



Local Governments Empowering Our Communities

# The *What, Why, Who, How, and When* of Reach Codes *(in 15 minutes)*

March 11, 2019

# WHAT?

What are we talking about today?

# California Building Standards Code (Title 24)

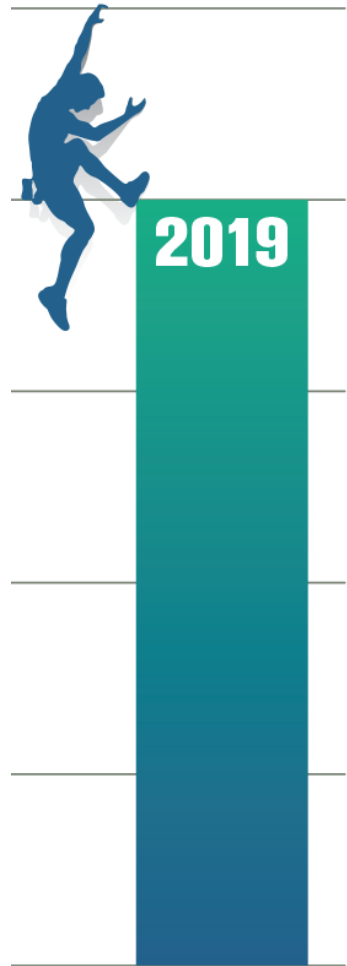
Title 24 is Composed of 12 "Parts," Described Below:

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- ◉ [Part 1 - California Building Standards Administrative Code](#)
- ◉ [Part 2 - California Building Code - Vol. I & II](#)
- ◉ [Part 3 - California Electrical Code](#)
- ◉ [Part 4 - California Mechanical Code](#)
- ◉ [Part 5 - California Plumbing Code](#)
- ◉ [Part 6 - California Energy Code](#)
- ◉ Part 7 - No longer published in Title 24; see Title 8 CCR
- ◉ [Part 8 - California Historical Building Code](#)
- ◉ [Part 9 - California Fire Code](#)
- ◉ [Part 10 - California Existing Building Code](#)
- ◉ [Part 11 - California Green Building Standards Code](#)
- ◉ [Part 12 - California Reference Standards Code](#)

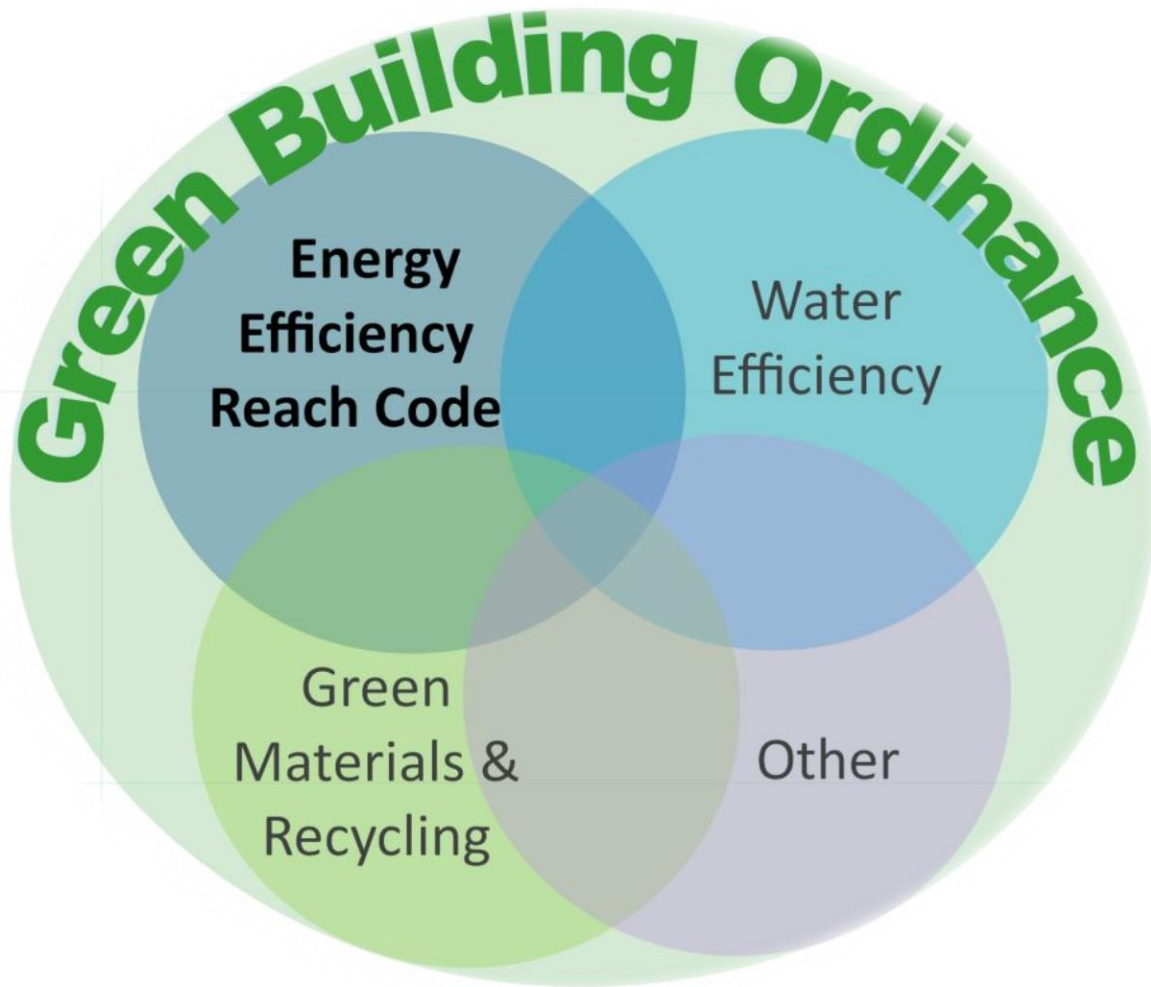


# A Reach Code Goes Above the State Code



- Local jurisdictions are required to adopt the California Building Code each time it is updated
- Local jurisdictions can amend the code to make it more stringent than the state code when they make certain findings.

# Not all energy-related codes are reach codes



## Energy Reach Codes

- Local amendment of the California Building Standards Code
- Require increased energy efficiency

## Other Codes

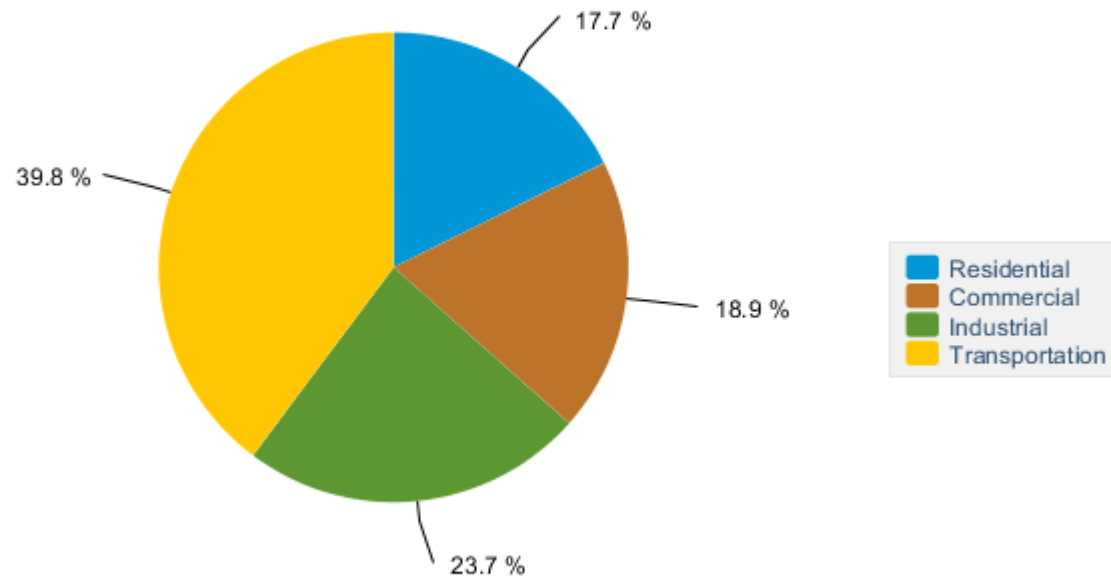
- May not require amendment of Building Code
- May not require increased energy efficiency

# WHY?

Why adopt an energy reach code?

# Buildings, Energy Use, and Greenhouse Gases

California Energy Consumption by End-Use Sector, 2016



## Buildings Use a Lot of Energy and Produce a Lot of GHGs

- The 2019 California Building Standards will reduce energy and GHGs
- Local governments can do more!

# New Buildings and Existing Buildings

## New Buildings

- Will be around for 30-50 years
- Building them right is easier than retrofitting

## Existing Buildings

- Make up most of California's building stock
- Many are not energy efficient





# WHO?

Who is involved in developing and adopting a reach code?

# Reach Code Actors & Stakeholders

## Local Governments Adopt Reach Codes

- Elected Officials
- Staff may include people from several departments, such as:
  - City Manager's Office
  - Sustainability Office
  - Building Department
  - Community Development Department
  - Public Works Department



# Reach Code Actors & Stakeholders

## External Reach Code Stakeholders include:

- Developers
- Architects and designers
- Contractors
- Environmental organizations
- And more!

## State Agencies

- California Energy Commission (CEC) reviews and approves reach codes that require additional energy efficiency
- Building Standards Commission receives all amendments to the Building Code



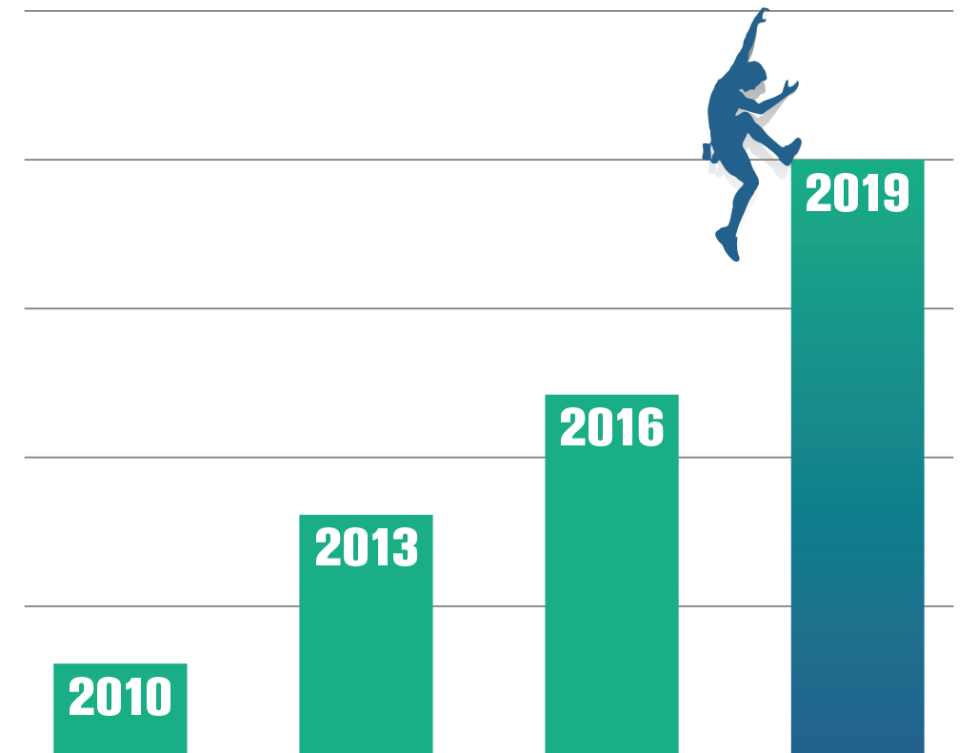
# WHEN?

When should reach codes be adopted?

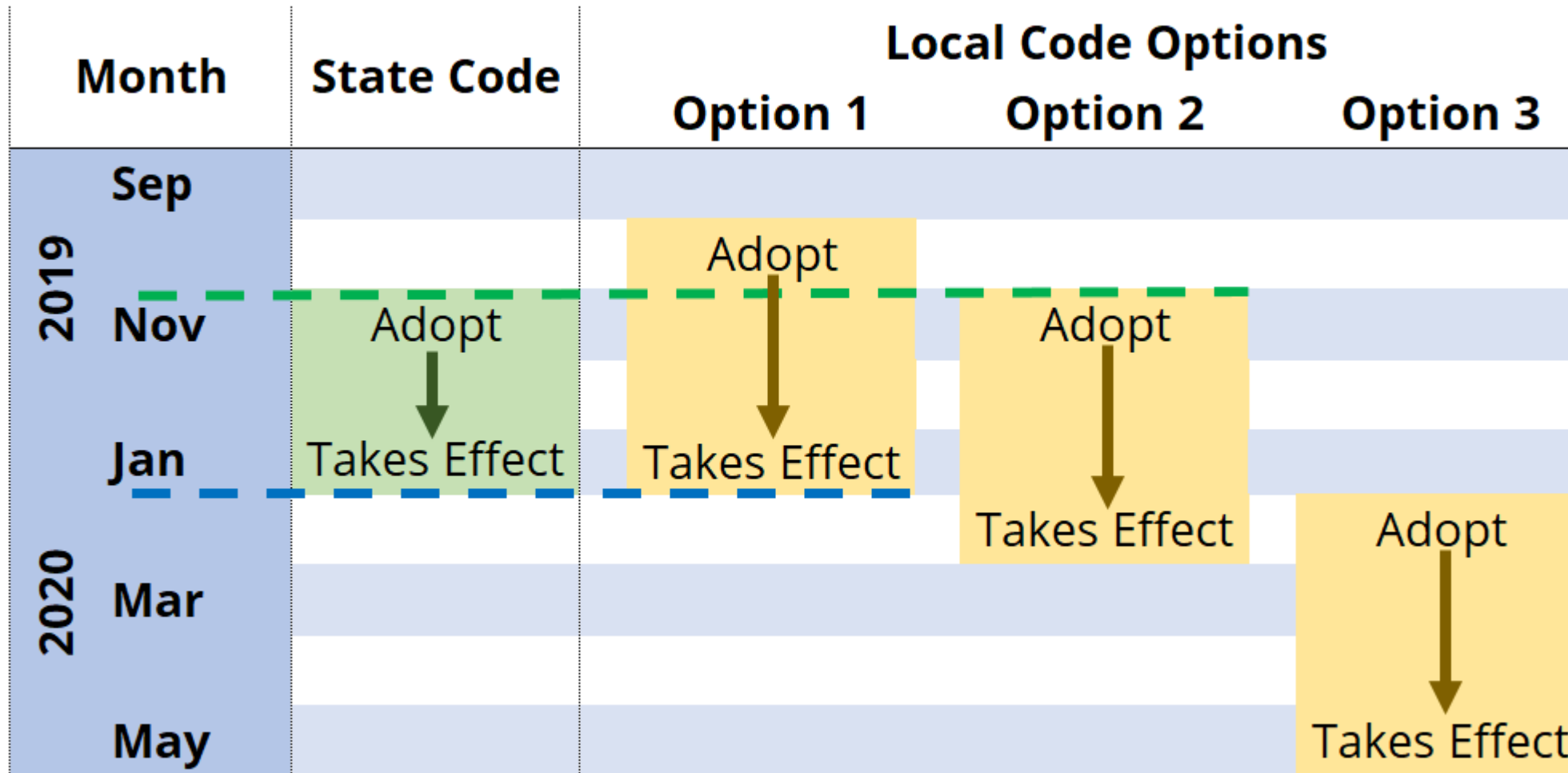
# Timing Considerations for Reach Codes

## Building Code Cycle

- State updates building code every 3 years
- Reach codes are amendments to that state building code
  - Only valid for time of underlying code: maximum 3 years
- 2019 Building Code will be in effect from 1/1/2020 to 12/31/2022



# Timing Options for Reach Codes



# HOW?

How does a local government start the reach code process?

# Look at Options

## Ways to Begin

- Options with potential political support
  - Check General Plans, Climate Action Plans, etc.
  - Talk with department heads
  - Consider neighboring jurisdictions
- Options with higher potential impact
  - What kinds of development are expected in the next 3 years?
  - Talk with Chief Building Official, Planning Department





# Cost Effectiveness Requirement



State law requires that all local ordinances that increase energy efficiency demonstrate that the measures will pay for themselves within a reasonable amount of time

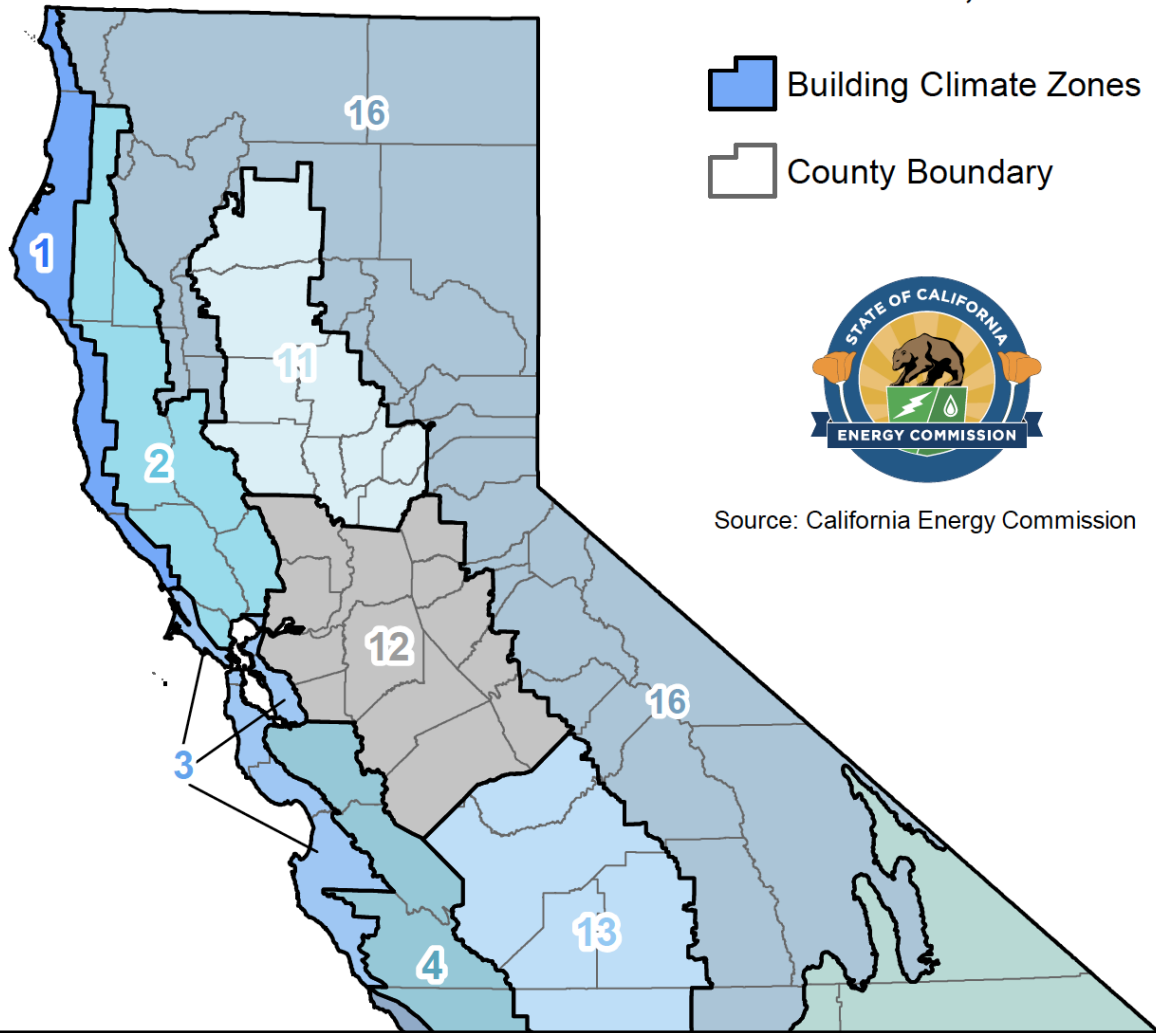
# Cost Effectiveness Studies

- Cost-effectiveness is usually shown with a study that examines the cost of the measure and compares that to projected savings due to energy savings
- Cost-effectiveness studies
  - Can be simple or complicated
  - Depend on assumptions – some of which are defined by the state in a manual or in software, and some of which are not



# Cost-Effectiveness and Building Climate Zone

## Building Climate Zones California, 2017



County	Climate Zone(s)
Marin	2, 3
Sonoma	1, 2
Napa	2
Solano	12
Contra Costa	3, 12
Alameda	3, 12
Santa Clara	4
San Mateo	3
San Francisco	3

HELP?

Who can help?

# Support for reach code efforts

Who	Where	What	How	Contact
BayREN	Bay Area	All energy reach codes	<ul style="list-style-type: none"><li>• Events</li><li>• Resources, webpage</li><li>• BayREN county representatives</li></ul>	<a href="mailto:codes@bayren.org">codes@bayren.org</a>
IOU Reach Code Team	Statewide	All energy reach codes	<ul style="list-style-type: none"><li>• Cost-effectiveness studies</li><li>• Model ordinances</li><li>• Technical support</li></ul>	<a href="mailto:info@localenergycodes.com">info@localenergycodes.com</a>
Zero Emissions Buildings Task Force	Statewide	Reach codes with goal of decarbonizing buildings	<ul style="list-style-type: none"><li>• Networking</li><li>• Technical support</li><li>• Resources</li></ul>	<a href="mailto:arider@archamy.com">arider@archamy.com</a>
Bay Area CCAs	Service Area	Primarily building electrification & EV codes	<ul style="list-style-type: none"><li>• Varies</li></ul>	Contact your local CCA

# For More Information

[bayrencodes.org](http://bayrencodes.org)

[bayrencodes.org/reachcodes](http://bayrencodes.org/reachcodes)

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