



# County of Monterey

Item No.

## Board Report

Board of Supervisors  
Chambers  
168 W. Alisal St., 1st Floor  
Salinas, CA 93901

Legistar File Number: 22-1028

November 08, 2022

Introduced: 10/31/2022

Current Status: ATS Paused

Version: 1

Matter Type: General Agenda Item

- a) Receive a status update on the Sustainability Program's exploration of reach codes to reduce greenhouse gas emissions from new construction through reach codes in the 2022 Building Code, and
- b) Consider reach code options and direct staff on which options to further develop then return to the Board of Supervisors; and
- c) Provide further direction as appropriate.

### RECOMMENDATION:

It is recommended that the members of the Board of Supervisors:

- a) Receive a status update on the Sustainability Program's exploration of reach codes to reduce greenhouse gas emissions from new construction through reach codes in the 2022 Building Code, and
- b) Consider reach code options and direct staff on which options to further develop then return to the Board of Supervisors; and
- c) Provide further direction as appropriate.

### SUMMARY:

On October 26, 2021, the Sustainability Program gave a presentation to the Board of Supervisors in response to referral 2021.14 regarding EV charging station (EVCS) accessibility in the County. At that time, staff recommended adopting a Clean Fleet Purchasing Policy along with several other measures, including a recommendation to explore a "reach code" with respect to EV charging at Multi-Family Unit dwellings and the Board recommended that staff explore these concepts further. A "reach code" refers to a local amendment to the building code or ordinance that "reaches" beyond the state minimum requirements in building design and construction, creating opportunities for local governments to lead the way on clean air, climate solutions, and the renewable energy economy. During the climate action planning process and through other engagement efforts, staff has heard from the public regarding the adoption of a reach code in Monterey County and is presenting a few options for the consideration of this Board.

### DISCUSSION:

The California Building Code operates on a 3-year cycle before being updated to regularly increase efficiency requirements for new construction in the state. The 2022 California Building Code will be

effective from January 1, 2023- January 1, 2026. This 2022 Code has several notable updates that relate to the County's greenhouse gas reductions goals in the built environment, including setting electric heat-pumps as the new standard for some space and water heating applications, electric-prewiring for new buildings, increased electric vehicle requirements, and new solar and battery storage requirements.

In addition to these improvements, the County has an opportunity to adopt a "reach code" to take action towards accomplishing our greenhouse gas emissions reductions goals. A "reach code" refers to a local building code that "reaches" beyond the state minimum requirements in building design and construction, creating opportunities for local governments to lead the way on clean air, climate solutions, and the renewable energy economy. Limiting natural gas in new construction, increasing EV charging requirements, and expanding rooftop solar requirements are key actions the County can take now to better prepare our communities for the future.

Over 60 California jurisdictions have used reach codes to limit gas in new construction to meet climate goals and improve health outcomes for residents. Gas infrastructure and appliances in residential settings leads to increased levels of air pollution that negatively impact residents, especially vulnerable populations and low-income groups that often live in poorer quality buildings with decreased ventilation. This indoor air pollution consists of PM2.5, carbon monoxide, formaldehyde, and NOx. Notably, children raised in homes with gas stoves are 40% more likely to develop asthma.

The County is committed to reducing carbon emissions from all sources by 40% by 2030 and reach carbon neutrality by 2045. The Sustainability Program is working to develop the County's Community Climate Action and Adaptation Plan to accomplish these goals and has discussed reach codes with stakeholders as a potential strategy. Community stakeholders cited concerns for increasing utility bills for requiring additional electricity usage, but were overall supportive of the idea of a reach code limiting gas and adopting all-electric buildings in new construction. Based on the amount of new homes the County needs to fulfill its Regional Housing Needs Assessment obligations, staff has found that an all-electric reach code for new construction would eliminate a greenhouse gas emissions increase in the residential sector by over 12,000 metric tons of CO2 equivalent over 30 years. However, the inverse is also true, meaning that allowing new construction with expanded natural gas infrastructure would represent a 17% increase in carbon emissions from the 2022 Code cycle in proportion with the County's 2019 greenhouse gas emissions baseline for residential emissions. If the County does not prevent these emissions with an all-electric ordinance, they will have to be reduced retroactively at greater cost to the County and residents.

Demonstrating cost-effectiveness is a requirement for adopting a reach code tied to the Building Code, and staff are exploring options that are the most cost-effective for residents. Additional requirements for reach codes are that they must include findings for local climatic reasons, they cannot exceed federal efficiency preemptions and they must be approved by the California Building Standards Commission and sometimes the California Energy Commission (CEC).

In order to adopt a reach code tied to the Building Code cycle, the County would need to first adopt the code changes locally after two readings. If the County makes changes to Title 24 Part 6, staff will then submit an application to the CEC who will approve the application if it is cost-effective. After CEC approval, staff will then file the code changes with the California Building Standards Commission who will approve the code changes. Once approved by the California Building Standards Commission, the reach code will go into effect.

Some jurisdictions, such as the City of Santa Cruz, choose to pass a local health and safety ordinance to limit gas in new construction because of acute benefits for resident health and climate action. These gas moratoriums are commonly referred to as reach codes, but do not need approval outside of the County. They are also more long-lasting since they are not tied to the Building Code's 3-year cycle.

Staff is presenting the following options for consideration by the Board:

1. Bring forward a County ordinance prohibiting the expansion of gas infrastructure in new construction and requiring new construction to be all-electric.
2. Bring forward a County ordinance prohibiting the expansion of gas infrastructure in new construction and requiring new construction to be all-electric with increased requirements for electric vehicle charging.
3. Bring forward County ordinance establishing increased electric vehicle charging requirements for new construction.
4. Provide guidance to staff, postpone adoption of reach codes, and pursue further exploration and engagement of reach code concepts.

OTHER AGENCY INVOLVEMENT:

Health Department: Staff met to discuss intersection of indoor air pollution, environmental sustainability, and equity. The Health Department and Sustainability Program are aligned on the benefits of an all-electric reach code.

Housing and Community Development: Staff met to align the reach code process with the adoption of the 2022 Building Code, develop a plan to bring this item to the Board, and conduct stakeholder engagement.

FINANCING:

There is no financial impact from receiving this report. It is expected that the adoption of this policy would result in an overall savings to the County and residents based on the State provided 2022 Cost-Effectiveness Study: Single-Family New Construction. This study shows that in Monterey County's climate zones 3 & 4 choosing to construct an all-electric home results in initial savings between \$6,483-6,490. Staff used the State's Cost-Effectiveness Explorer tool to develop all-electric code reach code alternatives that are the most cost-effective to residents.

BOARD OF SUPERVISORS STRATEGIC INITIATIVES:

Economic Development

Administration

Health & Human Services

Infrastructure

Public Safety

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*Margan Ruiz-Ignacio*  
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on behalf of Nicholas E. Chiulos

11/1/2022 | 2:29 PM PDT

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Attachments:

Reach Code Community FAQ

Model All Electric Municipal Ordinance  
Model 2022 Part 11 All Electric Model Reach Code  
Model 2022 EV Part 11 EV Reach Code  
Reach Code Community Outreach