

Item 7: Adoption of the 2025 California Energy Code

September 11, 2024 Business Meeting

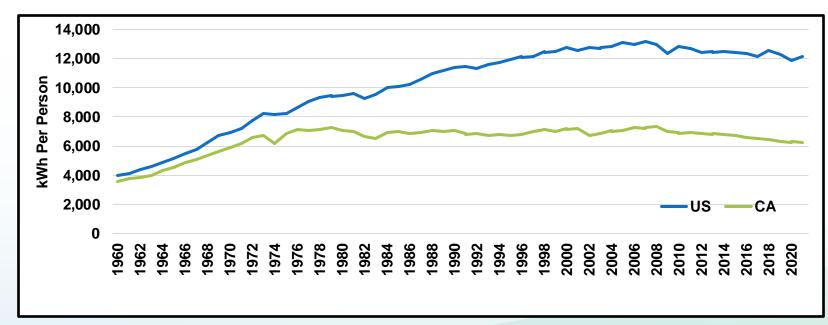
Gypsy Achong, Branch Manager Building Standards Branch, Efficiency Division



Benefits to Californians

Over the last 50 years:

- Savings for Californian households >\$100B
- Reduced demand for dirty, inefficient power
- Nearly constant per capita use of electricity



Source: CEC analysis; US Energy Information Agency (EIA) Historical State Date; US Census Bureau via USAFacts.org



2025 Energy Code Benefits by the Numbers

Energy cost savings: \$4.8B

Avoided GHG Emissions: 4.1M MT CO₂e

Benefit to Cost Ratio: 7

Electricity Savings: 392 GWh/yr

Natural Gas Savings: 23 MM Therms/yr

Water Savings: 68+ MM gallons/yr

Heat pumps:

Leads to installation of over 500k heat pumps over 3 years

PV/Battery:

Saves on average 300 GWh/year; reduces power demand on average 0.88MW/year. Minimizes grid exports.

Electric-ready:

Sets up owners of newly constructed commercial kitchens to use cleaner electric equipment when they are ready

Source: CEC



2025 Energy Code Process

	Milestone	Timeline
	33 Public Workshops	3/2022 - 4/2024
	45-Day Public Comment Period	3/2024 - 5/2024
	15-Day Public Comment Period	6/13/24 - 6/28/24
	15-Day Public Comment Period	8/22/24 — 9/6/24
Today	CEC Proposed Adoption	9/11/24
	Proposed Effective Date	1/1/26



Overview of Presentation

Highlights:

- Heat pumps
- Electric-ready
- Solar energy and battery storage
- Field verification and diagnostic testing

Initial Study & Negative Declaration - California Environmental Quality Act (CEQA)

Requested CEC Action





2025 Energy Code Highlights – Heat Pumps (HPs)

Standard design:

- Single-family: HPs for water, space heating
- Low-rise multifamily: HP Water Heater for individual dwelling units

Existing commercial buildings:

New or replacement rooftop packaged units < 65,000 Btu/hr

HP control requirements

Prescriptive multi-zone space-conditioning system type requirements for medium-sized offices and schools



Source: CEC



2025 Energy Code Highlights - Electric-Ready Requirements



- Commercial kitchens
- Central water heating systems (multifamily)
- Updated requirements for heat pump water heaters serving individual dwellings

Source: CEC



2025 Energy Code Highlights - Solar Energy & Battery Storage

Updated requirements for multifamily, nonresidential, while minimizing grid exports

Added requirements for:

- Event and exhibit buildings
- Religious worship buildings
- Sports and recreation buildings



Source: Joseph Schell



2025 Energy Code Highlights - Field Verification & Diagnostic Testing



Source: Lawrence Andersen

- Moves Home Energy Ratings System (HERS) program to Title 24
- Establishes "Energy Code Compliance" program
- Reestablishes focus on consumer protection
- Advances conflict of interest protections
- Strengthens quality assurance process
- Clarifies Field Verification and Diagnostic Testing community responsibilities



Other 2025 Energy Code Measures

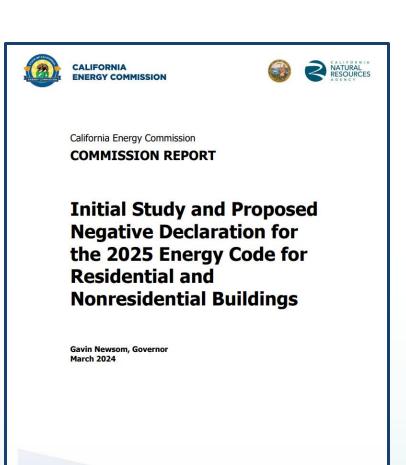
- Requirements for more efficient pool and spa heating systems
- Streamlined lighting requirements
- Improved multifamily indoor air quality



Source: Natalia Knezevic



Initial Study & Proposed Negative Declaration (CEQA)



- Public comment period: July 29 to August 29, 2024
- No responsive comments received on Initial Study and Proposed Negative Declaration
- Compliance with CEQA



Requested CEC Action

Staff requests the CEC:

- 1. Approve the initial study and adopt the negative declaration based on its findings
- 2. Adopt the proposed 2025 update to the California Energy Code, inclusive of:
 - Errata, and
 - Sections identified in the Resolution as "do not adopt".
 Sections will retain existing 2022 language



Thank you!

Commissioner McAllis and their advisers	ster, Chair Hochschild	Executive Office and Efficiency Division Team	
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