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: Ben. Gould, 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 to remove gasoline and other carbon-based fueling stations as a permitted use, and expand the availability of electric vehicle (EV) charging throughout all zoning districts.

The following changes should be considered:

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. This would make any expansions of existing stations require a Use Permit and a public hearing, allowing the ZAB to prevent existing gas and hydrocarbon stations from re-opening if they cease operations for a year or more. Permitting EV charging in the zoning ordinance would allow EV chargers to be operated commercially 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.

[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)

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.

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 proposing 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 proposing 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 proposing 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 proposing 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 proposing 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
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