



County of San Mateo

Inter-Departmental Correspondence

Department: COUNTY MANAGER: OFFICE OF SUSTAINABILITY

File #: 20-067

Board Meeting Date: 2/25/2020

Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: Jim Eggemeyer, Director, Office of Sustainability
Steve Monowitz, Community Development Director, Planning & Building Department

Subject: Adoption of an Ordinance - Local amendments to the California Energy and Green Building Code

RECOMMENDATION:

Adopt an ordinance amending the Energy and Green Building Codes of the County of San Mateo Municipal Code to make local amendments to the State Building Standards Code, previously introduced on February 11, 2020, and waive the reading of the ordinance in its entirety.

BACKGROUND:

Building Standards Code Adoption Process

Every three years, the State of California adopts new building standards that are organized in Title 24 of the California Code of Regulations, referred to as the California Building Standards Code. This regular update is referred to as a "code cycle." The most recent code cycle was adopted in 2019 with an effective date of January 1, 2020. This code cycle is an opportunity to adopt optional local energy code amendments, or reach codes, that exceed State code standards. Historically, cities and counties have adopted reach codes to the California Energy Code (Title 24, Part 6) and the California Green Building Standards - CALGreen (Title 24, Part 11) codes to meet local climate action goals.

Optional local amendments or reach codes must be filed with the California Building Standards Commission for the amendments to be in effect in the local jurisdiction. In addition, the local amendments of the Energy Code must be approved by the California Energy Commission (CEC) and filed with the California Building Standards Commission (CBSC), requiring the jurisdiction to demonstrate that the amendments to the code are cost effective and do not represent an unreasonable burden to builders and ultimately, the building's occupants. Unlike amendments to the Energy Code, a cost-effectiveness study is not required for amendments to the Green Building Standards Code for increased amounts of EV infrastructure.

Community Benefits

Natural gas usage in buildings is one of the largest sources of greenhouse gas (GHG) emissions. Reducing or eliminating natural gas usage in the building sector is an important component of climate mitigation to achieve the State's goal of Carbon Neutrality by 2045. Since Senate Bill 100 requires a 100% clean electric grid by 2045, passing a reach code that prohibits or disincentivizes natural gas infrastructure will enable San Mateo County to work towards achieving carbon neutrality by 2045.

Support for Local Reach Codes and Local Momentum

Several agencies have stepped up to support local governments in adopting local amendments or reach codes. The California investor-owned utilities (IOUs), including PG&E, Codes and Standards program led the development of a cost-effectiveness study for the Energy Code reach codes that examined different approaches for construction of new single family, low-rise multifamily, high-rise multifamily, and commercial buildings (referred to as Buildings throughout the report). Peninsula Clean Energy (PCE) and Silicon Valley Clean Energy (SVCE) leveraged the statewide cost-effectiveness analysis to draft model code ordinances and provide technical support to jurisdictions interested in adopting reach codes. Five jurisdictions in San Mateo County have now adopted energy and/or green building reach codes for 2020. An additional 13 jurisdictions in San Mateo County are participating in this effort by bringing code options to their Councils for consideration.

DISCUSSION:

County of San Mateo Updates from Study Session

On October 22, 2019, the Board of Supervisors received a report and heard a presentation regarding the inclusion of local amendments to the 2019 Building Code update and directed staff to prepare local amendments for the Board's consideration. The Board requested additional information to be presented during the first reading, including an analysis of upfront building and operational costs of all electric construction and EV infrastructure, a summary of engagement of homebuilders serving unincorporated County and a legal memo for future exploration of a natural gas ban. An analysis of costs is included in Attachment D. Community engagement and outreach conducted for the reach codes is described in Attachment E. A legal analysis on a gas ban will be presented to the Board in a separate communication in early 2020.

This report introduces an ordinance to amend the San Mateo County Municipal Ordinance Code to adopt the local amendments for the 2019 State code in alignment with the Board's feedback from October 22, 2019.

Energy Code Amendments

Staff proposed a local amendment requiring all new residential and non-residential buildings to use electric space and water heating. The initial proposal allowed for all building types, the use of natural gas for cooking and decorative fixtures (fireplaces, firepits, etc.). The Board amended the proposed ordinance during the Board of Supervisor's meeting on February 11, 2020. The proposed ordinance was amended to eliminate gas for cooking, fireplaces and decorative appliances with the exception that gas cooking appliances may be used for commercial applications at the discretion of the County's Building Official. The ordinance as adopted on February 11, 2020 requires new buildings to be constructed without natural gas infrastructure and systems. Solar photovoltaic requirements are also included in the Energy Code local amendments. Staff is proposing that all building types install a minimum size system. All electric or mostly electric buildings that have solar are more resilient, cost-effective, and environmentally sustainable. A summary of the requirements can be found in Attachment C.

Green Building Code Amendments

The Green Building code amendments for consideration would require additional electric vehicle charging infrastructure (EVCI) for the construction of new buildings. Increased EVCI would enable

more people to purchase, drive and charge EVs in San Mateo County. It is especially important to have chargers where vehicles are parked for long periods of time including the home and workplace. Staff is recommending two EV outlets for single family and charging access for 50% of multifamily dwelling units to provide more home charging options. For offices, staff is recommending 10% of spaces to be equipped with Level 2 EV charging stations, 10% to have Level 1 EV Ready chargers, and an additional 30% of spaces to be EV capable. For new commercial construction, staff is recommending 6% of the parking spaces be equipped with Level 2 EV charging stations and an additional 5% of spaces to be Level 1 EV Ready. A summary of the requirements can be found in Attachment C.

Adoption Process

Staff is recommending that the Board conduct the first reading of the ordinance to adopt by reference the local amendments to the 2019 Energy and Green Building Codes that are being introduced today. Staff also recommends that the Board provide direction to staff to schedule the second reading of the ordinance in February 2020. If the Board adopts the ordinance at the second reading, the local amendments will need to be submitted to the CEC and CBSC for consideration and approval before taking effect.

ENVIRONMENTAL REVIEW

The local amendments are exempt from the requirements of the California Environmental Quality Act ("CEQA") on the grounds that these standards are more stringent than the State energy standards, there are no reasonably foreseeable adverse impacts and there is no possibility that the activity in question may have a significant effect on the environment.

FISCAL IMPACT:

No Net County cost.

ATTACHMENTS

- A) Local Amendments to the Energy Code with Changes Demonstrated
- B) Local Amendments to the Green Building Code with Changes Demonstrated
- C) Summary of Local Amendments
- D) Cost of All-Electric Construction and EV Charging Infrastructure
- E) Summary of Community Engagement and Outreach
- F) 2019 Building Electrification & EV Infrastructure Reach Code Initiative Frequently Asked Questions