

Mayors' Commission on Climate Change

Meeting #3 | May 29, 2019

City of
SACRAMENTO



WELCOME

An aerial view of Pittsburgh, Pennsylvania, showing the city skyline, the Allegheny River, and the Fort Pitt Bridge. The sky is clear and blue. The text 'WELCOME' is overlaid in large white letters.

Anne Stausboll | Commission Chair

PROGRESS REPORT

Kate Meis | Local Government Commission

COMMUNITY ENGAGEMENT

JANUARY - JULY 2019

1

BUILT ENVIRONMENT

TAC Meetings, Equity Roundtable, and Report Section Development

JUNE - OCTOBER 2019

MOBILITY

TAC Meetings, Equity Roundtable, and Report Section Development

2

AUGUST - NOVEMBER 2019

3

COMMUNITY HEALTH & RESILIENCY

TAC Meetings, Equity Roundtable, and Report Section Development

DECEMBER 2019 - JANUARY 2020

BUSINESS & FINANCE ROUNDTABLES

Meetings with key stakeholders and experts to enhance recommendations

4

DECEMBER 2019 - FEBRUARY 2020

5

INTEGRATION & PUBLIC REVIEW

Integrate recommendations across sectors and release public draft of report

COMMUNITY ENGAGEMENT

An aerial photograph of a city skyline, likely Pittsburgh, featuring a river, a bridge with two prominent towers, and various buildings. The image is overlaid with a semi-transparent blue gradient at the top and bottom.

Kate Meis | Local Government Commission

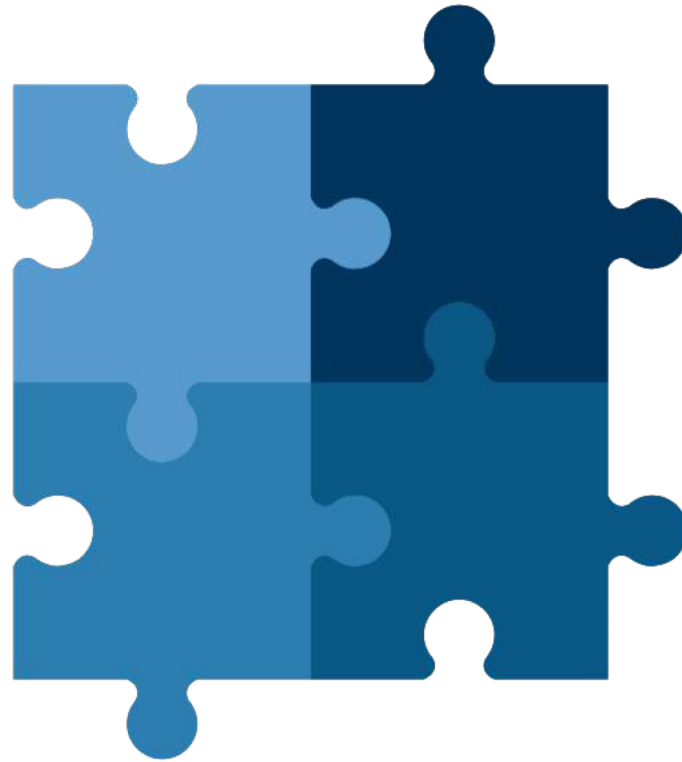
Public Input

Accelerate Climate Action

Commit to bold, progressive actions to make Sacramento and West Sacramento model cities for climate action.

Building Electrification

Embrace an all-electric future and cease our dependence on fossil fuels through mandates and taxes.



Increase Density

Prioritize infill and Transit-Oriented Development to create walkable, diverse, and vibrant communities.

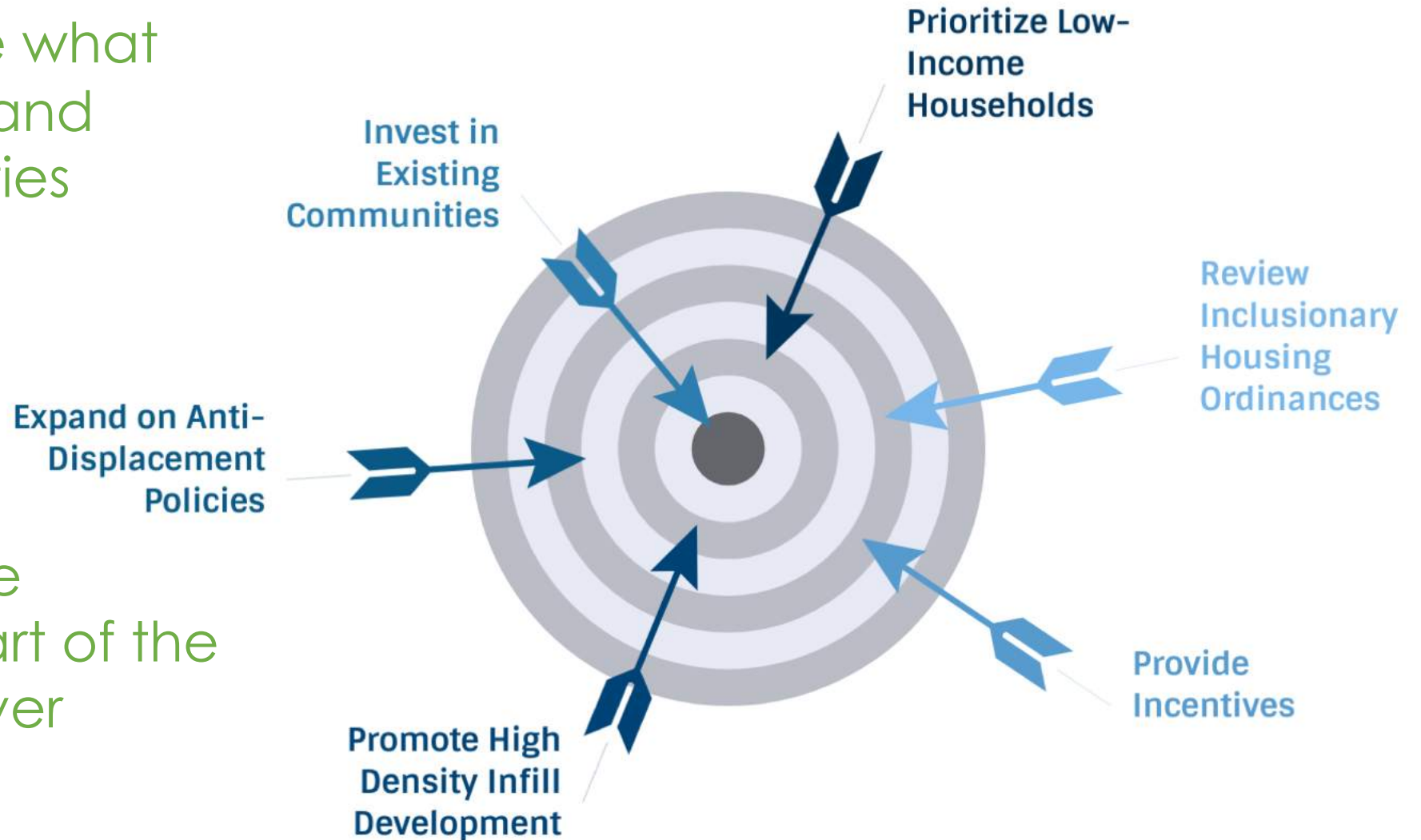
Retrofit Existing Buildings

Target investments and enact strict requirements to increase energy efficiency and electrify existing buildings.

Equity Roundtable Recommendations

How do we define what dense, walkable, and healthy communities should look like?

How can we ensure low-income households are part of the solution without overburdening them?



Capital Region Community Survey

Your voice matters,
now more than ever.



Share yours at climatereadiness.info/survey.

**SU VOZ ES
IMPORTA, AHORA
MÁS QUE NUNCA.**



Actualmente hay numerosos planes en proceso (sobre transporte, hogar, medioambiente y más) que ayudarán a determinar qué mejoras son necesarias a corto plazo e influirán en cómo serán nuestras comunidades en el futuro.

Comparte su voz en:
climatereadiness.info/survey

¡Tras completar la encuesta, tendrá la oportunidad de participar en el sorteo de una tarjeta regalo Visa de 200 \$!



Visita:
bit.ly/Capital-UHI-Survey
o escanear el código QR!



Para más información visita [f](#) [t](#)

**您的声音
比以往任何时候
都重要**



我们正在进行一系列的社区规划工作，包括对于交通、住房、环境等问题。您的观点将有助于确定城市改进，决定我们社区未来的风貌，对我们的工作无比重要。

分享您的意见！
climatereadiness.info/survey

完成调查问卷有机会赢取
**\$200 美元 VISA
礼品卡以及其它奖品！**



参加我们的活动
请扫描二维码，或访问
bit.ly/Capital-UHI-Survey



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SACRAMENTO METROPOLITAN



CAPITAL REGION
CLIMATE READINESS
COLLABORATIVE



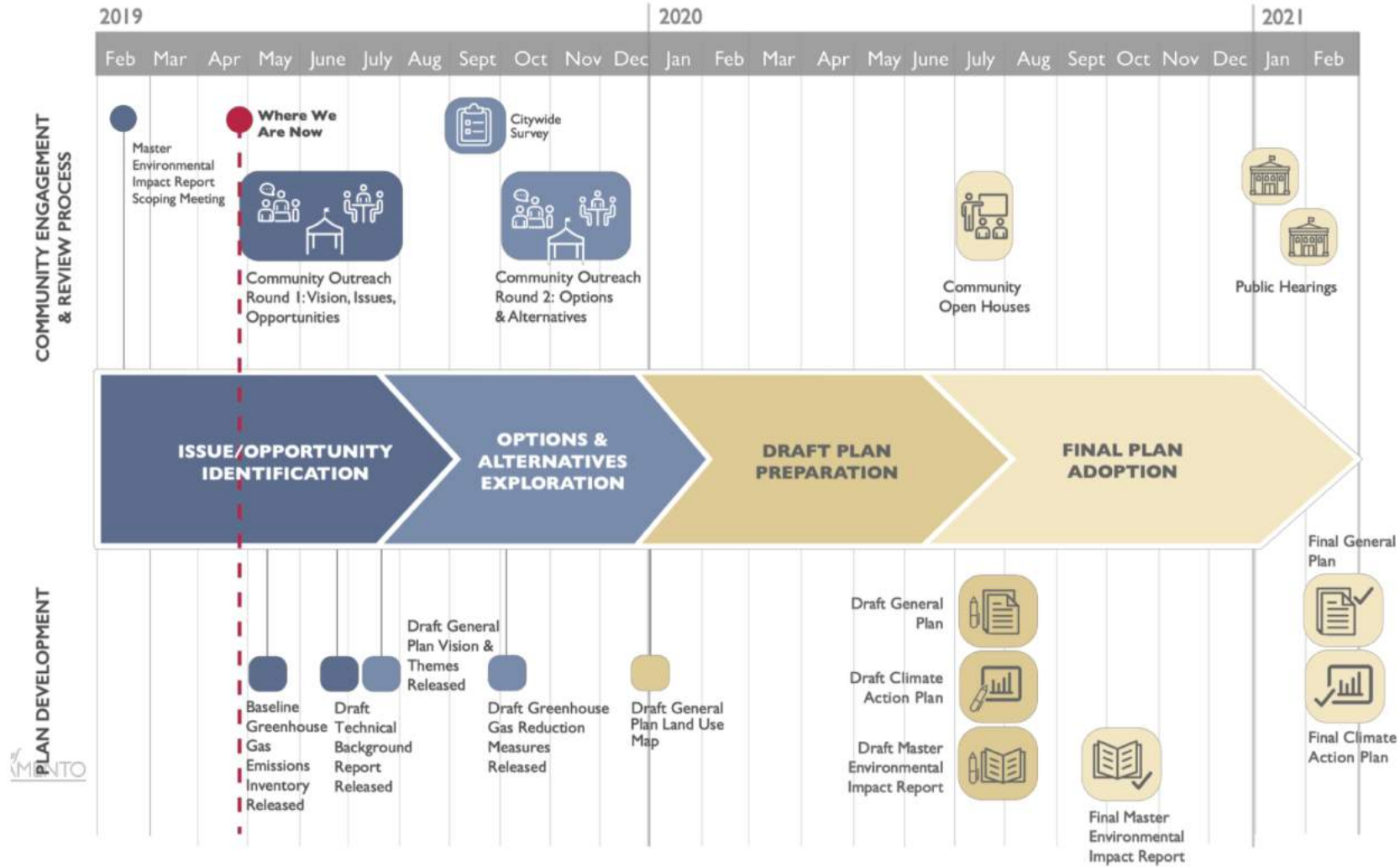
Local
Government
Commission



CITY OF SACRAMENTO ENGAGEMENT ACTIVITIES & INITIAL FINDINGS

Remi Mendoza | City of Sacramento
Jackie Cole | VG Consulting

PROJECT PROCESS AND TIMELINE



WAYS TO GET INVOLVED



CITYWIDE
WORKSHOPS



COMMUNITY
PLAN AREA
WORKSHOPS



SCIENTIFIC
SURVEY



TELEPHONE
TOWN HALL



POP UP EVENTS



ONLINE
ENGAGEMENT

PHASE I: Issues & Opportunities

April – September 2019

	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
WEEK 1						
WEEK 2						
WEEK 3						
WEEK 4						

STRATEGIES

Environmental Justice Working Group

Flash Feedback Engagement

City-Wide Workshop

Pop-up Engagement

Interest-Based Focus Group Meeting

Scientific Survey

Community Bike Party

Youth Engagement Kick-off

Environmental Justice Workshop

Sacramento Initiatives Meeting

Community Plan Area Meeting

Neighborhood Outreach
























Canvassing

Youth Pop-up

Tableting

PHASE II: Options & Alternatives

October 2019 – January 2020

	OCTOBER	NOVEMBER	DECEMBER	JANUARY
WEEK 1	 	 	 	
WEEK 2	  	 		  
WEEK 3	 	 		
WEEK 4	 			

STRATEGIES



Environmental Justice Working Group



City-Wide Workshop



Interest-Based Focus Group Meeting



Telephone Townhall



Community Plan Area Meeting



Online Engagement



Neighborhood Outreach



Pop-up Engagement

PHASE III: Draft Plan Development

February – July 2020

	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY
WEEK 1						
WEEK 2						
WEEK 3						
WEEK 4						

STRATEGIES

Environmental Justice Working Group

Flash Feedback Engagement

Citywide Open House


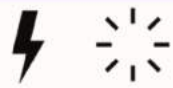







Pop-up Engagement

Interest-Based Focus Group Meeting

Neighborhood Outreach

PHASE IV: Adoption & Certification

August – November 2020

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
WEEK 1				
WEEK 2				
WEEK 3				
WEEK 4				

STRATEGIES

 Environmental Justice Working Group

 Flash Feedback Engagement

 Neighborhood Outreach

 Interest-Based Focus Group Meeting

 Pop-up Engagement





Increase density

to create walkable communities, prioritizing infill development.

Prioritize low-income

communities and increase access to healthy food, education, and job trainings.

Build Up... Not Out

Address Our
Housing Crisis

Investment without
Displacement

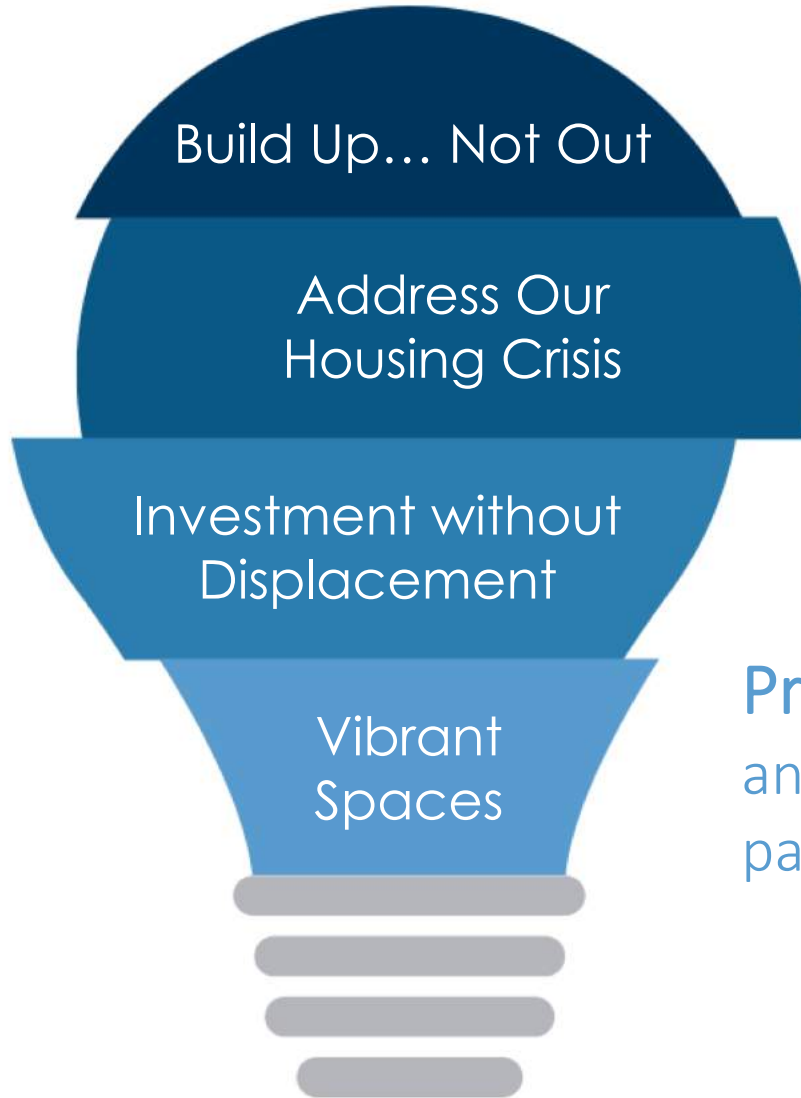
Vibrant
Spaces

More housing options

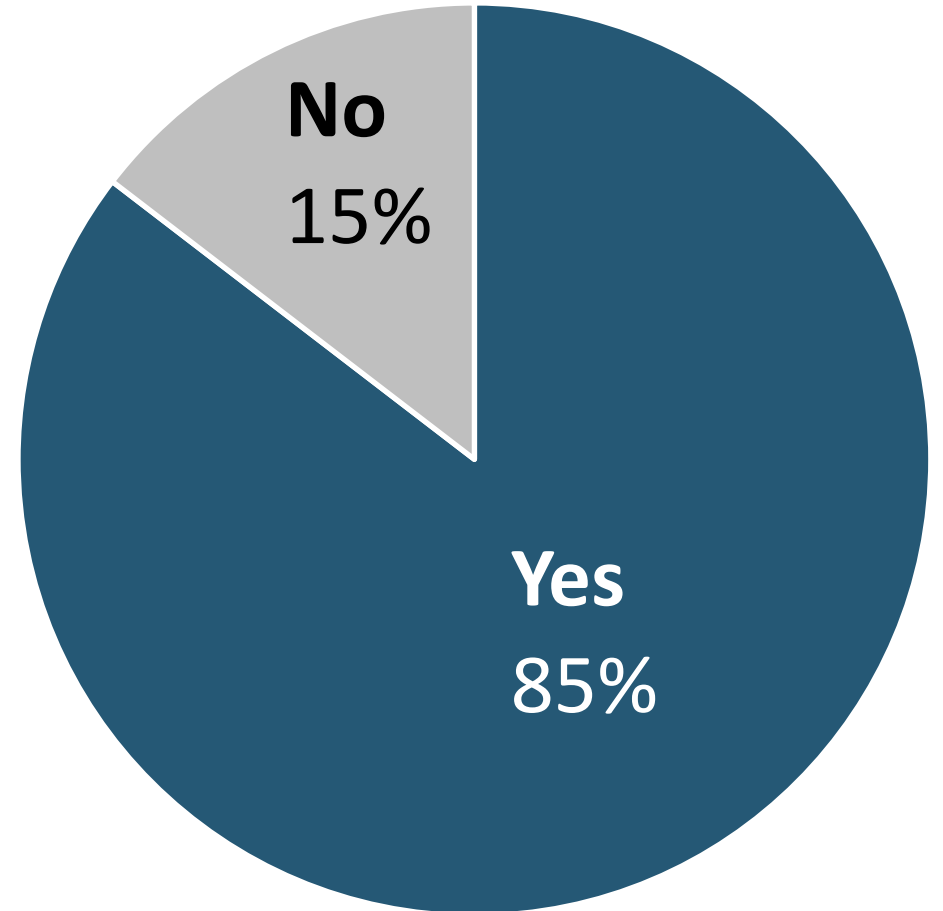
that are affordable and close to transit.

Preserve open space

and expand tree canopy, parks, and community gardens



Would you consider **converting your home to all-electric appliances** if they don't cost you more and function as well as gas appliances?



ENVIRONMENTAL JUSTICE WORKING GROUP



A group of young men are seated at a table in what appears to be a summit or meeting. They are looking towards the camera or slightly to the side. The background shows other people and a logo on a wall. A large white title is overlaid on the image.

YOUTH ENGAGEMENT & COLLEGE SUMMIT TAKEAWAYS

— *Julia Burrows* | Commissioner
Moiz Mir & Craig Coppin | Sac State Students



STUDENT CLIMATE CHANGE SUMMIT





Electric Vehicles

Living Building Challenge

Urban Density Reusable Products

Community Gardens

Ban Single Use Plastics

Behavior Change

LEED Certification

Solar Energy

Recycling

Affordable Housing

Native Plants

Energy Efficiency

Local Food

Retrofits

Compost

Trees Zero Waste

Green Space

Tiny Homes

Public Transportation



valley vision
Community Inspired Solutions

VALLEY VISION REGIONAL OPINIONS SURVEY RESULTS

Evan Schmidt | Valley Vision

the
ENVIRONMENTAL POLL

More than 90% of people think it is very important/essential to have clean drinking water, soil, air, and bodies of water



70% of people say at least one type of pollution (in the water, the air, and/or the soil) is a major problem in their community



The vast majority (88%) of our residents believe that humans have contributed to climate change, and 70% think the effects of climate change have already begun to happen.

OUR FUTURE

79% think their community is at very/extremely serious risk for at least one climate change risk, including wildfires and smoke in the air, drought, hotter temperatures, and flooding

91% report that at least one climate change risk has already been a major issue for their family

63% are very/extremely concerned about how climate change will affect the well-being of future generations



A man wearing a white t-shirt, blue jeans, and a tan baseball cap stands in a cornfield. He has his hands on his hips and is looking towards the camera. The background shows rows of corn plants stretching into the distance, with green hills and trees under a clear sky. The entire image has a semi-transparent green overlay.

80%

of people feel strongly about preserving open spaces, wild spaces, and/or farmland

84%

or more prefer preserving these spaces instead of developing them as retail and office areas

ENVIRONMENT AND THE ECONOMY

The majority of residents think that taking greater action on the environment is smart for communities, the economy, and our future.

66%

say climate change reduction efforts will not impact jobs or will result in more jobs

77%

think environmental regulations are beneficial to CA's quality of life

50%

think it is important to take action and to do so in a way that supports rather than damages job growth and the economy

9%

think environmental laws and regulations cost too many jobs and hurt the economy

WE WANT MORE TO BE DONE

Most people want to see more action from government and from individuals.

85%

think that governments should do more to protect the environment

50%

believe that our governments should do more to reduce global climate change

96%

support the expansion of solar and wind energy sourcing

Interactive Website for the Poll, powered by Sac Metro Air District

- <https://environment.valleyvision.org/>



SURVEY OVERVIEW

Purpose of survey

Increase understanding of values and priorities about environmental protection, beliefs about climate change, efforts to increase climate resiliency, efforts to reduce carbon emissions, efforts to improve environmental conditions, access to clean environment, and preferences about environmental investments.

Method: Scientific polling

- Random probability sampling
- Multiple language translations
- Demographic weight by gender, race/ethnicity & age

Response

- 985 total respondents
- December 2018 in the field
- +/- 3% margin of error
- Sacramento, Yolo, El Dorado, Placer, Yuba, Sutter, Solano, San Joaquin

Find all of Valley Vision's Public Opinion Research:

<https://valleyvision.org/our-research/public-opinion-polling/>

Contact:

Evan Schmidt

Senior Director, Valley Vision

evan.schmidt@valleyvision.org

(916) 325-1630





valley vision

Community Inspired Solutions

the
ENVIRONMENTAL
POLL



Uncovering the attitudes of residents
in California's Capital Region

MAY 2019

Community Priorities for the Built Environment

Create Walkable Communities

Preserve Open Space

Create Affordable Housing

Electrify Buildings

Invest in EE + Renewables

**CARBON
ZERO**



BUILT ENVIRONMENT STRATEGY RECOMMENDATIONS

Sacramento Area Building Electrification

May 29, 2019

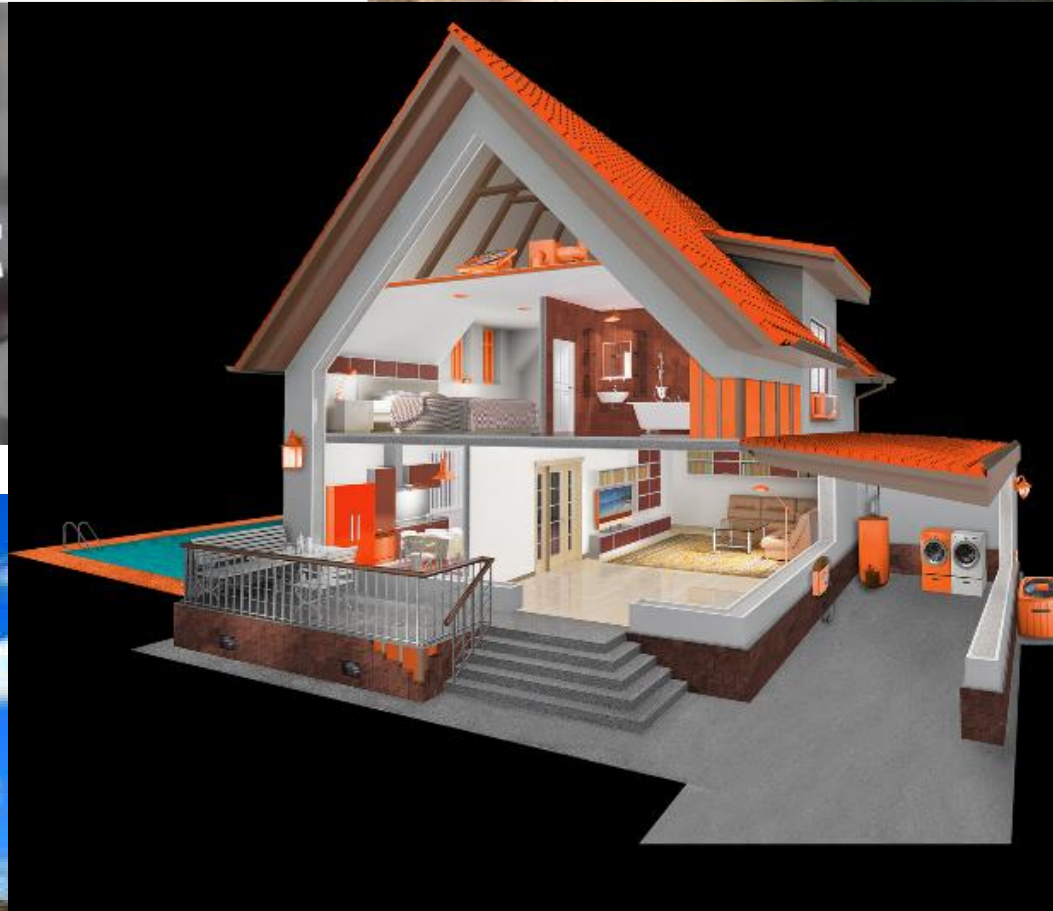
Benefits of Building Electrification

- ✓ Reduce Customer's Energy Bills
- ✓ Create Local Jobs
- ✓ Improve Indoor Air Quality
- ✓ Improve Regional Air Quality
- ✓ Downward Pressure on Electricity Rates
- ✓ Less Carbon Pollution/Emissions
- ✓ Reduce Cost of Housing

It's an Electric Future

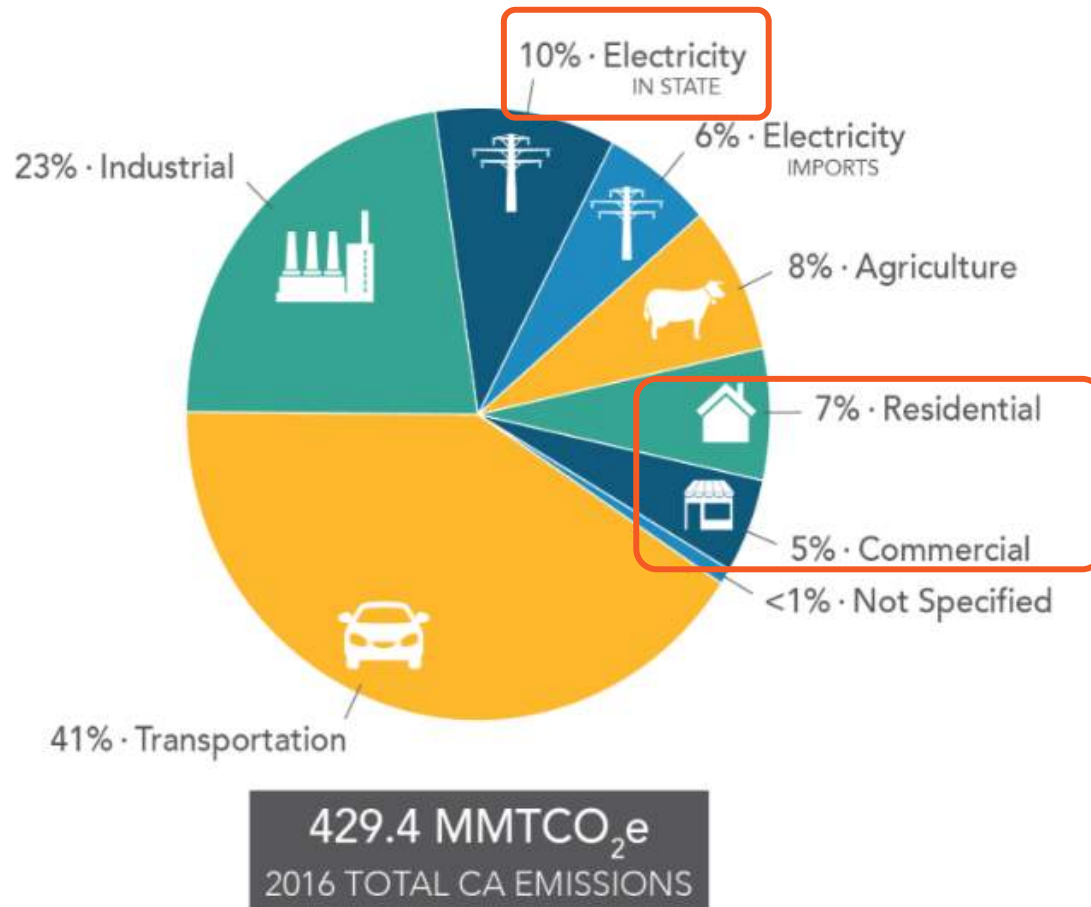


**Which Electric
Vehicle is Right
For Me?**



Pollution from Buildings > All In-state Power Plants

Emissions by Economic Sector



Carbon Free Electricity

SMUD: ~ 60% carbon free

PG&E: ~75% carbon free

Electric sector:

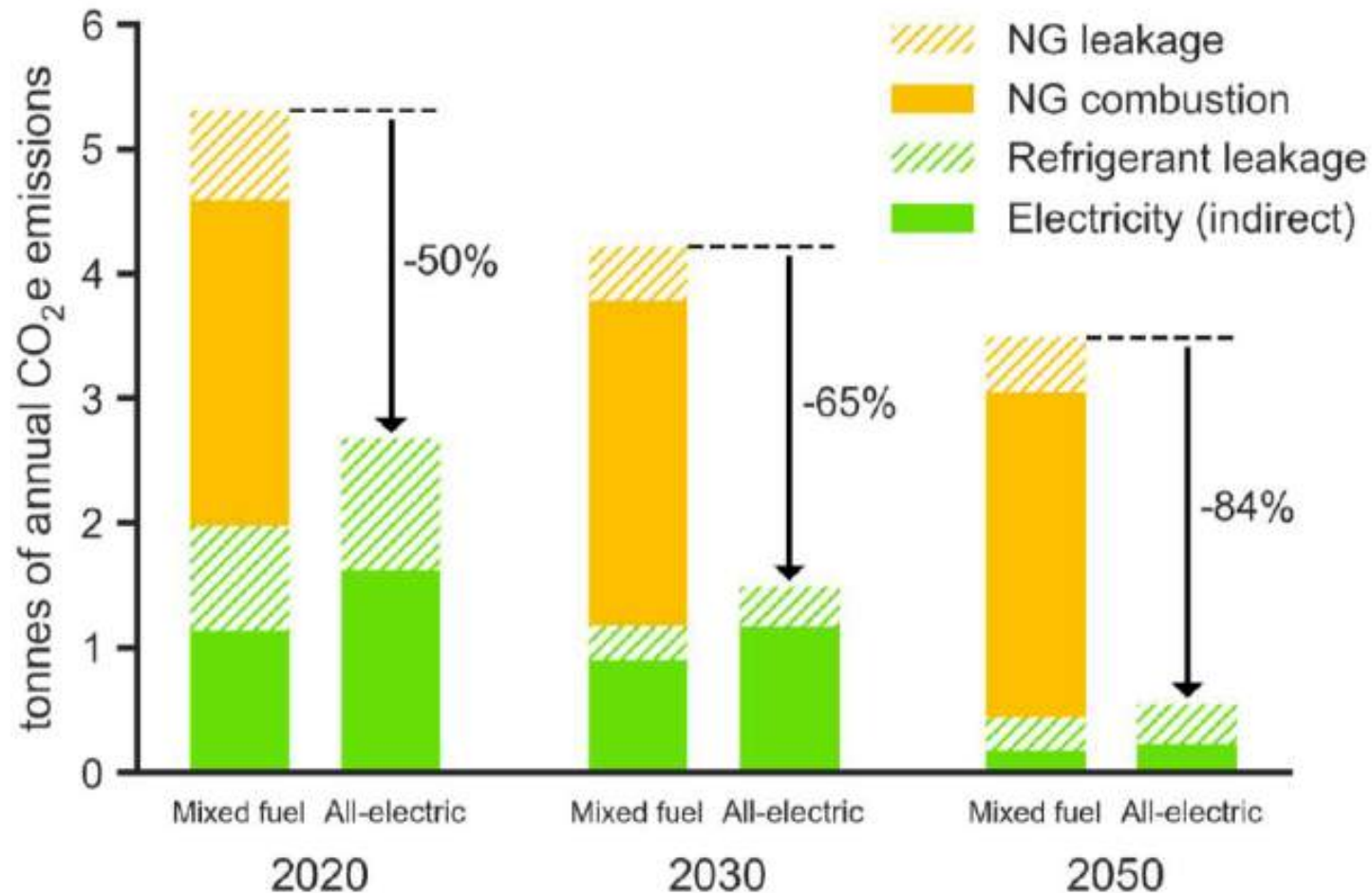
- 60% renewable / 2030
- 100% carbon-free / 2045

SB 100 (2018)



Pre-1978 Vintage Home, GHG Emissions

Figure 1-1: Annual GHG emissions from a mixed-fuel and all-electric pre-1978, single-family home in Sacramento



SMUD's 2018 Integrated Resource Plan

- IRP focus: **Maximize local benefit**
- IRP's 2 key strategies:



Electrification
(Buildings & Vehicles)



Carbon Free Energy Sources

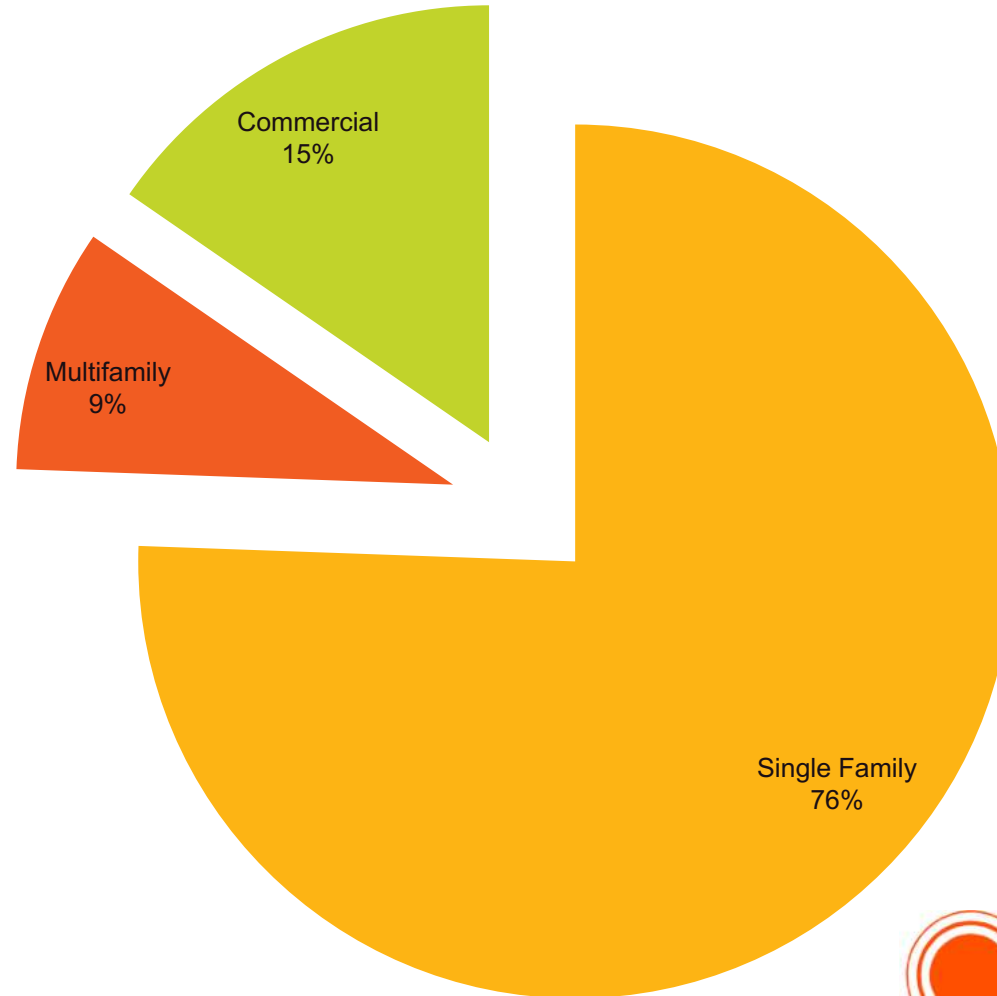
*This is a net zero
carbon plan!*

\$1.7 Billion investment plan for electrification over the next 21 years

Current Focus: Residential

Electrification Potential (Existing, by kWh)

Reflects site gas use for water heating and space heating only



This is not new technology

- We trust heat pumps
 - Heat Pump Food Cooler → Refrigerator
 - Heat Pump Home Cooler → Air Conditioner
- Heat pumps are very reliable, proven technology



Single Family New Construction Analysis

2019 Energy Efficiency Ordinance Cost-effectiveness Study - SMUD

Table 3: Single Family SMUD Climate Zone 12 Results Summary

Climate Zone 12 SMUD Single Family		EDR Red.	PV Size Change (kW) ⁴	CO ₂ -Equivalent Emissions (lb/sqft)		Inc. Cost (\$)	First Year Utility Savings		Benefit to Cost Ratio (B/C)	
				Total	Red.		Elec	Gas	On- Bill	TDV
Mixed Fuel to All- Electric ³	Code Compliant <i>(all-electric)</i>	0.0	0.0	1.1	1.0	(\$5,349)	(\$479)	\$537	>1	1.8
	Efficiency & PV	16.0	2.0	0.5	1.5	\$6,187	(\$58)	\$537	1.7	>1

Half the Carbon

No PV Change

Less Expensive to Build

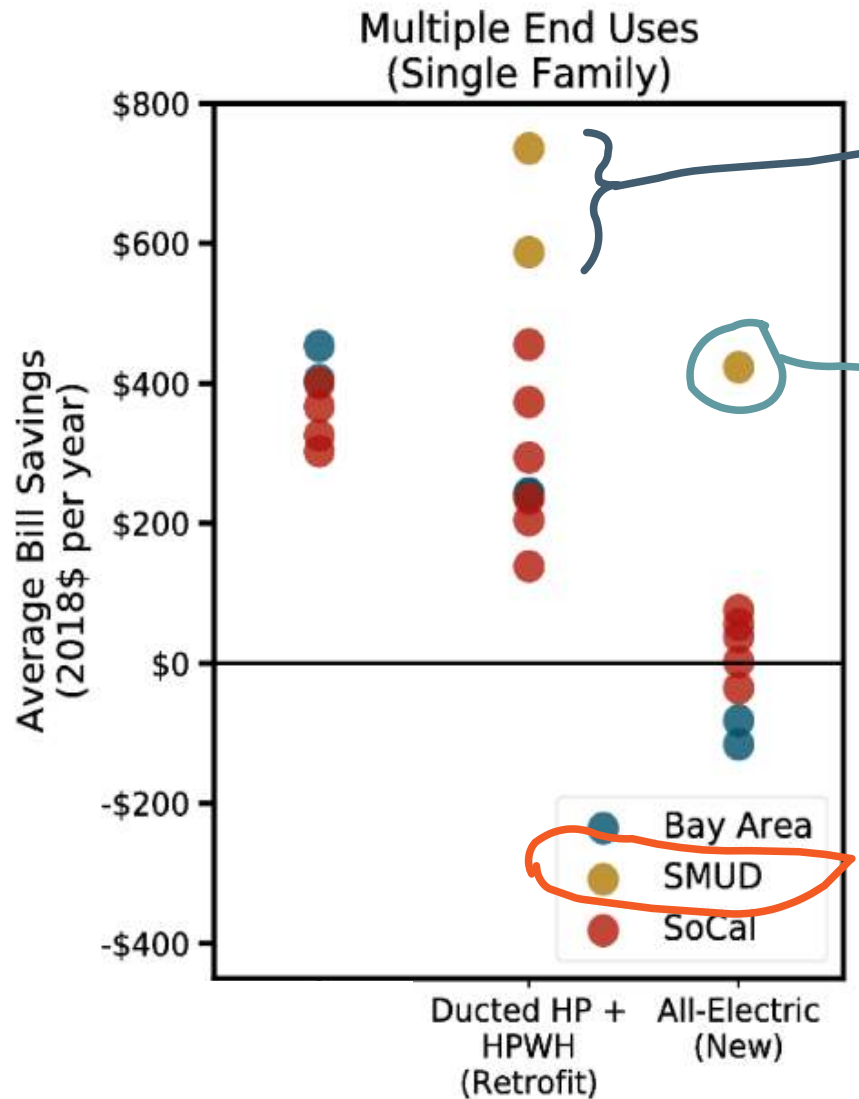
Code Compliant

Less Expensive to Operate

Delay for the City of Sacramento

- Each year a residential All-Electric code is delayed means:
 - **105,000 Tonnes of additional carbon**
 - **\$15.4 Million higher construction costs to builders**
 - **\$1.7 Million higher operating costs to residents**
- Ancillary costs to public health
- Lost awareness for existing buildings

Annual Customer Bill Impacts



> **\$600*** annual energy bill savings for **existing homes**

> **\$400** annual energy bill savings for **new homes**

Lifetime Savings even after cost of conversion from gas

** Existing homes only include space and water heating; however, with the inclusion of cooking and water heating the net savings is still >\$550/year*

Thank you

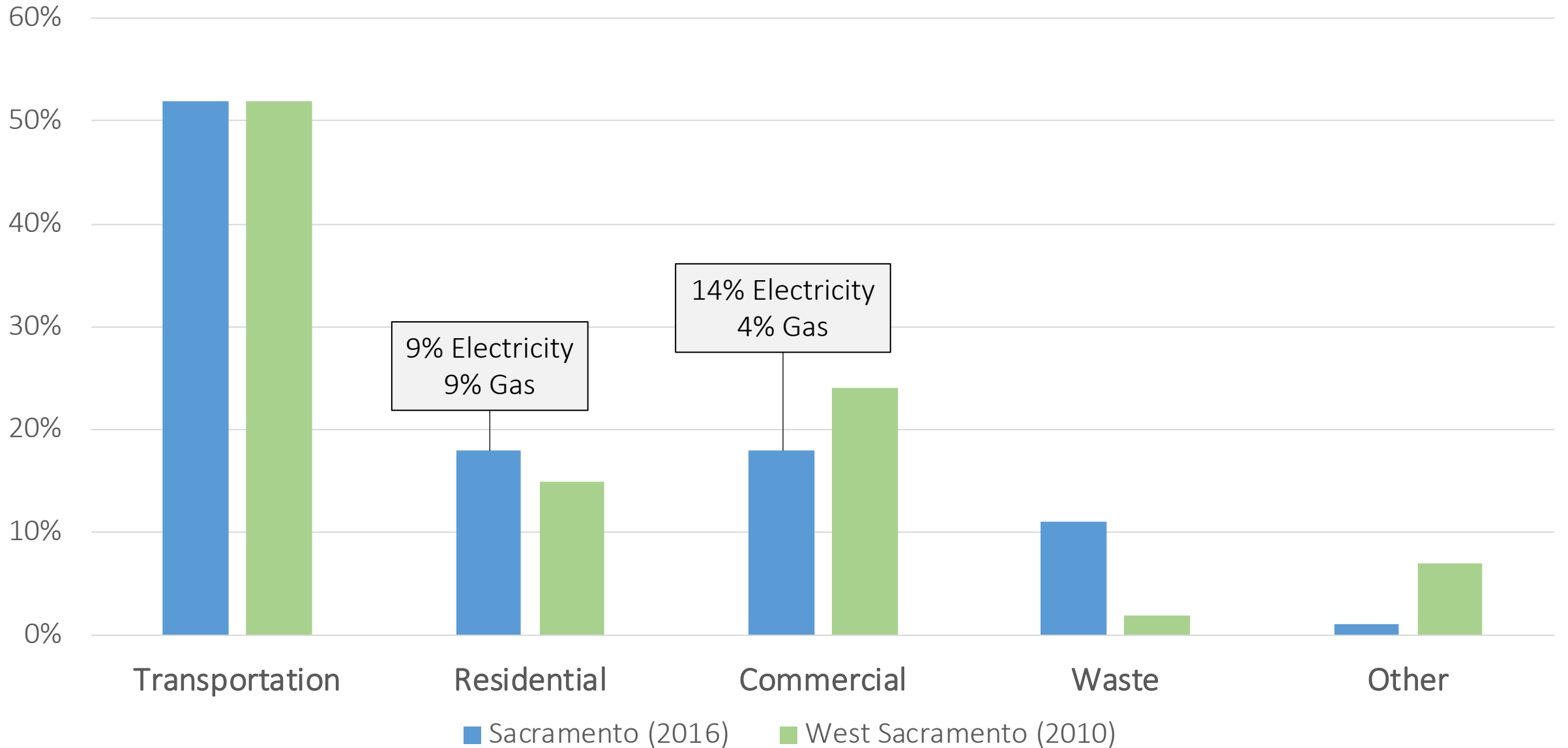
Scott Blunk
scott.blunk@smud.org

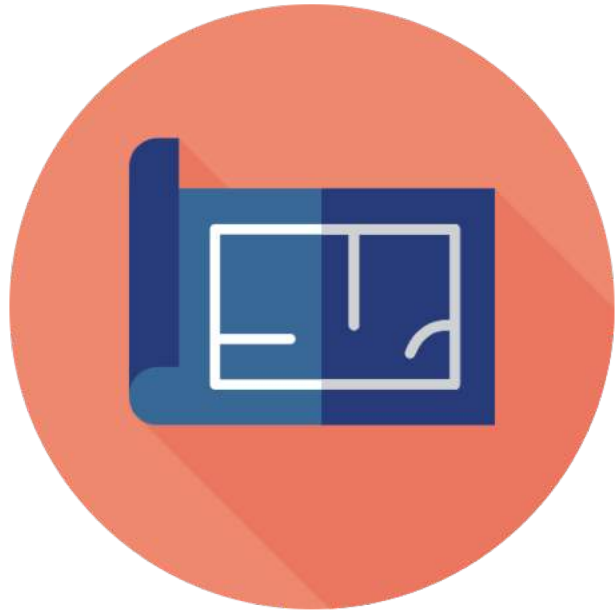




RECOMMENDATIONS FOR THE BUILT ENVIRONMENT

Key Sources of GHG Emissions





Urban
Growth
Boundaries



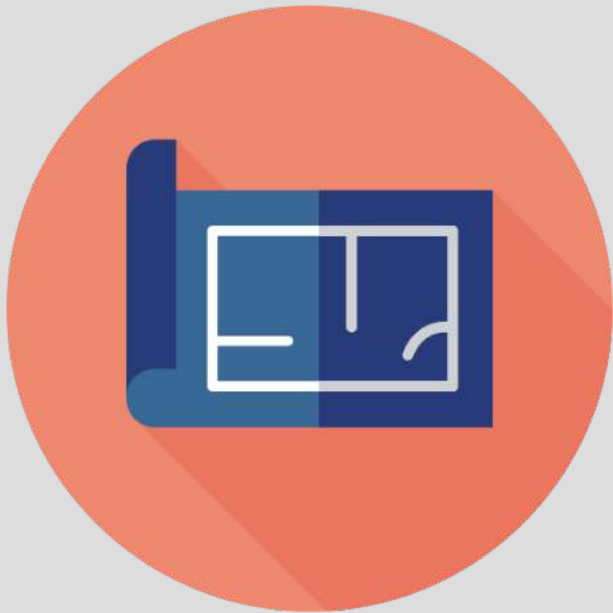
All-Electric
New
Construction



Electrify
Existing
Buildings

Built Environment Technical Advisory Committee

STRATEGY RECOMMENDATION #1



Urban Growth
Boundaries



Why Urban Growth Boundaries?



Regional Urban Growth Boundaries

PRIVATE CAR OWNERSHIP COSTS

- > Cities – 9% of household income
- > Suburbs – 27%
- > Low-income in Suburbs – 37%
- > Average Car: \$9,122 per year (2015)

PRIVATE CAR ACCIDENT COSTS

- > \$1200 Per Household Per Year
- > Only 1/3 Covered By Insurance

PUBLIC CAPITAL COSTS

- > 57% reduction in infrastructure cost for 2 DUA vs. 8 DUA
- > Little or no public infrastructure cost with typical infill
- > Infill provides resources to fix existing infrastructure deficiencies

PUBLIC O&M COSTS

- > Infrastructure O&M proportional to land area, not population.
- > \$400 to \$1,000 per year less for 8 DUA versus 2 DUA

An aerial photograph of a city with a multi-lane highway running through it. In the background, there are mountains under a blue sky with some clouds. The text is overlaid on the image in a large, white, sans-serif font.

Establish Urban Growth Boundaries to allocate all new growth regionally to existing developed areas by 2025.

Q&A



Urban Growth Boundaries

Built Environment Technical Advisory Committee

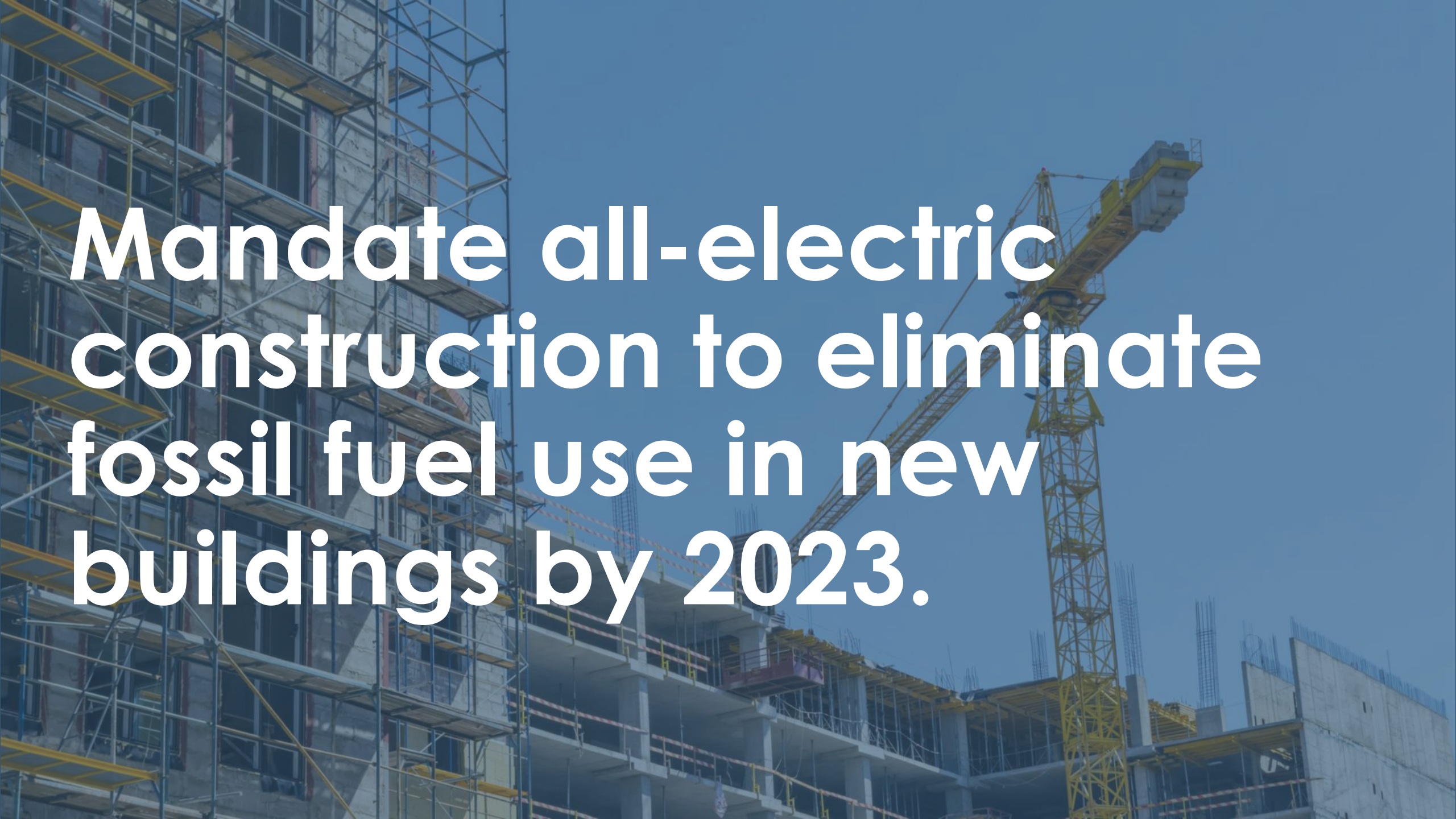
STRATEGY RECOMMENDATION #2



All-Electric
New Construction



Why All-Electric New Construction?

A photograph of a multi-story building under construction. The building is heavily encased in blue and yellow scaffolding. A large yellow tower crane stands to the right of the building. The sky is a clear, pale blue. The text is overlaid in white, bold, sans-serif font.

Mandate all-electric construction to eliminate fossil fuel use in new buildings by 2023.

Q&A



All-Electric New Construction

Built Environment Technical Advisory Committee

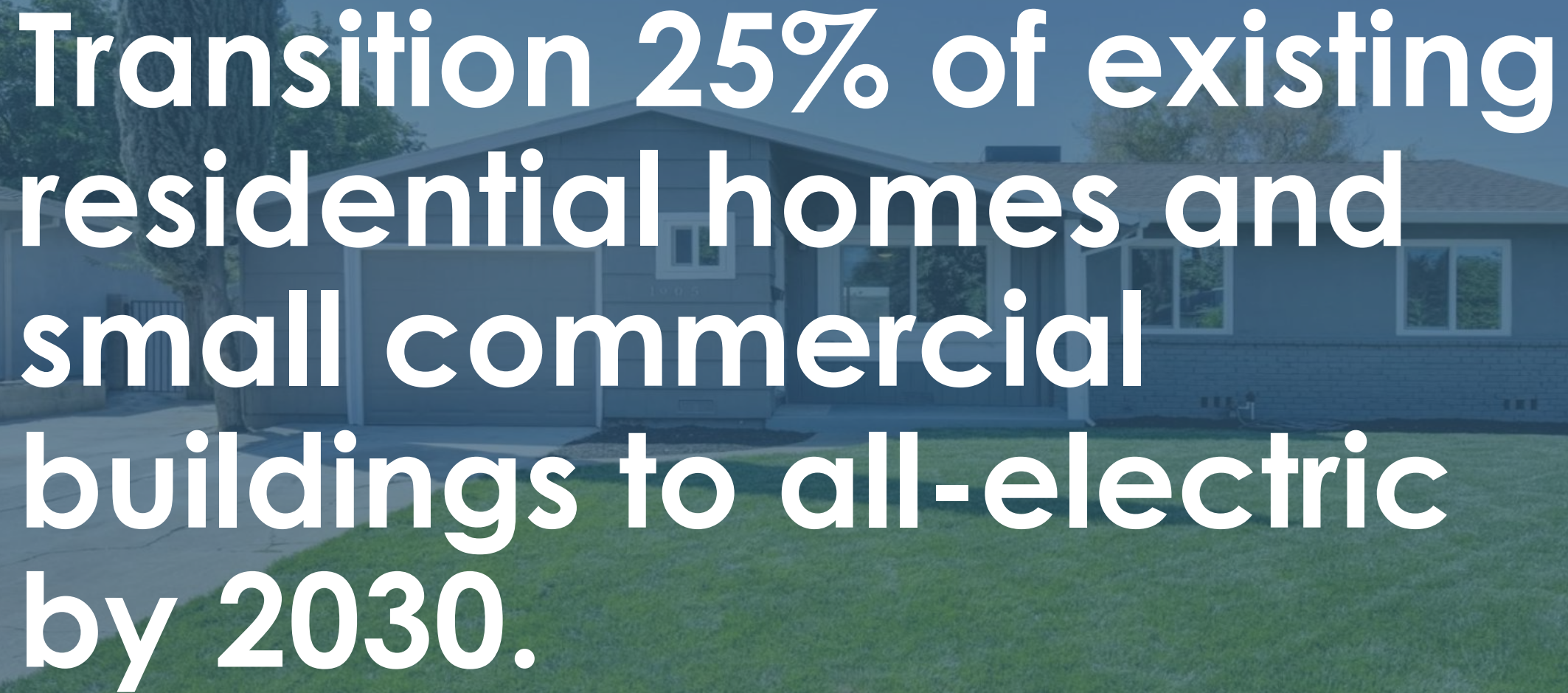
STRATEGY RECOMMENDATION #3



Electrify
Existing Buildings



Why Electrify Existing Buildings?

A modern, single-story house with a green lawn and a blue sky background. The house has a grey roof, white trim, and a brick base. There are trees and a fence in the background.

Transition 25% of existing residential homes and small commercial buildings to all-electric by 2030.

Q&A



Electrify Existing Buildings

PUBLIC COMMENT



Urban
Growth
Boundaries



All-Electric
New
Construction



Electrify
Existing
Buildings

COMMISSION DISCUSSION & ACTION



Urban
Growth
Boundaries



All-Electric
New
Construction



Electrify
Existing
Buildings

PUBLIC COMMENT



CLOSING REMARKS

An aerial view of a city skyline featuring a river and a bridge. The bridge has two prominent towers. In the foreground, there are green trees and a building with a glass facade. The sky is clear and blue.

Anne Stausboll | Commission Chair

Thank you!

www.lgc.org/climatecommission

City of
SACRAMENTO

