

WELCOME TO THE CITY OF HEATPUMPTOPIA

Let's Co-Create a Roadmap to Equitably Retrofit Buildings!

Innovation Workshop

June 2023

PART ONE

Welcome to Heatpumptopia!

CLIMATE ACTION PLAN GOAL

“Reduce emissions from existing buildings in half by 2030”

CITY MANAGER DIRECTION

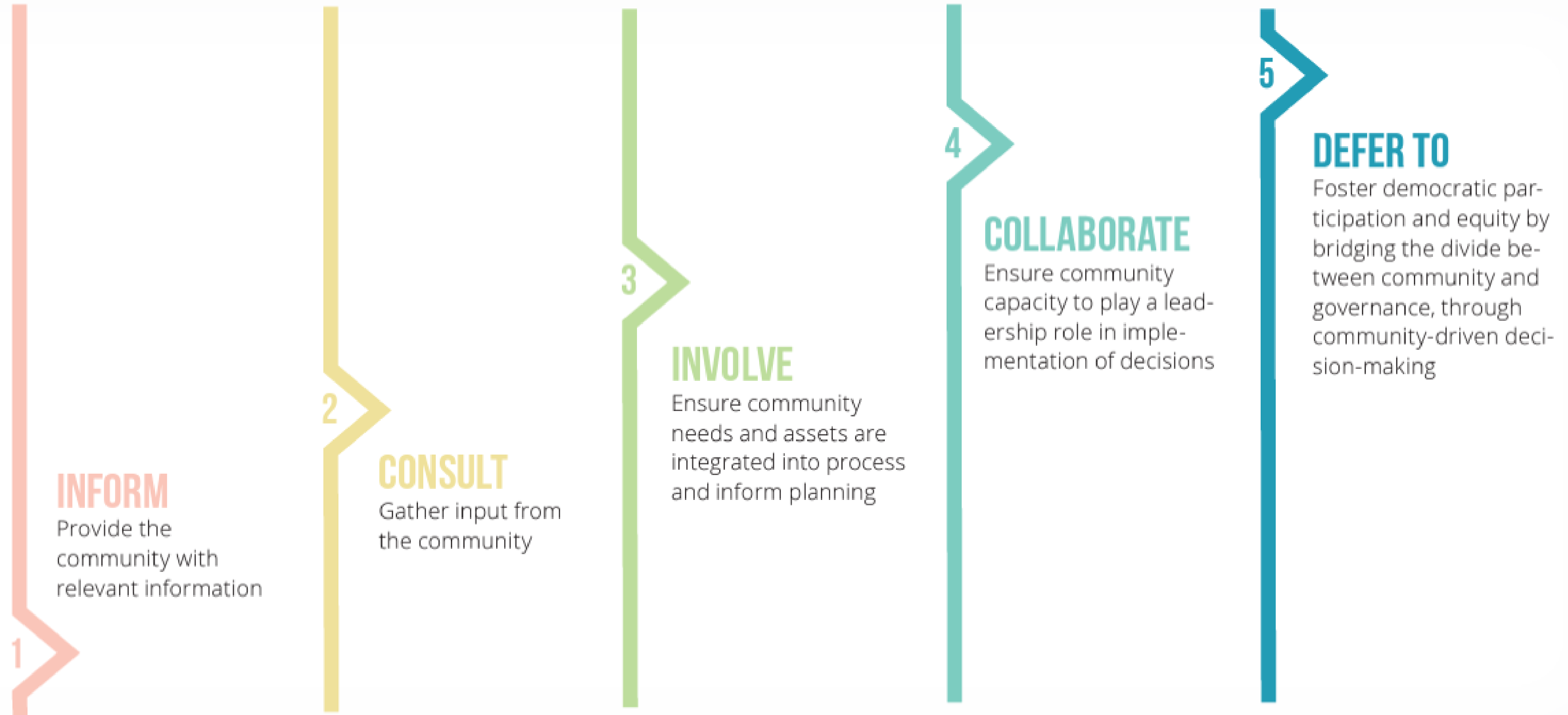
Propose an equitable building decarbonization program tailored to the demographics and building characteristics of *Heatpumptopia*. Work with your table to create a proposal by the end of this session.

PART TWO

Equity Guardrails

Rebecca Milken

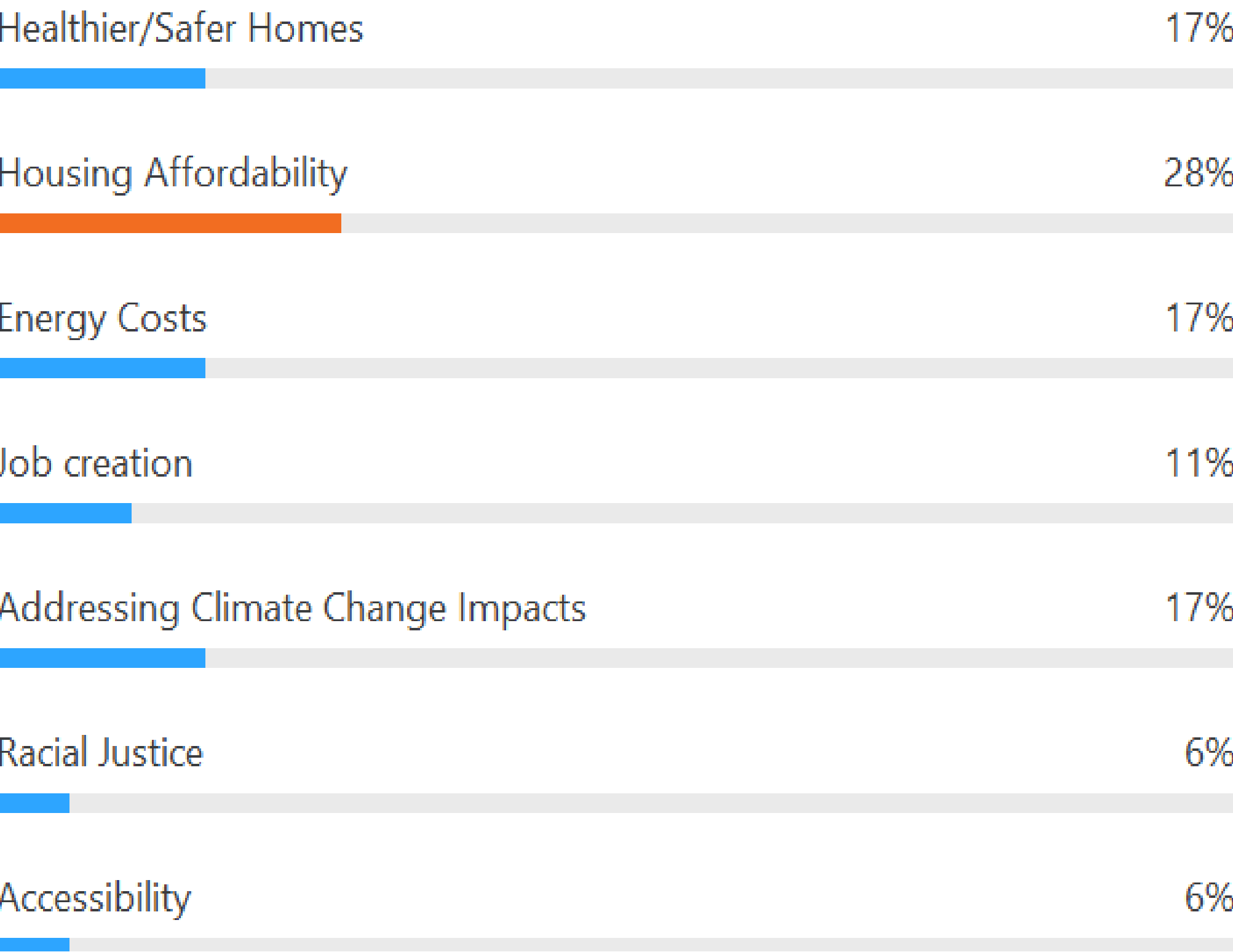
Spectrum of Community Engagement



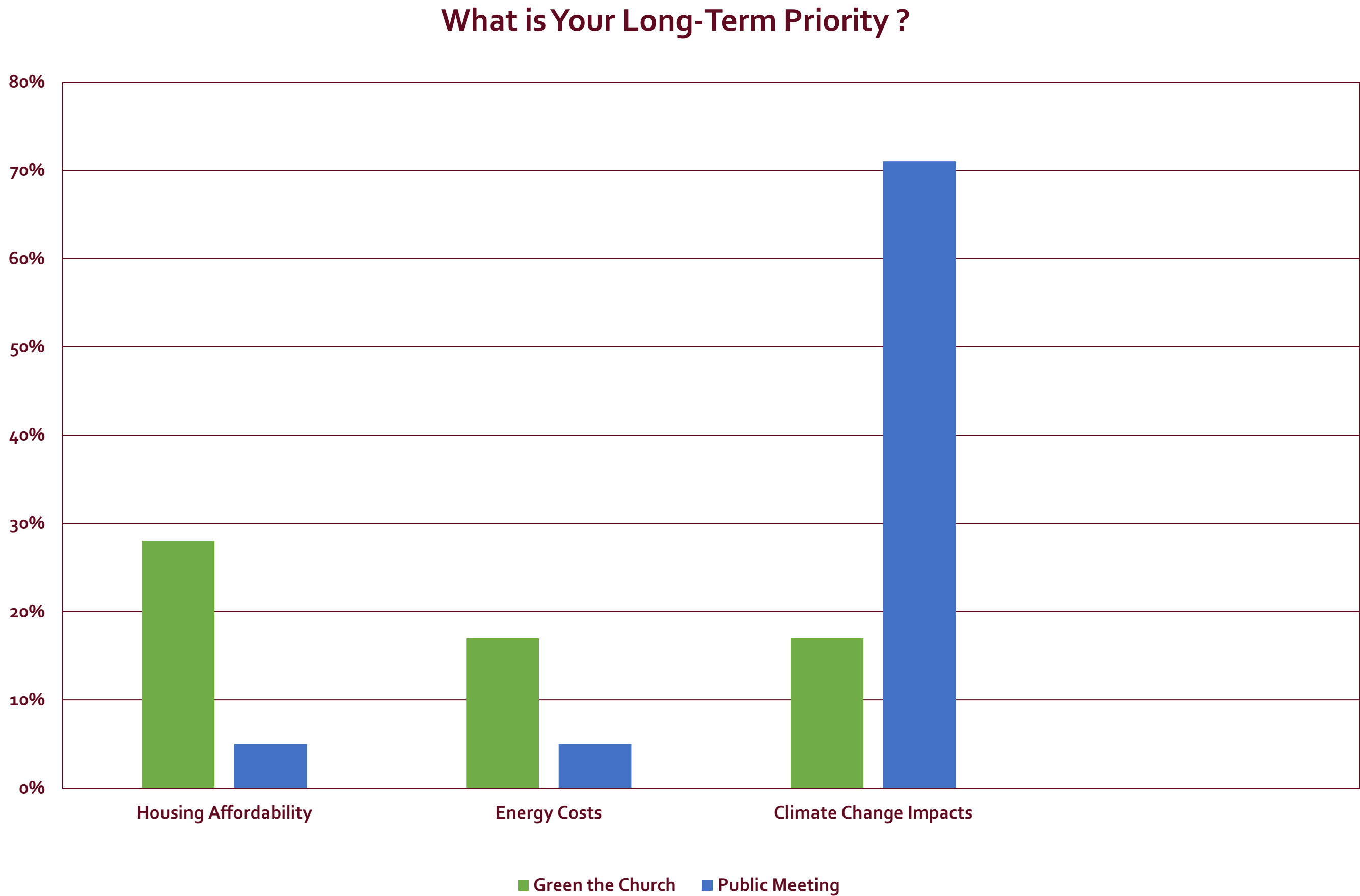
Community Engagement



1. What is the top long-term priority in your community?



Targeted versus General Outreach



What We Heard:

Health, safety, comfort & resilience benefits of electrification should be accessible to all

Upfront and long-term costs are primary concern

Electrification upgrades should be linked with other health/safety upgrades (e.g. lead, asbestos, mold)

Concern of displacement due to housing improvements (increased rent)

Need accessible financing and funding options – no new debt

Need to work with labor for just transition

Work closely with community on solutions

More education needed

Need to build trust in City, electrification

City and companies should be a model in electrification before requiring others

Concern of reliability of electricity supply, especially with PSPS events

Equity Guardrails



**MAXIMIZE ACCESS
TO HEALTH,
SAFETY &
MOBILITY
BENEFITS**



**MAXIMIZE ACCESS
TO ECONOMIC
BENEFITS**



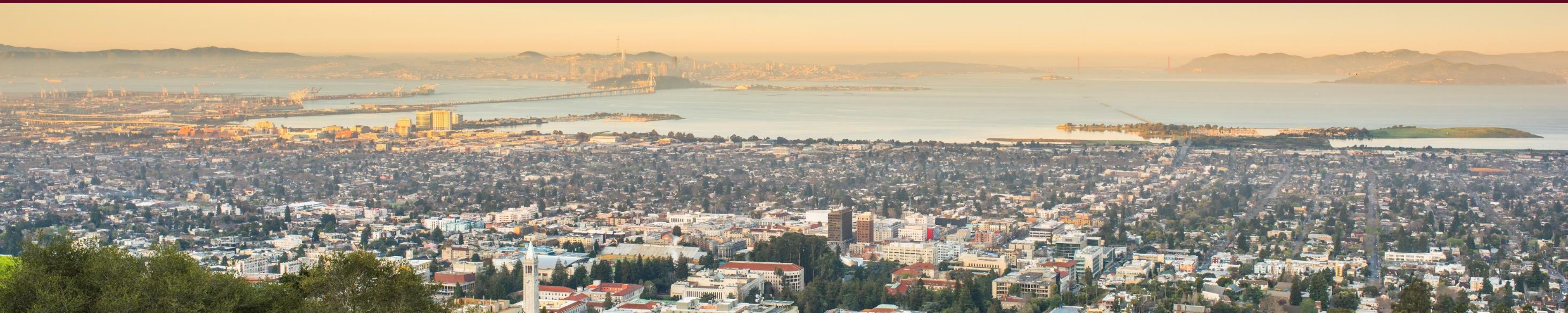
**MAXIMIZE EASE
OF
PARTICIPATION**



**PROMOTE HOUSING
AFFORDABILITY &
ANTI-
DISPLACEMENT**

Thank You!

Rebecca Milliken, *Sustainability Outreach Specialist*
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Equity Guardrails Discussion (10 min)

1. Review the Heatpumptopia City Profile, and in particular the demographics information
2. Discuss *who* a potential program might serve and *how* the program could achieve equity outcomes



MAXIMIZE ACCESS TO
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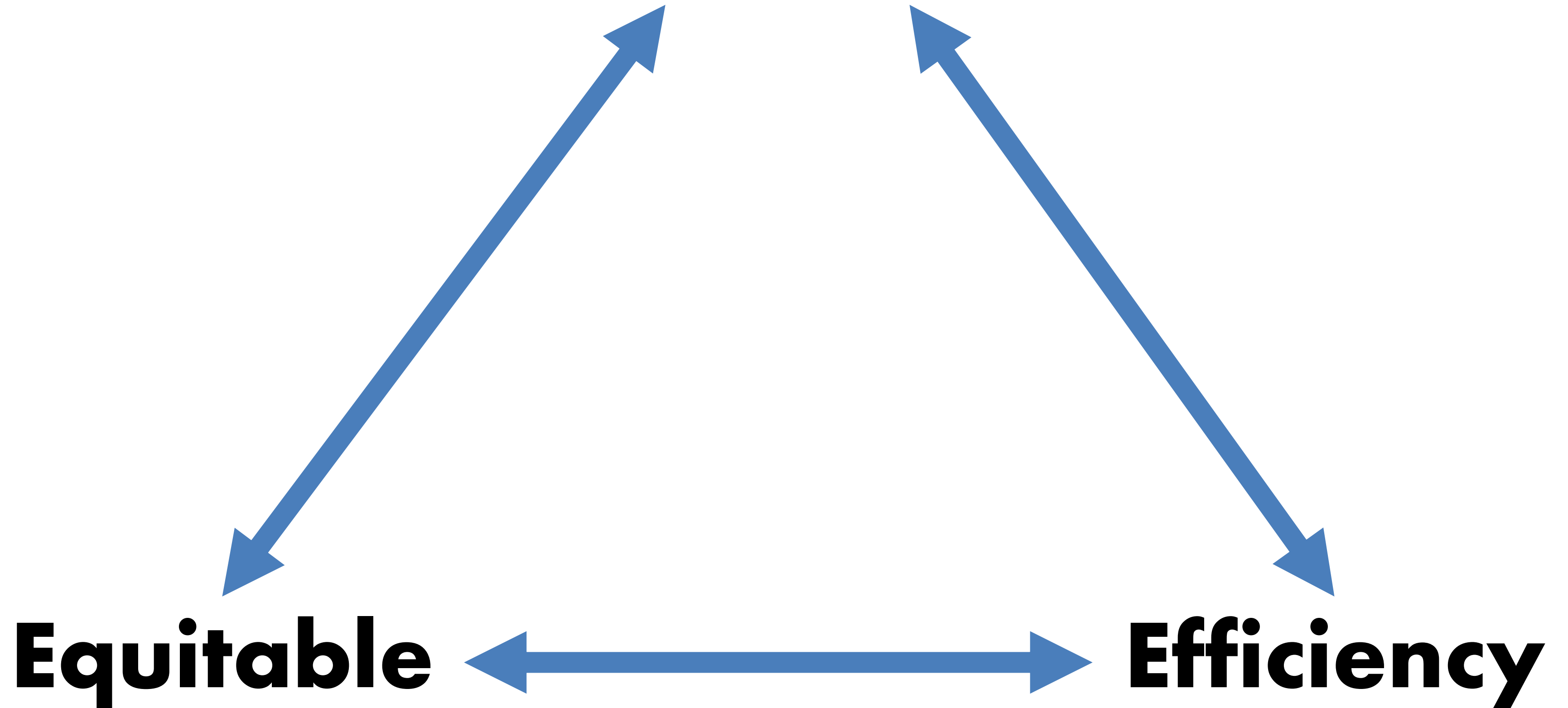
PROMOTE HOUSING
AFFORDABILITY &
ANTI-DISPLACEMENT

PART THREE

Market Segmentation and Building Stock

Lucia Pohlman

Cost-Effectiveness



Building Stock Discussion (10 min)

- 1. Review the Heatpumptopia City Profile, and in particular the building stock information.**
- 2. Discuss *what buildings* a potential program might serve given Heatpumptopia's building stock, keeping the equity guardrails discussion in mind**

PART FOUR

Available Resources

Panama Bartholomy



California Building Decarbonization Funding Opportunities

June 14, 2023
14th Annual California Climate & Energy Forum
Santa Rosa, CA

Funding Programs

- Federal
 - Tax Credits
 - Rebates
- State
 - Equitable Building Decarbonization Program
 - TECH
 - Self Generation Incentive Program
- Local
 - CCA Programs

Federal

- Residential Energy Efficiency Tax Credit
 - 30% of eligible purchases
 - Maximum annual credit of \$1,200 with exception of \$2,000 for heat pumps.
- Residential Clean Electricity Tax Credit
 - 30% for eligible expenditures for on-site solar electric, **batteries**, solar water heating, fuel cell, small wind energy, and geothermal heat pumps



Federal

- High-efficiency electric home rebate program
 - Rebates 50% or 100% of project cost, up to measure-specific caps:
 - \$8,000 for heat pump,
 - \$1,750 for a heat pump water heater,
 - \$840 for an electric stove,
 - \$840 for an electric clothes dryer.
 - \$4,000 for an upgraded electrical panel,
 - \$2,500 for upgraded electrical wiring, and
 - \$1,600 for insulation, ventilation and sealing



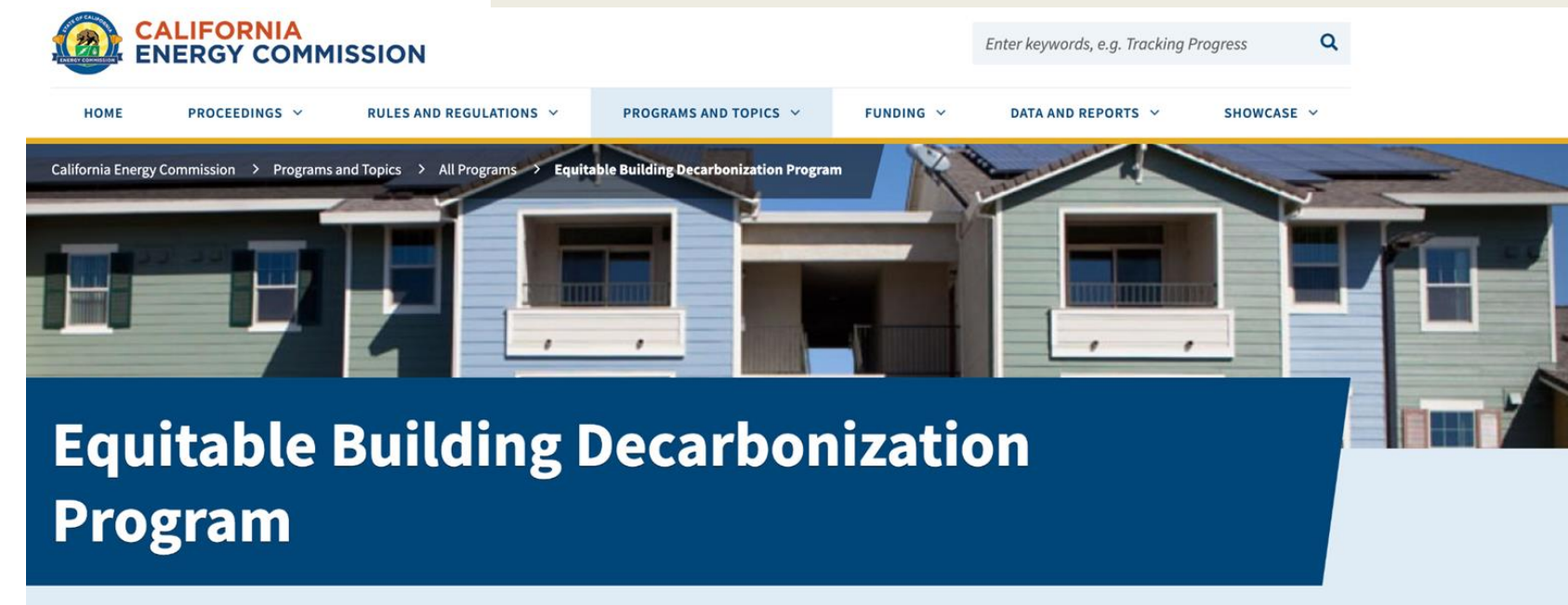
Federal

- Home energy performance-based, whole house rebates
 - Whole-home rebates for retrofits of up to \$4,000/home for market rate customers, \$8,000 for LMI homes
 - Rebate is based on either modeled or measured energy savings for the home overall



State

- **Equitable Building Decarbonization Program**
 - The Direct Install Program provides decarbonization retrofits to low- and moderate-income households.
 - The Statewide Incentive Program incentivizes the increased adoption of low-carbon technologies.



State

- TECH Clean California
 - Rebates for heat pumps and heat pump water heaters



Maximum Incentives

State

Customer Class ▶
Incentives ▼

General
Market
Residential

Equity
Residential

**Unitary HPWH
Incentive**

\$3,100

\$4,185

**Low-QWP Kicker
Incentive**

\$1,500

\$1,500

**55 Gallon
Capacity
Incentive**

\$700

\$700

**Electrical
Panel Upgrade
Incentive**

\$2,000

\$4,000

**Max. SGIP HPWH
Incentive**

\$7,300

\$10,385

Self
Generation
Incentive
Program



Local

- CCA Programs



Central Coast
**Community
Energy**



**Sonoma
Clean Power**



**PENINSULA
CLEAN ENERGY**



Santa Barbara
CLEAN ENERGY
CHOOSING RENEWABLE ELECTRICITY



Thank you!

Panama Bartholomy
panama@buildingdecarb.org

Available Resources Discussion (10 min)

- 1. Take stock of the resources that are available to support equitable building decarbonization.**
- 2. Discuss *how* a program can connect the buildings and communities discussed in previous sections to the resources that are available.**

PART FIVE

Program Design

- 1. Integrate learnings from the previous three sections and work with your table to propose a locally tailored building decarbonization program**
- 2. Summarize your proposal in the mad-libs style worksheet on your table**

PART SIX

SHARE OUT!