



# Existing Building Electrification Strategy

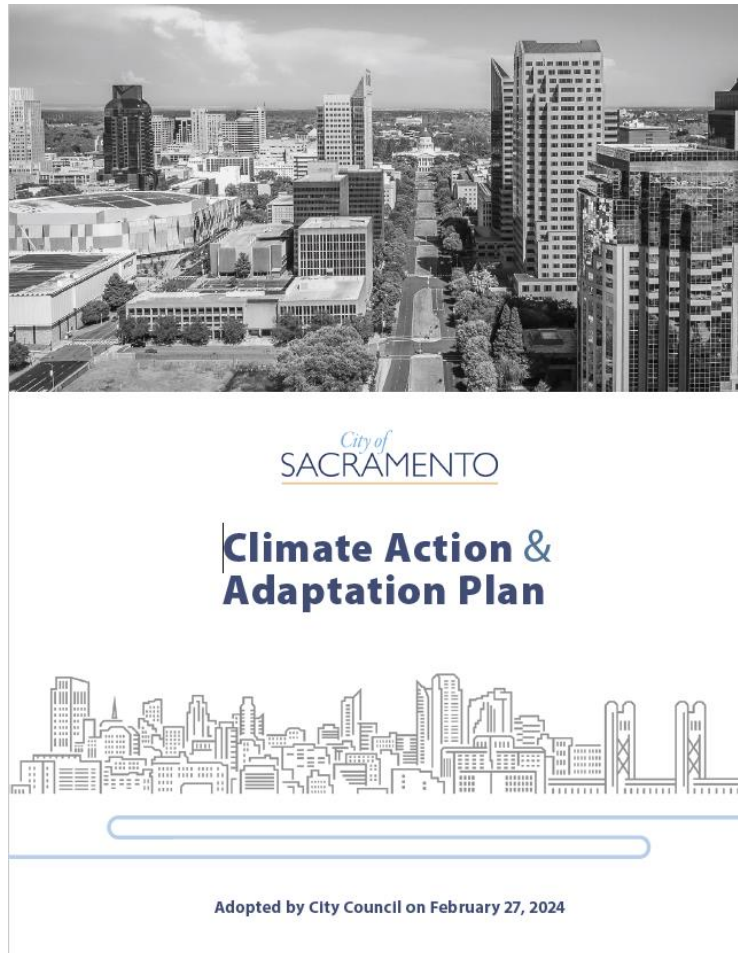
City Council  
May 14, 2024

## Overview

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1. Background
2. Strategy Development Process
3. Summary of Core Policies
4. Summary of Notable Revisions
5. Implementation Timeline
6. Next Steps

# Greenhouse Gas Emissions Reductions



To meet our climate goals, Sacramento's **building stock** and **electricity supply** must be carbon neutral by 2045

# New Building Electrification Update

**JUNE 2021**



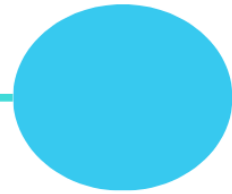
New Building  
Electrification  
Ordinance  
Adopted

**JAN 2023**



Ordinance takes  
effect for  
buildings 3 stories  
or less.

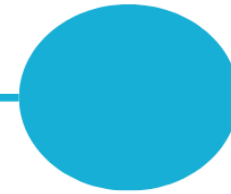
**APRIL 2023**



9th Circuit Court  
of Appeals  
decision in CRA v.  
City of Berkeley

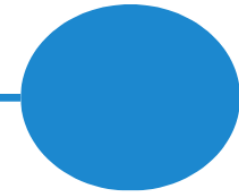
Sacramento stops  
enforcement of  
Ordinance

**MARCH 2024**



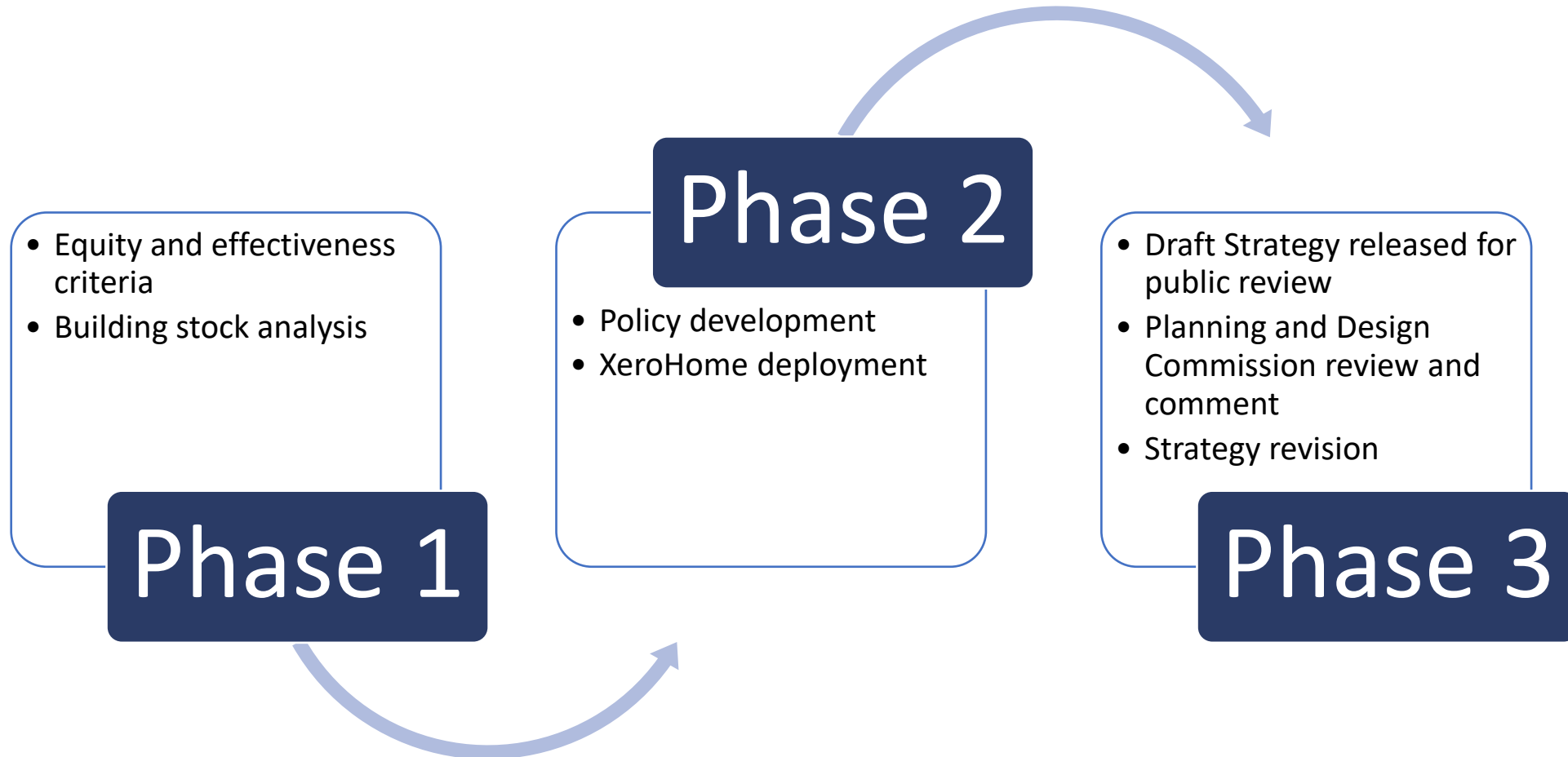
City of Berkeley  
Settles lawsuit  
with California  
Restaurant  
Association

**2025**



Replacement  
ordinance in  
compliance with  
applicable laws  
and regulations

# Strategy Development Process



# Equity and Effectiveness Criteria

## Equity Criteria



**Affordable and Reliable Energy**



**Easy and Affordable Installation**



**Holistic Building Improvements**



**Culturally Competent  
Outreach and Education**

## Effectiveness Criteria



**Cost-Effectiveness**



**Programmatic Feasibility**



**Measurable and Sustained Impact**



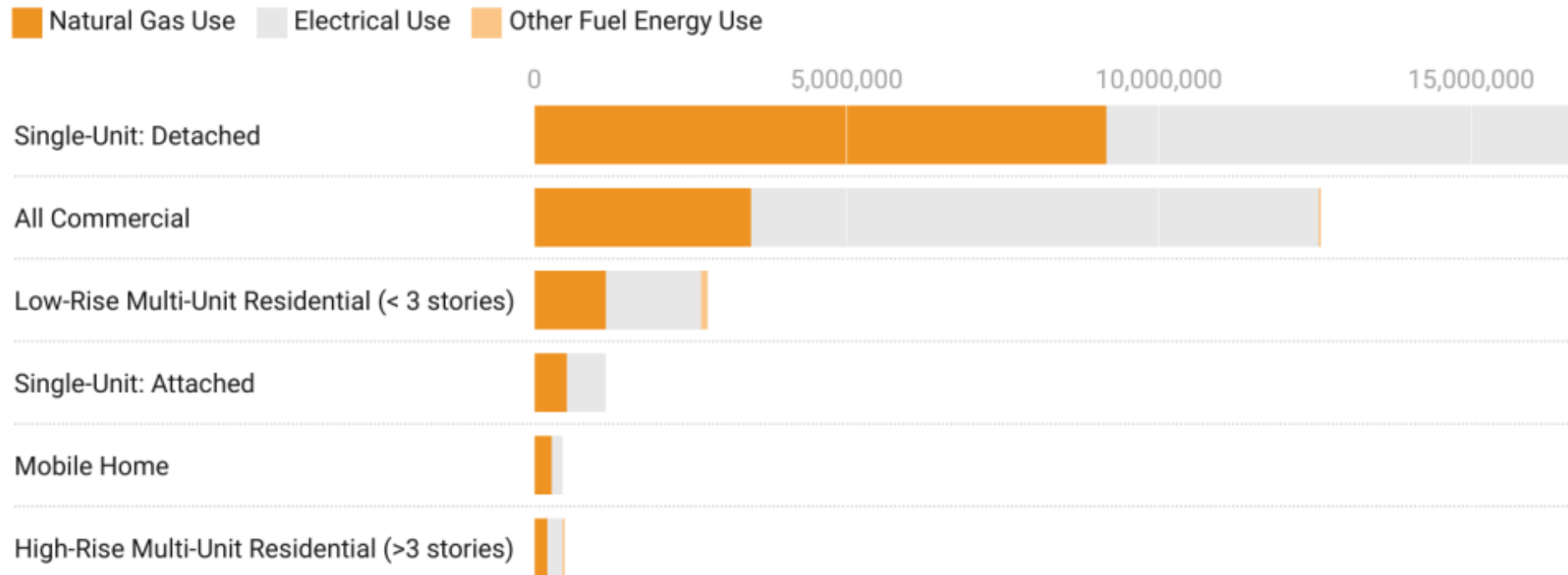
**Technological and  
Regulatory Feasibility**



**Energy Security**

# Energy Modeling

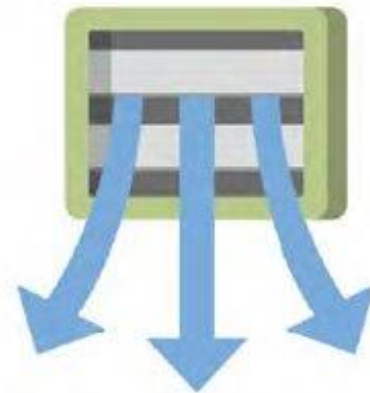
**Figure 4. Total Sacramento Energy Use by Building Type (MMBtu/Year)**



Single-unit residential buildings account for  
62% of gas use in Sacramento

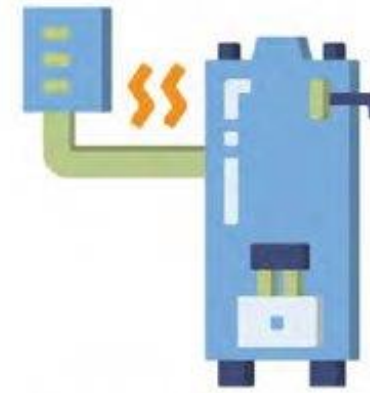
# Energy Modeling

**Figure 8. Annual On-Bill Cost Savings for Single-Unit Residential Homes after Switching to a Heat Pump**



**Average  
HVAC Savings**

**\$620**



**Average Water  
Heater Savings**

**\$330**

Utility bill savings projected for  
100% of single-unit homes



# How do we electrify existing buildings?

Replace gas appliances with energy efficient electric appliances



Gas furnace



Electric air source  
heat pump provides  
heating & cooling



Gas water heater



Electric heat  
pump water heater



Gas stove



Electric resistance  
or induction  
cooktop & oven



Gas clothes dryer



Electric resistance  
or heat pump  
clothes dryer

# Incentives Available for Electrification



Residential Incentives

Multi-unit Residential  
Incentives

Commercial Incentives



TECH Residential Incentives

- Heat pump HVAC
- Heat pump water heaters

Higher incentives available for  
low-income customers



Residential Tax Credits

Commercial Energy  
Efficiency Tax Credits

Industrial/Manufacturing  
Decarbonization Tax  
Credits

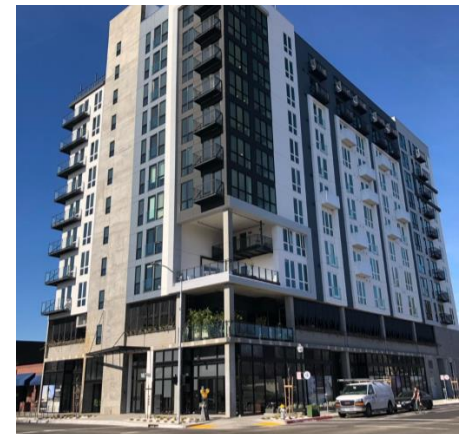
# Core Policies: Single Unit Residential and Small Multi Unit Residential

- Adopt a reach code through the Energy Code requiring certain additions/significant remodels to exceed the State Building Energy Efficiency Standards
- Adopt a local ordinance requiring that main service panel replacements demonstrate capacity for and reservation of breaker space to accommodate future full-home electrification
- Adopt a local ordinance through CalGreen requiring central air conditioners be replaced with heat pumps (with some exceptions)



# Core Policies: Commercial Nonresidential and Large Multi-Unit Residential

- Benchmarking and Building Performance Standard program recommended for buildings 50,000 square feet and larger.
- Rooftop package unit HVAC → heat pump prescriptive pathway (through California Building Standards Code or local ordinance)
- Develop an Industrial Decarbonization Strategy to support the cost-effective decarbonization of process loads in Sacramento's industrial sector.



# Supportive Actions

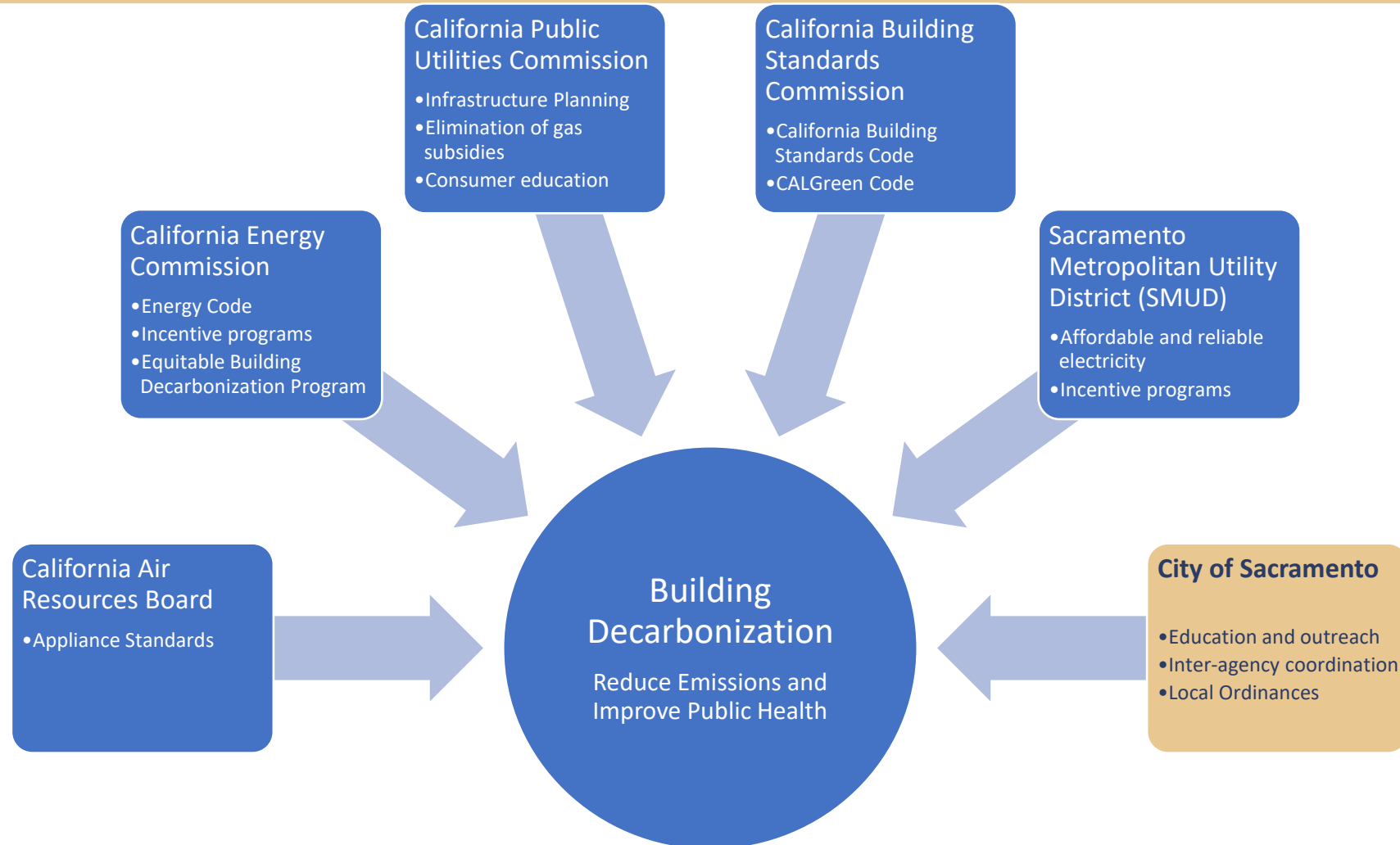
- Align with Equity Criteria
- Advocacy
- Data collection and tracking
- Electrification Pilots
- Education and information sharing

**Table 8. Residential and Small Multi-Unit Actions Implementation Summary**

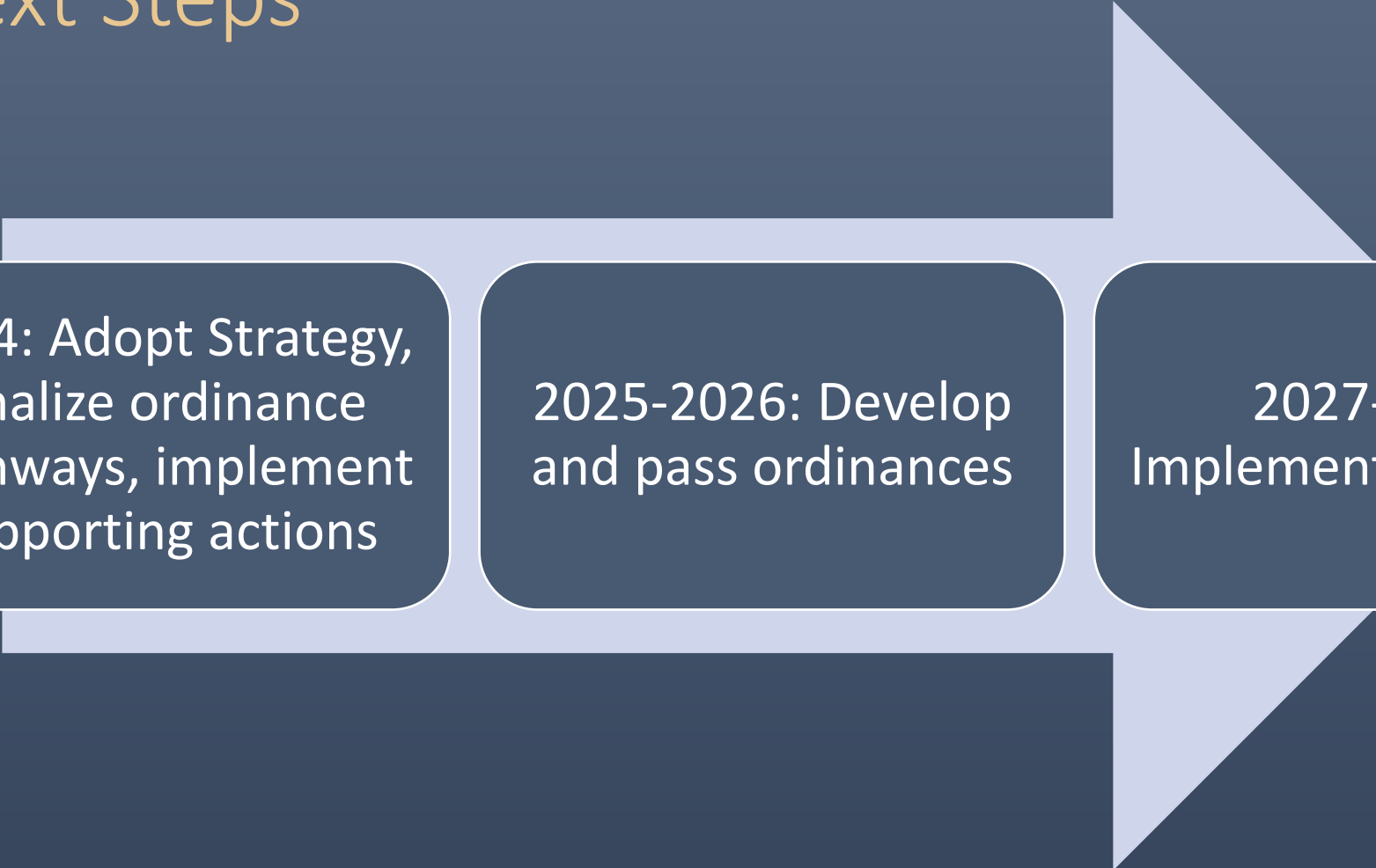
Action #	Action Description	Phase	Lead	Support
R-1	Provide education to the community on the long-term cost savings and health benefits of upgrading an AC unit to a heat pump, which provides both heating and cooling at time of AC or furnace replacement.	Near	CDD	SMUD, OCAS
R-2	Provide education to the community on the indoor air quality, safety, and health benefits of switching from gas to electric or induction stoves. Collaborate with community partners to disseminate information to groups most vulnerable to the impacts of poor indoor air quality.	Near	CDD	SMUD, OCAS
R-3	Connect individuals to City, SMUD, State, and federal resources on the electrification process, including likely costs and incentives, during project planning and at time of permit request and through the Rental Housing and Inspection Program.	Near	CDD	SMUD
R-4	Collaborate with SMUD and other partners to publicize current programs and develop additional accessible and affordable financing options for renters and homeowners.	Near	CDD	OIED, OCAS
R-5	Integrate available grant and incentive funding for electrification into existing low-income housing loan and rehabilitation programs and ensure the use of coordinated direct-referral processes to leverage incentives and other resources across partners.	Mid	OIED	SMUD, OCAS, CDD, SHRA
R-6	Monitor grant opportunities to assist in direct electrification investments in environmental justice communities, including innovative approaches such as portable and low voltage heat pumps.	Mid	OCAS	SMUD, CDD, OIED
R-7	Provide information and coordinate with community partners to support disadvantaged communities in obtaining funding and financing for electrification and energy-efficiency retrofit projects.	Near	OCAS, OIED\	CDD, SMUD
R-8	Conduct a review of permitting procedures to identify and remove hurdles to electrification.	Near	CDD	SMUD
R-9	Continue to work with SMUD to review and simplify incentive programs.	Mid	CDD	OCAS
R-10	Continue to support SMUD in their direct install investments for residents under EAPR and leverage complementary City investments.	Near	OCAS, OIED	CDD
R-11	Continue to work with SMUD to make information available to help Sacramento households avoid unnecessary panel upgrades and associated time and cost at the time of electrification improvements.		CDD	SMUD, OCAS



# Key Complementary Policies



## Next Steps



2024: Adopt Strategy,  
finalize ordinance  
pathways, implement  
supporting actions

2025-2026: Develop  
and pass ordinances

2027-2030:  
Implement and adapt

# Thank you!

[electrification@cityofsacramento.org](mailto:electrification@cityofsacramento.org)

<http://cityofsacramento.gov/electrification>

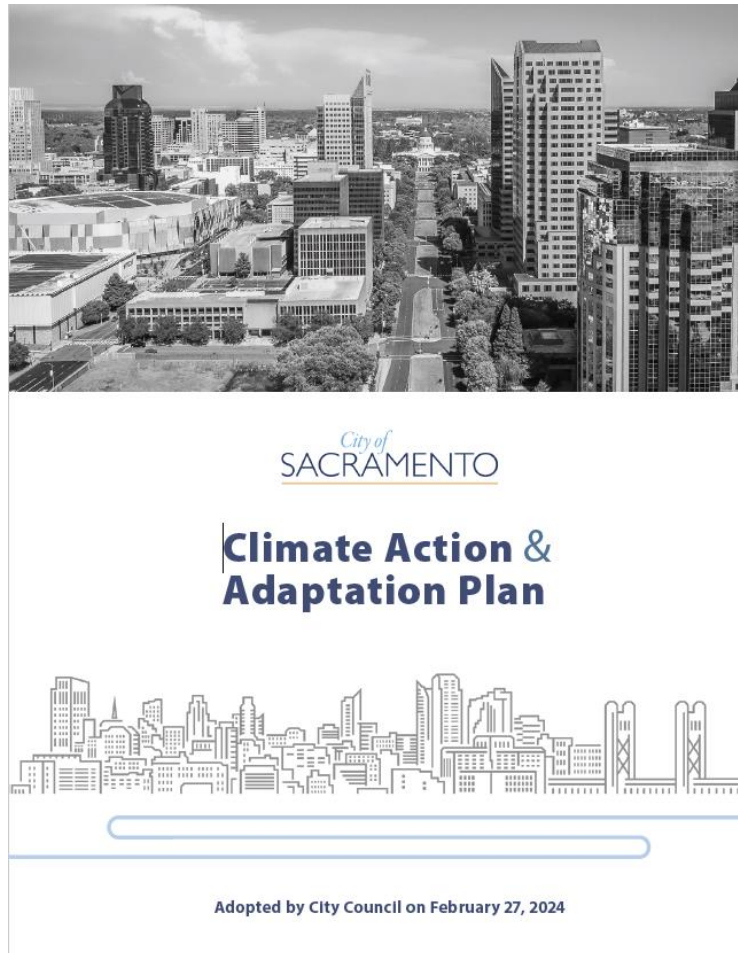




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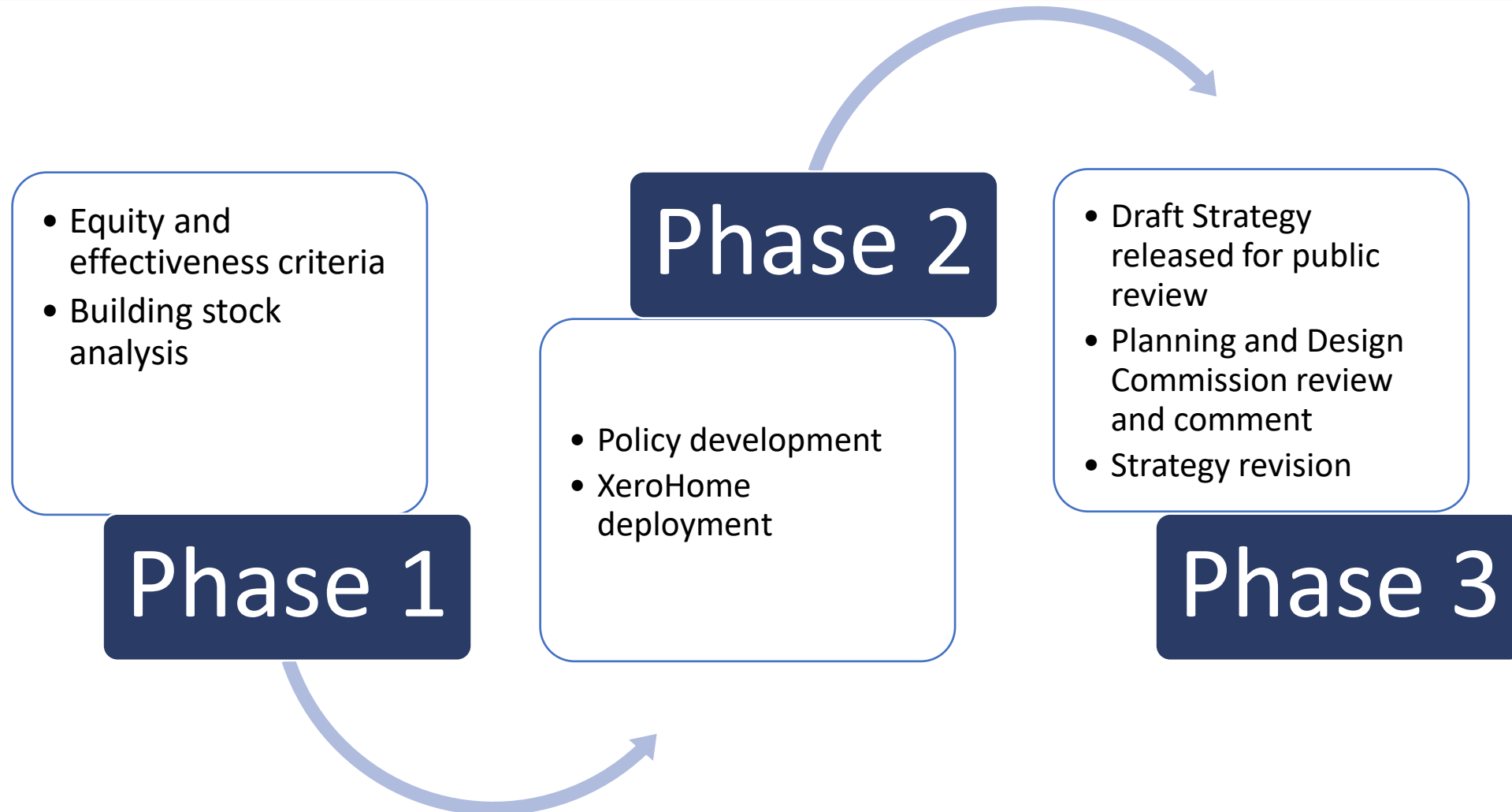
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# Core Policies



Single Unit Residential and Small Multi-Unit  
Residential Policies



Commercial Nonresidential and Multi-Unit  
Residential Policies



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- Data collection and tracking
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# Key Supportive Actions to support commercial kitchen electrification

- C-8 Dedicate City staff time to assisting building owners to access rebates and other incentives for electrification through SMUD, State, and federal programs, with particular focus on historically underrepresented communities and small businesses
- C-13 Collaborate with local ethnic businesses, restaurants, and associations to advance education and partnership for innovative electric and zero-carbon cooking technologies.
- C-14 Explore opportunities to support and collaborate with local CBOs for culturally appropriate, multilingual outreach campaigns about building electrification in environmental justice communities and Black, Indigenous, and People of Color-run businesses, with a focus on hard-to-electrify building types, including commercial kitchens.
- C-15 Identify chefs and restaurateurs to collaborate with to promote all-electric commercial kitchen training through local business-led collaboration and partnerships.