



# Zero Net Energy (ZNE):

## What it is, why it is talked about so much & what local governments can do to help get there

May 21, 2014



# Build It Green

- ✦ A non-profit with mission to achieve healthy & resource efficient homes
  - ✦ Establish and promote an attainable and credible green building program
  - ✦ Train professionals in green building
  - ✦ Work with local governments to create green building policy



# What Is GreenPoint Rated?

- ★ **Green home certification system**  
**New & Existing**
- ★ **Third-party verified**
- ★ **Awards points across 5 areas:**
  - ★ **energy, water, resources,**  
**indoor air quality, community**
- ★ **50 point minimum**

*Over 21,000 Rated projects completed,  
17,000 more in the pipeline*



# What Are the Benefits?

- ✦ **Credible**
- ✦ **Flexible**
- ✦ **Compatible**
- ✦ **Above Code**
- ✦ **Simple & Affordable**
- ✦ **Support System**
- ✦ **Value**

A graphic featuring a large green circle on a blue background. The circle contains the text 'GreenPoint Rated Homes.' in white, followed by 'ASSURANCE OF A BETTER PLACE TO LIVE.' and a paragraph of text. The background shows a modern house at dusk.

**GreenPoint  
Rated Homes.**

ASSURANCE OF A BETTER PLACE TO LIVE.

GreenPoint Rated provides you with a simple, affordable, and accessible rating system that reassures homebuyers that your homes are truly healthier and more energy efficient.

# CA Code

# GreenPoint Rated



Currently % better than Energy Code

Whole building energy use & passive strategies



High efficiency fixtures

Include performance metrics for fixture



Range hood ventilation

Performance & capture efficiency of range hood



50% waste diversion

Excluding ADC for water diversion



Accessibility

walkable

Livability - Services,



**Build It GREEN**  
Smart Solutions from the Ground Up

# Regulatory and Market Based Systems

## ✦ Role of Regulatory System

- ✦ Provides a baseline building code that raises the bar for the state, yet remains feasible to builders

## ✦ Role of Market-based Certifications

- ✦ Clearly defined & vetted criteria
- ✦ Prepares builders for future standards
- ✦ Provides reach code standard
- ✦ Awards higher performance
- ✦ 3<sup>rd</sup> party verification





# Key Issues for local ordinances

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- **Meet Local goals for green building, energy efficiency, climate mitigation, and AB 32**
- **Integrate need for regulation with need for innovative and higher performance goals**
- **Avoid duplicative and therefore “punitive” reporting mechanisms for builders using third party systems**
- **Award builders for higher than code performance through third-party systems**



# State Goals

## ✦ AB 32

✦ 80% 1990  
GHG by 2050

## ✦ CPUC Strategic Plan



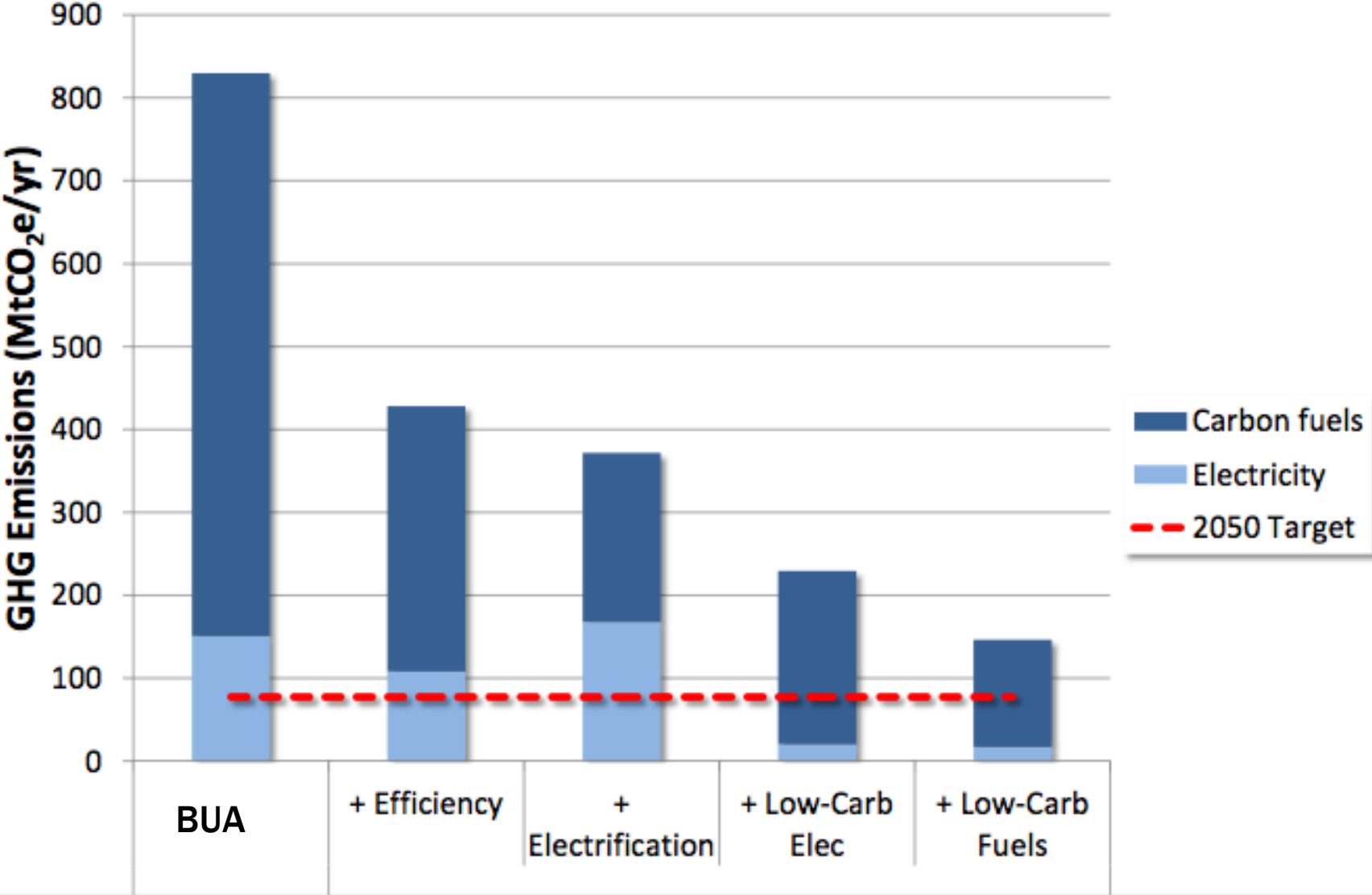
# California's Energy Future - The View to 2050

Summary Report

California Council on Science and Technology  
May 2011



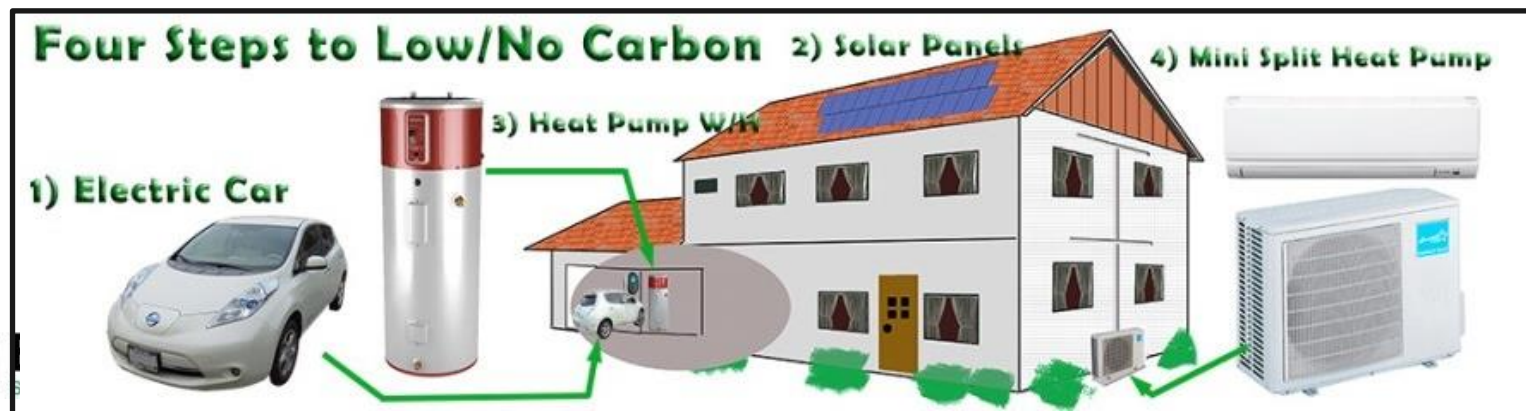
# Getting to 60% below 1990 level





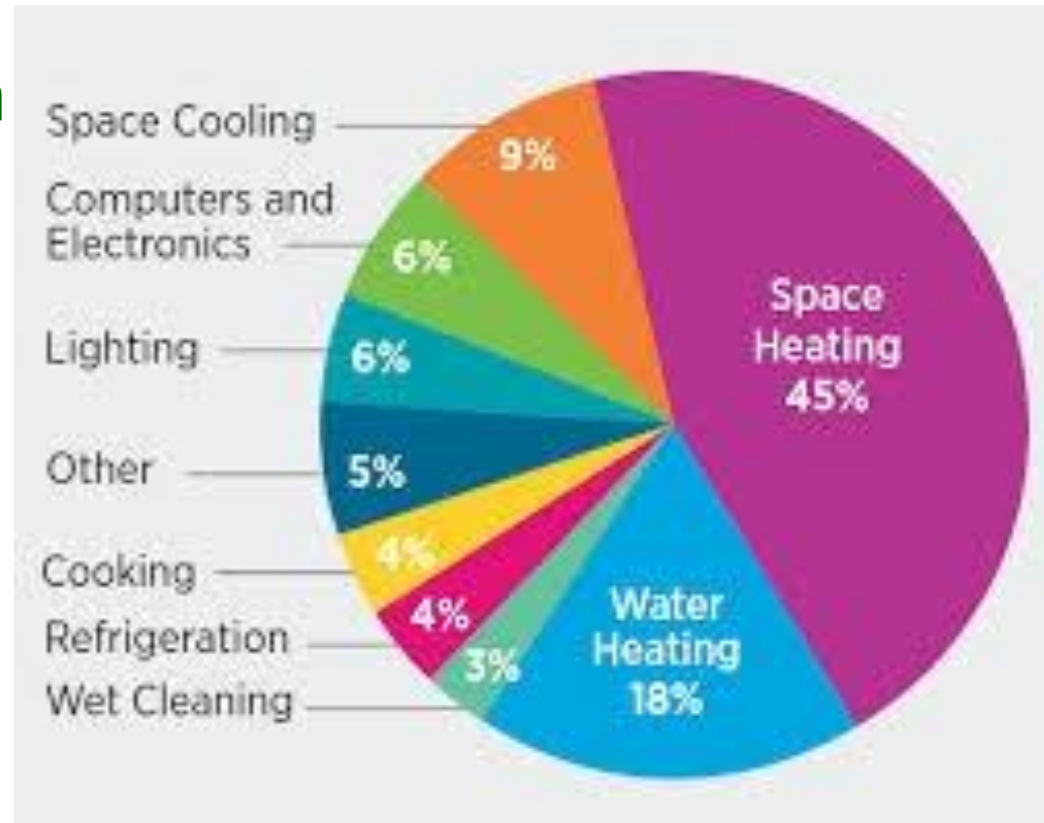
# Criteria and Metrics

- ✦ **Energy Code must be achieved without Photovoltaics**
- ✦ **Estimate Annual Energy Use of Home**
  - ✦ **Outputs from code compliance for heating, cooling, DHW, and envelope loads**
  - ✦ **Calculations for additional end uses**
  - ✦ **Site Energy**



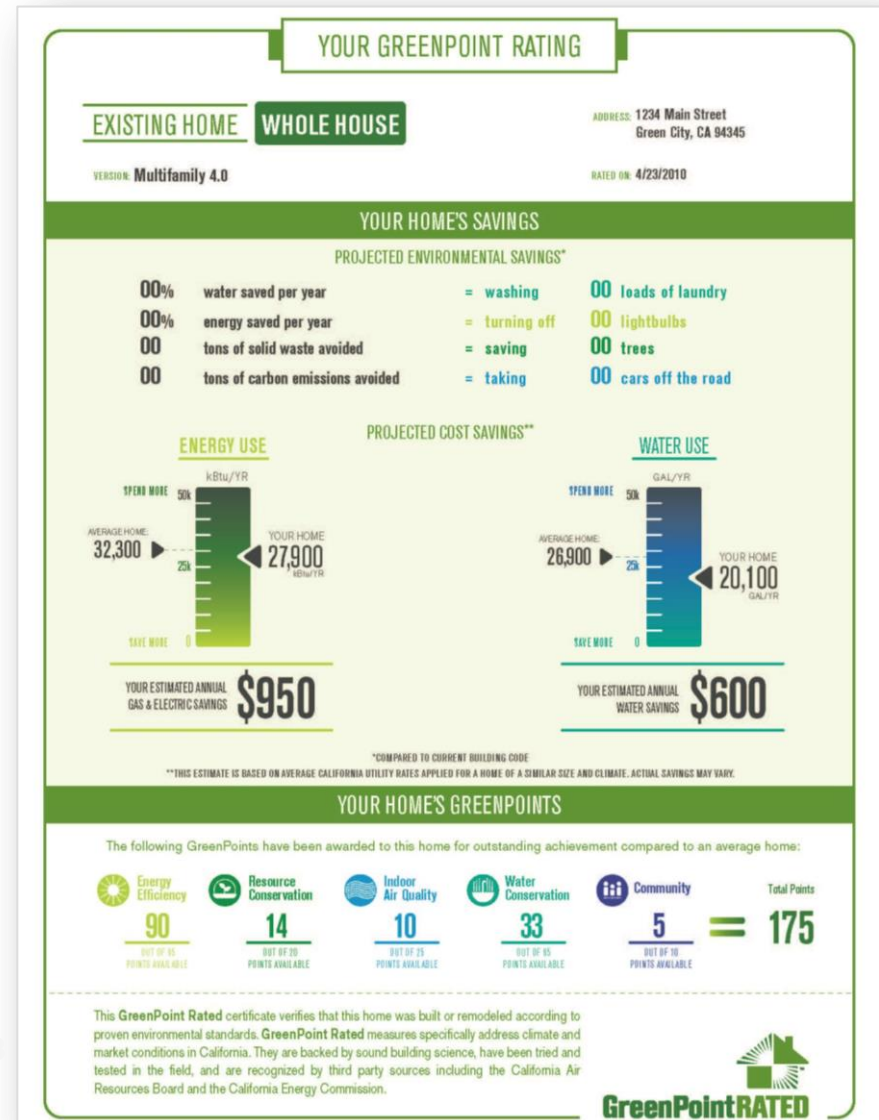
# End Uses Included in Calculation

- ✦ Heating/Cooling DHW
- ✦ Hot Water Distribution
- ✦ Lighting - Int/Ext.
- ✦ Plug loads
- ✦ Appliances and Cooking
- ✦ Laundry
  - ✦ Differentiate in unit and central



# Communicate Benefits

- ✦ ZNE designation
- ✦ Environmental savings from Climate Calculator
- ✦ Equivalencies make it easier to understand impact
- ✦ Projected annual cost savings for energy and water bills







**Thank you!**

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