

2022 California Energy Code, Title 24 Fact Sheet

Abstract:

- **Energy Code:** Title 24, Part 6 Building Energy Efficiency Standards
- **Effective Date:** January 1, 2023
- **Applies to:** All projects with permits filed on or after this date
- **Primary Goal:** Increase building energy efficiency

What Changed and Why?

The 2022 Energy Code, developed by the California Energy Commission (CEC), updated every three years, aims to combat carbon emissions by enhancing building energy efficiency cost-effectively. Benefits include:

- Lower utility bills
- Better indoor comfort and air quality
- Increased property value
- Reduced greenhouse gas emissions (GHG)

Economic and Environmental Impact according to CEC

Over 30 years, the 2022 code is estimated to provide \$1.5 billion in consumer benefits and a 10 million metric ton CHG reduction (equivalent to removing 2.2 million cars for a year)

For single-family homes: Annual reduction of 16,230 metric tons CO₂ (equivalent to 3,641 fewer cars) by switching from gas furnaces to electric heat pumps in most climate zones.

Benefits of the 2022 Energy Code

1. **Increased On-site Renewable Energy:** More solar power generation
2. **Improved Grid Reliability:** Enhanced electric load flexibility
3. **Reduced Emissions:** Lower carbon output from new constructions
4. **Better Public Health:** Decreased air pollution
5. **Eco-friendly Technology:** Encourages efficient electric solutions

California GHG Reduction Goals

California aims to reduce greenhouse gas emissions (GHG) while developing a climate-resilient energy system. The statewide climate and energy goals are among the most ambitious in the world, driving innovation and low-carbon transitions globally.

- **Assembly Bil 32:** 1990 levels by 2020
- **Senate Bill 32:** 40% below 1990 levels by 2030
- **Executive Order S-3-05:** 80% below 1990 levels by 2050

Computer Room-Specific Requirements

Applicability

- 2022 Building Energy Efficiency Standards applies to all space conditioning systems serving computer rooms with a power density >20 watts/ft² of conditioned floor area.

Mandatory Requirements

- **Reheat Control:** Computer room zones require controls preventing the simultaneous mixing of heating and cooling.

Prescriptive Requirements

- **Air Containment:** Required for air-cooled racks in a computer room that has a design load >10kW per room shall include air barriers to prevent significant mixing of heated and cooled air (with exceptions)
 - a. Exception 1: Expansions of existing computer rooms
 - b. Exception 2: Computer racks with a design load less than 1kW per rack
 - c. Exception 3: Equivalent energy performance based on computational fluid dynamics or other analysis

Additional Information

For complete details and documentation, visit 2022 Building Energy Efficiency Standards (energy.ca.gov)