

Agenda Item C.1
PUBLIC HEARING

Meeting Date: February 18, 2025

TO: Mayor and Councilmembers

SUBMITTED BY: Peter Imhof, Planning and Environmental Review Director

PREPARED BY: Dana Murray, Sustainability Manager

Angeline Foshay, Management Analyst

SUBJECT: Second Reading of Ordinance Amending Title 15, Chapter 15.15 of

the Goleta Municipal Code for an Energy Performance Reach

Code

RECOMMENDATION:

A. Hold a public hearing and conduct the second reading by title only, waiving further reading of Ordinance No. 25-__ entitled, "An Ordinance of the City Council of the City of Goleta, California, Amending Title 15, Chapter 15.15 Entitled "Energy Code" of the Goleta Municipal Code to Adopt the 2022 Edition of the California Building and Energy Code and Local Amendments Thereto and Determine the Ordinance to be Exempt from the California Environmental Quality Act."

B. Find the adoption of Ordinance No. 25-__ exempt from the California Environmental Quality Act and direct staff to file a Notice of Exemption within five (5) business days.

SUMMARY:

An Energy Performance Reach Code would modify the California Energy Code within the City to require a higher level of energy performance for new construction. Staff and the Green Committee recommend that the City Council consider adoption of an Energy Performance Reach Code. The proposed ordinance encourages electrification while still allowing for natural gas in buildings, although they may need to comply with additional energy performance measures. These additional measures may include increased energy efficiency (i.e., higher insulation), increased solar panel system size, and battery storage systems. For newly constructed buildings where fuel gas infrastructure is permitted due to any qualifying exceptions, they would be required to have sufficient electrical capacity, including reserved circuit breakers, electrical conduit, subpanels, panels, switchboards, and transformers, to facilitate future full-building electrification.

The ordinance would:

- Require higher energy performance for new single-family, low-rise multifamily buildings and non-residential buildings, including pre-fabricated buildings.
 - Provide for either reduced margins or exceptions for smaller homes and accessory dwelling units.
- Extend electric readiness requirements through:
 - Exterior location for space heat pump compressor in single-family;
 - Space and ventilation requirements for in-unit water heaters in multifamily buildings;
 - Electrical capacity requirements for multifamily central hot water systems, with an option to include space, ventilation, and condensate requirements.
- Be implemented through the submission of Title 24 reports, which are already a standard submission for all new projects.

The ordinance would NOT:

- Prohibit or prevent gas technologies.
- Apply to additions and alterations.
- Apply to unregulated loads such as equipment and appliances for cooking, laundry, and pools.

BACKGROUND:

Definitive climate data has revealed the urgent need for regulatory action. In 2016, California responded to this demand by adopting comprehensive goals to reduce GHG emissions and support local governments in carrying out community-level emissions reductions strategies. With the passage of Senate Bill 32 in 2016, California set targets to reduce statewide GHG emissions to 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050. To reach these state emissions targets, decarbonizing the building sector is essential. The primary method for the decarbonization of buildings is electrification, as escalating renewable portfolio standards have been and will continue to reduce the emissions content of our electricity.

The California Air Resources Board (CARB) 2022 Scoping Plan provides an implementation pathway to meet the State's carbon reduction goals. Statewide, residential and commercial buildings are responsible for approximately 25% of California's greenhouse gas (GHG) emissions when accounting for fossil fuels, such as natural gas consumed onsite and via electricity demand. The Scoping Plan recommends all-electric buildings become standard for residential construction starting in 2026 and non-residential construction starting in 2029 to improve indoor air quality and reduce GHG emissions to meet state goals.

In 2020, Goleta's energy use (from both electricity and natural gas) accounted for 40.4% of the community's total emissions. Of that total energy use, natural gas use in buildings accounted for 40% of Goleta's energy emissions. While efforts have been made to decarbonize the natural gas system through the development of renewable natural gas, there are insufficient supplies to properly meet state and local demand, ultimately leaving

the full decarbonization of the natural gas system infeasible. As stated in the 2021 California Energy Commission (CEC) Integrated Energy Policy Report, "Building electrification is the most promising decarbonization strategy and could result in significant reductions in residential and commercial building gas demand."

Taking action locally, the Goleta City Council voted unanimously to pass an all-electric new construction ordinance on April 18, 2023. However, on April 17, 2023, a three-judge panel of the Ninth Circuit Court of Appeals ruled in *CRA v. City of Berkeley*, that a Berkeley ordinance requiring all-electric new buildings was pre-empted by the federal Energy Policy and Conservation Act of 1975 (EPCA) and was therefore invalid. Due to the Ninth Circuit's decision to overturn the City of Berkeley's natural gas ban for new construction, Goleta's second reading to pass the ordinance was placed on hold. In January 2024, the full Ninth Circuit panel denied the City of Berkeley's request for an *en banc* (full court panel) hearing. In effect, the Ninth Circuit Court of Appeal ruling stands: Berkeley's all-electric ordinance is preempted by federal law, and, as a result, all-electric ordinances by any other city would not survive legal challenge.

Based on Council feedback and unanimous interest in pursuing electrification policy from the April 18, 2023 Council meeting, staff added "New Construction Building Electrification: Evaluate Reach Code Options & Policy Development" to the 2024-2025 PER Annual Work Program. Since the *CRA v. City of Berkeley* decision, many cities in California have evaluated alternative policy approaches to support new construction electrification. Staff has monitored new policy developments and collaborated with the Green Cities Network to find alternative pathways to incentivize electrification for new construction. Many jurisdictions with previously developed or adopted all-electric Reach Codes have been evaluating alternative options to pursue electrification and decarbonize their new and existing building stock. Notably, the Cities of San Luis Obispo, San Jose, Palo Alto, East Palo Alto, Santa Monica, Brisbane, Encinitas, and Santa Cruz have adopted Energy Performance Reach Codes in late 2023 and throughout 2024, which Goleta staff have been tracking closely.

On November 21, 2024, the Goleta City Council Energy & Green Issues Standing Committee was provided an update on building electrification policy and presented with a recommended pathway to improve new construction building performance. Staff were advised to construct a primer or brief to demonstrate the process of compliance for a project applicant and conduct further outreach to the community and developers that may be impacted by policy adoption in 2025. The Committee unanimously supported staff in developing an ordinance and bringing an Energy Performance Reach Code to City Council for review and consideration.

On February 4th, 2025, the Goleta City Council introduced and voted unanimously to approve the ordinance at First Reading.

DISCUSSION:

Staff recommends the Goleta City Council consider adopting an Energy Performance Reach Code that would increase the performance requirements for newly constructed

buildings, resulting in a reduction of building emissions. This Reach Code would not ban natural gas systems in new construction but require a uniformly applied increase in building performance to drive building decarbonization. The proposed Ordinance is included as Attachment 1.

With the City's all-electric ordinance for new construction on pause, supporting policies and programs that incentivize and remove barriers to electrification in existing buildings provides an opportunity to reduce carbon emissions and improve indoor air quality for Goleta residents. According to CARB, buildings emit about 66 tons per day (tpd) of NOx to the ambient air, about four times the emissions from electric utilities and nearly two-thirds the emissions from light-duty vehicles statewide. Electric heat pumps for space and water heating are more efficient than their natural gas counterparts and have the added safety benefits of lowering the potential for carbon monoxide poisoning and gas explosions.

The most cost-effective time to electrify is during the development of new construction, and new construction provides the best opportunity to avoid "lock-in emissions" which would be created through the inclusion of natural gas infrastructure in new buildings. While it will yield less emissions savings than an all-electric Reach Code, the City can still further support all-electric projects by increasing energy efficiency, solar, and/or battery requirements for both mixed fuel and all-electric buildings because it is typically simpler for all-electric buildings to comply.

Based on these observations, staff recommend adopting an Energy Performance Reach Code to reduce greenhouse gas emissions from new buildings.

Proposed Approach

Staff have identified local amendments to the California Energy Code (also known as a "Reach Code") to reduce greenhouse gas emissions in new buildings as the preferred alternative approach.

The proposed Energy Performance Reach Code would include requirements for new buildings that would result in higher efficiency and lower operational greenhouse gas emissions. To be consistent with state law, the City must make findings that the proposed Building Code amendments related to building energy performance are cost-effective and use less energy than the standard State Code. The California Energy Commission (CEC) must agree with the City's analysis before the local amendments to the California Energy Code can go into effect.

The California Energy Code establishes whole-building efficiency requirements, which account for a building's water heater, HVAC (heating, ventilation, and air conditioning) system, solar generating system, and insulation, among other things. However, it does not account for cooking equipment, laundry dryers, or other unregulated energy uses. As such, the proposed Energy Performance Reach Code does not regulate cooking equipment, laundry dryers, fireplace, outdoor cooking, or other energy uses not addressed by the California Energy Code.

California Energy Code Energy Evaluation Metrics

The 2022 California Energy Code provides baseline efficiency and building performance standards that a project must meet before receiving a building permit. The California Energy Code provides different metrics for different types of buildings. These metrics are summarized below, and described in a Memo (Attachment 2). (For more information, visit: https://energycodeace.com/resources/?itemId=66025)

Under the performance pathway of the 2022 Energy Code, new construction buildings must meet energy standards based on efficiency, emissions, and energy use. Single-family homes are rated using Energy Design Ratings (EDR), which measure energy efficiency, energy costs, solar impacts and more. A key focus of this proposal is the EDR1 metric, commonly known as hourly source energy.

Multi-family and non-residential buildings use similarly intentioned metrics and must meet standards for energy cost, emissions, and solar or battery contributions. The key metric of importance for this proposal is the "Source Energy" metric, which promotes renewable energy and decarbonization.

Proposed Energy Performance Enhancements

Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the Building Energy Efficiency Standards establish a process that allows local adoption of energy standards that are more stringent than the statewide standards. Under this process, the CEC requires any local amendments to the California Energy Code that affect energy use in regulated buildings to be cost-effective and use less energy than the standard requirements.

As noted in Table 1 below, the EDR1 of single-family residential new buildings would be required to be less than the EDR1 of the standard design by a compliance margin of at least 5 points. Smaller single-family homes would have a reduced compliance margin requirement of 2 points due to their smaller size and energy usage and thus lower capacity for energy improvements. Accessory dwelling units (ADUs) are exempt.

Table 1 also identifies a Source Energy performance requirement for new multi-family residential buildings (7% better than code for low-rise [three stories or fewer). High-rise [four stories or more] is not included as the State Code prescriptively requires a battery storage system in this building type, making it more difficult to comply with an extended reach beyond the state code.

New non-residential buildings would be required to have a compliance margin of 2%-14%, depending on the building type. Office facilities have a higher compliance margin of 14% because they tend to have larger conditioned floor areas, which translates to higher savings potential.

An exemption is available for non-residential projects designed with single-zone space-conditioning systems where California Energy Code Section 140.4(a)2 is applicable because the State Code prescriptively requires the use of heat pumps, making it difficult for mixed-fuel buildings to comply already.

Due to how EDR1 and Source Energy scores are calculated in the 2022 California Energy Code, the higher standards proposed in the Reach Code would incentivize new buildings to select electric appliances/mechanical systems, while also allowing mixed-fuel buildings that include energy efficiency measures, solar, and/or a battery. The enhanced performance requirements would apply equally to mixed-fuel and all-electric buildings and are cost-effective to achieve through the Energy Code's performance pathway without requiring appliances that exceed federal efficiency standards.

Table 1. Proposed Improved Energy Performance Standards

| Building Type | Performance Requirement |
|--------------------------------|---|
| Single-Family Residential | Buildings > 1,500 sq. ft EDR1 |
| | compliance margin of at least 5 points |
| | Buildings <1,500 sq. ft EDR1 |
| | compliance margin of at least 2 points |
| Multi-Family Residential (Low) | Source Energy compliance margin of at |
| | least 7% |
| Non-Residential | Source Energy compliance margin of at |
| | least the following: |
| | Hotel – 7% |
| | Small Restaurants – 2% |
| | Office – 14% |
| | All Other Building Types – 7% |
| Exceptions | Single Family: Accessory Dwelling Units |
| | (ADUs) |
| | Non-residential: When non-residential |
| | occupancies are designed with single |
| | zone space-conditioning systems |
| | complying with Section 140.4(a)2. |

Electric Ready Requirements

The 2022 California Energy Code currently requires certain mixed-fuel buildings to include "electric-ready" components, including electric outlets near certain natural gas appliances, appropriate ventilation for future heat pump appliances, and reserved and labeled breakers in the electrical panel for future electric appliances.

The proposed Reach Code adds to the 2022 California Energy Code by including electric readiness provisions (which are coming 2025 California Energy Code and will be effective on January 1, 2026). This Reach Code essentially brings forward the coming electric readiness regulation by several months.

Practical Effect of the Energy Performance Reach Code

Because the City is working within the confines of the California Energy Code, the description of the proposed approach above is inherently technical. This section illustrates the practical effect of the proposed approach by providing a simplified example of how a single-family home designer would comply with the Energy Performance Reach Code.

A building designer working on a single-family home built to the State's Energy Code minimum would likely include high efficiency LED lighting, rooftop solar, an electric heat pump hot water heater, a natural gas furnace, insulated walls, an insulated attic, and efficient windows, among other things. The designer would load the building design into a computer model and estimate its energy performance. The energy modeling software would provide standard reporting metrics, including an EDR1 score. The designer would then compare the EDR1 score to a standard design building on the CF-1R form. The designed building's EDR1 score would be equal to the standard design building's EDR1 score and would comply with that part of the California Energy Code.

With the Reach Code in place, the designer would now need to achieve an EDR1 compliance margin that is 5 points better than the standard design building. If this building designer replaced the gas furnace with a commonly available electric heat pump HVAC system, the building would achieve an EDR1 compliance margin that is 5 points better than the State Code's minimum and would be consistent with the proposed Reach Code requirements. Alternately, the building designer could keep the gas furnace and install a battery storage system, which would also result in an improved EDR1 compliance margin of more than 5 points. The building designer also has the option to develop a package of efficiency and solar measures; so long as the measures lead to an increased EDR1 compliance margin of 5 or more points better than the State Code's minimum, the new building is consistent with the Reach Code.

This example is similar for the other building types where the compliance margins could be achieved by either installing electric heat pump HVAC equipment or installing some package of additional solar capacity and efficiency measures.

Cost-Effectiveness

The California Energy Commission requires any local amendments to the California Energy Code that affect energy use in regulated buildings to be cost-effective and to use less energy than the standard requirements. The CEC requires the local agency to adopt a determination that the energy standards are cost-effective at a public meeting. The determination must subsequently be filed with the Energy Commission. In support of Reach Code development, the California Energy Codes and Standards Statewide Utility Program developed and published the following studies:

 2022 Cost-Effectiveness Study: <u>Single Family New Construction Study</u> and the associated cost-effectiveness data;

- 2022 Cost-Effectiveness Study: <u>Multifamily New Construction Study</u> and the <u>associated cost-effectiveness data;</u> and
- 2022 Code: <u>Non-residential New Construction Reach Code Cost-effectiveness Study</u> and the <u>associated cost-effectiveness data</u>.

These studies and the associated cost-effectiveness data are highly detailed and are included in the record to support Green Committee and Council's findings and policy decisions (Attachment 3). These studies and the associated cost-effectiveness data are the basis for staff's cost-effectiveness findings and are sufficient to illustrate compliance with the requirements set forth under California Administrative Code Chapter 10-106.

Based on these studies, staff finds the proposed local amendments to the 2022 California Energy Code to be cost-effective and consume less energy than otherwise permitted by Title 24, Part 6.

Incentives

Incentive and rebate programs are available to support the development of all-electric housing and the adoption of clean energy solutions, contributing to California's decarbonization goals. Notably, Central Coast Community Energy (3CE) provides rebates for housing developers and homeowners to build all-electric housing. Rebates are available for multiple types of housing developments, with enhanced rebates available for homeowners building Accessory Dwelling Units (ADUs) and for Single-family Disaster Rebuilds. See Attachment 4 for more information on rebates and incentives.

Public Engagement

As described in the 2023 Council Agenda reports, extensive outreach was conducted in various community forums and settings affirming that all-electric new buildings are feasible, cost-effective, and supportive of the City's climate action goals. The City coordinated and collaborated with the County of Santa Barbara, City of Carpinteria, and numerous utilities, consultants and energy-focused organizations to conduct outreach. The regional group organized an Advisory Committee of stakeholders, hosted multiple public workshops discussing Reach Codes and the benefits of electrification, and conducted targeted outreach to the South Coast Chamber of Commerce, the Joint Affordable Housing Task Group, Santa Barbara Association of Realtors and the Regional Climate Collaborative Equity and Outreach Subcommittee. The work conducted in support of the previous all-electric Reach Code provides a groundwork of understanding around building electrification in the community and supports any future Council policies related to low-emissions new buildings.

Staff has continued to collaborate with the County of Santa Barbara, City of Santa Barbara, and the City of Carpinteria, including recent meetings with regional stakeholders such as the South Coast Chamber of Commerce Public Policy Committee and Santa Barbara Association of Realtors. In addition to targeted stakeholder outreach, on January 14, 2025, staff collaborated with the County of Santa Barbara to conduct additional community outreach on the Energy Performance Reach Code through a public workshop

with various stakeholders in attendance, where staff presented on the Reach Code and held a discussion with the public and answered three questions that were asked.

Timing & Next Steps

Should City Council move forward with the second reading and adoption, staff would then submit the ordinance to the California Energy Commission (CEC) and California Building Codes and Standards. Before the Reach Code goes into effect, the CEC must approve the local energy code following the second reading. The CEC ensures that the local energy Reach Code improves building energy performance, is cost-effective and does not pre-empt Federal standards regulating appliance energy use. It is important to note that the California Building Code, which includes the California Energy Code, is updated every three years. Should City Council adopt the Energy Performance Reach Code, the local Reach Code would expire with the current Building Code on December 31, 2025. Staff is already coordinating regionally with other jurisdictions in San Luis Obispo County and Santa Barbara County on developing potential Reach Codes for the next cycle.

FISCAL IMPACTS:

There is no fiscal impact associated with this item.

GOLETA STRATEGIC PLAN:

City-Wide Strategy: 1. Support Environmental Vitality

Strategic Goal:

- 1.1.3. Encourage renewable energy generation and use through installation of solar panels, battery energy storage, electric vehicle charging stations and similar measures
- 1.1.4. Adopt a "Reach" Building Code

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

This ordinance has been assessed in accordance with the California Environmental Quality Act (Cal. Pub. Res. Code, § 21000 et seq.) ("CEQA") and the State CEQA Guidelines (14 Cal. Code Regs.§ 15000 et seq.) and is categorically exempt from CEQA under CEQA Guidelines § 15061(b)(3), which exempts from CEQA any project where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment. Adoption of the proposed amendment would not be an activity with potential to cause significant effect on the environment. Therefore, it can be seen with certainty that there is no possibility that the ordinance in question may have a significant effect on the environment; accordingly, the ordinance is categorically exempt from CEQA. A copy of the NOE is provided as an Attachment.

ALTERNATIVES:

1) Amend the ordinance and re-introduce it for first reading; or 2) direct staff to return with further information; or 3) take no action.

LEGAL REVIEW BY: Isaac Rosen, Acting City Attorney

APPROVED BY: Robert Nisbet, City Manager

ATTACHMENTS:

- Ordinance No. 25-__ entitled, "An Ordinance of the City Council of the City of Goleta, California, Amending Title 15, Chapter 15.15 Entitled "Energy Code" of the Goleta Municipal Code to Adopt the 2022 Edition of the California Building and Energy Code and Local Amendments Thereto and Determine the Ordinance to be Exempt from the California Environmental Quality Act"
- 2. Memo on Energy Performance Approach for Goleta Reach Code
- 3. 2022 Cost Effectiveness Studies (Multifamily, Single-family, Non-residential)
- 4. Building Performance Incentives
- 5. CEQA Notice of Exemption
- 6. Presentation