2013 Updates to the California Green Building Standards Code (CALGreen)

Wes Sullens
StopWaste of Alameda County

BayREN Regional Forum
February 24, 2015
• Effective since January 1, 2011 for new construction

• Provides a set of **Mandatory Provisions** that are required for all new construction:
  – Quality construction practices
  – Green practices not addressed in the building code before
  – Duplicative or additive to regulatory requirements

• **CALGreen** includes two voluntary “Tiers” that may be adopted via local amendment
CALGreen Major Changes for 2013

1. CALGreen Mandatory Measures apply to ALL residential “covered” occupancies

2. Mandatory Measures apply to residential and nonresidential additions and alterations:
   - Residential: all additions/alterations that add floor area or volume
   - Nonresidential: additions >1000 sf and/or permit valuation >$200,000
   - Mixed-occupancy buildings shall comply with appropriate requirements of each occupancy type
CALGreen Minor Changes for v2013

– Construction and demolition waste now covered by recycling requirement
– Updated formaldehyde limits for interior wood products
– 80% resilient flooring requirement
– New measure for Supermarket refrigerant leak reduction
– Many changes to the Tiers
– Other minor updates throughout the Code
CALGreen 2013 Tier Updates

• New measures:
  – Stormwater design & management
  – walkability
  – bike parking
  – nonroof heat island reduction
  – Energy Star and water efficient appliances
• Minor changes to cool roofs, reflectivity
• 30%/35%+ water conservation for fixtures
• Increased amounts of low-VOC resilient flooring:
  – Tier 1: 90% (was 80% in 2010)
  – Tier 2: 100% (was 90% in 2010)
• Electric Vehicle Charging
  – Tier 1: 3% of total parking spaces shall be capable of future EV charging stations (raceways provided)
  – Tier 2: 5% of total parking spaces
Residential CALGreen Tiers – Energy

• New construction:
  – Tier 1: 15% improvement over base code
  – Tier 2: 30% improvement over base code
    AND
  – HERS rating of whole house
  – Quality of Insulation Installation (QII) inspection
  – High efficacy lighting

• Existing Buildings (add/alt that affect major systems):
  – Tier 1: 5-10% improvement over base code
  – Tier 2: 10-15% improvement over base code
Nonresidential

CALGreen Tiers – Energy

• All construction:
  – Tier 1: 5-10% improvement over base code, depending upon scope (lighting and/or mechanical)
  – Tier 2: 10-15% improvement over base code
    AND
    • 10% reduction in outdoor lighting energy
    • Solar water heating required for restaurants
CALGreen Resources

• The full code can be found at: www.bsc.ca.gov/CALGreen

• Trainings offered throughout the state: www.green-technology.org/calgreen/
   www.calbo.org/education/cti/

• Resource guides for interpreting & verifying provisions in CALGreen:
   www.bsc.ca.gov/CALGreen (Non-residential)
   www.hcd.ca.gov (Residential)
   www.stopwaste.org/calgreen (unofficial guides)
Updates to the LEED Rating System

Wes Sullens
StopWaste of Alameda County

BayREN Regional Forum
February 24, 2015
Leadership in Energy & Environmental Design
213,900 projects are currently participating in LEED®, comprising more than 11.1 billion sq. ft. of construction space.
1.7 MILLION square feet certifies to LEED® EACH DAY
150 total countries and territories with LEED® PROJECTS
LOCAL GOVERNMENT PROJECTS

1,800 LEED® CERTIFIED PROJECTS REPRESENTING 150 MILLION SQ. FT.

2,600 REGISTERED PROJECTS REPRESENTING 337 MILLION SQ. FT.

CITY OF LOS ANGELES - FIRE STATION 36
SAN PEDRO, CA
LEED CERTIFIED
GOVERNMENT LEED® POLICIES AND INITIATIVES

16 FEDERAL AGENCIES OR DEPARTMENTS

30+ STATES

400+ LOCALITIES

NAVY’S ENERGY & SUSTAINABLE DEMONSTRATION FACILITY
PORT HUENEME, CA
LEED GOLD - NEW CONSTRUCTION
LEEDv4 Updates to Energy Credits

• LEED for Homes
  – Energy Star v3 and/or HERS index rating >70
    *adjustments made for home size

• LEED for Building Design & Construction (BD+C) (nonresidential buildings & major renovations)
  – Energy budget based on ASHRAE 90.1 v2010
    Title 24, part 6 equivalency to be developed in 2015

• LEED for Building Operations + Maintenance (aka LEED for Existing Buildings)
  – Energy Star Portfolio Manager new minimum score: 75
Resources for CALGreen & LEED projects

www.stopwaste.org/calgreen
LEED for California?

- USGBC is currently reviewing overlap between CALGreen code and the LEED BD+C rating system:
  - Several LEED measures will likely be streamlined for California projects seeking LEED labels
    - Nonresidential projects
    - New construction or major renovation (BD+C)
  
- Announcement expected in April 2015