



Environment & Climate Commission

AGENDA

REGULAR MEETING OF THE ENVIRONMENT AND CLIMATE COMMISSION

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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/84024211266>. 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 840 2421 1266. 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, May 25, 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. Introductions Commissioners and City Staff

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

DISCUSSION AND ACTION ITEMS

- 4. Discussion: Vision 2050 Revenue Measure
- 5. Discussion: Commissioner Overview
- 6. Action: Election of Officers - Chair and Vice Chair
- 7. [Action: 2022 Commission Meeting Schedule](#)
- 8. Discussion: Future Agenda Items

INFORMATION ITEMS

- 9. 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

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 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.

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 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

Name of Commission: Environment and Energy Commission

Commission Secretary: Billi Romain

Proposed 2022 Commission Meeting Dates

The ECC generally meets the 4th Wednesday of the month from 5:00pm – 7:00pm

Month	Meeting Day and Date	Time
January 2022	NA	
February 2022	NA	
March 2022	NA	
April 2022	NA	
May 2022	Wednesday 5/25/22	5:00pm
June 2022	Wednesday 6/22/22	5:00pm

Month	Meeting Day and Date	Time
July 2022	Wednesday 7/27/22	5:00pm
August 2022	No Meeting (Council recess)	
September 2022	Wednesday 9/28/22	5:00pm
October 2022	Wednesday 10/19/22 (10/26: Conflict Baha'i Faith Birth of Bab & Baja'u'llah)	5:00pm
November 2022	Wednesday 11/30/22 (11/23: Conflict Thanksgiving)	5:00pm
December 2022	No Meeting	5:00pm

Dates to Avoid – Holiday schedule attached and other Planning Department Commission meetings:

- Planning Commission – 1st Wednesdays, 7:00pm
- Landmarks Preservation Commission – 1st Thursdays, 7:00pm
- Design Review Committee – 3rd Thursdays, 7:00pm
- Zoning Adjustments Board (ZAB) – 4th Thursdays, 7:00pm

Item 7 - 2022 ECC Meeting Schedule
Environment and Climate Commission
May 25, 2022

Pursuant to Resolution No. 70,066-N.S., it is the policy of the City to avoid scheduling meetings of City Legislative Bodies (City Council, Commissions and Boards, Council Policy Committees, Task Forces) on religious holidays that incorporate significant work restrictions.

City legislative bodies must avoid scheduling meetings on the religious holidays listed below.

Religion	Holiday	Date	2022 Date
Christian	Good Friday	Varies (March or April)	4/15/22
Christian	Easter Sunday	Varies (March or April)	4/17/22
Christian	Christmas	December 25	12/25/22
Jewish	Rosh Hashanah	Varies (Sept. or Oct.)	9/25/22-9/27/22
Jewish	Yom Kippur	Varies (Sept. or Oct.)	10/4/22-10/5/22
Jewish	Sukkot - first and last day	Varies (Sept. or Oct.)	10/9/22, 10/16/22
Jewish	Shmini Atzeret	Varies (Sept. or Oct.)	10/16/22-10/18/22
Jewish	Simchat Torah	Varies (Sept. or Oct.)	10/17/22-10/18/22
Jewish	Chanukah (1 st night)	Varies (Nov. or Dec.)	12/18/22
Jewish	Passover (Nights 1, 2, 7, 8)	Varies (March or April)	4/15,4/16,4/22,4/23
Jewish	Shavuot	Varies (May or June)	6/4/22-6/6/22
Jewish	Shabbat	Weekly	Friday sunset to Saturday sunset
Jewish*	Purim	Varies (February or March)	3/16/22-3/17/22
Jewish*	Tish'a B'Av	Varies (July or August)	8/5/22-8/6/22
Jewish*	Yom HaShoah	Varies (April or May)	4/27/22-4/28/22
Buddhist	Vesak	Varies (April or May)	5/6/22
Hindu	Diwali	Varies (Oct. or Nov.)	10/24/22
Hindu	Dussera	Varies (Oct.)	10/5/2022
Hindu	Holi	Varies (March)	3/17-3/18
Hindu	Makar Sankranti	Varies (January or February)	1/14/2022
Islam	Eve & First Night of Ramadan	Varies	4/222 – 4/3/22
Islam	Eid al-Fitr	Varies	5/2/22-5/3/22
Islam	Eid al-Adha	Varies	7/9/22-7/10/22
Shinto	New Year	January 1-3	1/1/22-1/3/22
Shinto	Obon Ceremony	August 13-15	8/13/22-8/15/22
Baha'i Faith	Birth of Baja'u'llah	Varies	10/26/22-10/27/22
Baha'i Faith	Birth of Bab	Varies	10/25/22-10/26/22
Cultural	Chinese New Year (Day 1-7)	Varies (Jan. 21 – Feb. 20)	2/1/22-2/7/22
Cultural	Kwanzaa	Dec. 26 – Dec. 31	12/26/22-1/1/23

* No work restriction, but avoid scheduling meetings if possible

[Meeting Date (MM dd, yyyy)]

To: Environment and Climate Commission
From: Community Environmental Advisory Commission
Submitted by: Ben Gould, Chairperson, Community Environmental Advisory Commission
Subject: CEAC Past Projects & Future Recommendations for ECC

RECOMMENDATION

Review the attached record of major CEAC projects over the past 8 years, and consider the suggested areas of follow-up and new initiatives for the new commission's work plan.

BACKGROUND

The Community Environmental Advisory Commission (CEAC) was first established in 1991, with an emphasis on pollution prevention and addressing toxic and hazardous waste from both households and businesses (such as Lawrence Berkeley National Laboratory and Bayer). Over the decades, as local, state, and federal laws have effectively reduced the prevalence, and improved control, of hazardous chemicals, CEAC's work has shifted to cover a broader range of pollutants – such CO₂ and other greenhouse gases, air pollution, stormwater runoff, lead paint, and more – as well as other general environmental topics.

CURRENT SITUATION AND ITS EFFECTS

With the dissolution of CEAC effective March 31st, 2022, these responsibilities will transfer to the newly established Environment and Climate Commission (ECC). The ECC will also take on responsibilities from the former Energy Commission, with a full set of responsibilities spanning buildings, transportation, plant & animal welfare, greenhouse gas emissions and other pollutants, environmental justice, and community engagement.

This transition document is intended to highlight the breadth of work CEAC has undertaken in the past 8 years, providing context and background for new ECC commissioners, and to help provide concrete examples of how the new commission's responsibilities have been fulfilled in practice by CEAC in the past.

Historically, many of CEAC's work items were initiated via council referral. However, with the advent of standing Council policy subcommittees – particularly the Facilities, Infrastructure, Transportation, Environment, & Sustainability (FITES) Committee, launched in 2019 – many Council items have been directed to the FITES committee instead of CEAC. As a result, CEAC has had to create many of its own initiatives, and the new ECC will likely need to do the same.

CEAC was unable to meet during the COVID-19 pandemic. After February 2020, CEAC met once in December 2020 to adopt a work plan, and resumed regular meetings in October 2021 with the knowledge of a pending commission consolidation. With some turnover during the same period, CEAC only has a few outstanding items requiring additional follow-up (discussed in the attached notes), and no new projects currently in progress.

CONTACT PERSON

Ben Gould, Chair, Community Environmental Advisory Commission, 510-725-9176

Attachments:

1: CEAC Transition Notes

CEAC Transition Notes

Major Past Projects (2014-2022)

Cigarette Butts

In 2015, Save The Bay approached City Council asking Berkeley to take action to reduce tobacco litter flowing into the Bay. CEAC devised a pilot program to place receptacles for collecting cigarette butts in key locations in Downtown Berkeley where many smokers congregate and cigarette butt litter could be readily observed. A partnership was developed with the Downtown Berkeley Association for their Ambassadors to empty the receptacles and recycle collected cigarette butts, to minimize costs to the city. The program also included a signage requirement to discourage smoking in this non-smoking area, and to remind the public about stormwater pollution. The pilot program was intended as a one-year test to see if it worked.

City Council approved the pilot program, but it was slow getting started. There was some pushback from community members who argued that placing receptacles invited smoking in these non-smoking areas. (The sites recommended by CEAC were ones where smokers were already leaving cigarette butts on the sidewalk – while there was an ordinance in place, it was not enforced). Several receptacles were installed at modest cost (less than \$3,000 total) in multiple locations in and around downtown Berkeley, and maintained by Ambassadors for several months. The Downtown Business Association reported that the receptacles filled up regularly, though measured waste data were never sent to CEAC. Following the launch of the pilot program, but prior to its completion, Council sent another referral to CEAC suggesting that similar receptacles be installed in South Berkeley.

Turnover by Downtown Berkeley Association staff and CEAC commissioners have made it difficult to sustain the pilot program. In addition, pushback from public health experts and Save The Bay itself have made cigarette butt receptacles unpopular going forward. Fortunately, since the pilot was launched, the City of Berkeley has installed more effective stormwater trash collectors under the City's compliance with its municipal NPDES stormwater permit from the State Regional Water Quality Control Board. As a result, cigarette butts no longer must be collected prior to entering the stormwater system – these new trash capture devices are effective at capturing waste in the stormwater stream and preventing the pollution from entering the Bay.

A South Berkeley pilot program was never recommended, due to the lack of a business association capable of maintaining the receptacles, the unpopularity of putting cigarette butt receptacles in non-smoking zones (regardless of actual smoking behavior), and the ability of the trash capture devices to effectively prevent pollution from entering the Bay.

This item would fall under the new ECC's core responsibility to address reduce toxins in the environment and prevent pollution. Better signage would also raise awareness of tobacco waste polluting our oceans, and fall under community engagement efforts.

Bee City

CALPIRG students at UC Berkeley mobilized to urge the City to sign on as a *Bee City* under the Xerces Society. Such a program communicates City support of outreach activities that raise public awareness about the threats to and importance of insect pollinators in our region, and supports the establishment of pollinator landscaping throughout the City. UC Berkeley has already signed on to their campus program. CEAC partnered with the Parks and Waterfront Commission for advocacy with Scott Walker, head of the City's Department of Parks, Recreation and Waterfront. However as of March 2020, the City Department was reluctant to commit City personnel to this program or the \$500 annual membership fee. The Adopt-A-Spot concept, partnering with volunteers in various Berkeley neighborhoods to establish and manage pollinator gardens on City land, never got sufficient traction despite the urging of Commission members and the CalPIRG students. Councilmember Kate Harrison has been helpful. Meanwhile, pollinator gardens have been established anyway in cooperation with a non profit community group, *Transition Berkeley* despite the dearth of support by the City. As such, CEAC ultimately tabled this effort.

This item would fall under the new ECC's core responsibility engage and educate the community and address the welfare of important insect populations.

Green Stormwater Infrastructure (Public & Private)

Throughout the years, CEAC has been active advocating for green stormwater infrastructure. CEAC worked closely with the Public Works Commission to allocate more funding to offsetting the impacts of having such a dense impermeable urban landscape with seasonal flooding in the lower elevations. CEAC commissioners helped formulate green stormwater commitments in Measure M, and commented on the proposed Measure T1 bond that came several years later as well.

In response to a Council referral in 2015, CEAC developed recommendations to minimize stormwater runoff from both new and existing properties. The recommendation went through several iterations at CEAC, from the City Manager, from the Mayor, and the FITES committee, but was ultimately adopted and referred to staff for finalization in 2019.

These items would fall under the new ECC's core responsibility for promoting green buildings and resource efficiency, and preventing pollution.

Artificial Turf Health Effects

Members of the public voiced concerns to CEAC regarding potential detrimental health effects from synthetic turf made from recycled vehicle tires used on sports playing fields.

The fields on the west side of I-80, in particular, make use of these recycled materials. The complaints were timely and the State Office of Environmental Health Hazard Assessment (OEHHA) appointed a Synthetic Turf Advisory Panel which launched a four-year study on the health effects on humans from playing sports on this kind of synthetic turf. CEAC commissioners attended the initial public meetings for this study in 2015. We note that the environmental effects to water quality from the runoff of these fields was not included as part of the study, but may be consequential to marine life.

This item would fall under the new ECC's core responsibility of reducing toxins and preventing pollution to downstream waters. While the OEHHA may not be able to gather enough data to confirm short term health effects, more apparent effects and complaints may continue to surface.

Letter to Bayer

Ever since Bayer took over Chiron's pharmaceutical campus, CEAC has been a watchdog for changes that have been taking place on that property. At one point, Bayer was obligated to provide annual reports to CEAC on activities and hazardous waste generation. Presently, Bayer is going through public disclosure and planning steps with the City in preparation for a substantial expansion of their facilities on their West Coast Berkeley campus. Bayer's Berkeley facility is focused on producing medication for hemophiliacs. However, outside of Berkeley, Bayer is also the main producer of neonicotinoid pesticides, one of the most widely used type of pesticides in the world and a major culprit suspected of causing the demise of bee populations. In March 2016, CEAC drafted a letter to Bayer to be submitted by the City Council, pointing out that while Bayer claims to be "committed to human rights, labor standards, environmental protection and anti-corruption," they were still major producers of neonicotinoids. The letter asked why toxicity to bees is not considered a serious environmental problem by Bayer, but received no response.

This item would fall under the new ECC's core responsibility to address the impacts and welfare of all species.

Safe Urban Gardening

In June 2015, at the request of City Council, CEAC developed and shared a brochure for prospective Berkeley gardeners that would encourage backyard gardening as a healthy activity, but raise awareness of two of the common toxins found in Berkeley soils, namely lead and arsenic. 300 copies of the tri-folded brochure were printed. However, the subcommittee never completed its intended distribution of these brochures to local nurseries and community gardens, and staff was unable to take the time to support. Instead, copies of the brochure were made available in City offices. The brochure can be viewed [here](#).

This item would fall under the new ECC's core responsibility to engage and educate the community.

Lead Paint

Lead paint is a persistent and recurring problem in Berkeley. Lead-based paint was used up until 1978, and as a result most buildings in Berkeley likely still have some lead paint in them. Dust and debris from lead paint can contaminate soil, air, and indoor environments, where it can be inhaled or ingested by children, or remain in the soil indefinitely.

State and federal law impose certain requirements for the handling of lead paint during construction and renovation efforts, but these are often not followed by contractors, leading to lead paint contamination risks or events. Violation of these practices falls under the City's jurisdiction to enforce; however, the cost of enforcement (in staff time) exceeds the punitive fines extracted from a violation. As a result, city staff generally does not take action to enforce reported lead paint violations.

CEAC developed an item, which went to Council with a companion report, recommending that the City establish an administrative fee to supplement the punitive fine to cover the cost of enforcement. The companion report recommended that staff study the matter to identify the appropriate level of fee (as required under state law), and was adopted by Council shortly before the pandemic. There has been no action taken since, due to pandemic-imposed staffing challenges.

This item falls under the new ECC's core responsibility to reduce toxics and prevent pollution.

Indoor Air Quality

In 2014-17, CEAC developed recommendations for new standard conditions of approval (SCAs) for development projects in areas potentially prone to elevated levels of outdoor air pollution. These SCAs would require additional indoor air quality mitigation measures to be included, such as utilizing a higher-grade filtration system (eg MERV 13) for building ventilation and/or other design features to mitigate outdoor air quality. Council referred the recommendation to the Planning Commission on July 11, 2017; it is unclear if there has been any further action.

This item falls under the new ECC's core responsibilities to reduce toxics and prevent pollution, and support environmental justice.

Bird Safe Buildings

In 2019, at the prompting of the Golden Gate Audobon Society, CEAC developed recommendations to require new development above a certain size install bird-safe glass on larger windows, and to require external lighting to be pointed downwards (not up). The proposal was approved by Council and first discussed at the Planning Commission in March 2022.

This item falls under the new ECC's core responsibility to address the impacts and welfare of all species.

Fire Foam

In 2019, a methane-fueled recycling truck caught fire while in service and the firefighting foams used to put out the fire washed into Cordonices Creek, killing more than 60 local steelhead trout and threatening the creek's ecosystem. CEAC wrote a letter to staff urging improved communication and coordination between departments to ensure public works cleanup staff can arrive sooner to better mitigate the impact of the foam in future events.

This item falls under the new ECC's core responsibility to reduce toxics and prevent pollution, and to address the impacts and welfare of all species.

Natural Gas

In 2016, CEAC recommended that Council refer to CEAC and the Energy Commission to explore eliminating natural gas in new construction. A series of joint subcommittee meetings led to an analysis shared with the California Energy Commission that changes to Title 24 were required to ban natural gas in new construction; title 24 was subsequently amended beginning with the 2020 code cycle and in 2019 Berkeley was first in the nation to adopt an ordinance banning natural gas hookups in new construction.

This item falls under the new ECC's core responsibilities to reduce greenhouse gas emissions, advance green buildings and resource efficiency, decarbonize buildings, and reduce toxics and prevent pollution.

Zero Emission Vehicles

In 2018-19, CEAC worked on several projects related to zero-emission vehicles for the City of Berkeley.

In response to the climate emergency declaration and fossil free city goal, CEAC recommended that the City Manager develop a timeline to replace all existing city-owned light-duty passenger vehicles with ZEV alternatives by mid-to-late 2020s (eg 2027). The City Council and City Manager concurred, and the fleet replacement program has begun (subject to available funding).

CEAC also developed a recommendation that Berkeley set a target of 100% sustainable transportation by 2045; i.e. no gas-powered vehicles are used to get to or from anywhere in Berkeley. At the suggestion of the FITES subcommittee, Council adopted a more aggressive target, aiming to achieve 100% sustainable transportation by 2040 and a 50% improvement by 2030.

CEAC developed proposals to ban the resale of used gas cars by 2040, ban the sale of carbon-based fuels (ie gasoline and diesel) by 2045, and ban the operation and parking of gas cars on city streets by 2045. (Banning the sale of new gas cars is preempted under the Clean Air Act). Council adopted the recommendation to ban the resale of used gas cars and referred the language to the City Attorney for finalization; no action appears to have been taken since. The City Attorney found that a ban on the sale of gasoline is preempted under federal law prohibiting regulation based on the content of a fuel; and that a ban on the operation and parking of gas cars on city streets is implicitly preempted by the California Vehicle Code, which must be strictly interpreted to *only* permit those activities which it expressly authorizes. Banning gas cars from parking – or creating ZEV-only parking spaces – would require an amendment to state law; draft language has been prepared pending an author.

These items fall under the new ECC's responsibilities to reduce greenhouse gas emissions, decarbonize buildings and transportation, and support environmental justice.

Gas Station CO₂ Labeling

CEAC recommended that the City require gas station operators to add labels to pumps warning that the use of fossil fuels contributes to climate change. The City Attorney deferred action on the item pending the outcome of another First Amendment lawsuit related to cell phone warning labels. Berkeley was successful in the cell phone warning label requirements, and as such should be in the clear to implement gas station CO₂ labeling; however, no action has been taken.

General environmental hazards

Wooden power poles are coated in a carcinogenic preservative, dioxin, which leaches out into the soil and surrounding area over time. Unfortunately, CEAC has been unable to identify any action the city could take on this issue.

Dryer sheets (sometimes added to clothes dryers when drying a load of laundry) are laden with toxic chemicals and powerful perfumes that can irritate or harm sensitive individuals. Unfortunately, CEAC has been unable to identify any potential remedies that the City could take.

Berkeley Asphalt periodically leads to complaints of fumes and smells from neighbors. Berkeley Asphalt emissions are regulated by BAAQMD and are outside the City's jurisdiction.

Items to follow up on

Bird Safe Buildings

The bird-safe building recommendations are currently being discussed before the Planning Commission. This item should be tracked and public comment given at Planning Commission and Council meetings.

Gas Station CO₂ Labeling

The new ECC should ask staff to follow up with the City Attorney's office and inquire about the status of the item. Draft signage language was already developed, and it should be straightforward to complete this referral and return to Council with an ordinance.

Ban sale of used gas cars

The new ECC should ask staff to follow up with the City Attorney's office and inquire about the status of the item. Draft ordinance language was already developed, and it should be straightforward to complete this referral and return to Council.

Ideas for the ECC

Liaisons

CEAC has had a longstanding tradition of appointing individual commissioners to act as liaisons to other relevant commissions, including Energy, Parks & Waterfront, Public Works, Planning, and others. A liaison's responsibility is to serve as the commission's expert on the activities of the sister commission: generally, the liaison will review agendas and meeting minutes for the other commission, as well as serve as the primary point of contact if discussion is required between commissions. This practice has been effective at helping ensure CEAC is aligned with work being developed by other commissions, and would be good to continue.

Hazardous Waste

CEAC received multiple recent emails asking about how to dispose of household hazardous waste. Currently, there are no household hazardous waste drop-off sites within City limits. BMC 11.50 makes it extremely difficult, if not virtually impossible, for any agency other than the City or Alameda County Waste Management Authority to collect household hazardous waste; further study of this section of code is needed to understand the constraints and what should be done to improve household hazardous waste disposal / collection in the city.

Transportation

The City of Berkeley is currently likely behind on its target to achieve a 50% improvement in sustainable transportation usage and 100% sustainable trips by 2040. The new ECC could suggest policies to more aggressively move the city in this direction. Potential opportunities include:

- Setting specific, measurable VMT reduction targets and identifying and implementing strategies to achieve them
- 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
- 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. Berkeley faces a significant shortfall in paving funds;

eliminating entire lanes of traffic on low-volume residential streets could provide new space for alternative public uses (such as linear parks and/or stormwater retention). Fiscal analysis should be done to compare costs of alternative uses.

Buildings

Berkeley's building decarbonization plan is only a start; more work is needed to identify and effectively implement strategies to decarbonize:

- Single-family ownership residences
- Single-family rental residences
- Rent-controlled multifamily residences
- Non-rent-controlled multifamily residences
- Commercial spaces

Nexus Work

Berkeley has separate goals in climate (Climate Action Plan), housing (Regional Housing Needs Allocation), and transportation (sustainable trips, bicycle & pedestrian master plans). Analyzing the way(s) these three areas intersect could help illuminate strategies (or trade-offs) for advancing along multiple fronts at once.

De-zoning Gas Stations

Berkeley should remove gas stations as a permitted use from all City zoning codes.

Banning gas-powered delivery vehicles

The ECC should explore opportunities to require last-mile delivery vehicles to use zero-emission alternatives.



To: Honorable Mayor and Members of the City Council

From: Berkeley Energy Commission

Submitted by: Bentham Paulos, Chairperson, Energy Commission

Subject: Recommendations for Workplan for New Environment and Climate Commission

The Council has approved the creation of a new Environment and Climate Commission to be the successor to the Energy Commission and the Community Environmental Advisory Commission (CEAC), with the transition expected to happen in April 2022.

We fully anticipate the new commission will establish its own workplan, but to aid in the continuity of mission, the Energy Commission would like to make the following recommendations for strategic objectives and activities.

STRATEGIC OBJECTIVES

The new Environment and Climate Commission should strive to ensure that Berkeley, at the very least, achieves its Climate Action Plan goal of reducing greenhouse gas emissions 33% below 2000 levels by 2020, and is on track to achieve its 2050 Climate Action Plan goal of reducing greenhouse gas emissions 80% below 2000 levels, while avoiding unintended side effects.

We recommend activities in the following areas:

1. Reduce transportation greenhouse gas emissions
2. Promote greenhouse gas emission reductions in the built environment
3. Promote and support City wide greenhouse gas reduction and funding plans

ACTIVITIES

To advance each of these objectives, the Commission should focus on the following specific activities over the next year.

Objective 1. Reduce transportation greenhouse gas emissions

- Ensure the City is adequately staffed to implement transportation-related activities that reduce carbon emissions, such as by hiring an Electric Mobility coordinator. Priority staff items for the Electric Mobility Roadmap include:

Recommendations for the Environment and Climate Commission

- Conducting a mobility needs assessment
- Convening an electric mobility roadmap implementation working group
- Pursuing discounts and digital access strategies for electric shared mobility options
- 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.
- Study and support expanding transportation measures to reduce GHG emissions associated with car travel.
 - 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.
 - Promote safe routes to schools, beginning with opportunities for the Energy Commission to contribute to the 2x2 committee (Council and BUSD board).
 - Research the feasibility of a zero-emissions zone, or a car-free zone for Berkeley.
 - Investigate opportunities to cut emissions through mass transit, such as more frequent service, new routes, zero-carbon fuels, and lower fare prices.
- Work with the Transportation and Public Works commissions to 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 to the grid.
- Work with the Transportation and Public Works Commissions to integrate the climate aspects of transportation with other transportation issues. Consider asking the Council to create a standing joint committee, or convening joint meetings.
- Engage with Council to include language in City bond measures to finance and build low-carbon, equitable, safe, and convenient transportation infrastructure. This could include building safe streets for bicyclists and pedestrians, funding public EV charging, and improving public transit service. The Commission could host public meetings, promote items from the Berkeley Electric Mobility Roadmap, and analyze impacts.

Recommendations for the Environment and Climate Commission

Objective 2. Promote greenhouse gas emission reductions in the built environment

- 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.
- Recommend strategies the City can pursue 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.
- 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.
- Investigate and advance electrification mandates, such as through the Building Energy Savings Ordinance (BESO)
- 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.
- Explore ways to redirect funds used to maintain PG&E’s fossil gas distribution network to support building electrification.

Objective 3. Promote and support City wide greenhouse gas reduction plans

- 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 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.
- 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.
- 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.

Recommendations for the Environment and Climate Commission

General Activities

- Monitor Council actions related to environment and climate change, encourage Commissioners to communicate with individual Councilmembers, and make timely recommendations on relevant items. Advise Council on the climate implications of decisions across the whole of City actions, like procurement and planning.
- Assign Commissioners to serve as formal liaisons to Public Works and Transportation Commissions, and other Commissions as needed, which will involve tracking their agendas and attending meetings.
- Convene joint meetings with other Commissions on specific topics of mutual interest, intended to lead to joint recommendations to Council.
- Amplify awareness of funding gaps for climate action, and develop and support initiatives to raise new or allocate existing funding dedicated to reducing GHG emissions

While the combined Environment and Climate Commission will have a broader agenda than the Energy Commission, we strongly recommend putting a strong emphasis on retaining and improving Berkeley's leadership on climate action.

CONTACT PERSON

Billi Romain, Secretary, Energy Commission, 510-981-7432



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 1st, 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^{1,2,3}.

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 15th, 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

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

² 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 (accessed September 2019)

³ 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



Environment and Climate Commission

Internal

[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 1st, 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

Internal

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^{1,2,3}.

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 15th, 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.

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

² 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 (accessed September 2019)

³ 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)

Internal

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.

Internal

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



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^{1,2,3}.

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 15th, 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.

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

² 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 (accessed September 2019)

³ 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

From: david lerman <415justice@att.net>
Sent: Monday, April 25, 2022 1:35 AM
To: All Council <council@cityofberkeley.info>; Berkeley Mayor's Office <mayor@cityofberkeley.info>; Manager, C <CManager@cityofberkeley.info>; Kesarwani, Rashi <RKesarwani@cityofberkeley.info>; Gerstein, Beth <BGerstein@cityofberkeley.info>; ToxicsMailbox <Planningtoxicsmailbox@cityofberkeley.info>; Shrago Amy BOS Dist 5 <amy.shrago@acgov.org>; Stopwaste Info <info@stopwaste.org>; Jeanine Sidran <jsidran@stopwaste.org>
Subject: Earth Day & Hazardous Waste Disposal in Berkeley?

Dear City of Berkeley:

In honor of Earth Day, I encourage you to read, and consider, a City of Berkeley hazardous materials webpage, and selected portions from the webpage, below.

I have a thermometer I would like to properly dispose of in Berkeley. I have nowhere to properly dispose of the thermometer in Berkeley because the city has failed to allow a hazardous waste collection facility in Berkeley, and has refused to allow Alameda County's STOPWASTE.ORG to operate even a one day a year collection in Berkeley.

I will not make an appointment to drive a long distance in order to dispose of one thermometer. Last year I drove many miles to a distant location in Alameda County to properly dispose of household hazardous waste. The county provides great service. The City of Berkeley does not.

Many people are illegally dumping hazardous waste into Berkeley storm sewers, on the ground, and in the trash because proper disposal is difficult and inconvenient.

At a minimum, Berkeley needs to allow one day a year hazardous waste disposal. Berkeley have failed for many years to establish a proper system of local hazardous waste disposal and this is bad. I regularly see rusting containers of hazardous materials leaking hazardous materials into local dirt, and storm drains. I also see hazardous waste placed on the sidewalks of Berkeley.

I am attaching a picture of hazardous waste and toys I found on the sidewalk in my neighborhood a few months ago. This is all too common. Putting hazardous waste on sidewalk with toys is a dangerous way to try to get rid of hazardous waste, but this is what people do out of desperation in Berkeley. If the City of Berkeley had a proper system to conveniently dispose of hazardous waste we would be doing something good for the planet and our community instead of contaminating our city and the bay.



Since Berkeley has failed to provide household hazardous waste disposal service for decades, we need to allow Alameda County to expand their very efficient and professional service to the City of Berkeley. It is time to stop pretending that Berkeley can do this alone.

When can I properly dispose of a single thermometer in Berkeley?

Best regards,

David Lerman

Please read this City of Berkeley webpage re: hazardous waste:

https://www.cityofberkeley.info/Planning_and_Development/Home/CONDITIONS_TRE_NDS_ISSUES_Environmental_Quality_Hazardous_Materials.aspx

[Clarification Inserted by Rebecca Milliken, 5/19/22] Note: Due to recent website transition, the above link is no longer valid and the following information is no longer available online. The new City Hazardous Waste webpage is available at: <https://berkeleyca.gov/city-services/trash-recycling/household-hazardous-waste>

“In September, 1989, the Berkeley City Council rejected the Alameda County Hazardous Waste Management Plan and directed City staff to develop an alternative City plan in accordance with the Tanner Bill (AB 2948).”

“Hazardous Waste Importation Regulation Act

In 1991, the City adopted the Hazardous Waste Importation Act with the purpose of establishing a set of rigorous siting criteria for any hazardous waste facility within the City. At this time, there are no hazardous waste collection or recycling facilities located in Berkeley. This Act virtually prohibits the siting of any such facility in the City, through: a) 12 specific siting criteria; b) a one mile baseline testing radius; and c) a set of four findings that must be met prior to approval. The City of Berkeley has decided to participate in a County-wide household hazardous waste program, in part, because the cost would be too prohibitive for a "stand alone" city program. However, the virtual prohibition of collection and recycling sites under the provisions of Berkeley's Hazardous Waste Importation Act has created reluctance among several Southern Alameda County cities to implement the Countywide household hazardous waste program. In fact, proposed household hazardous waste facility sites in Livermore and Hayward will not be issued use permits until a north Alameda County site can be found in order to spread the responsibility throughout the County.

To comply with the provisions of the Tanner Bill for General Plans, the City must either: 1) develop a section in the updated General Plan that incorporates the portions of the County Hazardous Waste Management Plan relating to the various siting criteria; 2) enact an ordinance requiring that land use decisions be consistent with the area designations and the minimum siting criteria in the County Hazardous Waste

Management Plan; or 3) develop its own Hazardous Waste Management Plan, with siting criteria, that is consistent with the County Plan.

The right to create a City-specific plan is specifically preserved under the State law. By adopting more stringent criteria than those contained in the County plan, cities retain a certain amount of local control over siting decisions and can have continue input into the siting process. As Berkeley has an older, more established industrial area, with a greater amount of intermixed non-industrial uses than do newer areas, it is possible that the updated General Plan can justify additional restrictions in the siting criteria. In February 1993, the City published a draft Hazardous Waste Management Plan which incorporates the siting criteria from the Hazardous Waste Importation Regulation Act.

However, the City of Berkeley does generate hazardous materials and must assume its fair share of responsibility for treating and disposing of this waste. The Berkeley community will need to carefully consider the implications of prohibiting a local collection and/or recycling facility.”

Household Hazardous Waste

Many of the items routinely used by Berkeley residents, such as paints and thinners, cleaning products, motor oil and other such items, are in fact hazardous chemicals. Because they are commonly used around the house, many people are unaware of the potential hazards associated with the use and disposal of these items. An undetermined, but probably large, percentage of these materials are improperly stored and disposed of; half finished items may be stored in kitchens, garages or basements, or may be poured down storm drains, dumped into the garden, or placed into the household garbage can. None of these solutions is satisfactory as they expose the occupants and others, such as the refuse collectors, to unnecessary risks and potentially contaminate the ground.

The present situation for those attempting to properly dispose of their household hazardous waste is not ideal either. The individual has to go to a hazardous waste storage or transfer station and deliver the material, or arrange to have someone from the station come to the house and pick the material up. The nearest station presently accepting such waste is in Richmond, and it is only open for this use during certain hours. In addition, this method of disposal can be quite expensive because of the special handling required for the chemicals. The expense and inconvenience only serves to further discourage residents attempting to conscientiously dispose of their household hazardous waste.

The City of Berkeley has, in conjunction with the City of Albany, participated in household hazardous waste collection days, as part of an area wide effort coordinated by the Association of Bay Area Governments. This project has been quite successful, in terms of the quantities of material gathered, and the number of residents participating, but the cost is quite high, and they are, by their very nature, infrequent.

Golden Gate Fields served as the location, with the latex paint, waste oils, and spirit based paint separated out from all other materials. These recyclable and less hazardous materials cost less to dispose of; all other waste, which has to go to a landfill, costs about \$250-300 per barrel for disposal.

The City's Public Works Department is currently investigating ways to deal with this important category of waste. A waste oil tank has been installed at the recycling center and residents can now bring waste oil in for disposal, knowing that it will be recycled. In addition, the Mayor, in her 1989-90 budget message, proposed the establishment of a new household hazardous waste transfer facility. The Departments of Public Works and Health and Human Services are currently researching the details of such a facility. Previous private recycling establishments, like Zero Waste, have failed, possibly due to a lack of profit, so the City's effort must be well planned to succeed. Some issues have arisen in planning for this new facility. First of all, the City of Berkeley is not able to run the facility due to a potential conflict of interest over the collection of hazardous waste generator fees. There will have to be a contractor responsible for operating the facility, and arranging for the recycling and disposal of the material collected. The City cannot both inspect and collect these fees and run a facility.

A second, and much more serious problem to be resolved is a location for this facility. Given the City of Berkeley's firm stand on the siting of hazardous waste facilities in Berkeley (see discussion above), it is unlikely that a suitable location can be found within the City. It is possible that the project might become a joint venture with other cities such as Emeryville, Albany or the north part of Oakland, with the facility not actually located in Berkeley. Siting will be an important issue for the General Plan to consider, however, and will prove to be a critical point for the entire project."