Proposed Energy Code Amendment to Reduce Greenhouse Gas Emissions from New Buildings

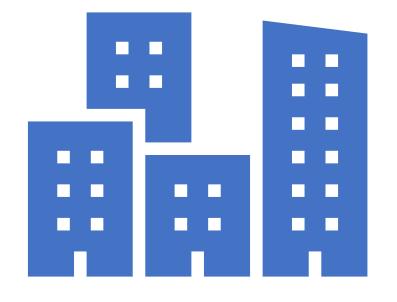
Board of Supervisors October 1, 2024



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Today's Presentation





Ordinance Adoption Process

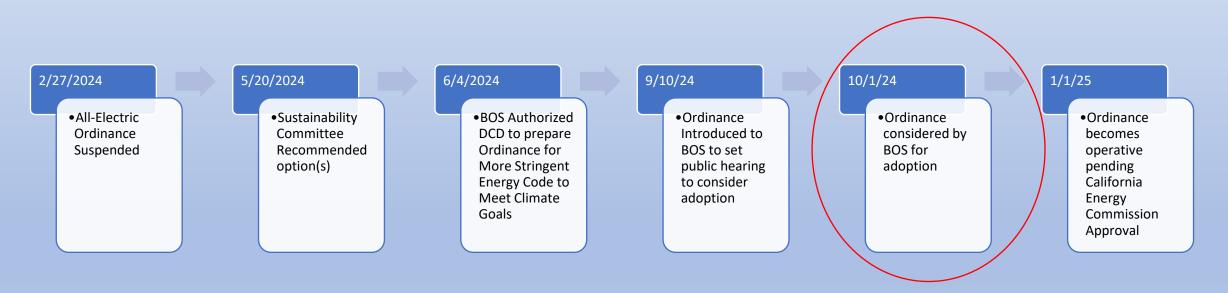


Ordinance Overview

Ordinance Process

On February 27, 2024, the Board of Supervisors suspended the all-electric ordinance in response to the to the Berkeley decision

□ The proposed ordinance is planned for an <u>operative date of January 1, 2025</u>



Proposed Ordinance

Purpose:

To replace emissions reductions lost from the suspended all-electric ordinance so the County can meet its 2024 Climate Action and Adaptation Plan goals.

Proposed Action:

Amend the 2022 California Building Code to increase energy efficiency standards for the design and construction of newly constructed residential buildings, hotels, offices, and retail buildings with an operative date of January 1, 2025



Contra Costa County Climate Action and Adaptation Plan 2024 Update

August 2024 Public Review Draft #2



Proposed Ordinance

Building Type	<u>Climate Zone 3</u> West County Energy Improvement Margin	<u>Climate Zone 12</u> Central/East County Energy Improvement Margin	Cost-effective Design Options
Single-Family Homes, Duplexes and Townhomes ¹	9 EDR1 Points	11 EDR1 Points	Install second heat pump system or install battery storage and additional solar.
Detached Accessory Dwelling Units (ADUs) ¹	Not yet proven cost-effective. No change recommended.	6.6 EDR1 Points	Only for Climate Zone 12, install second heat pump system, or install battery storage and additional solar.
Low-rise Multifamily (up to 3 habitable stories) ²	10%	11%	More heat pump system(s), or install battery storage and/or additional solar.
High-rise Multifamily Residential (4 or more habitable stories) ²	4%	4%	Would need additional solar above current code requirement(s).
Non-residential (Office, Retail, and Hotel) ²	5%	4%	Would need additional efficiency above current code requirement(s).

¹ Energy Design Rating (EDR1) - Rates the building energy efficiency based on hourly source energy use for the home measured in kBtu/ft²-yr. It includes energy use for the building envelope, indoor air quality (IAQ), HVAC, water heating and unregulated loads. The metric approximates the building's greenhouse gas (GHG) emissions to support California's GHG reduction goals.

² Source Energy (SE) - The log run marginal source energy of fossil fuels that are combusted as a result of building energy consumption considering the long-term effects of Commission-projected energy resource procurement. For a given hour, the value in that hour for each forecasted year is averaged to establish a lifetime average source energy.

Other Provisions & Exceptions

Other Provisions

• Electric readiness in nonresidential new construction where gas is installed for hotel, office and retail buildings

Exceptions

- Small homes exempt from installing solar under current code
- Nonresidential new construction with single-zone conditioning systems
- Projects with community solar and/or battery storage may use these systems to meet compliance
- Additions and alterations

Questions?



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