

MEETING DATE: 10/15/2024

ITEM NO: 10

DATE: October 10, 2024

TO: Mayor and Town Council

FROM: Katy Nomura, Interim Town Manager

SUBJECT: Receive a Report and Provide Direction to Staff on Potential Reach Code

Modifications

RECOMMENDATION:

Receive a report and provide direction to staff on potential reach code modifications.

BACKGROUND:

On November 15, 2022, the Town Council adopted the 2022 California Building and Fire Codes as required by state law. As part of this adoption, the Town Council chose to address greenhouse gas emissions by approving specific amendments, known as Reach Codes, that created higher environmental standards in building construction, by requiring all new construction and qualifying major remodels to be fully electric. This Reach Code also requires additional Electric Vehicle (EV) charging requirements. These Codes became effective January 1, 2023.

The Reach Code applies to new construction and major remodels for residential and commercial buildings, with exemptions for commercial cooking, gas-dependent processes, emergency services, and if all-electric equipment was deemed cost-prohibitive.

The following table summarizes the key differences between the 2022 State Building Code and the Town's Reach Code:

Appliance	2022 State Code*	Los Gatos Reach Code
Water Heating	Gas or Electric	Electric Required (All Buildings)
Space Heating	Encourages Electric	Electric Required (All Buildings)
Cooking	Gas or Electric	Electric Required
Outdoor	Gas or Electric	Electric Required

PREPARED BY: Robert Gray

Building Official

Reviewed by: Interim Town Manager, Town Attorney, and Finance Director

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Appliance	2022 State Code*	Los Gatos Reach Code
Specialized Processes	Gas or Electric	Electric with Exemptions
(Industrial / Restaurants)		

^{*}Installation of gas outlets serving water heaters, cooktops, and clothes dryers require the installation of electrical circuits for future conversion of fixtures.

Ninth Circuit Ruling on Berkeley's Gas Ban and Electrification Reach Codes

In April of 2023, a three-judge panel of the U.S. Court of Appeals for the Ninth Circuit held that the plain text and structure of the Energy Policy and Conservation Act (EPCA) preempts state and local building codes concerning the energy use of natural gas appliances, including Berkeley's building code which prohibits natural gas piping into new buildings and thereby prevents those appliances from using natural gas. On January 2, 2024, the U.S. Court of Appeals for the Ninth Circuit denied Berkeley's request for review by the full Ninth Circuit and the panel's decision was reaffirmed.

On July 31, 2024, the Town received correspondence from the California Restaurant Association's legal counsel regarding the ruling by the U.S. Court of Appeals for the Ninth Circuit. The letter requested that Town Council repeal or suspend enforcement of the Ordinance, make a public announcement of that decision, and direct relevant officials not to apply the Ordinance to building permit applications. It is important to note that the Town's adopted Ordinance includes exceptions for tenant improvement projects, and non-residential cooking facilities; however, these were both found to be preempted by the EPCA language referenced by the letter.

Based on the Berkeley decision, the Town Attorney is recommending that the Town rescind portions of the Town's existing Reach Code. This matter has been scheduled for the Town Council meeting of December 3rd. The purpose of this item is to discuss alternatives to the Town's existing Reach Code so that staff can prepare for the December recission.

DISCUSSION:

The Town has a responsibility to establish codes and regulations which serve in the best interests of public health, safety, and welfare of the community. The Town Council has repeatedly shown leadership in relevant advancement of codes and regulations that provide clean energy, conservation, and public health to the community we serve. The following discussion presents options including alternative approaches that the Town Council may consider regarding modification of the Town's existing Reach Code.

Option 1: Repeal Existing Reach Code and Without Adopting Alternative Requirements
The Town Council may elect to repeal portions of the Town's Reach Code as currently adopted that prohibit gas appliances without adopting any replacement regulations. The 2022 Building Code requires that, when gas connections are installed for water heaters, cooktops, and clothes

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dryers, equivalent electrical circuits must be included for future conversion to electric fixtures (dual plumbed). Allowing gas appliances would satisfy the ruling of the Berkeley decision; however, it would not achieve the Town Council's goal of reducing greenhouse gas emissions. The Building Code requirement for dual plumbing may independently reduce the number of builders who choose to accommodate gas.

Option 2: Energy Performance Standards Approach

An alternative approach to a Reach Code is the implementation of more stringent energy efficiency criteria, leveraging Title 24, Part 6, of the California Building Standards Code. By setting high performance standards for energy use in new construction and major remodels, buildings are encouraged to adopt all-electric designs to meet the required benchmarks. This approach encourages electrification, reduces greenhouse gas emissions, and improves overall energy efficiency; however, it does not *require* electrification.

Energy Performance Standards can only apply to water heaters, and space heating, and/or space cooling systems, as those are already regulated by the California Energy Commission but cannot regulate other appliances (e.g. cooking). This approach mitigates legal risk by allowing the use of natural gas, if the overall efficiency of the building meets the compliance margin.

Energy performance standards also ensure that buildings are future proofed against rising energy costs and more stringent environmental regulations. This approach requires extensive energy efficiency analysis with each application and will make the building permit review process more complex, requiring additional energy efficiency calculations and reviews. In addition, this approach requires the preparation of a cost effectiveness study by the Town and review and approval by the California Energy Commission (CEC).

This approach has recently been adopted by the City of Cupertino.

In summary, under this approach Town Council would repeal the portion of existing Reach Code that requires all-electric construction, staff would prepare a cost effectiveness study for review and approval by the CEC, then return to Town Council with a more stringent energy efficiency Reach Code that strongly encourages all-electric design for water and space heating systems (but not cooking).

Option 3: Air Quality Approach

An alternative approach to requiring building electrification is to incorporate a ban on nitrogen oxide (NOx)-emitting equipment installed as part of a new construction or qualifying major remodel project. Zero NOx-emitting equipment is defined as any equipment or appliance that emits 0.0 nanograms of nitrogen oxides. Currently, there are no natural gas appliances that meet this standard.

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As a group, natural gas building appliances are one of the largest emitters of nitrogen oxides and are known to contribute significantly to the formation of ground-level ozone and particulate matter (PM2.5) in buildings. Exposure to NOx has been linked to coughing, wheezing, difficulty breathing, asthma, and increased susceptibility to respiratory infections. Exposure to particulate matter has been linked to asthma and other respiratory conditions, neurological disease, heart attack, stroke, lung cancer, and premature death.

By focusing on air quality improvements, the Town Council could mandate that all new construction and qualifying major remodels utilize only NOx-free appliances and heating systems, thereby eliminating a significant source of indoor air pollution. Zero NOx-emitting equipment can apply to all appliances (e.g. space heating, water heating, cooking, and clothes drying).

Air quality is regulated by the Clean Air Act (CAA), rather than the Energy Policy and Conservation Act (EPCA). This approach not only aligns with the CAA's National Ambient Air Quality Standards (NAAQS), it also ensures a healthier living environment for residents and helps mitigate the adverse impacts of climate change.

Although each jurisdiction differs slightly, this approach has been taken by the City of Campbell, the City of Los Altos Hills, and the Bay Area Air Quality Management District (BAAQMD). BAAQMD's regulations state that only zero-emission, electric water heaters can be sold or installed in Bay Area homes or businesses starting in 2027, and furnaces starting in 2029. Large commercial water heaters will need to be zero-emissions by 2031. BAAQMD estimates that these amendments could prevent up to 85 premature deaths per year, avoid up to \$890 million per year in health impacts, and decrease exposure to PM2.5.

Under this approach, the Town Council would repeal the portion of existing Reach Code that requires all-electric construction and adopt new requirements, mandating that all new construction and qualifying major remodels utilize only NOx-free appliances.

A summary of the options going forward, and the pros and cons of each, is summarized below for ease of reference and comparison.

Option	Pros		Cons	
1. Repeal portions of the existing Reach Code and allow natural gas in new buildings and major remodels.	•	Avoids litigation based on federal law preemption.	•	Allows for continued use of natural gas, contributing to greenhouse gas emissions and poor air quality.

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Option	Pros	Cons
2. Repeal portions of the existing Reach Code and replace it with an alternative Reach Code using Energy Performance Standards.	 Uses established processes through Title 24 of the California Building Standards Code. Legally sound – Only increases compliance margin. 	 Requires cost effectiveness study and California Energy Commission approval. Requires additional resources and adds complexity during implementation. Doesn't address stoves, dryers, fireplaces, pool heating, etc. Only addresses space and water heating. Doesn't prohibit new gas infrastructure.
3. Repeal portions of the existing Reach Code and set a Zero NOxemitting appliance threshold that regulates Air Quality.	 It is comprehensive and can cover any appliance that uses gas and emits NOx. Simple to enforce and conforms with upcoming BAAQMD regulations. Does not require a cost effectiveness study or California Energy Commission approval. 	Hasn't been legally tested.

CONCLUSION:

Staff Recommendation

In review of the options and considerations outlined in this report, the Air Quality approach (Option 3) most closely resembles Town Council's prior direction. It provides a more holistic approach that better addresses the overall impacts of emissions, as it offers comprehensive benefits for both the environment and public health. By prohibiting NOx emissions in all new construction and qualifying major remodels, Town Council can directly mitigate these harmful pollutants. This approach reduces respiratory and cardiovascular issues linked to poor air quality, while also supporting broader climate action goals of reducing greenhouse gas emissions. Unlike the Energy Performance Standards approach, the Air Quality approach explicitly targets the elimination of NOx emissions, making it a more effective strategy for protecting both environmental and human health.

Staff recommends that the replacement standards retain the exemptions from the existing Reach Code that allow gas in certain specialized processes and restaurants. These provisions

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acknowledge the technical or business needs of these industries and will act to minimize the Town's potential legal risk should there be challenges from industry groups.

Based on direction provided by the Town Council on this item, Staff will return to the Town Council with a code amendment repealing and/or replacing portions of our current Reach Code.

COORDINATION:

The Community Development Department coordinated with the Town Attorney's Office in the preparation of this report.

FISCAL IMPACT:

Option #1 and #3 have no fiscal impact, because each involve very minor edits to the Town's existing ordinance.

Option #2 is the most expensive option, because it will require a study to be conducted by a consultant and a more detailed ordinance.

ENVIRONMENTAL ASSESSMENT:

Because the Town Council is providing direction only, and staff will return with a proposed ordinance, this action is not a project subject to the California Environmental Quality Act. (Public Resources Code Section 21065.)