





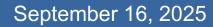






2028 CODE CYCLE

Migrating Measures from Concept to Code





Statewide Utility Codes and Standards Team

Actively supports the California Energy Commission in developing proposed changes to the Energy Code (Title 24, Part 6) to achieve significant statewide energy use reductions through the development of code change proposals for the 2028 cycle that are:

Feasible | Cost effective | Enforceable











California Energy Commission's Authority & Process

Public Resources Code (PRC 25402): Reduction of wasteful, uneconomic, inefficient, or unnecessary consumption of energy

- Warren Alquist Act Signed into law in 1974
- Mandates updates Building Efficiency Standards and requires the building departments to enforce them through the permit process

WARREN-ALQUIST ACT Warren-Alquist State Energy Resources Conservation and Development Act Public Resources Code Section 25000 et seq.



2022 EDITION JANUARY 2022 CEC-140-2022-001

2028 Energy Code Drivers and Themes

State Goals

- Contribute to the state's GHG reduction goals
- Increase building energy efficiency cost-effectively

2028 Energy Code Areas of Interest

- Continue to encourage efficient building decarbonization where possible
- Promote demand flexibility
- Covered process loads
- Additions, alterations, and smaller homes (e.g., ADUs)
- Interagency coordination
- Equity







How the Utility Team Supports the 2028 Code Cycle

General priorities:

- Support CEC in achieving statewide policy goals
- Cost-effective energy savings (kWh, kW, Therms)
- GHG emissions reductions

Options for utility team support:

- Develop Code Change Proposals (CASE Reports)
- Provide data for proposals CEC develops
- Collaborate with other stakeholders who are developing proposals
- Support software development

Maximize number of cost-effective code changes for each cycle that will allow the state to achieve long-term policy goals

Focus on Nonresidential Topics For the 2028 Code Cycle

Visit <u>Title24Stakeholders.com</u> for descriptions of topics and updated information

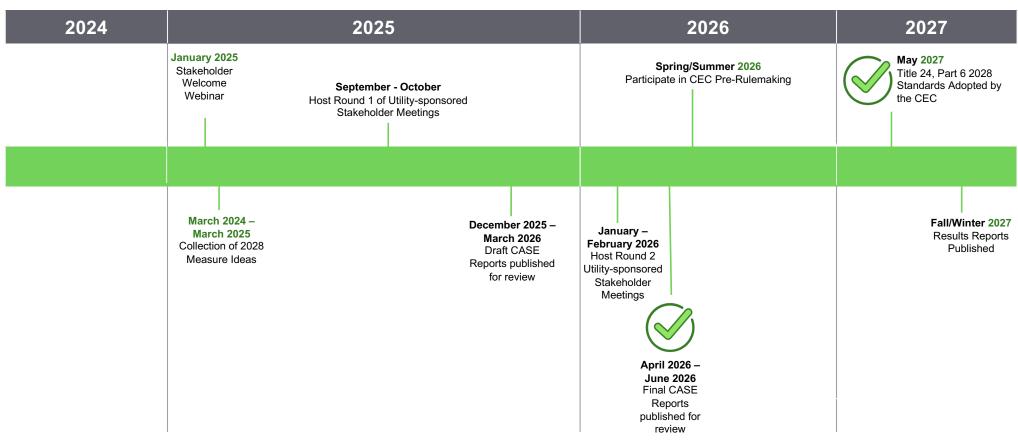


AB130 prevents residential measures from being considered

Bill Text: CA AB130 | 2025-2026 | Regular Session | Amended | LegiScan

Statewide CASE Team Milestones

See up-to-date timeline on <u>Title24stakeholder.com</u>



Timeline subject to change. Updated 8/26/2026

Upcoming Stakeholder Meetings for 2028 Code Cycle

Topics for Each Meeting

Tuesday September 23 9:00 - 3:00 PT	Wednesday September 24 11:00 - 4:30 PT	Tuesday September 30 10:00 - 1:15 PT	Thursday October 23 Time TBD	Thursday October 30 Time TBD
Process Boiler #1 Non- condensing Stack Economizer Requirement	Controlled Environment Horticulture Prescriptive Requirements for Space Conditioning Systems	Solar Heating for Existing Pools and Spas	ECM Circulator Pump with Controls	Modify existing chiller/boiler requirements to account for AWHP/WWHP
Process Boiler #2 Conductivity- Based Blowdown and Deaerator Settings	Controlled Environmental Horticulture: Lighting Efficacy & Language Clean-up	Traction Elevators	Require return to primary configuration	Update Air-to-Water Heat Pump Requirements
Reducing Maximum Airflow During Deadband Operation for Variable Air Volume HVAC Systems	Daylight Responsive Controls for Greenhouses	Data Centers Efficiency Improvements (HVAC)	Unitary HP/ER hybrid heaters	Air-to-Water Heat Pump Compliance Pathways and Requirements (glycol concentration only)
Enhanced Dedicated Outdoor Air Systems (DOAS)	Indoor Lighting Power Density	Fenestration Improvements	HVAC Fault Detection Diagnostics	Process Steam: Flash Steam Reduction and Recovery
Healthcare	Indoor Lighting Controls		Minimum Envelope Performance	Process Steam: Condensate Return
	Luminaire Classification and Power Exception for Alterations & Retrofits			Compressed Air: Air Drying
				Residential Heat Pump Water Heater Ventilation Clean Up

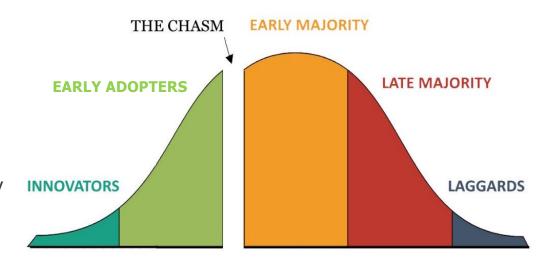
The Codes and Standards Program Supports Technology Adoption Throughout the Adoption Lifecycle

Early adopters and early majority phases

- Compliance software updates
- New and refined options for the performance approach

Late majority and "laggards" phases

 Advocating for prescriptive and mandatory requirements in the Energy Code and CALGreen



TECHNOLOGY ADOPTION LIFECYCLE

Image source: Business Insider. "Using the technology adoption lifecycle to overcome blocks".

Support for Early Adoption to Early Majority Phases

Steps to enable new technologies to receive appropriate code compliance credit





Notification. Builders are using new technology that is not included in the compliance software.

Program Activity

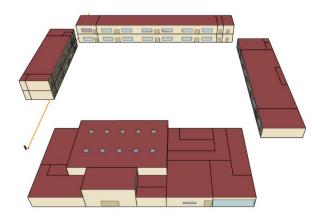
Data collection. Lab testing, field studies, market and technology research to understand how technology performs.

Program Activity

Compliance Software Recommendations. Develop technical specifications for compliance software updates.

Software Updates. CEC updates California Building Energy Code Compliance (CBECC) software

The Role of Accurate Simulations in Compliance Software



Simulated energy performance needs to be accurate for:

- 20+ prototypical buildings
- 16 climate zones
- 8,760 hours per year

Benefits of Accurate Modeling

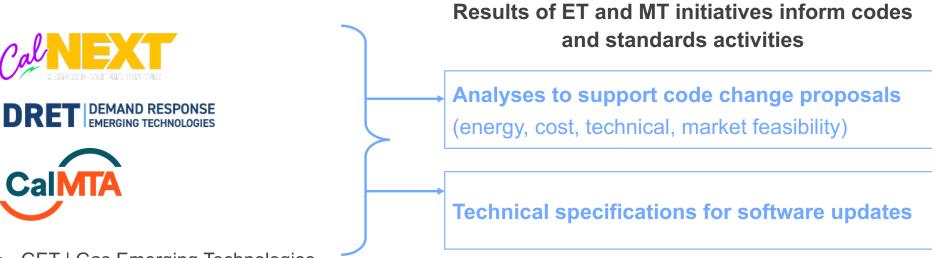
1. Support utility program innovation

Precursor for new and refined incentive program offerings (e.g., DEEMed measures)

2. Code compliance credit

Innovative designs can be used to meet the code-required energy budget

Deeper Impacts Through Collaboration



- GET | Gas Emerging Technologies
- EPIC | Electric Program Investment Charge
- EPRI | Electric Power Research Institute

PG&E Code Readiness Program

Conducts applied research to close data gaps on technologies and provides actionable insights to inform codes and standards activities

Energy Code and Building Performance Standards (BPS)

Considerations to Harmonize



Newly constructed buildings that comply with code should meet BPS requirements without significant renovations.

Are there code requirements that could help building managers operate buildings within the expected budgets?

Is there a set of measures that would allow existing buildings to meet BPS requirements that should also appear in the energy code?

Get in Touch

- 1. Visit <u>Title24stakeholders.com</u> to sign up for our listserv, or contact <u>info@title24stakeholders.com</u>
- 2. Follow 'Title 24 Stakeholders' on LinkedIn
- 3. Visit <u>Energy Code Ace</u> for compliance support and the <u>Local Energy Codes</u> program for information on statewide reach code activity
- 4. Contact the CEC <u>Building Energy Efficiency</u>
 <u>Standards Title 24</u>

