



City of Culver City

Mike Balkman Council
Chambers
9770 Culver Blvd.
Culver City, CA 90232

Staff Report

File #: 20-280, **Version:** 1

Item #: A-4.

CC - (1) Discussion of a Reach Building Code Amendment; and (2) Direction to the City Manager as Deemed Appropriate.

Meeting Date: September 23, 2019

Contact Person/Dept: Sol Blumenfeld / CDD
Stuart Tom / Consulting Building Official

Phone Number: (310) 253-5700

Fiscal Impact: Yes ☐ No ☐

General Fund: Yes ☐ No ☐

Public Hearing: ☐ **Action Item:** ☐ **Attachments:** ☐

Commission Action Required: Yes ☐ No ☐ **Date:**

Public Notification: (E-Mail) Meetings and Agendas - City Council (09/17/19);

Department Approval: Sol Blumenfeld, Community Development Director (09/11/19)

RECOMMENDATION

Staff recommends the City Council (1) discuss a Reach Building Code Amendment; and (2) direct the City Manager as deemed appropriate.

BACKGROUND/DISCUSSION

Culver City is in the process of adopting local amendments to the 2019 California Building Standards Code (CBSC). Concurrent adoption of municipal regulations that improve community resilience and sustainability through Reach codes would be a timely addition to the City's CBSC and would take effect on January 1, 2020.

Reach codes are locally adopted construction standards that generally accomplish one or more of the following objectives:

- 1) Improve energy efficiency
- 2) Increase water conservation
- 3) Enhance community resilience/sustainability

Several cities throughout California have contemplated the adoption of Reach codes. For the most part, these standards are intended to reduce the life-time operating cost of new buildings, by reducing the cost of energy and water consumption associated with the proposed construction. Additional standards have also been considered to lessen the impact of construction on the environment.

Reach code standards sometimes result in a slight increase in the initial construction costs, with a simple cost recovery expected to occur at some time during the useful life of the building. In most cases, any additional construction cost associated with a Reach code standard is recovered during the first half of a building's life expectancy, with significant savings realized thereafter.

Additional benefits are often realized in the form of reduced environmental impacts, including, but not limited to, the following:

- 1) Reduced carbon footprint;
- 2) Decreased reliance upon fossil fuels;
- 3) Improved water management; and
- 4) Rapid functional recovery after natural disasters.

Bifurcation of Proposed Reach Code Standards

Reach code standards generally fall into one of two categories: (1) easily adopted and enforced; and (2) more complicated to adopt and enforce.

Most Reach code standards, especially those related to water conservation and community resilience are easily adopted and enforced, as long as those standards meet or exceed standards contained within the CBSC and can be justified on the basis of a local geologic, topographic, or climatic condition, water conservation and resilience standards.

In contrast, Reach code standards that are related to energy usage require more effort to adopt. In particular, any local amendment that affects energy efficiency must be certified by the California Energy Commission (CEC) before it may be enforced. In order to receive certification by the CEC, a local jurisdiction must demonstrate that the proposed standard will not require buildings to consume more energy than the California Energy Code and must submit a "Cost Effectiveness Study" which demonstrates that the proposed standard will be reasonably affordable, based on the ability to recover additional construction costs during the operating lifetime of the building.

In the interest of adopting Reach code standards that can be adopted concurrently with the adoption of local building standards, the City Council may want to pursue a two phased code adoption approach. The first phase would focus on Reach code standards that omit energy usage and to defer that second phase of the code adoption to a later date (after January 1, 2020) when the required Cost Effectiveness Study has been approved by the City and CEC. In the event that the City Council wants to proceed with energy use standards without phasing the amendment, the City may complete the entire Reach code adoption process after January 1, 2020. The following provides a summary of a two phased approach to Reach code adoption for further background information.

Phase 1:

Phase 1 would identify achievable “reach standards” that can be integrated into the Culver City local code adoption process that is scheduled to take place from October through November 2019. These standards may include one or more of the following:

- 1) Water conservation
 - a. Increased permeable paving (and other storm water catchment features) to reduce surface runoff of storm water and augment ground water recharge.
 - b. Use of gray-water for landscape irrigation.
 - c. Mandatory use of moisture sensors for new landscape irrigation.
 - d. Use of higher efficiency plumbing fixtures (including mandatory retrofit triggers).
- 2) “Dark Sky” light pollution
 - a. Improved BUG ratings for outdoor lighting fixtures.
 - b. Limitations on outdoor lighting.
- 3) Sustainable/renewable construction practices
 - a. Increased construction waste recycling (including increased bonds).
 - b. Increased use of recycled construction materials.
 - c. Mandatory compliance with CalGreen Tier 1 and/or Tier 2.
- 4) Improved fire protection (WUI)
 - a. Increased defensible space & vegetation management.
 - b. Class-A fire resistant roof assemblies.
 - c. Prohibition of wood-shake & wood-shingle roof coverings.
 - d. Compliance with stricter standards of International Wildland-Urban Interface Code (IWUIC).
- 5) Vehicular trip reduction
 - a. Increased bicycle parking.
 - b. Increased electric vehicle charging.

Phase 2:

Phase 2 would identify additional “Reach standards” that will require further effort to implement within Culver City, including the need to secure certification by the California Energy Commission. These standards may include one or more of the following:

- 1) Renewable energy
 - a. Increased mandatory solar photovoltaic electricity generation.
 - b. Increased use of solar water heating for environmental heating & potable water heating.
- 2) Energy conservation
 - a. Increased requirement for photo-sensors and occupancy sensors for lighting switches.
 - b. Increased use of high-efficacy light fixtures.
 - c. Mandatory installation of radiant roof barriers for new construction.
 - d. Mandatory use of “cool-roof” coverings.
- 3) Restrictions on use of fossil fuels (ie., eliminate natural gas)
 - a. Limited use of fossil fuels for projects involving existing buildings.
 - b. Limited use of fossil fuels for projects involving new buildings.

Alternate Strategies

The City of Berkeley is the first city to ban natural gas in new buildings. In order to avoid the difficulties in adopting new building code standards related to energy usage, Berkeley chose a different strategy. Instead of adopting new building standards that would affect energy usage, Berkeley sought to leverage the City's authority under the State law to prohibit the installation of hazardous internal gas piping infrastructure when granting entitlements for new buildings.

Berkeley effectively took the position that internal gas piping within a new building constitutes a hazard, and banned such installations to avoid fires and explosions that could occur (for example if a gas line breaks during an earthquake). Its determination to ban gas piping was therefore not related to energy efficiency, but rather to prohibit what Berkeley deemed to be a hazardous practice. This approach does not require prior certification from the CEC.

FISCAL ANALYSIS

The fiscal impacts of adopting Reach codes are related to the extent of the codes adopted, particularly with respect to energy use codes. The Cost Effectiveness Study required for energy use Reach codes will detail the related fiscal impacts.

ATTACHMENTS

2019-09-23_ATT - Berkeley Municipal Code Prohibiting Natural Gas Infrastructure in New Buildings

MOTION

That the City Council:

1. Discuss the adoption of a Reach Building Code Amendment; and
2. Direct the City Manager as deemed appropriate.