



Environment & Climate Commission

# AGENDA

## REGULAR MEETING OF THE ENVIRONMENT AND CLIMATE COMMISSION

Please click the link below to join the webinar:

<https://us06web.zoom.us/j/88100099142>

Or Telephone:

Dial (for higher quality, dial a number based on your current location):

US: +1 669 900 6833 | Webinar ID: 881 0009 9142

**PUBLIC ADVISORY: This meeting will be conducted exclusively through videoconference and teleconference.**

Pursuant to Government Code Section 54953(e) and the state declared emergency, this meeting of the Energy Commission will be conducted exclusively through teleconference and Zoom videoconference. The COVID-19 state of emergency continues to directly impact the ability of the members to meet safely in person and presents imminent risks to the health of attendees. Therefore, no physical meeting location will be available.

To access the meeting remotely: Join from a PC, Mac, iPad, iPhone, or Android device: Please use this URL

<https://us06web.zoom.us/j/88100099142>. If you do not wish for your name to appear on the screen, then use the drop-down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the "raise hand" icon by rolling over the bottom of the screen. To join by phone: Dial +1 669 900 6833 and enter Meeting ID 881 0009 9142. If you wish to comment during the public comment portion of the agenda, Press \*9 and wait to be recognized by the Chair.

*Please be mindful that the teleconference will be recorded as any official meeting is recorded, and all other rules of procedure and decorum will apply for official meetings conducted by teleconference or videoconference.*

**Wednesday, June 22, 2022, 5:00 PM**

### **PRELIMINARY MATTERS**

**1. Call to Order and Roll Call:**

Vacant	Mayor	Mayor
Ranney, Sarah	Kesarwani	District 1
Vacant	Taplin	District 2
Vacant	Bartlett	District 3
Tahara, Daniel	Harrison	District 4
Vacant	Hahn	District 5
Guiliasi, Les	Wengraf	District 6
Vacant	Robinson	District 7
Gould, Ben	Droste	District 8

**2. Public Comment:** Comments on subjects not included on the agenda (3-minute limit per individual)

**3. Approval of Minutes:** [Approval of Minutes from Last Meeting \(May 25, 2022\)](#)

4. **Agenda Check:** Commissioners may rearrange items on the agenda
5. **Update from Chair** (Chair Gould)
6. **Update from staff:** Planning Department (Alene Pearson), Office of Energy & Sustainable Development (Katie Van Dyke)

***DISCUSSION AND ACTION ITEMS***

7. **Discussion:** [Environment and Climate Commission Work Plan](#)
8. **Discussion:** Climate Literacy
9. **Discussion:** [Gas Station Ban and EV Charging Expansion](#)
10. **Discussion:** [Fossil Free and Just Transition Overlay](#)
11. **Discussion:** Potential Revenue Measure Process & Procedures
  - a. [Fossil Fuel Parcel Tax Recommendation](#)
  - b. [Building Emissions Tax](#)
12. **Discussion:** [Tracking Climate Action and Resilience Implementation Progress](#)
13. **Action:** Appointment of Commission Liaisons
14. **Discussion:** Items for Future Agenda

***INFORMATION ITEMS***

15. **Communications**
16. **Announcements from Commissioners**

***ADJOURNMENT***

~~~~~  
*This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Billi Romain, 510-981-7432, [bromain@cityofberkeley.info](mailto:bromain@cityofberkeley.info).*

*Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: E-mail addresses, names, addresses, and other contact information are not required but, if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information.*

*Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at the Planning Department located at 1947 Center Street.*



**COMMUNICATION ACCESS INFORMATION:**

This meeting is being held in a wheelchair-accessible location. To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date. Please refrain from wearing scented products to this meeting.

~~~~~  
I hereby certify that the agenda for this regular/special meeting of the Berkeley City Commission on Commissions was posted at the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way, as well as on the City's website.

Billi Romain, Commission Secretary





Environment & Climate Commission

**DRAFT ENVIRONMENT AND CLIMATE COMMISSION Minutes  
Wednesday, May 25, 2022**

<b>Vacant</b>	Mayor	Mayor
<b>Ranney, Sarah</b>	Kesarwani	District 1
<b>Vacant</b>	Taplin	District 2
<b>Vacant</b>	Bartlett	District 3
<b>Tahara, Daniel</b>	Harrison	District 4
<b>Vacant</b>	Hahn	District 5
<b>Guiliasi, Les</b>	Wengraf	District 6
<b>Vacant</b>	Robinson	District 7
<b>Gould, Ben</b>	Droste	District 8

1. Call to Order and Roll Call

The meeting was called to order by Secretary Billi Romain at 5:08 p.m.  
Commissioners Present: Ranney, Tahara, Guiliasi, Gould  
Commissioner Leave of Absence: None  
Commissioner Absent: None  
Staff: Billi Romain, Rebecca Milliken

2. Public Comments and Announcements:

2 members of the Public  
1 comment(s)

***DISCUSSION AND ACTION ITEMS***

3. Discussion: Vision 2050 Revenue Measure (Liam Garland)

4. Discussion: Commissioner Overview (Billi Romain)

5. Action: Election of Officers - Chair and Vice Chair

Motion/second to elect Commissioner Gould to serve as Chair. (Gould, Guiliasi). The motion carried 4-0-0-0; Ayes: Ranney, Tahara, Guiliasi, Gould. Noes: None. Abstain: Absent

Motion/second to elect Commissioner Guiliasi to serve as Vice Chair. (Gould, Ranney). The motion carried 4-0-0-0; Ayes: Ranney, Tahara, Guiliasi, Gould. Noes: None. Abstain: Absent

6. Action: 2022 Commission Meeting Schedule

Motion/second to approve the proposed 2022 meeting schedule. (Tahara, Guiliasi). The motion carried 4-0-0-0; Ayes: Ranney, Tahara, Guiliasi, Gould. Noes: None. Abstain: Absent

7. Discussion: Future Agenda Items

Page 2 of 2

***INFORMATION ITEMS***

8. Communications

- a. Memo from Community Environmental Advisory Commission
- b. Memo from Energy Commission
- c. Fossil Free and Just Transition Overlay (Ben Gould)
- d. Fossil Fuel Parcel Tax Recommendation (Ben Gould)
- e. Gas Station Ban and EV Charging Expansion (Ben Gould)
- f. Hazardous Waste Disposal in Berkeley (David Learman)

Adjournment

Motion/second to adjourn at 6:41 pm (Guiliasi, Tahara). The motion carried 4-0-0-0; Ayes: Ranney, Tahara, Guiliasi, Gould. Noes: None. Abstain: Absent

Minutes Approved:

/S/ Billi Romain, Berkeley Energy Commission Secretary



Environment and Climate Commission

[Meeting Date (MM dd, yyyy)]

To: Honorable Mayor and Members of the City Council  
From: Environment and Climate Commission (ECC)  
Submitted by: Ben Gould, Chairperson, ECC  
Subject: Environment and Climate Commission 2022 Work Plan

## INTRODUCTION

The Environment and Climate Commission (ECC) is responsible for advising the City Council on matters related to environmental sustainability and climate change. The commission's scope includes work to advance the goals of: advancing green buildings and resource efficiency; decarbonizing buildings and transportation; engaging and educating the community; addressing the impacts and welfare of all species, including animals, insects, and plants; reducing greenhouse gas emissions; reducing toxics and preventing pollution; and supporting environmental justice. The commission works closely with the Office of Energy & Sustainable Development (OESD).

First established in 2022, ECC was formed by merging the Community Environmental Advisory Commission (CEAC) and the Energy Commission (EC). ECC commissioners bring a wide range of expertise, with backgrounds in government, academia, nonprofit, and private sector environmental work. These backgrounds inform ECC's work and help it to consider diverse and equitable approaches to addressing the City's environmental challenges.

This work plan is intended to provide a guide to the work ECC plans to take on in 2022. As additional items or issues arise, or are referred to the Commission from Council, ECC will adjust this plan accordingly.

## CURRENT SITUATION AND ITS EFFECTS

The Environment and Climate Commission has a very broad scope and a duty to continue and build upon past work done by both CEAC and EC. However, as a new commission, ECC also has numerous vacancies and limited institutional knowledge.

Both CEAC and EC prepared memos for ECC to review past projects and suggest future items. The table below indicates those items to follow up on and suggestions for new projects from the previous commissions:

Project	Status	Description	Source
Bird Safety	Follow up w/ Planning Commission	Track progress of item through Planning Commission and back to Council	CEAC
Gas Station CO <sub>2</sub> Labeling	Follow-up w/ City Attorney	City Attorney's office has had significant turnover and likely forgot to implement this item after relevant Supreme Court decision	CEAC
Ban sale of used gas cars	Follow-up w/ City Attorney	City Attorney's office has had significant turnover and likely forgot to implement this item after pandemic	CEAC
Hazardous Waste	Pot'l new item	CEAC received multiple emails in 2021-22 about hazardous waste, but there are no drop-off sites within City limits due to BMC 11.50	CEAC
VMT targets	Pot'l new item	Set specific, measurable VMT reduction targets and identify and implement strategies to achieve them	CEAC
Sidewalk Condition Index	Pot'l new item	Adopting a "sidewalk condition index" metric, similar to pavement condition index, to quantify the quality of Berkeley's sidewalks and measure improvements in pedestrian infrastructure	CEAC
Public Space Re-allocation	Pot'l new item	Re-allocate public street space away from auto-centric uses towards pedestrians, bicyclists, and buses, even more than currently envisioned in the bicycle and pedestrian master plans	CEAC
Building Decarb	Pot'l new item	Berkeley's building decarbonization plan is only a start; more work is needed to identify and effectively implement strategies to decarbonize: <ul style="list-style-type: none"> <li>- Single-family ownership residences</li> <li>- Single-family rental residences</li> <li>- Rent-controlled multifamily residences</li> <li>- Non-rent-controlled multifamily residences</li> <li>- Commercial spaces</li> </ul>	CEAC



De-zoning gas stations	Pot'l new item	Berkeley should remove gas stations as a permitted use from all City zoning codes.	CEAC
Banning gas-powered delivery vehicles	Pot'l new item	The ECC should explore opportunities to require last-mile delivery vehicles to use zero- emission alternatives.	CEAC
OESD input: Transportation	Pot'l new item	<p>Ensure the City is adequately staffed to implement transportation-related activities that reduce carbon emissions. Ensure staff:</p> <ul style="list-style-type: none"> <li>- Conducts a mobility needs assessment</li> <li>- Convenes an electric mobility roadmap implementation working group</li> <li>- Pursues discounts and digital access strategies for electric shared mobility options</li> </ul> <p>Track progress and provide input on implementation of the Electric Mobility Roadmap, the Bicycle Master Plan, the Pedestrian Plan, Vision Zero, and other City plans to encourage non-car mobility.</p>	EC
Alternative Transportation	Pot'l new item	<ul style="list-style-type: none"> <li>- Study and support expanding transportation measures to reduce GHG emissions associated with car travel.</li> <li>- Promote safe and convenient cycling through a protected and connected bike lane network, docked and dockless bike share systems, public e-bike charging, and secure bike parking.</li> <li>- Promote safe routes to schools, beginning with opportunities for the Energy Commission to contribute to the 2x2 committee (Council and BUSD board).</li> <li>- Research the feasibility of a zero-emissions zone, or a car-free zone for Berkeley.</li> <li>- Investigate opportunities to cut emissions through mass transit, such as more frequent service, new routes, zero-carbon fuels, and lower fare prices.</li> <li>- Investigate new approaches to public, curbside, or neighborhood charging for residents without access to on-site charging, focusing on commercial or public ownership of chargers, dedicated street parking spots for EV charging, and/or low-cost connections</li> </ul>	EC

		to the grid. Collaborate with Transportation and Public Works commissions.	
Integrate Climate + Transportation policymaking	Pot'l new item	Ensure integration of the climate aspects of transportation with other transportation issues in Transportation and Public Works work.	EC
Bond measure for transportation	Pot'l new item	Engage with Council to include language in City bond measures to finance and build low-carbon, equitable, safe, and convenient transportation infrastructure.	EC
OESD input: Buildings	Pot'l new item	<ul style="list-style-type: none"> <li>- Track progress and provide input on implementation of the Berkeley Existing Building Electrification Strategy (BEBES), including funding for the equity pilot program, staffing needs, and renovation reach codes.</li> <li>- Support municipal building electrification and energy efficiency upgrades and development of municipal green building programs, including the City's work with EBCE to install solar + storage systems on critical facilities to provide resilience during outages.</li> </ul>	EC
Electrification cost reduction	Pot'l new item	Develop recommendations to reduce the cost of electrification and for partial electrification measures, such as codes that require two-way heat pumps instead of central air conditioners, deployment of portable heat pumps and low voltage water heaters, and "Watt diet" measures to avoid electrical panel upgrades.	EC
Building sale requirements	Pot'l new item	Investigate and advance time of sale opportunities for electrification and energy efficiency, including a transfer tax rebate program for energy improvements and the allocation of transfer tax revenues towards expanding building electrification in LMI and renter communities.	EC
Electrification mandates	Pot'l new item	Investigate and advance electrification mandates, such as through the Building Energy Savings Ordinance (BESO)	EC
Defund natural gas	Pot'l new item	Explore ways to redirect funds used to maintain PG&E's fossil gas distribution network to support building electrification.	EC
OESD Input: Climate Action	Pot'l new item	Track and provide input on implementation of the Pilot Climate Equity Action Fund and seek funding sources to provide ongoing support. Identify options to support the Fund from existing or expanded City revenues. Solicit input from experts and conduct public meetings to study	EC

		<p>funding mechanisms, such as a gross-receipts tax, parcel tax, utility users tax, or building emissions tax. Explore options to split the collection of the Utility Users Tax to make it possible to charge separate rates for natural gas and electricity.</p> <p>Review and provide input on staff's annual report to Council on Climate Action Plan progress and recommend further actions. Explore the feasibility of expanding the Plan to cover "scope 3" or consumption-based emissions that occur outside of city limits, and research policies to reduce them. Work with staff to better measure and track progress and create a public dashboard to report key metrics.</p>	
Renewable energy advocacy	Pot'l new item	Promote the use of renewable energy by advising Council on EBCE activities including electricity mix, default offerings, local programs, and opportunities to advance City priorities.	EC

ECC commissioners, as well as OESD staff, have also proposed other ideas not listed above for items for the commission to work on.

Moving forward, ECC is exploring the following projects in 2022:

Project	Goal	Outputs	Target Date	Lead
Climate Literacy Advocacy	Request for state of CA to fund large \$\$ to do climate education work statewide	Sign-on letter for Council	Sept 2022	Ranney
De-zoning gas stations	Provide recommendation to Council and PlannCom to remove gas stations from zoning, expand EV charging	Rec. for Council	Sept 2022	Gould
Fossil Free & Just Transition Overlay	Recommendation for a density bonus + just transition fund for fossil-centric businesses, eg gas stations	Rec. for Council	Oct 2022	Gould

Building Emissions Tax	Ballot initiative to tax large building owners based on building GHG emissions (natural gas use)	Rec. for Council	Nov 2022	Tahara
Street Space Reallocation	Re-allocate public street space away from auto-centric uses	Rec. for Council	Dec 2022	Gould
OESD support - CAP tracking	Work with OESD staff to develop approach to track CAP implementation, based on recommendation under review at FITES	Rec. for Council	Dec 2022	Gould

**BACKGROUND**

Climate Literacy Advocacy: A letter in collaboration with other local & statewide advocacy efforts around climate education in K-12 schools.

De-zoning Gas Stations: Removing gas stations from permissible land use and expanding commercial EV charging will make it harder to expand the use of fossil fuels and easier to support alternatives.

Fossil Free and Just Transition Overlay: A density bonus + fee will help incentivize conversion of gas stations to other, more climate-friendly uses, while the fee will help fund just transitions for workers no longer employed in fossil fuels and related industries.

Building Emissions Tax: A local tax on direct CO<sub>2</sub> emissions from building operations, with funding going towards equitable decarbonization efforts.

Street Space Reallocation: Reopen the Transportation Element to close streets to cars, add bike lanes to more side streets & bus lanes to more major streets, narrow streets / add parks & parklets & bioswales, etc.

OESD support - CAP tracking: Support OESD staff in identifying key performance indicators (KPIs) for tracking CAP implementation & progress.

**ENVIRONMENTAL SUSTAINABILITY**

The projects which ECC is working on will improve environmental sustainability through a wide variety of methods.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

Future action items that ECC may send to City Council could require staff time to develop, finalize, and/or implement. ECC strives to ensure proposals provide significant net triple bottom line benefits to the City when evaluating total costs and benefits across environmental, social, and economic impacts.

CONTACT PERSON

Ben Gould, Chair, Environment and Climate Commission, 510-725-9176





Environment and Climate Commission

[CONSENT OR ACTION]  
CALENDAR  
[Meeting Date (MM dd, yyyy)]

To: Honorable Mayor and Members of the City Council  
From: Environment and Climate Commission  
Submitted by: [Name of Commission Chairperson], Chairperson, Environment and Climate Commission  
Subject: Gas Station Ban and EV Charging Expansion

RECOMMENDATION

Refer to the Planning Commission and the City Manager to prepare an ordinance making the following changes to the Zoning Ordinance:

- 1) Change gasoline fuel stations to a “Not Permitted” use in all zoning districts citywide,
- 2) Replace “Alternative Fuel Station” with “Hydrogen Fuel Station” in all applicable zoning districts, and add an associated definition for Hydrogen Fuel Station,
- 3) Replace the reference to “gas/auto fuel stations” in BMC 23.324.040(B)(2)(b) (Nonconforming Uses – Abandoned Uses – Exceptions – Uses with Major Investments) with “hydrogen fuel or electric vehicle charging stations”,
- 4) Add “Electric Vehicle Charging Station” as a permitted use or accessory use to all zoning districts, and
- 5) Change the permitting requirement for “Electric Vehicle Charging Station” from Administrative Use Permit to a Zoning Certificate in all zoning districts.

SUMMARY

This proposal would ban new gas and hydrocarbon fueling stations from being built in Berkeley, make any expansions of existing stations require a Use Permit and a public hearing, allow the ZAB to prevent existing gas and hydrocarbon stations from re-opening if they cease operations for a year or more, and allow electric vehicle (EV) chargers to be operated commercially by-right anywhere in Berkeley that has available parking.

FISCAL IMPACTS OF RECOMMENDATION

Some staff time required to develop updated ordinance language.

## BACKGROUND

Berkeley has permitted, and even encouraged, the sale of fossil fuels for decades. Numerous Berkeley businesses are known to promote the use of these dangerous chemicals, which pollute our air, water, and soil; pose major fire risks; contribute to the risk of cancer; and are either themselves potent greenhouse gases or, upon combustion, leading contributors to climate change.

These fossil fuel dealerships – colloquially known as gasoline stations – cause significant traffic and congestion, generate elevated levels of carcinogenic air pollutants in their local neighborhoods, and are frequently found to have leaked toxic chemicals into the ground, contaminating our soil and groundwater.

Gasoline, diesel, and other carbon-based transportation fuels are known to be harmful chemicals, posing a variety of risks to human health, public safety, and the environment, both of their own virtue and as a result of their combustion or oxidation for powering transportation<sup>1,2,3</sup>.

In recent years the cumulative harmful impacts of these chemicals across environmental, health, and safety impacts has become clear. In July 2018, the City Council declared a Climate Emergency and adopted a Fossil Fuel Free Berkeley resolution, setting the goal of eliminating fossil fuels in Berkeley. On September 15<sup>th</sup>, 2020, City Council adopted a goal of 100% sustainable trips by 2040, with a 50% improvement by 2030, and referred to the Environmental, Energy, and Transportation commissions to develop relevant proposals and recommendations. As the successor commission to the Environmental and Energy Commissions, the Environment and Climate Commission is now tasked with developing proposals and recommendations to achieve 100% sustainable transportation.

## CURRENT SITUATION AND ITS EFFECTS

In 2018, according to California Energy Commission data, over 20 million gallons of gasoline was sold in Berkeley at roughly 15 gas stations throughout the city. Ten of these gas stations had unresolved CalEPA violations as of October 2019.

Gasoline fuel stations are currently an allowed land use under Berkeley's zoning classifications C-C, C-U, C-N, C-NS, C-SA, C-SO, C-W, and C-AC. In addition, C-T allows gasoline fuel stations when located in a parking structure. Both the listed Commercial districts and all M districts also allow "alternative fuel" stations.

---

<sup>1</sup> Material Safety Data Sheet: Gasoline, All Grades, Vermillion County, IL: <https://www.vercounty.org/MSDS/EMA/9950allgradesgasoline.pdf> (accessed September 2019)

<sup>2</sup> Safety Data Sheet: Diesel Fuels, Valero: [https://www.valero.com/en-us/Documents/OSHA\\_GHS\\_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf](https://www.valero.com/en-us/Documents/OSHA_GHS_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf) (accessed September 2019)

<sup>3</sup> Safety Data Sheet: Natural Gas Odorized, Hess Corporation: <https://www.hess.com/docs/us-safety-data-sheets/natural-gas.pdf?sfvrsn=2> (accessed September 2019)



[BMC 23.502.020.15](#) defines “alternative fuels” using the same definition as in the Energy Policy Act, including “Methanol, denatured ethanol, and other alcohols; mixtures containing 85% or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; non-alcohol fuels (such as biodiesel) derived from biological material; and electricity.”

While some alternative fuels are not fossil fuels (e.g. hydrogen), this still includes mixed fossil blends (e.g. E85, which is 15% gasoline) and pure fossil fuels such as natural gas (methane). In addition, all hydrocarbon fuels have the same associated health and safety risks and environmental impacts regardless of the source or feedstock – benzene, found in gasoline, is a known carcinogen whether it is derived from petroleum or from corn, and biodiesel poses the same fire risks as regular diesel. As a result, truly addressing the health and safety impacts of these chemicals requires addressing the chemicals regardless of their origination source.

In contrast, electric vehicles are poised to provide widespread zero-emission transportation. EV charging availability remains a barrier to uptake, and Berkeley’s [Electric Mobility Roadmap](#) establishes a City priority of “[striving] to continually streamline its EV charging permitting process and to exceed the requirements of AB1236,” (p40).

Presently, the Zoning Ordinance only permits electric vehicle charging stations (a “facility that supplies electric energy for the recharging of plug-in electric vehicles”) with an Administrative Use Permit in commercial zones; other parts of the BMC allow electric vehicle charging stations (“a parking space dedicated to active charging events” or “any level of electric vehicle supply equipment station that... delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle”) to be applied to new or existing parking spaces with a building permit.

While it is not perfectly clear, it appears the intent of the BMC is to distinguish between a commercial operation providing electric vehicle (EV) charging to the public, permitted in commercial districts, and private equipment providing electric vehicle charging to only a restricted set of users, who may pay for the cost of charging either personally (e.g. through electricity bills) or indirectly (e.g. bundled in rent).

However, given the existing restrictions on constructing parking lots ([BMC 23.302.070 G](#)) and other parking spaces, the zoning restrictions on EV charging stations would appear to be independent of the zoning restrictions on parking. Instead, the present zoning restriction on EV charging stations appears only to serve to limit the economic viability of EV charging outside of commercial areas, by preventing the owners of electric vehicle supply equipment from renting or leasing out access to the chargers for other users.

Widespread EV uptake will rely upon widespread EV charging deployment. Allowing owners of EV supply equipment outside of commercial districts to rent or lease access to their chargers could allow tenants who lack access to charging, low-income residents who cannot afford electric panel upgrades, or “EV-curious” residents to have readily available charging close to where they live. Allowing small, distributed EV charging “businesses” to operate throughout the city could likely help increase the availability of charging, while reducing citywide VMT associated with trips to gas stations.

This would advance the City’s strategic goals to foster a dynamic, sustainable, and locally-based economy; and be a global leader in addressing climate change, advancing environmental justice, and protecting the environment.

#### ENVIRONMENTAL SUSTAINABILITY

Banning gas stations as a permitted use and expanding the availability of EV charging will reduce greenhouse gas emissions and improve environmental sustainability.

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Because this activity does not have the potential to cause a significant effect on the environment, it is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant impact on the environment (CEQA Guidelines 15061(b)(3)).

#### RATIONALE FOR RECOMMENDATION

This item supports the goal of 100% sustainable trips by beginning to phase out fossil fuel sales for transportation uses in Berkeley, and expanding the availability of zero-emission fueling stations.

Gas stations are a land use inconsistent with achieving a fossil-free city that uses 100% sustainable transportation modes. Removing gas stations as a permitted use will prevent new gas stations from being permitted, and classify existing gas stations as a “nonconforming use”, requiring a Use Permit with a public hearing (UP(PH)) for any substantial expansion or change. It will *not* force existing gas stations to close.

Removing the reference to “gas/auto fuel stations” in [BMC 23.324.050\(B\)\(2\)\(b\)](#) will allow (but not require) the Zoning Adjustments Board to prevent any gas or other fuel station which shuts down for a year or more from reopening as a gas or other fuel station.

Replacing “Alternative Fuel Station” with “Hydrogen Fuel Station” will prevent new fueling stations from opening up which would dispense natural gas (methane), or a host of other hydrocarbon fuels (derived from biological material or otherwise) including methanol, denatured ethanol, or other alcohols; mixtures containing 85% or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; liquefied petroleum gas; coal-derived liquid fuels; or non-alcohol fuels (such as

biodiesel) derived from biological material. It would make existing stations that dispense these fuels non-conforming uses, requiring a UP(PH) to expand or change, and would prevent them from re-opening if they cease operations for a year or more. However, it would still permit hydrogen fueling stations.

Adding “Electric Vehicle Charging Station” as a permitted use or accessory use to all zoning districts would allow electric vehicle charging facilities to be operated as a business anywhere in the city. It would not allow parking spaces to be constructed. Electric vehicle supply equipment (the hardware for electric vehicle charging) would remain subject to building code, electrical, and safety requirements.

Making “Electric Vehicle Charging Station” require a zoning certificate would make approval of an electric vehicle charging business an over-the-counter process subject only to the approval of Land Use Planning Staff, without the discretion and appeals process currently allowed with an Administrative Use Permit.

#### ALTERNATIVE ACTIONS CONSIDERED

ECC considered taking no action on removing gasoline and alternative fuel stations as a permitted use. While new gas stations are unlikely to be built, the ECC determined that banning gas stations is an important symbolic step towards achieving a fossil-free city.

ECC considered taking no action on the “Uses with Major Investments” clause on the exceptions to terminations of non-conforming uses and determined that no action would be inconsistent with achieving a fossil-free city.

ECC considered preserving biofuels and biodiesel as alternative fuels permitted, but determined that doing so would not address the inequitable health and safety risks, and that the continued use of any hydrocarbon-powered vehicles was likely to delay the transition to a fully zero-emission economy and fossil-free city.

ECC considered taking no action on removing restrictions on EV charging station zoning, but determined that the restrictions on EV charging station zoning could hamper the ability to achieve widespread access to EV charging, and that without changes to restrictions on creation of new parking spaces, there were unlikely to be any significant traffic or other impacts from the operation of EV charging businesses.

ECC considered taking no action on changing the permitting for EV charging stations from AUP to ZC, but determined that the benefit of streamlined permitting and approval outweighed the likely minimal impacts from EV charging businesses.

#### CITY MANAGER

The City Manager [TYPE ONE] concurs with / takes no position on the content and recommendations of the Commission’s Report. [OR] Refer to the budget process.

Gas Station Ban and EV Charging Expansion

CALENDAR

**Note: If the City Manager does not (a) concur, (b) takes any other position, or (c) refer to the budget process, a council action report must be prepared. Indicate under the CITY MANAGER heading, “See companion report.”**

**CONTACT PERSON**

[Name], Chairperson, Environment and Climate Commission, [Phone Number]

Ben Gould, Commissioner, Environment and Climate Commission, 510-725-9176



Environment and Climate Commission

[CONSENT OR ACTION]

CALENDAR

[Meeting Date (MM dd, yyyy)]

To: Honorable Mayor and Members of the City Council

From: Environment and Climate Commission

Submitted by: [Name of Commission Chairperson], Chairperson, Environment and Climate Commission

Subject: Fossil Free and Just Transition Overlay

RECOMMENDATION

Refer to the Planning Commission and the City Manager to prepare an ordinance making the following changes to the Zoning Ordinance:

- 1) Create a new citywide Fossil Free and Just Transition (FFJT) Overlay across all zoning districts
- 2) Apply a Fossil Free and Just Transition Density Bonus to proposed projects within the FFJT Overlay which would replace the following qualified existing uses:
  - a. Gasoline stations,
  - b. Alternative fuel stations, not including hydrogen fuel stations or electric vehicle charging stations,
  - c. Automobile repair shops which do not exclusively service zero-emission vehicles,
  - d. Automobile dealerships, for automobile dealers or manufacturers which have not committed to selling 100% zero-emission vehicles by 2030, or which, on January 1<sup>st</sup>, 2030, are still selling internal combustion engine vehicles.
- 3) Set the FFJT Density Bonus to be 100% of the underlying zoning for permitted height, floor to area ratio (FAR), and units per acre, with a subsequent 50% reduction in lot area per unit requirements.

- 4) Establish that the FFJT Density Bonus is considered underlying zoning for any proposed project, and applies when evaluating a base project prior to any additional state or local affordable housing density bonuses.
- 5) Require that FFJT Density Bonus Projects achieve all of the following:
  - a. LEED Gold (or equivalent), or better
  - b. Zero emissions (direct or indirect) from building energy use or activities (no natural gas permitted, 100% of residents or occupants defaulted to carbon-free electricity supply such as EBCE Renewable 100)
  - c. 100% sustainable transportation by residents or building occupants (no on-site automobile parking for ICE vehicles permitted)
- 6) Authorize the City to collect a Just Transition Fee from FFJT Density Bonus Projects upon approval, at a level that shall set by the City Council. The Just Transition Fee shall be used to fund worker education, training, and job placement programs either directly to impacted workers or for the general public at local public or nonprofit educational institutions (such as Berkeley City College, UC Berkeley, or Berkeley Adult School).

#### SUMMARY

This proposal would grant a local density bonus to new construction projects which propose to replace existing land uses which are incompatible with a Fossil Free City, and recapture some of the increased value in the form of a Just Transition Fee, which shall be used to support worker education and job training for workers impacted by the transition to a fossil free economy.

#### FISCAL IMPACTS OF RECOMMENDATION

Some staff time required to develop updated ordinance language. If adopted, the zoning ordinance is likely to increase City revenues due to property tax assessments on new projects built with the density bonus. The Just Transition Fee shall be fully paid out through programs supporting a just transition, and be revenue neutral.

#### BACKGROUND

Berkeley has permitted, and even encouraged, the sale of fossil fuels for decades. Numerous Berkeley businesses are known to promote the use of these dangerous chemicals, which pollute our air, water, and soil; pose major fire risks; contribute to the risk of cancer; and are either themselves potent greenhouse gases or, upon combustion, leading contributors to climate change.

These fossil fuel dealerships – colloquially known as gasoline stations – cause significant traffic and congestion, generate elevated levels of carcinogenic air pollutants

in their local neighborhoods, and are frequently found to have leaked toxic chemicals into the ground, contaminating our soil and groundwater.

Gasoline, diesel, and other carbon-based transportation fuels are also known to be harmful chemicals, posing a variety of risks to human health, public safety, and the environment, both of their own virtue and as a result of their combustion or oxidation for powering transportation<sup>1,2,3</sup>.

In recent years, the cumulative climate and health impacts of these chemicals has become untenable. In July 2018, the City Council declared a Climate Emergency and adopted a Fossil Fuel Free Berkeley resolution, setting the goal of eliminating fossil fuels in Berkeley. On September 15<sup>th</sup>, 2020, City Council adopted a goal of 100% sustainable trips by 2040, with a 50% improvement by 2030, and referred to the Environmental, Energy, and Transportation commissions to develop relevant proposals and recommendations. As the successor commission to the Environmental and Energy Commissions, the Environment and Climate Commission is now tasked with developing proposals and recommendations to achieve 100% sustainable transportation and a Fossil Free City.

#### CURRENT SITUATION AND ITS EFFECTS

In 2019, over 21 million gallons of gasoline were sold in Berkeley, according to California Energy Commission data, at roughly 15 gas stations throughout the city. Ten of these gas stations had unresolved CalEPA violations as of October 2019.

Berkeley's Electric Mobility Roadmap sets forth the City vision for our transportation future: an all-electric fleet of bikes, buses, BART trains, and cars to transport residents, workers, and visitors across our city. Gasoline and other hydrocarbon-based fuels play no role in this future.

At the same time, however, the end of gasoline will have repercussions beyond just gas stations. Nationally, most gas stations are actually owned independently, run as franchises by local owners who may also be longtime community members. In addition, as Berkeley transitions to greater use of electric vehicles, and more towards non-automotive modes of transport overall (as envisioned by the Bicycle and Pedestrian Master Plans), sales and maintenance of internal combustion engine (ICE) vehicles will also decline. These shifts may pose challenging for business owners whose livelihoods

---

<sup>1</sup> Material Safety Data Sheet: Gasoline, All Grades, Vermillion County, IL: <https://www.vercounty.org/MSDS/EMA/9950allgradesgasoline.pdf> (accessed September 2019)

<sup>2</sup> Safety Data Sheet: Diesel Fuels, Valero: [https://www.valero.com/en-us/Documents/OSHA\\_GHS\\_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf](https://www.valero.com/en-us/Documents/OSHA_GHS_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf) (accessed September 2019)

<sup>3</sup> Safety Data Sheet: Natural Gas Odorized, Hess Corporation: <https://www.hess.com/docs/us-safety-data-sheets/natural-gas.pdf?sfvrsn=2> (accessed September 2019)

have depended upon their now-defunct business models, as well as workers who have years or decades of experience in dying industries.

While macroeconomic and societal shifts always result in some businesses closing as others take their place, Berkeley's ambitious climate goals necessitate an accelerated timeline for shifting our physical and economic infrastructure away from supporting gasoline-powered vehicles. In addition, while business owners or landlords can sell the property and cash out, workers in these industries risk being left behind. This proposal would establish a density bonus overlay to encourage an accelerated transition away from fossil fuels and associated industries, while also recapturing some of the value add from the overlay to dedicate to worker transition efforts.

This would advance the City's strategic goals to foster a dynamic, sustainable, and locally-based economy; and be a global leader in addressing climate change, advancing environmental justice, and protecting the environment.

#### ENVIRONMENTAL SUSTAINABILITY

Encouraging a shift away from gasoline dependency will reduce greenhouse gas emissions and improve environmental sustainability.

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The FFJT Overlay is likely to be considered a project under CEQA. However, because the permissible land *uses* remain unchanged, and only the potential *height* would change, any potential impacts may already be evaluated through the Housing Element or other General Plan EIRs. The City Attorney should review any draft FFJT Overlay ordinance for CEQA considerations prior to adoption.

#### RATIONALE FOR RECOMMENDATION

This item supports the goal of a Fossil Free Berkeley and 100% sustainable trips by accelerating the phase out of fossil fuels. Gas stations, gas car dealerships, and gas car repair shops are all inconsistent with a fossil-free city that uses 100% sustainable transportation modes. A density bonus to replace these sites with alternative uses will reduce the availability of these facilities, discouraging ICE vehicle ownership.

A fee to recapture some of the value added from the additional height is an effective way to ensure workers employed in fossil fuel-centric industries are able to receive benefits and support for a just transition.

#### ALTERNATIVE ACTIONS CONSIDERED

ECC considered taking no action, but determined that a Fossil Free city with 100% sustainable transportation was unlikely to be achieved by 2040, much less 2030, without significant and aggressive action to both discourage ICE ownership and encourage alternative transportation and EVs.



ECC considered applying the FFJT only to gas stations, but determined that a range of industries and workers were likely to be affected by the transition to sustainable transportation and would benefit from assistance in transitioning to alternative careers.

ECC considered expanding the FFJT to include asphalt plants, but determined that the asphalt industry was independent of achieving sustainable transportation. Asphalt is still incompatible with a fossil free city, but it is not directly affected by sustainable transportation, and it is unclear whether low- or no-carbon alternatives to asphalt are readily available and affordable at scale.

ECC considered recommending a different density bonus level, but determined that a 100% density bonus was likely adequate to encourage the qualified uses as priority development spots. The ECC believes that the City Council and Planning Commission are better equipped to evaluate and weigh priorities and considerations around achieving a rapid decarbonization effort—which would shift our economy away from fossil fuels, raise revenue for a just transition for workers, address environmental justice, and help to stabilize the climate to ensure a habitable planet for future generations—versus the fact that some people just don't like tall buildings.

#### CITY MANAGER

The City Manager [TYPE ONE] concurs with / takes no position on the content and recommendations of the Commission's Report. [OR] Refer to the budget process.

**Note: If the City Manager does not (a) concur, (b) takes any other position, or (c) refer to the budget process, a council action report must be prepared. Indicate under the CITY MANAGER heading, "See companion report."**

#### CONTACT PERSON

[Name], Chairperson, Environment and Climate Commission, [Phone Number]  
Ben Gould, Commissioner, Environment and Climate Commission, 510-725-9176



[CONSENT OR ACTION]

CALENDAR

[Meeting Date (MM dd, yyyy)]

To: Honorable Mayor and Members of the City Council

From: Environment and Climate Commission

Submitted by: [Name of Commission Chairperson], Chairperson, Environment and Climate Commission

Subject: Fossil Fuel and Just Transition Gas Station Tax

### RECOMMENDATION

Refer to the City Attorney the development of a ballot initiative for the November 2022 ballot, which would:

- 1) Establish a “Fossil Fuel and Just Transition Gas Station Tax”, levied on properties within city limits which sell transportation fuels made from nonrenewable sources (such as gasoline or methane).
- 2) Set the tax rate at a modest level per square foot of parcel effective January 1, 2025. ECC recommends \$0.10 per square foot, such that a gas station on a 10,000 square foot parcel would pay \$1,000 per year.
- 3) Automatically increase the tax dramatically every few years. ECC recommends tenfold every 5 years. Effective January 1<sup>st</sup>, 2030, the rate would be \$1 per square foot. Effective 2035, it would be \$10 per square foot, until reaching a maximum rate of \$10,000 per square foot in 2050.
- 4) Dedicate all revenues from the tax to just transition and Green New Deal efforts, either as a general tax (with recommendations from ECC) or a special tax.

### SUMMARY

This proposal would create a ballot initiative which, if passed, would levy new taxes on fossil fuel dealerships (gas stations) to fund just transition and Green New Deal efforts.

### FISCAL IMPACTS OF RECOMMENDATION

Some staff time required to develop ballot initiative. If approved, additional costs associated with placing the item on the ballot. If adopted, the initiative would provide some additional revenue depending on how many gas stations remain in Berkeley.

### BACKGROUND

Berkeley has permitted, and even encouraged, the sale of fossil fuels for decades. Numerous Berkeley businesses are known to promote the use of these dangerous

chemicals, which pollute our air, water, and soil; pose major fire risks; contribute to the risk of cancer; and are either themselves potent greenhouse gases or, upon combustion, leading contributors to climate change.

These fossil fuel dealerships – colloquially known as gasoline stations – cause significant traffic and congestion, generate elevated levels of carcinogenic air pollutants in their local neighborhoods, and are frequently found to have leaked toxic chemicals into the ground, contaminating our soil and groundwater.

Gasoline, diesel, and other carbon-based transportation fuels are also known to be harmful chemicals, posing a variety of risks to human health, public safety, and the environment, both of their own virtue and as a result of their combustion or oxidation for powering transportation<sup>1,2,3</sup>.

In recent years, the cumulative climate and health impacts of these chemicals has become untenable. In July 2018, the City Council declared a Climate Emergency and adopted a Fossil Fuel Free Berkeley resolution, setting the goal of eliminating fossil fuels in Berkeley. On September 15<sup>th</sup>, 2020, City Council adopted a goal of 100% sustainable trips by 2040, with a 50% improvement by 2030, and referred to the Environmental, Energy, and Transportation commissions to develop relevant proposals and recommendations. As the successor commission to the Environmental and Energy Commissions, the Environment and Climate Commission is now tasked with developing proposals and recommendations to achieve 100% sustainable transportation and a Fossil Free City.

### CURRENT SITUATION AND ITS EFFECTS

In 2018, according to California Energy Commission data, over 20 million gallons of gasoline was sold in Berkeley at roughly 15 gas stations throughout the city. Ten of these gas stations had unresolved CalEPA violations as of October 2019.

Berkeley's Electric Mobility Roadmap sets forth the City vision for our transportation future: an all-electric fleet of bikes, buses, BART trains, and cars to transport residents, workers, and visitors across our city. Gasoline, and the associated dispensaries, play no role in this future.

However, Berkeley is currently far from achieving its ambitious Fossil Free City goal of eliminating fossil fuels by 2030.

---

<sup>1</sup> Material Safety Data Sheet: Gasoline, All Grades, Vermillion County, IL: <https://www.vercounty.org/MSDS/EMA/9950allgradesgasoline.pdf> (accessed September 2019)

<sup>2</sup> Safety Data Sheet: Diesel Fuels, Valero: [https://www.valero.com/en-us/Documents/OSHA\\_GHS\\_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf](https://www.valero.com/en-us/Documents/OSHA_GHS_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf) (accessed September 2019)

<sup>3</sup> Safety Data Sheet: Natural Gas Odorized, Hess Corporation: <https://www.hess.com/docs/us-safety-data-sheets/natural-gas.pdf?sfvrsn=2> (accessed September 2019)

### ENVIRONMENTAL SUSTAINABILITY

Banning gas stations as a permitted use and expanding the availability of EV charging will reduce greenhouse gas emissions and improve environmental sustainability.

### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Because this activity does not have the potential to cause a significant effect on the environment, it is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant impact on the environment (CEQA Guidelines 15061(b)(3)).

### RATIONALE FOR RECOMMENDATION

This item supports the goal of 100% sustainable trips by beginning to phase out fossil fuel sales for transportation uses in Berkeley, and expanding the availability of zero-emission fueling stations.

Gas stations are a land use inconsistent with achieving a fossil-free city that uses 100% sustainable transportation modes. Removing gas stations as a permitted use will prevent new gas stations from being permitted, and classify existing gas stations as a “nonconforming use”, requiring a Use Permit with a public hearing (UP(PH)) for any substantial expansion or change. It will *not* force existing gas stations to close.

Removing the reference to “gas/auto fuel stations” in [BMC 23.324.050\(B\)\(2\)\(b\)](#) will allow (but not require) the Zoning Adjustments Board to prevent any gas or other fuel station which shuts down for a year or more from reopening as a gas or other fuel station.

Replacing “Alternative Fuel Station” with “Hydrogen Fuel Station” will prevent new fueling stations from opening up which would dispense natural gas (methane), or a host of other hydrocarbon fuels (derived from biological material or otherwise) including methanol, denatured ethanol, or other alcohols; mixtures containing 85% or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; liquefied petroleum gas; coal-derived liquid fuels; or non-alcohol fuels (such as biodiesel) derived from biological material. It would make existing stations that dispense these fuels non-conforming uses, requiring a UP(PH) to expand or change, and would prevent them from re-opening if they cease operations for a year or more. However, it would still permit hydrogen fueling stations.

Adding “Electric Vehicle Charging Station” as a permitted use or accessory use to all zoning districts would allow electric vehicle charging facilities to be operated as a business anywhere in the city. It would not allow parking spaces to be constructed. Electric vehicle supply equipment (the hardware for electric vehicle charging) would remain subject to building code, electrical, and safety requirements.

Making “Electric Vehicle Charging Station” require a zoning certificate would make approval of an electric vehicle charging business an over-the-counter process subject only to the approval of Land Use Planning Staff, without the discretion and appeals process currently allowed with an Administrative Use Permit.

#### ALTERNATIVE ACTIONS CONSIDERED

ECC considered taking no action on removing gasoline and alternative fuel stations as a permitted use. While new gas stations are unlikely to be built, the ECC determined that banning gas stations is an important symbolic step towards achieving a fossil-free city.

ECC considered taking no action on the “Uses with Major Investments” clause on the exceptions to terminations of non-conforming uses and determined that no action would be inconsistent with achieving a fossil-free city.

ECC considered preserving biofuels and biodiesel as alternative fuels permitted, but determined that doing so would not address the inequitable health and safety risks, and that the continued use of any hydrocarbon-powered vehicles was likely to delay the transition to a fully zero-emission economy and fossil-free city.

ECC considered taking no action on removing restrictions on EV charging station zoning, but determined that the restrictions on EV charging station zoning could hamper the ability to achieve widespread access to EV charging, and that without changes to restrictions on creation of new parking spaces, there were unlikely to be any significant traffic or other impacts from the operation of EV charging businesses.

ECC considered taking no action on changing the permitting for EV charging stations from AUP to ZC, but determined that the benefit of streamlined permitting and approval outweighed the likely minimal impacts from EV charging businesses.

#### CITY MANAGER

The City Manager [TYPE ONE] concurs with / takes no position on the content and recommendations of the Commission’s Report. [OR] Refer to the budget process.

**Note: If the City Manager does not (a) concur, (b) takes any other position, or (c) refer to the budget process, a council action report must be prepared. Indicate under the CITY MANAGER heading, “See companion report.”**

#### CONTACT PERSON

[Name], Chairperson, Environment and Climate Commission, [Phone Number]  
Ben Gould, Commissioner, Environment and Climate Commission, 510-725-9176

## Summary

Tax owners of large buildings for the emissions their buildings generate as a way to incentivize electrification and to invest in climate programs. We anticipate raising at least \$4 million/year, and potentially up to \$17 million/year.

## Revenue

### Building Owners Emissions Tax

The Berkeley Energy Saving Ordinance (BESO) is a buildings performance ordinance with audit requirements for buildings over 25,000 square feet. In other words, Berkeley has an existing ordinance on the books that requires owners of large buildings to submit data to the City about energy usage on a regular basis. Starting this year, this will extend to buildings over 15,000 square feet. We propose taxing the owners of such “medium” and “large” (as defined by the BESO) commercial and industrial buildings for the greenhouse gas emissions (GHG) that their buildings generate at a price of at least \$300/ton, indexed to CPI and increasing by 6% per year. Total GHGs would be based on actual utility meter data and would incorporate any emissions resulting from science-based upstream methane leakage rates. The \$300/ton rate is consistent across a range of social cost of carbon studies, but is not meant to reflect a specific cost as the field is constantly evolving and such estimates can be subjective.

Including residential buildings that fall under the BESO audit requirements would add about 40% to the expected revenues. Measure U1, which increased the business license tax on rental companies, explicitly prohibited pass-throughs. Assuming we can prohibit pass-throughs like Measure U1, including for rent-controlled units, then we should include residential buildings in the tax, which would bring estimated revenues to \$4-17 million. We could also exempt residential buildings with  $\geq 50\%$  affordable units and residential buildings owned by non-profits.

We propose taxing owners for two reasons. First, because they are the ones in control of equipment and infrastructure decisions in the buildings, and second, because these are larger buildings, they are more likely to have a robust financial and capital planning process that would incorporate electrification organically, preserving precious subsidies for smaller residential units, small, locally owned commercial buildings, and single-family homes.

This mechanism is also currently under consideration for the ballot in San Francisco since it is a progressive tax, leverages existing city policy, and has a strong nexus with the proposed expenditures.

### Revenue Table

Although the ranges are wide, we expect that revenues will likely come in towards the lower end of the range, given similar analysis in San Francisco:

Building Type	# of bldgs	Square Footage	Lower Bound Emissions (tons)	Lower Bound \$	Upper Bound Emissions (tons)	Upper Bound \$
<b>Commercial + Industrial, &gt;25k sqft</b>	152	9,095,291	6,079	<b>\$1,823,700</b>	35,775	<b>\$10,732,500</b>
<b>Residential + Mixed Use, &gt;25k sqft</b>	149	7,723,423	4,335	<b>\$1,300,500</b>	11,566	<b>\$3,469,800</b>
<b>All Uses, 15k-25k sqft</b>	296	5,741,145	3,012	<b>\$903,600</b>	11,577	<b>\$3,473,100</b>
<b>Total</b>	597	22,559,859		<b>\$4,027,800</b>		<b>\$17,675,400</b>

## Statistics and Comparisons

1. Berkeley has 35,000 buildings. This would tax 597, which is just 1.7%.
2. At the low end, with a \$300/ton tax, the additional cost averages out to ~18 cents/square foot on average, which is in line with existing property tax rates (e.g. recent tax measures such as Measure FF), and small when compared to rents. For example, it is well below 1% on the commercial side for all classes of office real estate. On the residential side, and only if the increase can be passed through to tenants (which we intend to prohibit), this would be less than a 1% rent increase as long as rents were above \$1.5/square foot/month. Put another way, a 1200 square foot apartment would see a less than 1% cost increase as long as its rent was above \$1800/month.
3. Most of the largest residential buildings meeting this requirement are newer construction. 15,000 square foot buildings would typically contain at least 15 units. Moreover, it's a narrower reaching tax increase (both in \$\$ and reach) than Measure U1, which was previously supported by Berkeley Tenants Union, the Sierra Club, and more. U1 assessed a tax that amounts to 1.5-2x higher than this one, applying to landlords with 5 or more rental units. The means that U1 applies to more and smaller buildings, as well as some single family homes, duplexes, etc. The proposed building emissions tax hits none (or very few) of these buildings.

## Expenditures

We propose allocating the revenues to the Fossil Fuel Free Berkeley Fund, to be created by this measure. The fund can be used as follows, after subtracting out up to 5% of the revenues to



pay for the administration of the tax. Each category should receive a percentage of the revenues as defined in this section.

The City Council would have the ultimate authority in allocating revenues, with advice provided from the:

- Facilities, Infrastructure, Transportation, Environment, & Sustainability Policy Committee
- Climate and Environment Commission
- Transportation Commission
- Public Works Commission

## Transportation and Green Streets

*Allocation: 30%*

Funding to implement strategies for decarbonizing transportation and greening our streets, focusing on micro mobility, expanding pedestrian and bike infrastructure, and street tree planting. Secondly, this money can be used for EV and public transit related projects that are not substantially capital intensive, or pilots of such projects.

## Building Decarbonization and Just Transition

*Allocation: 30%*

Projects and programs that decarbonize existing buildings and improve indoor/outdoor health and comfort, with an emphasis on programs that enforce labor standards, e.g. via prequalified contractors, and with a focus on environmental justice and low income communities who will be hit hardest by existing and projected natural gas prices.

## Public Sector Climate Staffing

*Allocation: 20%*

Expanded staffing within OESD and across city departments to support the implementation of the Climate Action Plan, including technical assistance, and related roadmaps (e.g. Existing Buildings Electrification Strategy, Electric Mobility Roadmap, etc).

## Climate Equity Action Fund

*Allocation: 20%*

This would provide an ongoing city funding source for the Climate Equity Action Fund, created as a pilot in 2021 to help implement programs related to climate equity in households at or below 50% AMI.





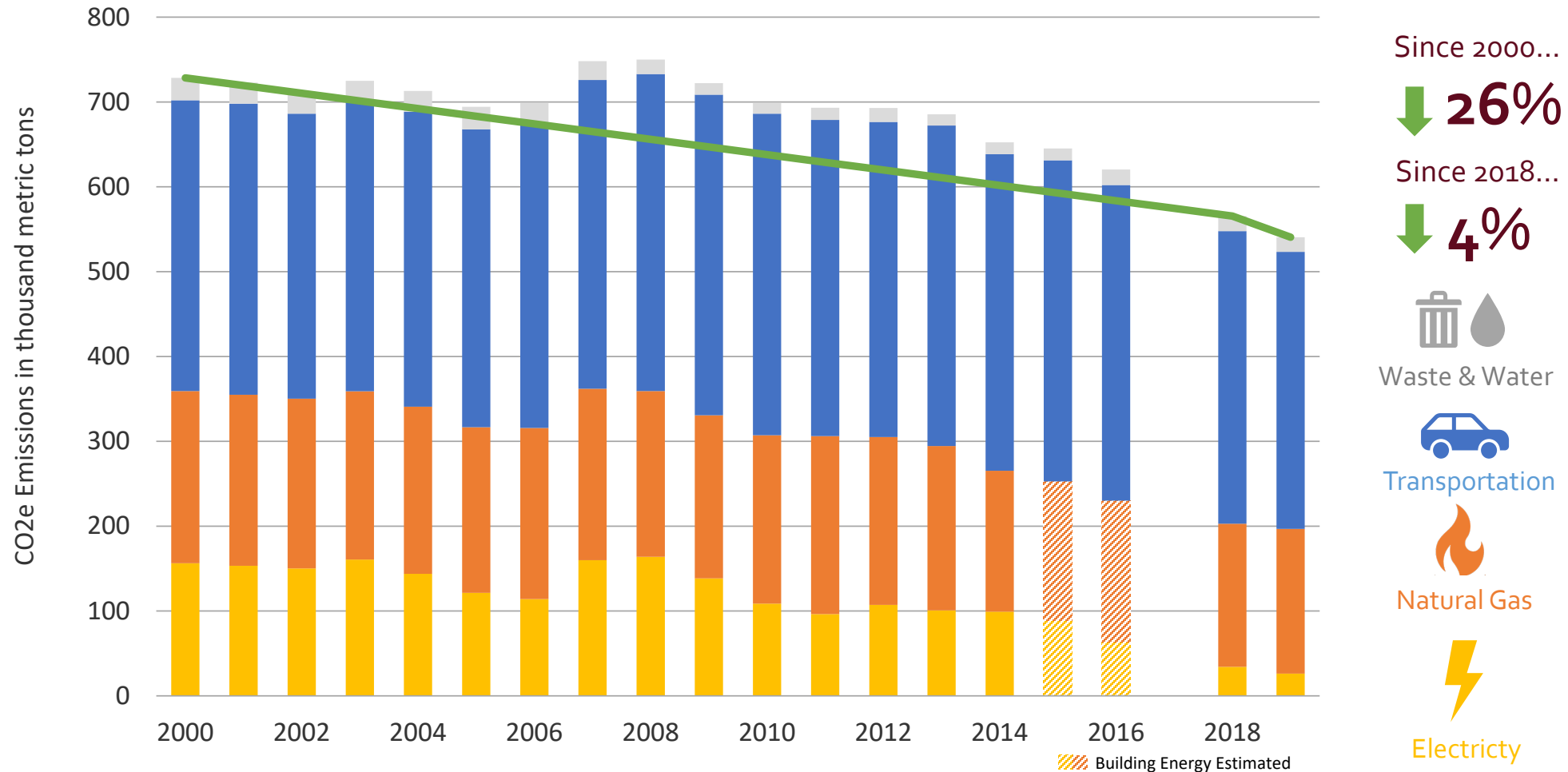
# Climate Action Plan Report

February 8, 2022



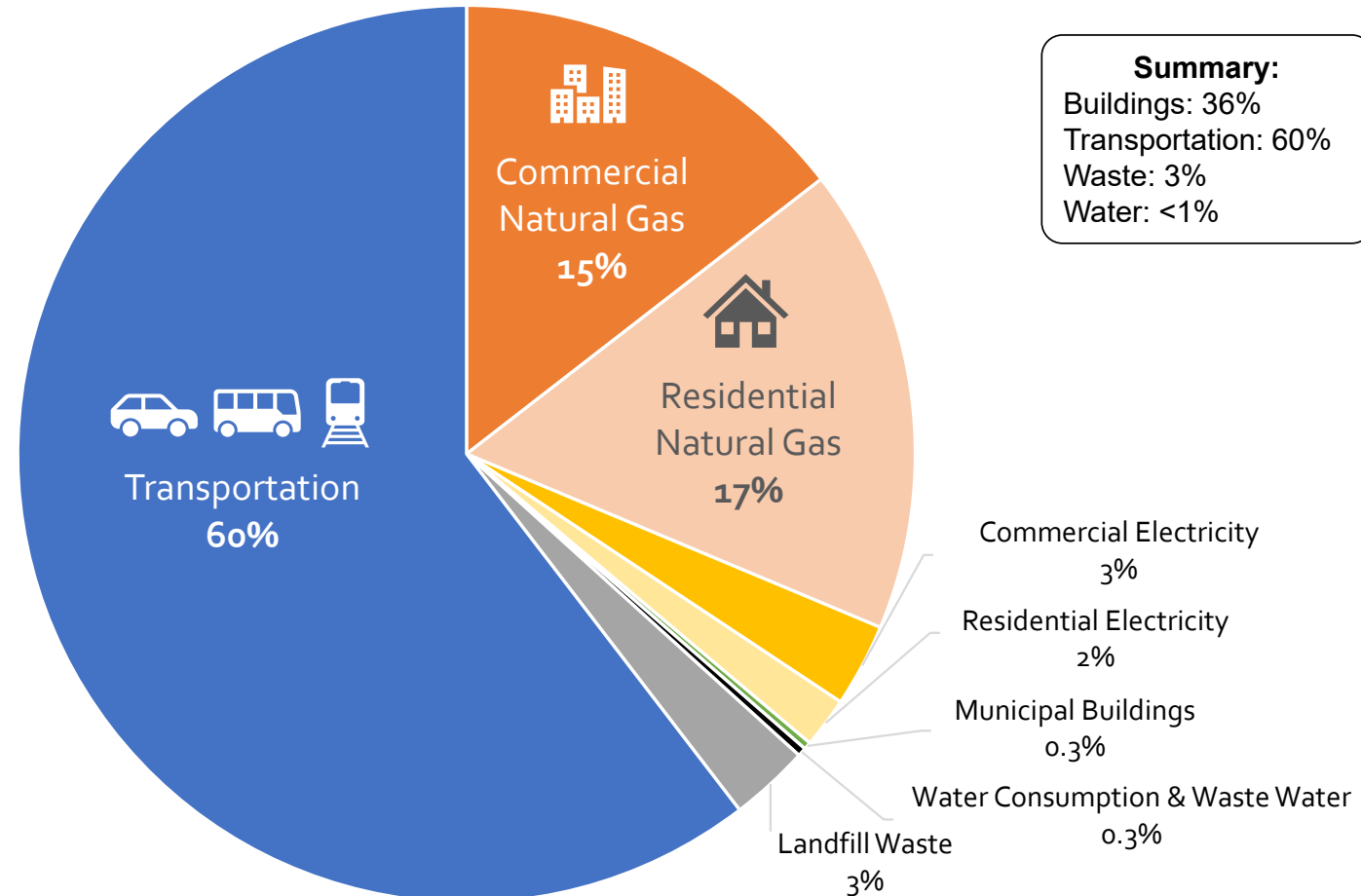


# GHG Emissions Inventory Trends





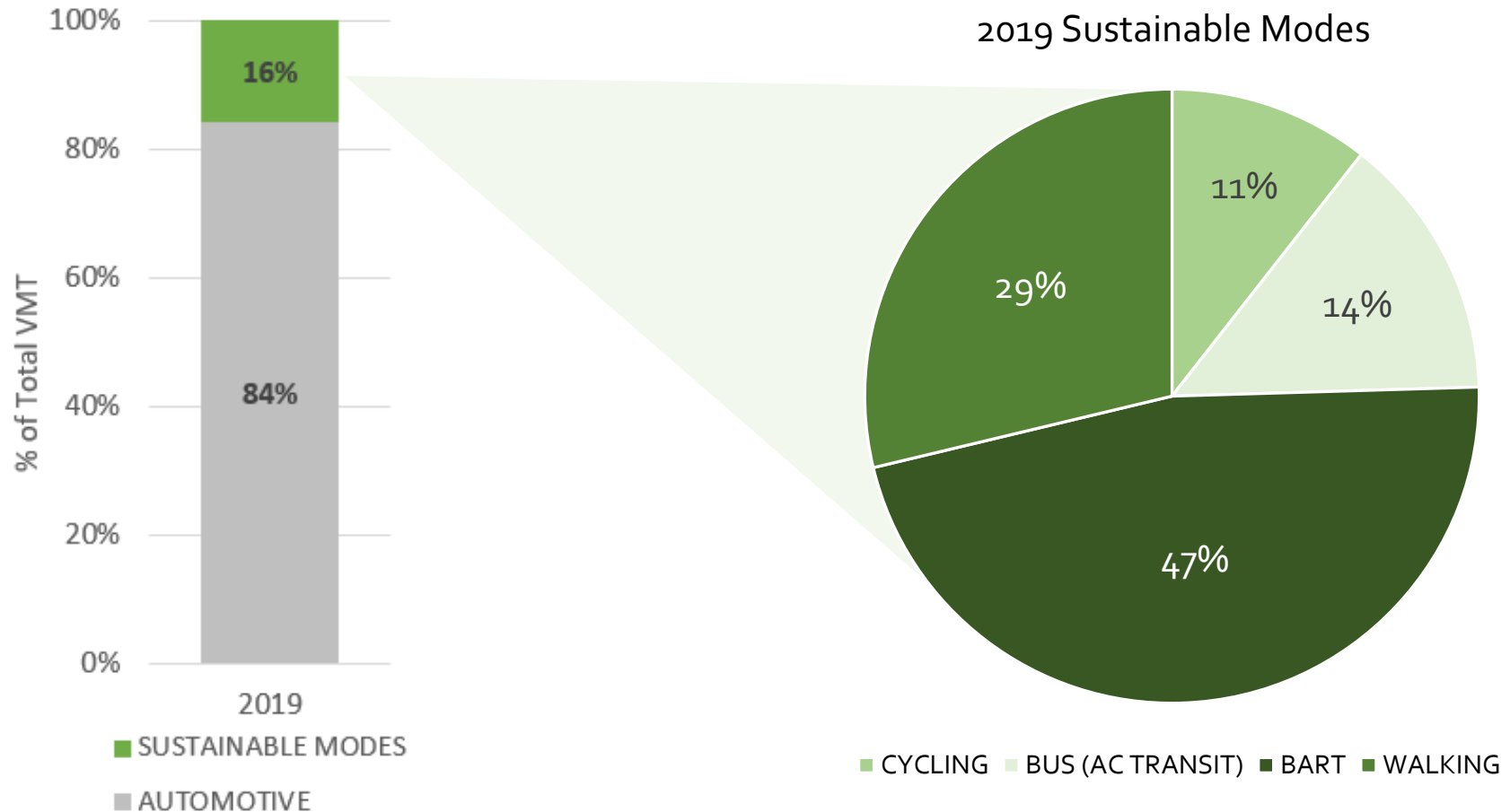
# 2019 Greenhouse Gas Inventory



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

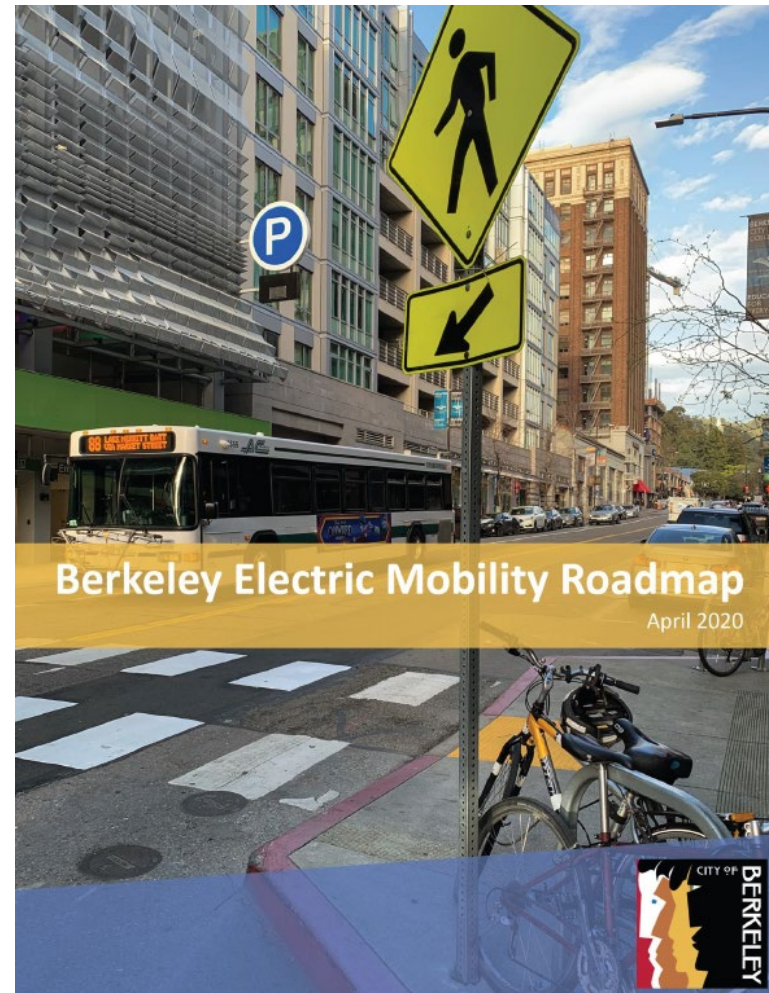
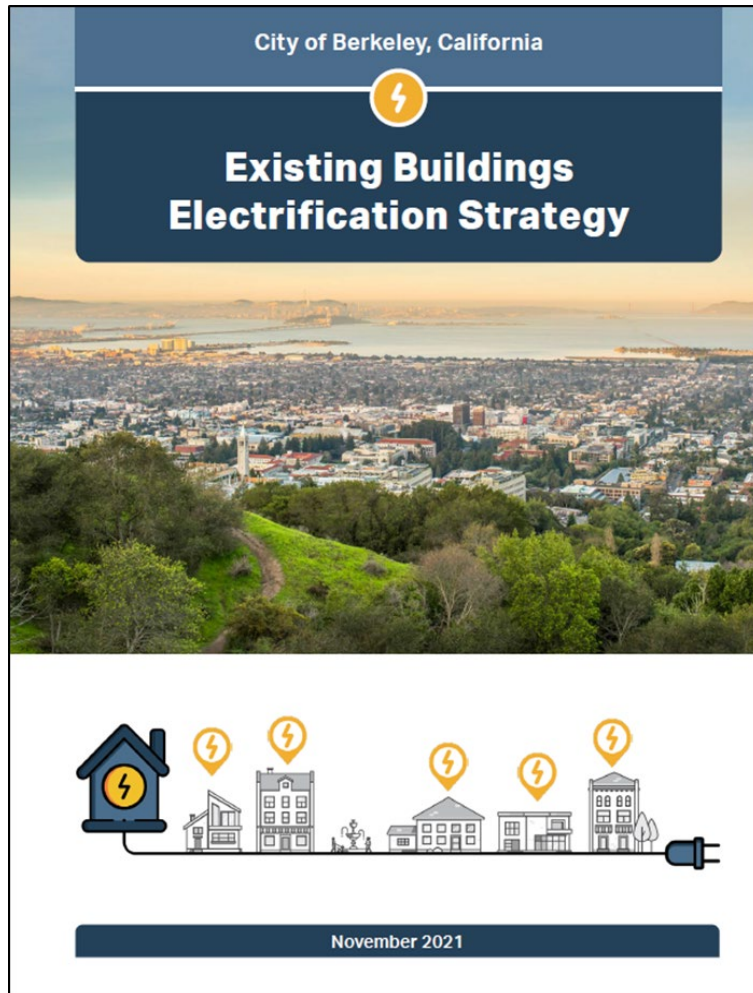


# New Data on Transportation Modes





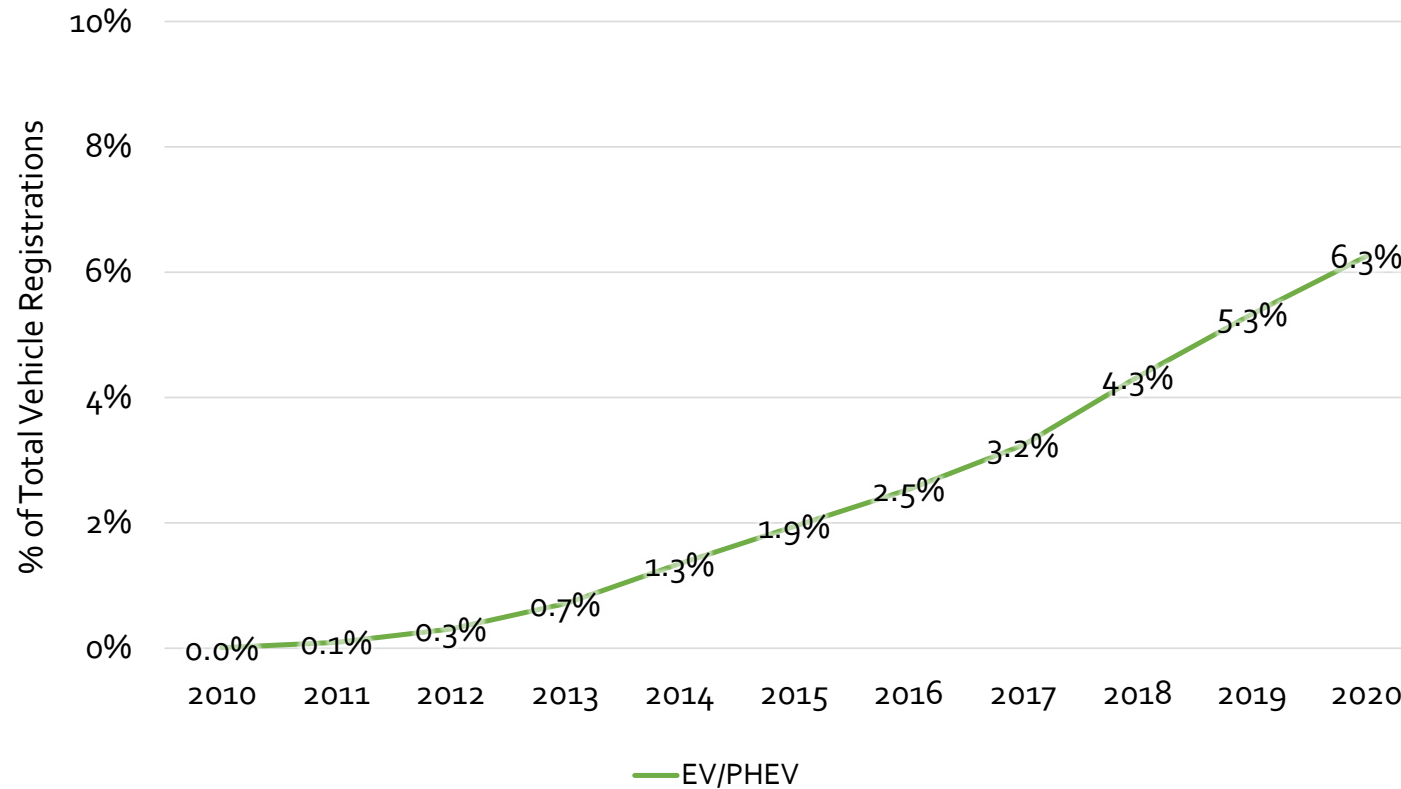
# CAP Implementation Plans





# How are we doing? Electric Vehicles

Electric Vehicle Registrations





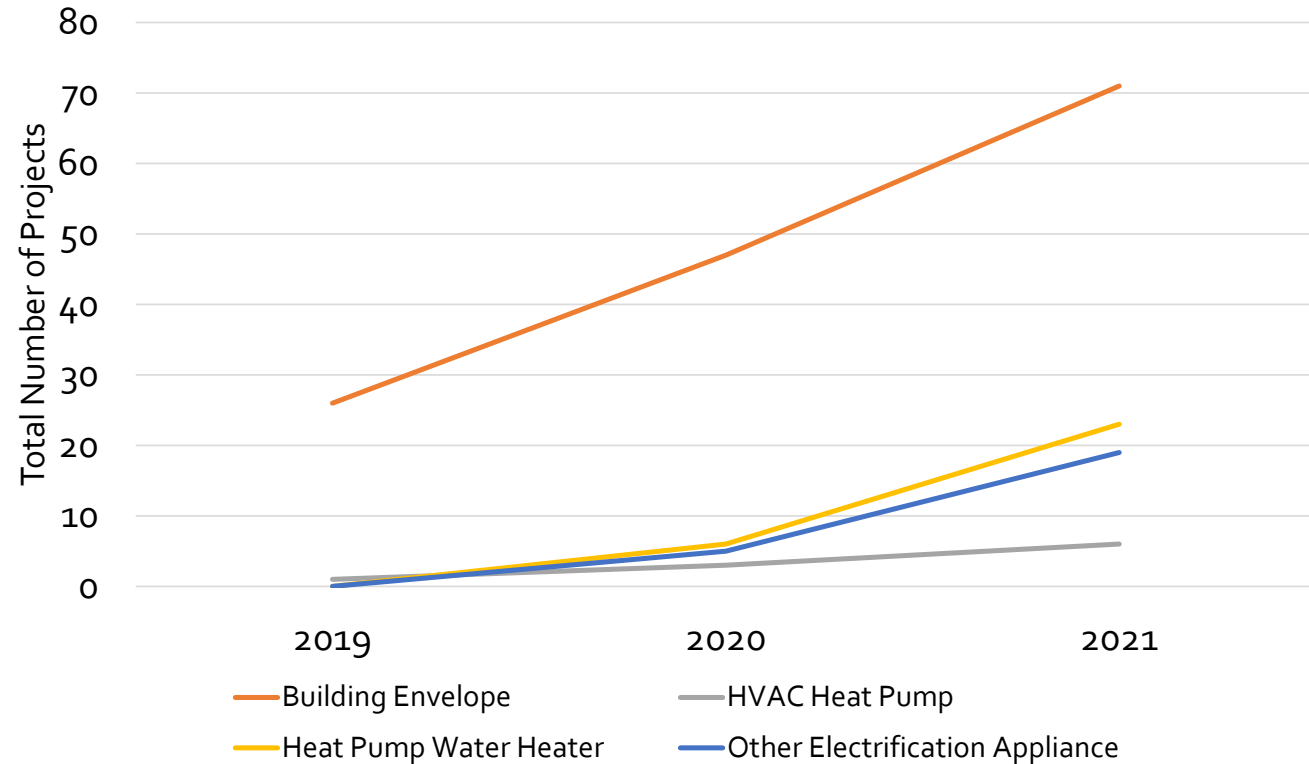


# How are we doing? BayREN Home+ Rebates

## From 2019-2021:

- 692 completed measures
- \$267,000 in rebates
- 17,049 therm savings
- 90 metric tons GHG savings

Total BayREN Home+ Projects by Measure Type  
2019-2021



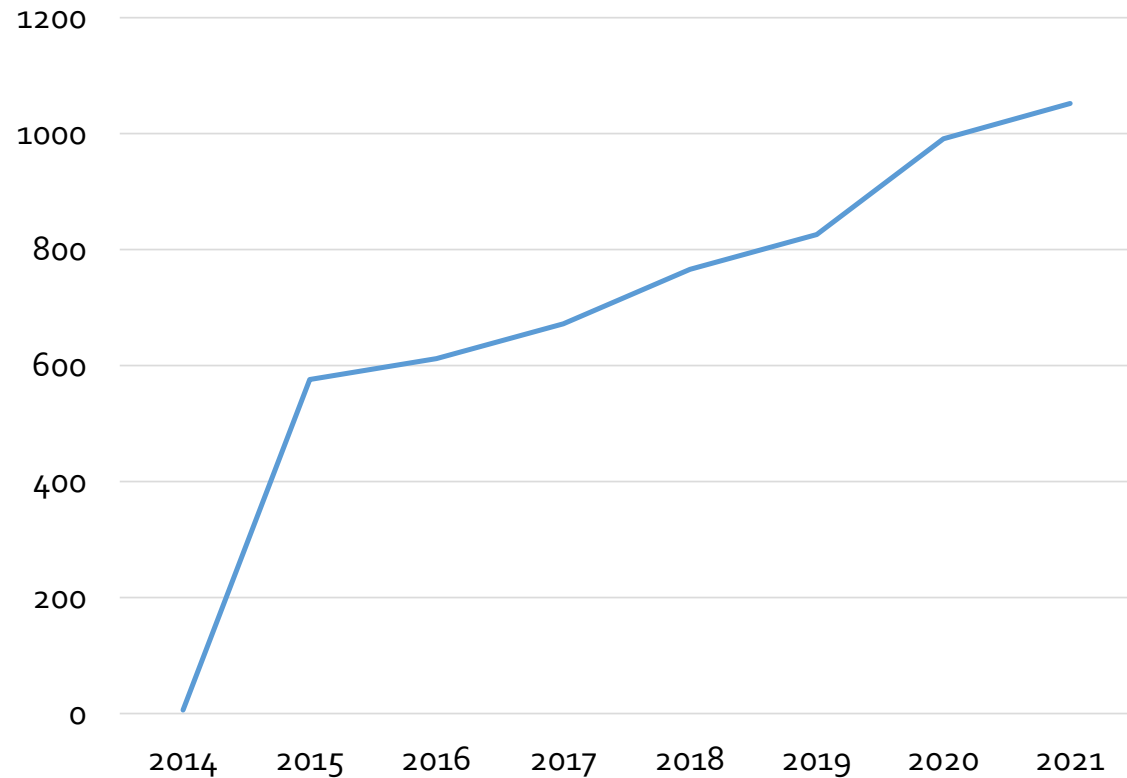


# How are we doing? BayREN Multifamily Rebates

## From 2014-2021:

- 1,052 units retrofit
- \$789,000 in rebates
- Rebates reduced project cost by 1/3
- 43,492 therm savings
- 230 metric tons GHG savings from gas

Total Multifamily Units Upgraded from 2014-2021





# Climate Equity Fund Pilot Programs

- Climate Equity Action Fund established July 27, 2021 with \$600,000
- Provide climate & resilience benefits to low-income residents for building & transportation electrification
- In process of selecting pilot programs





# Upcoming Climate Actions

---



## Climate Equity Fund implementation



## Building Electrification

- BESO time of sale and building performance requirements
- 2022 Code Cycle and local amendments (effective 2023)
- Solar + Storage on Critical Facilities Project with EBCE
- Identifying funding and financing solutions to scale electrification
- ACEEE Renter Protections Technical Assistance Grant



## Transportation

- Improving public and fleet charging access
- Increasing micromobility



# Equity Guardrails



## MAXIMIZE ACCESS TO HEALTH, SAFETY & MOBILITY BENEFITS:

Prioritize the benefits of building and transportation electrification including health, safety, comfort, and mobility to those most impacted by climate change.



## MAXIMIZE ACCESS TO ECONOMIC BENEFITS:

Leverage incentives and financing, reduce costs when possible, and support high-road job opportunities.



## MAXIMIZE EASE OF PARTICIPATION:

Easy for all community members to access, and integrated with other programs and services.



## PROMOTE HOUSING AFFORDABILITY & ANTI-DISPLACEMENT:

Support housing preservation and tenant protections, and not displace renters or homeowners.



# Thank you!

## **Billi Romain**

Manager

Office of Energy and Sustainable Development

[BRomain@CityofBerkeley.info](mailto:BRomain@CityofBerkeley.info)

## **Ammon Reagan**

Sustainability Program Coordinator

Office of Energy and Sustainable Development

[AREagan@CityofBerkeley.info](mailto:AREagan@CityofBerkeley.info)

