



# COUNCIL REPORT

**DATE:** November 1, 2022

**CATEGORY:** Public Hearing

**DEPT.:** Community Development, Fire

**TITLE:** **Ordinances Amending Chapters 8, 14, and 24 of the City Code to Adopt the 2022 California and 2021 International Codes, Incorporating by Reference Other Uniform Codes and Reach Codes**

## **RECOMMENDATION**

1. Introduce an Ordinance of the City Of Mountain View Amending Chapter 8, Articles I Through XIV, of the Mountain View City Code, Relating to the Adoption of the 2022 California Building Codes, Incorporating by Reference Other International and Uniform Codes, and Adoption of the 2021 International Property Maintenance Code and 1997 Uniform Code for the Abatement of Dangerous Buildings, to be read in title only, further reading waived, and set a second reading for December 13, 2022 (Attachment 1 to the Council report).
2. Introduce an Ordinance of the City of Mountain View Amending Chapter 14, Articles I and II, of the Mountain View City Code, Relating to the Adoption of the 2021 International Fire Code, Incorporating by Reference the Amendments Adopted by the State of California to Establish the 2022 California Fire Code, to be read in title only, further reading waived, and set a second reading for December 13, 2022 (Attachment 2 to the Council report).
3. Introduce an Ordinance of the City of Mountain View Amending Chapter 24 of the Mountain View City Code Relating to Hazardous Materials, to be read in title only, further reading waived, and set a second reading for December 13, 2022 (Attachment 3 to the Council report).

## **BACKGROUND**

The State adopts new California Building Standards Codes (CBSC) every three years. The new 2022 State Codes were sent to cities in July 2022 and go into effect on January 1, 2023. The State of California allows cities to amend the CBSC to make them more restrictive, provided required findings are made. The amendments must be necessary to address local climatic, geologic, environmental, or topographic conditions that affect the health, safety, and welfare of residents. This year, the Building Inspection Division went through an intense three-month review process with Division staff, consultants, the Fire Department, the Sustainability Division, and outside

agencies to ensure that local amendments, Reach Codes, and recommendations from Silicon Valley Clean Energy (SVCE) were incorporated into the adopted code.

To maintain consistency with other cities in the State and region, staff proposes that the City of Mountain View adopt the 2022 CBSC, which consists of Building, Fire, Residential, Electrical, Plumbing, Mechanical, Energy, Green Building, Historical, Existing Building, and Referenced Standards. In addition, staff proposes that the City adopt the 1997 Uniform Code for the Abatement of Dangerous Buildings, 2021 International Fire Code, and the 2021 International Property Maintenance Code (IPMC) by reference and with local amendments.

Staff is also proposing several local amendments, including “Reach Codes,” which are described in the next section of this Council report. Since the Reach Codes are local amendments to the State’s building energy efficiency standards (located in the California Energy Code), the City is required to file an application with the California Energy Commission (CEC), along with a cost-effectiveness study as discussed later in this Council report. The local amendments must be adopted and the application filed and accepted by the CEC before January 1, 2023 for the local amendments to take effect.

## **Outreach**

City of Mountain View staff in the Building Inspection Division and Sustainability Division held a virtual community meeting on October 24, 2022 to solicit community feedback on the City’s proposed Reach Codes amendments. Staff from SVCE was also in attendance. Email notices were sent to developers, interest groups, and residents. There was a total of 30 attendees at the meeting. Discussion included specifics of the code amendments and staff from SVCE discussed potential rebates and incentives for homeowners to electrify. Comments received were in support for the revisions and included suggestions that the City consider requirements for existing buildings.

## **ANALYSIS**

### **City-Specific Amendments—Reach Codes**

The recommended model Reach Codes serve as a framework for building electrification and electric vehicle charging infrastructure requirements in new construction, and each participating city is determining the most appropriate level of proposed amendments for Reach Code measures based on local conditions. Because of the significant revisions made by Mountain View to further building electrification during the adoption of the triennial code update in 2019, the list of amendments to meet model code requirements is relatively small. However, the changes

made in 2019 have to be readopted along with the new amendments since the State Code does not require building electrification.

Staff is proposing the following amendments to the CBSC, International Codes, and City ordinances. Pertinent new amendments are summarized in Attachment 4 and outlined below. In some cases, the recommendations are different from the SVCE recommendation for the following reasons:

1. The 2019 Mountain View Reach Codes have a more stringent requirement than the 2022 recommendations from SVCE.
2. The 2022 Reach Codes amendments propose installation based on system size to accommodate all-electric buildings (100% kilowatt hour (kWh) consumption offset), which is more stringent than 2022 recommendations from SVCE.
3. The EV parking amendments adhere to the 2022 California Codes, Table A5.106.5.3.2, and are more restrictive than the proposed SVCE recommendations.

**Table 1: Recommended Amendments for the 2022 Adopted Reach Codes**

Occupancy Type	2019 Mountain View Reach Code	2022 Reach Code Recommendation by SVCE	2022 Mountain View Reach Code
<b>NEW:</b> Single-Family, Duplex, and Townhomes	<ul style="list-style-type: none"> <li>• PV prewired for all-electric building (100% kWh usage)</li> <li>• (1) EV level 2 ready</li> <li>• (1) EV level 1 installed</li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• (1) EV Level 2 ready</li> <li>• (1) EV Level 1 ready</li> </ul>	<ul style="list-style-type: none"> <li>• PV installation prewired to accommodate an all-electric building (100% kWh consumption) and battery storage installation per 2022 CA Codes (Energy and Green)</li> <li>• (1) EVCS Level 2 installed</li> <li>• (1) EV Level 1 ready</li> </ul>
<b>EXISTING:</b> Single-Family, Duplex, and Townhomes	Current requirements: <ul style="list-style-type: none"> <li>• None</li> </ul>	Parking additions or electrical panel upgrades shall reserve breaker space and capacity for EV requirements for new construction.	<ul style="list-style-type: none"> <li>• EV Parking: Adopt SVCE recommendation.</li> </ul>

Occupancy Type	2019 Mountain View Reach Code	2022 Reach Code Recommendation by SVCE	2022 Mountain View Reach Code
<b>NEW:</b> Multi-Family (with <u>less than</u> or <u>equal to</u> 20 units)	<ul style="list-style-type: none"> <li>• PV install 50% of allowable roof area</li> <li>• 15% EV Level 2 installed</li> <li>• Level 3 fast charger for every 100 spaces</li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• 40% EVCS Level 2 ready</li> <li>• 60% EV Level 1 ready (low power)</li> </ul>	<ul style="list-style-type: none"> <li>• PV installation prewired to accommodate an all-electric building (100% kWh consumption) and battery storage installation per 2022 CA Codes (Energy and Green)</li> <li>• EV Parking: Adopt SVCE recommendation.</li> </ul>
<b>NEW:</b> Multi-Family (with <u>more than</u> 20 units)	<ul style="list-style-type: none"> <li>• PV install 50% of allowable roof area</li> <li>• 15% EV Level 2 installed</li> <li>• Level 3 fast charger for every 100 spaces</li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• 15% EVCS Level 2 ready</li> <li>• 85% EV Level 1 ready (high power)</li> </ul>	<ul style="list-style-type: none"> <li>• PV installation prewired to accommodate an all-electric building (100% kWh consumption) and battery storage installation per 2022 CA Codes (Energy and Green)</li> <li>• 15% EVCS Level 2 installed</li> <li>• 85% EV Level 1 ready</li> <li>• Level 3 fast charger for every 100 spaces</li> </ul>
<b>NEW:</b> Mixed-Use	<ul style="list-style-type: none"> <li>• Meet the EV and PV requirements applicable to each occupancy</li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• Meet the EV requirements applicable to each occupancy</li> </ul>	<ul style="list-style-type: none"> <li>• Meet the EV, PV, and battery storage requirements applicable to each occupancy</li> </ul>
<b>NEW:</b> Hotel and Motel	<ul style="list-style-type: none"> <li>• PV install 50% of allowable roof area</li> <li>• Parking spaces:               <ul style="list-style-type: none"> <li>— 0-9: 1 EV Level 2 install</li> <li>— 10+: 15% Level 2 install</li> <li>— 100+: 1 for every 100 spaces</li> <li>— DC fast charger</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• 5% EVCS Level 2 ready</li> <li>• 25% EV Level 2 ready (low power)</li> <li>• 10% EV Level 2 capable</li> </ul>	<ul style="list-style-type: none"> <li>• PV installation prewired to accommodate an all-electric building (100% kWh consumption) and battery storage installation per 2022 CA Codes (Energy and Green)</li> <li>• EV Parking: Installed per Table A5.106.5.3.2</li> <li>• 100+: 1 for every 100 spaces</li> <li>• DC fast charger</li> </ul>

Occupancy Type	2019 Mountain View Reach Code	2022 Reach Code Recommendation by SVCE	2022 Mountain View Reach Code
<b>NEW:</b> Commercial	<ul style="list-style-type: none"> <li>• PV install 50% of allowable roof area</li> <li>• Parking spaces:                             <ul style="list-style-type: none"> <li>— 0-9: 1 EV Level 2 install</li> <li>— 10+: 15% Level 2 install</li> <li>— 100+: 1 for every 100 spaces</li> <li>— DC fast charger</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PV install and battery storage</li> <li>• 20% EVCS Level 2 ready (office)</li> <li>• 30% EV Level 2 capable (office)</li> <li>• 10% EVCS Level 2 ready (all other commercial buildings)</li> </ul>	<ul style="list-style-type: none"> <li>• PV installation prewired to accommodate an all-electric building (100% kWh consumption) and battery storage installation per 2022 CA Codes (Energy and Green)</li> <li>• EV Parking: Installed per Table A5.106.5.3.2</li> <li>• 100+: 1 for every 100 spaces</li> <li>• DC fast charger</li> </ul>
<b>EXISTING:</b> Multi-Family, Mixed-Use, Hotel, and Commercial	Current requirements: <ul style="list-style-type: none"> <li>• None</li> </ul>	10% of parking spaces added or altered shall be EVCS. Applicable to electrical or lighting alternations.	<ul style="list-style-type: none"> <li>• EV Parking: Adopt SVCE recommendation.</li> </ul>

**City-Specific Amendments—Other than Reach Codes**

In addition, staff is proposing the following amendments to the State Codes:

1. Amendments to Mountain View City Code Chapter 8 to be consistent with previous local requirements, maintain uniformity in building code amendments throughout the County, and accomplish the Council-adopted greenhouse gas (GHG) reduction targets.
2. Amendments to Mountain View City Code Chapter 14 to be consistent with previous local requirements and maintain uniformity in fire code amendments throughout the County.
3. Amendments to Mountain View City Code Chapter 24, “Hazardous Materials,” to be consistent with previous local requirements and maintain uniformity in fire code amendments throughout the County. The amendments remove regulations related to toxic gasses because these are now regulated in the Fire Code and Mountain View City Code Chapter 14.

**State Requirements for Local Amendments**

Under State law, a city must file an application with the California Energy Commission (CEC), which must include a cost-effectiveness study, whenever local amendments to the State’s

building energy efficiency standards (located in the California Energy Code) are adopted. The City's local amendments related to the Reach Codes require this filing.

### **Building Prototypes**

The Statewide Program's analysis estimated the cost-effectiveness of several building prototypes, including one-story and two-story single-family homes; a two-story, multi-family building; a three-story office building; a one-story retail building; and a four-story hotel. The single-family homes and office building prototypes are directly applicable to City of Mountain View development.

### **Statement of Findings**

Pursuant to State law, when a city makes a change to the model codes, it must make findings for each amendment, addition, or deletion based upon climatic, topographical, or geological conditions, including local environmental conditions as established by the City. The findings are included in the proposed ordinances. The amendments to the California Green Code and the California Energy Code are necessary due to local environmental conditions due to climate change issues.

The proposed Reach Codes are consistent with the goals outlined in Sustainability Action Plan 4 to reduce GHG emissions from energy use in new buildings and accelerate the electrification of vehicles and will help the City achieve its adopted GHG emissions reduction targets.

### **FISCAL IMPACT**

Staff and resources for the Building Inspection Division are funded by the Development Services Fund. The proposed revisions to the Building and Energy Codes will require staff resources in the Building Inspection Division to provide outreach and education to the development community and applicants, in addition to training and code books. Funding for training and code books is included in the Fiscal Year 2022-23 budget in the Building Inspection Division and Fire Department budgets. Staff will monitor the workload to determine whether additional resources may be necessary next fiscal year.

### **NEXT STEPS**

After Council introduces the proposed ordinances to amend the Code, staff will work with a consultant to prepare the paperwork and file an application with the CEC and send the Code updates to Building Standards Commission in November, so that the codes can take effect January 2023.

## **ALTERNATIVES**

1. Do not modify Chapters 8, 14, and 24 of the City Code or amend the 2022 State and 2021 International Codes or 1997 Dangerous Building Code, readopt Reach Codes, and be preempted by State-adopted codes on January 1, 2023. Preemption by the State would eliminate the City's ability to enforce the proposed and existing amendments.
2. Provide other direction.

## **PUBLIC NOTICING**

Agenda posting in the local newspaper and direct mail to selected businesses, architects, contractors, and developers, and two community outreach meetings held on October 24, 2022.

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- Attachments:
1. Draft Ordinance, Chapter 8
  2. Draft Ordinance, Chapter 14
  3. Draft Ordinance, Chapter 24
  4. Summary List of Amendments to Chapters 8, 14, and 24 of the Mountain View City Code