



DATE: March 11, 2024

TO: Council Sustainability Committee

FROM: Director of Public Works

SUBJECT Reach Code – Current Status and Future Revisions – Discussion and Direction to Staff

RECOMMENDATION

That the Council Sustainability Committee (CSC) reviews this report and provides direction to staff regarding the development of an amended Reach Code.

SUMMARY

Hayward's current Reach Code took effect on January 1, 2023. The Reach Code ordinance modifies and goes beyond the State building code to require:

- All new residential buildings, including mixed-use buildings, must be all electric.
- All new non-residential buildings for which natural gas infrastructure is installed, must be "electric ready", meaning they have the wiring, electrical capacity and space needed to be converted to an all-electric building in the future.
- All new buildings, and modifications to existing buildings resulting in new parking spaces, must have electric vehicle (EV) charging infrastructure above and beyond that required by the California Green Building Standards Code.

The Ninth Circuit Court of Appeals found the City of Berkeley's natural gas ban ordinance preempted by the federal Energy Policy and Conservation Act (EPCA). Due to similarities between Berkeley's ordinance and Hayward's Reach Code ordinance, Hayward's requirement for new residential buildings to be all electric is no longer being enforced.

Hayward's Climate Action Plan (CAP), adopted by Council on January 30, 2024, includes 180 actions – all of which need to be implemented for Hayward to meet its ambitious goal of reducing greenhouse gas (GHG) emissions by 55% by 2030. The CAP includes actions that call for continued enforcement of and expansion of Hayward's Reach Code. Staff recommends that efforts be focused on a Reach Code that will take effect with the next version of the California Green Building Standards Code, which will take effect in January 2026.

BACKGROUND

State law allows local jurisdictions to adopt ordinances that amend the California Building Standards Code. The ordinances are commonly referred to as reach codes. Out of approximately 540 cities and counties in California, more than sixty local governments have adopted reach codes to encourage or require all-electric construction as well as electric vehicle charging infrastructure. Hayward adopted its first Reach Code on March 3, 2020. Hayward's current Reach Code was adopted on November 15, 2022¹ and was re-adopted on June 6, 2023² with minor technical revisions. The purpose of the ordinance is to reduce the use of fossil fuels – both in buildings and in vehicles. The ordinance modifies the State building code to require:

- All new residential buildings, including mixed-use buildings, must be all electric.
- All new non-residential buildings for which natural gas infrastructure is installed, must be “electric ready”, meaning they have the wiring, electrical capacity and space needed to be converted to an all-electric building in the future.
- All new buildings, and modifications to existing buildings resulting in new parking spaces, must have electric vehicle (EV) charging infrastructure above and beyond that required by the California Green Building Standards Code.

Ninth Circuit Ruling on Berkeley's Gas Ban and Electrification Reach Codes – In April 2023, the Ninth Circuit Court of Appeals found the City of Berkeley's natural gas ban ordinance preempted by the federal Energy Policy and Conservation Act (EPCA). On January 2, 2024, the Ninth Circuit affirmed the April 2023 decision and denied a petition for rehearing en banc. In January 2024, staff ceased enforcement of Hayward's Reach Code requirements prohibiting installation of natural gas infrastructure in new residential construction. A statement to that effect was added to the City's Reach Code webpage and staff also began informing building permit applicants who had plans in review.

DISCUSSION

Hayward's updated Climate Action Plan (CAP) was adopted by Council on January 30, 2024³. One of the actions in the CAP is “BE-1.1: Continue to enforce the adopted Hayward Electrification Ordinance for new residential buildings banning natural gas.” The current pause in enforcement means that new residential construction can include natural gas infrastructure, which will likely become obsolete in less than 20 years. However, all new residential construction is subject to the California Energy Code, which requires at least one heating appliance (space and water) to be an electric heat pump. It also requires that new homes be “electric ready”, meaning they have the dedicated wiring, electrical breaker space, etc. so that electric appliance can easily be installed in the future.

¹ <https://hayward.legistar.com/LegislationDetail.aspx?ID=5936054&GUID=8FFD9DC8-3B84-4362-96C4-67C41B3FBED4&Options=&Search=>

² <https://hayward.legistar.com/LegislationDetail.aspx?ID=6247758&GUID=10E0620B-A871-4725-B18F-696FBD4F87B6&Options=&Search=>

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=6497833&GUID=90E54932-8B3F-46FA-8B79-47F2DD47560D&Options=&Search=>

There are more than 60 reach codes adopted by local jurisdictions in California and most have stopped enforcing provisions related to prohibitions of gas infrastructure due to the Berkeley ruling. Several cities have adopted reach codes in recent months in an effort to avoid legal challenges similar to what Berkeley has faced. They include the Cities of San Jose, Santa Cruz, San Luis Obispo and Los Altos Hills. These more recent ordinances take an approach that is different from most that have been adopted in the last few years, including Berkeley's and Hayward's.

The San Jose, Santa Cruz and San Luis Obispo ordinances require performance standards anticipated to achieve GHG reductions similar to those in previous reach codes. All three ordinances were adopted in the fall of 2023 and do not restrict fuel type. Instead, they require an increased compliance margin for the Source Energy Design Rating (EDR), which is a calculation required by the 2022 California Energy Efficiency Standards, Title 24, Part 6. The EDR is essentially an energy budget or a scoring metric that determines the energy consumption of a proposed building.

The City of Los Altos Hills has taken an approach similar to that taken by the Bay Area Air Quality Management District (BAAQMD), which is to regulate nitrogen oxides (NO_x). In March 2023, the BAAQMD adopted new rules for water heaters and furnaces to require ultra-low NO_x emissions. As noted in the BAAQMD's final report for the rule adoption, breathing air with a high concentration of NO_x can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. NO_x also react with other chemicals in the air to form both fine particulate matter (PM_{2.5}) and ozone (O₃). There are currently no natural gas water heaters or furnaces that meet the ultra-low NO_x standards. On February 15, 2024, the City of Los Altos Hills adopted an ordinance that prohibits NO_x emissions from appliances such as water heaters, space heaters and clothes dryers. The ordinance applies to new residential buildings and substantially altered existing residential buildings, but it does not apply to cooking equipment in residential buildings.

The Los Altos Hills ordinance is believed the first of its kind adopted by a local jurisdiction. Some cities that are currently considering new reach codes appear to be leaning toward the approach that requires an increased compliance margin for the EDR as it is a more well-established approach that is part of the California Energy Code.

Hayward's current Reach Code is an amendment to the 2022 California Building Code, which is in effect from January 1, 2023, through December 31, 2025. The 2025 California Building Code will take effect in January 2026. If a new Reach Code is adopted by Council, it would then require approval by the California Energy Commission, which could take another four to five months. It is likely that a new Reach Code, if adopted this year, would only be in effect for approximately one year.

Hayward's CAP includes BE-1.2: "Adopt an ordinance, reach code, or zero NO_x threshold, effective January 1, 2026, that establishes mandatory requirements that all newly constructed buildings avoid natural gas use by 2026." As such, staff is planning to develop a new Reach Code in 2025 so that it can take effect with the new state code on January 1, 2026. Developing

a new Reach Code in 2024 would require significant staff time. The regulatory approaches used in newer reach codes are still evolving. Staff recommends that we monitor reach codes of other local jurisdictions as well as the development of the 2025 California Building Code over the next 12 months so that Hayward is well prepared to develop a new reach code in 2025. Staff is seeking feedback from the CSC regarding the recommended approach.

FISCAL IMPACT

The preparation of an updated Reach Code in 2024 would take significant staff time and would require postponing other projects. Preparing a new Reach Code in 2025 will also require significant staff time, but it is also consistent with the implementation schedule for the recently adopted CAP. Additionally, staff expects that in 2025 there will be more support from Ava Community Energy and BayREN for the development of local codes as there was in 2022.

ECONOMIC IMPACT

An updated Reach Code would not have a significant impact on the local economy. In general, it is cheaper to build new buildings without natural gas infrastructure. The California Energy Codes and Standards Statewide Utility Program, which includes the State's Investor-Owned Utilities (PG&E, SDG&E, and SCE, under the auspices of the California Public Utilities Commission) developed and published cost-effectiveness studies to support the adoption of local reach codes⁴. The studies conclude that all-electric construction of new single family and multifamily residential buildings is cost-effective. The current pause in enforcement of Hayward's Reach Code will give builders additional flexibility through the end of 2025.

STRATEGIC ROADMAP

This agenda item supports all of the projects listed in the Strategic Priority to *Confront Climate Crisis & Champion Environmental Justice*, and specifically relates to implementation of the following Projects under that heading:

Reduce Greenhouse Gases and Dependency on Fossil Fuels:

Project C1: Implement Year 1 Programs from the adopted GHG Roadmap (Climate Action Plan).

SUSTAINABILITY FEATURES

The use of electric appliances in homes and businesses avoids indoor air pollution associated with the burning of natural gas. Ending the use of natural gas and providing the infrastructure needed for a transition to electric vehicles are both necessary to meet the City's long term GHG reduction goals, which include:

- 30% below 2005 levels by 2025
- 55% below 2005 levels by 2030
- work with the community to develop a plan that may result in the reduction of community based GHG emissions to achieve carbon neutrality by 2045

⁴ <https://localenergycodes.com/content/resources>

PUBLIC CONTACT

No public contact has been made for this item. A summary of the public outreach conducted leading up to the adoption of the current ordinance is included in the November 1, 2022, Council report. While some smaller builders of custom homes have expressed a desire to include gas appliances, particularly gas stoves, in new homes, staff has not received significant concerns about Hayward's current Reach Code from developers of larger projects.

NEXT STEPS

Upon direction from the Committee, staff will monitor new local and state codes and plan to prepare a new Reach Code in 2025, to be effective in January 2026.

Prepared by: Erik Pearson, Environmental Services Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager