

Reach Code Stakeholder Session Summary

When they go all-electric, buildings, vehicles, and off-road equipment transition from carbon-based fuels such as natural gas, gasoline, and diesel to clean energy provided by East Bay Community Energy (EBCE). These all-electric buildings and transportation options are safer, healthier, and more cost effective. By adopting reach codes, cities in Alameda County can further contribute towards saving energy and reducing GHG emissions.

Commented [SA1]: Spell out

The City of San Leandro held stakeholder listening sessions to get feedback on the reach code development to join the 50+ other cities across California that have adopted reach codes around building and transportation electrification. Approximately 20 individuals, including commercial property owners, commercial tenants, and representatives from the industrial/manufacturing and residential development sectors participated across three listening sessions in February 2022. A summary of their feedback is provided below.

Public presentations to Planning Commission and City Council are planned for late spring/summer 2022 to provide a summary of feedback received and staff recommendations for reach code requirements. The goal is to bring the building and EV reach codes to City Council for adoption by fall 2022 and for them to go into effect in Jan 2023, concurrent with the new Building Code cycle. [Read more about reach codes here.](#)

Housing

CURRENT USE

- There are already 34 all-electric communities in the Bay Area and counting
- Builders are beginning to see cost savings to electric construction and are turning more and more to solar to take advantage of those savings.
- It is beneficial to builders to only have to deal with one utility, electric, instead of both electric and gas.
- Architects have joined the Architecture Institute of America 2030 commitment to going all-electric in buildings and are seeking ways to move the market along.
- There is enough demand in the housing market that if all-electric is built, there will not be a shortage of buyers.
- There has been increasing concern about indoor air quality due to wildfire seasons. Uptake of electric appliances is occurring quickly, and buyers are continuing to ask for smarter usage of water and electricity, and smart controls. Generally, buyers are attuned to air and water quality issues.
- PV panels can get hot and create a local urban heat island effect.

INDUSTRY READINESS

- Certain appliances are not ready for all-electric transition (for example, solar or thermal hot water heaters or electric dryers). Developers are willing, however, to work toward all-electric and incorporate those appliances into their buildings as the technology becomes

available. Other appliances may not work as well for water demand (for example, electric tankless water heating).

- Certain technologies can create logistical issues for builders. Builders are avoiding solar thermal and staying with garage-sited hot water heaters as the maintenance responsibility clearly falls on the homeowner. Pool and spa heating is a challenge.
- There are space and size constraints that must be taken into account in the design of a development. For instance, battery storage would require eight feet of linear wall to be marked out in a parking garage.
- There are challenges to incorporating solar into housing developments with more traditional roofing designs. Some building designers are aware of these issues and attempting to accommodate solar through designing roofs to be simpler and using different materials.
- If EV charging stations are required, builders will likely go above and beyond the reach code requirements, as they want to make the same amenities available for all users.
- Affordable housing projects acquire much of their funding upfront and only the exact amount required to complete the project. To be competitive for funding, projects must be as inexpensive as possible. Reach codes can be helpful for making these projects greener, and applicants for funding can then point to the City's code as a reason for the higher cost.
- The substantial added cost of going all-electric, particularly due to the cost of all-electric water heating, that can deter affordable housing projects. Projects need to be as inexpensive as possible to lock down funding.
- Space can also be a constraint to installing solar panel arrays. There is not enough space in certain urban environments to install enough solar panels to justify the extra cost.
- Even if some neighborhoods go all-electric, gas infrastructure may still need to be run down the street for an end user that is exempt.

STAKEHOLDER RECOMMENDATIONS

- Make reach code requirements apply only at the very beginning of the development phase in the beginning of the design process. It is not easy to change electric service to a building partway through.
- For affordable housing projects, create a phase-in timeline with a longer runway for implementation.
- An increase in the City assistance offered to affordable housing projects may be required to absorb additional cost of electrification so that projects are able to comply with regulations without sacrificing competitiveness for funding.
- Accessory dwelling units (ADUs) could be included in the all-electric requirement to encourage lower cost operations for tenants.

Commercial Sector

CURRENT USE

Commented [BK2]: Do we want exceptions for pool heating? Note about ADUs?

Commented [MH3R2]: I thought we were not including pool heating because it was low priority.

Commented [BK4]: Could use this more broad term, or list restaurant/retail/office

- Large amounts of gas use comes from legacy industrial businesses and food businesses.
- EV charging stations are being installed based on user demand. Developers anticipate increasing demand.
- HVAC systems may require gas. However, in buildings where there is a desire to avoid requesting more electricity service from PG&E, there has been a turn toward using more efficient HVAC units, which tend to be all-electric units.
- Installation of EV charging stations is currently being driven by demand from tenants. Developers are not opposed to installation and want to be able to deliver amenities demanded by tenants.
- In offices, the majority of tenant appliance use is electric.

INDUSTRY READINESS

- There are concerns about the cost of all-electric HVAC and space constraints on roofs.
- Certain end users – such as breweries, restaurants, and labs – utilize equipment that depend on gas.
- Restaurants particularly have an expectation that gas will be provided in building spaces.
- Restaurants and other small businesses have limited funding to make upgrades to infrastructure when they are moving into a space and doing tenant improvements. Additionally, many may bring existing equipment (such as ovens) with them.
- Retail centers are looking to convert traditional 'soft goods' retail spaces to food and other uses, which will contribute to the experienced-based retail that is needed to bring people out to shop rather than order online. Such conversion of spaces may require expanded gas service or additional meters.
- Requiring more electric and EV charging stations in new developments would not deter developers. However, concern was expressed about PG&E's capability to keep up with electricity demand.
- It is easy to create a specification for electric vehicle charging before a space is built but hard to transition an existing space.
- The definition of "new construction" needs to be defined carefully when it comes to renovations of existing spaces, as installation of new equipment is cost-prohibitive to new tenants.

Industry

CURRENT USE

- Most existing industry physically located in the Bay Area have some need to be in Northern California. Examples of these industries include parts providers for manufacturing companies located nearby or providers for life sciences industries in the area.
- Tenants for industry developments are often not identified prior to development. Gas is incorporated into new buildings to provide flexibility for an array of potential users.

Commented [BK5]: These seem to be more observations than recommendations. I put what I was thinking our recomms are for retail below. I think that they are: (can you confirm?)
 - requirements apply only to new construction
 'carve out' for restaurants/food users

- While gas may not be needed for warehouse/distribution uses, gas is more often needed by the high intensity, value-add users that the City is trying to attract, such as manufacturing.
- Potential tenants are looking for the right space quickly and additional requirements above code may cause them to 'move on' to the next city, or to the central valley.
- Industry developers are familiar with EV charging stations when it comes to reach codes and are already incorporating charging stations into their buildings.
- Certain STEM and life sciences businesses require gas lines.

INDUSTRY READINESS

- The technology of some industries are not ready for a transition to all-electric.
- Some companies operating from out of state are not yet ready for a transition to all-electric.
- Requirements for implementing electric utilities at a certain threshold value of a building can create an incentivization not to invest in buildings and cause urban blight.
- Upfront capital investments pose barriers to all-electric. A business that owns its own equipment would need to make a capital investment into new equipment in order to meet reach code requirements.
- STEM business centered on topics like sustainability, climate, battery, or vegan foods would likely be supportive of reach codes and installation of EV charging stations.
- Industry developers are already incorporating EV vehicle charging, but concern is focused on balancing the number of charging stations installed against projected user need.

STAKEHOLDER RECOMMENDATIONS

- Make it easier for building users to go electric, or it may be a deterrent to locating businesses within the city.
- Provide flexibility for industry developers in reach code requirements, as future tenants of buildings are often not known.
- Potentially provide a menu of options for meeting reach code requirements so that developers can find creative paths forward.
- Apply reach code requirements at the beginning of the development process. It is expensive to convert an existing space to accommodate all-electric or EV charging requirements.
- Find ways to accommodate companies that are not yet ready for all-electric so that they are not left behind.