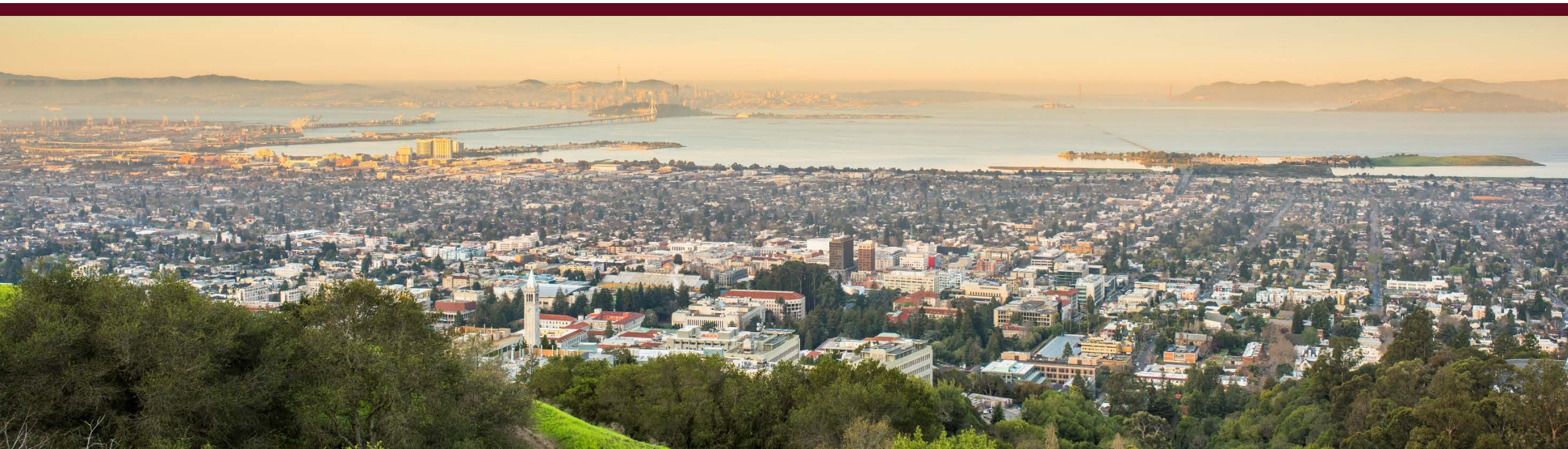


Climate Action Plan Update

July 21, 2020





Climate Action Plan Update



Community Outreach Referral



Transfer Tax Rebate Referral



Building Energy Savings Ordinance (BESO)



Electric Mobility Roadmap

Berkeley's Ambitious Climate Action Goals

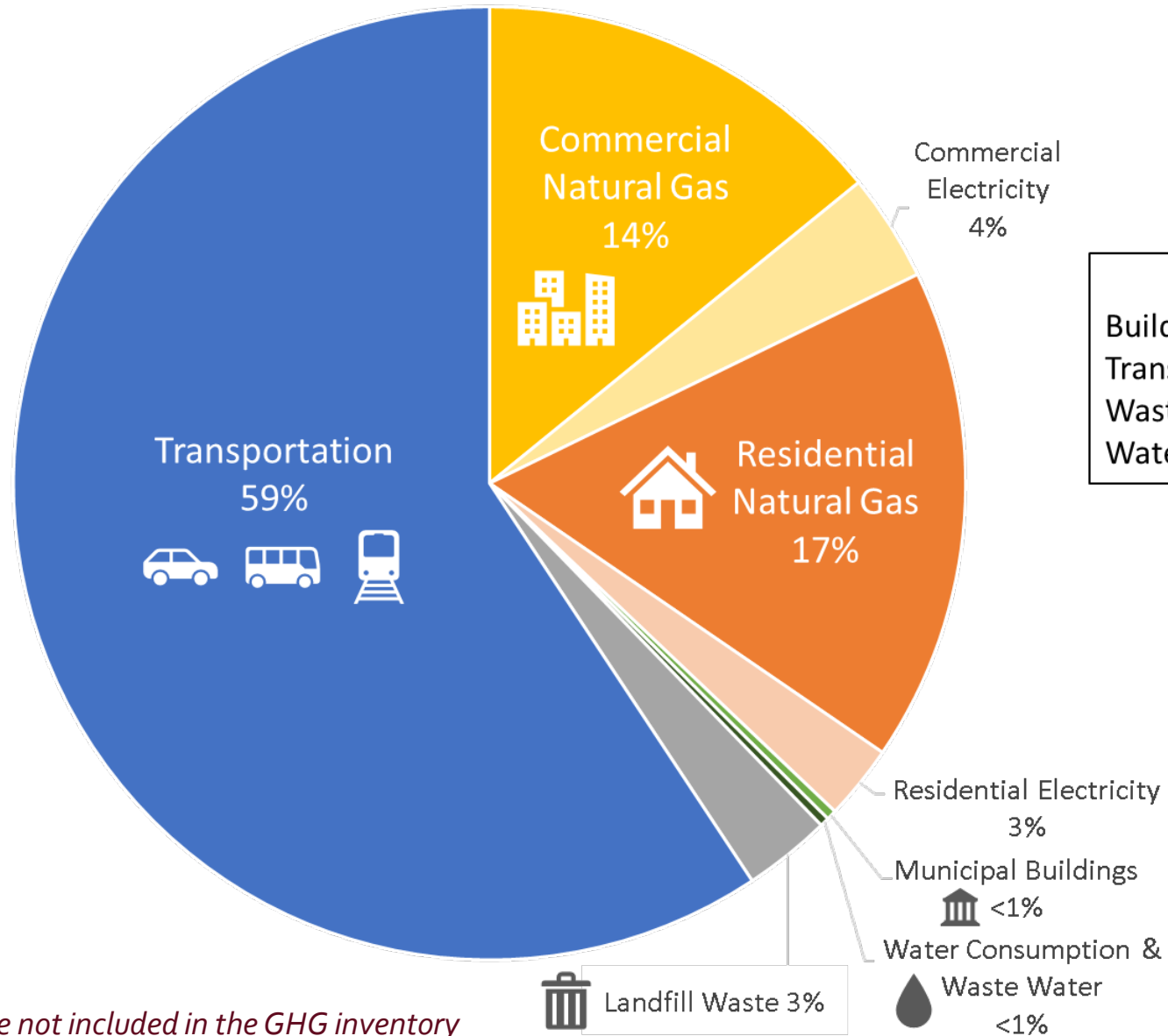


- Climate Action Plan (2009)
- Fossil Fuel Free City (2018)
- Climate Emergency Declaration (2018)
- Net Zero Carbon Emissions (2018)



Photo from www.theclimatemobilization.org

2018 Greenhouse Gas Emissions Inventory



Note: UC Berkeley and the Berkeley Lab are not included in the GHG inventory

2018 Greenhouse Gas Emissions Inventory



Community-Wide Emissions

Since 2000...

↓ %26



Waste & Water



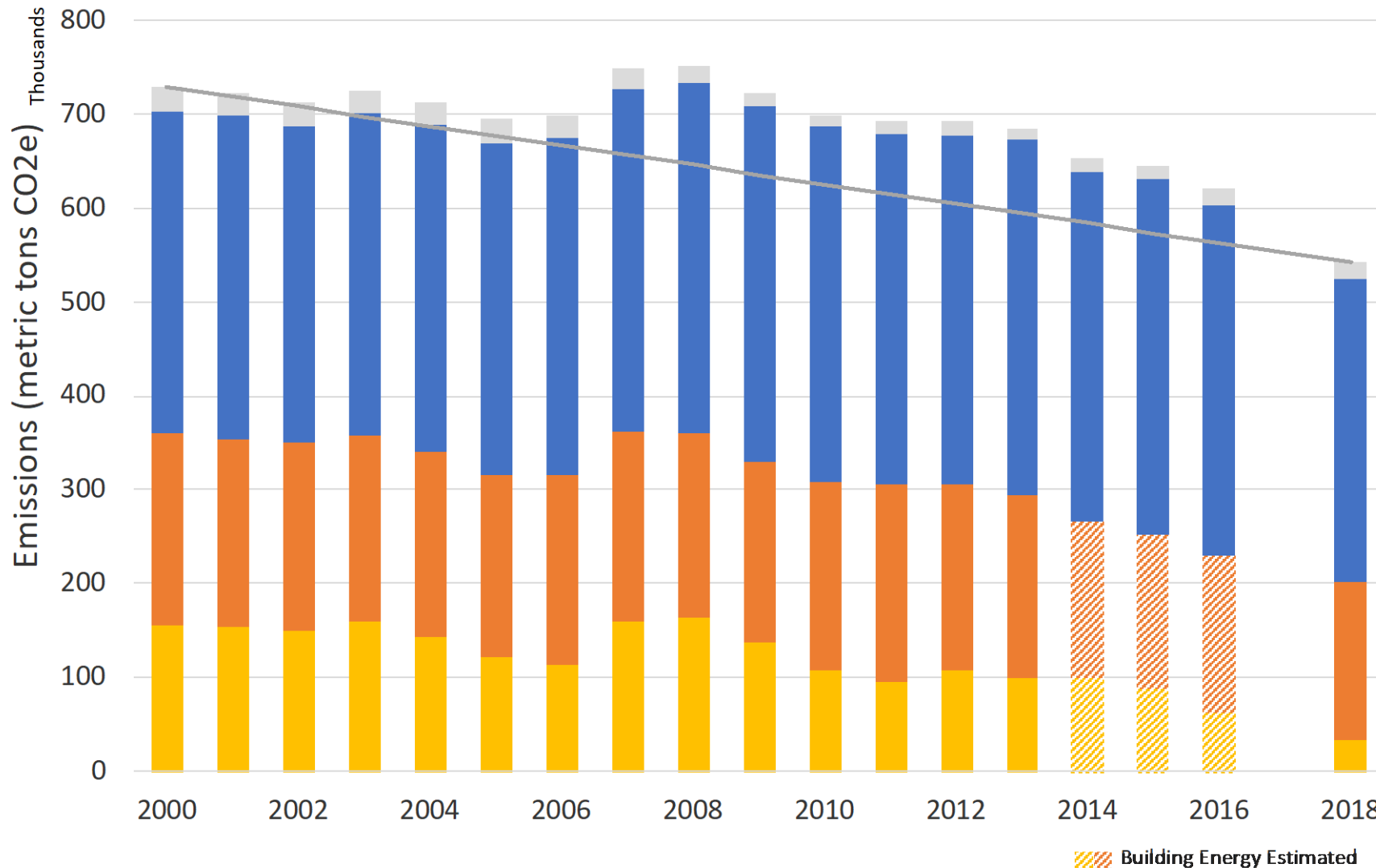
Transportation



Natural Gas



Electricity

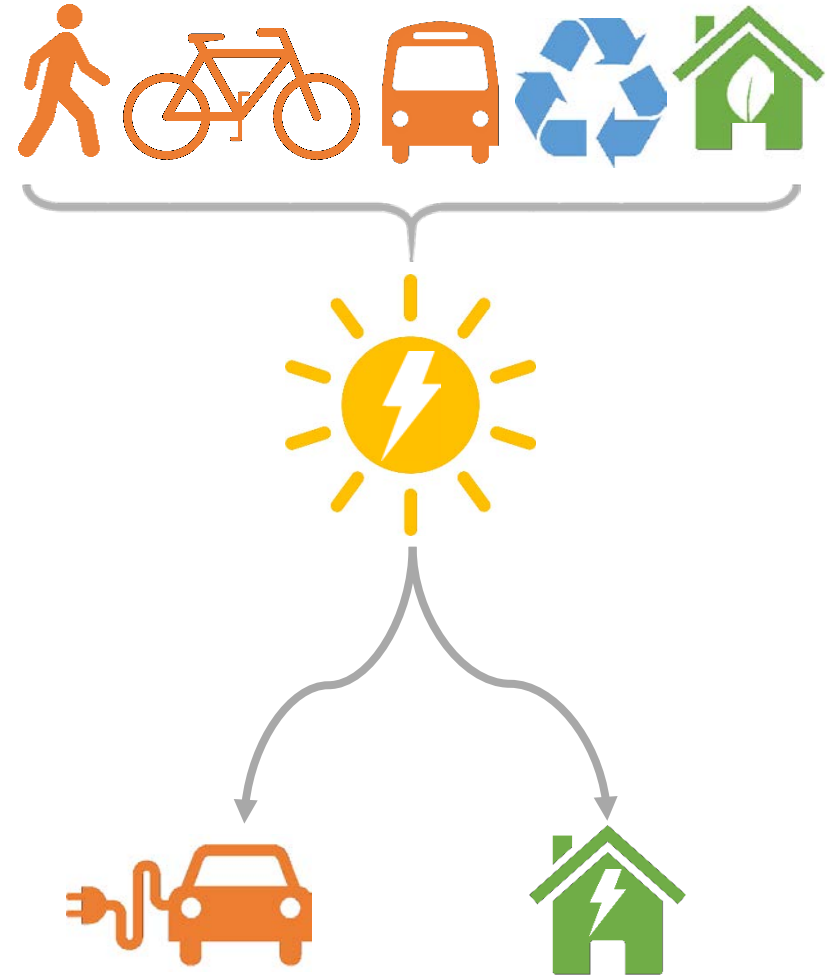


Path to a Clean Energy Future

1. Reduce energy use
2. Promote cleaner electricity



3. Electrify transportation & buildings
 - Electric mobility
 - Building electrification



Alignment with Strategic Plan Goals



- Champion and demonstrate social and racial equity



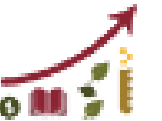
- Be a global leader in addressing climate change, advancing environmental justice, and protecting the environment



- Create a resilient, safe, connected, and prepared City



- Provide state-of-the-art, well-maintained infrastructure, amenities, and facilities



- Foster a dynamic, sustainable, and locally-based economy



- Create affordable housing and housing support services for our most vulnerable community members

Current Projects

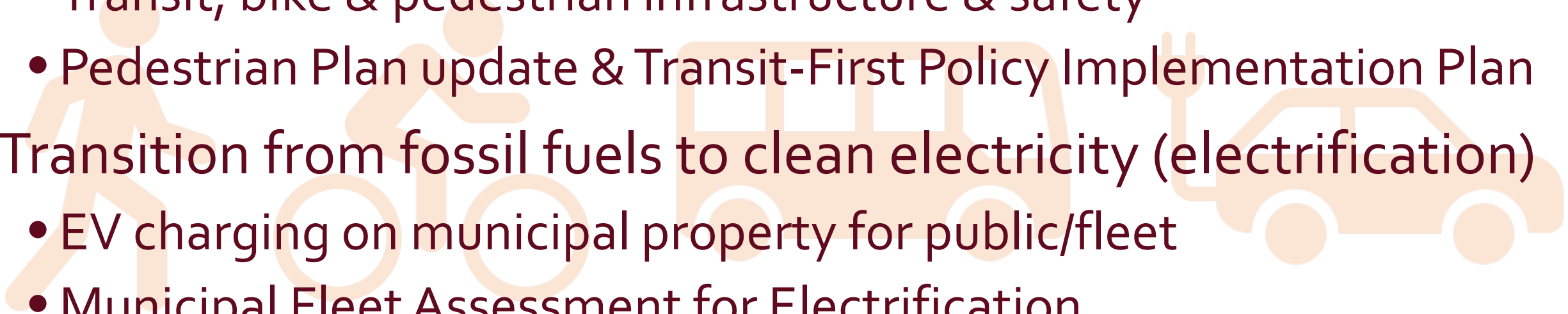
- Transportation
- Buildings
- Waste
- Climate Adaptation
- Resilience



Transportation



- Active transportation
 - Bike share, micromobility
 - Transit, bike & pedestrian infrastructure & safety
 - Pedestrian Plan update & Transit-First Policy Implementation Plan
- Transition from fossil fuels to clean electricity (electrification)
 - EV charging on municipal property for public/fleet
 - Municipal Fleet Assessment for Electrification
 - Consideration of the Electric Mobility Roadmap
 - Outreach



Current Projects



- Transportation
- Buildings
- Waste
- Climate Adaptation
- Resilience



Buildings



- 1. Reduce energy use:** Energy efficiency incentives, municipal facility upgrades
- 2. Promote clean energy:** EBCE, community outreach
- 3. Transition from natural gas to clean electricity (electrification)**
 - ***No new natural gas connections*** – Natural Gas Prohibition, 2019 Electric-favored Energy Reach Code
 - ***Promote energy efficiency & electrification*** – Consideration of proposed Building Energy Savings Ordinance (BESO) updates, Resilience Transfer Tax Rebate update and equity pilot program, community outreach
 - ***Strategic electrification*** – Existing Building Electrification Strategy

Municipal Buildings

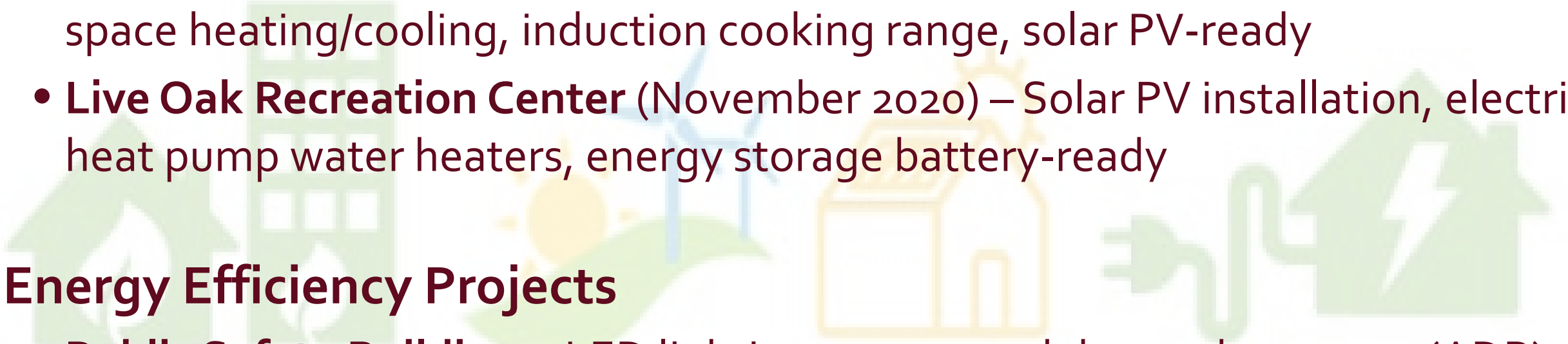


- **Building Upgrades**

- **Mental Health Clinic** (October 2020) – All electric, zero net energy
- **North Berkeley Senior Center** (October 2020) - Electric water heaters and space heating/cooling, induction cooking range, solar PV-ready
- **Live Oak Recreation Center** (November 2020) – Solar PV installation, electric heat pump water heaters, energy storage battery-ready

- **Energy Efficiency Projects**

- **Public Safety Building** - LED lighting, automated demand response (ADR)
- **James Kenney Recreation Center** - Automated demand response



Current Projects



- Transportation
- Buildings
- **Waste**
- Climate Adaptation
- Resilience



Waste



- Zero Waste Transfer Station Rebuild Feasibility Study
- Senate Bill 1383 (Organic Waste Reduction)
- Single Use Foodware and Litter Reduction Ordinance (impacted by COVID-19)
- Zero Waste Strategic Plan



Current Projects



- Transportation
- Buildings
- Waste
- Climate Adaptation
- Resilience



Climate Adaptation

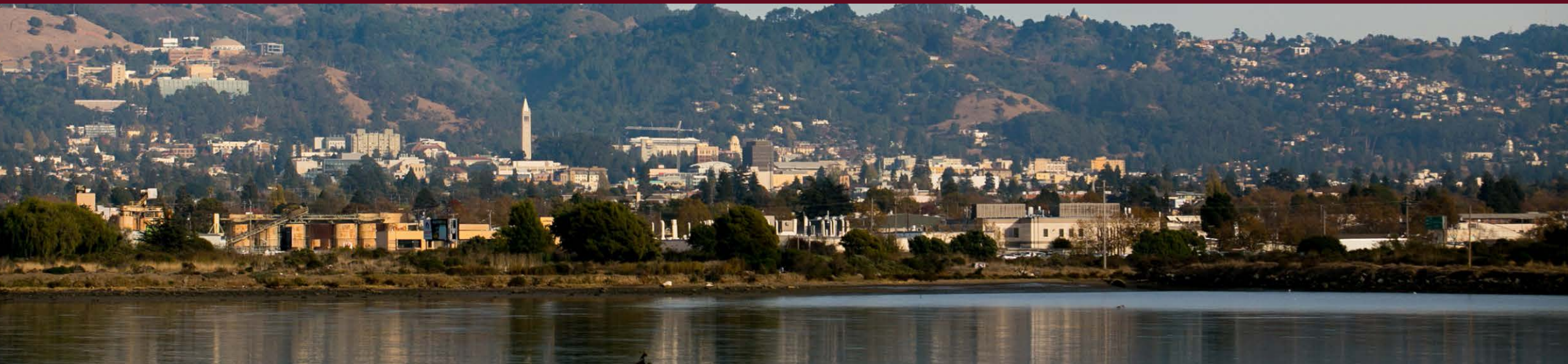


- 2019 Updated Local Hazard Mitigation Plan
- 2019 Green Infrastructure Plan
- Berkeley Marina Sea Level Rise Study
- Upcoming groundwater + sea level rise study for 4 Bay Area counties including Alameda County (San Francisco Estuary Institute, UC Berkeley)
- Regional coordination (Bay Area Climate Adaptation Network [BayCAN])

Current Projects



- Transportation
- Buildings
- Waste
- Climate Adaptation
- Resilience



Some Resilience Projects Across the City



- Goal- Build a Connected & Prepared Community
 - COVID-19 response & recovery
 - Public Safety Power Shutoffs
 - Retrofits of community shelters
- Goal - Advance Racial Equity: Advancing equity approach to policies and programs
- Goal – Accelerate Access to Reliable and Clean Energy :
 - Solar + Storage at critical municipal facilities in partnership with East Bay Community Energy (EBCE)
- Goal - Adapt to the Changing Climate:
 - 2019 Green infrastructure plan and implementation

Collaboration and Community Engagement



Join the Berkeley Climate Action Coalition!

<https://ecologycenter.org/climatecoalition/>

Some past/present community partners:





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Community Outreach Referral



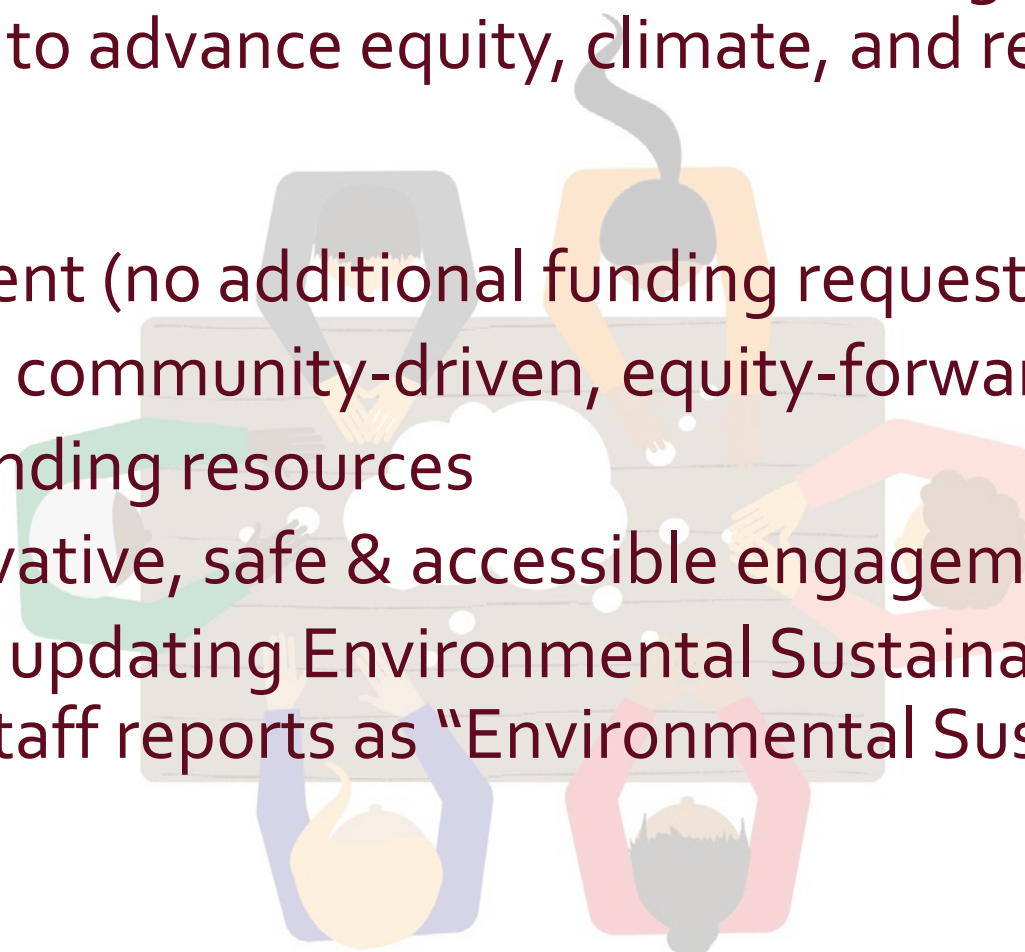
Fossil Fuel Free Streets Declaration

35

Community Outreach Referral



- **Goal:** Deepen engagement with communities most negatively affected by climate-related events to advance equity, climate, and resilience goals
- **Recommendations:**
 - Continue engagement (no additional funding request)
 - Build on existing community-driven, equity-forward work
 - Seek external funding resources
 - Implement innovative, safe & accessible engagement strategies
 - Raise awareness by updating Environmental Sustainability section in City Council items and staff reports as “Environmental Sustainability *and Climate Impacts*”





Climate Action Plan Update



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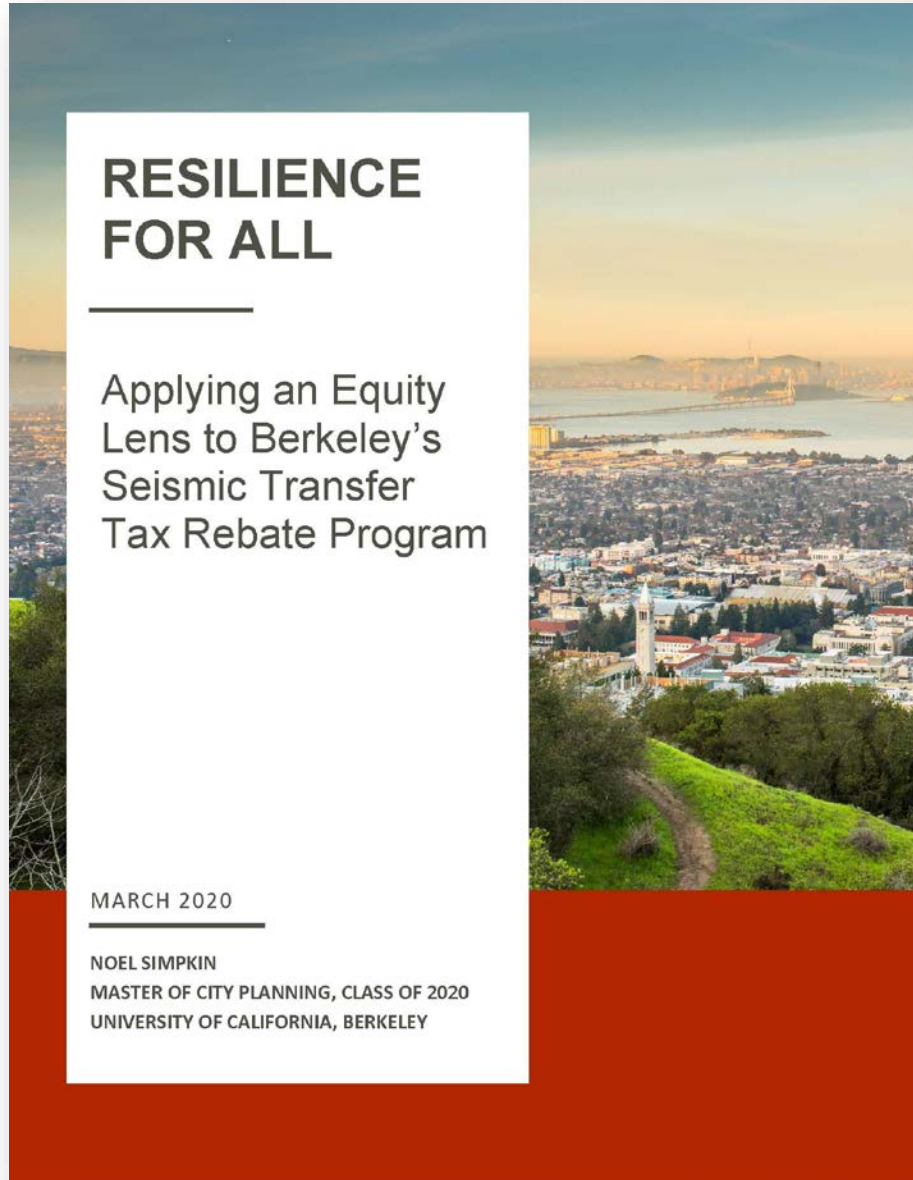


RESILIENCE FOR ALL

Applying an Equity
Lens to Berkeley's
Seismic Transfer
Tax Rebate Program

MARCH 2020

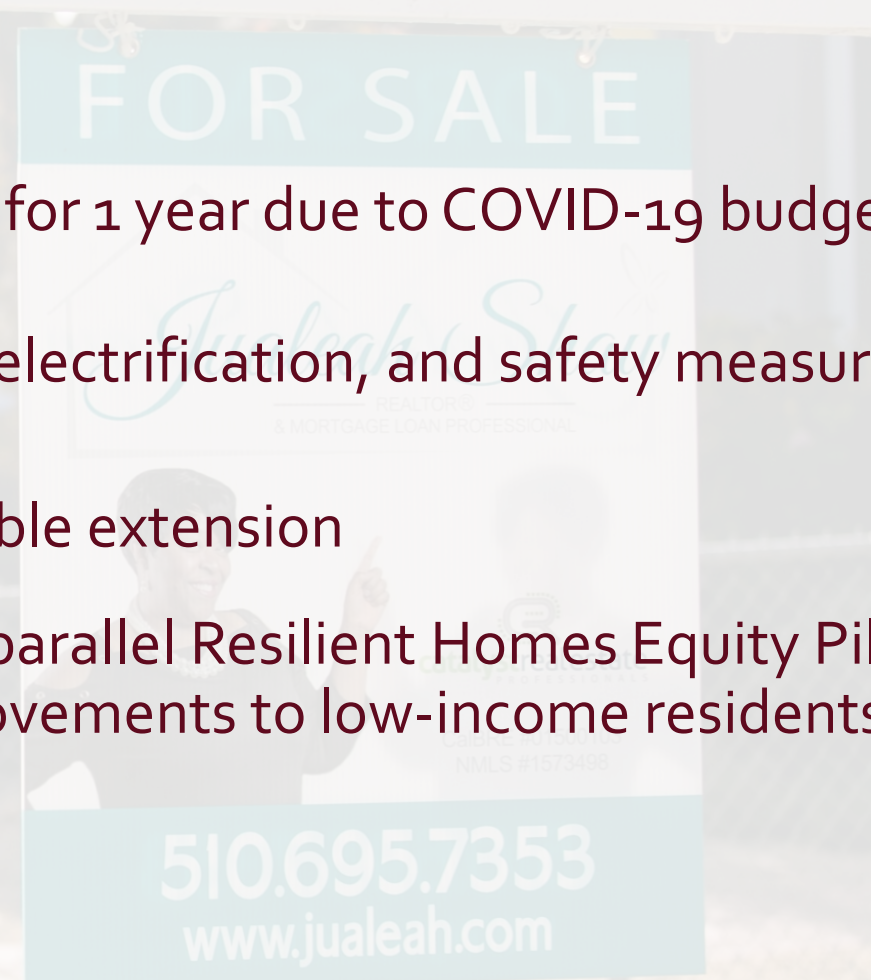
NOEL SIMPKIN
MASTER OF CITY PLANNING, CLASS OF 2020
UNIVERSITY OF CALIFORNIA, BERKELEY



Transfer Tax Rebate Referral



- **Goal:** Expand existing Seismic Transfer Tax Rebate Program to advance sustainability and resilience in Berkeley buildings
- **Recommendations:**
 - Delay update Seismic Transfer Tax Rebate Program for 1 year due to COVID-19 budget impacts. Proposed changes upon future adoption:
 - Include additional resilience, energy efficiency, electrification, and safety measures.
 - Include commercial and mixed-use buildings
 - Extend rebate deadline to 2 years + 1 year possible extension
 - Propose Council take action now for Staff design a parallel Resilient Homes Equity Pilot Program to provide funding for home retrofit improvements to low-income residents.





Climate Action Plan Update



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Transfer Tax Rebate Referral



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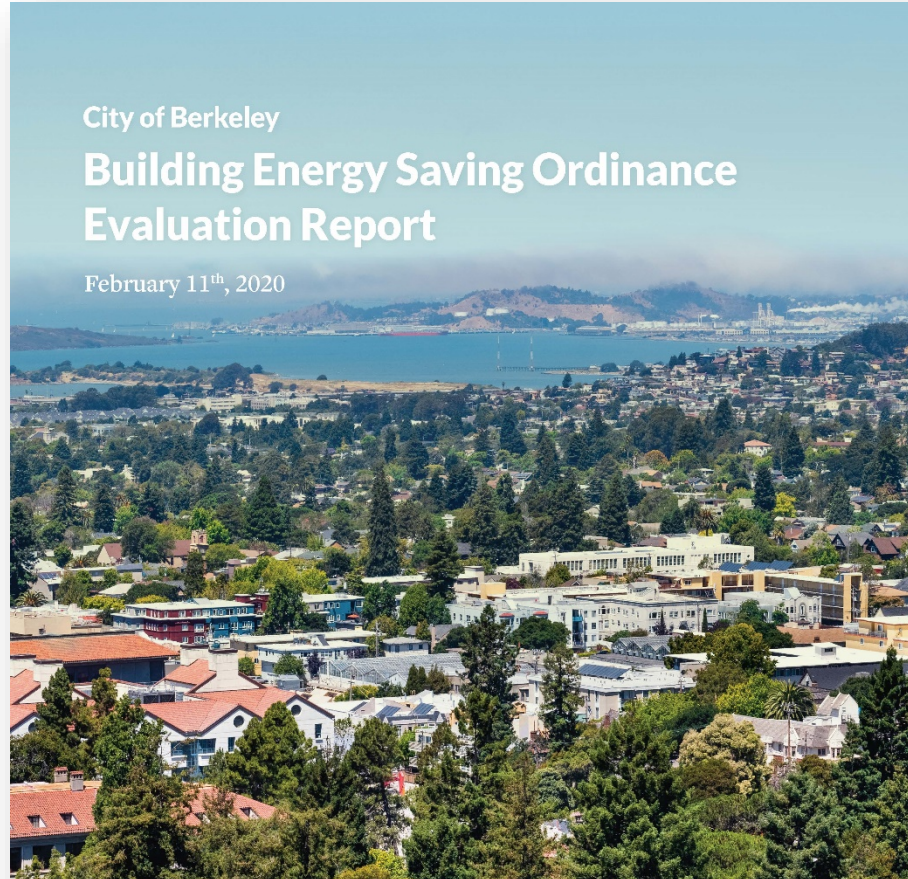
BESO Evaluation



City of Berkeley

Building Energy Saving Ordinance Evaluation Report

February 11th, 2020



To: City of Berkeley

Billi Romain
Sustainability Manager

Marna Schwartz
Sustainability Coordinator

Ammon Reagan
Sustainability Program Coordinator

From:

Cassidee Kido
Project Manager

Alameli Brooks
Senior Engineer

Nate Dewart
Senior Project Manager

Michael McGaraghan
Director



BESO Evaluation Highlights



Align Assessments with **Electrification** & Resilience Goals



Leverage Rebates for Phased-In Mandatory Upgrades



Improve Tracking & City Systems for Compliance

Proposed BESO Updates



Homes 1-4 Units

Current

- Assessment at time of sale

Proposed

- Electrification Assessment *at time of listing*
- *Develop rebates & phased-in mandatory requirements*
- Electrification Assessment *at time of listing*



Small Buildings
Up to 15k

- Assessment every 10 years

- Electrification Assessment *at time of listing*



Medium Buildings
15k -25k

- Assessment every 10 years

- Electrification Assessment *at time of listing*
- *Annual Benchmarking*



Large Buildings
25k+

- Assessment every 5 years
- Annual Benchmarking

- Electrification Assessment every 5 years
- Annual Benchmarking
- *Develop phased-in performance based targets*

Proposed BESO Updates



- **Goal:** Update BESO to further align with the city's goals and continue to decrease emissions from the building sector.
- **Recommendation:**
 - Amend BESO
 - Shift goal to include electrification
 - Move the assessments to time of listing
 - Leverage upcoming rebates and incentives
 - Develop mandatory energy upgrade requirements to be phased in



Climate Action Plan Update



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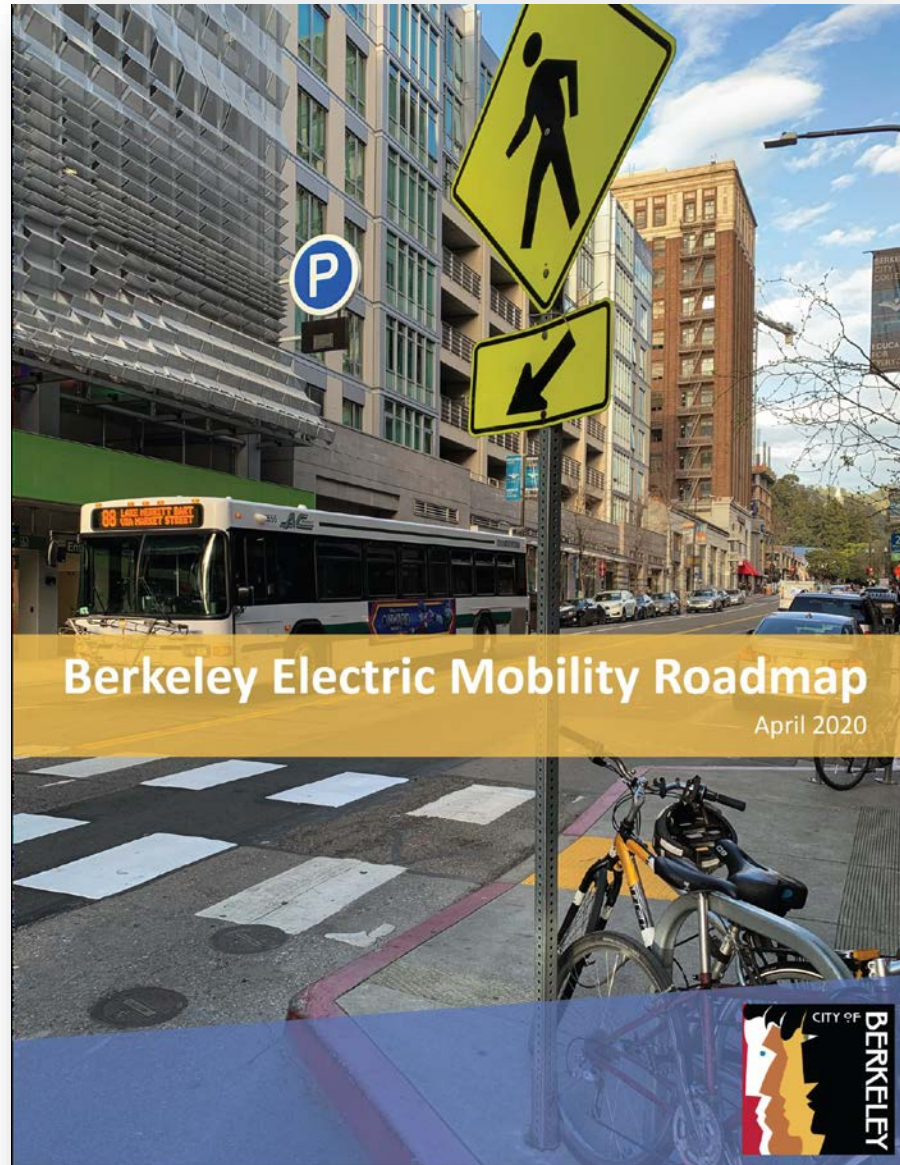


Building Energy Savings Ordinance (BESO)



Electric Mobility Roadmap

Electric Mobility Roadmap



Berkeley Electric Mobility Roadmap

April 2020

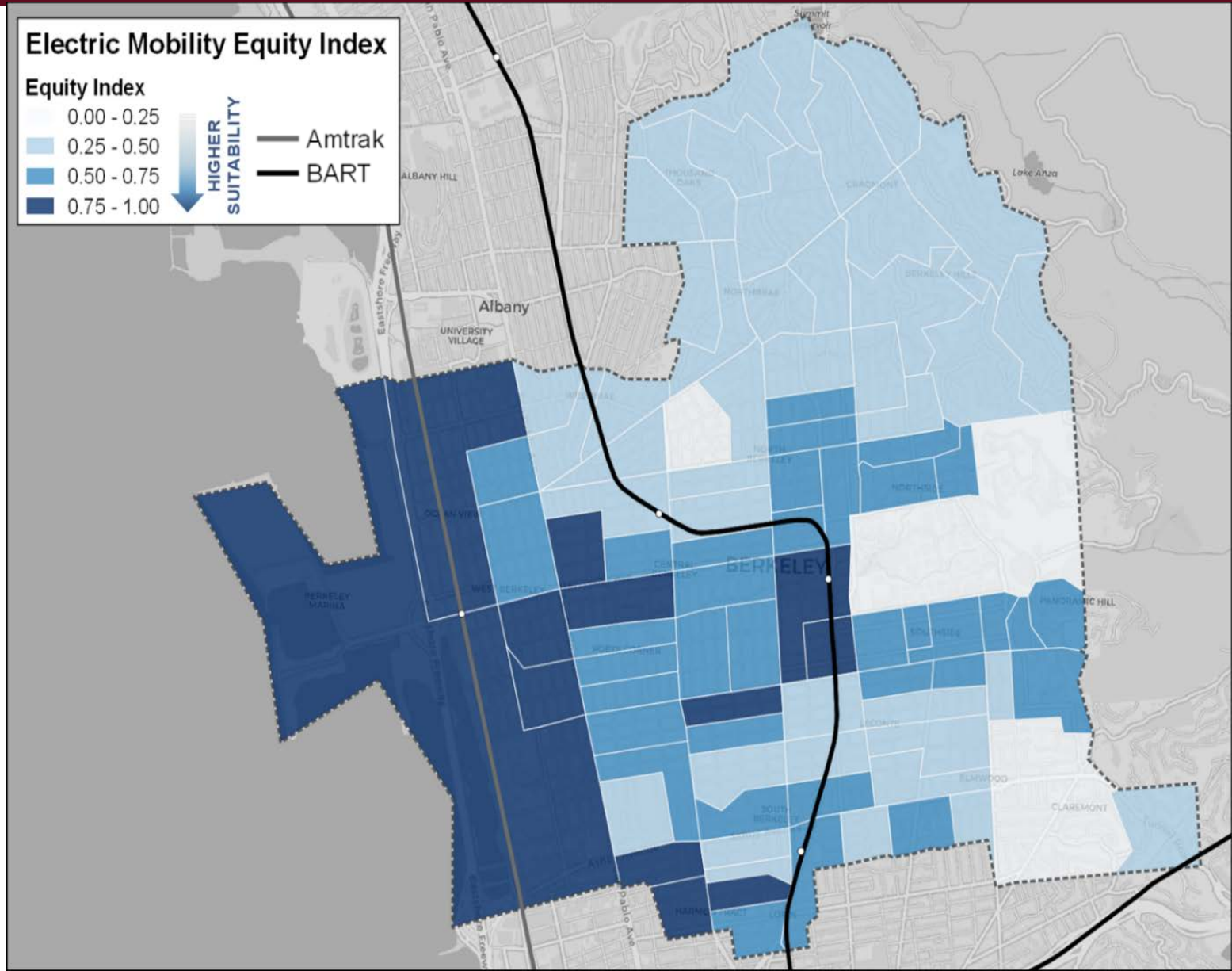


Electric Mobility Roadmap



Roadmap Vision:

Create a fossil fuel-free transportation system that integrates with and supports the City's ongoing efforts to increase walking, biking, and public transportation use in Berkeley, and that ensures equitable access to the benefits of clean transportation.



Electric Mobility Roadmap

Roadmap Goals:

- Ensure Equity in Access to Electric Mobility
- Improve Alternatives to Driving
- Achieve Zero Net Carbon Emissions
- Demonstrate City Leadership

Recommendations:

- Adopt the Berkeley Electric Mobility Roadmap
- Form an Electric Mobility Implementation Working Group



Thank You!



Billi Romain

Manager

Office of Energy and Sustainable Development

(510) 981-7432

bromain@CityofBerkeley.info

