

Attachment A. Summary of Proposed Local Amendments to the 2022 California Energy Code

The following summarizes the local amendments to the 2022 California Energy Code, which utilizes the 2025 California Energy Code model language.

California Energy Code Energy Evaluation Metrics

The 2022 Energy Code contains energy, water efficiency requirements, and indoor air quality requirements for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The California Energy Code provides different metrics for different types of buildings and is organized into three categories:

1. **Single-Family Residential:** A new single-family residential building must meet or exceed all “Energy Design Ratings” (EDR). There are three EDR categories:
 - a. EDR1 (Source Energy) – EDR1 is a score representing a building’s energy efficiency expressed in terms that serve as a proxy for greenhouse gas emissions.
 - b. EDR2 (Efficiency) – EDR2 is a score representing a building’s energy efficiency expressed in terms of the value and cost of energy consumed at different times of the day and year.
 - c. EDR Total (Total Energy Design Rating) is a score representing the building’s total energy expressed in terms of the value and cost of energy consumed at different times of the day and year while also factoring in solar and energy demand flexibility.
2. **Multi-Family Residential:** A new multi-family residential building must meet or exceed a standard that combines the value and cost of energy consumed at different times of the day and year (referred to as Time Dependent Valuation of energy, or TDV), and the emissions from the building’s energy source. The 2022 Source Energy metric is new for all multifamily buildings, and it was added to support decarbonization and electrification policy goals.
3. **Non-Residential:** A new non-residential building must also meet or exceed a standard that uses TDV energy and Source Energy emissions scores.

Proposed Energy Performance Enhancements

The proposed Reach Code would increase the required EDR1 score for single family residential buildings and the required Source Energy scores for all other buildings. Source Energy acts as a proxy for carbon emissions. By increasing these requirements, the result is a decrease in energy use and emissions from newly constructed buildings. As noted in Table 1, single-family residential new buildings would be required to exceed the standard design Total Source Energy Design Rating (EDR1) by at least <9> . Table 2 (below) also identifies Source Energy performance requirement for new multi-family residential buildings (<10%> for three stories or fewer, <4%> for four stories or more), and <7%> for new non-residential buildings.

Because of how the EDR1 and Source Energy scores are calculated in the 2022 California Energy Code, the higher standards proposed in the Reach Code would allow new buildings to include electric appliances and/or mechanical systems, or allow the use of mixed-fuel appliances and systems which would include additional energy efficiency measures, PV systems, and/or a battery. The enhanced performance

requirements would apply equally to mixed-fuel and all-electric buildings and are cost-effectively achievable through the energy code’s performance pathway without requiring appliances that exceed federal efficiency standards.

Table 1. Proposed Energy Performance Standards

Building Type	Performance Requirement
Single Family Residential Buildings	Exceed the standard EDR1 requirement by at least <9>
Multi-Family Residential (Low-rise, ≤ 3 stories)	Exceed the standard Source Energy requirement by <10%>
Multi-Family Residential (High-rise, ≥ 4 stories)	Exceed the standard Source Energy requirement by <4%>
Non-Residential	Exceed the standard Source Energy requirement by <7%>

Electric Ready Requirements

The proposed reach code would add to the current 2022 California Energy Code requirements for “electric ready” components in buildings, including electric outlets near natural gas appliances, appropriate ventilation for future heat pump appliances, and reserved and labelled breakers in the electrical panel for future electric appliances. Table 2 represents the current 2022 California Energy Code requirements, and those proposed to be added with the reach code.

Table 2. Electric Ready Infrastructure

Building Type	Current Energy Code	Proposed Reach Code
Single-Family Residential	<ul style="list-style-type: none"> Gas-fueled furnaces Gas-fueled water heaters Gas-fueled clothes dryers Gas-fueled cooktops 	<ul style="list-style-type: none"> No additions
Multifamily Residential	<ul style="list-style-type: none"> Gas-fueled furnaces Gas-fueled water heaters (Excludes central water-heating systems) Gas-fueled clothes dryers Gas-fueled cooktops 	<ul style="list-style-type: none"> Gas-fueled water heaters (Includes central water-heating systems)
Nonresidential	<ul style="list-style-type: none"> No current requirements 	<ul style="list-style-type: none"> Commercial kitchens Control for HVAC hot water temperature Any other systems using gas or propane