

# Opportunities for Above Code Ordinances

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Build It Green

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# About Build It Green

Build It Green's Mission is to help professionals adopt green practices and grow the market for efficient, healthy homes.

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



# What We'll Cover Today

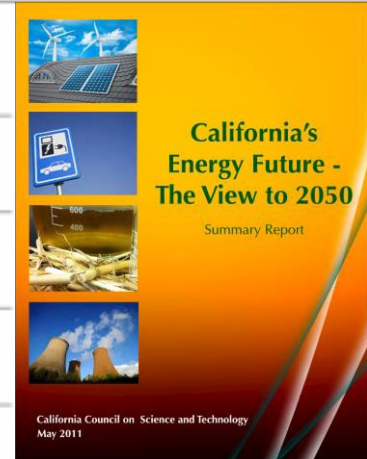
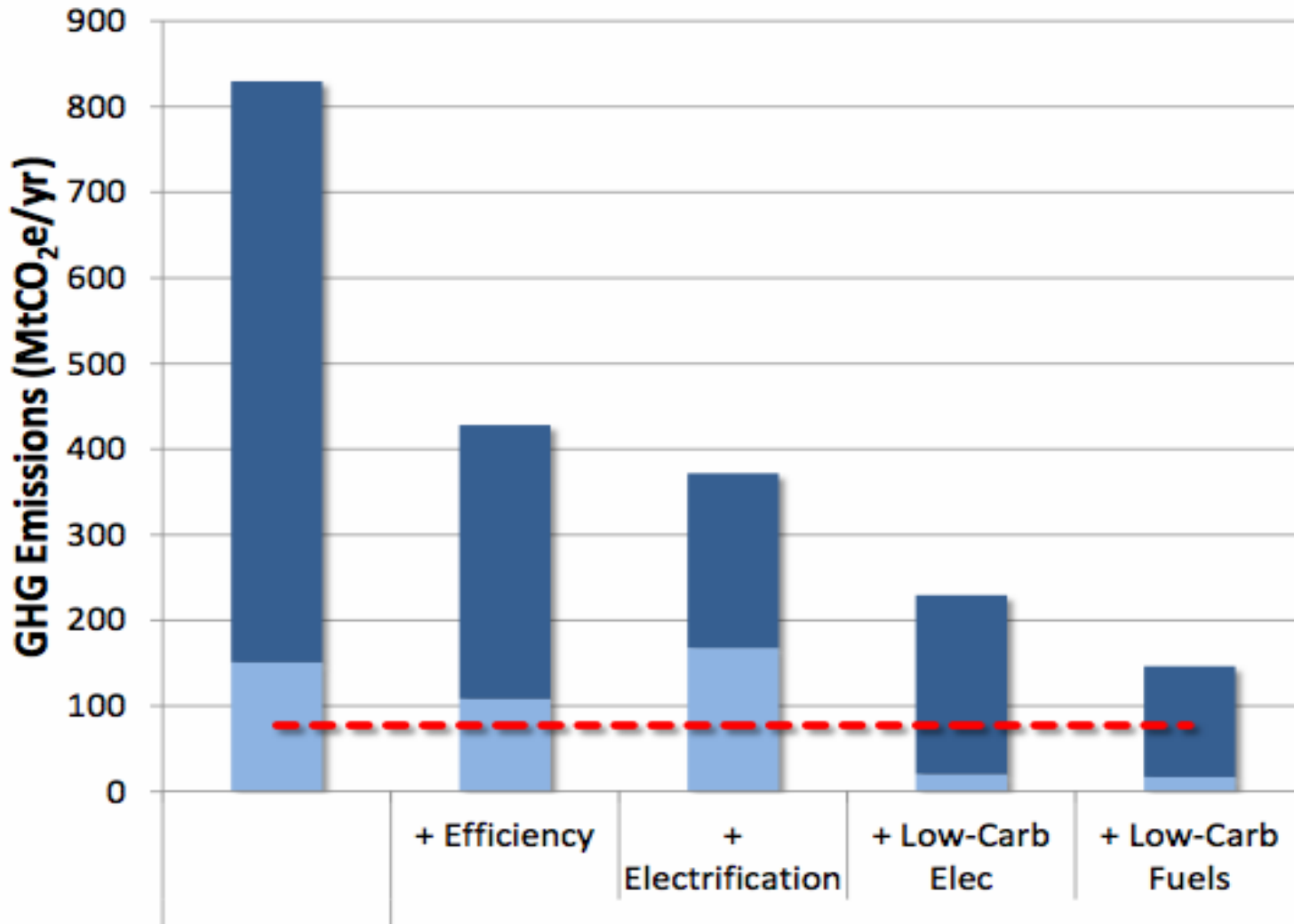
- Codes and standards efforts
- Above Code opportunities
- Resources and support
- Timeline

# Codes and Standards Efforts

- ▶ **Goal:** Engage with local governments to support attainment of local goals and adoption of above code ordinances
- ▶ Bay Area Regional Energy Network
  - ▶ Coordinating with 9 county Bay Area gov'ts
- ▶ PG&E Codes and Standards
  - ▶ PG&E territory and coordination State agencies and other IOUs
  - ▶ BIG supporting efforts

# Getting to 2050 Goals – AB32

## Getting to 60% below 1990 level



■ Carbon fuels  
■ Electricity  
- - - 2050 Target

*BAU: Business as Usual*  
**California's Energy Future - The View to 2050**  
California Council on Science and Technology

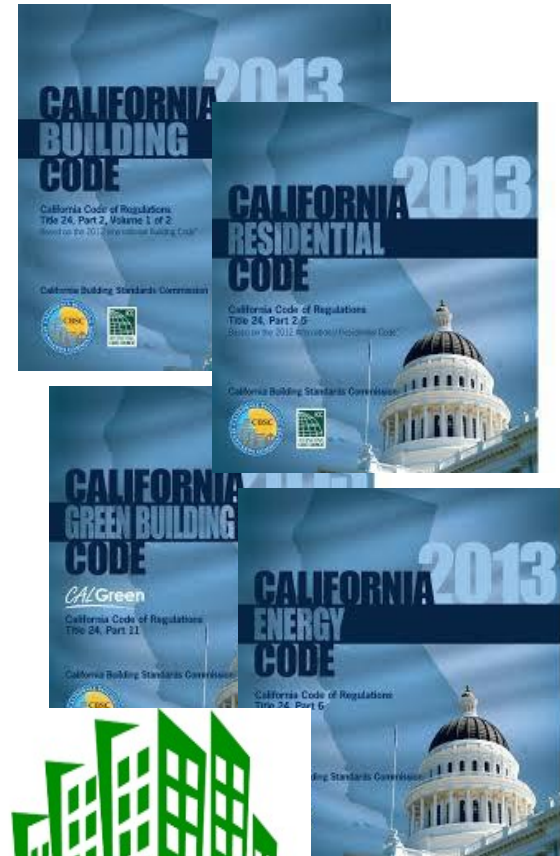
# The Built Environment

- ▶ Residential creates 18% of total greenhouse gas emissions in CA
- ▶ Uses 48% energy and residential 21% in US
- ▶ Creates 136 million tons of C&D waste each year
- ▶ Consumes 10% of potable water and in CA 20% electricity and 30% gas for conveying distribution and treatment of water
- ▶ Uses 40% of raw materials globally
- ▶ Automobiles and light duty trucks create 30% GHGs in CA



# California Policy Decisions

- ▶ AB 32 –State plan to reduce greenhouse gas emissions to 1990 levels by 2020
  - ▶ Improve 6% of existing homes by 25% each year for 10 years
- ▶ CPUC Strategic Plan- by 2020
  - ▶ New Homes – Net Zero Energy
  - ▶ Existing Homes – 40% improvement
- ▶ State Codes and Climate Action Plans
- ▶ Above Code & Green Building Ordinances
- ▶ Executive Order B-29-15
  - ▶ Emergency rule making May 29, 2015
- ▶ Executive Order B- 30-15
  - ▶ SB 350 and SB 32



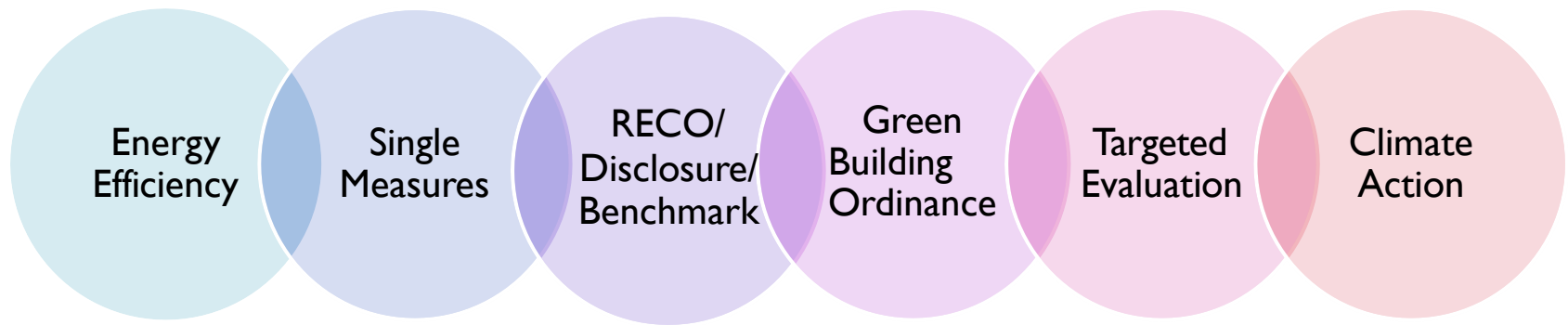
# Evaluation of Community





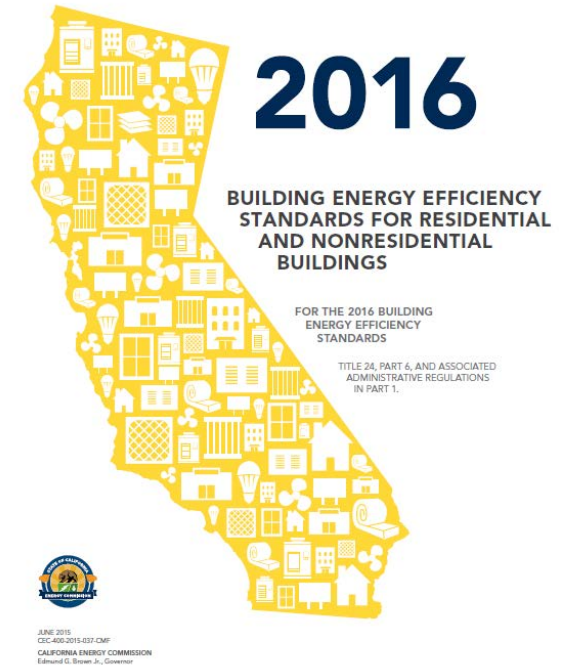
# Opportunities

- ▶ In Public Buildings/ Projects
- ▶ Private Development
- ▶ Building Type – Comm/ Res/ SF/ MF
- ▶ New homes- responsive to current code
- ▶ Existing homes – responsive to trigger events



# Approach: Energy Efficiency Performance

- ▶ **% 2016 above code**
  - ▶ CALGreen Tier 1 – 15%
  - ▶ CALGreen Tier 2 – 30%
  - ▶ Draft cost effectiveness for Res end of Q1, non-res Q2
- ▶ **2016 – ZNE CALGreen Tier**
  - ▶ Adaptation of software
- ▶ **New and Existing**



# Why Single Measures?

- ▶ **Identify measure that exceed 2016 Code**
- ▶ **Adoption now and implementation through 2016 code cycle**
- ▶ **Continued improvement of buildings**
- ▶ **More stability in implementation**

Measure	Cost Effectiveness Study	New Construction	Existing	Single Family	Multifamily	Non-Residential
Lighting	Yes	X	Yes with some exceptions			X
Hot Water Distribution	Yes	X	X	X	X	
Indoor Water Efficiency	No	X	Yes with some exceptions	X	X	X
Outdoor Water Efficiency	No	X	Yes with some exceptions	X	X	X
Commercial Kitchens	No	X	Yes with some exceptions			X
EV Charging Readiness	No	X			X	X

Measure	Cost Effectiveness Study	New Construction	Existing	Single Family	Multifamily	Non-Residential
EV Charging Stations	No	X	X	X		
Cool Roofs	Yes	X		X	X	
Elevators	N/A	X			X	X
Solar PV	Yes	X	Yes with some exceptions	X	X	X
Energy Rating Audits	N/A		X	X	X	X
Rental Property	No		X	X	X	

# Example: Single Measures

- ▶ **Non Res Outdoor lighting new construction**
  - ▶ Specific areas
- ▶ **With interest existing can be pursued**



# Example: Single Measures

- ▶ **Cost effectiveness study (completed)**
- ▶ **Swap existing table with updated**
- ▶ **We provide technical assistance for:**
  - ▶ Adoption Process
  - ▶ Implementation



# Timeline

## Codes and Standards Team

April 2016

Feedback and measure identification

June 2016

Draft documents ready

July 2016

Final documents ready



# Timeline: Local Jurisdictions

Ordinances  
effective in  
2016?

Let's talk.

Effective in  
2017?

What is your adoption timeline?

July 2016

180 day timeline starts July

December  
2016

Adoption by December

# Available Support

- ▶ **Evaluation and identification of opportunities**
- ▶ **Cost effective analysis**
- ▶ **Development of submittal materials**
- ▶ **Training and Tools for implementation and compliance**
  
- ▶ **Carbon Tracking?**

# Interested?

- ▶ **Contact us:**

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**Questions?**