

Stakeholder Engagement in the Standards Development Process

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Why does the Energy Commission regulate buildings?

- Energy Efficiency is critical to meeting California's energy and Greenhouse Gas goals, helping to meet increasing energy demands without increasing fossil fuel consumption (and associated emissions and water use).
- The Energy Commission is directed both by executive policy, as well as the Governor's goal of achieving zero net energy buildings by 2020 and 2030.





Legislative Mandate

Public Resources Code Section 25402:

"The commission shall, after one or more public hearings, do all of the following, in order to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy, including the energy associated with the use of water:

...Prescribe, by regulation, lighting, insulation, climate control system, and other building design and construction standards..."



Legislative Policies

- Warren Alquist Act (1974)
- Global Warming Solutions Act (AB 32, 2006)
- Efficiency in Existing Buildings (AB 758, 2009)





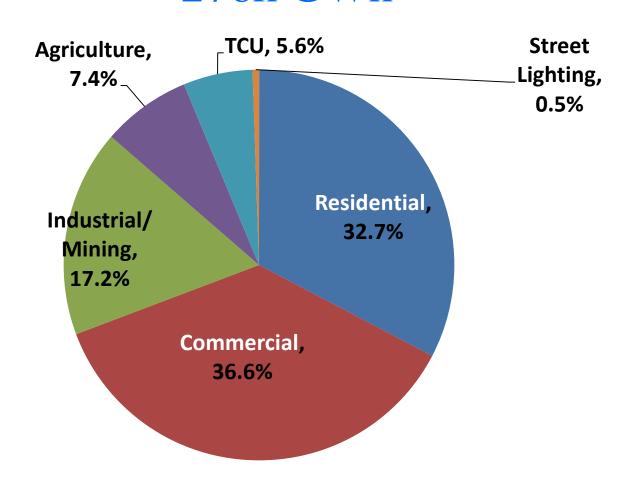
Executive Goals and Policy Drivers



- Energy Efficiency first in California's loading order (Integrated Energy Policy Report)
- Double the Rate of Energy
 Efficiency in Existing Buildings by
 2030
- 50% of utility-generated electricity from renewable sources by 2030 (Renewable Portfolio Standard)
- Zero Net Energy Buildings: Newly Constructed Residential by 2020, Nonresidential by 2030
- Reduce Greenhouse Gas Emissions to 40% below 1990 levels by 2030₅



2013 Total Consumption in CA 276k GWh





Efficiency benefits the occupant

- Health and Comfort: Indoor air quality and thermal comfort.
- Safety: Heat waves pose serious risks if electricity becomes unavailable or when occupants feel they cannot afford to run their AC.
- Consumer Protection: Consumers can be taken advantage of with missing, poorly installed, or underperforming insulation or equipment.
- Housing Security: Energy bills are contributors to the rate of home foreclosures.
- Climate Change Mitigation: Improves resiliency in California's building stock while mitigating GHG emissions.



Standards Development Obligations

- Standards must be technically feasible.
- Standards "shall be cost-effective when taken in their entirety and when amortized over the economic life of the structure."
 - Energy costs are calculated using Time-Dependent Valuation of Energy (TDV Energy)
- Standards must include performance-based and prescriptive compliance paths.



How Standards are Updated

- The energy efficiency requirements of Title 24, Part 6, follow the same three-year cycle as the rest of the Building Code. The code cycle can be divided into four phases:
 - Proposals → Pre-Rulemaking → Rulemaking → Post-Adoption
- Each phase follows a roughly similar pattern:
 - Publish draft documents → Open a public comment period →
 - Hold a workshop or hearing → Revise and finalize documents
- Comments can be made at any or all of these phases. Let us know how best to include you.



How You Can Participate

- The participation of local jurisdictions is <u>critical</u> to ensuring consistent, enforceable standards.
- Participation can be as simple as submitting a letter or e-mail with your comments during a public comment period.
- Utility companies organize and conduct early stakeholder meetings during the proposal phase. These are the best forums for early discussion of proposed measures, and we highly recommend participating.
- The Energy Commission holds staff workshops and Commissioner hearings throughout the standards development process which can be attended remotely via the internet or by phone.



Current and Next Code Cycle

- The 2016 update is partway through the post-adoption process.
 - o Updates to the Compliance Tools (manuals, documents, and software) are being finalized for official deployment at the end of 2015.
- The 2019 cycle will begin in January with work on updating the Energy Commission's calculation of TDV.
- To stay informed, add your e-mail to the Building Standards E-mail List Server (at http://www.energy.ca.gov/listservers/). Official standards-related notices and updates, with instructions for participating, are sent out to this list.



Implementation and Compliance

- The Energy Commission implement several programs to assist with the compliance processes:
 - o Home Energy Rating System (HERS)
 - o Acceptance Test Technician Certification Program (ATTCP)
 - o Outreach and Education



Currently Approved 2013 Home Energy Rating System (HERS) Providers

- CalCERTS (Newly Constructed and Additions and Alterations)
- Energy Analysis and Comfort Solutions, Inc. (EACS), (Additions and Alterations)
- U.S. Energy Raters Association (USERA), (Additions and Alterations)



HERS Supports Local Enforcement

- HERS Raters provide independent field verification and diagnostic testing for newly constructed buildings, additions, and alterations.
- HERS Providers oversee HERS Raters:
 - Train and Certify Raters
 - Create and Maintain Data Registry
 - Perform Quality Assurance







ATTs Support Local Enforcement

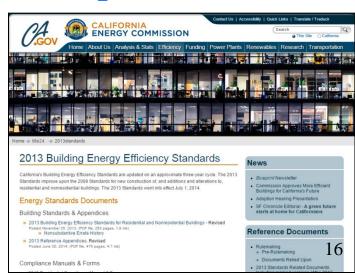
- Acceptance Test Technicians ensure compliance and promote optimization for newly constructed nonresidential buildings, additions, and alterations.
- Certification Providers oversee technicians and their employers.
 - Train and Certify Technicians/Employers
 - Perform Quality Assurance





Compliance Resources

- Standards Hotline (800/772-3300)
- EnergyCode Ace, www.energycodeace.com
- Blueprint Bi-monthly Newsletter
- Residential & Nonresidential Compliance Manuals
- On-site Training





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