

# City of Chula Vista Draft Policy Summary Existing Home Energy Sustainability Ordinance (EHESO) version 3.6

## Policy Overview

- Require installation of specific energy upgrades for homes built before 2006 (including condos and townhouses) when they perform additions and remodels
- Required upgrades depend on the age of home and climate zone
- Required upgrades will apply to the part of the home not already required to comply with current building code as a result of the addition or remodel
- Allow homes to install a custom set of upgrades, instead of the required upgrades, as long as they meet or exceed the energy performance of the required upgrades
- Avoid dis-incentivizing solar installation or other energy efficiency measures
- Avoid inordinate financial burden
- Avoid impeding ADUs or JADUs
- Avoid disruption to permit process
- Estimated to affect 3,872 units and reduce GHG emissions by 3,218 metric tons over the first 10 years

## Proposed Requirements

1. **APPLICABILITY:** Applies to 1-4 unit residential buildings and individually owned townhome and condominium units built before 2006 when an Addition or Remodel is performed.

2. **DEFINITIONS**

*Addition:* As defined in Energy Code<sup>1</sup>.

*Remodel:* Means any of the following:

1. Any change or rearrangement, other than a repair, of the structural elements of an existing building including foundations, footing, sub-floors, lintels, beams, columns, girders, slabs, roof trusses, staircases, load bearing walls, door frames, window frames, or any other part of the building that resists force or moment.
2. Change or rearrangement of the plan configuration of walls and full-height partitions of an existing building.

3. **OPTION 1: PRESCRIPTIVE PATH:** Owners shall install specific measures according to the requirements below.

3.1. Owners of residential buildings with 1-4 units residential buildings must complete the following prescribed upgrades measures according to their climate zone and year of construction:

Year Built	Climate Zone 7	Climate Zone 10
Pre-1978	Water Heating Package; LED Lighting; R38 Attic Insulation; Duct Sealing	Water Heating Package; LED Lighting; Duct Sealing; R38 Attic; Air Sealing
1978-2005	Water Heating Package; LED Lighting	

3.2. Owners of individual townhomes or condominiums within buildings of 5 or more units must complete the following prescribed upgrades measures according to their climate zone and year of construction:

Year Built	Climate Zone 7	Climate Zone 10
Pre-1978	Water Heating Package; LED Lighting; R38 Attic Insulation; Duct Sealing	Water Heating Package; LED Lighting; Duct Sealing; R38 Attic; Air Sealing
1978-1991	Water Heating Package; LED Lighting; Duct Sealing	
1992-2005	Water Heating Package; LED Lighting;	

3.3. These prescriptive requirements shall apply to the entire unit or units within the scope of the triggering permit, not just the additional or altered portion. Where these requirements conflict with other energy code requirements, the stricter requirement shall prevail.

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<sup>1</sup> Any change to a building that increases conditioned floor area and conditioned volume. See also “newly conditioned space.” Addition is also any change that increases the floor area and volume of an unconditioned building of an occupancy group or type regulated by Part 6. Addition is also any change that increases the illuminated area of an outdoor lighting application regulated by Part 6.

- 3.4. For Additions and Remodels involving roof replacement, recovering or recoating (>50% or >2,000sf), or new roof sections, on a steep sloped roof the Cool Roof measure applies for:
  - a. 1-4 unit buildings, built before 1978 in climate zone 7, or pre-2006 in climate zone 10
  - b. Individually owned units in 5+ unit buildings, built before 1992 in climate zone 7, or pre-2006 in climate zone 10

3.5. Required Measures shall be installed per the description below:

Measure Name	Description
R-38 Attic Insulation	Add attic insulation in buildings with vented attic spaces to meet R-38.
Air Sealing	Apply air sealing practices throughout all accessible areas of the building. All joints, penetrations and other openings in the building envelope that are potential sources of air leakage shall be caulked, gasketed, weather stripped, or otherwise sealed to limit infiltration and exfiltration. Buildings constructed before 1992 should be sealed to 7 Air Changes per Hour (ACH), and buildings constructed from 1992-2005 should be sealed to 5 ACH, at 50 Pascals pressure difference. Homes with one or more vented combustion appliances must have a BPI Combustion Appliance Safety Inspection performed after air sealing.
Cool Roof	For steep slope roofs, install a roofing product rated by the Cool Roof Rating Council (CRRC) with an aged solar reflectance of 0.25 or higher and thermal emittance of 0.75 or higher.
Duct Sealing	Air seal all ductwork to meet the requirements of the 2016 Title 24 Section 150.2(b)1E. Homes with one or more vented combustion appliances are STRONGLY RECOMMENDED to have a BPI Combustion Appliance Safety Inspection performed after duct sealing.
LED Lighting	Replace screw-in halogen, incandescent or CFL light bulbs with LED light bulbs in accordance with the requirements of Title 24 Section 150.0(k)1.A,D,G,H and I.
Water Heating Package	<u>Water Heater Blanket</u> Add R-6 insulation to the exterior of existing residential tank storage water heaters manufactured before April 2015. Requirement is waived for water heaters with internal tank insulation of at least R-16. <u>Hot Water Pipe Insulation</u> Insulate all accessible hot water pipes with R-3 pipe insulation. <u>Low Flow Fittings</u> Upgrade sink and shower fittings to meet current CALGreen requirements, which require maximum flow rates of 1.8 gallons per minute (gpm) for showerheads and kitchen faucets, and 1.2 gpm for bathroom faucets.

4. OPTION 2: PERFORMANCE PATH: Owners may concurrently complete an alternative set of energy measures that performs equal to or better than the applicable prescribed measures subject to the requirements below and/or additional rules as put forth by the Conservation Department.

4.1. Applicants may demonstrate this by submitting one compliance report, as already required, the with the proposed performance measures, and a second compliance report modeling the existing home + alteration with the prescribed measures. The Total Energy Use for the first compliance report must be equal or less than that of the second compliance report.

4.2. The LED Lighting and Water Heater Blanket requirements are mandatory, and cannot be substituted for performance measures.

5. EXEMPTIONS: Owners are exempt from this ordinance, in part or in whole, subject to the requirements below.

- 5.1. Project Value Cutoff. If the cost of completing energy efficiency measures required under the prescriptive path exceeds 20% of the overall project cost absent those measures, permit applicants can propose a more limited set from among the required measures which does not exceed 20%.
  - 5.2. Permits for work principally composed of one of the following are excluded from this requirement: Solar PV, Solar water heating, electrical upgrades for PV or EV charging, energy storage, EV charging
  - 5.3. Homes where similar measures have already been completed.
  - 5.4. Prescribed measures would be technically infeasible or not be cost-effective due to unique characteristics of home or other special circumstances.
    - a. Evidence to show lack of cost effectiveness: Letter from energy professional explaining calculation
    - b. Evidence to show technical infeasibility: Letter from building professional documenting infeasibility for one of the following reasons: inaccessibility, violation of other codes, low likelihood of success, measure would affect proper functioning of other building elements, result in safety risks, cause harm to building occupants
  - 5.5. Home achieves a Home Energy Score (HES) of at least 8 out of 10
  - 5.6. Home has on-site photovoltaics in place offsetting at least 95% of the annual electricity and gas-equivalent usage (simplified evidence options to be included in implementation guidelines)
  - 5.7. A measure is beyond the authority of the homeowner due to HOA covenant
  - 5.8. An Addition or Remodel consists solely of medically necessary improvements.
6. IMPLEMENTATION AUTHORITY
- 6.1. The City Manager may adopt rules and regulations for the implementation.
  - 6.2. The City Manager may modify or suspend the requirements of this section after submitting a written justification to the Sustainability Commission for one or more of the following reasons:
    - a. Technological infeasibility
    - b. Economic infeasibility
    - c. Legal infeasibility
    - d. Streamlining of compliance