DOCKETED		
Docket Number:	22-BSTD-07	
Project Title:	Local Ordinance Applications Exceeding the 2022 Energy Code	
TN #:	258412	
Document Title:	City of Encinitas Public Hearing Staff Report	
Description:	Plain text of City of Encinitas public hearing staff report (first reading)	
Filer:	Anushka Raut	
Organization:	California Energy Commission	
Submitter Role:	: Commission Staff	
Submission Date:	8/9/2024 4:16:13 PM	
Docketed Date:	8/9/2024	



MEETING DATE:

May 15, 2024

PREPARED

BY:

Madelyn Wampler, Sustainability Analyst **DEPARTMENT** Kerry Kusiak

DIRECTOR:

MANAGER:

DEPARTMENT: Development Services

CITY

Pamela Antil

SUBJECT:

Public Hearing to review and consider the introduction of City Council Ordinance No. 2024-04 proposing Municipal Code amendments which modify the 2022 California Building Standards Code related to energy efficiency and green building

RECOMMENDED ACTION:

Introduce City Council Ordinance No. 2024-04, titled "An Ordinance of the City Council of the City of Encinitas, California, adopting amendments to Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the Encinitas Municipal Code to make certain amendments, additions, and deletions related to energy efficiency and green building" (Attachment 1 (clean) and 2 (local strikeout)).

ENVIRONMENTAL CONSIDERATIONS:

The minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects. Adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan, including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required.

This item is related to the following measures in the City's Climate Action Plan:

- BE-2: Require Decarbonization of New Residential Buildings
- BE-4: Require Decarbonization of New Commercial Buildings

STRATEGIC PLAN:

This item aligns with the Environmental Health and Leadership Focus Area of the Strategic Plan.

FISCAL CONSIDERATIONS:

There is no direct fiscal impact associated with the staff recommendation. Costs associated with administering the ordinances will be recovered through plan check, permitting, and inspection fees currently in effect. No fee modifications are proposed.

BACKGROUND:

On November 18, 2020, City Council approved an interim update to the Climate Action Plan which included the following updated building-related measures which exceed state Building Code minimum standards:

BE-2: Require Decarbonization of New Residential Buildings

BE-4: Require Decarbonization of New Commercial Buildings

On October 26, 2022, City Council adopted and amended the California Building Standards Code (Attachment 3). The amendments, codified in Encinitas Municipal Code (EMC) Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction), included a decarbonization requirement, specifying that newly constructed buildings be all-electric.

The City of Berkeley had adopted a similar regulation in 2019, which was subject to an unsuccessful challenge in federal district court that the federal Energy Policy and Conservation Act (EPCA) preempted the City of Berkeley's all-electric ordinance. However, on April 17, 2023, the United States Court of Appeals for the Ninth Circuit ("Ninth Circuit") reversed a district court's decision and ruled that the EPCA preempted the City of Berkeley's all-electric ordinance. The EPCA (42 U.S.C. § 6297(c)) states that "no State [or local] regulation concerning the energy efficiency, energy use, or water use, of [a] covered product shall be effective with respect to such covered product." In response to the Ninth Circuit's ruling, on June 14, 2023, the City Council adopted Resolution 2023-75 (Attachment 4), temporarily suspending the all-electric requirement for new buildings.

On January 2, 2024, the Ninth Circuit denied the City of Berkeley's petition for rehearing and issued a modified opinion affirming that Berkeley's regulation is preempted by federal law. The City of Berkeley subsequently announced that it would not pursue an appeal of the Ninth Circuit ruling and will repeal its ordinance banning natural gas connections in new buildings. This decision effectively solidifies the Ninth Circuit's ruling on April 17, 2023, as final law.

ANALYSIS:

Staff recognizes City Council's priority to implement the City's Climate Action Plan and reduce local greenhouse gas emissions while ensuring compliance with federal and state laws. To this end, and in response to the outcomes of *California Restaurant Association v. City of Berkeley*, the recommended action before City Council is to permanently repeal EMC Sections 23.12.110.B and 23.12.110.C, which regulate the use of fuel gas infrastructure in new buildings, and adopt a revised set of requirements that encourages decarbonization through enhanced energy efficiency performance requirements that are not in conflict with EPCA. This approach aims to reduce emissions from new mixed-fuel buildings as well. The state allows such local amendments (commonly called "reach codes") to the California Energy Code (Part 6, of the California Building Standards Code) when findings can be made to support that local topographical, geological, and climatic conditions necessitate the amendments and when findings can be made that the standards are cost-effective. In no circumstances can a local amendment be less restrictive than the state adopted codes.

Proposed Ordinance No. 2024-04 would update the EMC to adopt an amended version of the California Energy Code that includes higher performance standards for all newly constructed single-family and low-rise (three habitable stories or less) multifamily buildings. The performance standards would apply to mixed-fuel and all-electric buildings alike. In addition, the proposed ordinance would expand electric-readiness requirements for all mixed-fuel multifamily and nonresidential newly constructed buildings. Single-family buildings less than 1,500 square feet, (including detached accessory dwelling units), high-rise (4 stories or more) multifamily buildings, and nonresidential buildings would be excluded from the requirement because, in these scenarios, meeting the requirement may not be cost effective (Attachment 5).

The 2022 California Energy Code establishes certain energy requirements for new construction, including energy performance targets. The performance requirements state that a proposed design may not exceed a specific energy budget, as calculated by State-approved modeling software. The proposed standards in Ordinance No. 2024-04 would increase the performance requirements to encourage the use of highly efficient heat pump appliances in newly constructed single-family and low-rise multifamily buildings.

For single-family buildings, the proposed standard is a 4.5-point reduction in the Energy Design Rating 1 (EDR1), where EDR1 represents the source energy budget. For low-rise multifamily buildings, the proposed standard is an eight (8) percent reduction in the source energy budget. Both standards have been determined to be cost effective and analysis has shown that constructing a new single-family building or low-rise multi-family building with all-electric appliances would be the most economical compliance option (Attachment 5).

In summary, the proposed approach aligns with federal and state laws, promotes energy efficiency, and encourages the transition to all-electric buildings while offering flexibility for mixed-fuel construction. It represents a balanced strategy to achieve greenhouse gas reduction targets while ensuring compliance and technical feasibility. Notably, the Cities of Santa Cruz, San Luis Obispo, and San Jose have each adopted a similar high-performance reach code, with several other municipalities in the state exploring a similar approach.

The ordinance also includes several administrative updates to enhance clarity and align with the proposed 2025 State Energy Code:

- Introduction of definition for "Certified Energy Analyst" to support the performance approach reach code language.
- Removal of definitions and code sections pertaining to the all-electric requirement.
- Modification of code language to clarify the electric vehicle (EV) charging requirements for nonresidential additions and alterations.
- Addition of electric readiness requirements for mixed-fuel single-family and multifamily buildings, including a guidance document for electric readiness of multifamily central hot water systems (Attachment 6). While the California Energy Code already incorporates some electric readiness provisions, the proposed requirements offer enhanced specificity to facilitate future conversion to all-electric systems.
- Reinstatement of the adoption by reference of the 2022 California Energy Code, Part 6 and the 2022 California Green Building Standards Code, Part 11, Title 24 of the California Code of Regulations which were previously omitted unintentionally in prior Ordinance Nos. 2022-13 and 2022-14.

All proposed amendments to the Municipal Code are shown in Attachment 2. Red strike through font indicates deletions, while <u>blue underlined</u> font indicates additions. A clean copy of the draft ordinance is attached herein as Attachment 1. A redline version tailored for submission to the California Energy Commission and the California Building Standards Commission is also attached herein as Attachment 7.

ATTACHMENT(S):

- Clean version of City Council Ordinance No. 2024-04, titled "An Ordinance of the City Council of the City of Encinitas, California, adopting amendments to Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the Encinitas Municipal Code to make certain amendments, additions, and deletions related to energy efficiency and green building."
- Strikeout version of City Council Ordinance No. 2024-04 titled "An Ordinance of the City Council of the City of Encinitas, California, adopting amendments to Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the Encinitas Municipal Code to make certain amendments, additions, and deletions related to energy efficiency and green building."
- 3. Ordinance No. 2022-14, titled "An Ordinance of the City Council of Encinitas, adopting amendments to Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the Encinitas Municipal Code to make certain amendments, additions, and deletions related to building decarbonization, electric vehicles, water conservation and energy efficiency."
- 4. Resolution No. 2023-75, titled "A Resolution of the City Council of the City of Encinitas Temporarily Suspending Sections 23.12.110.B and 23.12.110.C of Chapter 23.12 (Uniform Building Codes for Construction) Of Title 23 (Building and Construction) of the Encinitas Municipal Code.
- 5. High Performance Reach Code Analysis, California Energy Codes and Standards Team
- 6. Guidance for Electric Readiness of Multifamily Central Hot Water Systems
- 7. Redline amendments to the 2022 Title 24 California Building Standards Code, Part 6, Energy Code and 2022 Title 24 California Building Standards Code, Part 11, Green Building (CALGreen) Code for filing with the California Building Standards Commission.

[CLEAN version]

ORDINANCE 2024-04

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ENCINITAS, CALIFORNIA, ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION) OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE TO MAKE CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO ENERGY EFFICIENCY AND GREEN BUILDING

WHEREAS, the City of Encinitas desires to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80 percent below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, and, making heating fuels cleaner;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018, aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100 percent renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses;

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the City Council of the City of Encinitas adopted Resolution 2020-90 declaring a climate emergency on December 16, 2020;

WHEREAS, Health and Safety Code (HSC) Section 18941.5, with reference to HSC Section 17958.7, allows for more restrictive local amendments to the California Building Standards Code that are reasonably necessary because of local climatic, geological, or topographical conditions;

WHEREAS, the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storm damage, erosion, and flooding. There is

- broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare.

WHEREAS, Public Resources Code (PRC) Section 25402.1(h)(2) and the California Energy Code, Title 24, Part 6, Section 10-106 establish a process by which local governments may adopt more stringent standards to the energy efficiency and conservation provisions in the California Energy Code, Title 24, Part 6, provided that the standards have been determined to be cost effective and will require buildings to be designed to consume no more energy than permitted by the California Energy Code;

WHEREAS, the following studies commissioned by the California Statewide Energy Codes and Standards Program demonstrate that the local amendments are cost effective and do not result in buildings consuming more energy than is permitted by the California Energy Code:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023);

WHEREAS, it has been determined that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduced environmental effects. Adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated

the potential environmental effects of the implementation of the Climate Action Plan including, the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required; and

WHEREAS, the City Council of the City of Encinitas now seeks to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 to reflect its Climate Action Plan.

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION ONE: ENERGY CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.080, Subsections F., G., H., I., J., K., L., M. and N., Adoption of the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, is hereby amended to modify or add the following sections as specified herein:

There is adopted and incorporated by reference herein as the City's Energy Code for the purpose of prescribing regulations in the City of Encinitas for the conservation of energy, the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, a portion of the 2022 California Building Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings where energy will be utilized shall be in conformance with 2022 California Energy Code and any rules and regulations promulgated pursuant thereto, including the California Energy Code, 2022 Edition, published by the California Energy Commission.

- **F.** Applicability. Requirements A through E apply to all building permit applications filed on or after January 1, 2023, or the effective date, whichever is later. On or after August 2, 2022, and until December 31, 2022, or the effective date of the ordinance codified in this section, whichever is later, the requirements adopted by Ordinance No. 2021-13 shall apply.
- **G.** Section 100.1(b) DEFINITIONS, of the California Energy Code is hereby amended to add a definition to read:
 - **CERTIFIED ENERGY ANALYST** is a person registered as a Certified Energy Analyst with the California Association of Building Energy Consultants as of the date of submission of a Certificate of Compliance as required under Section 10.103.
- **H.** The first two paragraphs of Section 150.0 of the California Energy Code are hereby amended to read:

SECTION 150.0 – MANDATORY FEATURES AND DEVICES

Single-family residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(v).

NOTE: The requirements of Sections 150.0(a) through 150.0(v) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations.

I. Section 150.0(t) of the California Energy Code is hereby amended to read:

Section 150.0(t) - Heat Pump Space Heater Ready.

Systems using gas or propane furnace to serve individual dwelling units shall include the following:

- 1. A dedicated 240-volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready". All electrical components shall be installed in accordance with the California Electrical Code.
- 2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use".
- 3. A designated exterior location for a future heat pump compressor unit with either a drain or natural drainage for condensate.
- **J.** Section 150.1(b)1A of the California Energy Code is hereby added to read:

Section 150.1(b)1A

In addition, the total source energy (EDR1) of the Proposed Design Building shall be less than the EDR1 of the Standard Design Building by a compliance margin of 4.5.

EXCEPTION 1 to Section 150.1(b)1.A. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one point, but in no event shall be less than zero.

EXCEPTION 2 to Section 150.1(b)1.A. A dwelling unit with a conditioned floor space of 1,500 square feet or less.

- **K.** Sections 160.9(a), (b), and (c) of the California Energy Code are hereby renumbered as Sections 160.9(b), (c), and (d), respectively.
- L. A new Section 160.9(a) of the California Energy Code is added to read as follows:
 - (a) General Requirements. Multifamily buildings shall comply with the applicable requirements of subsection 160.9. The building electrical system shall be sized to meet the future electric requirements of the electric ready equipment specified in sections 160.9(a) through (e). The building main service conduit, the electrical system to the point specified in each subsection, and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each electric ready appliance in accordance with the California Electrical Code.
- **M.** A new Section 160.9(e) of the California Energy Code is added to read as follows:
 - (e) Individual Heat Pump Water Heater Ready. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:
 - 1. A dedicated 125-volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor branch circuit rated to 30 amps minimum, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all the following:
 - A. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and
 - B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and
 - 2. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance, and

- 3. The construction drawings shall designate a space at least 39 inches by 39 inches and 96 inches tall for the future location of heat pump water heater.
- 4. A ventilation method meeting one of the following:
 - A. The designated space for the future heat pump water heater shall have a minimum volume of 700 cubic feet; or
 - B. The designated space for the future heat pump water heater shall vent to a communicating space in the same pressure boundary via permanent openings with a minimum total NFA of 250 square inches., so that the total combined volume connected via permanent openings is 700 cubic feet or larger. The permanent openings shall be:
 - i. Fully louvered doors with fixed louvers; or
 - ii. Two permanent fixed openings located within 12 inches from the enclosure top and bottom;
 - C. The designated space for the future heat pump water heater shall include two 8-inch capped ducts, venting to the building exterior:
 - i. All ducts, connections, and building penetrations shall be sealed.
 - ii. Exhaust air ducts and all ducts which cross pressure boundaries shall be insulated to a minimum insulation level of R-6.
 - iii. Airflow from termination points shall be diverted away from each other.
- N. A new Section 160.9(f) of the California Energy Code is added to read as follows:
 - (f) Heat Pump Water Heater Ready.
 - 1. Central water heating systems using gas or propane to serve multiple dwelling units shall include the following elements for future conversion to electric heat pump technology:
 - a. Space reserved for heat pumps and tanks for service clearances and airflow clearances.
 - b. Pathways and penetrations reserved for ventilation.
 - c. Condensate drainage piping.
 - d. Electrical capacity for heat pumps and temperature maintenance tanks.
 - 2. Compliance with this section shall be demonstrated in a manner prescribed by "Guidance for Electric Readiness of Multifamily Central Hot Water Systems" issued and periodically amended, as needed, by the Building Official.
- **O.** Section 170.1 of the California Energy Code is hereby amended to read:

SECTION 170.1 - PERFORMANCE APPROACH: ENERGY BUDGETS

A building complies with the performance approach if the TDV energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the TDV energy budget calculated for the Standard Design Building under Subsection (a). Additionally, the energy budget, expressed in terms of source energy, of a newly constructed low-rise multifamily building (less than four habitable stories) shall be at least eight (8) percent lower than that of the Standard Design Building.

EXCEPTION to Section 170.1. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one percentage point, but in no event shall be less than zero.

SECTION TWO: GREEN BUILDING CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.110, Subsections A., B., C. and G., Adoption of the 2022 California Green Building Standards Code, Part 11, Title 24 of the California Code of Regulations, is hereby amended to modify or add the following sections as specified herein:

There is adopted and incorporated by reference herein as the City's Green Building Code for the purpose of prescribing regulations in the City of Encinitas for enhancing the design and construction of buildings, through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices the 2022 California Green Building Standards Code, Part II, Title 24 of the California Code of Regulations, a portion of the 2022 California Buildings Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq., and the California Green Building Standards Code, 2022 Edition. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings shall be in conformance with the 2022 California Building Standards Code and any rules and regulations promulgated pursuant thereto, including the California Green Building Standards Code, 2022 Edition, published by the California Building Standards Commission.

A. Section 202 DEFINITIONS, is hereby amended to add or modify the following definitions to the 2022 California Green Building Standards Code to read:

Newly Constructed Building (or New Construction) shall have the meaning defined in Title **24**, Part 2, Chapter **2**, Section 202, as amended.

- **B.** Reserved.
- C. Reserved.
- **G.** Section 5.106.5.3.2.1 Additional Electric Vehicle Charger Requirements for Nonresidential Buildings, is hereby added to the 2022 California Green Building Standards Code Section to read:

5.106.5.3.2.1 Additional electric vehicle charging station requirements for nonresidential buildings.

- 1. The total number of parking spaces provided with electric vehicle supply equipment (EVSE) required under Section 5.106.5.3.2 shall be at least 8% of the total number of parking spaces provided for all types of parking facilities, but in no case less than one. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property.
- 2. For any nonresidential alteration or addition that requires a building permit with square footage larger than 10,000 sq. ft. as determined by the City of Encinitas Building Division, at least 8% of the total number of required parking spaces provided for all types of parking facilities allocated to the tenant space(s), but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each such space shall be equipped with, at a minimum, fully operational Level 2 electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property in the same manner as other parking spaces. Refer to Sections 5.106.5.3.2 and 5.106.5.3.3 for design requirements.
- **3.** These requirements shall apply to mixed occupancy buildings as specified in Section 302.

Exceptions:

On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
- 2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3.2.1, may adversely impact the construction cost of the project.
- 3. Or other conditions as determined by the City.

SECTION THREE: FINDINGS.

The proposed amendments and changes to the California Energy Code, Part 6 of the California Building Standards Code, are reasonably necessary because of the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

- 1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storm damage, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare;

By adopting this ordinance, the City Council has determined, in a public meeting, that the standards are cost-effective according to the following studies:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023).

SECTION FOUR: ENVIRONMENTAL COMPLIANCE.

The City Council finds in its independent judgment that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects and that adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan, including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required.

SECTION FIVE: CONSISTENCY.

Any provision of the Encinitas 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 affect the provisions of this Ordinance.

SECTION SIX: SEVERABILITY.

If any chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion of this Ordinance, or the application thereof to any person, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of this Ordinance or its application to other persons. The City Council hereby declares that it would have adopted this Ordinance and each chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion thereof, irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, phrases, or portions of the application thereof to any person, be declared invalid or unconstitutional.

SECTION SEVEN: EFFECTIVE DATE.

This Ordinance shall take effect and be in force sixty (60) days after its passage and following approval of the California Energy Commission and filing with the California Building Standards Commission, whichever is later. The City Clerk of the City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 36933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.

This Ordinance was introduced at a regular meeting of the City Council held on May 15, 2024.

PASSED, APPROVED AND ADOPT	ED at a regular	meeting of the C	ity Council held	d on the
day of				

	Tony Kranz, Mayor
ATTEST:	
	_
Kathy Hollywood, City Clerk	
APPROVED AS TO FORM	
Tarquin Preziosi, City Attorney	_
certify under penalty of perjury that the foregoin a meeting of the City Council on the 15th day of	erk of the City of Encinitas, California, do herebying ordinance was duly and regularly introduced at _May, 2024 and that thereafter the said ordinance eting of the City Council on the of the, to wit:
AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
IN WITNESS WHEREOF, I have hereunto set r Encinitas, California, this day of,	my hand and affixed the official seal of the City of , 2024.
Kathy Hollywood. City Clerk	

ORDINANCE 2024-04

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ENCINITAS, CALIFORNIA,
ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION)
OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE
TO MAKE CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO
ENERGY EFFICIENCY AND GREEN BUILDING

WHEREAS, the City of Encinitas desires to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80 percent below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, and, making heating fuels cleaner;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018, aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100 percent renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses;

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the City Council of the City of Encinitas adopted Resolution 2020-90 declaring a climate emergency on December 16, 2020;

WHEREAS, Health and Safety Code (HSC) Section 18941.5, with reference to HSC Section 17958.7, allows for more restrictive local amendments to the California Building Standards Code that are reasonably necessary because of local climatic, geological, or topographical conditions;

WHEREAS, the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storm damage, erosion, and flooding. There is

- broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- Amendments to the California Energy Code are reasonably necessary to promote energy
 efficiency and conservation in the City, reduce GHG emissions, promote green
 development patterns, and maintain a long-term balance between environmental, social,
 and economic impacts that protect public health and welfare.

WHEREAS, Public Resources Code (PRC) Section 25402.1(h)(2) and the California Energy Code, Title 24, Part 6, Section 10-106 establish a process by which local governments may adopt more stringent standards to the energy efficiency and conservation provisions in the California Energy Code, Title 24, Part 6, provided that the standards have been determined to be cost effective and will require buildings to be designed to consume no more energy than permitted by the California Energy Code;

WHEREAS, the following studies commissioned by the California Statewide Energy Codes and Standards Program demonstrate that the local amendments are cost effective and do not result in buildings consuming more energy than is permitted by the California Energy Code:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023);

WHEREAS, it has been determined that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects. Adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated

the potential environmental effects of the implementation of the Climate Action Plan including, the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required; and

WHEREAS, the City Council of the City of Encinitas now seeks to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 to reflect its Climate Action Plan.

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION ONE: ENERGY CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.080, Subsections F., G., H., I., J., K., L., M. and N., Adoption of the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, is hereby amended to modify or add the following sections (<u>underline</u> is used to denote new text being added, <u>strikeout</u> is used to denote text being deleted):

There is adopted and incorporated by reference herein as the City's Energy Code for the purpose of prescribing regulations in the City of Encinitas for the conservation of energy, the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, a portion of the 2022 California Building Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings where energy will be utilized shall be in conformance with 2022 California Energy Code and any rules and regulations promulgated pursuant thereto, including the California Energy Code, 2022 Edition, published by the California Energy Commission.

- **F.** Applicability. These requirements Requirements A through E apply to all building permit applications filed on or after January 1, 2023, or the effective date, whichever is later. On or after August 2, 2022, and until December 31, 2022, or the effective date of the ordinance codified in this section, whichever is later, the requirements adopted by Ordinance No. 2021-13 shall apply.
- **G.** Section 100.1(b) DEFINITIONS, of the California Energy Code is hereby amended to add a definition to read:
 - CERTIFIED ENERGY ANALYST is a person registered as a Certified Energy Analyst with the California Association of Building Energy Consultants as of the date of submission of a Certificate of Compliance as required under Section 10.103.
- **H.** The first two paragraphs of Section 150.0 of the California Energy Code are hereby amended to read:

SECTION 150.0 – MANDATORY FEATURES AND DEVICES

Single-family residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(v).

NOTE: The requirements of Sections 150.0(a) through 150.0(v) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations.

I. Section 150.0(t) of the California Energy Code is hereby amended to read:

Section 150.0(t) - Heat Pump Space Heater Ready.

Systems using gas or propane furnace to serve individual dwelling units shall include the following:

- 1. A dedicated 240-volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready". All electrical components shall be installed in accordance with the California Electrical Code.
- 2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use".
- 3. A designated exterior location for a future heat pump compressor unit with either a drain or natural drainage for condensate.
- **J.** Section 150.1(b)1A of the California Energy Code is hereby added to read:

Section 150.1(b)1A

In addition, the total source energy (EDR1) of the Proposed Design Building shall be less than the EDR1 of the Standard Design Building by a compliance margin of 4.5.

EXCEPTION 1 to Section 150.1(b)1.A. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one point, but in no event shall be less than zero.

EXCEPTION 2 to Section 150.1(b)1.A. A dwelling unit with a conditioned floor space of 1,500 square feet or less.

- K. Sections 160.9(a), (b), and (c) of the California Energy Code are hereby renumbered as Sections 160.9(b), (c), and (d), respectively.
- L. A new Section 160.9(a) of the California Energy Code is added to read as follows:
 - (a) General Requirements. Multifamily buildings shall comply with the applicable requirements of subsection 160.9. The building electrical system shall be sized to meet the future electric requirements of the electric ready equipment specified in sections 160.9(a) through (e). The building main service conduit, the electrical system to the point specified in each subsection, and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each electric ready appliance in accordance with the California Electrical Code.
- **M.** A new Section 160.9(e) of the California Energy Code is added to read as follows:
 - (e) Individual Heat Pump Water Heater Ready. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:
 - 1. A dedicated 125-volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor branch circuit rated to 30 amps minimum, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all the following:
 - A. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and
 - B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and

- 2. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance, and
- 3. The construction drawings shall designate a space at least 39 inches by 39 inches and 96 inches tall for the future location of heat pump water heater.
- 4. A ventilation method meeting one of the following:
 - A. The designated space for the future heat pump water heater shall have a minimum volume of 700 cubic feet; or
 - B. The designated space for the future heat pump water heater shall vent to a communicating space in the same pressure boundary via permanent openings with a minimum total NFA of 250 square inches., so that the total combined volume connected via permanent openings is 700 cubic feet or larger. The permanent openings shall be:
 - i. Fully louvered doors with fixed louvers; or
 - <u>ii.</u> Two permanent fixed openings located within 12 inches from the enclosure top and bottom;
 - C. The designated space for the future heat pump water heater shall include two 8-inch capped ducts, venting to the building exterior:
 - i. All ducts, connections, and building penetrations shall be sealed.
 - ii. Exhaust air ducts and all ducts which cross pressure boundaries shall be insulated to a minimum insulation level of R-6.
 - <u>iii.</u> Airflow from termination points shall be diverted away from each other.
- **N.** A new Section 160.9(f) of the California Energy Code is added to read as follows:
 - (f) Heat Pump Water Heater Ready.
 - 1. Central water heating systems using gas or propane to serve multiple dwelling units shall include the following elements for future conversion to electric heat pump technology:
 - a. <u>Space reserved for heat pumps and tanks for service clearances and airflow</u> clearances.
 - b. Pathways and penetrations reserved for ventilation.
 - c. Condensate drainage piping.
 - d. Electrical capacity for heat pumps and temperature maintenance tanks.
 - 2. Compliance with this section shall be demonstrated in a manner prescribed by "Guidance for Electric Readiness of Multifamily Central Hot Water Systems" issued and periodically amended, as needed, by the Building Official.
- O. Section 170.1 of the California Energy Code is hereby amended to read:

SECTION 170.1 – PERFORMANCE APPROACH: ENERGY BUDGETS

A building complies with the performance approach if the TDV energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the TDV energy budget calculated for the Standard Design Building under Subsection (a). Additionally, the energy budget, expressed in terms of source energy, of a newly constructed low-rise multifamily building (less than four habitable stories) shall be at least eight (8) percent lower than that of the Standard Design Building.

5

Item #10A

2024-05-15

EXCEPTION to Section 170.1. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one percentage point, but in no event shall be less than zero.

SECTION TWO: GREEN BUILDING CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.110, Subsections A., B., C. and G., Adoption of the 2022 California Green Building Standards Code, Part 11, Title 24 of the California Code of Regulations, is hereby amended to modify or add the following sections (<u>underline</u> is used to denote new text being added, <u>strikeout</u> is used to denote text being deleted):

There is adopted and incorporated by reference herein as the City's Green Building Code for the purpose of prescribing regulations in the City of Encinitas for enhancing the design and construction of buildings, through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices the 2022 California Green Building Standards Code, Part II, Title 24 of the California Code of Regulations, a portion of the 2022 California Buildings Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq., and the California Green Building Standards Code, 2022 Edition. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings shall be in conformance with the 2022 California Building Standards Code and any rules and regulations promulgated pursuant thereto, including the California Green Building Standards Code, 2022 Edition, published by the California Building Standards Commission.

A. Section 202 DEFINITIONS, is hereby amended to add or modify the following definitions to the 2022 California Green Building Standards Code to read:

All-Electric Building. A building that uses electricity as the source of energy for all its space heating (including but not limited to fireplaces and outdoor heaters), water heating (including but not limited to pools and spas), cooking (including but not limited to barbeques), and clothes drying appliances, and has no Fuel Gas Infrastructure within the building or building property lines for these end uses, except for abandoned Fuel Gas plumbing. An All-Electric Building may include solar thermal collectors.

Fuel Gas. A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

Fuel Gas Infrastructure. Fuel Gas piping in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter or gas tank as specified in the California Mechanical Code and Plumbing Code.

Newly Constructed Building (or New Construction) shall have the meaning defined in Title **24**, Part 2, Chapter **2**, Section 202, as amended.

B. Reserved. Section 4.504.6 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 4.504.6 Fuel gas. All Newly Constructed Residential and Hotel/Motel buildings shall be designed and constructed as All-Electric Buildings.

Exception to Section 4.504.6. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza

ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- 3. The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use that is equal to or greater than the expected annual GHG emissions from the therms consumed onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building;

4. The applicant shall comply with the pre-wiring provision of Note 1 below.

Note 1: If natural gas appliances are used under the exception above, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.

Note 2: Where the exception is granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or end-use that is required to be electric.

Note 3: If the exception is granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code, Part 2, Section 104.

C. Reserved. Section 5.509 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 5.509 Fuel gas. All Newly Constructed nonresidential buildings shall be designed and constructed as All-Electric Buildings.

Exception 1 to Section 5.509. "Essential Facilities" as defined by California Health and Safety Code Section 16007 built to the standards required by the Essential Services Buildings Seismic Safety Act of 1986 (California Health and Safety Code Sections 16000-16023) and Title 24, Part 1, Chapter 4 are exempt from the all-electric requirements if it is necessary to meet the requirements of other permitting agencies or is demonstrated to be necessary for the purpose of protecting public health, safety, and welfare. "Essential Facilities" as defined by the California Building Code Part 2 Section 202 are included in the definition of "essential services building."

Exception 2 to Section 5.509. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- 3. The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use that is equal to or greater than the expected annual GHG emissions from the therms consumed onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building;

- 4. 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 1-2, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.
 - **Note 2:** Where any of the exceptions 1-2 are granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or enduse that is required to be electric.
 - **Note 3:** If any of the exceptions 1-2 are granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per **California Building Code**, Part 2, Section 104.
- **G.** Section 5.106.5.3.2.1 Additional Electric Vehicle Charger Requirements for Nonresidential Buildings, is hereby added to the 2022 California Green Building Standards Code Section to read:

5.106.5.3.2.1 Additional electric vehicle charging station requirements for nonresidential buildings.

- 1. The total number of parking spaces provided with electric vehicle supply equipment (EVSE) required under Section 5.106.5.3.2 shall be at least 8% of the total number of parking spaces provided for all types of parking facilities, but in no case less than one. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property.
- **2.** For any nonresidential alteration or addition that requires a building permit with square footage larger than 10,000 sq. ft. as determined by the City of Encinitas Building Division, at least 8% of the total number of required parking spaces provided for all types of parking facilities allocated to the tenant space(s), but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each such space shall be equipped with, at a minimum, fully operational Level 2 electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property in the same manner as other parking spaces. Refer to Sections 5.106.5.3.2 and 5.106.5.3.3 for design requirements.
- 3. These requirements shall apply to mixed occupancy buildings as specified in Section 302.

Exceptions:

On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
- 2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3.2.1, may adversely impact the construction cost of the project.
- 3. Or other conditions as determined by the City.

SECTION THREE: FINDINGS.

The proposed amendments and changes to the California Energy Code, Part 6 of the California Building Standards Code, are reasonably necessary because of the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

- 1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storm damage, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- Amendments to the California Energy Code are reasonably necessary to promote energy
 efficiency and conservation in the City, reduce GHG emissions, promote green
 development patterns, and maintain a long-term balance between environmental, social,
 and economic impacts that protect public health and welfare;

By adopting this ordinance, the City Council has determined, in a public meeting, that the standards are cost-effective according to the following studies:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023).

SECTION FOUR: ENVIRONMENTAL COMPLIANCE.

The City Council finds in its independent judgment that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects and that adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of

the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan, including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required.

SECTION FIVE: CONSISTENCY.

Any provision of the Encinitas 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 affect the provisions of this Ordinance.

SECTION SIX: SEVERABILITY.

If any chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion of this Ordinance, or the application thereof to any person, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of this Ordinance or its application to other persons. The City Council hereby declares that it would have adopted this Ordinance and each chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion thereof, irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, phrases, or portions of the application thereof to any person, be declared invalid or unconstitutional.

SECTION SEVEN: EFFECTIVE DATE.

This Ordinance shall take effect and be in force sixty (60) days after its passage and following approval of the California Energy Commission and filing with the California Building Standards Commission, whichever is later. The City Clerk of the City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 36933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.

This Ordinance was introduced at a regular meeting of the City Council held on May 15, 2024.

PASSED, APPROVED AND ADOPTED day of	at a regular meeting of the City Council held on the
	Tony Kranz, Mayor
ATTEST:	
Kathy Hollywood, City Clerk	
APPROVED AS TO FORM	

2024-05-15 Item #10A Page 23 of 62

Tarquin Preziosi, City Attorney
CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the 15th day ofMay, 2024 and that thereafter the said ordinance was duly and regularly adopted at a meeting of the City Council on the of, 2024 by the following vote, to wit:
AYES:
NOES:
ABSENT:
ABSTAIN:
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Encinitas, California, this day of, 2024.
Kathy Hollywood, City Clerk

ORDINANCE NO. 2022-14

AN ORDINANCE OF THE CITY COUNCIL OF ENCINITAS, ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION) OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE TO MAKE CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO BUILDING DECARBONIZATION, ELECTRIC VEHICLES, WATER CONSERVATION AND ENERGY EFFICIENCY

CASE NUMBER: PLCY-005621-2022; CITYWIDE

SECTION ONE. The City Council of the City of Encinitas hereby finds and declares as follows:

WHEREAS, the City of Encinitas desires to amend Section 23.12.110 of Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving water and energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80 percent below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, making heating fuels cleaner, and reducing emissions from transportation;

WHEREAS, California Governor Gavin Newsom signed Executive Order N-79-20 on September 23, 2020, setting a target of 100 percent of in-state sales of new passenger vehicles will be zero-emission by 2035, as well as ambitious targets for zero-emission medium- and heavy-duty vehicles;

WHEREAS, the State of California recent adopted Assembly Bill 1236, which requires local agencies to adopt an ordinance that creates an expedited and streamlined permitting process for electric vehicle charging systems;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018, aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100 percent renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses:

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will

result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the City Council of the City of Encinitas adopted Resolution No. 2020-90 Declaring a Climate Emergency on December 16, 2020;

WHEREAS, to help achieve the goals set forth under Executive Order N-79-20, the City of Encinitas is amending Chapter 23.12 (Uniform Codes for Construction) Section 23.12.110 (2019 California Green Building Standards Code) in the City of Encinitas Municipal Code to implement State law as adopted by Assembly Bill 1236 on January 1, 2016, in order to achieve timely and cost-effective installations for electric vehicle charging stations in accordance with California Government Code section 65850.7; and

WHEREAS, Section 23.12.110 will facilitate the creation of an expedited, streamlined permitting process for electric vehicle charging stations would facilitate convenient charging of electric vehicles and help reduce the City's reliance on environmentally damaging fossil fuels.

WHEREAS, Chapter 23.12 will promote and encourage the use of electric vehicles in accordance with the City's Climate Action Plan; and

WHEREAS, an increase in local use of electric vehicle charging stations is expected to occur as the number of electric vehicles increases, which is consistent with the City's Climate Action Plan goals to expand alternative fuel infrastructure and increase the percentage of vehicle miles traveled by electric and alternative fuel vehicles; and

WHEREAS, the 2019 California Building Standards Code adopted by the California Building Standards Commission has set minimum Green Building Standards and, within the code, expressly stated that the standards are viewed as "minimal" and that local government entities retain discretion, pursuant to Health and Safety Code Section 17958 to exceed the standards established by the code based on express findings that such changes or modifications are reasonably necessary because of local climatic, topographical, or geological conditions pursuant to Health and Safety Code Section 17985.5, 17958.7, and 18941.5;

WHEREAS, California Green Building Standard Code Section 101.7.1 provides that local climatic, geological, or topographical conditions include environmental conditions established by a city, county, or city and county;

WHEREAS, the local amendments and changes to the California Building Standards Codes are reasonably necessary because of the following climatic, geologic, and topographical conditions:

- 1. The City has over 6 miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storms, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1 degree F in many parts of the state and have exceeded

- increases of 2 degree F in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produce extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy Efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Green Building Standards Code are reasonably necessary to increase use of sustainable energy sources, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare;

WHEREAS, the City Council finds in its independent judgment that the proposed amendment to the Encinitas Municipal Code to adopt State uniform codes is exempt from environmental review as per Section 15378(b)(5) of the CEQA Guidelines since the activity in question is not considered a "project" as defined therein. The action being considered by the City Council is an administrative activity of government that will not result in the direct or indirect physical change in the environment. This action entails adoption of State mandated Building Codes that are enforceable upon the City. Minor amendments will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduced environmental effects. Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224). dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum and no further California Environmental Quality Act (CEQA) compliance is required. The City Council therefore finds that there is no possibility that the minor local amendments may have a significant effect on the environment; therefore pursuant to Section 15061(b)(3) of the CEQA Guidelines the activity is exempt from the provisions of CEQA; and

WHEREAS, the City Council of the City of Encinitas seeks to amend Section 23.12.110 of Chapter 23.12 to reflect its Climate Action Plan.

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION TWO. Ordinance No. 2021-13 amending Section 23.12.110 of Chapter 23.12 of the Encinitas Municipal Code is hereby repealed in its entirety. Section 23.12.110 of Chapter 23.12 of the Encinitas Municipal Code is hereby amended to add, modify or remove the following sections as specified herein:

A. Section 202 DEFINITIONS, is hereby amended to add or modify the following definitions to the 2022 California Green Building Standards Code to read:

All-Electric Building. A building that uses electricity as the source of energy for all its space heating (including but not limited to fireplaces and outdoor heaters), water heating (including but not limited to pools and spas), cooking (including but not limited to barbeques), and clothes drying appliances, and has no Fuel Gas Infrastructure within the building or building property lines for these end uses, except for abandoned Fuel Gas plumbing. An All-Electric Building may include solar thermal collectors.

Fuel Gas. A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

Fuel Gas Infrastructure. Fuel Gas piping in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter or gas tank as specified in the California Mechanical Code and Plumbing Code.

Newly Constructed Building (or New Construction) shall have the meaning defined in Title 24, Part 2, Chapter 2, Section 202, as amended.

B. Section 4.504.6 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 4.504.6 Fuel gas. All Newly Constructed Residential and Hotel/Motel buildings shall be designed and constructed as All-Electric Buildings.

Exception to Section 4.504.6. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use that is equal to or greater than the expected annual GHG emissions from the therms consumed

onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building;

4. The applicant shall comply with the pre-wiring provision of Note 1 below.

Note 1: If natural gas appliances are used under the exception above, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.

Note 2: Where the exception is granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or enduse that is required to be electric.

Note 3: If the exception is granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code, Part 2, Section 104.

C. Section 5.509 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 5.509 Fuel gas. All Newly Constructed nonresidential buildings shall be designed and constructed as All-Electric Buildings.

Exception 1 to Section 5.509. "Essential Facilities" as defined by California Health & Safety Code § 16007 built to the standards required by the Essential Services Buildings Seismic Safety Act of 1986 (California Health & Safety Code§§ 16000-16023) and Title 24, Part 1, Chapter 4 are exempt from the all-electric requirements if it is necessary to meet the requirements of other permitting agencies or is demonstrated to be necessary for the purpose of protecting public health, safety, and welfare. "Essential Facilities" as defined by the California Building Code Part 2 Section 202 are included in the definition of "essential services building".

Exception 2 to Section 5.509. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- 3. The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use

that is equal to or greater than the expected annual GHG emissions from the therms consumed onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building:

4. 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 1-2, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.

Note 2: Where any of the exceptions 1-2 are granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or end-use that is required to be electric.

Note 3: If any of the exceptions 1-2 are granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code, Part 2, Section 104.

- D. Section 4.304.2 Graywater Systems is hereby added to the 2022 California Green Building Standards Code to read:
 - **4.304.2 Graywater systems.** Newly Constructed single-family dwelling units shall be preplumbed for a graywater system permitted and constructed in accordance with Chapter 15 of the California Plumbing Code and including a connection to a convenient location for integration of the graywater system with landscape irrigation systems and accepting graywater from all sources permissible in conformance with the definition of graywater as per Section 14876 of the California Water Code.

Exception:

A graywater system shall not be permitted where a qualified soils engineer determines in a written, stamped report, or a percolation test shows, that the absorption capacity of the soil at the project site is unable to accommodate the discharge of a graywater irrigation system.

- E. This section covers Electric Vehicle Service Equipment requirements and includes the following sections:
 - A4.106.8 Electric vehicle charging for new construction.
 - A4.106.8.1 Electric vehicle charging for new one- and two-family dwellings and townhouses with attached private garages.
 - 4.106.4.4 Electric vehicle charging for newly constructed multifamily buildings.
 - 5.106.5.3.2.1 Additional electric vehicle charging equipment (EVCE) requirements for nonresidential buildings.
 - Section 102.4: Electric vehicle service equipment streamlined permitting for AB 1236 compliance.

The first paragraph of Section A4.106.8 and the entirety of Section A4.106.8.1 are hereby added as amended to the 2022 California Green Building Standards Code to read:

A4.106.8 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections A4.106.8.1 to facilitate future installation and use of electric vehicle chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

A4.106.8.1 Electric vehicle charging for new one- and two-family dwellings and townhouses with attached private garages.

Tier 1 and Tier 2. For each dwelling unit a dedicated 208/240-volt branch circuit shall be installed in the raceway required by Section 4.106.4.1. The branch circuit and associated overcurrent protective device shall be rated to 40 amperes minimum. Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the California Electrical Code.

A4.106.8.1.1 Identification. The service panel or subpanel circuit director shall identify the overcurrent protective device designated for future EV charging purposes as "EV READY" in accordance with the California Electrical Code. The receptacle or blank cover shall be identified as "EV READY".

Section 4.106.4.4 EV Chargers, is hereby added to the 2022 California Green Building Standards Code Section 4.106.4 to read:

4.106.4.4 Electric vehicle charging for newly constructed multifamily and hotel/motel buildings. At least 15 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). For any new hotel or motel project, or for any alteration or addition to a hotel, or motel that requires a building permit with square footage larger than 10,000 square feet as determined by the City of Encinitas Building Division, at least eight (8) percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each such space shall be equipped, at a minimum, with fully operational Level 2 Electric Vehicle Supply Equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. These requirements shall apply to mixed occupancy buildings as specified in Section 302.

4.106.4.4.2 Technical requirements. The EV spaces required by Section 4.106.4.4 shall be designed and constructed in accordance with Sections 4.106.4.2.2.1.1, 4.106.2.2.1.2, 4.106.2.2.1.3.4.

Exceptions:

On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

1. Where there is no local utility power supply or the local utility is unable to supply adequate power.

- 2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4.4, may adversely impact the construction cost of the project.
- 3. Or other conditions as determined by the City

Section 5.106.5.3.2.1 Additional Electric Vehicle Charger Requirements for Nonresidential Buildings, is hereby added to the 2022 California Green Building Standards Code Section to read:

5.106.5.3.2.1 Additional electric vehicle charging station requirements for nonresidential buildings.

- 1. The total number of parking spaces provided with electric vehicle supply equipment (EVSE) required under Section 5.106.5.3.2 shall be at least eight (8) percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property.
- 2. For any nonresidential alteration or addition that requires a building permit with square footage larger than 10,000 sq. ft. as determined by the City of Encinitas Building Division, at least eight (8) percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each such space shall be equipped with, at a minimum, fully operational Level 2 electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property in the same manner as other parking spaces. Refer to Sections 5.106.5.3.2 and 5.106.5.3.3 for design requirements.
- 3. These requirements shall apply to mixed occupancy buildings as specified in Section 302.

Exceptions:

On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
- 2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3.2.1, may adversely impact the construction cost of the project.
- 3. Or other conditions as determined by the City

Section 102.4, Electric Vehicle Charging Station Streamlined Permitting/ AB 1236 and AB 790 Compliance, is hereby added to the 2022 California Green Building Standards Code Section to read:

Section 102.4: Electric vehicle service equipment streamlined permitting for AB 1236 and AB 970 compliance.

102.4.1 Purpose. The purpose of this amendment is to promote and encourage the use of electric vehicles by creating an expedited, streamlined permitting process for electric vehicle charging stations while promoting public health and safety and preventing specific adverse impacts in the installation and use of such charging stations. This Chapter is also purposed to comply with California Government Code Sections 65850.7 and 65850.71, as modified.

102.4.2 Definitions. The following definitions shall apply to Section 102.4:

Electric Vehicle Charging Station or **Charging Station**. Any level of electric vehicle supply equipment station that is designed and built-in compliance with Article 625 of the California Electrical Code and delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle.

Association. A nonprofit corporation or unincorporated association created for the purpose of managing a common interest development.

Checklist. The submittal checklist required by the City of Encinitas to be submitted with the permit application for an electric vehicle charging station to demonstrate compliance.

Specific, Adverse Impact. A significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

Electronic submittal. Submittal through the City's Customer Self Service Portal.

Feasible Method. A method to satisfactorily mitigate or avoid a specific, adverse impact including, but is not limited to, any cost-effective method, condition, or mitigation imposed by the city on another similarly situated application in a prior successful application for a permit.

102.4.3 Permit Application Processing. Section 102.4 applies to the permitting of all electric vehicle charging stations in the City of Encinitas.

- A. Prior to submitting an application for processing, the applicant shall verify that the installation of an electric vehicle charging station will not have specific, adverse impact to public health and safety and building occupants. Verification by the applicant includes but is not limited to: electrical system capacity and loads; electrical system wiring, bonding and overcurrent protection; building infrastructure affected by charging station equipment and associated conduits; areas of charging station equipment and vehicle parking.
- B. A permit application that satisfies the information requirements in the City's adopted checklist shall be deemed complete and be promptly processed. Upon confirmation by the Building Official that the permit application and supporting documents meets the requirements of the City adopted checklist and is consistent

with all applicable laws and health and safety standards, the Building Official shall, consistent with Government Code Section 65850.7 and Section 65850.71, approve the application and issue all necessary permits. Such approval does not authorize an applicant to energize or utilize the electric vehicle charging station until approval is granted by the City. If the Building Official determines that the permit application is incomplete, he or she shall issue a written correction notice to the applicant, detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.

C. Consistent with Government Code Section 65850.7, the Building Official shall allow for electronic submittal of permit applications and associated supporting documentations. In accepting such permit applications, the Building Official shall also accept electronic signatures on all forms, applications, and other documentation in lieu of a wet signature by any applicant.

102.4.4 Permit Application and Submittal Requirements.

- A. All electric vehicle charging stations shall meet applicable health and safety standards and requirements imposed by the state and the city.
- B. All documents required for the submission of an electric vehicle charging station application are available on the city website, including a checklist of submittal requirements for expedited review. Unless otherwise specified, the checklist shall be the most current version of the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" of the "Zero-Emission Vehicles in California: Community Readiness Guidebook".
- C. Along with the Checklist, the applicant shall submit a site plan, accessibility details, and associated electrical plans as part of their submittal to the City.
- D. Electronic submittal of the required permit application and documents shall be made available to all electric vehicle charging station permit applicants. The permit application and associated documentation may be submitted to the Building Division by electronic submittal together with required permit processing and inspection fees. Electronic signature of the applicant on all forms, applications, and other documents may be used in lieu of a wet signature.
- E. Should this chapter conflict with any permit processing requirements specified in any other chapter of the Encinitas Municipal Code, this chapter shall take precedence.

102.4.5 Permit Review and Issuance.

- A. The Development Services Department shall implement an administrative, nondiscretionary review process to expedite approval of electric vehicle charging stations.
- B. A permit application that satisfies the information requirements in the city's Checklist shall be deemed complete and be promptly processed per Government Code Section 6580.71.

- C. If an application is deemed incomplete, a written correction notice detailing all deficiencies in the application and any additional information or documentation required to be eligible for expedited permit issuance shall be sent to the applicant for resubmission.
- D. Upon confirmation by the Building Official that the permit application and supporting documents meets the Checklist and is consistent with all applicable laws and health and safety standards, the Building Official shall, consistent with Government Code Section 65850.7 and Section 65850.71, approve the application and issue all necessary permits. Such approval does not authorize an applicant to energize or utilize the electric vehicle charging station until final inspection approval is granted by the City.

102.4.6 Technical Review.

- A. It is the intent of this code to encourage the installation of electric vehicle charging stations by removing obstacles to permitting for charging stations so long as the action does not supersede the Building Official's authority to address higher priority life-safety situations.
- B. In the technical review of a charging station, consistent with Government Code Section 65850.7, the Building Official shall not condition the approval for any electric vehicle charging station permit on the approval of such a system by an Association, as that term is defined by Civil Code Section 4080.

102.4.7 Electric Vehicle Charging Station Installation Requirements.

- A. Electric vehicle charging station equipment shall meet the requirements of the California Electrical Code, the Society of Automotive Engineers, the National Electrical Manufacturers Association, and accredited testing laboratories such as Underwriters Laboratories, and rules of the Public Utilities Commission or a Municipal Electric Utility Company regarding safety and reliability.
- B. Installation of electric vehicle charging stations and associated wiring, bonding, disconnecting means and overcurrent protective devices shall meet the requirements of Article 625 and all applicable provisions of the California Electrical Code.
- C. Installation of electric vehicle charging stations shall be incorporated into the load calculations of all new or existing electrical services and shall meet the requirements of the California Electrical Code. Electric vehicle charging equipment shall be considered a continuous load.
- D. Anchorage of either floor-mounted or wall-mounted electric vehicle charging stations shall meet the requirements of the California Building or Residential Code as applicable per occupancy, and the provisions of the manufacturer's installation instructions. Mounting of charging stations shall not adversely affect building elements.
- E. If an electric vehicle charging station and any associated equipment interfere with, reduce, eliminate, or in any way impact the required parking spaces for existing

uses, the City shall reduce the number of required parking spaces for the existing uses by the amount necessary to accommodate the electric vehicle charging station and any associated equipment.

F. Section A5.213 Energy Efficient Steel Framing, is hereby added to the 2022 California Green Building Standards Code to read:

A5.213.1 Steel framing. Design steel framing for maximum energy efficiency. Techniques for avoiding thermal bridging in the envelope include:

- 1. Exterior rigid insulation;
- 2. Punching large holes in the stud web without affecting the structural integrity of the stud;
- 3. Spacing the studs as far as possible while maintaining the structural integrity of the structure; and
- 4. Detailed design of intersections of wall openings and building intersections of floors, walls and roofs.
- G. **Applicability:** These requirements apply to all building permit applications filed on or after January 1, 2023 or the effective date, whichever is later. On or after August 2, 2022 and until December 31, 2022, or the effective date of this ordinance, whichever is later, the requirements adopted by Ordinance No. 2021-13 shall apply.

SECTION THREE. SEVERABILITY.

If any section, subsection, sentence, clause, phrase or word of this Ordinance is for any reason held to be invalid by a 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 and adopted this Ordinance, and each and all provisions hereof, irrespective of the fact that one or more provisions may be declared invalid.

SECTION FOUR. PUBLIC NOTICE AND EFFECTIVE DATE.

The City Clerk is directed to prepare and have published a summary of the Ordinance no less than five days prior to consideration of its adoption, and again within 15 days following adoption, indicating the votes cast.

This ordinance shall take effect and be in force on January 1, 2023, or the 30th day after adoption and following filing with the California Building Standards Commission, whichever is later. The City Clerk of City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 26933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.

SECTION FIVE: INTRODUCTION AND ADOPTION.

This Ordinance was introduced at a regular meeting of the City Council held on October 12, 2022.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council held on the 26th day of October, 2022.

Catherine S. Blakespear, Mayor

ATTEST:

Kathy Hollywood, City Clerk

APPROVED AS TO FORM

Tarquin Preziosi, City Attorney

CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the 12th day of October, 2022 and that thereafter the said ordinance was duly and regularly adopted at a meeting of the City Council on the 26th of October, 2022 by the following vote, to wit:

AYES:

Blakespear, Hinze, Kranz, Lyndes, Mosca

NOES:

None

ABSENT:

None

ABSTAIN:

None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Encinitas, California, this 26th day of October, 2022.

Kathy Hollywood, City Clerk

RESOLUTION NO. 2023-75

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ENCINITAS
TEMPORARILY SUSPENDING SECTIONS 23.12.110.B AND 23.12.110.C
OF CHAPTER 23.12 (UNIFORM BUILDING CODES FOR CONSTRUCTION) OF
TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE

- **WHEREAS**, the City of Encinitas is committed to the long-range goal of protecting the natural environment, increasing sustainability efforts, and improving overall quality of life;
- WHEREAS, carbon dioxide (CO₂) and other greenhouse gases released into the atmosphere have a profound effect on the Earth's climate and reduction of the potential magnitude of climate change may lower its harmful effects on public health and safety;
- **WHEREAS,** achieving greenhouse gas emission reductions to protect the climate is important to the City of Encinitas, which relies heavily on the stability of the climate for its environment, economy, and quality of life;
- **WHEREAS,** local actions, whenever taken by cities and counties nationwide, can help provide a collective response and may also provide the benefits of testing and developing model programs, methods, and technologies for achieving greenhouse gas reductions;
- **WHEREAS,** on January 17, 2018, the City Council of the City of Encinitas adopted a comprehensive Climate Action Plan which includes a set of strategies, goals, emission reduction targets, and measures aim to reduce greenhouse gas emissions;
- **WHEREAS,** on December 16, 2020, the City Council of the City of Encinitas adopted Resolution No. 2020-90, "A Resolution of the City of Encinitas City Council Declaring a Climate Emergency;"
- WHEREAS, on October 27, 2021, City Council adopted Ordinance No. 2021-13 which enacted amendments to Chapter 23.12 (Uniform Codes for Construction) of the Encinitas Municipal Code (EMC) including building regulations to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions in residential and commercial buildings, becoming the fiftieth city in California to adopt such an ordinance;
- **WHEREAS**, on October 26, 2022, the City of Encinitas adopted Ordinance No. 2022-14 which re-enacted amendments made to Chapter 23.12, including EMC Section 23.12.110, as required by the California Building Standards Commission;
- **WHEREAS**, Section 23.12.110.B regulates fuel gas in buildings and requires all newly constructed Residential and Hotel/Motel buildings to be designed and constructed as All-Electric Buildings;
- **WHEREAS**, Section 23.12.110.C also regulates fuel gas in buildings and requires all newly constructed Nonresidential to be designed and constructed as All-Electric Buildings;

WHEREAS, in July 2019, the City of Berkeley was the first city in California to adopt an ordinance (No. 7672-N.S.) prohibiting the use of fuel gas in the design and construction of all new buildings;

WHEREAS, on Monday, April 17, 2023, a three-judge panel of the United States Court of Appeals for the Ninth Circuit ("Ninth Circuit") decided *California Restaurant Association v. City of Berkeley* and ruled that the Energy Policy and Conservation Act (EPCA) preempts the City of Berkeley's 2019 all-electric ordinance (the "Ninth Circuit's Ruling"); and

WHEREAS, Encinitas Municipal Code Sections 23.12.110.B and 23.12.110.C are substantively similar to the City of Berkeley's Ordinance No. 7672-N.S.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the City Council of the City of Encinitas that mandatory compliance with, and the enforcement of, the requirements of Encinitas Municipal Code Sections 23.12.110.B and 23.12.110.C and are hereby temporarily suspended in response to the Ninth Circuit's Ruling in *California Restaurant Association v. City of Berkeley*;

BE IT FURTHER RESOLVED that the City of Encinitas remains committed to doing its part to reduce greenhouse gas emissions and limit global climate change impacts;

BE IT FURTHER RESOLVED that if the Ninth Circuit's Ruling is overturned or modified, the City Council of the City of Encinitas will immediately consider reinstating enforcement of Encinitas Municipal Code Sections 23.12.110.B and 23.12.110.C; and

BE IT FURTHER RESOLVED that if the Ninth Circuit's Ruling is upheld, the City Council of the City of Encinitas will consider amendments or revisions to Encinitas Municipal Code Sections 23.12.110.B and 23.12.110.C as may be required to comply with the Ruling.

PASSED, APPROVED AND ADOPTED at a regular City Council meeting of the City Council held on this 14th day of June, 2023.

Tony Kranz, Mayor

ATTEST:

- DocuSigned by:

Kathy Hollywood

Kathy Hollywood, City Clerk

2024-05-15 Item #10A Page 39 of 62

APPROVED AS TO FORM:	
DocuSigned by: Tarquin Preziosi	

Tarquin Preziosi, City Attorney

CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing Resolution was duly adopted at a regular meeting of the City Council on the 14th day of June, 2023 by the following vote:

AYES: Blackwell, Ehlers, Hinze, Kranz, Lyndes

NOES: None

ABSENT: None

ABSTAIN: None

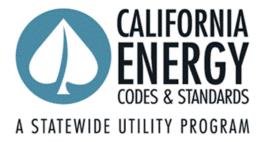
DocuSigned by:

Kathy Hollywood

Kสัสก์งั Hollywood, City Clerk

HIGH PERFORMANCE REACH CODE: DETAILED BACKGROUND AND ANALYSIS

Prepared by: The California Energy Codes and Standards Team LocalEnergyCodes.com



This program is funded by California utility customers and administered by Pacific Gas and Electric Company, San Diego Gas & Electric Company (SDG&E®), and Southern California Edison Company under the auspices of the California Public Utilities Commission and in support of the California Energy Commission

LocalEnergyCodes.Com

HIGH PERFORMANCE REACH CODE: DETAILED BACKGROUND AND ANALYSIS

California has adopted relatively strict building energy standards that are passed through to local jurisdictions. Local jurisdictions have specific authority to adopt more stringent energy standards, subject to certain requirements. Many, including Encinitas, have adopted either total or partial bans on natural gas in new buildings. However, the US 9th Circuit Court of Appeals recently ruled that a City of Berkeley ordinance prohibiting natural gas in new buildings violates the Federal Energy Policy and Conservation Act. The intent of the proposed requirements is to promote all-electric construction and be in alignment with Federal and State law. Consistent with the Energy Policy and Conservation Act (EPCA), the requirements are based on energy use, provide a compliance pathway for mixed-fuel buildings, are fuel-neutral, and are achievable with standard efficiency space and water heating equipment. Consistent with State law, the requirements are both cost-effective and more stringent than the California Energy Code (the State Code).

The State Code performance requirements state that a proposed building design may not exceed a specific energy budget, as calculated by State-approved modeling software (CBECC – California Building Energy Code Compliance). The energy budget in the State's software for the San Diego area assumes a heat pump water heater in single family homes and a heat pump space heater in multifamily buildings. A solar photovoltaic (PV) system is assumed for both single family homes and multifamily buildings; exemptions exist for very small loads (e.g., some ADUs) and where solar access is limited. It is important to note that heat pumps are not a requirement; gas units are permitted if the design employs other measures to offset the increased energy use of the gas appliance(s).

The State Code uses two different performance metrics in their software – source energy and time dependent value (TDV) energy. Source energy is the amount of energy (electricity or gas) needed to power a building, is dependent upon the time the energy is used, and includes fuel used to generate power as well as transmission and distribution losses. TDV Energy incorporates other societal values, including grid impacts and long-term system costs.

The proposed policy would use source energy as the performance metric because it is a reasonable substitute for GHG emissions, serving as a good proxy for a GHG metric. Source energy was introduced in the 2022 California Energy Code to support California's decarbonization and electrification goals.

For single family buildings source energy is expressed as the Energy Design Rating-1 (EDR1). For multifamily buildings source energy is expressed as the Source Energy Budget and represents energy intensity per square foot per year (kBTu/sf-year). Under both metrics, a lower value represents better energy performance.

The intent of the policy is to encourage all-electric construction by setting the performance requirements at a level that would require few or no additional measures for all-electric buildings and more significant measures for mixed-fuel buildings. It is important to note that the same standard would apply to all-electric and mixed-fuel buildings – it would just be much easier to build all-electric.

2024-05-15 Item #10A Page 42 of 62

While it is possible to achieve high energy performance in a mixed-fuel building, the relatively low system efficiency of natural gas appliance(s) would need to be offset by more aggressive energy efficiency, on-site renewables and/or energy storage measures to achieve the level of performance that can be provided by heat pumps alone. The measures that are needed for mixed-fuel compliance can be costly in comparison to an all-electric design, especially since all-electric buildings do not need to install gas piping and gas service (meter and piping external to the building). The added cost of mixed-fuel compliance could encourage all-electric construction.

The proposed requirements are informed by studies¹ that identify several strategies to costeffectively achieve higher energy performance including, full electrification, energy efficiency, additional solar PV capacity, and battery storage.

Similar opportunities for high-rise multifamily and non-residential buildings in the San Diego climate are more limited. The State Code treats high-rise multifamily (defined as four habitable stories or more) and nonresidential buildings differently than low-rise multifamily, and under these requirements there are fewer cost-effective opportunities to improve energy performance. The State Code baseline energy budget assumes that high-rise multifamily buildings will have natural gas water heat, electric heat pump space heat, solar PV, and battery storage.

An all-electric home could achieve relatively high-performance levels with the following measures²:

- Heat pump water heater
- Heat pump space heater
- Prescriptive efficiency measures (baseline efficiency measures otherwise required by the State Code)
- Additional solar PV, additional efficiency measures or high-efficiency appliances

To achieve a similar performance level, a mixed-fuel home may need to include some combination of the following measures:

- Prescriptive efficiency measures
- Advanced efficiency measures
 - Increased ceiling insulation
 - Slab insulation
 - Low-pressure drop ducts
 - Buried ducts
 - Compact hot water distribution
- Additional solar PV³
- Battery storage

The ranges of performance requirements for newly constructed single-family homes (including duplexes), free-standing accessory dwelling units, and low-rise (three stories or less) multifamily

LocalEnergyCodes.Com 2

¹ The <u>2022 Cost-Effectiveness Study: Single Family New Construction</u> (including an update pending publication) and the <u>2022 Cost-Effectiveness Study: Multifamily New Construction</u>.

² The cost-effectiveness studies modeled typical buildings and identified the most practical and economical strategies to achieve compliance at different performance levels. The most appropriate measures for any specific building may vary based on the design, orientation, size, and features.

³ Exceptions for limited solar access already exist in the State Code and would apply to the local requirements as well.

buildings that are consistent with State and Federal requirements are provided in Table 1 below. The lower end of the ranges represents what can be achieved by an all-electric building with nothing more than measures that are already required under the State Code (prescriptive measures). The higher end of the range represents the highest margin that is cost-effective for both mixed-fuel and all-electric buildings. The higher end would require some additional investments in energy efficiency and/or renewable energy for all-electric buildings, and substantial investments in efficiency, renewable energy and/or energy storage for mixed-fuel buildings.

Table 1: Range of Allowable Performance Margins

Occupancy	Metric	Margin
Single Family	EDR1	3-18 Points
ADU	EDR1	0-20 Points
Low-Rise Multifamily	Source Energy Budget	8-19%

The appropriate margin depends upon the City's objectives. Higher margins will provide more encouragement to build all-electric and will reduce emissions in both all-electric and mixed-fuel buildings but will also increase initial construction costs for both building types. However, the City might not need to require the maximum allowable margin to achieve its objectives. To understand the effect of different margins, it is helpful to see where different designs fall within the range of possible margins. The designs analyzed in the cost-effectiveness studies include the following:

- Business-As-Usual (BAU) A mixed-fuel building that minimally complies with the State Code.
- All-Electric Prescriptive Efficiency An all-electric building that includes only those energy efficiency measures that are prescriptively required under the State Code.⁴
- Efficiency A building that includes some efficiency measures above those required prescriptively by State Code.
- Efficiency and Efficient Equipment⁵ A building that includes some efficiency measures above those required prescriptively by State Code and includes appliances that exceed Federal efficiency standards.
- Prescriptive Efficiency and PV A building that includes only those energy efficiency measures that are prescriptively required under the State Code but includes additional solar PV.
- Efficiency and PV A building that includes some efficiency measures above those required prescriptively by State Code and additional solar PV.
- Efficiency, Efficient Equipment, and PV A building that includes some efficiency measures above those required prescriptively by State Code, appliances that exceed Federal efficiency standards, and additional solar PV.
- Efficiency, PV, and Battery A building that includes some efficiency measures above those required prescriptively by State Code, additional solar PV, and battery storage.

LocalEnergyCodes.Com 3

⁴ Margins should be set no lower than the All-Electric Prescriptive Efficiency Case, which includes the minimum set of efficiency measures that would be required of a mixed-fuel design. Otherwise, an all-electric building could use heat pumps to offset baseline (i.e., prescriptive) efficiency measures.

⁵ A design that includes high efficiency appliances may not be used to establish the performance requirements, since that would preempt Federal appliance standards; it may, however, be used as a strategy to comply with the requirements.

The tables below present a range of margins, the design types that would satisfy each margin, the incremental cost of the design-type (as compared to the BAU case, i.e., a mixed-fuel design that minimally complies with State code) and the first year GHG reductions associated with the design type. Note, GHG reductions are based on the standard utility electric power mix. Under a carbon-free electricity mix, all-electric emissions reductions would approach 100%; emissions for mixed-fuel buildings would be slightly lower.

Table 2 presents a range of margins for single family homes. Under the existing State Code (BAU, zero margin), there is already an incentive for all-electric buildings, which cost considerably less to build. By increasing the EDR1 compliance margin to three, a mixed-fuel home would need to install additional efficiency measures or additional solar PV; an all-electric home would only need to install prescriptive efficiency measures. Either design may install high-efficiency appliances to achieve the performance requirements, but they are not required. A margin of six would require some additional solar PV for all-electric buildings and an even more comprehensive set of measures for mixed-fuel buildings.

Table 2: Single Family Design Types and Margins

Fuel	Design Type	Margin	Capital Cost	GHG Reductions
	Business-As-Usual (zero margin)	-	-	-
	Efficiency	1.4		4%
Mixed-	Efficiency and Efficient Equipment	3.1	na	9%
Fuel	Efficiency and PV	2.7		7%
	Efficiency, Efficient Equipment and PV	4.4		13%
	Efficiency, PV & Battery	18.6	\$ 9,214	49%
	Prescriptive Efficiency	2.8	\$ (6,664)	20%
	Efficiency	3.5	\$ (5 <i>,</i> 757)	23%
All-	Efficiency and Efficient Equipment	4.8	na	26%
Electric	Efficiency and PV	6.9	\$ (2,204)	31%
	Efficiency, Efficient Equipment and PV	8.2	na	34%
	Efficiency, PV & Battery	23.6	\$ 4,624	75%

Figure 1 provides another view of the data. The columns represent the source energy margins (left vertical axis) for the various design types, with the Business-As-Usual case on the far left (at a margin of zero). The margins get higher as the measures increase and the margins for all-electric designs out-perform mixed-fuel. The horizontal lines represent a range of possible requirements. The top line represents the highest margin that can be cost-effectively achieved by both all-electric and mixed-fuel buildings, which corresponds to the Mixed-Fuel Efficiency, PV & Battery design. The lower line represents the All-Electric Prescriptive Efficiency design margin. The circles represent the incremental cost (right vertical axis) of the design type. Note, the scale goes below zero, indicating a cost savings for some of the all-electric designs.

2024-05-15 Item #10A Page 45 of 62

Single Family Climate Zone 7 25 \$12,000 \$10,000 Mixed Fuel Margin 20 \$8,000 \$6,000 Margin (EDR1) All-Electric Margin \$4,000 15 \$2,000 Margin @ A-E Prescriptive 10 \$0 Efficiency -\$2,000 Margin @ Maximum 5 -\$4,000 -\$6,000 -\$8,000 Margin @ A-E Efficiency & Prescripting Fix 18 by Fix Volumes of by Battern PV Incremental Cost Mixed-Fuel Incremental Cost All-Electric

Figure 1: Design Types, Margins and Costs

Table 3 presents similar data for free-standing ADUs, but the results are quite different due to small space heating loads and an exception for small solar PV systems under the State Code. In this case, a higher performance margin may not create much more encouragement to build all-electric than already exists under the State Code. There is, however, an opportunity to increase the performance of both fuel types by setting the margin to five, which would effectively require solar PV for both all-electric and mixed-fuel designs. This would, however, increase construction costs, which may be at odds with affordable in-fill housing objectives.

Table 3: ADU Design Types and Margins

Fuel	Design Type	Margin	Capital Cost	GHG Reductions
	Business-As-Usual (zero margin)	-	-	-
Mixed-	Efficiency	1.0	na	1%
Fuel	Efficiency and PV	2.5		22%
	Efficiency, PV & Battery	20.3	\$ 12,424	60%
	Prescriptive Efficiency	0.1	\$ (4,692)	14%
	Efficiency	0.8	\$ (3,748)	15%
All-	Efficiency and Efficient Equipment	2.1	na	18%
Electric	Efficiency and PV	5.0	\$ 3,110	40%
	Efficiency, Efficient Equipment and PV	6.3	na	42%
	Efficiency, PV & Battery	25.9	\$ 10,021	86%

In the case of low-rise multifamily buildings, Table 4, an eight percent margin would likely necessitate mixed-fuel designs to install some combination of additional efficiency, solar PV and/or battery storage, while an all-electric design would require only State Code minimum efficiency measures (prescriptive efficiency) to yield significant first-year GHG reductions.

Table 4: Low-Rise Multifamily Design Types and Margins

Fuel	Design Type	Margin	Capital Cost	GHG Reductions
D. Girrand	Business-As-Usual (zero margin)	-	-	-
Mixed- Fuel	Efficiency	0.1%	\$ 132	0%
	Efficiency, PV & Battery	19.5%	\$ 3,498	24%
All-	Prescriptive Efficiency	8.3%	\$ 697	42%
Electric	Prescriptive Efficiency & PV	20.9%	\$ 2,777	52%

The potential impact of these requirements depends on a variety of factors:

- The compliance margins
- The market response to the cost differentials of design types
- The number of units subject to the requirements
- The carbon content of electricity

A single-family policy with modest margins could reduce first year GHG emissions from allelectric homes by 20-30%. A multifamily policy could reduce all-electric emissions by 40%. Any mixed-fuel buildings that are built would have a somewhat smaller carbon footprint than they otherwise would be due to the improved efficiency, additional solar PV, and grid benefits of battery storage. Emissions under a carbon-free electricity product would approach zero for allelectric buildings.

The current draft of the proposed 2025 State Code assumes a performance baseline with heat pumps for both space and water heating; the impacts may be similar to the proposed local requirements. Adoption of the local policy would ensure that any buildings permitted from the effective date of the ordinance through December 31, 2025, would be subject to the higher standards.

Proposed Compliance Margins by Occupancy Type for the City of Encinitas

Occupancy	Metric	Margin
Single Family	EDR1 Total Source Energy	4.5
Low-Rise Multifamily	Source Energy Budget	8%



Version 1.0 | Updated 04/23/2024 Prepared by: City of Encinitas Building Official

This document is intended to provide guidance for compliance with the electric readiness provisions of the Encinitas Municipal Code Section 23.12.080. It may be updated from time-to-time.

Heat Pump Water Heater Ready. Central water heating systems using gas or propane to serve multiple dwelling units shall include the following:

- 1. The system input capacity of the gas or propane water heating system shall be determined as the sum of the input gas or propane capacity of all water heating devices associated with each gas or propane water heating system.
- 2. Space reserved shall include:
 - A. Heat Pump. The minimum space reserved shall include space for service clearances and air flow clearances and shall meet one of the following:
 - The space reserved shall be the space required for a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project; or
 - ii. The space reserved shall meet the requirements specified in Appendix A, Item 1.
 - B. Tanks. The minimum space reserved shall include space for service clearances and shall meet one of the following:
 - i. The space reserved shall be the space required for a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project; or
 - ii. The space reserved shall meet the requirements specified in Appendix A, Item 2.
- 3. Ventilation shall be provided by meeting one of the following:
 - A. Physical space reserved for the heat pump shall be located outside; or
 - B. A pathway shall be reserved for future routing of supply and exhaust air via ductwork from the reserved heat pump location to a suitable outdoor location. Penetrations through the building envelope for louvers and ducts shall be planned and identified for future use. The reserved pathway and penetrations through the building envelope shall be sized to meet one of the following:
 - i. The reserved pathway and penetrations shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
 - ii. The reserved pathway and penetrations shall be sized to meet the requirements specified in Appendix A, Item 3
- 4. Condensate drainage piping. An approved receptacle that is sized per the California Plumbing Code for condensate drainage shall be installed within 3 feet of the

Version 1.0 | Updated 04/23/2024

reserved heat pump location, or piping shall be installed from within 3 feet of the reserved heat pump location to an approved discharge location that is sized in accordance with the California Plumbing Code, and meet one of the following:

- A. Condensate drainage shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
- B. Condensate drainage piping shall be sized to meet the requirements specified in Appendix A, Item 4.

5. Electrical

- A. Physical space shall be reserved on the bus system of the main switchboard or on the bus system of a distribution board to serve the future heat pump water heater system including the heat pump and temperature maintenance tanks. In addition, the physical space reserved shall be capable of providing adequate power to the future heat pump water heater in accordance with the following:
 - i. Heat Pump. Meet one of the following.
 - A. The electrical power required to power a heat pump water heater system heat pump that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
 - B. The electrical power required that meets the requirements specified for the heat pump in Appendix A, Item 5.
 - ii. Temperature Maintenance Tank. Meet one of the following.
 - A. The electrical power required to power a heat pump water heater system temperature maintenance tank that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
 - B. The electrical power required that meets the requirements specified for the temperature maintenance tank in Appendix A, Item 5.

Version 1.0 | Updated 04/23/2024

Appendix A – Qualification Requirements for Central Heat Pump Water Heater Ready

This Appendix provides sizing requirements for electric ready infrastructure installed with gas or propane water heating systems to meet the requirement for electric readiness.

1. Heat Pump Space Requirements

Space shall be reserved for future installation of central heat pump water heaters. The space reserved shall meet the following requirements:

- (a) If the gas water heating system has an input capacity less than 200,000 Btu per hour, the minimum space reserved for the heat pump shall be 2.0 square feet per 10,000 Btu per hour input of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 48 linear inches.
- (b) If the gas water heating system has an input capacity greater than or equal to 200,000 Btu per hour, the minimum space reserved for the heat pump shall be 3.6 square feet per 10,000 Btu per hour input of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 84 linear inches.

2. Storage Tank Space Requirements

Space shall be reserved for future installation of hot water storage tanks. The space reserved shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, the minimum space reserved for the storage and temperature maintenance tanks shall be 4.4 square feet per 10,000 Btu per hour input of the gas or propane water heating system.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, the minimum physical space reserved for the storage and temperature maintenance tanks shall be 3.1 square feet per 10,000 Btu per hour input of the gas or propane water heating system.

3. Ventilation Requirements

The reserved pathway and penetrations through the building envelope shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, the minimum air flow rate shall be 70 CFM per 10,000 Btu per hour input of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, the minimum air flow rate shall be 420 CFM per 10,000 Btu per hour input of the gas or propane water heating system and the

Version 1.0 | Updated 04/23/2024

total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.

4. Condensate Drainage Piping Requirements

The condensate drainage piping shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, condensate drainage shall be sized for 0.2 tons of refrigeration capacity per 10,000 Btu per hour input.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, condensate drainage shall be sized for 0.7 tons of refrigeration capacity per 10,000 Btu per hour input.

5. Electrical Requirements

The electrical system serving the heat pump shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, provide 0.1 kVA per 10,000 Btu per hour input.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, provide 1.1 kVA per 10,000 Btu per hour input.

The electrical system serving the temperature maintenance tank shall meet the following requirements:

- (c) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, provide 1.0 kVA per 10,000 Btu per hour input.
- (d) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, provide 0.6 kVA per 10,000 Btu per hour input.

[STATE REDLINE version]

Version **Ordinance 2024-04** with Markup of Changes to the California Building Code for Submission to the California Energy Commission and the California Building Standards Commission

This version of the ordinance tracks changes to the California Building Code, as previously amended and submitted to the California Energy Commission and California Building Standards Commission under Ordinances 2022-13 and 2022-14. Deletions to the State code, as previously amended, are marked as strikeouts; additions are underlined.

ORDINANCE 2024-04

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ENCINITAS, CALIFORNIA,
ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION)
OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE
TO MAKE CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO
ENERGY EFFICIENCY AND GREEN BUILDING

WHEREAS, the City of Encinitas desires to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80 percent below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, and, making heating fuels cleaner;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018, aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100 percent renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses:

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the City Council of the City of Encinitas adopted Resolution 2020-90 declaring a climate emergency on December 16, 2020;

WHEREAS, Health and Safety Code (HSC) Section 18941.5, with reference to HSC Section 17958.7, allows for more restrictive local amendments to the California Building Standards Code that are reasonably necessary because of local climatic, geological, or topographical conditions;

WHEREAS, the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

- 1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storm damages, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare.

WHEREAS, Public Resources Code (PRC) Section 25402.1(h)(2) and the California Energy Code, Title 24, Part 6, Section 10-106 establish a process by which local governments may adopt more stringent standards to the energy efficiency and conservation provisions in the California Energy Code, Title 24, Part 6, provided that the standards have been determined to be cost effective and will require buildings to be designed to consume no more energy than permitted by the California Energy Code;

WHEREAS, the following studies commissioned by the California Statewide Energy Codes and Standards Program demonstrate that the local amendments are cost effective and do not result in buildings consuming more energy than is permitted by the California Energy Code:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023);

WHEREAS, it has been determined that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects. Adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum, and no further California Environmental Quality Act (CEQA) compliance is required; and

WHEREAS, the City Council of the City of Encinitas now seeks to amend Sections 23.12.080 and 23.12.110 of Chapter 23.12 to reflect its Climate Action Plan.

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION ONE: ENERGY CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.080, Subsections F., G., H., I., J., K., L., M. and N., Adoption of the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, is hereby amended as shown to read as follows: (underline is used to denote new text being added, strikeout is used to denote text being deleted):

There is adopted and incorporated by reference herein as the City's Energy Code for the purpose of prescribing regulations in the City of Encinitas for the conservation of energy, the 2022 California Energy Code, Part 6, Title 24 of the California Code of Regulations, a portion of the 2022 California Building Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings where energy will be utilized shall be in conformance with 2022 California Energy Code and any rules and regulations promulgated pursuant thereto, including the California Energy Code, 2022 Edition, published by the California Energy Commission.

- **F.** Applicability. Requirements A through E apply to all building permit applications filed on or after January 1, 2023, or the effective date, whichever is later. On or after August 2, 2022, and until December 31, 2022, or the effective date of the ordinance codified in this section, whichever is later, the requirements adopted by Ordinance No. 2021-13 shall apply.
- **G.** Section 100.1(b) DEFINITIONS, of the California Energy Code is hereby amended to add a definition to read:

CERTIFIED ENERGY ANALYST is a person registered as a Certified Energy Analyst with the California Association of Building Energy Consultants as of the date of submission of a Certificate of Compliance as required under Section 10.103.

H. The first two paragraphs of Section 150.0 of the California Energy Code are hereby amended to read:

SECTION 150.0 - MANDATORY FEATURES AND DEVICES

Single-family residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(v).

NOTE: The requirements of Sections 150.0(a) through 150.0($\underline{r}\underline{v}$) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations.

I. Section 150.0(t) of the California Energy Code is hereby amended to read:

Section 150.0(t) - Heat Pump Space Heater Ready.

Systems using gas or propane furnace to serve individual dwelling units shall include the following:

- 1. A dedicated 240-volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready". All electrical components shall be installed in accordance with the California Electrical Code.
- 2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use".
- 3. A designated exterior location for a future heat pump compressor unit with either a drain or natural drainage for condensate.
- **J.** Section 150.1(b)1A of the California Energy Code is hereby added to read:

Section 150.1(b)1A

In addition, the total source energy (EDR1) of the Proposed Design Building shall be less than the EDR1 of the Standard Design Building by a compliance margin of 4.5.

EXCEPTION 1 to Section 150.1(b)1.A. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one point, but in no event shall be less than zero.

EXCEPTION 2 to Section 150.1(b)1.A. A project consisting of a single-family dwelling unit with a conditioned floor space of 1,500 square feet or less.

- K. Sections 160.9(a), (b), and (c) of the California Energy Code are hereby renumbered as Sections 160.9(b), (c), and (d), respectively.
- L. A new Section 160.9(a) of the California Energy Code is added to read as follows:
 - (a) General Requirements. Multifamily buildings shall comply with the applicable requirements of subsection 160.9. The building electrical system shall be sized to meet the future electric requirements of the electric ready equipment specified in sections 160.9(a) through (e). The building main service conduit, the electrical system to the point specified in each subsection, and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each electric ready appliance in accordance with the California Electrical Code.
- M. A new Section 160.9(e) of the California Energy Code is added to read as follows:

- (e) Individual Heat Pump Water Heater Ready. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:
 - 1. A dedicated 125-volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor branch circuit rated to 30 amps minimum, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all the following:
 - A. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and
 - B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and
 - 2. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance, and
 - 3. The construction drawings shall designate a space at least 39 inches by 39 inches and 96 inches tall for the future location of heat pump water heater.
 - 4. A ventilation method meeting one of the following:
 - A. The designated space for the future heat pump water heater shall have a minimum volume of 700 cubic feet; or
 - B. The designated space for the future heat pump water heater shall vent to a communicating space in the same pressure boundary via permanent openings with a minimum total NFA of 250 square inches., so that the total combined volume connected via permanent openings is 700 cubic feet or larger. The permanent openings shall be:
 - i. Fully louvered doors with fixed louvers; or
 - <u>ii.</u> Two permanent fixed openings located within 12 inches from the enclosure top and bottom;
 - C. The designated space for the future heat pump water heater shall include two 8-inch capped ducts, venting to the building exterior:
 - i. All ducts, connections, and building penetrations shall be sealed.
 - ii. Exhaust air ducts and all ducts which cross pressure boundaries shall be insulated to a minimum insulation level of R-6.
 - iii. Airflow from termination points shall be diverted away from each other.
- **N.** A new Section 160.9(f) of the California Energy Code is added to read as follows:
 - (f) Heat Pump Water Heater Ready.
 - Central water heating systems using gas or propane to serve multiple dwelling units shall include the following elements for future conversion to electric heat pump technology:
 - a. <u>Space reserved for heat pumps and tanks for service clearances and airflow clearances.</u>
 - b. Pathways and penetrations reserved for ventilation.
 - c. Condensate drainage piping.
 - d. Electrical capacity for heat pumps and temperature maintenance tanks.
 - 2. Compliance with this section shall be demonstrated in a manner prescribed by "Guidance for Electric Readiness of Multifamily Central Hot Water Systems" issued and periodically amended, as needed, by the Building Official.
- **O.** Section 170.1 of the California Energy Code is hereby amended to read:

SECTION 170.1 – PERFORMANCE APPROACH: ENERGY BUDGETS

A building complies with the performance approach if the <u>TDV</u> energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the <u>TDV</u> energy budget calculated for the Standard Design Building under Subsection (a). <u>Additionally, the energy budget, expressed in terms of source energy, of a newly constructed low-rise multifamily building (less than four habitable stories) shall be at least eight (8) percent lower than that of the Standard Design Building.</u>

EXCEPTION to Section 170.1. If the Certificate of Compliance is prepared and signed by a Certified Energy Analyst, the compliance margin may be reduced by one percentage point, but in no event shall be less than zero.

SECTION TWO: GREEN BUILDING CODE AMENDMENTS.

That Encinitas Municipal Code Chapter 23.12, Uniform Codes for Construction, Section 23.12.110, Subsections A., B., C. and G., Adoption of the 2022 California Green Building Standards Code, Part 11, Title 24 of the California Code of Regulations, is hereby amended as shown to read as follows: (underline is used to denote new text being added, strikeout is used to denote text being deleted):

There is adopted and incorporated by reference herein as the City's Green Building Code for the purpose of prescribing regulations in the City of Encinitas for enhancing the design and construction of buildings, through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices the 2022 California Green Building Standards Code, Part II, Title 24 of the California Code of Regulations, a portion of the 2022 California Buildings Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq., and the California Green Building Standards Code, 2022 Edition. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings shall be in conformance with the 2022 California Building Standards Code and any rules and regulations promulgated pursuant thereto, including the California Green Building Standards Code, 2022 Edition, published by the California Building Standards Commission.

A. Section 202 DEFINITIONS, is hereby amended to add or modify the following definitions to the 2022 California Green Building Standards Code to read:

All-Electric Building. A building that uses electricity as the source of energy for all its space heating (including but not limited to fireplaces and outdoor heaters), water heating (including but not limited to pools and spas), cooking (including but not limited to barbeques), and clothes drying appliances, and has no Fuel Gas Infrastructure within the building or building property lines for these end uses, except for abandoned Fuel Gas plumbing. An All-Electric Building may include solar thermal collectors.

Fuel Gas. A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

Fuel Gas Infrastructure. Fuel Gas piping in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter or gas tank as specified in the California Mechanical Code and Plumbing Code.

Newly Constructed Building (or New Construction) shall have the meaning defined in Title **24**, Part 2, Chapter **2**, Section 202, as amended.

B. Reserved. Section 4.504.6 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 4.504.6 Fuel gas. All Newly Constructed Residential and Hotel/Motel buildings shall be designed and constructed as All-Electric Buildings.

Exception to Section 4.504.6. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- 3. The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use that is equal to or greater than the expected annual GHG emissions from the therms consumed onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building;

4. The applicant shall comply with the pre-wiring provision of Note 1 below.

Note 1: If natural gas appliances are used under the exception above, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.

Note 2: Where the exception is granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or end-use that is required to be electric.

Note 3: If the exception is granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code, Part 2, Section 104.

C. <u>Reserved.</u> Section 5.509 Fuel gas, is hereby added to the 2022 California Green Building Standards Code to read:

Section 5.509 Fuel gas. All Newly Constructed nonresidential buildings shall be designed and constructed as All-Electric Buildings.

Exception 1 to Section 5.509. "Essential Facilities" as defined by California Health and Safety Code Section 16007 built to the standards required by the Essential Services Buildings Seismic Safety Act of 1986 (California Health and Safety Code Sections 16000-16023) and Title 24, Part 1, Chapter 4 are exempt from the all-electric requirements if it is necessary to meet the requirements of other permitting agencies or is demonstrated to be necessary for the purpose of protecting public health, safety, and welfare. "Essential Facilities" as defined by the California Building Code Part 2 Section 202 are included in the definition of "essential services building."

Exception 2 to Section 5.509. At the discretion of the Development Services Director or designee, non-residential buildings containing a for-profit restaurant open to the public may be approved for an exception to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. Examples include: barbeque-themed restaurants, woks, and pizza

ovens. The Development Services Director or designee shall grant this exception if they find the following:

- 1. There is a business-related reason to cook with a flame.
- 2. This need cannot be reasonably achieved with an electric fuel source.
- 3. The applicant has employed methods to mitigate the greenhouse gas impacts of the gas fueled appliance based on reducing on site energy use that is equal to or greater than the expected annual GHG emissions from the therms consumed onsite based on new natural gas service request from the utility and equipment installed.

Note: GHG emissions mitigation can include energy efficiency, onsite renewable generation, electric vehicle service equipment, or other action to reduce GHG emissions from the building;

- 4. 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 1-2, natural gas appliance locations shall also be Electric-Ready for future electric appliance installation. Electric-Ready shall be specified in the Design Guidelines for Electric-Ready Buildings published by Development Services.
 - **Note 2:** Where any of the exceptions 1-2 are granted, the applicant is prohibited from completing any natural gas or propane plumbing rough work or stub out for any appliance or enduse that is required to be electric.
 - Note 3: If any of the exceptions 1-2 are granted, the Development Services Director or designee shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code, Part 2, Section 104.
- **G.** Section 5.106.5.3.2.1 Additional Electric Vehicle Charger Requirements for Nonresidential Buildings, is hereby added to the 2022 California Green Building Standards Code Section to read:

5.106.5.3.2.1 Additional electric vehicle charging station requirements for nonresidential buildings.

- 1. The total number of parking spaces provided with electric vehicle supply equipment (EVSE) required under Section 5.106.5.3.2 shall be at least 8% of the total number of parking spaces provided for all types of parking facilities, but in no case less than one. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property.
- **2.** For any nonresidential alteration or addition that requires a building permit with square footage larger than 10,000 sq. ft. as determined by the City of Encinitas Building Division, at least 8% of the total number of <u>required</u> parking spaces provided for all types of parking facilities <u>allocated to the tenant space(s)</u>, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each such space shall be equipped with, at a minimum, fully operational Level 2 electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. All EVSE and EV spaces shall be made available to all employees and patrons of the property in the same manner as other parking spaces. Refer to Sections 5.106.5.3.2 and 5.106.5.3.3 for design requirements.
- 3. These requirements shall apply to mixed occupancy buildings as specified in Section 302.

Exceptions:

On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
- 2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3.2.1, may adversely impact the construction cost of the project.
- 3. Or other conditions as determined by the City.

SECTION THREE: FINDINGS.

The proposed amendments and changes to the California Energy Code, Part 6 of the California Building Standards Code, are reasonably necessary because of the following climatic, geologic, and topographical conditions exist in the City of Encinitas:

- The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone
 to flooding. The City is at risk to coastal storm damage, erosion, and flooding. There is
 broad scientific consensus that the earth will continue to warm, and sea levels will rise
 impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare;

By adopting this ordinance, the City Council has determined, in a public meeting, that the standards are cost-effective according to the following studies:

- 1. 2022 Cost-effectiveness Study: Single Family New Construction (March 2024); and
- 2. 2022 Cost-effectiveness Study: Multifamily New Construction (June 2023).

SECTION FOUR: ENVIRONMENTAL COMPLIANCE.

The City Council finds in its independent judgment that the minor amendments proposed will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduce environmental effects and that adoption of the amendments is exempt from environmental review as per Section 15308 of the CEQA Guidelines, which allows a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan, including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum and no further California Environmental Quality Act (CEQA) compliance is required.

SECTION FIVE: CONSISTENCY.

Any provision of the Encinitas 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 affect the provisions of this Ordinance.

SECTION SIX: SEVERABILITY.

If any chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion of this Ordinance, or the application thereof to any person, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of this Ordinance or its application to other persons. The City Council hereby declares that it would have adopted this Ordinance and each chapter, article, section, subsection, subdivision, sentence, clause, phrase, word, or portion thereof, irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, phrases, or portions of the application thereof to any person, be declared invalid or unconstitutional.

SECTION SEVEN: EFFECTIVE DATE.

This Ordinance shall take effect and be in force sixty (60) days after its passage and following approval of the California Energy Commission and filing with the California Building Standards Commission, whichever is later. The City Clerk of the City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 36933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.

This Ordinance was introduced at a regular meeting of the City Council held on May 15, 2024.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council held of day of		
	Tony Kranz, Mayor	
ATTEST:		

2024-05-15 Item #10A Page 61 of 62

Kathy Hollywood, City Clerk
APPROVED AS TO FORM
Tarquin Preziosi, City Attorney
CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the _15th_ day ofMay_, 2024 and that thereafter the said ordinance was duly and regularly adopted at a meeting of the City Council on the of, 2024 by the following vote, to wit:
AYES:
NOES:
ABSENT:
ABSTAIN:
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Encinitas, California, this day of, 2024.
Kathy Hollywood, City Clerk