

Scaling up Energy Efficiency in Existing Buildings

Statewide Energy Efficiency Best Practices Forum

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Andrew McAllister

Commissioner
California Energy Commission



McAllister Policy Lead Areas

- Energy Efficiency
 - T24 New Construction Building Efficiency Standards
 - T20 Appliance Efficiency Standards
 - AB758 (Skinner, 2009) CA Comprehensive Energy Upgrade Program for Existing Buildings
 - Proposition 39 Implementation
- Natural Gas Markets
- 2013 IEPR Integrated Energy Policy Report
 - Demand Response, Zero-Net-Energy Buildings
- Generation Facility Siting Cases



AB 758 Direction to the CEC

- AB 758 requires the Energy Commission to "Establish greater energy efficiency in existing residential and non-residential structures." (PRC §25943(a) (1))
- "The comprehensive program may include...energy assessments, building benchmarking, energy ratings, cost-effective energy efficiency improvements, public and private sector energy efficiency financing options, public outreach and education efforts, and green workforce training." (PRC §25943 (a) (2))



Existing Buildings – AB 758

- Draft Action Plan: http://www.energy.ca.gov/ab758/
- Recommends high-level <u>Strategies</u>, and within each a group of <u>Initiatives</u>
- CEC will work with CPUC/IOUs, POUs, other agencies, local governments, industry and consumer groups to develop and strengthen a variety of approaches
- Great opportunity for comment feedback from you and your stakeholders is critical!
- Final Action Plan expected to be adopted in Fall 2013



Existing Buildings – AB 758 Overarching Themes

- Large gap between existing EE program activity and scale needed to achieve (multiple) policy goals.
- Future cannot be prescribed. Market actors need information, knowledge and support tools to thrive.
- Programs must impose the least administrative burden possible for the market to bring innovation.
- Continue to embrace home performance, at the same time aggressively seek to influence the "reactive" and routine upgrade marketplaces.
 - Leverage <u>all</u> opportunities for influence and messaging.



AB 758 Strategies

"No Regrets"
Strategies

Voluntary Pathways

Potential Mandatory

Approaches



Strategies





Data reporting and management

Permitting support and code enforcement

Education and outreach to building owners/managers

Training to ensure skilled workforce

Provide broad choice of pathways to encourage more upgrades

Engage contractors & building professionals

Standardized Assessment Tools

Small & medium commercial upgrades

Efficiency solutions for rental properties

Public sector leadership

Account for efficiency in property valuation

Offer variety of innovative financing options

Disclosure for largest commercial and public buildings

Broad-coverage disclosure; basic cost-effective upgrades



No-Regrets Strategy #1: Data Reporting and Management

- Simple access to reliable, relevant, longitudinal information is an essential tool for program design and for decision making at all levels
- Various use cases: Agencies, Researchers, Local Governments, Industry, Investors...
- Develop approaches to enable the marketplace to be much more sophisticated in providing upgrades
 - Identify data sources currently available; and package for privacy and appropriate, secure access
 - Actively develop and promote third-party analytical tools for customer engagement
- Explore additional pathways for energy-related disclosure

No-Regrets Strategy #2: Permitting Support and Code Compliance

- Better understand which installations are not complying with code, and what the savings gaps may be.
- Establish permanent, accessible, ongoing education & training regarding current code.
- Provide and/or facilitate opt-in tools to help LGs manage and streamline permitting.
- Work with local governments and CSLB to improve enforcement of building standards and local energy ordinances.



AB 758 Draft Action Plan Workshops

- Next Week!
 - 1. June 24, 2013: San Francisco (CPUC)
 - 2. June 25, 2013: Fresno (Willow CC Center)
 - 3. June 28, 2013: Los Angeles (UCLA)
 - WebEx enabled for remote participation
- Written comments encouraged
- Notice & agendas: http://www.energy.ca.gov/ab758/



Proposition 39

- The California Clean Energy Jobs Act, passed in November
- Prop 39 transfers ~\$550 million annually to the Clean Energy Job Creation Fund, for 5 years beginning FY13–14.
- The California Energy Commission will:
 - Receive \$28 million for year 1 into the ECAA program for low- & nointerest loans for eligible school projects.
 - Establish guidelines for participation, to be adopted publicly.
 - Evaluate and approve expenditure plans submitted by local education agencies.
 - Monitor projects funded by P39 funds.



Thank You!



State Intergovernmental Collaboration

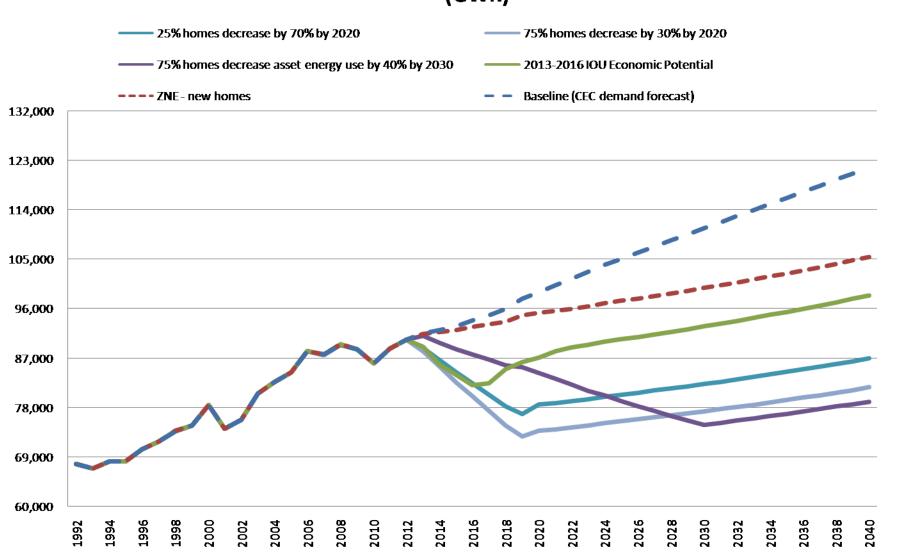




Energy Policy Drivers

- Energy Efficiency 1st in the Loading Order
- 2006 AB32 California Global Warming Solutions Act
- Zero Net Energy Buildings
 - Newly constructed homes to be ZNE by 2020
 - Newly constructed commercial buildings to be ZNE by 2030
- 2008 Energy Action Plan
- 2008 CA Long Term Energy Efficiency Strategic Plan
- 2010 Governor Brown's Clean Energy Jobs Plan
- 2010 Clean Energy Future Initiative
- 2012 Governor Brown's Executive Order for State Buildings

Residential Electricity Consumption with Efficiency Scenarios (GWh)





Commercial Electricity Consumption with Efficiency Scenarios (GWH)

2013-2016 IOU Economic Potential

- 50% Existing Buildings are ZNE by 2030
- 75% Buildings decrease asset energy use by 40% by 2030
- ---ZNE New Buildings

Baseline (CEC Demand Forecast)

