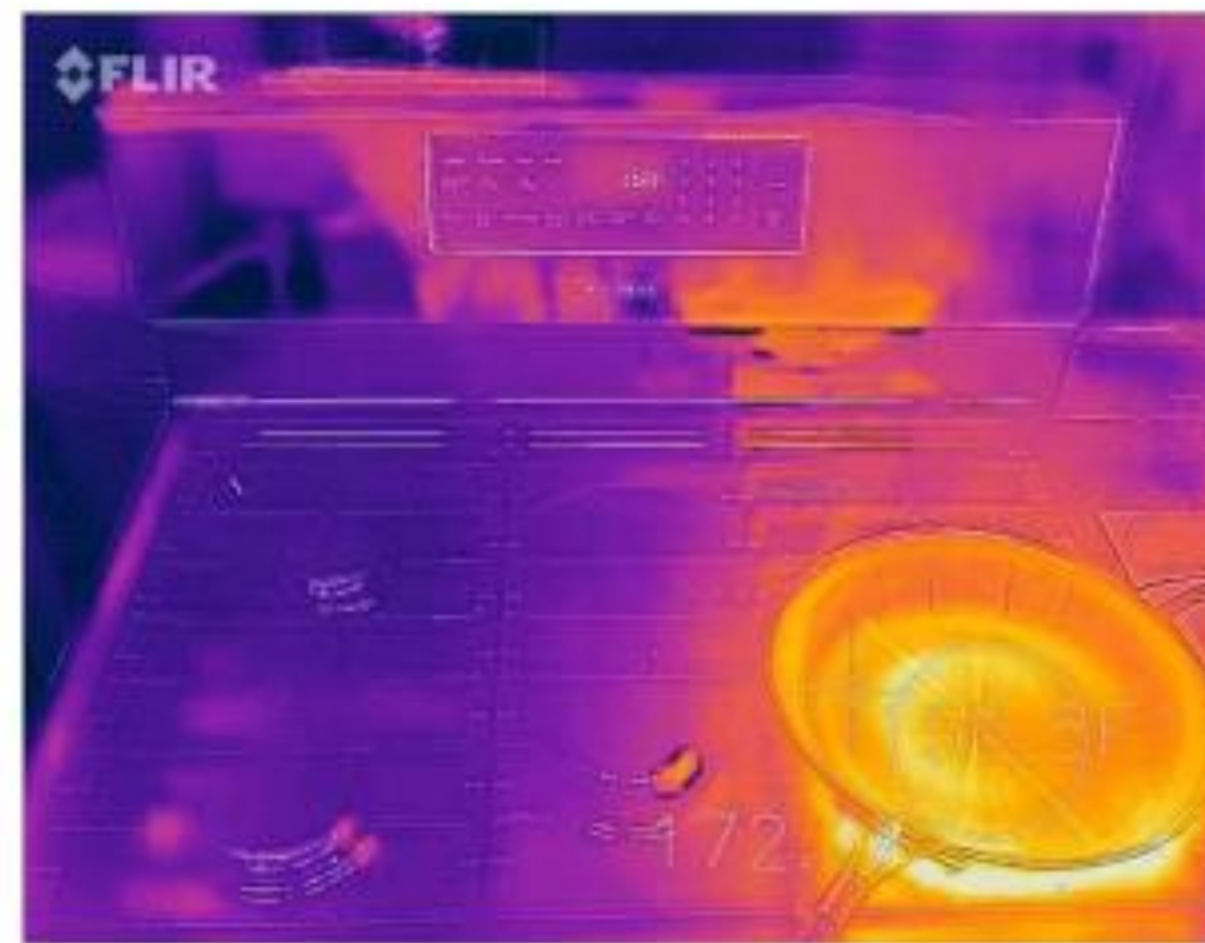


Figure 13: Gas Cooktop

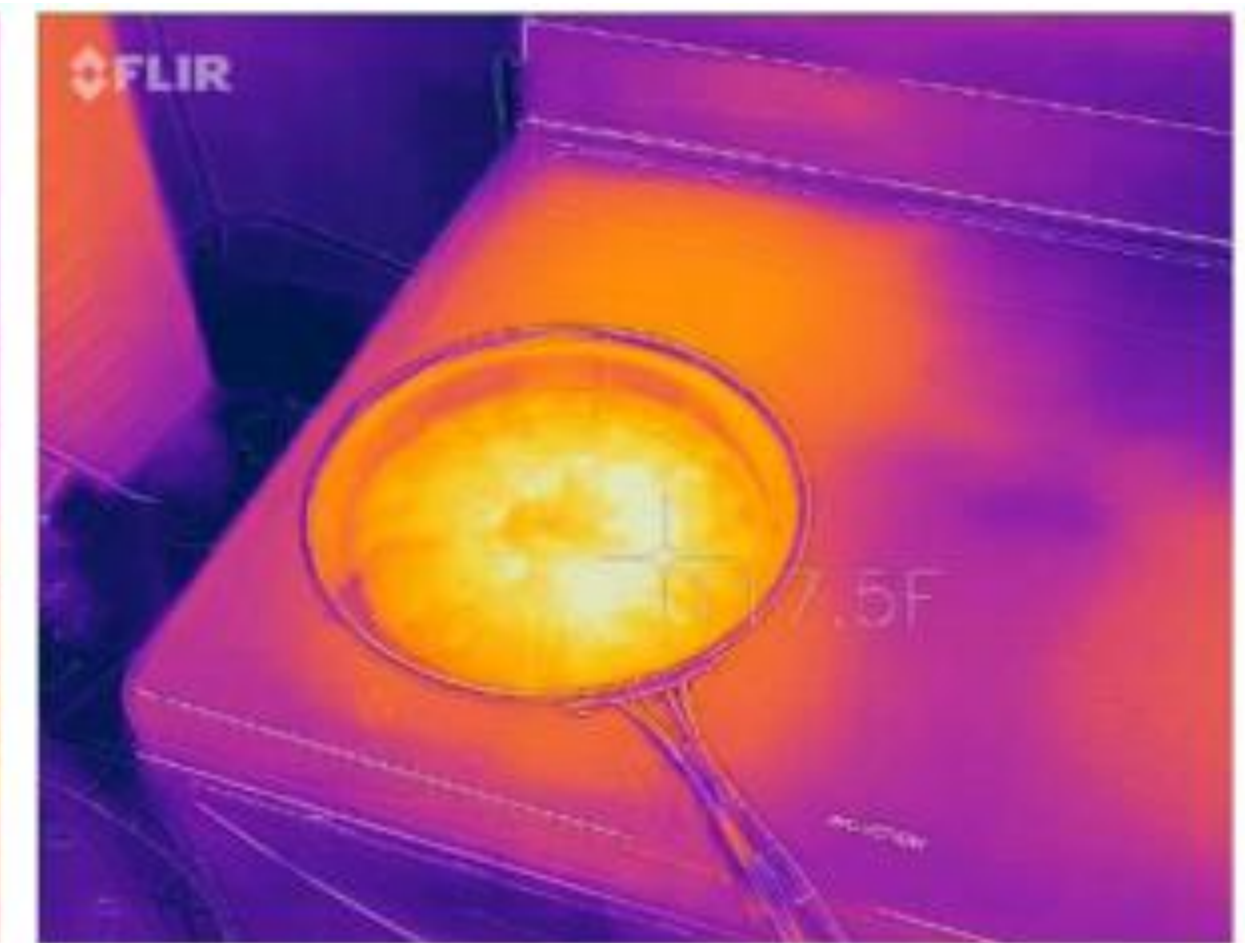


Figure 14: Induction Cooktop

Image source: Residential Cooktop Performance and Energy Comparison Study Frontier
Energy Report # 501318071-R0

Induction: but what about...

Equipment Cost

- Induction currently not cheapest electric ranges
- Prices should come down as adoption accelerates
- Range of options

Compatible Cookware

- Pots and pans must be ferromagnetic
- Cast-iron and many others with sandwich bottom
- Many affordable options available
- May require replacement cookware



Frigidaire 30 in. 5.4 cu. ft. Induction Range with Self-Cleaning Oven in Stainless Steel

Model# FFIF3054TS

★★★★☆ (68)

SPECIAL BUY \$989¹⁰ \$1,099.00
Save \$109.90 (10%)



Utopia Kitchen Nonstick Frying Pan Set - 3 Piece Induction Bottom - 8...

★★★★☆ ~ 199

\$26⁹⁹

Electric Laundry (Dryers)

Clothes Dryers

Residential



Heat Pump Dryer



Electric Resistance
Dryer



Combo Washer +
Heat Pump Dryer

Commercial



Electric Resistance
Dryer



Heat Pump Dryer (Not yet
available in US)

Electric Pools & Spas

Heat Pump Pool Heaters



What about **Renewables?**

Why Solar PV pairs well with Electrification

- No moving parts
- Simpler maintenance
- Can offset 100% of all loads for small buildings
- Works well with heat pumps



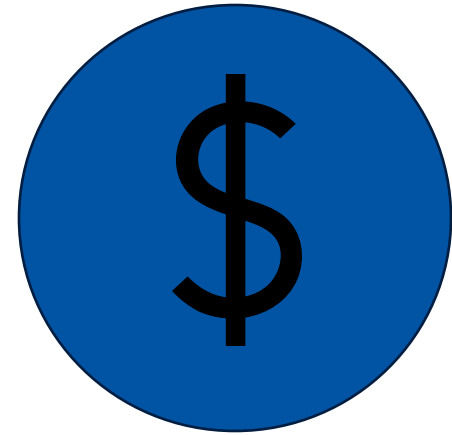
Applying this to Multifamily properties in your community

Spectrum of MF Electrification



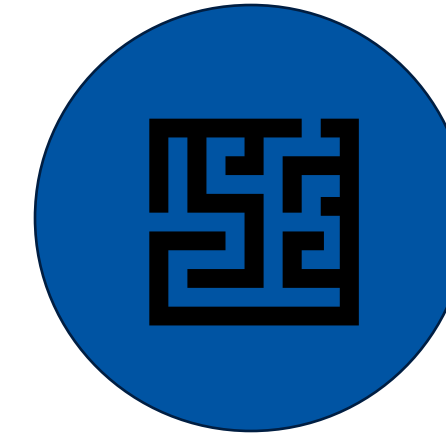
Panel Size	≥100A	≥100A	≤70A
Available Panel Space	Adequate	Limited	Insufficient
Physical & Utility Constraints	Minimal	Moderate	Severe (Underground utilities; transformer/ service limitations; apartment constraints)
Existing AC	Yes	No	No
Funding	Available	Moderate	Limited

Electrification MF Project Challenges



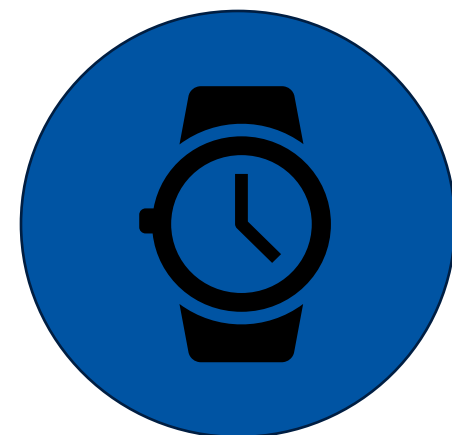
Costs

- ~\$15-25k/unit
- Need support in subsidizing/rebating costs,
- Inadequate reserves for planned upgrades, not planning for electrification
- Large scopes, electrical upgrades and building modifications



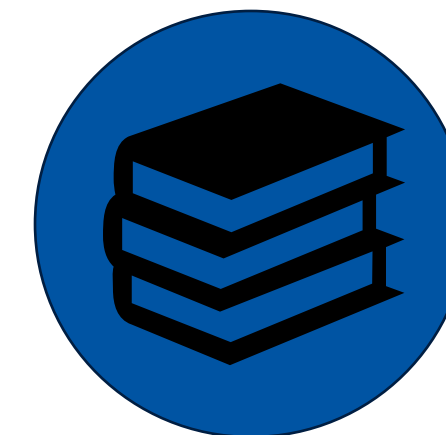
Complexity

- More complex than like-for-like
- Comprehensive scopes
- Diverse retrofit types requires expertise and custom approach
- Existing Conditions/Building Age- creative thinking to address form factor
- Logistically challenging - Coordination with utilities



Timing

- Need to integrate with larger rehab schedules at capital events
- Utility upgrades can delay project timelines



Learning Curve

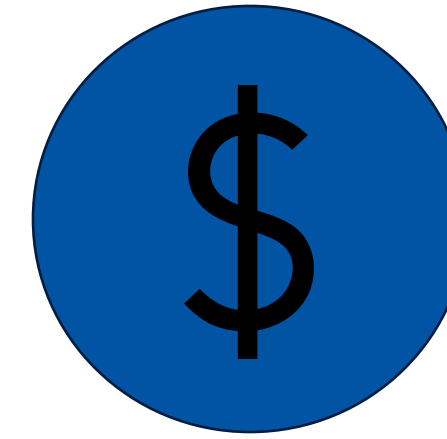
- Consumer knowledge
- Contractor knowledge (change in BAU)- System sizing
- Range of options (many pros and cons)

Plugging for Successful Electrification



Early Planning

- Align electrification with capital improvements and modernization cycles



Incentives

- Leverage incentives and funding opportunities



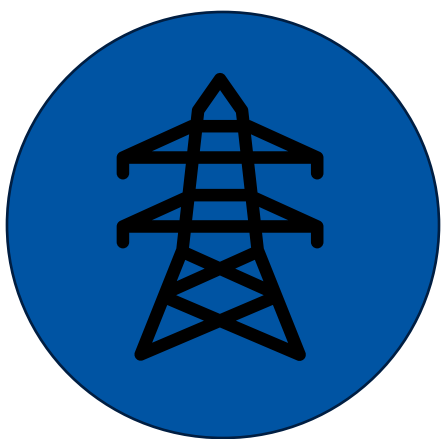
Smart Electrification

- Energy efficiency + Electrification + PV
- Reduce building loads first to simplify HVAC and water heating systems



Flexibility

- Select solutions based on building layout, infrastructure and project goals
- Phased electrification



Electrical Readiness

- Evaluate panel capacity and service upgrades early



Tenant & Stakeholder Engagement

- Align key project partners to avoid redesigns and delays
- Communicate with tenants about benefits, construction impacts and new technologies



Image: AEA





Image: AEA



Image: AEA







Image: AEA

Thank You!

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Lunch

Case Studies



Menlo Spark's Multifamily Electrification Pilots:
No panel upsizing needed + climate, public health, safety benefits

May 19, 2026

*Angela Evans
Program Director, Menlo Spark
angela@menlospark.org*



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2. Menlo Spark's 63rd Street Multifamily Building Overview
3. Major Takeaways/Resources for Multifamily Building Owners

1. Willow Court Multifamily Building Overview

Willow Court in Belle Haven Community, Menlo Park: First fully electrified existing multifamily building in San Mateo County



- Completed fall 2024.
- Six housing units of affordable housing.
- Collaboration, Menlo Spark, [AEA](#) & [MidPen Housing](#).
- Now all electric: gas lines capped at the street.
- Replaced all gas appliances with more efficient, in unit electric versions (see next slide for details).
- Power efficient design: no panel upsizing needed.

“The complete electrification of Willow Court marks a groundbreaking precedent for our region, as the first existing multifamily property in San Mateo County to provide a full suite of climate pollution reductions via healthy, clean, more efficient electric appliances. Willow Court residents will benefit greatly from the significant air pollution reductions achieved by removing gas combustion from the property. I commend Menlo Spark and MidPen Housing for their efforts to successfully complete this vital project.” – Josh Becker, California State Senator, 13th District

Willow Court's Gas to Electric Appliance Replacements

Scope of Work

Full electrification: replacement of all gas appliances with high efficiency electric versions

In each of the six dwelling units within Willow Court, the following gas appliances were removed and replaced with clean, healthy, more efficient electric appliances:

- Gas furnaces replaced with Mitsubishi electric heat pump HVAC units (M-Series; SEER 18, HSPF 10.4);
- Gas water heaters replaced with Rheem electric heat pump water heaters (80 gallon; UEF 4.07);
- Gas ranges replaced with Frigidaire induction electric ranges (30 inches; 5.4 cu feet);
- Gas clothes dryers and washing machines replaced with electric 120-volt plug-in GE Profile Washer/Dryer Combos with ventless heat pump technology (4.8 cu feet, Energy Star).

Source: [Menlo Spark Willow Court Case Study](#)



Local Press Coverage, Willow Court

The Almanac

Nonprofit local news for the Midpeninsula

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MENLO PARK

Belle Haven townhouses become first multifamily buildings in San Mateo County to be retrofitted with fully electric appliances

by Eleanor Raab

November 19, 2024 9:00 am Updated November 20, 2024 12:07 pm

“The Willow Court project provides an example for how community can come together to transform existing multifamily buildings across the city from gas guzzlers to clean energy homes for the health of our residents. This will serve as a model as the City explores programs, grants, policies, and other solutions to support the electrification of all buildings across Menlo Park.”

-- Rachael Londer
Sustainability Manager, City of Menlo Park

Source: [Almanac Willow Court article](#)

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Willow Court Benefits Summary



CLIMATE POLLUTION REMOVAL

Removal of all gas appliances (water heaters, furnaces, clothing dryers), replaced by heat pump electric versions. All gas lines shut off.



BILL SAVINGS FOR TENANTS

Tenants save estimated \$360/year (\$30/month) with heat pump HVAC and heat pump water heater vs. traditional gas appliances and AC systems.*



TENANT AND PUBLIC HEALTH

Elimination of NOx and all gas combustion pollutants that cause asthma, cardiac disease, and other serious health concerns.



EXTREME HEAT RESILIENCE

Heat pump HVAC systems provide cooling (AC) for the first time to tenants, reducing health risks from heat waves.



NO ELECTRICAL PANEL UPGRADE NEEDED

Power efficient design debunks myth that all-electric retrofits need panel upsizing. Panel space remains to add EV charging in the future, if desired.

* Estimate only. All buildings are different.

Source: [Menlo Spark Willow Court Fact Sheet](#)

2. 63rd Street Multifamily Building Overview

63rd Street in Berkeley, Alameda County: Fully electrified existing 1960s era multifamily building



- Completed fall 2025.
- Five housing units (soon to be six).
- Collaboration, Menlo Spark, private building owner, [AEA](#) & [BayREN](#).
- Now all electric: gas lines capped at the street.
- Replaced all gas appliances with more efficient, in unit electric versions (see next slide for details).
- Power efficient design: no panel upsizing needed.
- **All five units electrified on single 200 main amp panel (subpanels each 55-60 amps).**

Pictured above: One of two tours with Bay Area District board members and Air District staff.

Source: [Menlo Spark 63rd St Case Study](#)

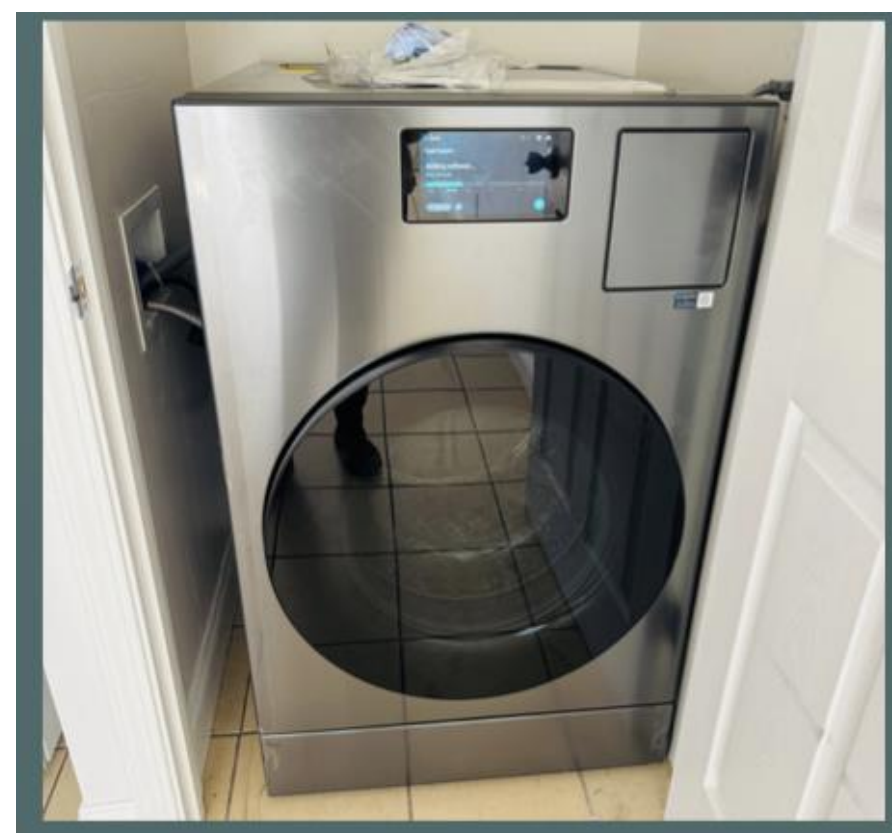
63rd Street Gas to Electric Appliance Replacements

Scope of Work

Full electrification: replacement of all gas appliances with high efficiency electric versions

In each of the five dwelling units within 63rd, the following gas appliances were removed and replaced with clean, healthy, more efficient electric appliances. 63rd no longer includes gas combustion appliances, enabling the building owner to cap all gas lines to the property.

- Gas wall furnaces replaced with Gree Minisplit electric HVAC units (12,000 Btu/H; SEER2 24.5, HSPF2 9.5);
- Gas water heaters replaced with AO Smith 120-volt electric heat pump water heaters (66 gallon; UEF 3.2);
- Gas clothing dryers and washing machines replaced with electric 120-volt plug-in Samsung Bespoke All-in-One Combo Washer/Dryer with heat pump technology (5.4 cu feet). Note that these laundry replacements were undertaken in two units only as other units already had electric resistance machines that do not use gas.
- Note that all units already included all-electric ranges with induction or electric resistance stovetops; therefore no gas to electric replacements were needed here.



63rd Street Benefits Summary

Menlo Spark, Association for Energy Affordability, and BayREN collaborated on a 1960s era, five-plex multifamily building at 63rd Street in Berkeley, California.

Climate Pollution Removal

Removal of all gas appliances (water heaters, furnaces, clothing dryers), replaced by heat pump electric versions. All gas lines shut off.





Tenant and Public Health

Elimination of NOx and all gas combustion pollutants that cause asthma, cardiac disease, and other serious health concerns.

Bill Savings for Tenants

Tenants save **estimated \$360/year (\$30/month)** with heat pump HVAC and heat pump water heater vs. traditional gas appliances and AC systems.*





Extreme Heat Resilience

Heat pump HVAC systems provide cooling (AC) for the first time to tenants, reducing health risks from heat waves.



NO Main Electrical Panel Upgrade Needed

Power efficient design debunks myth that all-electric retrofits require main panel upgrades. Circuit sharing could enable EV charging in the future at this building.



Source:
[Menlo Spark 63rd Street Fact Sheet](#)

*Source: RMI Analysis, Cost Savings From Household Heat Pump Adoption, April 2025
*Note: All buildings are different, and estimated savings are averages only.

63rd Street Favorable Tenant Response

*“I really enjoy the hot water from my new heat pump water heater. My old gas water heater used to ‘freeze up’ while I was in the shower, but the new heat pump water heater provides hot water much more consistently. I also enjoy the new A/C from my heat pump HVAC system; the cooling works very efficiently and helps me on hot days. These units also help to protect my health and our planet, and that’s something I appreciate.” – **Kayly, 63rd tenant***

3. Major Takeaways/Resources for Multifamily Building Owners

Menlo Spark Pilots Demonstrate: Bay Area Air District appliance rules early compliance & associated health benefits

Compliance Timeline

The rule amendments will apply only to new appliances, and do not mandate retrofitting of existing appliances.

2027 – only zero NOx water heaters can be sold or installed in the Bay Area.

2029 – only zero NOx furnaces can be sold or installed in the Bay Area.

2031 – only zero NOx large commercial water heaters can be sold or installed in the Bay Area.

Health impacts from short- and long-term exposure

NOx

- Coughing, wheezing, difficulty breathing
- Asthma
- Increased susceptibility to respiratory infections



PM_{2.5}

- Asthma and other respiratory conditions
- Neurological disease
- Heart attack
- Stroke
- Lung cancer
- Premature death



Menlo Spark Pilots Demonstrate Earthquake Preparation Benefits: Improved resilience and safety after major quake

Benefits of Electrification & Energy Efficiency

Safety

- Eliminate indoor air pollutants
- Reduce fire risk

Cost

- Efficiency + Electrification = Maintain or reduce utility costs

Climate

- Lower carbon emissions
- Reduce fire risk

Resilience

- Electricity restored faster than gas after grid outages

Health

- Cleaner indoor and outdoor air
- Reduce incidence of asthma

Source: [Association for Energy Affordability](#)

120 Years After 1906

San Francisco's progress toward earthquake-safe buildings — and what needs to happen next

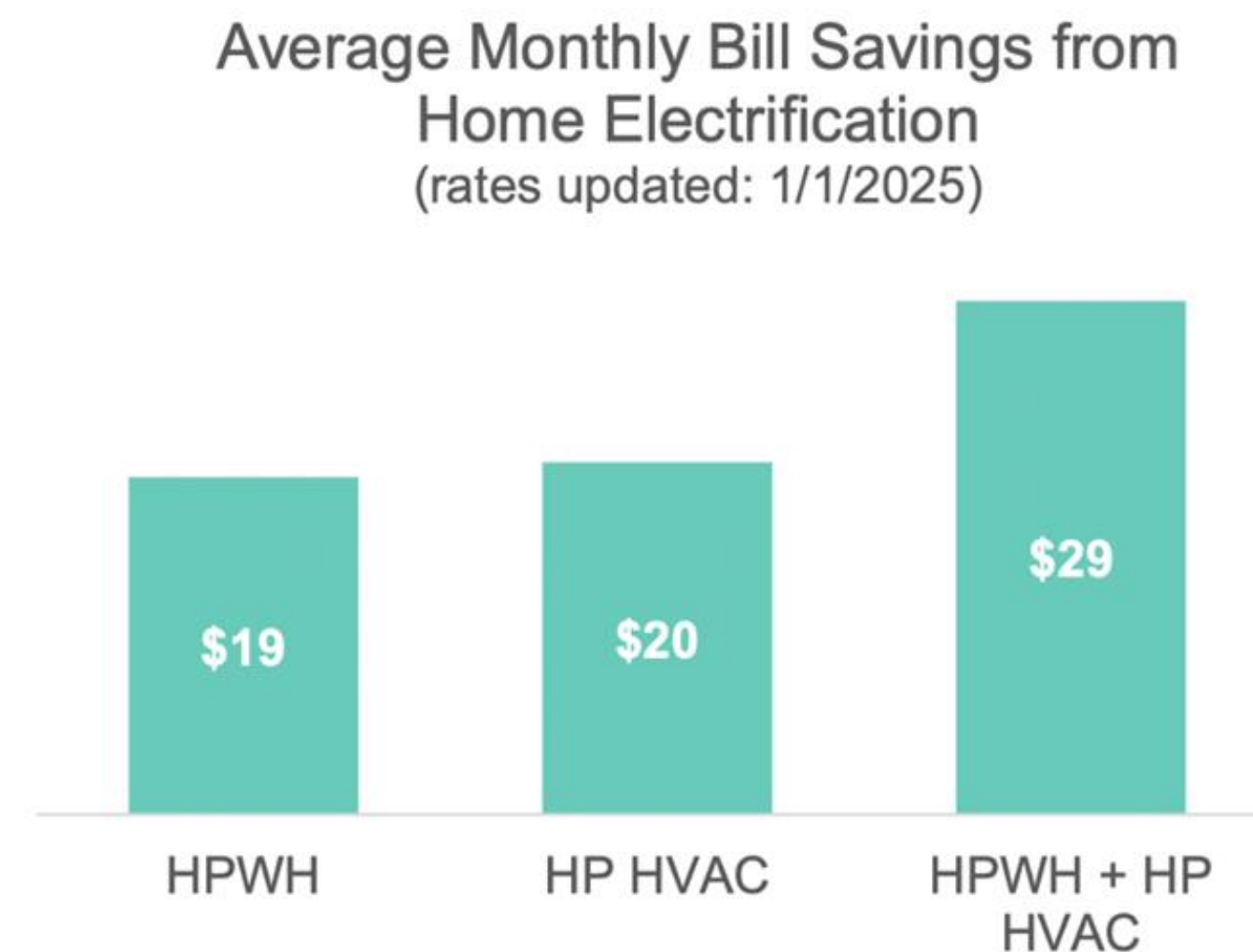
“Electrification not only aligns with strategies to decarbonize the city’s energy supply but also reduces post-earthquake fire risks associated with gas infrastructure.”

Source: [SPUR “120 Years After 1906”](#) policy brief, April 2026

Menlo Spark Pilots Demonstrate Likely Utility Bill Savings: Estimated average \$30/month vs. gas (for each housing unit)

Summary of Findings

- **On average, a home saves \$30 a month by switching to heat pumps.**
- HPWH retrofits provide the **most consistent** bill savings of all modeled scenarios.
- HP HVAC retrofits see a **wider range** of bill impacts due to increased variables (technology, sizing, thermostat settings, etc.), but overall provide savings for most customers.
- Switching to an “electrification friendly” rate (E-ELEC or EV-2) **as quickly as possible** is key to unlocking savings. This makes **all household electricity use cheaper**, saving money.



Note: Results include savings from electric rate optimization which lowers costs for all home usage. Therefore, savings do not stack linearly.

Takeaways

- Bay Area electricity providers model average savings by switching to heat pumps.
- Impacts single family homes and multifamily (with in unit appliances).

Source: [Bill Impacts of Electrification \(Peninsula Clean Energy; Silicon Valley Clean Energy\) Feb 2025](#)



Incorrect Myth about Electrification and Panel Upsizing



- Historically, conventional wisdom implied that electrification also required upsizing electrical panels (in single family and multifamily buildings).
- Upsizing panels can be expensive/time-consuming.
- Fear of panel upsizing can block electrification motivation.
- The panel upsizing myth is now largely debunked, but we continue to see rampant misinformation on this topic. See resources on next slides.
- Menlo Spark avoided panel upsizing at both multifamily pilots (next slide).

Menlo Spark Pilots Demonstrate No Panel Upsizing Needed: Deployed power efficient design

Deployed power-efficient design, also known as “Watt Diet”. Tools included:

- Highly efficient heat pumps (heat pump water heaters, heat pump HVAC), appropriately-sized for space and expected consumption in housing units.
- To calculate electric loads per housing unit, Menlo Spark used National Electric Code (NEC) 220.84 “Other Multifamily” for *in-unit* appliances. NEC 220.84 allows more flexibility vs other relevant NEC codes.
- See [Willow Court case study](#) and [63rd St case study](#) for electrical load calculations.
- 120 volt plug in heat pump combo washer/dryers save considerable panel space (vs. electric resistance dryers).
- At 63rd: 120 volt plug in heat pump water heaters save space on panels (vs 240 volt versions). 120 volt versions offer reduced installation times/emergency options.
- Room on panels for EV charging later (at both buildings).
- At 63rd, EV charging would require a circuit pauser to share electrical loads with laundry.



Pictured:
[AO Smith 120V Heat Pump Water Heater](#)

Power Efficient Design Additional Resources

Other resources on power efficient design:

- WestLight Energy [resources](#).
- Silicon Valley Clean Energy (SVCE) [resources](#).
- [SPUR's "Panel Puzzle"](#).
- [Bay Area Air District Appliance Rules "Myths vs Facts"](#) (see Myth 7).
- Redwood Energy [Watt Diet Calculator](#).
- [Smart Panel resources](#) (not needed for these two pilots but valuable tool for many)

Thank You



Two Paths to Electrification

Scaling Up & Staying Small:

Lessons from Berkeley Building Upgrades

Multifamily Property Summit 2026

Preeti
Property Owner and Investor

The Future of Multifamily

Decarbonizing existing assets isn't just about the environment. It's about:

Regulatory Compliance

Asset value

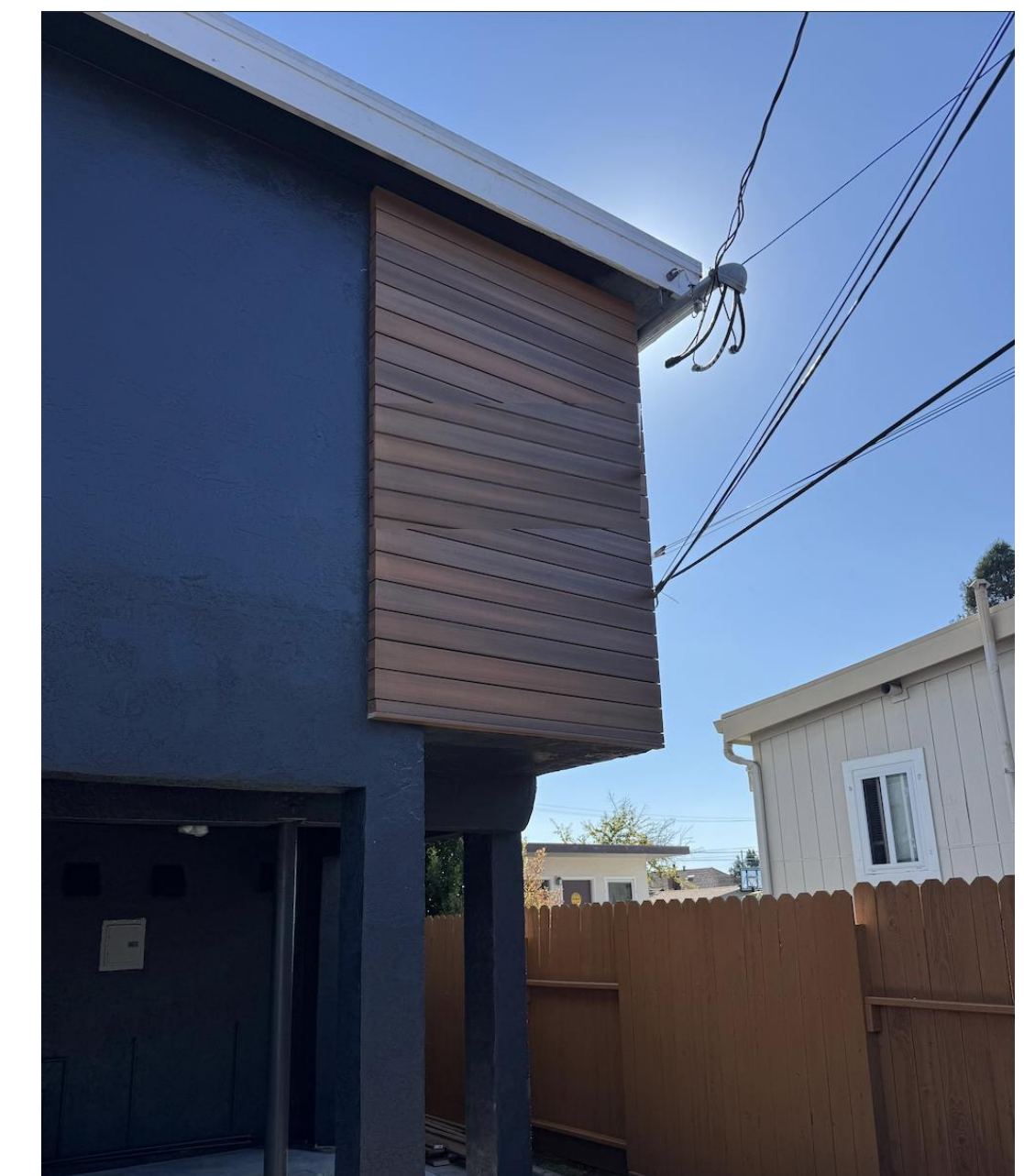
Tenant Satisfaction

A Tale of Two Berkeley Buildings

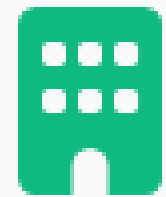
Strategy Overview

In the last 24 months, I converted two distinct multifamily properties to 100% electric operations. Each required a fundamentally different technical approach based on electrical capacity.

Goal: Decarbonization without compromising reliability or project ROI.



Path A: Main Panel Upgrade



Building 1

Complete gas-to-electric conversion of 100% of building loads.



Main Panel Upgrade

Expanded Main Service Panel (MSP) to handle 240V high-capacity loads.



HVAC & Water

Installed standard residential heat pump water heaters and mini splits air conditioners.

| Path A: Challenges

6-12

MONTHS FOR UTILITY WORK



Infrastructure Investment

Upgrading the main electrical panel is the "standard" path but carries high friction. While it provides future-proof capacity for EV charging, it often requires extensive coordination with PG&E.

Key Trade-off: High long-term capacity vs. high initial cost and significant project delays.

Path B: Low-Power Innovation

Building 2: Zero Panel Work

We avoided the 6-12 month wait and massive costs of utility upgrades by rethinking the technology stack.

The Strategy: "Plug-and-Play" 110V/120V appliances that fit within the building's existing footprint.

Ideal for older multifamily stock where panel space is at a premium.



Path B: The 110V Technology Stack



120V Heat Pump Water Heater: High-efficiency unit that plugs into standard outlets.

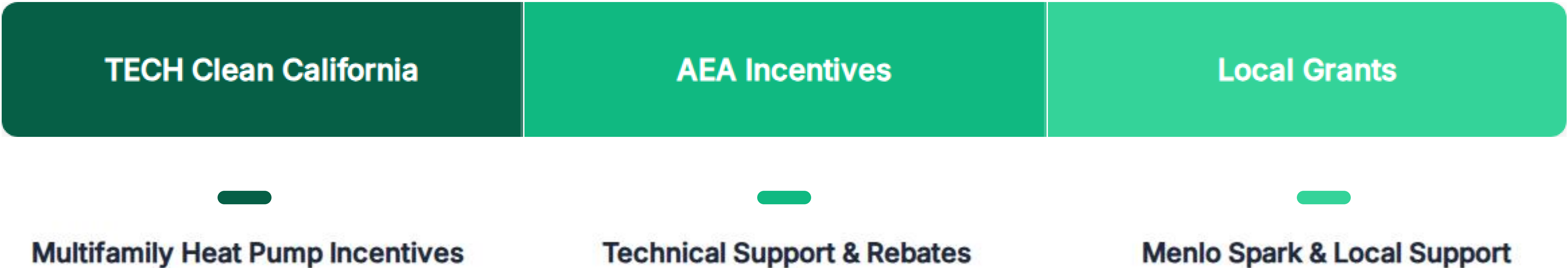


All-in-One Laundry: Ventless 110V heat pump combos eliminating dryer ducts and gas lines.

Making the Numbers Work: The Stack

The Triple-Layer Funding Strategy

Maximizing ROI requires "stacking" multiple incentive streams to bridge the capital gap.



"Stacking local and state incentives allows us to cover the capital gap between traditional gas replacement and high-efficiency electric upgrades."

Side-by-Side: Project Economics

Feature	Building 1 (Heavy)	Building 2 (Light)
Primary Power	240V Upgrade Required	110V Standard Outlets
Utility Interaction	High (New Transformers)	None (Existing Service)
Deployment Time	Long (8-14 Months)	Fast (2-3 Months)
EV Readiness	Fully Ready	Use Smart Splitter
Incentive Efficiency	High (TECH + AEA)	Maximum (Menlo + TECH + AEA)

Operational Excellence & Tenant Impact



Indoor Air Quality: Elimination of indoor combustion (CO, NO2) improving health.



Reduced Maintenance: Modern heat pumps have fewer failure points than old central boilers.



Risk Mitigation: Protection against future gas bans and rising natural gas costs.



Tenant Satisfaction

Tenants reported lower utility bills, higher comfort levels due to **newly added air conditioning** and modern "luxury" feel with upgraded all-in-one laundry units.

Strategy for Success



Audit

Assess panel
load and
current
appliance
inventory.



Partner

Engage AEA for
technical specs
and funding
paths.



Reserve

Secure TECH
Clean California
reservations
early.



Scale

Implement
either 110V or
MSP paths
based on ROI.

Thank you.

Let's build a carbon-free multifamily future together.

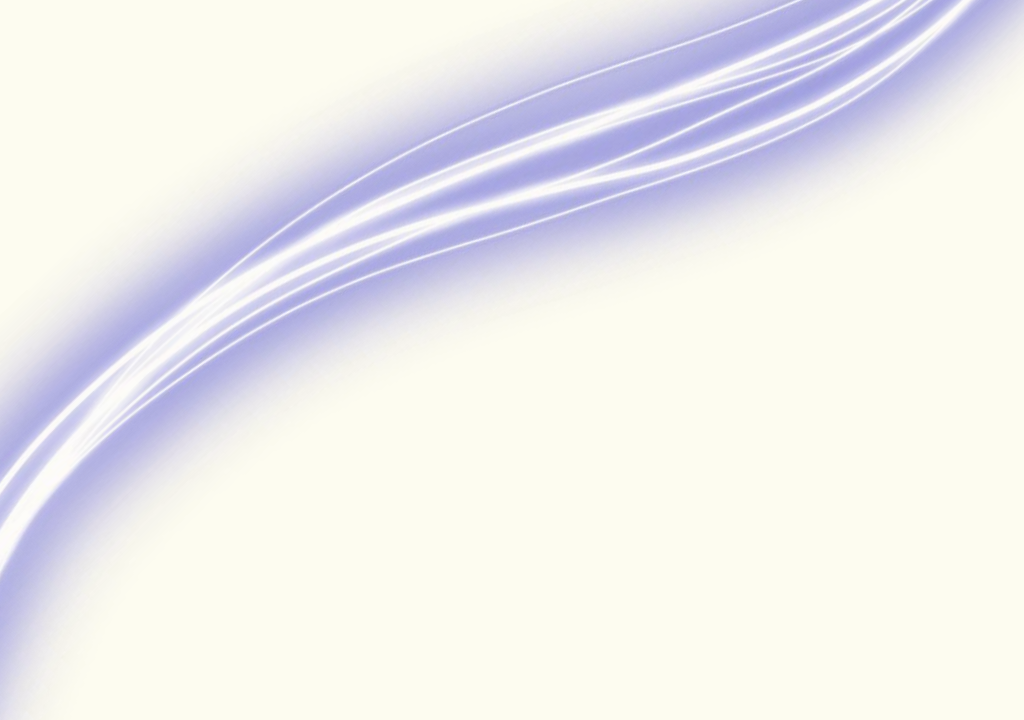
Contact me: primediamondrealty@gmail.com



Electrifying Mechanical and Plumbing Systems



May 19, 2026

- 
1. Electrification Overview
 2. Mechanical (HVAC) Systems
 3. Plumbing Systems



Plumbing – Domestic HW

- Anticipate equipment end of life so it is a sunk cost
- Air-source heat pumps – higher COPs justify upfront costs
- Requires access to outdoors to pull heat from ambient air



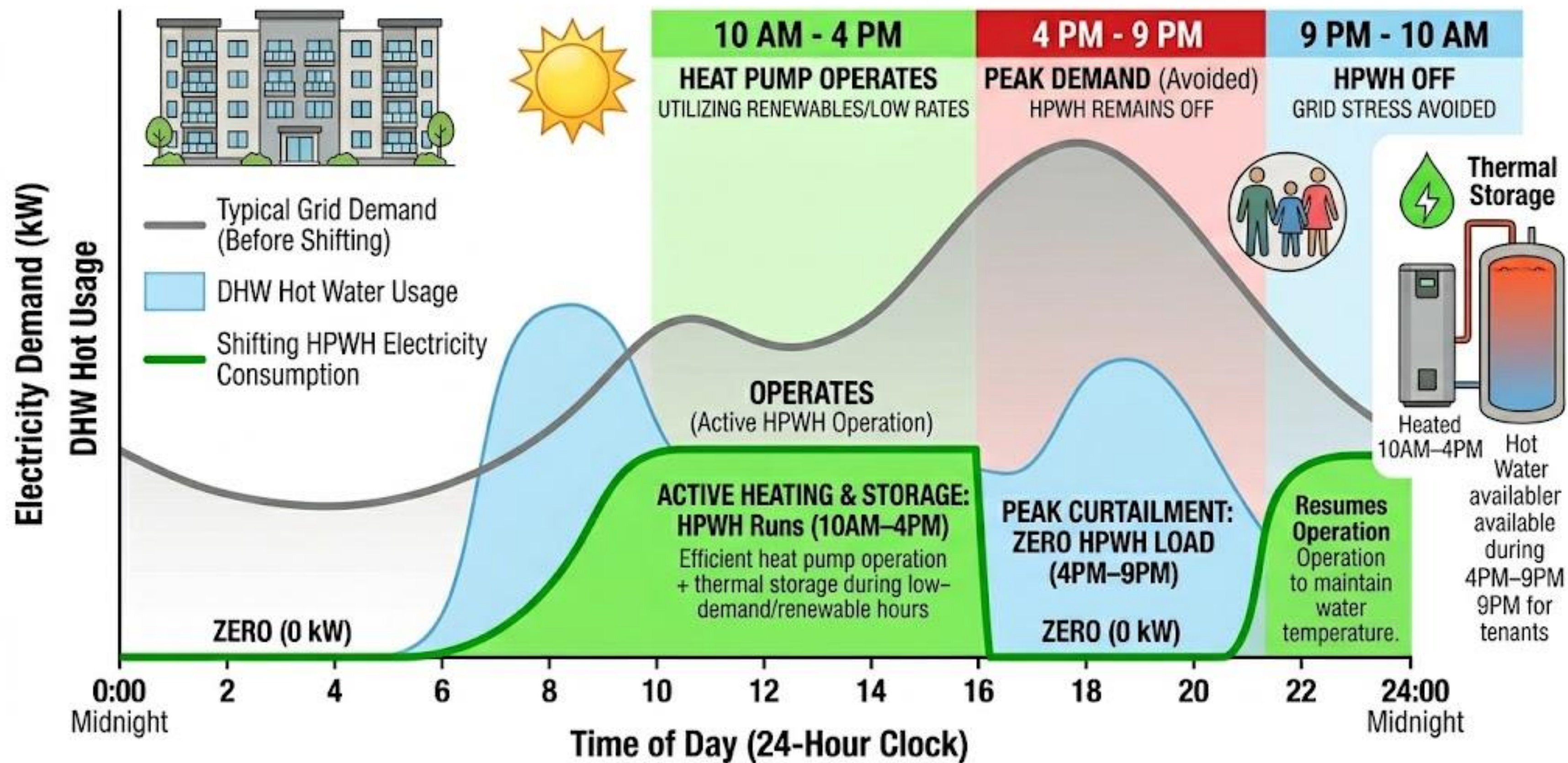
Plumbing – Load Shift

- Large storage tanks allow for load shifting



LOAD SHIFTING IS REAL

MULTIFAMILY HPWH LOAD SHIFTING PRINCIPLE: DAILY OPERATIONAL CYCLE



HVAC – Current All-Electric Landscape



One-to-one split systems

- R-32 or R-454B
- Ideal for first cost, serviceability, and tenant billing
- Higher overall HVAC GWP

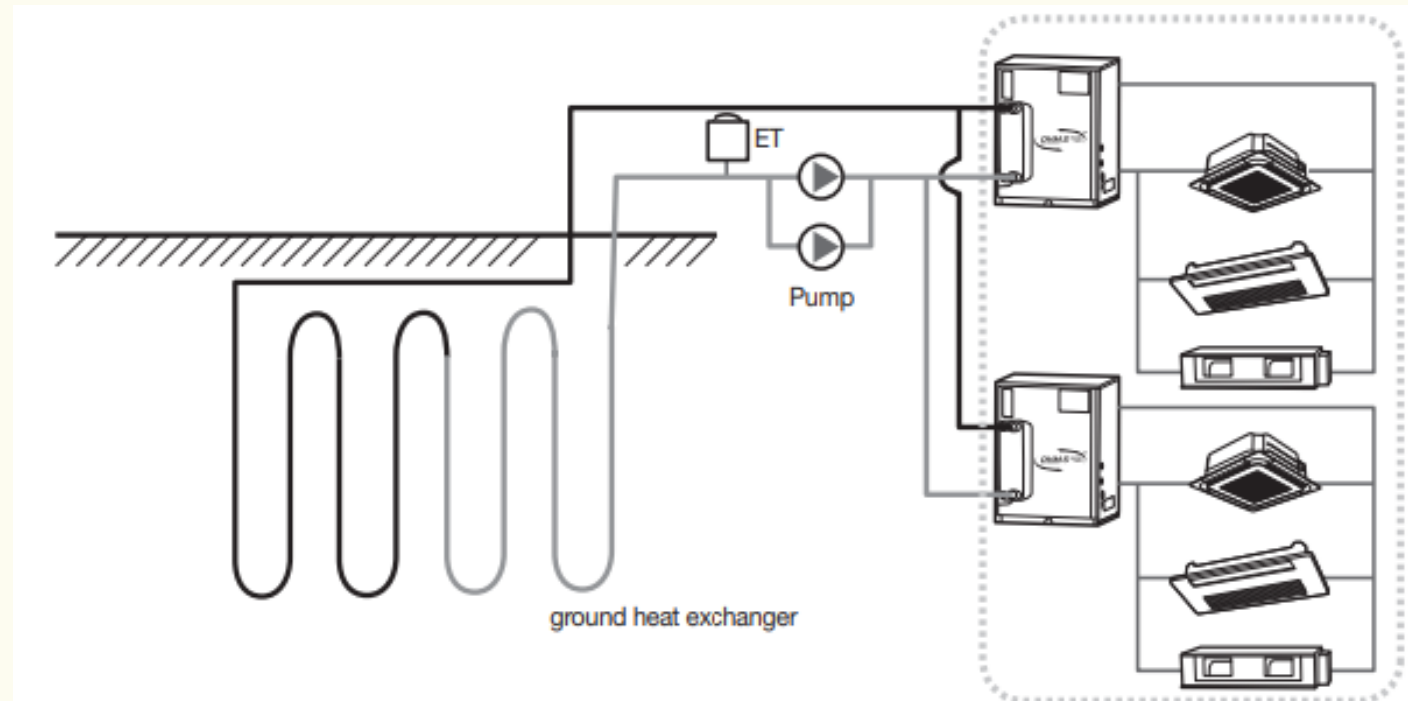


Packaged Terminal Heat Pump (PTHP)

- R-32
- Ideal for first cost, serviceability, and tenant billing
- Lower overall HVAC GWP
- Limited to 12 kbtuh per unit

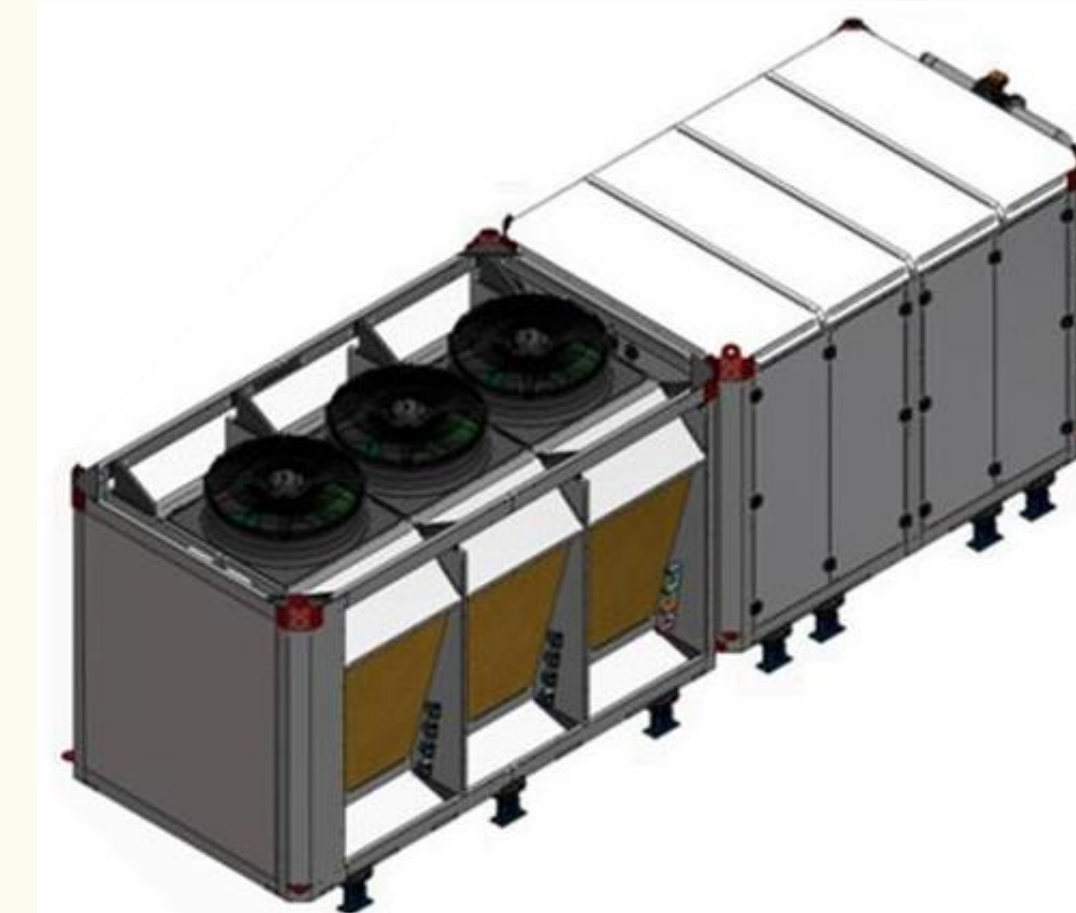


HVAC – Low GWP Options



Water-to-Water Heat Pump (WWHP)

- Refrigerant only inside heat pump
- Ideal for low GWP and overall system life
- R-32, R-454B, and CO2 options
- More coordination required by design team
- Needs to overcome first cost challenges



Air-to-Water Heat Pump (ASHP)

- Refrigerant only inside heat pump
- Ideal for low GWP and overall system life
- R-32, R-454B, and CO2 options
- More coordination required by design team
- Needs to overcome first cost challenges



EV Ready Program

Case Studies
May 19, 2026

evready@westlightenergy.com



Agenda

Large scale outlet installations

- HOAs and rentals
- Hundreds of outlets installed for every dwelling unit

Strategies to lower costs

- 1 parking space: 1 outlet
- Level 1 charging
- Direct wiring



EV Ready Program

EV Ready Program:

Providing technical assistance and incentives since 2020

350+

customer sites
evaluated

2500+

ports installed

2000+

ports in
installation

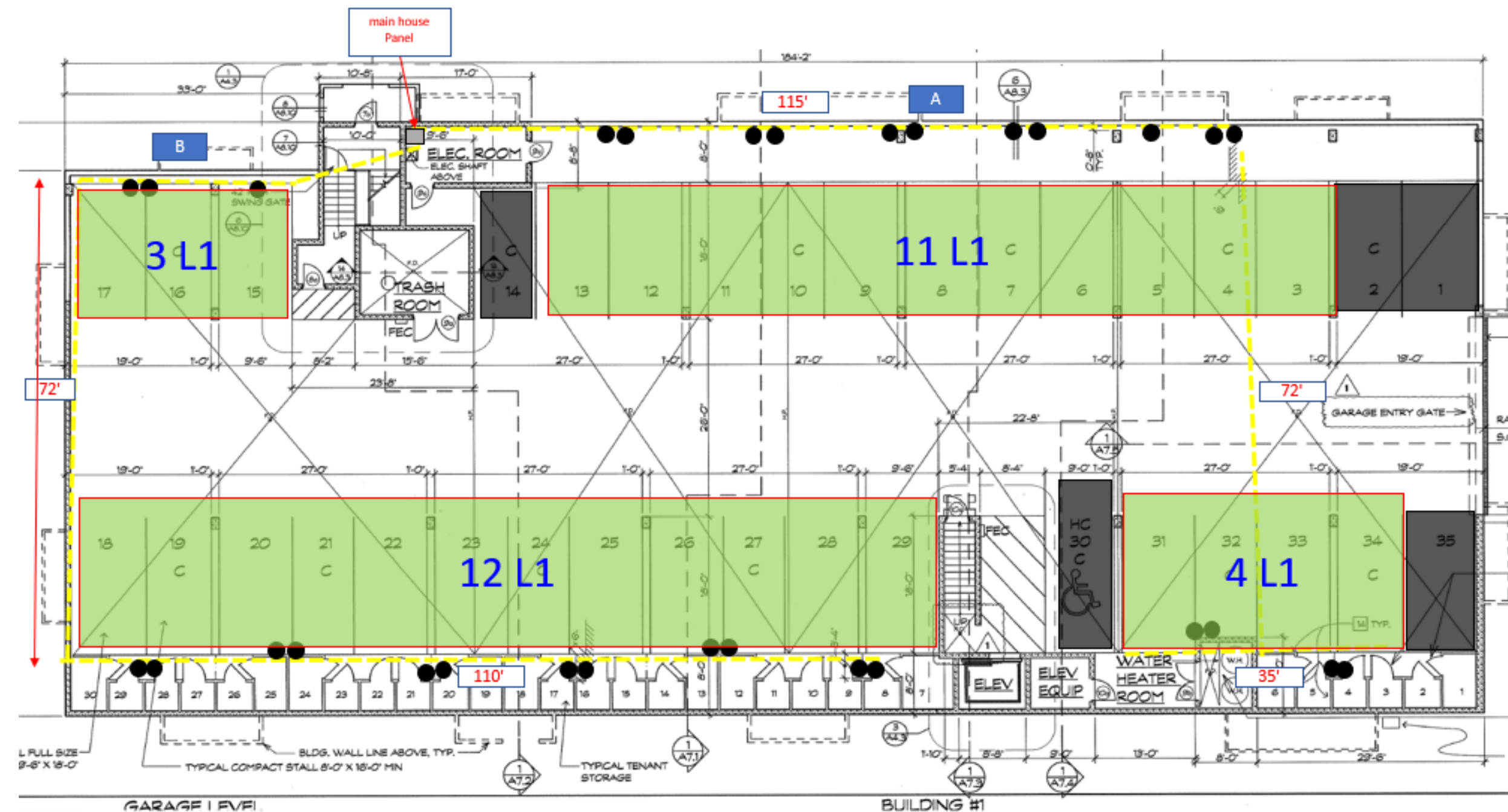
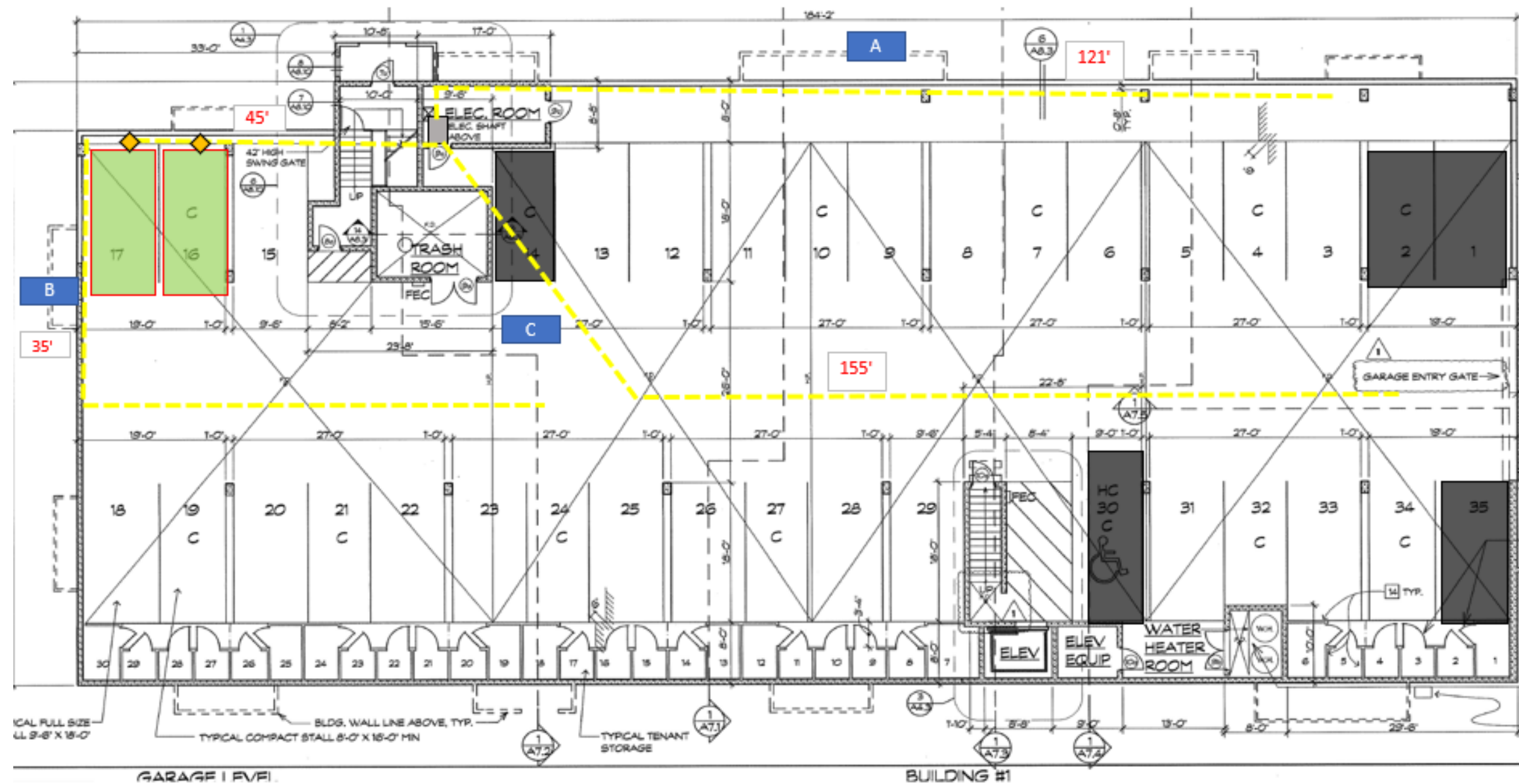
WestLight Energy mission:

Expand access to affordable energy solutions



Woodland Creek HOA

This 90-unit HOA in East Palo Alto came looking to install a few shared chargers...



And ended up installing a load-managed Level 2 outlet in every parking space -
For less than <\$500 per space!

Shared vs Assigned charging

Shared chargers

- More electricity required
- Costly service upgrades
- Requires ADA compliance
- Sacrifice parking spaces to “EV charging only”
- Competition between residents for charging time



WestLight Energy Recommendations for Multifamily

Assigned outlets

- Smooth experience for drivers
- Similar to single-family homes
- Meets the daily needs of 96% of EV drivers
- Costs about \$2500/port, **3-5x less** than Level 2 installs in other programs

Level 1 and load-managed Level 2
Charging keeps costs low and **avoids
service upgrades**



Bayview HOA – Millbrae, CA

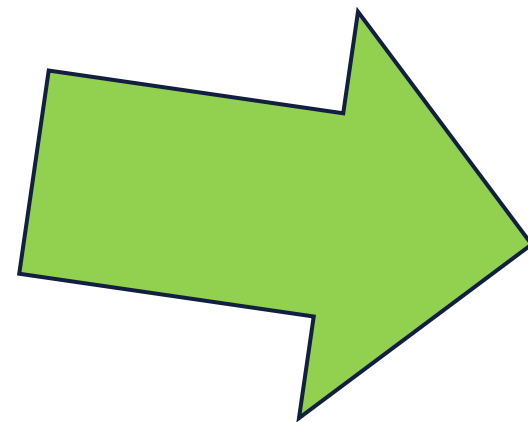
143 outlets - every condo
Zero-cost installation
with WestLight Energy
incentives



House Meters vs. Tenant Meters

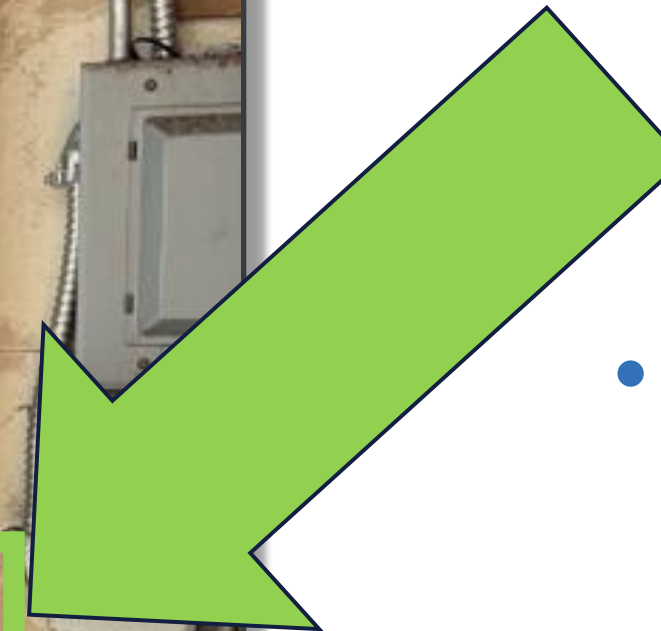
Tenant Meters

- Measures electricity used by each separate unit
- Lighting, TVs, microwave, etc.



House Meter

- Measures electricity used by common area lights, laundry, gym, etc.
- EV chargers are typically installed on the house meter



Smart Outlets and Chargers

Typical multifamily solution:

- Installed on the House panel
- Drivers pay via app to use chargers
- Service provider reimburses the property with collected app revenues
- Property owner sets the price
- Service provider charges a fee



New technologies bill tenants directly

These technologies simplify EV charging management for property owners by billing tenants directly for EV charging

Direct wiring with load balancer



Virtual submetering



Peninsula Pines Rental Apartments

Over 200 outlets installed, one per every dwelling unit

Demand for EV charging is here, and property owners are going big!

You're invited!
Ribbon Cutting – July 29th



Connect with us to learn more



<https://www.westlightenergy.org/business/rebates-offers-business/ev-ready-program/>

Questions? evready@westlightenergy.org

Thank you!

Resources





Delivering the benefits of room heat pumps through market transformation

May 19, 2026

CalMTA is a program of the California Public Utilities Commission and is administered by Resource Innovations.

Who is CalMTA?



- **A program of the CPUC** created to accelerate progress toward the state's energy, climate, workforce development, and equity goals
- Seeks to **make beneficial energy-saving technologies and practices more accessible** and widely adopted through market transformation
- Market transformation: a proven strategic process of **intervening in a market to overcome market barriers and create lasting change**

Why Room Heat Pumps?



- Meeting California's decarbonization goals requires **solutions that meet the needs of multifamily buildings and renters**
- Room heat pumps are a **cost-effective** way to deliver clean, **all-electric cooling and heating**
- Portable **120V products eliminate the need for costly installation or panel upgrades**
- Clear role for CalMTA to **address market barriers and leverage market momentum** with partners like Gradient

CalMTA is a program of the California Public Utilities Commission and is administered by Resource Innovations.



Room heat pump technology



- Includes plug-in window and portable (dual hose) form factors
- Variable speed
- Output at 8k -14k BtU/h for 400-1,000 ft²
- 120V
- Installs without certified HVAC technician or electrician, thus cheaper than alternative HP solutions



Benefits for multifamily buildings



- Increased indoor comfort by providing **cooling and heating in one simple solution**
- **Low-disruption:** products plug into standard outlets and do not require professional installation or drilling in walls
- **Lower upfront cost** than central heat pump systems or mini splits
- **Lower utility bills** than with older plug-in AC units or space heaters
- **Aesthetically pleasing and quiet**

CalMTA is a program of the California Public Utilities Commission and is administered by Resource Innovations.



Preparing for market deployment



CalMTA will launch the Room Heat Pumps MTI with a third-party implementer in mid-2026. Near term key activities will include:

- Work with RHP manufacturers to **ensure greater product diversity** available for the **California market**
- **Partner with MF building owners** to help them access the benefits of RHP technology
 - Demonstrations with currently available products
 - Develop and size opportunity for future products
 - Help with product buy downs
 - Learn about the role this product can play for those without AC
 - Ensure occupants understand benefits and operations
 - Collaborate with existing programs in the area



Let's Connect!



- We want to hear from you!
 - Tell us about your building portfolio
 - location, tenant needs, window type
 - Discuss RHPs and their fit in your buildings
 - How can RHPs solve your challenges
 - Questions on RHPs or the program
- Your input can have a direct impact!
- Check out our website: [CalMTA RHP MTI](#)
- Contact me to discuss: awurzel@calmta.org



Gradient

Window Mounted Heat Pumps



The Urgent Shift in HVAC

AGING SYSTEMS, RISING COSTS, AND CLIMATE PRESSURES FORCE UPGRADES NOW

EXPENSIVE & FAILING



**AGING
INFRASTRUCTURE
IS FAILING**

MANDATES & HIGH COSTS



**LOOMING STATE/LOCAL
REGULATORY PRESSURE**

INFRASTRUCTURE MUST ADAPT



**EXTREME
WEATHER DRIVES
HVAC UPGRADES**

The Gradient Solution: Revolutionizing HVAC Installation & Efficiency for Modern Comfort

⚡ All-Climate, High
Performance Electric
Heating & Cooling

FUNCTIONAL, MODULAR DESIGN



Cooling power
9300 BTU/hr

Heating power
9000 BTU/hr

Plugs into a standard 120-volt outlet

Quiet: 32-47 decibels vs. window ACs (50-60)

All-season comfort:
Operates -13 °F to 115 °F

MERV 13 filter add-on

HASSLE-FREE, LOW-COST INSTALLATION

No drilling or refrigerant handling

30-minute install

Proven field success; units already
transforming homes

Straight forward maintenance schedules

FUTURE-READY

Gradient Nexus offers a full building
management system for building
owners

Cloud-based energy management

Proactive maintenance alerts

Smart set point guardrails

*Includes housing units occupied as primary
residences in the 50 states and DC.

The Gradient All-Weather 120V Window Heat Pump

• GRADIENT





86%

Lower
retrofit
cost

**Boston Housing
Authority**

Boston, Massachusetts



16

minutes to
install a
Gradient by
building
maintenance
staff

**Lynn Housing
Authority**

Lynn, Massachusetts

New York City Housing Authority

New York City, New York

85%

Lower
heating
energy

*GRADIENT



New York City Housing Authority M&V Results

Demonstrated success at NYCHA using Gradient Heat pumps:



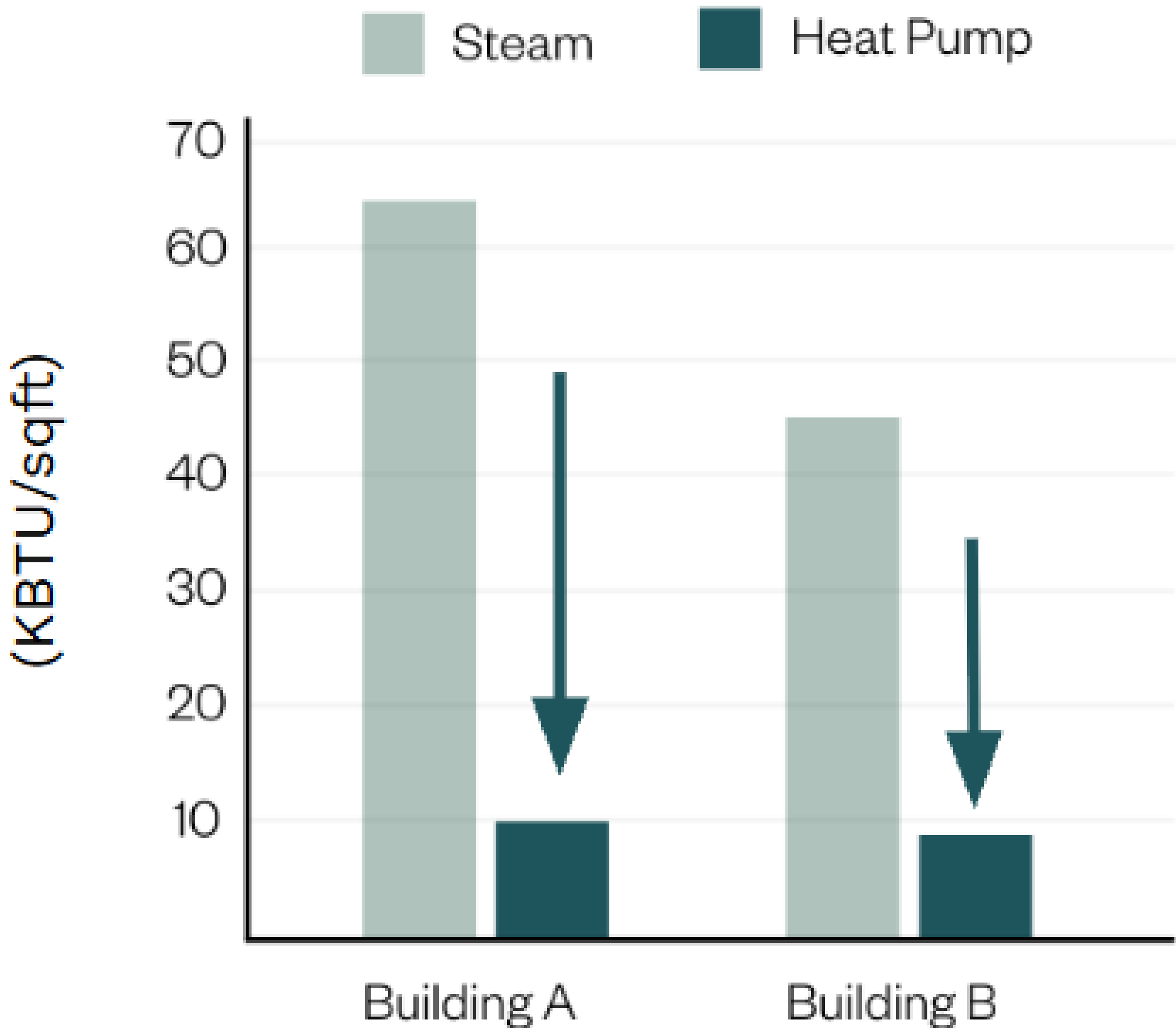
Energy & Cost Savings: 85-88% reduction in heating energy use

GHG Reduction: 76-81% reduction in emissions.

Uniform Temperature: Consistent control, even in unheated spaces.

Minimal Impact to Electrical Load: Only 30% of building load from heat pumps at peak - no electrical upgrades needed

Heating Energy Per Square Foot





Thank You

Samantha Lamos

Senior Manager, Policy & Business Development
samantha@gradientcomfort.com



Local Governments Empowering Our Communities

Energy Saving Retrofits for your Multifamily Property

[5/19/2026]

What We'll Cover

- **Program overview:** key benefits, offerings, and requirements
- Why energy efficiency and electrification?
- The participant journey and common upgrades
- Getting Started
- Q&A

The Bay Area Regional Energy Network (BayREN)

BayREN is a highly effective and trusted group of local governments that deliver targeted, integrated, and regional-scale climate solutions focused on energy, water, and resilience.



BAMBE Program History

2013 – Program launch

2019 – Received a national ACEEE Exemplary Program Award

2020 – New incentives for gas-to-electric conversions

2023 – New incentives to address tenant health, housing, and heat burdens



Program Impacts:

- Upgraded over 51,000 units across 740 multifamily properties
- Paid over \$46 million in direct rebates
- Model for other multifamily retrofit programs across the state

Bay Area Multifamily Building Enhancements (BAMBE)

No-Cost Technical Assistance and Rebates for Energy Retrofits



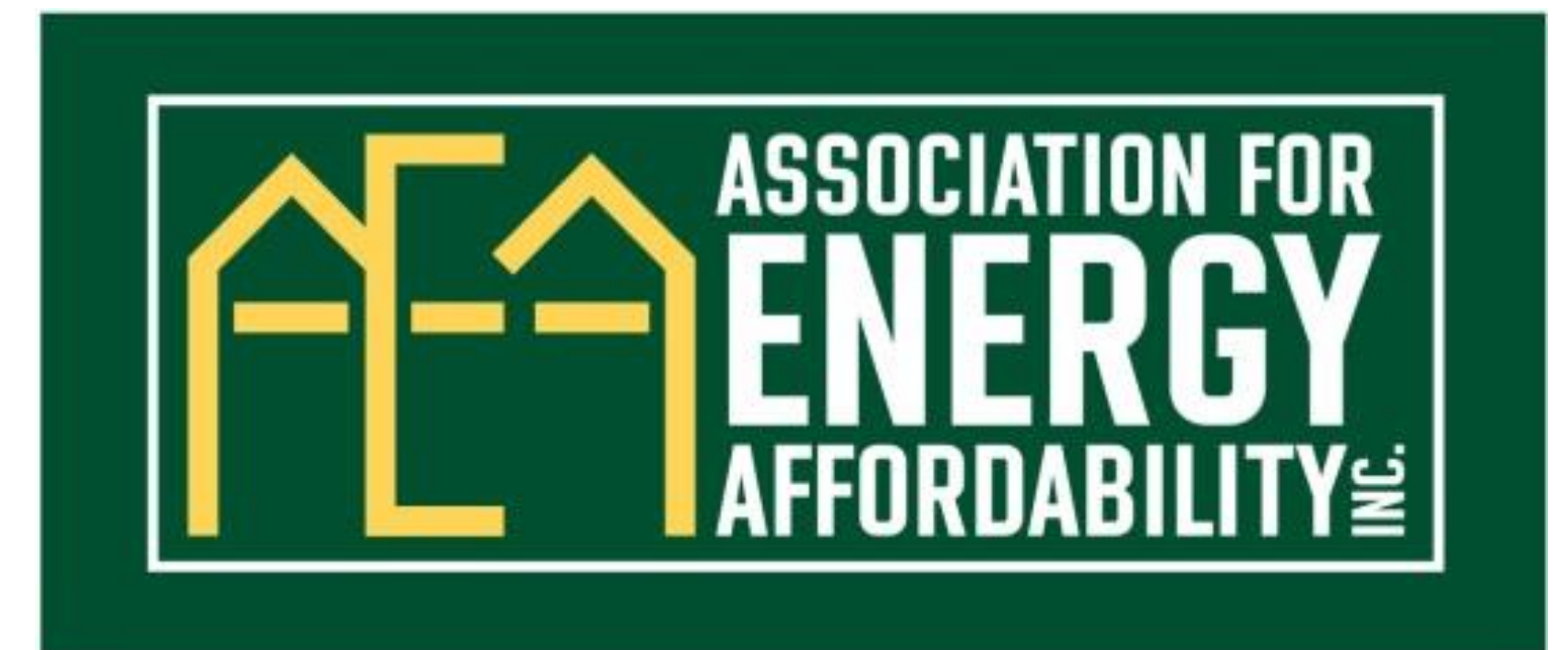
1. Technical Assistance (TA)

- Provided in partnership with the Association for Energy Affordability (AEA)
- One-stop-shop to connect with contractors, financing and additional programs
- Scope development support and energy usage analysis once project is ready to move forward



1. Technical Assistance (TA)

- Nonprofit organization dedicated to achieving energy efficiency in new and existing buildings to foster and maintain affordable and healthy housing and communities, especially those of low-income.
 - Implements various efficiency programs across California
 - Will connect you with additional incentive programs, if available



2. Cash Rebates

- **Rebates ranging from \$500-\$6,000+ per unit**
 - Base rebate of \$500/unit
 - 30-40% avg. project cost covered
 - Rebate adders for properties pursuing electrification and those located in high-priority communities
- Choose your own licensed contractors
- Financing options are available to fill gap between rebate and project cost

BAMBE program requirements

- Eligibility:
 - Existing residential properties **located in the 9-county Bay Area** and served by PG&E
 - Must have **5 or more dwelling units** (renter- and owner-occupied both eligible)
 - *Market rate properties 50 units or more are not eligible*
- Requirements:
 - Must install 2 or more unique measures that achieve combined modeled energy savings of at least 10%

Typical Upgrades

- HVAC
 - Smart thermostats
 - Electrical wiring upgrades
- Domestic Hot Water
- Envelope
 - Windows, walls, roofs
- Lighting
- Appliances
- Pool Equipment
- Gas to Electric Conversions

- **Ineligible:**

- Renewable energy
- Green building materials

*Work already purchased or installed are not eligible for BAMBE rebates

Benefits of Energy Efficiency Retrofits

Your Bottom Line

- Save on utility bills for central systems, common areas
- Reduce equipment downtime

Resident satisfaction

- Increased comfort, reduce ambient noise
- Improved indoor air quality/health
- Improved safety
- Increase systems reliability

Future-Proofing

- Rising energy and water costs
- Get ahead of potential mandatory requirements



BAMBE Technical Assistance (TA): What to Expect



TA Phase I: Assessment + Scope Development

- Phone Consultation and Scope Development
 - What are the needs of the property and the tenants?
 - What are the goals of the property owner/manager?
 - Do you have a scope of work in mind?
 - Have you received bids from contractors?

TA Phase II: Site visit

- Site visit
 - Gather data points to build a model of how the property uses energy
 - Document any red flags that should be addressed
 - Identify key opportunities and constraints as they relate to owner's goals and proposed scope of work
 - TA and property owner will use findings from the site visit to finalize the scope of work and request the associated rebate reservation

TA Phase II: Assessment + site visit



TA Phase II: Energy Survey Report and Scope Development

- Energy Survey Report includes findings from site visit and recommended upgrades
- Your TA will walk you through the report and work with you to finalize a detailed scope of work and request a rebate reservation
- At this point we can make referrals to additional programs and connect you with contractors

Bay Area Multifamily
Building Enhancements

BAYREN

Rebates and Free Consulting for Energy and Water Savings

Energy Survey Report



8/17/2020

ASSOCIATION FOR
ENERGY AFFORDABILITY

BAYREN

TA Phase III: Installation and project close-out

- Once you reserve your rebate, you may use any licensed contractor
- Project upgrades should take 12 months or less, projects that are greater than 12 months require written explanation
- Once work is complete, AEA will complete a combustion appliance safety (CAS) test and project verification
- Upon approval, your rebate check will be sent in the mail

TA Phase III: Energy Survey Report and Scope Development



Understanding Potential Rebate Incentives



Base Rebate

Eligibility	Amount	Eligible Measures
<i>Must install 2 or more measures that reduce building's total energy use by 10% or more*</i>	\$500 per unit	All eligible energy efficiency measures

**Energy savings estimates are modeled by our team. Only 5% energy savings is required if in-unit envelope improvements are included (i.e. windows, wall insulation)*

Electrification Adders

Eligibility	Eligible Measures	Rebate Amount
All properties in BayREN territory are eligible	In-unit Heat Pump Water Heater	\$1500 per apartment upgraded
	In-unit Heat Pump HVAC	\$1500 per apartment upgraded
	In-unit Laundry Dryer	\$250 per apartment upgraded
	In-unit Electric Cooking	\$750 per apartment upgraded
	Central Heat Pump Water Heater	\$1000 per apartment served*
	Central Heat Pump HVAC	\$1000 per apartment served
	Common Area Heat Pump HVAC	\$1000 per equipment
	Laundry/Common Area HP Water Heater	\$1000 per equipment
	Heat Pump Pool Heater	\$1000 per pool/spa
	Electric Panel Upgrades	Up to \$1000 per unit for subpanel & up to \$5000 /property for central/common area

**Property cap of \$100,000. Program cap of \$500,000*



Health Burden Adder

Eligibility	Eligible Measures	Rebate Amount
Only properties located in “Health Burdened” priority zone	Windows	\$500/ unit upgraded
	In-unit Heat Pump HVAC (MSHPs/ PTHPs)	
	In-unit Laundry Dryer	
	In-unit Electric Cooking	
	In-unit Heat Pump Water Heater	

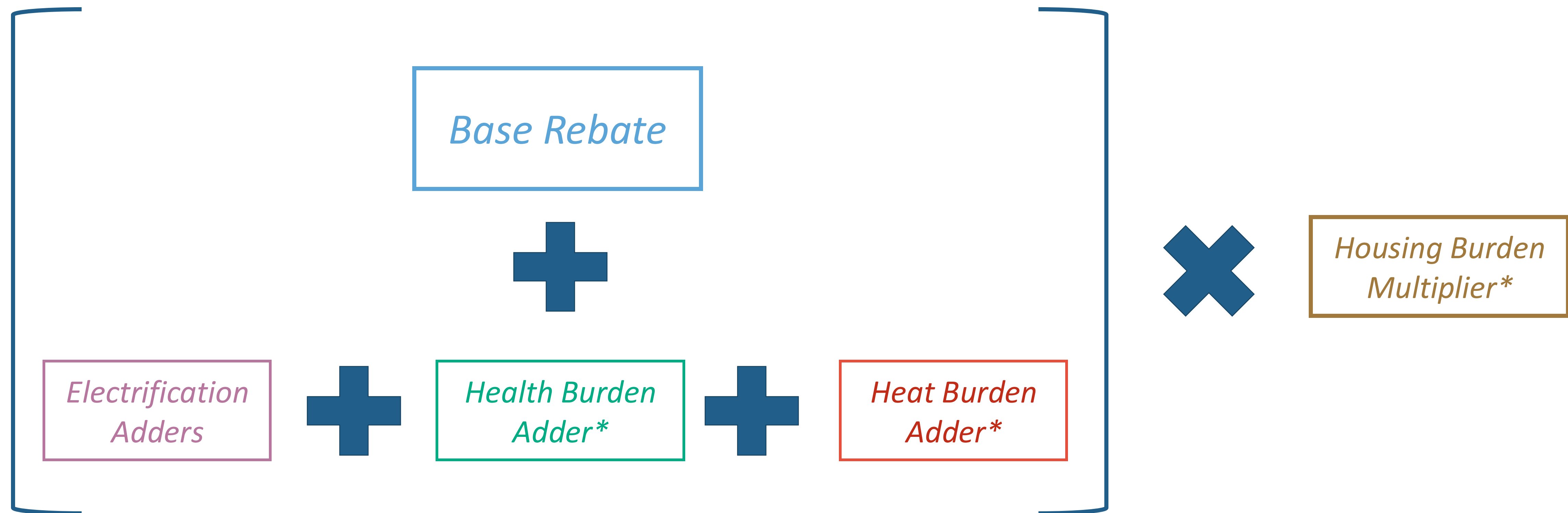
Heat Burden Adder

Eligibility	Eligible Measures	Rebate Amount
Only properties located in “Heat Burdened” priority zone	Windows	\$500/ unit upgraded
	In-unit Heat Pump HVAC (MSHps/ PTHPs)	
	Wall Insulation/ Attic Insulation/ Roof Insulation/ Crawlspace Insulation/ Floor Insulation/ Cool Roof	

Housing Burden Multiplier

Eligibility	Eligible Measures	Rebate Amount
Only properties located in “Housing Burdened” priority zone AND Has <50 units and built pre-2010, or deed-restricted affordable property	A) 1.5x increase to total rebate for all scopes of work OR 2X increase if scope includes wall insulation and/or window upgrades	
	AND	B) \$500 reimbursable per unit for refrigerators, dishwashers, in-unit washing machines, lighting, in-unit duct sealing, in-unit duct insulation, and/or smart thermostats

How is my rebate determined?



**Only available to properties in select census tracts*

Understanding Rebate Incentives

Here is an **example** of an electrification project at a 20-unit property that does not include burden zone incentives

- **Base Incentive = \$10,000** (\$500 rebate x 20 units)
- **Central Heat Pump Water Heater Electrification Adder = \$20,000**
(\$1,000/unit x 20 units)
- **In Unit Heat Pump HVAC Electrification Adder = \$30,000**
(\$1,500/unit x 20 units)
- **Total Rebate = \$60,000**

Property Lookup

BAMBE Eligibility Tool

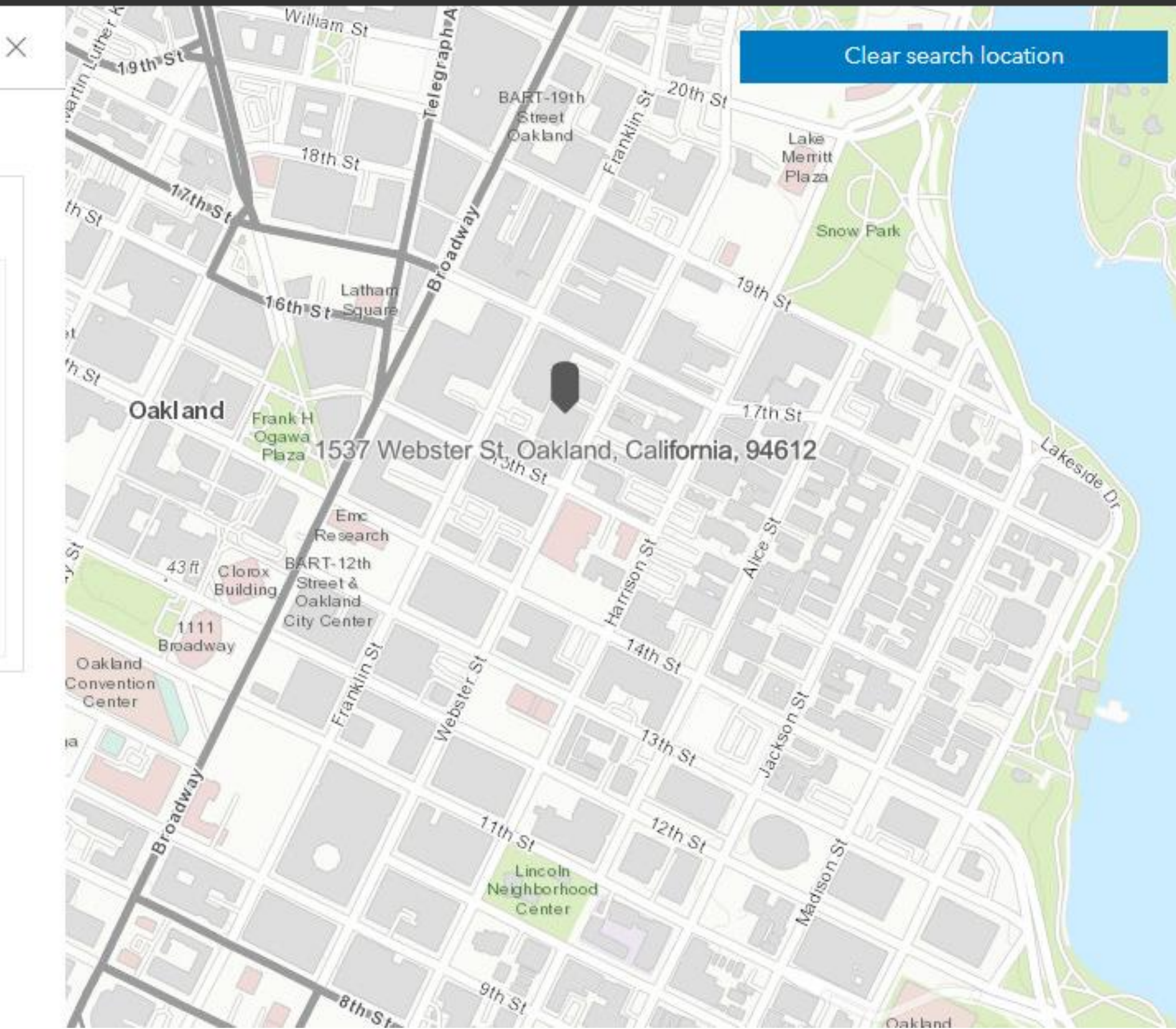
1537 Webster St, Oakland, CA, 94612, USA

Results: 1

Rebate and Adder Eligibility

Gas Provider	Pacific Gas & Electric
Electric Provider	Pacific Gas & Electric
Base Rebate	Eligible (\$500/unit)
Electrification Adder	Eligible
Health Burden Adder	Eligible (\$500/unit)
Heat Burden Adder	Not Eligible
Housing Burden Multiplier	Eligible (1.5-2x rebate multiplier)

<https://tinyurl.com/BAMBEeligibility>

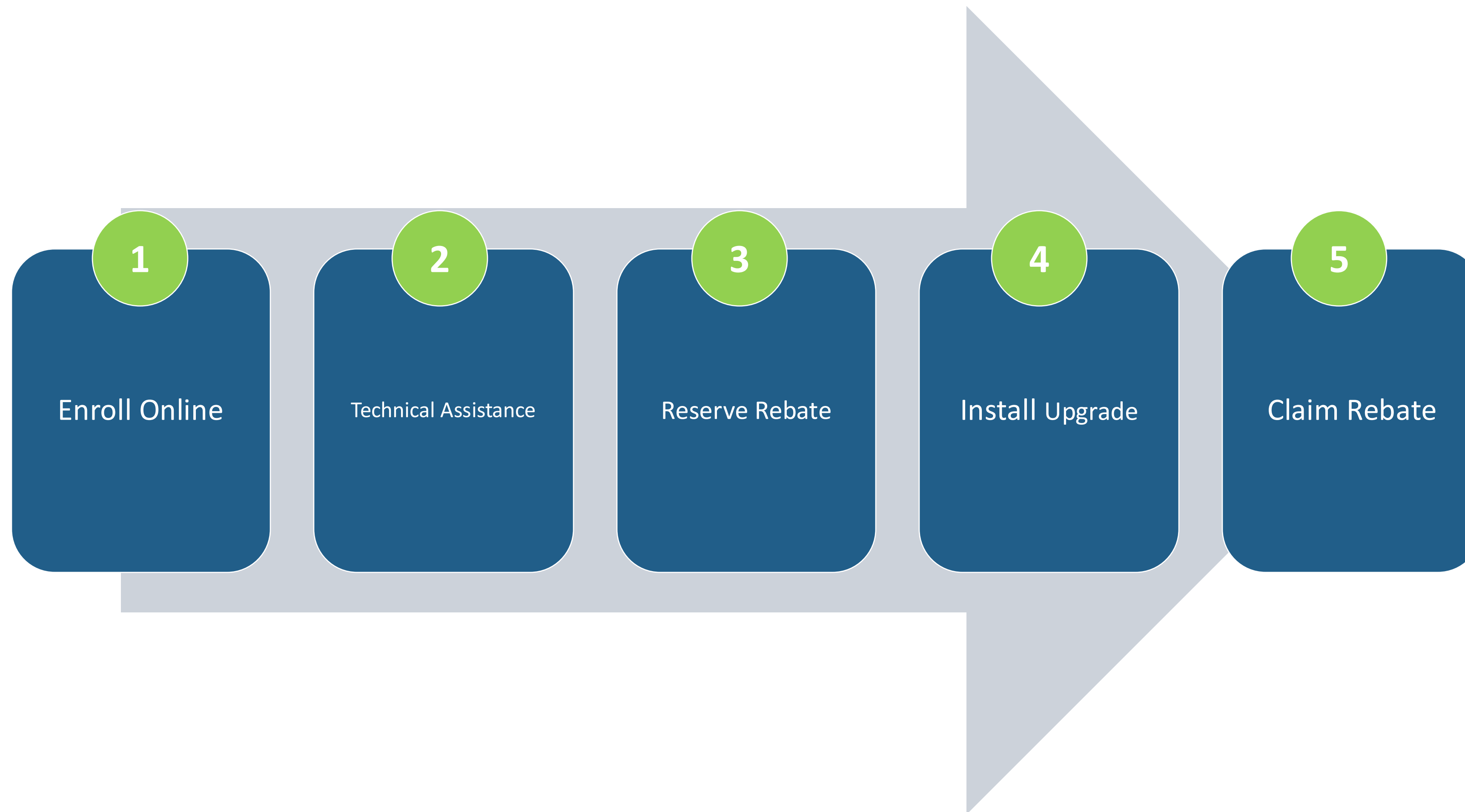


Getting Started

Bay Area Multifamily Building Enhancements



5 Simple Steps



Interest Form

» Interest & Eligibility

If you're a multifamily property owner interested in significant rebates and consulting for building energy upgrades in the Bay Area, complete and submit this form to let us know you're interested in the program.

A BayREN representative will contact you within five business days.

The program requires multiple energy efficiency and/or electrification measures. Rebates typically cover a significant portion of project costs and are paid after installation.

BAMBE Eligibility

First Name *

Last Name *

Property Contact Type

- ☐ Property Manager
- ☐ Property Owner
- ☐ Homeowner

Are you the decision-maker for the property? *

- ☐ No
- ☐ Yes

Enroll Online Today:
www.bayren.org/eligibility



Thank you

Learn more & roll online at
Bayren.org/multifamily

Contact the program:
855-213-2832 or
multifamily@BayREN.org



EV Ready Program

Resources and Incentives
May 19, 2026

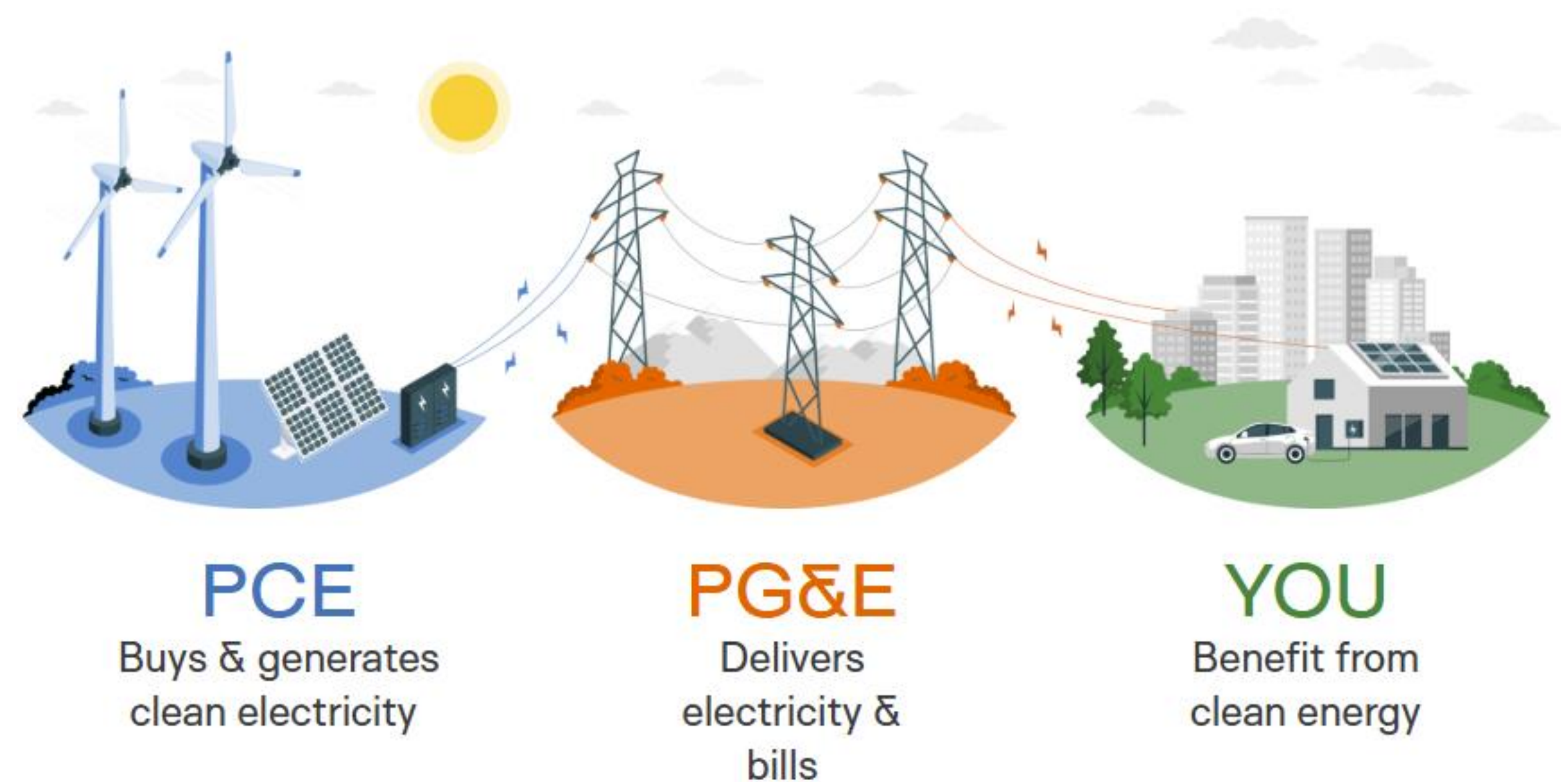
evready@westlightenergy.com



WestLight Energy is a **locally-led** electricity provider generating **clean & affordable** power serving San Mateo County and Los Banos

Mission: Reduce greenhouse gas emissions by expanding access to **sustainable & affordable** energy solutions

How it works



Community Programs and Reinvestment

As a not-for-profit organization public agency, WestLight Energy reinvests its earnings into the community

Since our inception in 2016:

\$70M
Community
investment

\$200M
saved by
WestLight Energy
customers

<3%
State
funds



Recent initiatives

- Launched \$26 million building electrification assistance (\$40M joint with SVCE)
- Financing solar + storage, public agency electrification, home electrification
- Caltrain first commuter rail service to use 100% clean electricity
- Contracting for 50MW/4hr local FTM storage in Brisbane Baylands

~\$160M
Over next 4 years
in community
reinvestments



Committed to investing in EV charging

WestLight Energy EV Ready is fully self-funded

Program support:

- 1 on 1 technical assistance
- Incentives up to 100% of costs

Program partners,
Ecology Action



- Saves money when investing in EV charging
- Property owners install on average 3x more chargers than originally anticipated
- Customized assessment for each property helps avoid costly service upgrades

II. EV Charging Options Continued



Option 1: 22 Level 2 ports (Optimal Number of L2 Chargers on Existing Service)

Install up to 22 privately shared Level 2 chargers, providing each unit access to at least one Level 2 charger. Chargers will be installed on new EV subpanel from house panel. When all chargers are in use, chargers will provide a minimum of 3.3 kW rate of charge.

OPTION 2 SUMMARY	House Meter #	House Panel Name	EVSE Type (L1 or L2)	EVSE kW rating	Max # of EVSE possible
Parking Lot	1007073686	HS	L2	11.52kW	33

Property owners also receive:

- Contractor and bidding support
- Negotiated charger pricing
- Expert guidance on selecting vendors and setting prices
- Support navigating all available incentives



Incentives are structured to support property owners tackling large, full electrification projects

Existing Building Multifamily dwelling	Measure Type L1 or L2 outlet	Port Incentive \$2,500	Applicable Cap ¹ No cap
	Measure Type L2 charging station port	Port Incentive \$4,500	Applicable Cap ¹ Up to 75% of project cost, maximum \$135,000 per property
	Measure Type Main panel upgrade ²	Port Incentive \$5,000	Applicable Cap ¹ Up to \$5,000 per property
Existing Building Affordable housing multifamily dwelling	Measure Type L1 or L2 outlet	Port Incentive \$3,000	Applicable Cap ¹ No cap
	Measure Type L2 charging station port	Port Incentive \$5,500	Applicable Cap ¹ Up to 100% of project cost; maximum \$135,000 per property
	Measure Type Main panel upgrade ²	Port Incentive \$5,000	Applicable Cap ¹ Up to \$5,000 per property

**Up to
100% of
outlet
project
costs**

<https://www.westlightenergy.org/business/rebates-offers-business/ev-ready-program/>

Sign up for technical assistance today



<https://www.westlightenergy.org/business/rebates-offers-business/ev-ready-program/>

Questions? evready@westlightenergy.com

Thank you!



gogreen
FINANCING™

GoGreen Business & GoGreen Multifamily Energy Financing Programs

Presented by Kevin Nakano, Program Specialist

Administered by the California State Treasurer's Office
Supported by California's Investor-Owned Utilities (IOUs)



Program Overview

Purpose

- To help business, nonprofit, and multifamily (including HOAs) owners reduce energy consumption and GHG emissions.

Program Structure

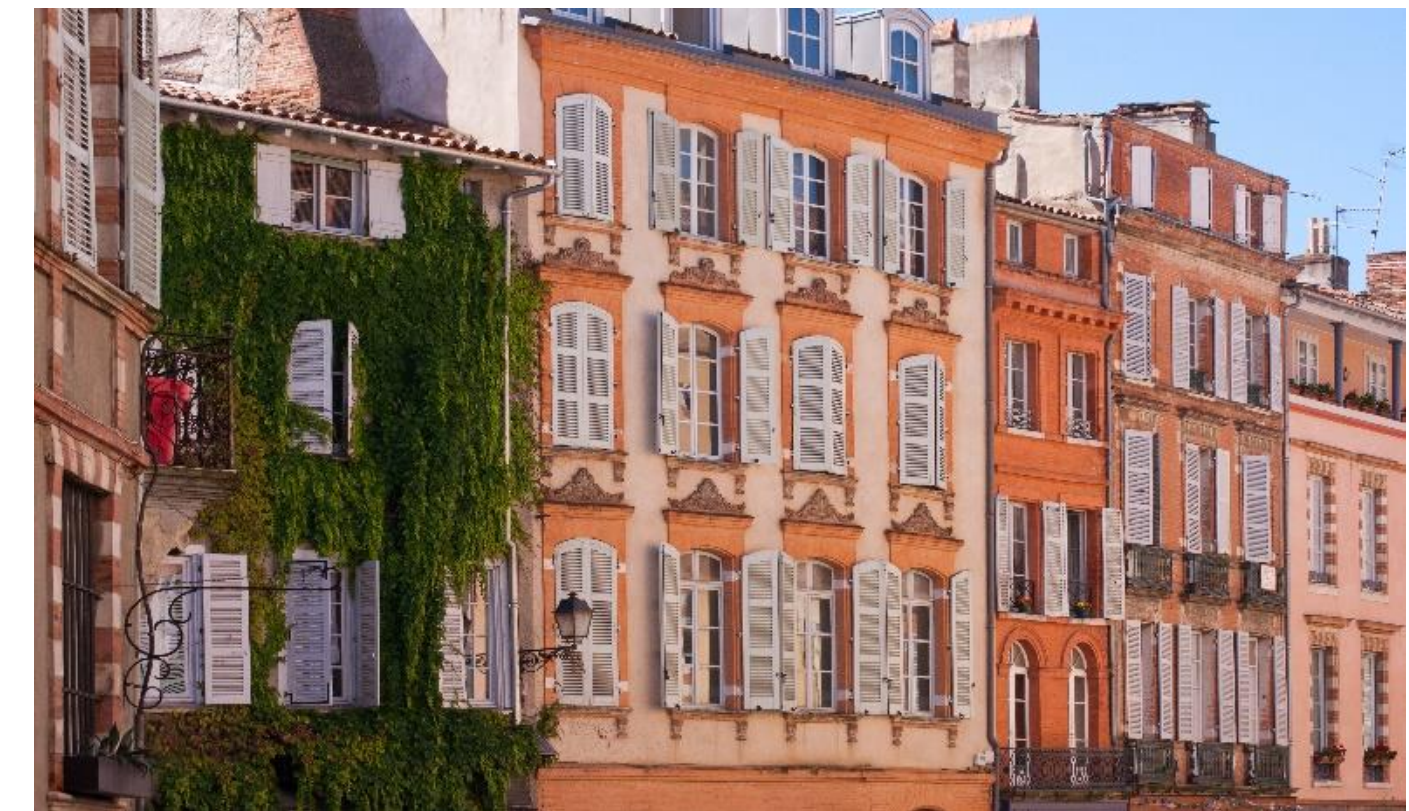
- Offers a credit enhancement to enrolled financing companies and in return they provide benefits to customers, such as better financing terms and expanded underwriting criteria.

Helping Business, Nonprofit, & Multifamily Owners

- Helps owners avoid paying cash upfront for energy upgrade and energy efficiency retrofit projects.
- Enables owners to do larger more comprehensive energy projects.

Interest Rate By Down Promotion

- \$7,500 per project to help buy down customer's interest rate (subject to funds availability).



Eligible Small Business Financing Customer

(Includes Market Rate Multifamily Customers)

IOU customers who are:

✓ For-profit
businesses

or

✓ Nonprofit
organizations

Businesses that own or lease their space are eligible

As long as business meets **ONE** of the following size requirements:

100 or fewer employees, **or**

Annual revenues of less than \$16 million, **or**

Meet SBA small business size requirements for their industry

*Multifamily property is a residential building with five or more units.



Eligible Affordable Multifamily Customer

IOU customers who are:

✓ For-profit
businesses

or

✓ Nonprofit
organizations

Businesses that own or lease their space are eligible

Meets the following requirements:

Recorded affordability deed restriction or covenant

And

Restricted occupancy

*Multifamily property is a residential building with five or more units.



Project Financing Structure

70% or More - Eligible Energy Measures:

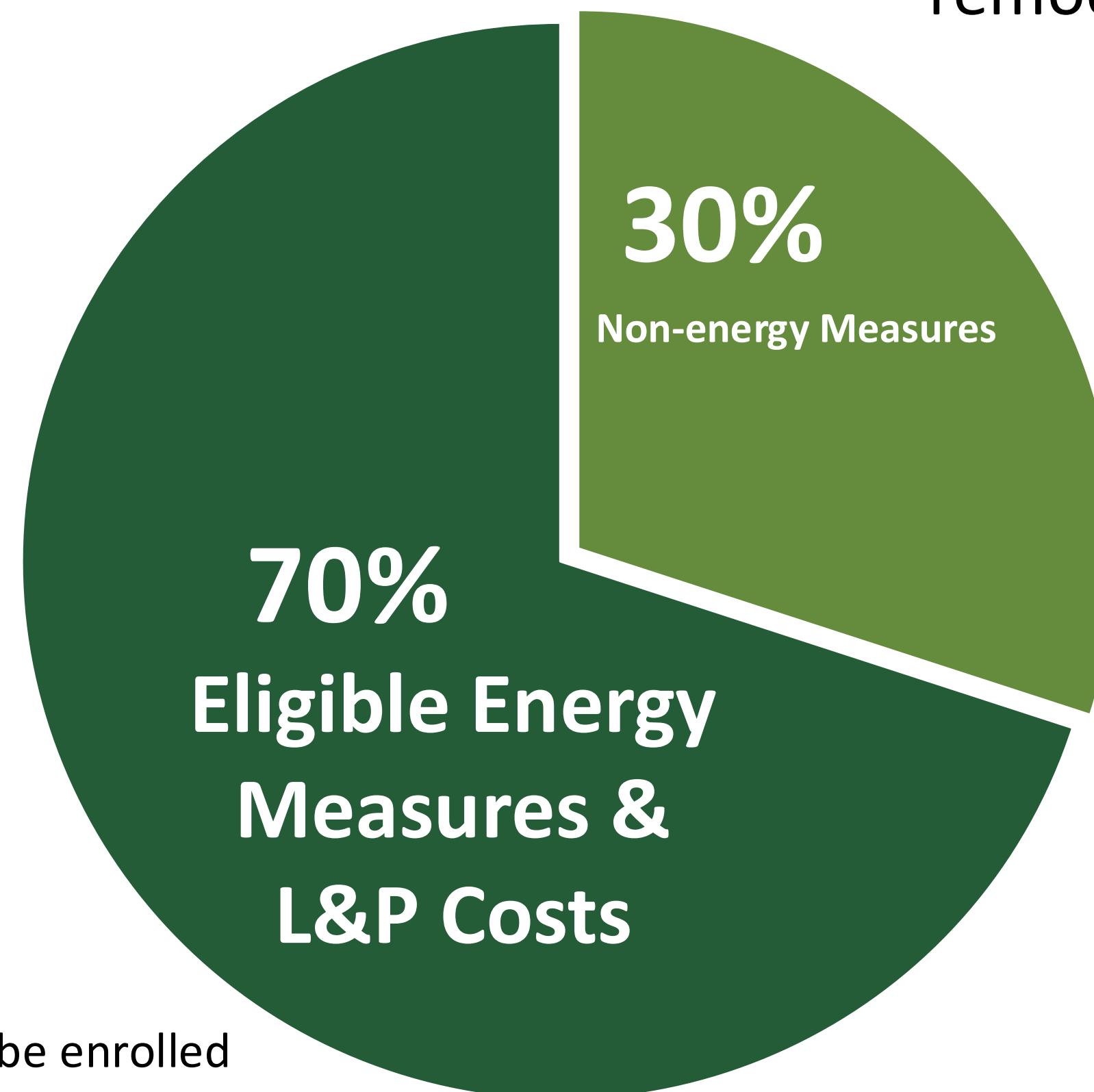
- Energy generation and storage measures
- EV charging
- Energy efficiency measures

Includes Legally & Practically Required Costs:

- Code-required repairs
- Roof repairs
- Battery enclosures
- Electrical panel upgrades
- Permits

Similar Programs:

Projects enrolled in the GGB program may not also be enrolled in another credit enhanced financing program.



30% Max - Borrower's Choice:

Non-energy measures, such as remodeling and landscaping

Multifamily Projects:

In-unit and common area installations both qualify

Energy Source:

An EEM must utilize, conserve, store, or produce a fuel provided by an IOU, CCA (Community Choice Aggregation), or ESP (Electric Service Provider) at the Eligible Property.

Eligible Energy Measures

1. Eligible Energy Measure Prequalified List (EEM List)

- Prequalified list of eligible energy measures (EEM).
- Max \$350,000 for non-LED EEM project, no limit for LED projects.
- IOU, REN, or CCA demand-side energy management program measure.



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Explore Eligible Energy Measures for GoGreen Business.

Use the table below to find prequalified [Eligible Energy Measures \(EEMs\)](#). View [additional qualification methods](#) for custom projects.

Filter results (237 results)

Fuel type: Any

Search by measure name: Enter measure name

☐ Self-install eligible

Search [Reset](#)

Agriculture	▼
Appliances	▼

Measure Eligibility Pathways

2. Professionally Certified Measure Method

- EEM projects that are not included on the EEM list above or exceed the \$350,000 non-LED EEM limit require an Energy Professional, either a Certified Energy Manager (CEM) or Professional Engineer (PE), certification.

3. IOU Custom Measure

- IOU Custom program measure (IOU approved within last 24 months).



EEM Examples

Energy Generation & Storage:

- Solar PV & Battery Storage
- Solar Hot Water
- Microgrid Infrastructure
- Anaerobic Digestion
- Power to Gas/Hydrogen Fuel Cells
- Wind Turbines
- *And more...*



Energy Efficiency:

- LED
- EV Charging (Level 1, 2 & 3)
- HVAC & duct sealing
- Water heaters
- Insulation & air sealing
- Window replacements
- Cool roofs
- Refrigeration
- VFD pumps
- Appliances and smart thermostats
- *And more...*

Enrolled Contractors & Project Developers

The number of enrolled project developers and state licensed contractors is over 300 and is continually growing. A searchable list can be found on the program website:

[Project Developers](#)

[Contractors](#)



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Find a contractor for
your commercial
energy efficiency
upgrades

Find a GoGreen Business contractor to help with
affordable financing and expert installation of energy-
efficiency improvements for your business, nonprofit
organization or multifamily property.

Search by name

Enter name

Zip code

Enter zip

Types of upgrades

0 selected

▼

Spoken language

English

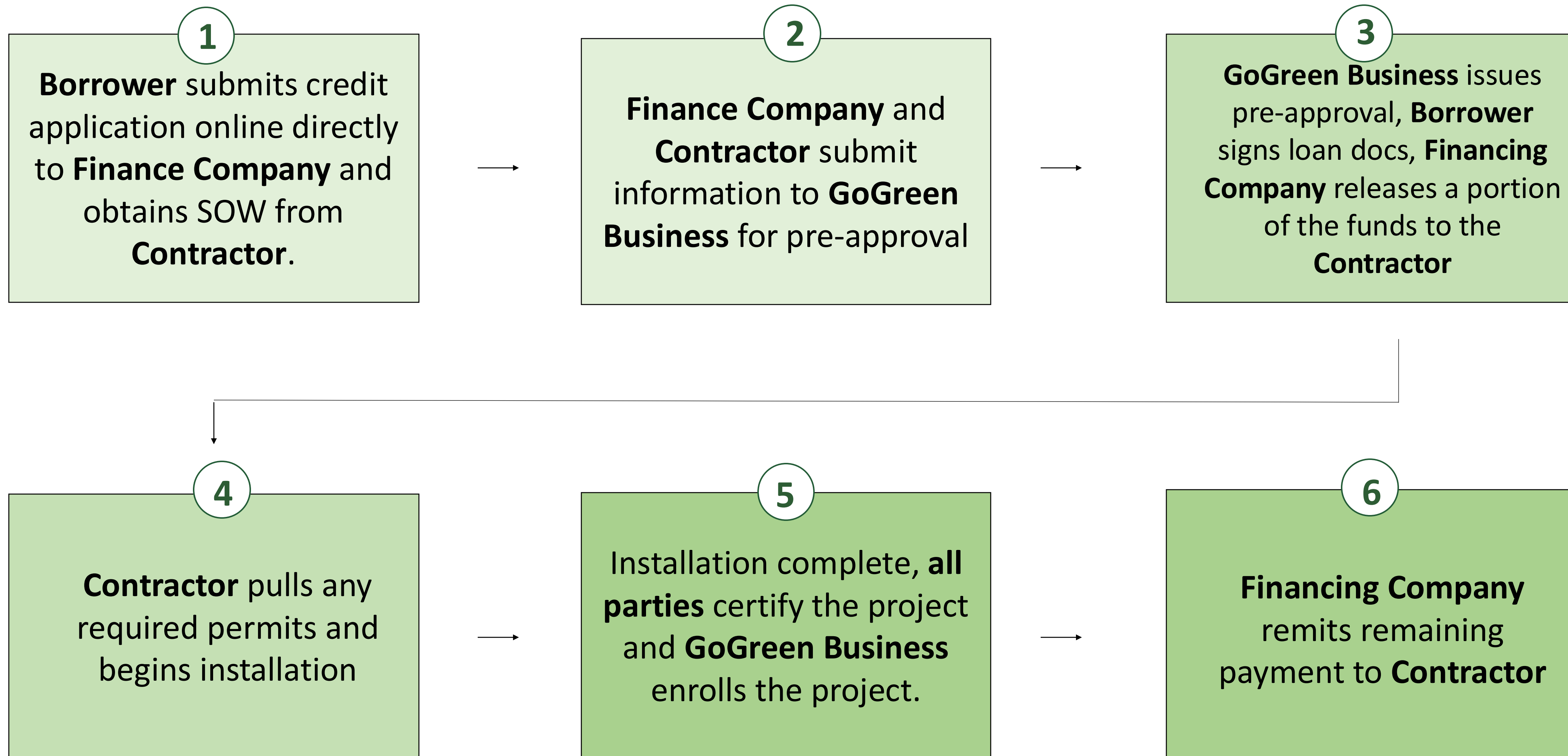
▼

Search

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Typical Customer Process



On-Bill Repayment (OBR)

- Customers have the option to make their financing agreement payments through their utility bills.
- Available in all four IOU territories.
- Available to multifamily properties that are master metered.



Enrolled Financing Companies



[Link to Enrolled Financing Companies](#)

GoGreen Multifamily Project Examples

Example 1:

Project Cost: \$81,100

Measures: Heat Pump Water Heaters

Example 2:

Project Cost: \$127,755

Measures: Solar & Battery Storage

Example 3:

Project Cost: \$21,250

Measures: Cool Roof

Example 4:

Project Cost: \$241,744

Measures: Heat Pump HVACs

Example 5:

Project Cost: \$60,000

Measures: Air Conditioning Units

Example 6:

Project Cost: \$64,200

Measures: Heat Pump Water Heaters

Customer Online Resources

- [GoGreen Business & GoGreen Multifamily](#)
- [Contractor Database](#)
- [Project Developer Database](#)
- [Finance Company Database](#)
- [Eligible Energy Measure Database](#)



Thank You

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Thank you.