ORDINANCE NO. 2024-17

AMENDMENT TO THE 2022 CALIFORNIA ENERGY CODE TO INCREASE ENERGY EFFICIENCY STANDARDS FOR CERTAIN NEWLY CONSTRUCTED BUILDINGS

The Contra Costa County Board of Supervisors ordains as follows (omitting the parenthetical footnotes from the official text of the enacted or amended provisions of the County Ordinance Code):

SECTION I. SUMMARY. This ordinance amends the 2022 California Energy Code to increase energy efficiency standards for the design and construction of newly constructed residential buildings, hotels, offices, and retail buildings. These requirements replace the all-electric building requirements previously included in Section 74-4.010 of the County Ordinance Code. This ordinance is adopted pursuant to Health and Safety Code sections 17922, 17958, 17958.5, 17958.7, and 18941.5, Public Resources Code section 25402.1(h)(2), and Government Code sections 50020 through 50022.10.

SECTION II. Section 74-4.010 (Amendments to CEnC) of Chapter 74-4 (Modifications) of Division 74 (Building Code) of the County Ordinance Code is amended to read:

74-4.010 Amendments to CEnC. The 2022 California Energy Code ("CEnC") is amended by the changes, additions, and deletions set forth in this chapter and Division 72. Section numbers used below are those of the 2022 California Energy Code.

(a) Section 120.11 (Electric Readiness Requirements for All Systems) is added to CEnC Subchapter 3 (Nonresidential, Hotel/Motel Occupancies, and Covered Processes – Mandatory Requirements), to read:

> **120.11 Electric Readiness Requirements for All Systems.** For hotel, office, and retail building types, where nonresidential systems using gas or propane are installed, the construction drawings shall include routing of conduit from the equipment using gas or propane to the point of interconnection with the electrical service.

(b) Section 140.1 (Performance Approach: Energy Budgets) of CEnC Subchapter 5 (Nonresidential and Hotel/Motel Occupancies – Performance and Prescriptive Compliance Approaches for Achieving Energy Efficiency) is amended to read:

> **140.1 Performance Approach: Energy Budgets.** A building complies with the performance approach if both the following conditions are met:
>
> 1. The energy budget calculated for the proposed design building under subsection (b) is no greater than the energy budget calculated for the Standard Design Building under subsection (a).

2. For hotel, office, and retail building types, the energy budget calculated for the proposed design building under subsection (b) must also have a Source Energy Compliance Margin, relative to the energy budget calculated for the Standard Design Building under subsection (a), of at least the value specified for the occupancy type and location in Table 140.1-A, below.

Table 140.1-A SOURCE ENERGY COMPLIANCE MARGINS		
Occupancy Type	Climate Zone	Source Energy Compliance Margin
Hotel	3	5%
	12	4%
Office	3	5%
	12	4%
Retail	3	5%
	12	4%

Exception to Section 140.1(2). The Source Energy Compliance Margin specified in Table 140.1-A is not required when the building is conditioned with single zone space conditioning systems with direct expansion cooling with rated cooling capacity 240,000 Btu/hr or less and direct expansion or furnace heating at any rated heating capacity.

(a) **Energy budget for the Standard Design Building.** The energy budget for the Standard Design Building is determined by applying the mandatory and prescriptive requirements to the proposed building design. The energy budget is the sum of the source energy and time-dependent valuation (TDV) energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage systems, service water heating and covered process loads.

(b) **Energy budget for the proposed design building.** The energy budget for a proposed design building is determined by calculating the source energy and TDV energy for the proposed design building. The energy budget is the sum of the source energy and TDV energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage systems, service water heating, and covered process loads.

Exception to Section 140.1(b). A community shared solar electric generation system, or other renewable electric generation system, or community shared battery storage system, that provides dedicated power, utility energy reduction credits or payments for energy bill reductions to the permitted building, and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system or battery storage system TDV energy required to comply with the standards, as calculated according to methods established by the Commission in the Nonresidential ACM Reference Manual.

(c) **Calculation of energy budget.** The TDV energy for both the Standard Design Building and the proposed design building shall be computed by compliance software certified for this use by the Commission. The processes for compliance software approval by the Commission are documented in the ACM Approval Manual.

(c) Section 150.1(b) (Performance Standards), of CEnC Subchapter 8 (Single-Family Residential Buildings – Performance and Prescriptive Compliance Approaches) is amended to read:

(b) **Performance standards.** A building complies with the performance standards if the energy consumption calculated for the proposed design building is no greater than the energy budget calculated for the Standard Design Building using Commission-certified compliance software as specified by the Alternative Calculation Methods Approval Manual. The building must also comply with the applicable requirements in subsections 1, 2, and 3, below.

1. **Newly constructed buildings.** The energy budget for newly constructed buildings is expressed in terms of the Energy Design Ratings, which are based on source energy and time-dependent valuation (TDV) energy. The Energy Design Rating 1 (EDR1) is based on source energy. The Energy Design Rating 2 (EDR2) is based on TDV energy and has two components, the Energy Efficiency Design Rating, and the Solar Electric Generation and Demand Flexibility Design Rating. The total Energy Design Rating shall account for both the Energy Efficiency Design Rating and the Solar Electric Generation and Demand Flexibility Design Rating. The proposed building shall separately comply with the Source Energy Design Rating, Energy Efficiency Design Rating, and the Total Energy Design Rating. Additionally, for a newly constructed building to comply with the performance standards, the proposed building must have a Source Energy Design Rating Compliance Margin, relative to the Source Energy Design Rating calculated for the Standard Design Building, of at least the value specified for the occupancy type and location in Table 150.1-A, below.

Table 150.1-A SOURCE ENERGY DESIGN RATING COMPLIANCE MARGINS		
Occupancy Type	Climate Zone	Source Energy Desing Rating Compliance Margin (EDR1 Points)
Single-Family	3	9
Detached Accessory Dwelling Unit	3	0
Single-Family	12	11
Detached Accessory Dwelling Unit	12	6.6

Exception 1 to Section 150.1(b)1. A community shared solar electric generation system, or other renewable electric generation system, or community shared battery storage system, that provides dedicated power, utility energy reduction credits or payments for energy bill reductions to the permitted building, and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the Solar Electric Generation and Demand Flexibility Energy Design Rating required to comply with the standards, as calculated according to methods established by the Commission in the Residential ACM Reference Manual.

Exception 2 to Section 150.1(b)1. A newly constructed building that does not require a PV system in accordance with section 150.1(c)14 is not required to have a Source Energy Design Rating Compliance Margin.

[Subsections 150.1(b)(2)-(3) are adopted without modification]

(d) Section 170.1 (Performance Approach), of CEnC Subchapter 11 (Multifamily Buildings – Performance and Prescriptive Compliance Approaches) is amended to read:

170.1 Performance Approach. A building complies with the performance approach if both the following conditions are met:

1. The energy budget calculated for the proposed design building under subsection (b) is no greater than the energy budget calculated for the Standard Design Building under subsection (a).

2. The energy budget calculated for the proposed design building under subsection (b) must also have a Source Energy Compliance Margin, relative to the energy budget calculated for the Standard

Design Building under subsection (a), of at least the value specified for the occupancy type and location in Table 170.1-A, below.

Table 170.1-A SOURCE ENERGY COMPLIANCE MARGINS		
Occupancy Type	Climate Zone	Source Energy Compliance Margin
Low Rise Multifamily (three or fewer habitable stories)	3	10%
	12	11%
High Rise Multifamily (four or more habitable stories)	3	4%
	12	4%

(a) **Energy budget for the Standard Design Building.** The energy budget for the Standard Design Building is expressed in terms of source energy and time-dependent valuation (TDV) energy, and they are determined by applying the mandatory and prescriptive requirements to the proposed design building. The source energy budget and the TDV energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage system, service water heating and covered process loads.

(b) **Energy budget for the proposed design building.** The energy budget for a proposed design building is expressed in terms of source energy and time-dependent valuation (TDV) energy, and they are determined by calculating the source energy and TDV energy for the proposed design building. The source energy budget and the TDV energy budget is the sum of the energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage system, and service water heating and covered process loads. The proposed building shall separately comply with the source energy budget and the TDV energy budget.

Exception to Section 170.1(b). A community shared solar electric generation system, or other renewable electric generation system, and/or community shared battery storage system, that provides dedicated power, utility energy reduction credits or payments for energy bill reductions to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system or

battery storage system TDV energy required to comply with the standards, as calculated according to methods established by the Commission in the Nonresidential ACM Reference Manual.

(c) **Calculation of energy budget.** The TDV energy for both the Standard Design Building and the proposed design building shall be computed by compliance software certified for this use by the Commission. The processes for compliance software approval by the Commission are documented in the ACM Approval Manual.

[Subsection 170.1(d) is adopted without modification]

(Ords. 2024-17 § 2, 2022-35 § 3, 2022-02 § 3.)

SECTION III. VALIDITY. The Contra Costa County Board of Supervisors declares that if any section, paragraph, sentence, or word of this ordinance or of the 2022 California Energy Code as amended herein is declared for any reason to be invalid, it is the intent of the Contra Costa County Board of Supervisors that it would have passed all other portions or provisions of this ordinance independent of the elimination herefrom any portion or provision as may be declared invalid.

SECTION IV. EFFECTIVE AND OPERATIVE DATE. This ordinance becomes effective, but not operative, upon approval by the California Energy Commission or 30 days after passage, whichever is later. This ordinance will become operative on the effective date of this ordinance or January 1, 2025, whichever is later. Within 15 days of passage, this ordinance shall be published once in the East Bay Times, a newspaper published in this County.

PASSED on _____, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST: MONICA NINO,
Clerk of the Board of Supervisors
and County Administrator

_____
Board Chair

By: _____
Deputy

[SEAL]

KCK: