

DOCKETED

Docket Number:	19-BSTD-06
Project Title:	Local Ordinances Exceeding the 2019 Energy Code
TN #:	243167-3
Document Title:	City of Solana Beach 081221 Staff Report
Description:	Text of the December 8, 2021 Solana Beach staff report
Filer:	Danuta Drozdowicz
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/19/2022 2:49:00 PM
Docketed Date:	5/19/2022



STAFF REPORT CITY OF SOLANA BEACH

TO: Honorable Mayor and City Councilmembers
FROM: Gregory Wade, City Manager
MEETING DATE: December 8, 2021
ORIGINATING DEPT: City Manager's Department
SUBJECT: Adopt (2nd Reading) of Ordinance No. 518 Adopting Additions to and Amending Title 15 of the Solana Beach Municipal Code to Adopt Amendments to the 2019 California Building Code and California Green Building Code to Implement Solar Energy, Building Decarbonization and Electric Vehicle Infrastructure Requirements

BACKGROUND:

On November 10, 2021, the City Council (Council) introduced Ordinance No. 518 to amend Title 15 of the Solana Beach Municipal Code. If the Ordinance is adopted, the revised SBMC will amend the 2019 California Building Code and California Green Building Code to implement solar energy, building decarbonization and electric vehicle (EV) installation requirement with the goal of decreasing greenhouse gas (GHG) emissions.

This item is before the Council to consider adoption (2nd Reading) of Ordinance 518 amending Title 15 of the Solana Beach Municipal Code.

DISCUSSION:

Council introduced and discussed Ordinance 518 at their meeting on November 10, 2021. After some discussion about the various provisions, Council passed a motion to approve the Ordinance with some modifications as recommended by the Climate Action Commission and by Council. These modifications are reflected in blue font in Attachment 1. Minor, clerical edits are shown in red font. Attachment 2 is a clean copy of the ordinance with all changes incorporated. In addition, Council directed Staff to begin tracking the metrics relevant to this Ordinance as residential and non-residential

CITY COUNCIL ACTION:

AGENDA ITEM #

construction projects are submitted to the Community Development Department for review.

Energy Code Amendments – Chapter 15.22 of SBMC

Ordinance 518 includes Reach Code provisions that would amend the energy requirements in the City's local Building Code as follows:

- All newly constructed non-residential properties must install photovoltaic (PV) systems in accordance with sizing requirements based on square footage or Time Dependent Valuation (TDV) factors.
 - **Cost implications:** Solar photovoltaic systems on new non-residential construction are cost effective across modeled non-residential scenarios including retail buildings, office buildings and hotel buildings. Scale of solar requirements depends on electrification requirements. The more systems that are electrified, the more cost-effective solar becomes.
 - **Greenhouse gas impacts:** The amount of GHG savings varies by the size of the characteristics of the building and the size of the solar system.
- In new residential and commercial construction, all space conditioning, water heating and clothes dryer systems will be electric only.
 - **Cost implications:** Based on studies conducted by the statewide Codes and Standards Team, electrifying the above listed building systems and appliances is cost-effective. The largest cost savings opportunity identified in the study was that of avoided gas infrastructure. Cost savings would be less if gas infrastructure is still installed to accommodate cooking and grills.
 - **Greenhouse gas impacts:** According to the 2018 RMI report, The Economics of Electrifying Buildings, 87% of building end use emissions come from space and water heating. Please note: this number does not account for the methane leakage from gas infrastructure.

Green Building Code Amendments – Chapter 15.23 of the SBMC

Ordinance 518 also includes Reach Code provisions that create a local amendment to the State Green Building Code, which is an action that does not require California Energy Commission (CEC) approval, but the City, nonetheless, will submit them together with the Energy Code amendments to the CEC as one complete Reach Code package. The Green Building Code provisions in Ordinance 518 include the following requirements:

- All new residential and non-residential construction must be pre-wired for battery storage that would accommodate backup loads for a minimum of 5 kWh.
- All new residential and non-residential construction must install sufficient electrical capacity for future electrification of all non-electric appliances.

- All new residential and non-residential construction must install EV infrastructure in accordance with the requirements outlined in Section 15.23.060 of the proposed ordinance.

The State does not require cost-effectiveness studies to be submitted in support of these measures. However, as California transitions to clean electric power, these measures have relatively small upfront costs at the time of new construction and potentially significant future retrofit cost avoidance.

Substantial Remodels as New Construction

Ordinance 518 applies to new residential and non-residential construction. Because Solana Beach is a relatively built-out community, much of the construction activity in the City consists of remodels to existing homes and buildings rather than entirely new construction. At times, the extent of the remodeling is extensive enough that most of the structure is essentially “new” construction. According to the proposed Ordinance, the parameters that follow will determine when a remodel should be considered as “New Construction” as follows:

A. Residential Remodel.

1. Any construction that Remodels more than fifty percent (50%) of any of the following major structural components:
 - (i) exterior walls (measured by linear feet);
 - (ii) interior walls (measured by linear feet), except where the building or structure is less than 1200 square feet;
 - (iii) roof (measured by square footage);
 - (iv) floor and/or foundation (measured by square footage); or
2. The addition of seven hundred (700) or more square feet of floor area.

B. Non-Residential Remodel.

1. Any construction that Remodels more than fifty percent (50%) of any of the following major structural components:
 - (i) exterior walls (measured by linear feet);
 - (ii) interior walls (measured by linear feet);
 - (iii) roof (measured by square footage);
 - (iv) floor and/or foundation (measured by square footage); or

2. The addition of fifty percent (50%) or more of floor area to the building (measured by square footage); or
3. The Remodel project has a permit valuation of four hundred thousand dollars (\$400,000) or more.

Next Steps

If approved by Council, Staff will submit the Ordinance and cost-effectiveness studies as a Reach Code package to the CEC to be filed with the California Building Standards Commission (CBSC) prior to implementation, as required by Public Resources Code Section 25402.1(h)(2). The Ordinance will go into effect only after formal approval by the CEC is granted at which time the provisions will apply to any projects that have not been deemed as complete by the Community Development Department by that date.

The City will have to follow the reach code adoption process once again as early as August or September of 2022 if Council would like any of the requirements to remain in place for the next triennial adoption of the revised California Building Codes. The 2022 Building Codes will be adopted by the State as of January 1, 2022 and go into effect on January 1, 2023.

CEQA COMPLIANCE STATEMENT:

The proposed Ordinance is exempt from the provisions of the California Environmental Quality Act ("CEQA") pursuant to Sections 15307 and 15308 of the CEQA Guidelines (14 CCR 15307 and 15308) because it is an activity undertaken to assure the maintenance, restoration, enhancement and protection of the environment and pursuant to Section 15061(b)(3) because there is no possibility that the activity in question may have a significant effect on the environment.

FISCAL IMPACT:

The Reach Code amendments parallel the structure and terms of the State Building Code and as such, any incremental plan check and inspection time should be minimal. The provisions will require plan checkers and inspectors to develop and apply additional checklists but are not expected to require significant additional Staff time. Any incremental costs of administering these requirements will be covered through existing permit fees.

WORK PLAN:

This item is included in the Environmental Sustainability section of the FY 2021/2022 Work Plan.

OPTIONS:

- Adopt Ordinance 518 amending Title 15 of the Solana Beach Municipal Code to adopt amendments to the 2019 California Building Code and California Green Building Code to implement Solar Energy, Building Decarbonization and Electric Vehicle Infrastructure requirements for new construction.
- Do not adopt Ordinance 518 and provide direction.

DEPARTMENT RECOMMENDATION:

Staff recommends the City Council adopt Ordinance 518 amending Title 15 of the Solana Beach Municipal Code to adopt amendments to the 2019 California Building Code and California Green Building Code to implement Solar Energy, Building Decarbonization and Electric Vehicle Infrastructure requirements for new construction.

CITY MANAGER'S RECOMMENDATION:

Approve Department Recommendation.



Gregory Wade, City Manager

Attachments:

1. Ordinance 518 – Redline Copy
2. Ordinance 518 – Clean Copy