

ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY OF BURLINGAME
ADOPTING AMENDMENTS TO THE MUNICIPAL CODE TO REQUIRE BUILDING
ELECTRIFICATION, SOLAR ENERGY SYSTEMS, AND ELECTRIC VEHICLE
INFRASTRUCTURE ON NEWLY CONSTRUCTED SINGLE FAMILY RESIDENCES TO
REDUCE GREENHOUSE GAS EMISSIONS**

The City Council of the City of Burlingame ordains as follows:

DIVISION 1. Factual Background

WHEREAS, consensus exists among the world's leading climate scientists that climate change caused by greenhouse gas (GHG) emissions from human activities is among the most significant problems facing the world today; and

WHEREAS, the City of Burlingame adopted a Climate Action Plan (CAP) that directs the City in reducing approximately 50,000 tons of GHG emissions by the year 2030 to meet reduction goals consistent with California's GHG targets; and

WHEREAS, measures in the CAP aim to curb the use of fossil fuels, a primary contributor to GHG emissions, in buildings and transportation; and

WHEREAS, reach codes that extend beyond the California building code are being adopted by cities region wide to accelerate GHG reductions from new construction by limiting the use of natural gas, increasing local solar production, and installing electric vehicle (EV) infrastructure to charge a greater number of EV's beyond state code requirements; and

WHEREAS, Peninsula Clean Energy has provided support and technical resources to jurisdictions to adopt a reach code including model ordinances and cost effectiveness studies; and

WHEREAS, Burlingame's reach code ordinance for single family residences is based on Peninsula Clean Energy's model reach code ordinances for building electrification, solar, and EV infrastructure; and

WHEREAS, the assumptions for climate zones, building types, cost effectiveness, and the provisions of the model reach code are applicable to the City of Burlingame; and

WHEREAS the reach code ordinance would implement at least three measures from the City's CAP; and

WHEREAS, the City of Burlingame wishes to adopt the reach code ordinance to enhance building electrification, solar production, and EV infrastructure within the City as part of Title 18 of the Municipal Code.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BURLINGAME DOES ORDAIN AS FOLLOWS:

DIVISION 2. Amendments

The City of Burlingame adopts the following local amendments to California Energy Code, 2019 Edition, Title 24, Part 6 of the California Code of Regulations: § 100.0 – Scope (e) Sections applicable to Single Family Residences. The proposed Ordinance shows where changes were made to the California Energy Code. Plain text is the State’s code; underlined text shows additions; and strikethroughs indicate deletions. The Ordinance will be incorporated as a clean version without edits. TABLE 100.0-A and this subsection list the provisions of Part 6 that are applicable to different types of buildings covered by Section 100.0(a)

1. All buildings. Sections 100.0 through 110.12 apply to all buildings.
EXCEPTION to Section 100.0(e) 1: Spaces or requirements not listed in TABLE 100.0-A.

2. Newly constructed buildings
 - A. All newly constructed buildings. Sections 110.0 through 110.12 apply to all newly constructed buildings within the scope of Section 100.0(a). In addition, newly constructed buildings shall meet the requirements of Subsections B, C, D or E, as applicable; and Single Family Residences shall be All-Electric Buildings as defined in Section 100.1(b). For the purposes of All-Electric Building requirements, newly constructed buildings as defined in Section 100.1 shall include newly constructed additions and improvements in existing buildings where more than 50 percent of the valuation of the existing structure is being remodeled, provided the remodel also includes a new heating, cooling, and ventilation system. The cost calculations for the additions/improvements shall be calculated utilizing current Burlingame average construction cost as determined by the Chief Building Official. Projects that have been submitted to the Planning Division or have been granted entitlements before the effective date of this ordinance are not required to meet the all-electric requirements.

Exception 1: Single Family Residences may contain non-electric indoor and outdoor Cooking Appliances and Fireplaces.

Exception 2: If the applicant established that an all-electric building is infeasible for the project due to exceptional or extraordinary circumstances particular to the project, then the Chief Building Official may grant a modification. The design professional shall submit findings demonstrating a unique reason that makes the technical code impractical, that the modification is in conformity with the intent and purpose of the technical code, the modification shall be as narrow as possible so as to effectuate as much of a reduction in

natural gas as possible, and that such modification does not lessen health, life safety and fire safety requirements or any degree of structural integrity. If the Chief Building Official grants a modification pursuant to this Exception, the applicant shall comply with the pre-wiring provision of Note 1 below.

Note 1: If natural gas appliances are used in any of the above exceptions, natural gas appliance locations must also be electrically pre-wired for future electric appliance installation. This shall include the following:

1. A dedicated circuit, phased appropriately, for each appliance, with a minimum amperage requirement for a comparable electric appliance (see manufacturer's recommendations) with an electrical receptacle or junction box that is connected to the electric panel with conductors of adequate capacity, extending to within 3 feet of the appliance and accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and
2. Both ends of the conductor or conduit shall be labeled with the words "For Future Electric Appliance" and be electrically isolated; and
3. A circuit breaker shall be installed in the electrical panel for the branch circuit and labeled for each circuit "For Future Electric Range;" and
4. All electrical components, including conductors, receptacles, junction boxes, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Note 2: If any of the exceptions are granted, the Chief Building Official shall have the authority to approve alternative materials, design and methods of construction or equipment per CBC 104.

Section 100.1(b) is modified by adding the following definitions:

ALL-ELECTRIC BUILDING: a building that has no natural gas or propane plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances. All-Electric Buildings may include solar thermal pool heating.

Section 110.2 is modified as follows:

SECTION 110.2 – MANDATORY REQUIREMENTS FOR SPACE-CONDITIONING EQUIPMENT

Certification by Manufacturers. Any space-conditioning equipment listed in this section, meeting the requirements of Section 100.0 (e)2A, may be installed so long as the manufacturer has certified to the Commission that the equipment complies with all the applicable requirements of this section.

Section 110.3 is modified as follows:

SECTION 110.3 – MANDATORY REQUIREMENTS FOR SERVICE WATER-HEATING SYSTEMS AND EQUIPMENT

(a) Certification by manufacturers. Any service water-heating system or equipment, meeting the requirements of Section 100.0 (e)2A, may be installed so long as the manufacturer has certified that the system or equipment complies with all of the requirements of this subsection for that system or equipment.

Section 110.4 is modified as follows:

SECTION 110.4 – MANDATORY REQUIREMENTS FOR POOL AND SPA SYSTEMS AND EQUIPMENT

(a) Certification by Manufacturers. Any pool or spa heating system or equipment, meeting the requirements of Section 100.0 (e)2A, may be installed so long as the manufacturer has certified that the system or equipment has all of the following:

Section 110.5 is modified as follows:

SECTION 110.5 – NATURAL GAS CENTRAL FURNACES, COOKING EQUIPMENT, POOL AND SPA HEATERS, AND FIREPLACES: PILOT LIGHTS PROHIBITED

Any natural gas system or equipment, meeting the requirements of Section 100.0 (e)2A, listed below may be installed so long as it does not have a continuously burning pilot light:

Local Amendments to the Green Building Code

The proposed Ordinance shows where changes were made to the State Green Building Code. Plain text is the State’s code; underlined text show additions; and strikethroughs indicate deletions. The Ordinance will be incorporated as a clean version without edits.

**SECTION 2
DEFINITIONS**

EV Capable: A parking space linked to a listed electrical panel with sufficient capacity to provide at least 110/120 volts and 20 amperes to the parking space. Raceways linking the electrical panel and parking space only need to be installed in spaces that will be inaccessible in the future, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits. Raceways must be at least 1” in diameter and may be sized for multiple circuits as allowed by the California Electrical Code. The panel circuit directory shall identify the overcurrent protective device space(s) reserved for EV charging as “EV CAPABLE.” Construction documents shall indicate future completion of raceway from the panel to the parking space, via the installed inaccessible raceways.

Level 1 EV Ready Space: A parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE).

Level 2 EV Ready Space: A parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 40 amperes.

Electric Vehicle Charging Station (EVCS): A parking space that includes installation of electric vehicle supply equipment (EVSE) with a minimum capacity of 30 amperes connected to a circuit serving a Level 2 EV Ready space. EVCS installation may be used to satisfy a Level 2 EV Ready space requirement.

SECTION 4 RESIDENTIAL MANDATORY MEASURES

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

Exceptions:

1. On a case-by-case basis, where the City has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - 1.1.1 Where there is no commercial power supply available to the designated parking area.
 - 1.1.2 ~~Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per dwelling unit.~~
 - 1.1.3 The construction is for an Accessory Dwelling Units (ADU) or Junior Accessory Dwelling Unit (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.

For each dwelling unit, install at least two EV Ready Spaces, including at least one Level 2 EV Ready space as described in Section 2 Definitions. ~~listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.~~

Exception: For each dwelling unit with only one parking space, only one Level 2 EV Ready space is required.

4.106.4.1.1 Identification. ~~The service panel or sub-panel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “Level 2 EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV GAPABLE”. “Level 2 EV Ready”.~~

4.106.4.2.1.1 Electric vehicle charging stations (EVCS). When EV chargers are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11 B.

4.106.4.2.3 —

Single EV space required. ~~Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV spaces. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit over-current protective device.~~

~~4.106.4.2.4 — Multiple EV spaces required. Construction raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.~~

~~4.106.4.2.5 — Identification. The service panel or sub-panel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as “EV CAPABLE” in accordance with the California Electrical Code. Refer to Section 2 Definitions for identification requirements.~~

DIVISION 3:

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance. The Council declares that it would have adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

DIVISION 4:

This Ordinance is exempt from the environmental review requirements of CEQA pursuant to Section 15061 (b)(3) of Title 14 of the California Code of Regulations because it can be seen with certainty that there is no possibility that the provisions contained herein may have a significant effect on the environment. Further, the Ordinance is also exempt from the requirements of CEQA pursuant to CEQA Guidelines Sections 15307 and 15308 of Title 14 of the California Code of Regulations as actions taken by regulatory agencies to assure the maintenance, restoration, enhancement of natural resources, or protection of the environment.

DIVISION 5:

This Ordinance shall be published in a newspaper of general circulation in accordance with California Government Code Section 36933, published, and circulated in the City of Burlingame, and shall be in full force and effect following approval by the California Energy Commission.

Emily Beach, Mayor

I, Meaghan Hassel-Shearer, City Clerk of the City of Burlingame, certify that the foregoing ordinance was introduced at a public hearing at a regular meeting of the City Council held on

the 6th day of July, 2020, and adopted thereafter at a regular meeting of the City Council held on the 17th day of August 2020, by the following vote:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

Meaghan Hassel-Shearer, City Clerk