

Building Energy and Local Government Climate Action

October 14, 2019

AGENDA

1. Reach code overview
2. Discuss benefits
3. Outline some of the key concerns that have been expressed in various jurisdictions
4. Discuss the importance of this policy for long term goals

SCIENCE  NATIONAL GEOGRAPHIC

How climate change primed California's power shutdown

Dry seasons are intensifying, increasing fire risk. A power utility is hedging against fires by cutting off electricity to more than half a million.

BY ALEJANDRA BORUNDA

PUBLISHED OCTOBER 10, 2019

California's largest utility has turned off the power for 500,000 accounts, with 250,000 more setting off another catastrophic burn like 2018's Camp Fire, which killed 85 people and displaced 15,000 people in the state are likely to be affected by the power outages.



California Building Standards Code (Title 24 of CA code of regulations)

- Part 1: California Building Standards Administrative Code
- Part 2: California Building Code
- Part 2.5: California Residential Building Code
- Part 3: California Electrical Code
- Part 4: California Mechanical Code
- Part 5: California Plumbing Code
- **Part 6: [California Energy Code](#)**
- *Part 7: currently vacant - formerly California Elevator Safety Construction Code*
- Part 8: California Historical Building Code
- Part 9: California Fire Code
- Part 10: California Existing Building Code
- **Part 11: [California Green Building Standards Code \(CALGreen Code\)](#)**
- Part 12: California Reference Standards Code



CALIFORNIA'S 2019 RESIDENTIAL BUILDING ENERGY EFFICIENCY STANDARDS

CALIFORNIA ENERGY COMMISSION

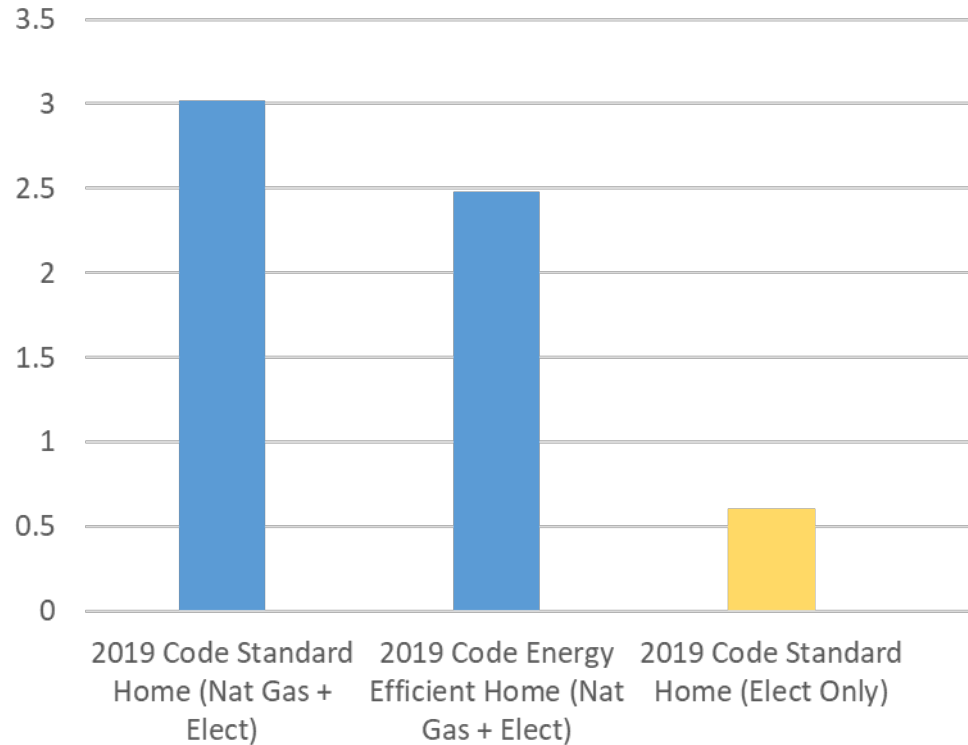
The state's energy efficiency standards for new buildings and appliances have saved consumers billions in lower electricity and natural gas bills. The 2019 Building Energy Efficiency Standards for residential buildings includes a first-in-the-nation requirement to install solar photovoltaic systems. Other features enable homes to reduce the electricity demand from the grid, helping to reduce energy bills and the carbon footprint.

\$19,000 SAVINGS OVER A 30 YR. MORTGAGE | INITIAL COST \$9,500

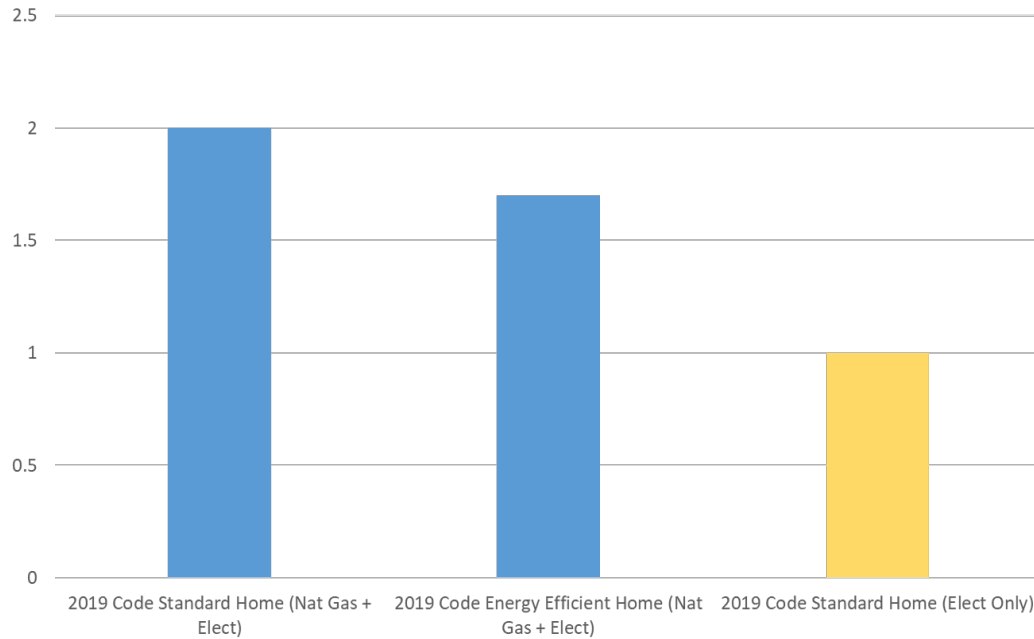


1. Must be at least as stringent as the statewide code.
2. Must be cost effective.
3. Must be approved by the California Energy Commission.
4. Need to be re-approved with each Energy Code update.

Graph: Single Family Home Emissions per Year (MT CO₂e) with Sonoma Clean Power



Graph: Single Family Home Emissions per Year (MT CO₂e) with Healdsburg Electric





Heat pump clothes dryer

Induction cooktop



Heat pump space heating

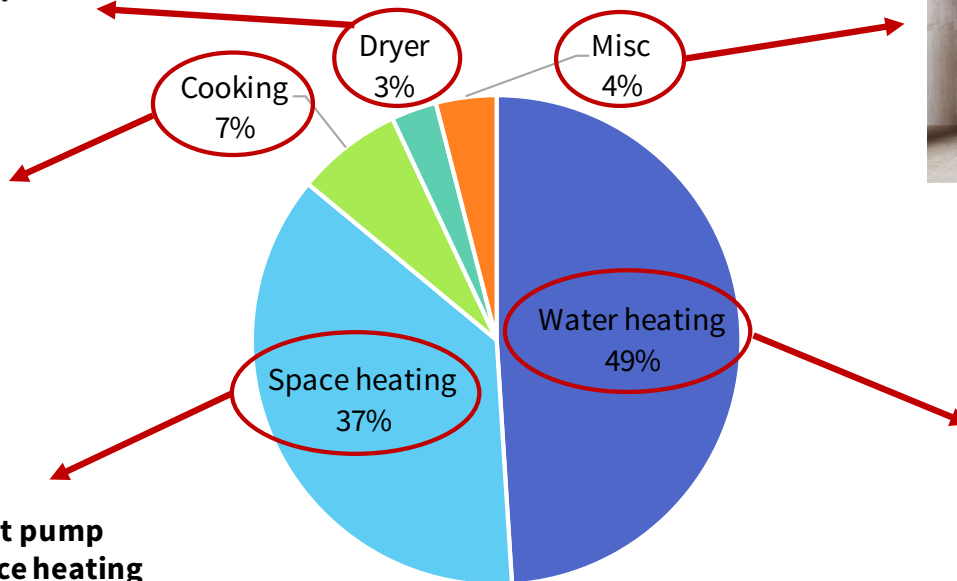
Electric fireplaces



Heat pump water heater



CA Gas Use in Homes - 2010



- Costs
- Attractiveness
- Patchwork approach
- Grid is not ready

- Cloverdale
- Santa Rosa
- Windsor
- Petaluma
- *Berkeley**
- Fremont
- Hayward
- *San Mateo**
- Arcata
- *Carlsbad**
- Cupertino
- Davis
- Healdsburg
- Hillsborough
- Los Altos
- Los Angeles
- Monte Sereno
- Mountain View
- Marin County
- *Menlo Park**
- Morgan Hill
- Oakland
- Pacifica
- Palo Alto
- Portola Valley
- San Francisco
- *San Jose**
- *San Luis Obispo**
- Santa Clara County
- Santa Cruz
- *Santa Monica**
- and more...

**adopted as of 10/14/2019*

Recommendation: That the Board express formal support for Sonoma County jurisdictions seeking to reduce greenhouse gas emissions through the adoption of energy reach codes