#### CITY OF ALAMEDA ORDINANCE NO. \_\_\_\_\_

#### **New Series**

AMENDING THE ALAMEDA MUNICIPAL CODE BY AMENDING: (1) ARTICLE I (UNIFORM CODES RELATING TO BUILDING, HOUSING AND TECHNICAL CODES) OF CHAPTER XIII (BUILDING AND HOUSING) TO ADOPT ALAMEDA LOCAL AMENDMENTS TO THE 2022 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE TO REQUIRE NEWLY CONSTRUCTED BUILDINGS TO BE ALL-ELECTRIC.

WHEREAS, the California State Building Standards Commission approved and published the 2022 edition of the California Building Standards Code on July 1, 2022, and such code will be effective 180 days thereafter, which is January 1, 2023; and

WHEREAS, Alameda adopted local amendments to the 2019 California Energy Code in 2021 requiring that all new construction be all-electric with certain exceptions; and

WHEREAS, these local amendments must be renewed upon adoption of the 2022 California Building Standards Code; and

WHEREAS, the 2022 California Building Standards Code includes the 2022 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 each such change or modification is reasonably necessary because of local climatic, geological, or topographical conditions; 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 each of the local amendments to the 2022 California Green Building Standards Code, are reasonably necessary because of local climatic, geological, and topographic conditions; and

WHEREAS, consistent with the City's Climate Action and Resiliency Plan, the local amendments to the 2022 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 emissions as evidenced by the statewide cost-effectiveness studies prepared by the California Statewide Investor Owned Utilities Codes and Standards Program, which demonstrate the potential for both a reduction in emissions and energy usage; and

Exhibit 2 Item 7-B, November 3, 2022 Historical Advisory Board Meeting Page 1 of 9

WHEREAS, cost effectiveness studies prepared by the California Statewide Investor Owned Utilities Codes and Standards Program in conjunction with the City's consultant, demonstrate that the local amendments are cost-effective and do not result in buildings consuming more energy than is permitted by the 2022 California Energy Code; and

WHEREAS, local amendments to the 2022 California Green Building Standards Code were the subject of stakeholder workshops conducted on October 18 and 20, a public meeting conducted on November 3 (Historical Advisory Board) and November 14 (Planning Board), in addition to this evening's City Council meeting, at which attendees included architects, energy modelers, designers, builders, developers, and residents; and

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

#### Section 1: RECITALS

The City Council finds the foregoing recitals to be true and correct and hereby incorporates those recitals into this Ordinance.

#### Section 2: PURPOSE AND INTENT

It is the purpose and intent of this Ordinance to adopt the local amendments to the 2022 California Green Building Standards Code (Title 24, Part 11) that provide local, cost effective standards for new residential, non-residential, and hotel and motel buildings that exceed the minimum standards of the 2022 California Green Building Standards Code to achieve energy savings, reduce local pollution, reduce greenhouse gas emissions, and address unique local climatic, geological, and topographical conditions.

#### Section 3: LOCAL AMENDMENTS TO ENERGY CODE

Article I (UNIFORM CODES RELATING TO BUILIDNG, HOUSING AND TECHNICAL CODES) of Chapter XIII (BUILDING AND HOUSING) of the Alameda Municipal Code, is hereby amended as follows (<u>underlined</u> for additions and strike through for deletions):

#### 13-10. 1 – ALAMEDA GREEN BUILDING STANDARDS CODE.

#### 13-10.1 – Adoption of California Green Building Standards Code.

The 2022 Edition of California Green Buildings Standards Code (CalGreen) published by the California Building Standards Commission, is adopted by reference and made a part hereof as if fully set forth herein at length, and shall be known as the Alameda Green Buildings Code.

# 13-10.2 – Copy of California Green Building Standards Code with Planning, Buildings and Transportation Department.

A copy of the California Green Building Standards Code, the 2022 Edition shall be maintained by the Building Official for use and examination by the public.

## <u>13-10.3 – Local Amendments.</u>

Notwithstanding any provisions of the 2022 California Energy Code, 2022 California Green Building Standards Code, or other codes adopted by any Chapter in the Alameda Municipal Code to the contrary, the local amendments to the Green Building Standards Code set forth in this Section shall apply and are hereby amended as follows (underlined for additions and strike through for deletions):

# CHAPTER 2 – DEFINITIONS

ALL-ELECTRIC BUILDING. A building that contains no combustion equipment or plumbing for combustion equipment serving space heating (including fireplaces), water heating (including pools and spas), cooking appliances (including barbeques), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

**COMBUSTION EQUIPMENT.** Any equipment or appliance used for space heating, water heating, cooking, clothes drying and/or lighting that uses *fuel gas*.

**COMMERCIAL FOOD HEAT-PROCESSING EQUIPMENT.** An equipment used in a food establishment for heat-processing food or utensils and that produces grease vapors, steam, fumes, smoke, or odors that are required to be removed through a local exhaust ventilation system, as defined in the California Mechanical Code.

**ELECTRIC HEATING APPLIANCE.** A device that produces heat energy by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions.

**FUEL GAS.** A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

# CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES

## Division 4.1 PLANNING AND DESIGN

# **SECTION 4.106**

## SITE DEVELOPMENT

.....

**4.106.5 All-electric buildings.** New construction buildings and qualifying alteration projects shall comply with Section 4.106.5.1 or 4.106.5.2 so that they do not use *combustion equipment* or are ready to facilitate installation of *electric heating appliances*.

#### 4.106.5.1. New construction and qualifying alteration projects. All newly

constructed buildings shall be *all-electric buildings*. Alterations that include replacement or addition of over 50 percent of the existing foundation for purposes other than a repair or reinforcement as defined in California Existing Building Code Section 202; or where over 50 percent of the existing building footprint is being remodeled, including unfinished spaces, shall be *all-electric buildings*. If either of these criteria are met within a three-year period, measured from the date of the most recent previously obtained permit final date, the project shall be subject to the *all-electric buildings* requirements.

<u>Tenant improvements shall not be considered new construction. The final determination</u> whether a project meets the definition of substantial reconstruction/alteration shall be made by the Building Official.

### Exception:

 <u>The Building Official may grant a modification to the requirements set forth</u> <u>herein, if s/he finds: (1) there is no all-electric prescriptive compliance pathway</u> <u>for the building under the Energy Code, and (2) the building is not able to achieve</u> <u>the performance compliance standard applicable to the building under the</u> <u>Energy Code using commercially available technology and an approved</u> <u>calculation method. The applicant shall comply with Section 4.106.5.2.</u>

<u>Alameda shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104.</u>

- 2. <u>Newly constructed buildings with a valid planning entitlement or Development</u> <u>Agreement approved prior to July 1, 2021.</u>
- 3. Existing appliances that are not included in the scope of the qualifying alteration.

# 4.106.5.2 Requirements for combustion equipment.

Where combustion equipment is allowed per Exceptions under 4.106.5.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways:

- 1. <u>Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and</u>
- 2. <u>Labeling of both ends of the unused conductors or conduit shall be with "For</u> <u>Future Electrical Appliance"; and</u>
- 3. <u>Reserved circuit breakers in the electrical panel for each branch circuit,</u> <u>appropriately labeled (i.e "Reserved for Future Electric Range"), and positioned</u> <u>on the opposite end of the panel supply conductor connection; and</u>
- 4. <u>Connected subpanels, panelboards, switchboards, busbars, and transformers</u> <u>shall be sized to serve the future electrical heating appliances. The electrical</u> <u>capacity requirements shall be adjusted for demand factors in accordance with</u> <u>the California Electric Code; and</u>
- 5. <u>Physical space for future electrical heating appliances, including equipment</u> footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.

# CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES

# Division 5.1 PLANNING AND DESIGN

# SECTION 5.106 - SITE DEVELOPMENT

.....

**5.106.13 All-electric buildings.** New construction buildings and qualifying alteration projects shall comply with Section 5.106.13.1 or 5.106.13.2 so that they do not use *combustion equipment* or are ready to facilitate installation of *electric heating appliances.* 

5.106.13.1. New construction and qualifying alteration projects. All newly constructed buildings shall be *all-electric buildings*. Alterations that include replacement or addition of over 50 percent of the existing foundation for purposes other than a repair or reinforcement as defined in California Existing Building Code Section 202; or where over 50 percent of the existing framing above the sill plate is removed or replaced for purposes other than repair, shall be *all-electric buildings*. If either of these criteria are met within a three-year period, measured from the date of the most recent previously obtained permit final date, the project shall be subject to the *all-electric buildings* requirements.

Tenant improvements shall not be considered new construction. The final determination whether a project meets the definition of substantial reconstruction/alteration shall be made by the local enforcing agency.

## Exceptions:

- 1. <u>Commercial food heat-processing equipment in nonresidential buildings</u> <u>containing located in a place of public accommodation, as defined in the</u> <u>California Building Code Chapter 2.</u>
- <u>Non-electric space heating and process systems in newly constructed buildings</u> <u>containing occupancies F, H, or L. To take advantage of this exception applicant</u> <u>shall provide third party verification approved by the City that All-Electric process</u> <u>system requirement is not cost effective or feasible.</u>
- The Building Official may grant a modification to the requirements set forth herein, if s/he finds: (1) there is no all-electric prescriptive compliance pathway for the building under the Energy Code, and (2) the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method. The applicant shall comply with Section 5.106.13.2

Alameda shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104.

# 5.106.13.2. Requirements for combustion equipment.

Where combustion equipment is allowed per exceptions under Section 5.106.13.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways, as certified by a registered design professional or licensed electrical contractor:

1. <u>Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum</u>

amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

- 2. <u>Labeling of both ends of the unused conductors or conduit shall be with "For</u> <u>Future Electrical Appliance"; and</u>
- 3. <u>Reserved circuit breakers in the electrical panel for each branch circuit,</u> <u>appropriately labeled (i.e "Reserved for Future Electric Range"), and positioned</u> <u>on the opposite end of the panel supply conductor connection; and</u>
- 4. <u>Connected subpanels, panelboards, switchboards, busbars, and transformers</u> <u>shall be sized to serve the future electrical heating appliances. The electrical</u> <u>capacity requirements shall be adjusted for demand factors in accordance with</u> <u>the California Electric Code; and</u>
- 5. <u>Physical space for future electrical heating appliances, including equipment</u> footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.

Section 4: IMPLIED REPEAL

Any provision of the Alameda Municipal Code inconsistent with this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to the extent necessary to effectuate this Ordinance.

Section 5: CEQA DETERMINATION

This action is exempt from CEQA pursuant to CEQA Guidelines section 15061(b)(3) in that the standards set forth in the ordinance are more protective of the environment than the California Energy Code standards, and there is no possibility that the activity in question may have a significant effect on the environment. As a separate and independent basis, this action is exempt from CEQA pursuant to CEQA Guidelines section 15308 in that the standards set forth in the ordinance assure the maintenance, restoration, enhancement or protection of natural resources and the environment. In addition, CEQA Guidelines section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) applies to the project in that the standards set forth in the Ordinance are consistent with the General Plan and the Climate Action and Resiliency Plan.

The foregoing determination is made by the City Council in its independent judgment.

Section 6: SEVERABILITY Exhibit 2 Item 7-B, November 3, 2022 Historical Advisory Board Meeting If any provision of this Ordinance is held by a court of competent jurisdiction to be invalid, this invalidity shall not affect other provisions of this Ordinance that can be given effect without the invalid provision and therefore the provisions of this Ordinance are severable. The City Council declares that it would have enacted each section, subsection, paragraph, subparagraph and sentence notwithstanding the invalidity of any other section, subsection, paragraph, subparagraph or sentence.

Section 7: EFFECTIVE DATE

This Ordinance shall be in full force and effect from and after January 1, 2023.

\* \* \* \* \*

Presiding Officer of the City Council

Attest:

Lara Weisiger, City Clerk

I, the undersigned, hereby certify that the foregoing Ordinance was duly and regularly adopted and passed by the Council of the City of Alameda in a regular meeting assembled on the \_\_\_\_\_\_, 2022, by the following vote to wit:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

١

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this \_\_\_\_\_\_, 2022.

Lara Weisiger, City Clerk City of Alameda

Approved as to form:

Yibin Shen, City Attorney