



# Building Code Changes Public Workshop

October 17, 2016 - 6:30 pm

# Overview

- Background
- California Building Code
- California Energy Code
- Municipal Code
- Administrative Considerations
- Round Table Discussion
- Questions?

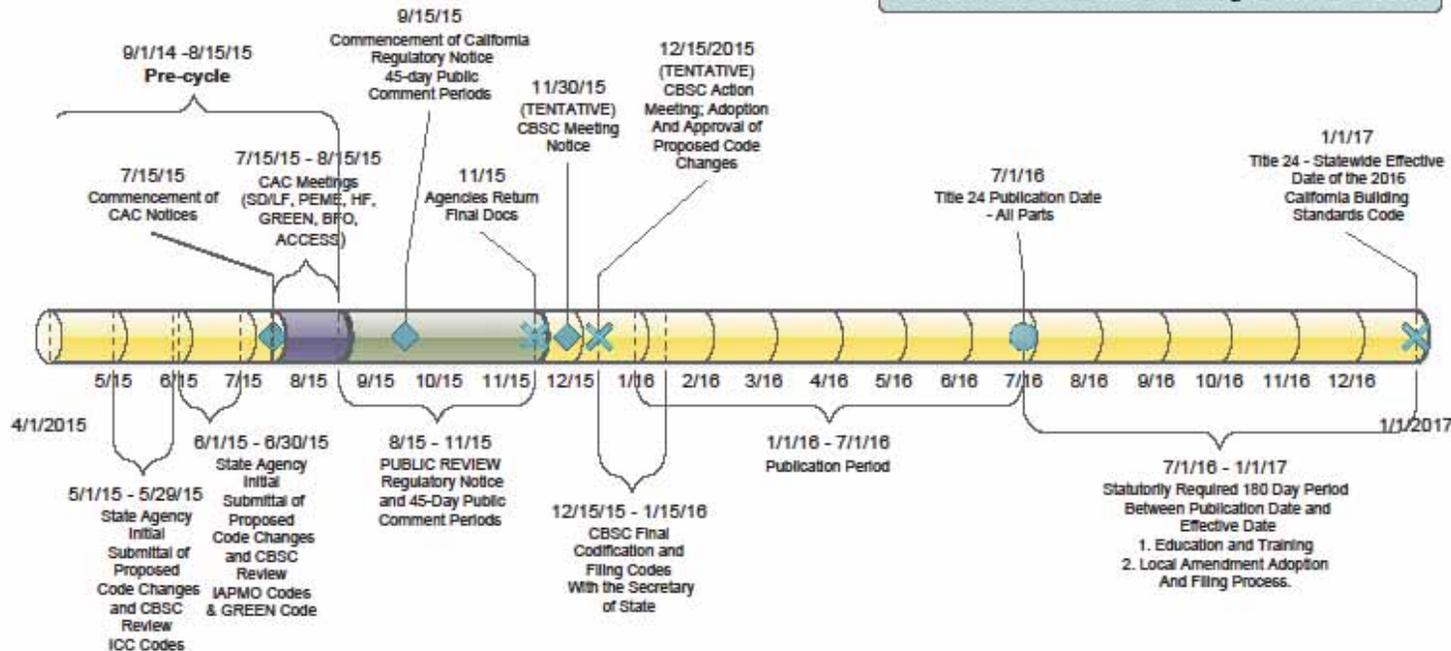
# Background

- Model Codes
- California Building Code
  - Triennial Code Adoption Cycle
- Municipal Code

January 1, 2017 Effective Date

# 2015 Triennial Code Adoption Cycle

For the 2016 California Building Standards Code



## CAC Committees:

- SD/LF – Structural Design/ Lateral Forces
- PEME – Plumbing, Electrical, Mechanical & Energy
- HF – Health Facilities
- GREEN – Green Building
- BFO – Building, Fire & Other
- ACCESS – Accessibility

\* All dates are subject to change

# 2016 California Building Code

- Examples of changes to the 2016 codes

There are numerous changes in the 2016 codes however many of them are not very significant changes to Paso Robles

Atriums:



- What has changed that has significance in Paso Robles

## Commercial Kitchens:



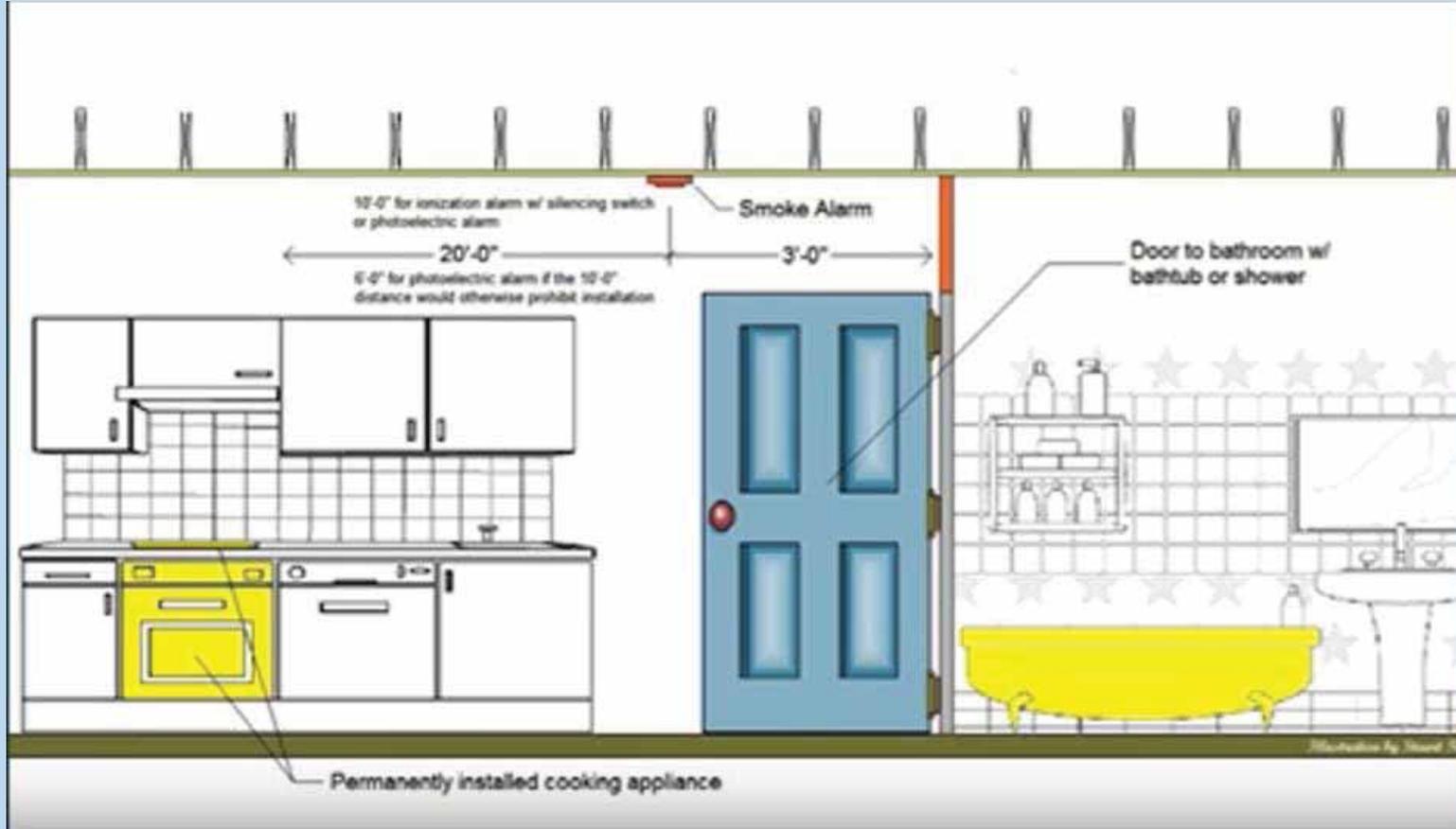
Take out:



- Sign above the door



- Smoke alarms



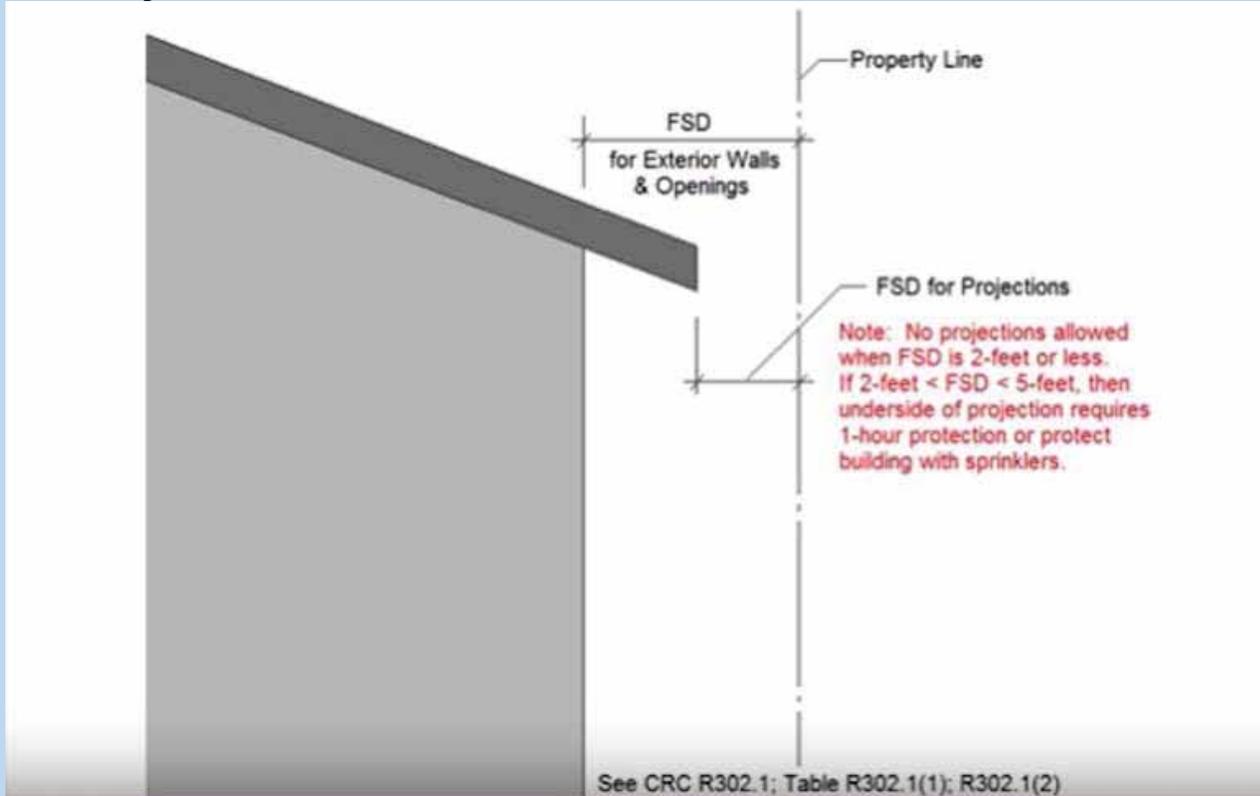
- PV conduits



- Accessory Structures



- Projections



- Anchor Bolts



- Guard Rails



- Underfloor protection



- EV charging



# Electrical Code Changes

- Dishwashers are now required to be on GFCI circuits
- Garages are now required to have a receptacle for each car space
- Receptacles within 6 feet of the outside edge of a tub or shower are required to be GFCI protected
- Laundry areas are required to be GFIC protected



# High Efficacy lighting

2016 Indoor Residential Lighting Requirements: Luminaires

| Mandatory Measure  | Screw-Base Luminaire                    | Pin-Base <sup>1</sup> Luminaire     | Recessed Downlight   | Inseparable SSL <sup>5</sup> Luminaire (LED) | Night Lights <sup>2</sup> | All Other |
|--|---|-------------------------------------|--|--|---------------------------|-----------|
| <b>High Efficacy (required)</b>  | Yes—All                                 | Yes—All                             | Yes—All  | Yes—All                                      | No                        | Yes—All   |
| <b>High Efficacy Qualification via JAB lamps and luminaires<sup>3</sup></b>  | All, excluding hard-wired ballasted HID | Only GU-24 LED lamps                | All types, and certified compliant for elevated temperatures | All, except colored-decorative               | No                        | All types |
| <b>Automatic Qualification as High Efficacy: Listed in Table 150.0-A, Column 1</b><br><i>(JAB compliance not required)</i> | Hard-wired, ballasted HID only          | All types, excluding GU-24 LED      | None   | Colored-decorative                           | No                        | None      |
| <b>Dimmer, Vacancy Control or EMCS<sup>4</sup></b>   | Yes—All                                 | Not mandatory, except for GU-24 LED | Yes—All  | All, except colored-decorative               | No                        | All       |
| <b>Other Requirements</b>  | Cannot be a recessed downlight          | Must use an electronic ballast      | Airtight, IC-rated and maintenance per §150(k)1.C            | None   | Must consume 5W or less   | None      |

<sup>1</sup> Excludes recessed downlights

<sup>2</sup> Permanently installed or integral to luminaire or exhaust fan

<sup>3</sup> Enclosed luminaires must use JAB lamps certified for use at elevated temperatures

<sup>4</sup> Excludes luminaires in closets less than 70ft<sup>2</sup> and hallways

<sup>5</sup> Solid-state lighting such as LED where the LED source is permanently attached to the luminaire

# 2016 California Energy Code

## Background

- California Public Utilities Commission- January 2011
- “Big Bold” Energy Efficiency Strategies

# “BIG BOLD” ENERGY EFFICIENCY STRATEGIES

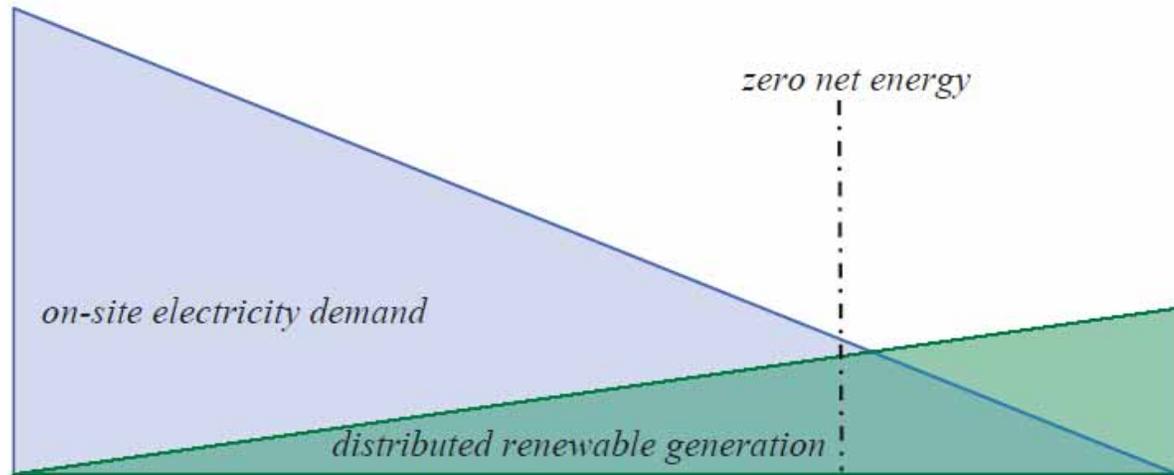


*In order to guide market transformation in a number of key sectors, this Plan embraces four specific programmatic goals, known as the “Big Bold Energy Efficiency Strategies” (BBEES), established by the CPUC in D.07-10-032 and D.07-12-051. These goals were selected not only for their potential impact, but also for their easy comprehension and their ability to galvanize market players.*

1. All new residential construction in California will be zero net energy by 2020;
2. All new commercial construction in California will be zero net energy by 2030;
3. Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California’s climate; and
4. All eligible low-income customers will be given the opportunity to participate in the low income energy efficiency program by 2020.

# WHAT IS ZERO NET ENERGY?

Zero net energy is a general term applied to a building with a net energy consumption of zero over a typical year. To cope with fluctuations in demand, zero energy buildings are typically envisioned as connected to the grid, exporting electricity to the grid when there is a surplus, and drawing electricity when not enough electricity is being produced.



- The amount of energy provided by on-site renewable energy sources is equal to the amount of energy used by the building.
- A ZNE building may also consider embodied energy – the quantity of energy required to manufacture and supply to the point of use, the materials utilized for its building.<sup>29</sup>

# 2016 California Energy Code

- Elevated Standards
  - “Energy Ace” Handout
- Estimated Cost \$2,700/ house
- Estimated Savings \$7,400/ 30 years
- Final step towards “Net Zero”- 2019

# City of Paso Robles Municipal Code

- Housekeeping
- Coordination
- Deletions
  - Liaison Committee

# Administrative Considerations

- New permit applications
- Existing applications
- Expiration

# Round Table Discussion

Questions?