

ments or asked to be kept informed of the results of this regulatory action.

**XI. AVAILABILITY OF THE FINAL
STATEMENT OF REASONS**
(Gov. Code, § 11346.5, subdivision (a)(19))

Upon completion, copies of the final statement of reasons may be obtained by contacting the contact person listed above.

**XII. INTERNET WEBSITE
FOR ELECTRONIC
PUBLICATION AND DISTRIBUTION**
(Gov. Code, § 11346.5, subdivision (a)(20))

Copies of this notice, the initial statement of reasons, the text of the proposed regulations, and all materials published or distributed by the Council on this regulatory action made be found at the Council’s website: www.deltacouncil.ca.gov.

**TITLE 24. BUILDING STANDARDS
COMMISSION/ENERGY COMMISSION**

**CALIFORNIA BUILDING ENERGY
EFFICIENCY STANDARDS**

**2025 BUILDING ENERGY
EFFICIENCY STANDARDS
CALIFORNIA CODE OF REGULATIONS,
TITLE 24, PART 1, CHAPTER 10, AND
PART 6 (2025 CALIFORNIA ENERGY CODE)**

DOCKET NUMBER 24–BSTD–01

INTRODUCTION

Notice is hereby given that the California Energy Commission (CEC) proposes to adopt changes to the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Title 24, Part 1, Chapter 10, after considering all recommendations, comments, and objections regarding the proposed action. A description of the proposed standards is provided in the Informative Digest below.

**PUBLIC HEARING AND ADOPTION
BY COMMISSION**

The CEC will hold a public hearing for the purpose of hearing comments on the proposed standards at the

date and time listed below. Interested persons, or their authorized representative, may present oral and written statements, arguments, or contentions relevant to the proposed standards at the public hearing.

Public Hearing and Proposed Adoption Date

**August 14, 2024
10:00 a.m. (Pacific Time)**

REMOTE ATTENDANCE

The public hearing may be accessed by clicking the Zoom link below or visiting Zoom at <https://join.zoom.us> and entering the ID and password for the workshop listed below. If you experience difficulties joining, you may contact Zoom at (888) 799–9666 ext. 2, or the Office of the Public Advisor, Energy Equity, and Tribal Affairs at publicadvisor@energy.ca.gov or by phone at (916) 957–7910.

Link: <https://zoom.us/>
Meeting ID: 938 6923 0237
Passcode: mtg@10am

To participate by telephone dial (213) 338–8477 or 1–888–475–4499 (toll free). When prompted, enter the Webinar ID and password listed above. To comment or ask a question over the telephone, dial *9 to “raise your hand” and *6 to mute/unmute your phone line.

PUBLIC ADVISOR

The CEC’s Office of the Public Advisor, Energy Equity, and Tribal Affairs provides the public assistance in participating in CEC proceedings. For information on participation or to request interpreting services or reasonable accommodations, reach out via email at publicadvisor@energy.ca.gov, by phone at (916) 957–7910. Requests for interpreting services and reasonable accommodations should be made at least five days in advance. The CEC will work diligently to accommodate all requests.

Zoom: If you experience difficulties with the Zoom platform, please contact the Public Advisor’s office via email or phone.

MEDIA INQUIRIES

Direct media inquiries to the Media and Public Communications Office to (916) 654–4989 or mediaoffice@energy.ca.gov.

WRITTEN PUBLIC COMMENT PERIOD

The written public comment period for the 2025 Building Energy Efficiency Standards will be held from **March 29, 2024, through May 13, 2024**. Any

interested person, or their authorized representative, may submit written comments to the CEC for consideration on or prior to **May 13, 2024**. The CEC appreciates receiving written comments at the earliest possible date. Comments submitted outside this comment period are considered untimely. The CEC may, but is not required to, respond to untimely comments.

The CEC encourages use of its electronic commenting system. Visit the e-commenting page at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>, which links to the comment page for this docket. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the “Comment Text” box or attached as a downloadable, searchable document consistent with California Code of Regulations, Title 20, Section, 1208.1. The maximum files size allowed is 10 MB.

Written comments may also be submitted by email. Include docket number 24–BSTD–01 and “2025 Energy Code” in the subject line and email to docket@energy.ca.gov.

A paper copy may be sent to:

California Energy Commission
Docket Unit
Docket Number 24–BSTD–01
715 P Street, MS–4
Sacramento, CA 95814

Written and oral comments, attachments, and associated contact information (including address, phone number, and email address) will become part of the public record of this proceeding with access available via any internet search engine.

To ensure you receive notice of any changes to the proposed regulatory changes in this proceeding, please follow the instructions provided at the end of this notice to join the proceeding email subscriber list or provide a valid email or mailing address with your comments.

POST–HEARING MODIFICATIONS TO THE TEXT OF THE REGULATIONS

Pursuant to Government Code Section 11346.8, following the written public comment period and the public hearing, the CEC may adopt the proposed building standards substantially as proposed in this notice or with modifications that are sufficiently related to the original proposed text and notice of proposed changes. If modifications are made, the full text of the proposed modifications, clearly indicated, will be made available to the public for at least 15 days prior to the date on which CEC adopts, amends, or repeals the regulation(s). The CEC will accept written com-

ments on the modified building standards during the 15–day period.

AUTHORITY AND REFERENCE

The CEC proposes to adopt the regulations under the authority granted by Public Resources Code Sections 25213, 25218, 25218.5, 25402, 25402.1, and 25605.

The CEC proposes to implement, interpret, or make specific Public Resources Code Sections 21080.4, 21153, 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25605, 25910, 25942, and 25943, and Health and Safety Code Sections 18930, 18934, and 18935.

INFORMATIVE DIGEST

Summary of Existing Laws, Regulations and Effect

The Warren–Alquist Act (California Public Resources Code Sections 25001 *et seq.*) establishes the CEC as California’s primary energy policy and planning agency. Public Resource Code Sections 25213, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25910, 25942, and 25943 mandate and/or authorize that the CEC adopt rules and regulations, as necessary, to reduce the inefficient consumption of energy and water in newly constructed buildings and certain additions and alterations to existing buildings.

One of the ways the CEC satisfies this requirement is through the California Energy Code (California Code of Regulations, Title 24, Part 6) found in the California Building Standards Code, which are adopted pursuant to Health and Safety Code Sections 18930, 18934, and 18935 and, where applicable, the California Environmental Quality Act, California Public Resources Code Sections 21000 *et seq.* The Energy Code includes all the energy efficiency requirements applicable to newly constructed buildings and additions and alterations to existing buildings. As a portion of the California Building Code (Title 24), the Energy Code (Title 24, Part 6) follows the same three–year update cycle.

The CEC is initiating its next triennial rulemaking proceeding for updating the Energy Code, and the CEC proposes to adopt amendments for publication in 2024 with an effective date of January 1, 2026.

The proposed amendments to the 2025 Energy Code would:

- Introduce prescriptive heat pump requirements for select nonresidential existing building types.
- Update prescriptive heat pump requirements, and associated performance baselines, for newly constructed single–family, multifamily, and select nonresidential building types.
- Update solar photovoltaic system standards for residential, nonresidential and hotel and motel buildings.

- Update energy storage standards for high-rise residential, nonresidential, and hotel and motel buildings.
- Increase envelope efficiency standards for residential and nonresidential buildings.
- Increase space conditioning system efficiency and control standards for residential and nonresidential buildings.
- Improve indoor air quality requirements for multifamily buildings by requiring balanced or supply-only ventilation systems and compartmentalization leakage testing, as well as a prescriptive standard for energy/heat recovery ventilation systems with a fault indicatory display.
- Introduce prescriptive heat pump requirements for individual domestic water heating systems serving individual dwelling units in low rise multifamily buildings.
- Establish electric-ready requirements for multifamily domestic water heating systems.
- Simplify standards for multifamily buildings.
- Introduce options for improving efficiency of pool and spa water heating systems.
- Increase daylighting control requirements for nonresidential buildings.
- Increase efficiency standards for laboratories.
- Increase efficiency requirements for controlled environment horticulture buildings.
- Increase efficiency requirements for nonresidential refrigeration systems.
- Establish industrial pipe insulation requirements.
- Establish electric-ready requirements for commercial kitchens.
- Relocate portions of the Alternative Calculation Method Approval Manual pertaining to the application, approval, updates, expiration, and decertification of third-party compliance software to Title 24, Part 1.
- Relocate field verification and diagnostic testing requirements from Title 20 to Title 24, Part 1.
- Make general improvements to the clarity and consistency of existing provisions.

These amendments are significant to the State of California in that they support State clean energy goals, policies, and legislation. These amendments will increase the deployment and grid benefits of on-site renewable energy generation, increase flexibility of energy demand, reduce carbon emissions from new buildings (building decarbonization), reduce growth in energy demand, and ensure that California buildings are as energy efficient as possible while also being technically feasible and cost-effective.

Comparable Federal Statute or Regulations

The CEC has determined that there are no existing comparable federal regulations or statutes.

Policy Statement Overview

The Energy Code helps create long-term economic growth and stability by increasing the disposable income of Californians and California businesses in the longer term. The regulations will increase energy efficiency savings in the state by carrying out the CEC's statutory mandate to provide energy efficiency and conservation standards for newly constructed buildings and certain alterations and additions to existing buildings. By saving large amounts of energy, the standards will make a major contribution in meeting the state's goals for reductions in greenhouse gas emissions.

The CEC estimates that the implementation of the 2025 Energy Code will reduce anticipated statewide electricity demand. This will, in turn, result in a net reduction in the emissions of greenhouse gases, nitrous oxide, sulfur oxides, carbon monoxide, and particulate matter attributable to electricity generation and on-site combustion. Improved air quality as a result of reduced emissions will result in health benefits to Californians and help mitigate costs related to health and other issues associated with climate change. The reduction in statewide electricity demand will also marginally decrease water consumption in the electricity generation sector.

EVALUATION OF INCONSISTENCY OR INCOMPATIBILITY WITH EXISTING STATE REGULATIONS

The CEC has conducted an evaluation for other state regulations in this area and has determined that the proposed standards are neither inconsistent nor incompatible with existing state regulations.

OTHER MATTERS PRESCRIBED BY STATUTE APPLICABLE TO THE AGENCY OR TO ANY SPECIFIC REGULATION OR CLASS OF REGULATIONS

None.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

The CEC has determined that the proposed regulatory action would not impose a new mandate on local agencies or school districts.

ESTIMATE OF COST OR SAVINGS

The CEC has prepared an estimate in accordance with instructions adopted by Department of Finance, of cost or savings to any state agency, local agency, or school district.

- A. Cost or savings to any state agency:** Yes. Buildings owned and occupied by state agencies are required to comply with the standards.
- B. Cost to any local agency required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4:** Buildings owned or operated by local agencies are required to comply with the standards. However, costs of complying with the standards are not required to be reimbursed.
- C. Cost to any school district required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4:** School buildings are covered by the standards, and the administrative regulations of the Division of State Architect require public school buildings to comply with the standards. However, costs of complying with the standards are not required to be reimbursed.
- D. Other nondiscretionary cost or savings imposed on local agencies:** None.
- E. Cost or savings in federal funding to the state:** While the CEC receives federal State Energy Program funding for the building standards program, the updates proposed to the standards do not alter or affect the state's ongoing participation in federal State Energy Program.

INITIAL DETERMINATION OF NO SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT ON BUSINESSES, INCLUDING ABILITY OF CALIFORNIA BUSINESSES TO COMPETE WITH BUSINESSES IN OTHER STATES

The CEC has made an initial determination that the proposed regulations are unlikely to have a statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. Despite minor competitive impacts to California businesses in the short term, the long-term benefits of the proposed regulations will not disadvantage California businesses from competing with businesses in other states.

On the contrary, California's Energy Code is part of the California Building Standards Code and therefore, impact nearly all newly constructed buildings, as well as to specific additions and alterations to nearly all existing buildings. Therefore, the Energy Code may eventually impact all business in the state that own

buildings. While there are initial up-front costs imposed by the Energy Code, there are significantly more lifetime savings to residents and businesses across the state who will experience lower energy costs and lower overall costs of ownership.

There are long-term savings that typically more than compensate for initial upfront costs by a significantly positive ratio. Past changes to the Energy Code continue to generate benefits. More simply, the Energy Code helps create long-term economic growth and stability by increasing the disposable income of Californians and California businesses in the longer term. These long-term benefits far outweigh the initial upfront costs and, therefore, California businesses are not disadvantaged in competing with businesses from other states by these regulations. Since the 1970s, California has maintained a deep history of progressive environmental and energy regulations that also save consumers money. Additional facts, data, and evidence supporting this initial determination are included in the CEC's Economic and Fiscal Analysis (STD. 399) and in the rulemaking docket.

DECLARATION OF EVIDENCE

The basis for the CEC's findings on economic impacts is that the standards are cost-effective, and therefore will have a beneficial economic impact on the owners and occupants of buildings built to comply with the standards. Evidence for the cost-effectiveness of the standards requirements is contained in the formal rulemaking docket.

DOCUMENTS INCORPORATED BY REFERENCE

The existing Energy Code incorporates a number of industry test standards by reference. The amendments proposed for the 2025 Energy Code include updates to these standards as needed to maintain currency. The following documents are being incorporated by reference into the Energy Code:

AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE

AHRI Standard 210/240–2023 (2020) Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment 2023

AHRI Standard 340/360–2022 (1–P) Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment 2022

AHRI Standard 420–2023 (I–P) Performance Rating of Forced-circulation Free-delivery Unit Coolers 2023

ANSI/AHRI Standard 550/590–2023 (I–P)

Performance Rating of Water–Chilling Packages and Heat Pump Water–heating Packages Using the Vapor Compression Cycle 2023

AHRI Standard 560–2023 (I–P) Performance Rating of Water–cooled Lithium Bromide Absorption Water–chilling and Water–heating Packages 2023

AHRI Standard 1060–2023 (I–P) Performance Rating of Air–to–Air Exchangers for Energy Recovery Ventilation Equipment 2023

AHRI Standard 1240–2017 (R2023) (I–P) Performance Rating of Active Chilled Beams 2017

AHRI Standard 1360–2022 (I–P) Performance Rating of Computer and Data Processing Room Air Conditioners 2022

AIR–CONDITIONING CONTRACTORS OF AMERICA

ANSI/ACCA 2 Manual S–2023 2023

Manual S — Residential Equipment Selection, Third Edition 2023

AAMA/WDMA/CSA

AAMA/WDMA/CSA 101/1.S.2/A440:22 North American Fenestration Standard/Specification for Windows, Doors, and Skylights 2023

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

2023 TLVs and BEIs Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices 2023

AMERICAN NATIONAL STANDARDS INSTITUTE

ANSI/AMCA Standard 220–21 Laboratory Methods of Testing Air Curtain Units for Aerodynamic Performance Rating 2021

ANSI/ASSP Z9.5–2022 Laboratory Ventilation 2022

ANSI/NEMA WD 6–2021 Wiring Devices — Dimensional Specifications 2021

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR–CONDITIONING ENGINEERS (NATIONAL PUBLICATIONS)

ASHRAE GUIDELINE 36–2021 High–Performance Sequences of Operation for HVAC Systems 2021

ANSI/ASHRAE Standard 55–2023 Thermal Environment Conditions for Human Occupancy 2023

ANSI/ASHRAE Standard 62.1–2022 Ventilation and Acceptable Indoor Air Quality 2022

ANSI/ASHRAE Standard 62.2–2022 Ventilation and Acceptable Indoor Air Quality in Residential Buildings 2022

ANSI/ASHRAE 84–2020 Method of Testing Air–to–Air Heat/Energy Exchanger 2020

ANSI–ASHRAE 90.1–2022 Energy Standard for Buildings Except Low–Rise Residential Buildings 2022

ANSI/ASHRAE Standard 154–2022 Ventilation for Commercial Cooking Operations 2022

ASHRAE Handbooks

2023 ASHRAE Handbook — HVAC Applications (I–P) 2023

2020 ASHRAE Handbook — HVAC Systems and Equipment (I–P) 2020

2021 ASHRAE Handbook — Fundamentals (I–P) Fundamentals (I–P) 2021

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

ASME A17.1–2019/CSA B44:22 Safety Code for Elevators and Escalators 2022

AMERICAN SOCIETY FOR TESTING AND MATERIALS/ASTM INTERNATIONAL

ASTM C55–22 Standard Specifications for Concrete Building Brick 2022

ASTM C335/C335M–23 Standard Test Method for Steady–State Heat Transfer Properties of Horizontal Pipe Insulation 2023

ASTM C518–21 Standard Test Method for Steady–State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus 2021

ASTM C731–15(2022) Standard Test Method for Extrudability, After Package Aging, of Latex Sealants 2022

ASTM C732–22 Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants 2022

ASTM C836/C836M–18(2022) Standard Specification for High Solids Content, Cold Liquid–Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course 2022

ASTM C1167–22 Standard Specification for Clay Roof Tiles 2022

ASTM C1492–22 Standard Specification for Concrete Roof Tile 2022

ASTM C1549–16(2022) Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer 2022

ASTM C1583/C1583M–20 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull–off Method)

ASTM D448–12(2022) Standard Classification for Sizes of Aggregate for Road and Bridge Construction 2022

ASTM D522/D522M–17(2022) Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings 2022

ASTM D822/D822M–13(2018) Standard Practice for Filtered Open–Flame Carbon–Arc Exposures of Paint and Related Coatings

ASTM D2202–00(2023) Standard Test Method for Slump of Sealants 2023

ASTM D3805/D3805M–16(2023) Standard Guide for Application of Aluminum–Pigmented Asphalt Roof Coatings 2023

ASTM D5870–22 Standard Practice for Calculating Property Retention Index of Plastics (2016) 2022

ASTM D6694/D6694M–15(2023) Standard Specification for Liquid–Applied Silicone Coating Used in Spray Polyurethane Foam Roofing 2023

ASTM E96/E96M–22a1 Standard Test Methods for Water Vapor Transmission of Materials 2022

ASTM E1175–87(2022) Standard Test Method for Determining Solar or Photopic Reflectance, Transmittance, and Absorptance of Materials Using a Large Diameter Integrating Sphere 2022

ASTM E1677–23 Standard Specification for Air Barrier (AB) Material or Assemblies for Low–Rise Framed Building Walls 2023

ASTM E1680–16(2022) Standard Test Method for Rate of Air Leakage through Exterior Metal Roof Panel Systems 2022

ASTM E1918–21 Standard Test Method for Measuring Solar Reflectance of Horizontal and Low–Sloped Surfaces in the Field 2021

ASTM E2178–21a Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials 2021

ASTM E2357–23a Standard Test Method for Determining Air Leakage of Air Barrier Assemblies 2023

CALIFORNIA BUILDING CODE

2025 California Building Code 2025

2025 California Electrical Code 2025

2025 California Fire Code 2025

2025 California Historical Building Code 2025

2025 California Mechanical Code 2025

2025 California Plumbing Code 2025

CALIFORNIA ENERGY COMMISSION

Appliance Efficiency Regulations 2025

Alternative Calculation Method (ACM) Manual 2025

CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

Standards for Insulating Material

COOL ROOF RATING COUNCIL

CRRC–1 (2023) Product Rating Program Manual 2023

ILLUMINATING ENGINEERING SOCIETY

IES LM–51–20 Approved Method: Electrical and Photometric Measurement of High Intensity Discharge Lamps 2020

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO 7574–4: 1985 Statistical methods for determining and verifying stated noise emission values of machinery and equipment 1985

ANSI/ASA S12.55–2012/ISO 3745:2012 Acoustics — determination of sound power levels and sound energy levels of noise sources using sound pressure–precision methods for anechoic rooms and hemi–anechoic rooms 2012

INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

California Mechanical Code

INTERNATIONAL CODE COUNCIL

California Building Code (2025) 2025

INTERNATIONAL WINDOW FILM ASSOCIATION

Architectural Visual Inspection Standard Window Film (reindorsed 2018) 2018

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NEMA LSD 57–2023 Polyurethane Foam Application: Lighting Equipment 2023

NATIONAL FENESTRATION RATING COUNCIL

ANSI/NFRC 100–2023 Procedure for Determining Fenestration Product U–factors 2023

ANSI/NFRC 200–2023 Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence 2023

ANSI/NFRC 202–2023 Procedure for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence 2023

ANSI/NFRC 203–2020 (R2023) Procedure for Determining Visible Transmittance of Tubular Daylighting Devices 2020

ANSI/NFRC 400–2023 Procedure for Determining Fenestration Product Air Leakage 2023

NSF INTERNATIONAL (FORMERLY NATIONAL SANITATION FOUNDATION)

NSF/ANSI/CAN 50–2023e Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities 2023

SHEET METAL AND AIR-CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION
ANSI/SMACNA 006–2020 HVAC Duct Construction Standards — Metal and Flexible 2020

UNDERWRITERS LABORATORIES / UL

UL 1598–2021 Standard for Luminaires 2021

UL 1741–2021 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources 2021

UL 1973–2022 Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications 2022

UL 2108–2015 (R2023) Low Voltage Lighting Systems 2015

UL 9540–2023 Standard for Energy Storage Systems and Equipment 2023

Upon request, all documents are available for review at the CEC located at 715 P Street, Sacramento, California 95814.

FINDING OF NECESSITY FOR THE PUBLIC'S HEALTH, SAFETY, OR WELFARE BUSINESS REPORT

The proposed regulations of Part 1, Chapter 10, sections 10–103.3 would impose new reporting requirements on Energy Code Compliance (ECC) providers and ECC independent raters and rater companies.

ECC–Provider:

1. Reporting to the Commission Compliance Document Repository (CCDR)

The proposed regulations will require the ECC–Providers to transmit compliance documentation registered in its data registry no less than once per calendar year to the Commission Compliance Document Repository (CCDR). This reporting requirement will relieve existing annual reporting requirements concerning these registered compliance documents.

2. Quality Assurance Reporting:

- a. Quarterly Reporting. The proposed regulations will require that the ECC–Provider report each quarter to the CEC a summary of all failed quality assurance audits.
- b. Annual Reporting. The proposed regulations will require that the ECC–Provider report each year to the CEC.

3. Response to data requests from the CEC: At any time, the Executive Director may request access to or a digital copy of one or more registered compliance documents, associated Compliance Registration Packages, and quality assurance records that an ECC–Provider is required to maintain.

4. Immediate Reporting of Disciplinary Actions. The ECC–Provider will be required to provide written notification of any ECC–Rater or ECC–Rater Company decertification to the Commission within 24 hours of decertification.
5. Summary of ECC–Rater Company and Independent Rater annual reports (see below). This summary will include an aggregation of the total and average costs of services for each type of field verifications and diagnostic tests reported by all ECC–Rater Companies and independent ECC–Raters without any associated identification.

ECC–Rater Company and Independent Rater:

Under the proposed requirements, beginning in June of 2027, the ECC–Provider will submit to the CEC a summary of the annual reports from each ECC–Rater Companies and Independent Raters under its certification. The ECC–Rater Companies and Independent Raters must submit a detailed report annually to the ECC–Provider. These annual reports must include the ECC–Rater Company or independent Rater's continued licensure compliance, employed ECC–Rater certificate status, field verification and diagnostic testing activities, and average cost of services provided.

It is necessary for the health, safety, or welfare of the people of the state, that these regulations, which require a report, apply to businesses.

COST IMPACT ON REPRESENTATIVE PRIVATE PERSON OR BUSINESS

The CEC has determined that there may be additional incremental costs to an individual homeowner imposed by the Energy Code, however, there are long–term savings that typically repay those costs by a significantly positive ratio making the initial costs for a new single family home buyer to be statistically insignificant.

California's Energy Code is part of the California Building Standards Code and therefore impacts nearly all newly constructed buildings, as well as to certain additions and alterations to existing buildings. As a result, the Energy Code may eventually impact all businesses in the state that own buildings because California's Energy Code applies to buildings built in the state of California. While the increased energy efficiency measures in California's buildings may have short term initial costs, there are long–term benefits from reduced utility costs. For individuals this will result in increased disposable income and for businesses lower costs and potentially additional profit. The proposed standards are cost–effective over the life of the building.

In addition, the CEC estimates that the implementation of the proposed standards will reduce anticipated increases in statewide annual electricity demand and

natural gas consumption. This will, in turn, result in a net reduction in the emissions of greenhouse gases, nitrous oxide, sulfur oxides, carbon monoxide, and particulate matter attributable to electricity generation and on-site combustion (compared to the current Energy Code requirements). Reduced air pollution and reductions in greenhouse gases will result in health benefits to Californians and help mitigate health and other costs associated with climate change. The reduction in statewide electricity demand will also marginally decrease water consumption in the electricity generation sector.

SMALL BUSINESS

The proposed standards will affect small businesses. The Energy Code does not differentiate between a small business and a typical business but rather impact construction that may occur in nearly all public and private buildings in California.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

The CEC has assessed whether and to what extent this proposal will affect the following:

A. The creation or elimination of jobs within the State of California

The CEC has made the initial determination that the proposed regulations for the 2025 Energy Code will result in an estimated 6,215 jobs created and 18 jobs eliminated. Jobs created and eliminated estimates were developed with support from Evergreen Economics using IMPLAN modeling software. The IMPLAN model provides a relatively simple representation of the California economy; however, it is important to understand that the IMPLAN model simplifies the extremely complex actions and interactions of individual, businesses, and other organizations as they respond to changes in energy efficiency codes. The estimated jobs eliminated are the result of a proposed measure that will increase central water heating pipe efficiency requirements in newly constructed multifamily buildings, which will result in increased costs for builders. This measure results in incremental costs and thereby decreases discretionary income. Therefore, the CEC concludes that the proposal may result in both jobs created and eliminated in California.

B. The creation of new businesses or the elimination of existing businesses within the State of California.

California's Energy Code is part of the California Building Standards Code and therefore impacts nearly all newly constructed buildings, as well as specific

additions and alterations to existing buildings. As a result, the 2025 Energy Code is expected to eventually impact all businesses in the state that own buildings. While there are initial up-front costs imposed by the Energy Code, there are significantly more lifetime savings to residents and businesses across the state who will experience lower energy costs and lower overall costs of ownership. The Energy Code helps create long-term economic growth and stability by increasing the disposable income of Californians and California businesses in the longer term making it possible that new businesses may be created to provide compliance services and to supply energy efficient products. Therefore, the CEC concludes that the proposal may create some additional business and is unlikely to eliminate existing businesses within the state of California. Given the uncertainty, and the many unknown variables in making these projections, the CEC is conservatively assuming there will be no additional businesses created.

C. The expansion of businesses currently doing business within the State of California.

California businesses producing energy efficient products and technology that meet or exceed the proposed Standards are likely to expand their sales of those products and technologies due to the implementation of these proposed Standards. Therefore, the CEC concludes that businesses currently doing business in California to provide energy-efficient products and services may be expanded.

D. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

Beyond the monetary benefits, the CEC estimates that the implementation of the 2025 Energy Code updates will reduce anticipated increases in statewide annual electricity demand. This will, in turn, result in a net reduction in the emissions of greenhouse gases, nitrous oxide, sulfur oxides, carbon monoxide, and particulate matter attributable to electricity generation and on-site combustion. Improved air quality as a result of reduced emissions will result in health benefits to Californians and help mitigate costs related to health and other issues associated with climate change. The reduction in statewide electricity demand will also marginally decrease water consumption in the electricity generation sector.

The proposed regulations will not adversely affect the health and welfare of California residents, worker safety, or the state's environment.

ESTIMATED COST OF COMPLIANCE OF STANDARDS THAT WOULD IMPACT HOUSING

The proposed regulations are required by statute (Public Resources Code § 25402(b)(3)) to be cost-effective when amortized over the economic life of the structure. Increasing energy efficiency in California's buildings through the Energy Code often incurs short term initial costs, largely imposed on California homebuilders and commercial building developers, but results in long-term benefits to large amounts of residents and businesses across the state. For residents and businesses alike, advancing the state's Energy Code results in reduced energy costs, lower overall expenses for renters, lower costs of ownership and thereby lower risks of default for borrowers.

There is significant evidence that the cost increases associated with complying with the Energy Code have no statistically significant impact on median single-family home sale prices.⁵ Initial costs imposed on homebuilders and developers are included as initial costs in B1, but not considered significant enough to impact housing costs in the state. Currently, two identical homes in California — one that complies with the Energy Code that is currently in effect, and another that would comply with this proposed set of regulations — would have the same market value. Notable factors that are known to impact housing costs are neighborhood comparable homes ("comps"), location, home size, age, interest rates, and other economic indicators; the Energy Code does not impact these factors.

CONSIDERATION OF ALTERNATIVES

The CEC has determined that no reasonable alternative considered by the CEC or that has otherwise been identified and brought to the attention of the CEC would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

The CEC invites interested persons to present statements, arguments, or data concerning alternatives to the proposed standards at the scheduled hearing or during the written comment period.

AVAILABILITY OF RULEMAKING DOCUMENTS

The CEC maintains a website to facilitate public access to documents prepared and considered as part of this rulemaking proceeding. Documents prepared

by the CEC for this rulemaking have been posted at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>.

The CEC will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at the address below. As of the date this notice is published in the Notice Register, the rulemaking file consists of this Notice, the Express Terms, the Initial Statement of Reasons (ISOR), the Economic and Fiscal Impact Statement (STD. 399), any documents relied upon, and any documents incorporated by reference. Copies may be obtained by contacting Corrine Fishman at the phone number below or accessed through the CEC website at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>.

At the conclusion of the rulemaking, persons may obtain a copy of the Final Statement of Reasons (FSOR), once it has been prepared, by visiting the CEC's website at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>.

CONTACT PERSON FOR PROCEDURAL AND ADMINISTRATIVE QUESTIONS

Please direct general inquiries concerning aspects of the rulemaking process including requests for copies of the proposed text (Express Terms), the Initial Statement of Reasons (ISOR), any modified version of the regulations, the substance of the proposed regulations, or any other information upon which the rulemaking is based to:

Corrine Fishman, MA
Regulations Manager
Efficiency Division
corrine.fishman@energy.ca.gov

PROPOSING STATE AGENCY CONTACT PERSON FOR SUBSTANTIVE AND/ OR TECHNICAL QUESTIONS ON THE PROPOSED CHANGES TO BUILDING STANDARDS

Specific questions regarding the substantive and/or technical aspects of the proposed changes to the building standards should be addressed to:

Payam Bozorgchami, PE
Senior Civil Engineer
Building Standards Branch
Payam.bozorgchami@energy.ca.gov