Industry Context: Market and Regulatory Drivers Towards ZNE

Presented by:
Diane Vrkic
President, Waypoint Building Group

August 4, 2011
California’s GHG Reduction Targets

• The California Global Warming Solutions Act of 2006 (AB 32) relies on intensified energy efficiency efforts across California.
• CARB Scoping Plan for AB 32 establishes a statewide energy efficiency target of at least 32,000 GWh and 800 million therms by 2020.
• If achieved, emission reductions from these efficiency savings would make them the second largest component in the State’s overall emissions reduction program.
• To meet this target, the CPUC worked with multiple stakeholders and state agencies to develop the Long Term Energy Efficiency Strategic Plan that would identify new collaborative initiatives across market sectors and cross-cutting areas.
• In addition, new policies and initiatives have been or will be implemented which will impact the state’s efficiency savings.
Policies that will Impact Energy Efficiency Goals for 2013 and Beyond

State legislative requirements:

• **AB 1103**: Adopted in 2007, the Commercial Building Benchmarking Bill

• **AB 1109**: Adopted in 2007, the Huffman Bill

• **Title 24 Update**: Energy Efficiency Standards for Residential and Nonresidential Buildings established in 1978, most recent update January 1, 2010, next updated is expected to occur 2013.

• **AB 758**: Adopted in 2009, Skinner Bill
California Long Term Energy Efficiency Strategic Plan

• History
  – Developed 2007
  – Collaborative Development

• Objective
  – Roadmap for EE in CA

• Goals
  – Market Transformation
Programmatic Goals - BEES

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

End Use Sectors
- Residential
- Commercial
- Industrial
- Agricultural

Cross Cutting Sectors
- HVAC
- Demand Side Management (DSM) Coordination and Integration
- Codes and Standards
- Marketing Education & Outreach (ME&O)
- Research and Technology
- Local Government
- Workforce Education Training (WET)
Commercial Sector
Existing Buildings & Commissioning

• Strategic Plan Goal
  – 50% of existing buildings will be equivalent to Zero Net Energy buildings by 2030 through achievement of deep levels of energy efficiency and clean distributed generation.

• ZNE Action Plan: Commercial Building Sector (2010-2012)
  – Strategy 2-5-2
    • Strengthen tools and practices for building commissioning

  – Strategy 2-5-3
    • Strengthen Building Operator Certification (BOC) training for commissioning