

ORDINANCE NUMBER _____ (CCS)

(City Council Series)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA MONICA
AMENDING ARTICLE VIII OF THE SANTA MONICA MUNICIPAL CODE BY
ADOPTING THE 2019 CALIFORNIA ENERGY CODE AND 2019 CALIFORNIA GREEN
BUILDING STANDARDS CODE AND THE SANTA MONICA LOCAL AMENDMENTS
TO SUCH CODES TO REQUIRE HIGHER ENERGY PERFORMANCE FOR NEWLY
CONSTRUCTED BUILDINGS

WHEREAS, the California State Building Standards Commission approved and published the 2019 edition of the California Building Standards Code on July 1, 2019, and such code will be effective 180 days thereafter, which is January 1, 2020; and

WHEREAS, the 2019 California Building Standards Code includes the 2019 California Energy Code and the 2019 California Green Building Standards Code; and

WHEREAS, California Health and Safety Code Sections 17958.7 and 18941.5 provide that the City may make changes or modifications to the building standards contained in the California Building Standards Code based upon express findings that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, Section 101.7.1 of the 2019 California Green Building Standards Code provides that for the purposes of local amendments to the 2019 California Green Building Standards Code, local climatic, topographical, or geological conditions include local environmental conditions as established by the City; and

WHEREAS, the Council has adopted a resolution making express findings, in accordance with Health and Safety Code Sections 17958.5, 17958.7, and 18941.5, that the local amendments to the 2019 California Energy Code and 2019 California Green Building Standards Code, are reasonably necessary because of local climatic, geological, topographic, and environmental conditions; and

WHEREAS, consistent with the City's Climate Action & Adaptation Plan, the local amendments to the 2019 California Energy Code and 2019 California Green Building Standards Code establish requirements to increase energy efficiency and the use of renewable energy, including in particular solar energy, which will reduce demands for local energy and resources, reduce regional pollution, and promote a lower contribution to greenhouse gases; and

WHEREAS, cost effectiveness studies prepared by the California Statewide Investor Owned Utilities Codes and Standards Program in conjunction with consultants and cities (collectively known as the "Reach Code Team"), demonstrate that the local amendments are cost-effective and do not result in buildings consuming more energy than is permitted by the 2019 California Energy Code; and

WHEREAS, local amendments to the 2019 California Energy Code and 2019 California Green Building Standards Code were the subject of three public stakeholder workshops conducted on April 24, May 16, and June 11, 2019, at which attendees included architects, energy modelers, designers, builders, developers, and residents; and

WHEREAS, on August 14, 2019, the City's Building and Fire Life Safety Commission met and unanimously determined to recommend that the City Council

adopt a resolution making necessary local findings and adopt local amendments to the 2019 California Building Standards Code, including the 2019 California Energy Code and 2019 California Green Building Standards Code; and

WHEREAS, on September 3, 2019, the City's Task Force on the Environment met and unanimously recommended that the City Council approve this ordinance adopting local findings and local amendments to the 2019 California Energy Code and 2019 California Green Building Standards Code; and

WHEREAS, once adopted by the City Council, the local amendments to the 2019 California Energy Code and 2019 California Green Building Standards Code will, in accordance with Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the 2019 California Administrative Code (Title 24, Part 1), be submitted to the California Energy Commission for approval, following which approval the local amendments will be returned to the City Council for final adoption;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SANTA MONICA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Purpose

It is the purpose and intent of this Ordinance to adopt the 2019 California Energy Code (Title 24, Part 6) and the 2019 California Green Building Standards Code (Title 24, Part 11), along with local modifications and changes that provide local, cost-effective standards for new residential, non-residential, and hotel and motel buildings that exceed the minimum standards of the 2019 California Energy Code and 2019

California Green Building Standards Code to achieve energy savings, reduce local pollution, and reduce greenhouse gas emissions.

SECTION 2. Chapter 8.36 of the Santa Monica Municipal Code is hereby amended to read as follows:

Chapter 8.36 Energy Code

8.36.010 Adoption.

That certain document entitled “~~2016~~2019 Building Energy Efficiency Standards—Standards for Residential and Nonresidential Buildings” which adopts Part 6 of Title 24 and Part 1, Chapter 10 of Title 24 of the California Code of Regulations, as published by the California Building Standards Commission and the California Energy Commission, is hereby adopted as the Energy Code of the City of Santa Monica.

8.36.012 Local Amendments

Notwithstanding any provisions of the 2019 California Energy Code, 2019 California Green Building Standards Code, or other codes adopted by any Chapter in Article VIII of the Municipal Code to the contrary, the local amendments to the Energy Code set forth in this Chapter shall apply.

8.36.015 Additional Definitions

In addition to definitions set forth in Section 100.1(b) of the 2019 California Energy Code, the following definitions shall apply:

(a) All-Electric Building or All-Electric Design. A building or building design that uses a permanent supply of electricity as the source of energy for space

heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances, and has no natural gas or propane plumbing installed in the building.

(b) Certified Energy Analyst. A person who is certified by the California Association of Building Energy Consultants (CABEC) as a Certified Energy Analyst (CEA) and is in good standing with CABEC as of the date of submission of a Certificate of Compliance as required under Section 10-103 of the 2019 California Energy Code. A CEA in good standing is listed in the CABEC CEA Roster as “Active-Current.”

(c) Mixed-Fuel Building or Mixed-Fuel Design. A building or building design that uses natural gas or propane as fuel for space heating, water heating (including pools and spas), cooking appliances or clothes drying appliances, or is plumbed for such equipment.

8.36.020 Energy Efficiency and Solar Photovoltaic Requirements – Low-rise Residential Buildings

(a) All-Electric Buildings. All new all-electric low-rise residential buildings shall be designed to code established by the 2019 California Energy Code.

(b) Mixed-Fuel Buildings. All new mixed-fuel low-rise residential buildings shall meet all requirements for mixed-fuel designs as specified for CalGreen Tier 1 under the 2019 California Green Building Standards Code, Title 24, Part 11, Appendix A4 Residential Voluntary Measures Division A4.203 –Performance Approach for Newly Constructed Buildings.

(c) Solar Photovoltaic Requirement. All new low-rise residential buildings shall have a photovoltaic (PV) system meeting the minimum qualification requirements as specified in Joint Appendix JA11 to the 2019 California Energy Code, with annual

electrical output equal to or greater than the dwelling's annual electrical usage as determined by Equation 150.1-C of the 2019 California Energy Code, using the CFA and Dwelling Adjustment Factors for Climate Zone 6 from Table 150.1-C of the 2019 California Energy Code, as follows:

EQUATION 150.1-C ANNUAL PHOTOVOLTAIC ELECTRICAL OUTPUT:

$$\text{kW}_{PV} = (\text{CFA} \times 0.594)/1000 + (\text{N}_{\text{dwell}} \times 1.23)$$

WHERE:

kW_{PV} = kWdc size of the PV system

CFA = Conditioned floor area

N_{dwell} = Number of dwelling units

(d) Certified Energy Analyst Requirement. For all new low-rise residential buildings, the Certificate of Compliance described in Section 10-103 of the 2019 California Energy Code shall be prepared and signed by a Certified Energy Analyst (CEA) as the Documentation Author.

~~All new low-rise residential buildings shall be designed to use fifteen percent less energy than the allowed energy budget established by the 2016 California Energy Code, and achieve an energy design rating of zero.~~

8.36.030 Energy Efficiency and Solar Photovoltaic Requirements – High-rise Residential, Non-residential, and Hotels and Motels Buildings

(a) All-Electric Buildings. All new all-electric high-rise residential, non-residential, and hotel and motel buildings shall be designed to code established by the 2019 California Energy Code.

(b) Mixed-Fuel Buildings.

(i) All new mixed-fuel non-residential buildings shall be designed to use ten percent less energy than the allowed energy budget established by the 2019 California Energy Code.

(ii) All new mixed-fuel high-rise residential and hotel and motel buildings shall be designed to use five percent less energy than the allowed energy budget established by the 2019 California Energy Code.

(c) Solar Photovoltaic Requirement. The minimum solar photovoltaic system required for all new high-rise residential, non-residential, and hotel and motel buildings is 2 watts per square foot of the building footprint.

(d) Certified Energy Analyst Requirement. For all new high-rise residential, non-residential, and hotel and motel buildings, the Certificate of Compliance described in Section 10-103 of the 2019 California Energy Code shall be prepared and signed by a Certified Energy Analyst as the Documentation Author.

(e) Exemptions. The Building Official may, at their discretion, waive or reduce the requirements set forth in this Section 8.36.030 for buildings that are uninhabitable and consist solely of unconditioned space.

~~All new high-rise residential buildings, non-residential buildings, hotels and motels shall be designed to use ten percent less energy than the allowed energy budget established by the 2016 California Energy Code.~~

SECTION 3. Chapter 8.106 of the Santa Monica Municipal Code is hereby amended to read as follows:

Chapter 8.106 GREEN BUILDING STANDARDS CODE

8.106.010 Adoption.

That certain document entitled “California Green Building Standards Code, ~~2016~~ 2019 Edition,” as published by the California Building Standards Commission, is hereby adopted as the Green Building Standards Code of the City of Santa Monica.

8.106.020 Local Amendments to the California Green Building Standards Code.

Notwithstanding any provisions of the 2019 California Green Building Standards Code, ~~2019 California Energy Code~~~~California Building Code~~, ~~California Residential Code~~, ~~California Building Standards Code~~, or other codes adopted by any Chapter in Article VIII of the Municipal Code to the contrary, the following local amendments shall apply.

8.106.050 Additional Definitions.

~~Amend Section 202 of the California Green Building Standards Code to include the following:~~

In addition to definitions set forth in Section 202 of the 2019 California Green Building Standards Code, the following definitions shall apply:

(a) Major Addition. The addition to any building of either (1) an additional story or (2) additional floor area equal to or greater than fifty percent of the building's existing floor area prior to the addition.

(b) Sustainability. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

(c) Unshaded Area. Area(s) where light emittance from the sun is unobstructed by fixed objects during the majority of daylight hours between March 21st and September 21st.

8.106.053 Green Building.

Section 301.1.1 of the 2019 California Green Building Standards Code is amended to read as follows:

~~Amend Section 301.1.1 of the California Green Building Standards Code to read as follows:~~

301.1.1 Additions and Alterations. With the exception of Sections 4.201.4 and 4.201.5, which apply only to major additions to one-, two-, and multi-family dwellings (three stories or less), the mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings. The requirements shall apply only to and/or within the specific area of the addition or alteration.

8.106.055 Residential Solar and Pool Heating Requirements.

Amend ~~Section 4.201 of the 2016 California Green Building Standards Code to read as follows:~~

Section 4.201 of the 2019 California Green Building Standards Code is amended to read as follows:

4.201.3 Solar Pool Heating.

(a) For new pool construction, if the pool is to be heated, renewable energy an electric heat pump water heater or a solar thermal system shall be used for such heating. ~~provided that, if a solar thermal system is used:~~

- ~~(i) The surface area of the solar collectors used to generate such renewable energy for such heating is equal to or greater than seventy percent (70%) of the surface area of the pool; or~~
- ~~(ii) Renewable Solar energy produced provides at least sixty percent (60%) of the total energy necessary for heating purpose.~~

~~(b) Electrical resistance heaters that are not powered directly by renewable energy sources shall not be used to heat pool water.~~

~~(c) The requirements of this Section shall be waived or reduced, by the minimum extent necessary, in situations where installation of solar water heating is technically infeasible due to lack of unshaded area to install solar collectors, lack of adequate roof space, water pumping energy~~

~~use exceeding half of the energy derivable from the renewable energy system, or other similar conditions.~~

4.201.4 Solar Photovoltaic Installation Requirements for Major Additions to One- and Two-Family Dwellings
Solar Photovoltaic Installations.

(a) All ~~new~~ major additions to one- and two-family dwellings are required to install a solar electric photovoltaic (PV) system. The ~~required installation of the PV system~~ installed must have ~~shall be implemented~~ using one of the following methods: (i) ~~Install an on-site solar PV system with a minimum total wattage 1.5 times the square footage of the~~ addition dwelling (1.5 watts per square foot);

~~(ii) Install a solar PV system or other renewable energy system that will offset 75%-100% of the Time Dependent Valuation (TDV) energy budget;~~

~~(iii) Demonstrate that the Time Dependent Valuation (TDV) energy budget is reduced by the same wattage required by (a)(i).~~

(b) The requirements of this Section shall be waived or reduced, by the minimum extent necessary, where: (i) production of electric energy from solar panels is technically infeasible due to lack of available and feasible unshaded areas; (ii) the PV system size required is less than 1,200 watts DC; or (iii) the dwelling has an existing functioning grid-tied PV system meeting the electrical utility's interconnection requirements.

(c) The requirements of this Section shall take priority if there is a conflict between compliance with Section 4.201.3 through use of a solar thermal system and compliance with this Section.

4.201.5 Solar Photovoltaic Installation Requirements for Major Additions to Multi-Family Dwellings (3 stories or less)-Solar Photovoltaic Installations.

(a) All new major additions to multi-family dwellings are required to install a solar electric photovoltaic (PV) system. The required installation of the PV system shall be implemented by installing a solar PV system with a minimum total wattage 2.0 times the square footage of the building footprint of the addition (2.0 watts per square foot).

(b) The requirements of this Section shall be waived or reduced, by the minimum extent necessary, where: (i) production of electric energy from solar panels is technically infeasible due to lack of available and feasible unshaded areas; (ii) the PV system size required is less than 1,200 watts DC; or (iii) the dwelling has an existing functioning grid-tied PV system meeting the electrical utility's interconnection requirements.

(c) The requirements of this Section shall take priority if there is a conflict between compliance with Section 4.201.3 through use of a solar thermal system and compliance with this Section.

8.106.070 Flashing Details.

Section 4.407.1 of the 2019 California Green Building Standards Code is amended to read as follows:

~~Amend Section 4.407.1 of the California Green Building Standards Code to read as follows:~~

4.407.1 Flashing Details. Provide flashing details on the building plans which comply with accepted industry standards or manufacturer's instructions. Details are shown on the house plans at all of the following locations:

1. Around windows and doors.
2. Roof valleys.
3. Deck connections to the structure.
4. Roof-to-wall intersections.
5. Chimneys to roof intersections.
6. Drip caps above windows and doors with architectural projections.
7. Other locations as identified by the Building Officer.

8.106.080 Non-Residential, High-Rise Residential, Hotels and Motels Solar and Pool Heating Requirements.

Section 5.201 of the 2019 California Green Building Standards Code is amended to read as follows:

~~Amend Section 5.201 of the 2016 California Green Building Standards Code to read as follows:~~

5.201.3 Solar Pool Heating – Non-Residential, High-Rise Residential, and Hotels and Motels Buildings Solar Photovoltaic Installation.

(a) For new pool construction, if the pool is to be heated, ~~renewable energy~~ an electric heat pump water heater or a solar thermal system shall be used for such heating. ~~provided that, if a solar thermal system is used:~~

(i) ~~The surface area of the solar collectors used to generate such renewable energy for such heating is equal to or greater than seventy percent (70%) of the surface area of the pool; or~~

(ii) ~~Renewable Solar energy produced provides at least sixty percent (60%) of the total energy necessary for heating purpose.~~

(b) ~~Electrical resistance heaters that are not powered directly by renewable energy sources shall not be used to heat pool water.~~

(c) ~~The requirements of this Section shall be waived or reduced, by the minimum extent necessary, in situations where installation of solar water heating is technically infeasible due to lack of unshaded area to install solar collectors, lack of adequate roof space, water pumping energy use exceeding half of the energy derivable from the renewable energy system, or other similar conditions.~~

5.201.4 Solar Photovoltaic Installation Requirements for Major Additions to Non-Residential, High-Rise Residential, and Hotels and Motels Buildings Solar Photovoltaic Installations.

(a) All ~~new major additions to~~ non-residential, high-rise residential, and hotel; and motel buildings are required to install a solar electric photovoltaic (PV) system. ~~The required installation of the PV system installed must have~~ shall be implemented by installing a solar PV system with a minimum total wattage 2.0 times the square footage of the ~~building footprint of the addition~~ (2.0 watts per square foot).

(b) The requirements of this Section shall be waived or reduced, by the minimum extent necessary, where: (i) production of electric energy from solar panels is technically infeasible due to lack of available and feasible unshaded areas; (ii) the PV system size required is less than 1,200 watts DC; or (iii) the dwelling has an existing functioning grid-tied PV system meeting the electrical utility's interconnection requirements.

(c) The requirements of this Section shall take priority if there is a conflict between compliance with Section 5.201.3 through use of a solar thermal system and compliance with this Section.

8.106.100 Electric Vehicle Charging.

Electric vehicle charging for new residential and hotel and motel buildings is governed by Sections 4.106.4 through 4.106.4.3.6 of the Green Building Standards Code. Electric vehicle charging for new non-residential buildings is governed by Sections 5.106.5.3 through 5.106.5.3.5 of the Green Building Standards Code.

~~(a) **Multi-Family Dwellings.** For new electrical services in multi-family dwellings, the following shall apply:~~

~~(1) The total load calculations shall include a load for future electrical vehicle charging. This load shall be calculated at ten kilowatts per five percent of the parking spaces provided.~~

~~(2) The minimum rating of the main service panel and the ampacity of the service entrance conductors shall be based on the total calculated load and the requirements of Chapter 2 of the [California Electrical Code](#).~~

~~(3) A separate multi-meter distribution section shall be provided for electrical vehicle charging only. The minimum number of meters in this multi-meter section shall be based on five percent of the parking spaces provided. The minimum rating of this multi-meter distribution section shall be calculated at ten kilowatts per five percent of the parking spaces provided.~~

~~Each meter shall have a space for a two-pole 208/240 volt circuit breaker where the space is identified as “Electric Vehicle Charging” or “Future Electric Vehicle Charging,” as applicable. This distribution panel section shall be permanently and conspicuously marked “Electric Vehicle Charging Only.”~~

~~(4) If the continuous rating of Level 2 and/or Level 3 electric vehicle service equipment is known at the time of installation then these ratings shall be applied to the load calculations in subsection (a), but in no case shall less than ten kilowatts per five percent of the parking spaces be provided.~~

~~(5) Where the calculated number of parking spaces results in a fraction of one-half or greater, the calculated number shall be rounded to the next higher whole number.~~

~~(b) **Buildings of Mixed-Use Occupancies.** For new electrical services in buildings of mixed-use occupancies, the following shall apply:~~

~~(1) The requirements in subsection (a) shall be applicable to the residential portion of the building. The residential distribution system shall supply the charging source for electric vehicles.~~

~~(c) **Non-Residential Buildings.** For new electrical services in non-residential buildings, the following shall apply:~~

~~(1) The total load calculations shall include a load for future electric vehicle charging. This load shall be calculated at 10 kilowatts per five percent of the parking spaces provided.~~

~~The minimum load for future electrical vehicle charging shall not be less than 10 kilowatts; however, if the continuous rating of Level 2 and/or Level 3 electric vehicle service equipment is known at the time of installation then these ratings shall be applied to the load calculations, but in no cases less than 10 kilowatts per five percent of the parking spaces provided.~~

~~The minimum rating of the main service panel and the ampacity of the service entrance conductors shall be based on the total calculated load and the requirements of Chapter 2 of the California Electrical Code.~~

~~(2) The electrical distribution system shall include spaces for two-pole, 208/240 volt circuit breakers for future electric vehicle charging. The minimum~~

~~number of circuit breaker spaces shall be equal to five percent of the provided parking spaces. These circuit spaces shall be dedicated and identified as “Future Electric Vehicle Charging.”~~

~~(3) For new non-residential buildings, five percent of the parking spaces provided shall be dedicated to electric vehicles. Each parking space shall have a raceway installed from the service or distribution panel and stubbed up at the midline of each parking space. The minimum size of the raceway shall be one-inch nominal.~~

~~Where the parking accommodations include more than one floor or level, the parking spaces dedicated to electric vehicles, to the extent practicable, shall be provided at the first floor or level of parking access.~~

~~(4) Where the calculated number of five percent of the parking spaces provided results in a fraction of 0.5 or greater, the calculated number shall be rounded to the next higher whole number.~~

~~(d) **Exceptions.** The requirements of this Section shall not apply under the following conditions:~~

~~(1) New electrical service is installed in a building where there is no attached or dedicated parking facility;~~

~~(2) New electrical service is not associated with a building or structure;~~

~~(3) Compliance is technically infeasible due to the distance between a dedicated parking facility and the structure containing residential occupancies, or similar conditions.~~

SECTION 4. Any provision of the Santa Monica Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 5. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 6. The Mayor shall sign and the City Clerk shall attest to the passage of the Ordinance. The City Clerk shall cause the same to be published once in the official newspaper within 15 days after its adoption. This Ordinance shall become effective January 1, 2020. Building permit applications submitted on or after the effective date of this Ordinance shall be required to comply with the requirements set forth herein.

APPROVED AS TO FORM:

LANE DILG
City Attorney