

CA | Energy Efficiency Strategic Plan

“The California Long-Term Energy Efficiency Strategic Plan and CPUC’s Role in Implementing AB 758”

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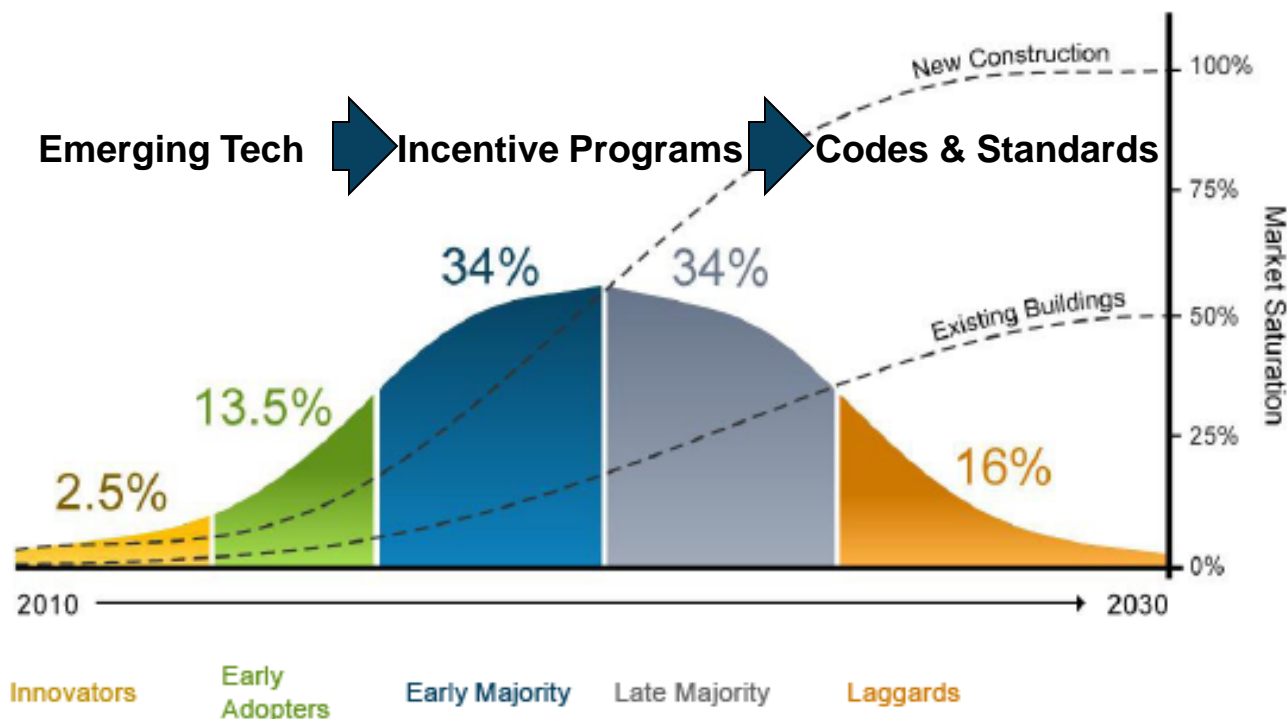
- Introduction to Energy Efficiency Planning
- Background on BBEES
- BBEES in the EE Goals process
- Strategic Plan development and 2010-2012 IOU EE portfolio guidance
- Strategic Plan Implementation
- Zero Net Energy Action Plan for Commercial Buildings
- The Future of the Strategic Plan?

CPUC Oversight of IOU Energy Efficiency Programs

- Investor-owned utilities (IOUs) administer EE programs with CPUC approval and oversight
- Statutory mandates:
 - Identify all cost-effective energy efficiency and set IOU targets
 - Energy efficiency is first in the “loading order”
- CPUC:
 - Establishes policy guidance for budget applications, e.g.:
 - Energy savings goals
 - California Energy Efficiency Strategic Plan
 - Approves portfolio budget applications
 - Independently evaluates portfolio impacts

- AB 758 (Skinner, 2009) grants California Energy Commission (CEC) authority to establish a comprehensive program to retrofit all residential and non-residential buildings in California that fall significantly below current Title 24 building standards.
- CPUC shall investigate the ability of IOUs to provide energy efficiency financing options to their customers to implement the comprehensive program
- CEC shall coordinate with CPUC and avoid duplication of programs administered by utilities, e.g.:
 - Energy assessments, building benchmarking, energy ratings, cost-effective energy efficiency improvements, financing options, outreach and education, and workforce training

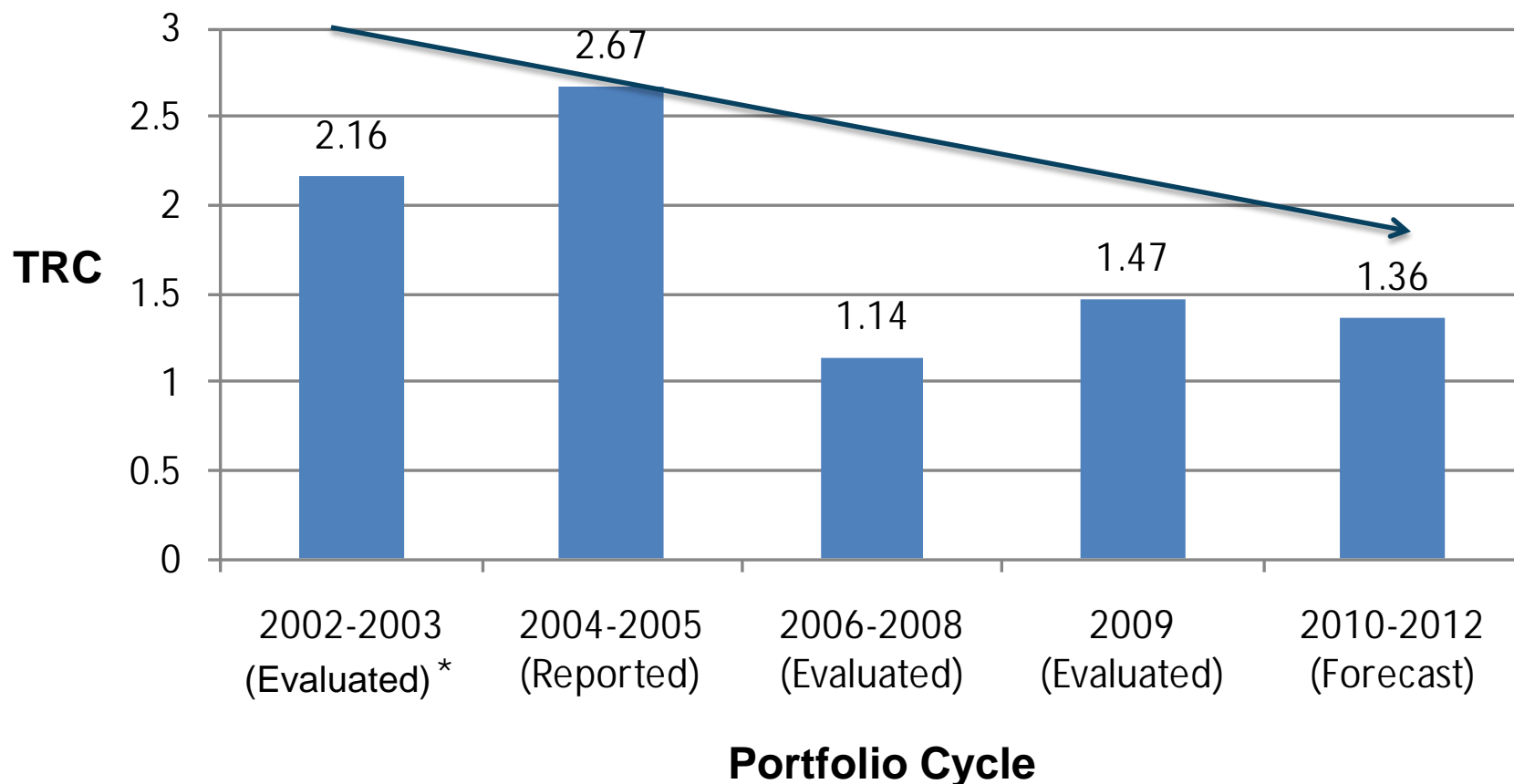
Market Transformation Approach to Regulation of Utility Programs



CPUC Definition (Decision 09-09-047):

Market transformation is long-lasting, sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point *where continuation of the same publicly-funded intervention is no longer appropriate in that specific market.*

IOU EE Portfolio Cost-effectiveness



* Proxy estimate of TRC

- Drivers for the Long-Term Strategic Plan
 - Traditional incentive programs becoming less cost-effective
 - Need for deeper, more comprehensive retrofit programs
 - Need for coordinated effort amongst state agencies, utilities, market actors
 - AB 32 climate goals – Energy efficiency expected to produce 15% of GHG reductions per the ARB Scoping Plan
- Decision 07-10-32 order the IOUs to develop a long-term strategic plan to achieve “all cost-effective energy efficiency”

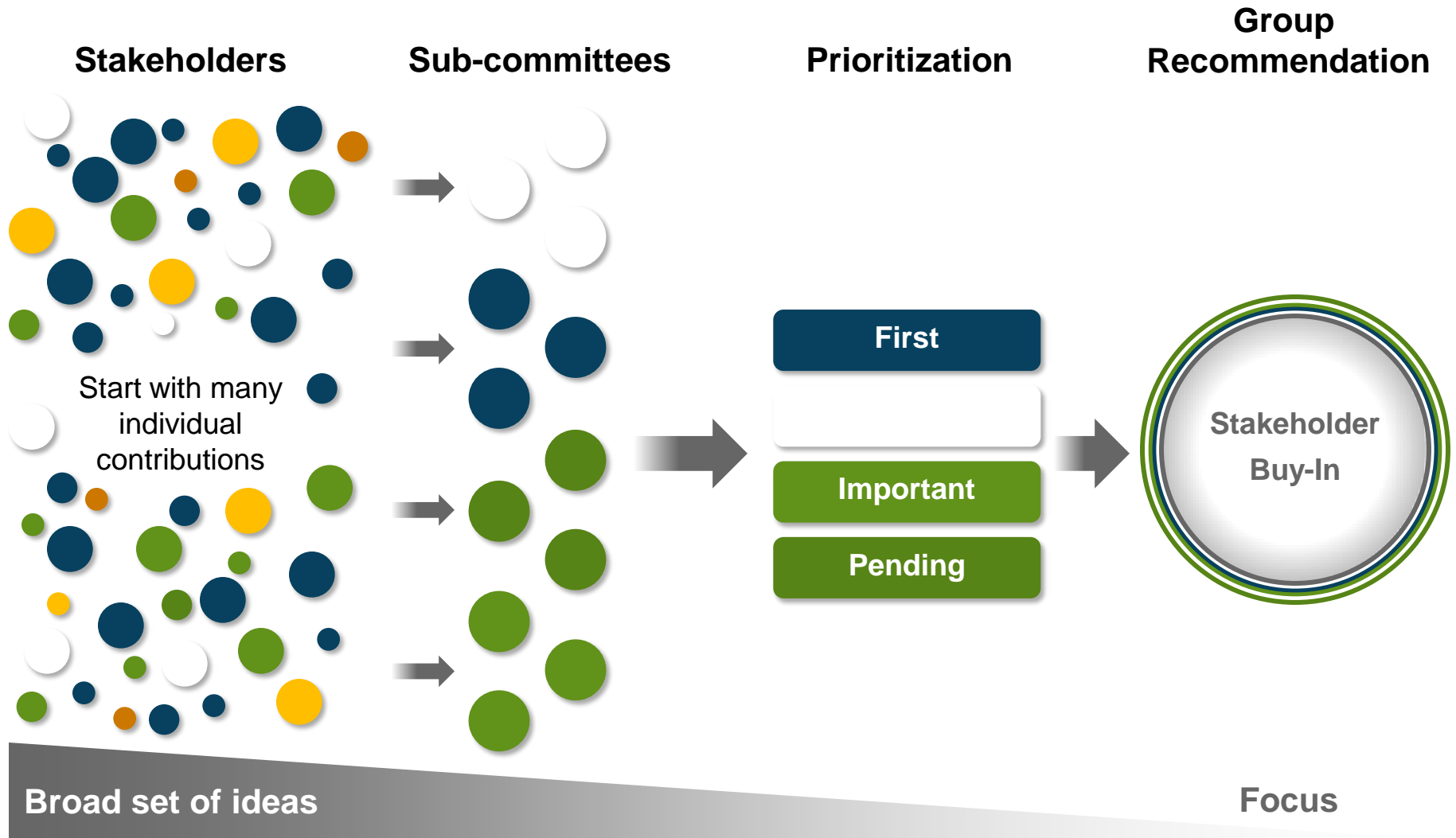
All Economic Sectors

- Residential, including Low Income
- Commercial
- Industrial
- Agricultural

Cross-Cutting Areas

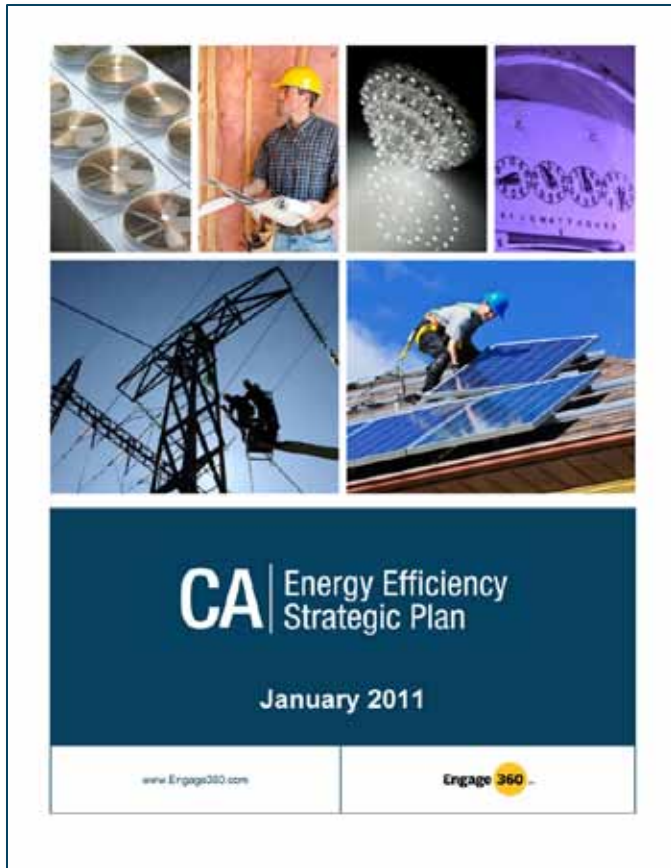
- Codes & Standards
- DSM Coordination & Integration
- Workforce Education & Training
- Marketing & Outreach
- Research & Technology
- Local Governments
- Heating, Ventilation & Air Conditioning
- Lighting*

Strategic Plan: Novel Process



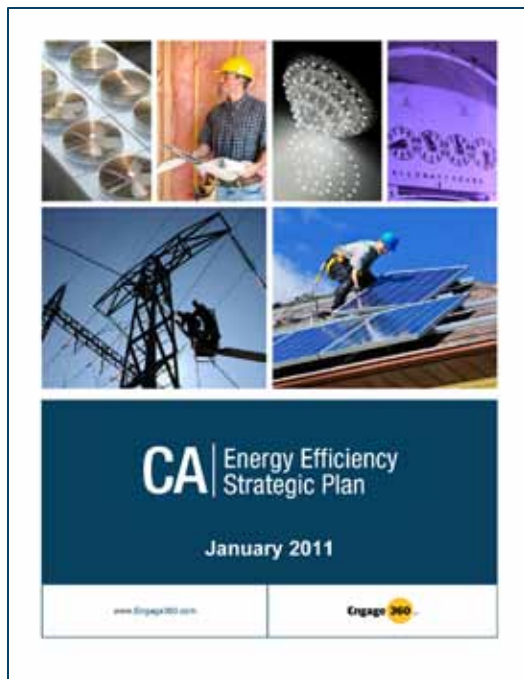
Strategic Plan Goals for Building Retrofits

CA Energy Efficiency Strategic Plan



- Goal for **existing residential**: Reduce consumption 40% by 2020
- Goal for **existing commercial**: 50% of buildings will be ZNE by 2030
- 60% - 80% reduction in statewide **lighting** energy consumption

Strategic Plan: Implementation Vehicles



IOU Portfolios

State
Agencies

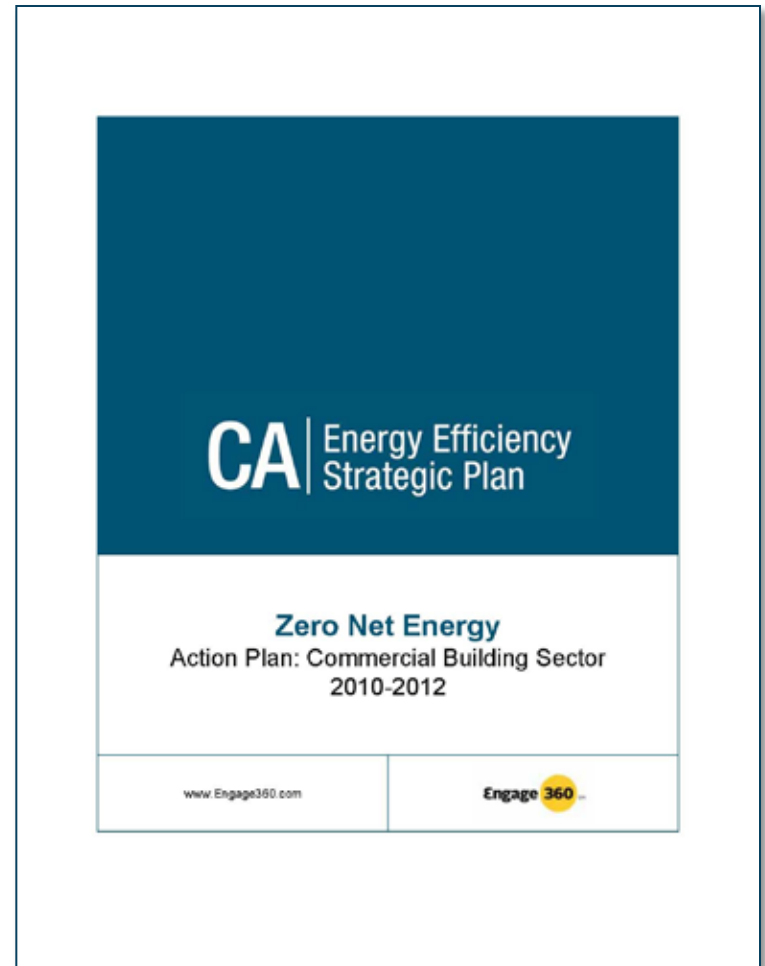
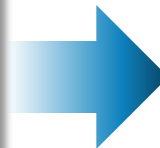
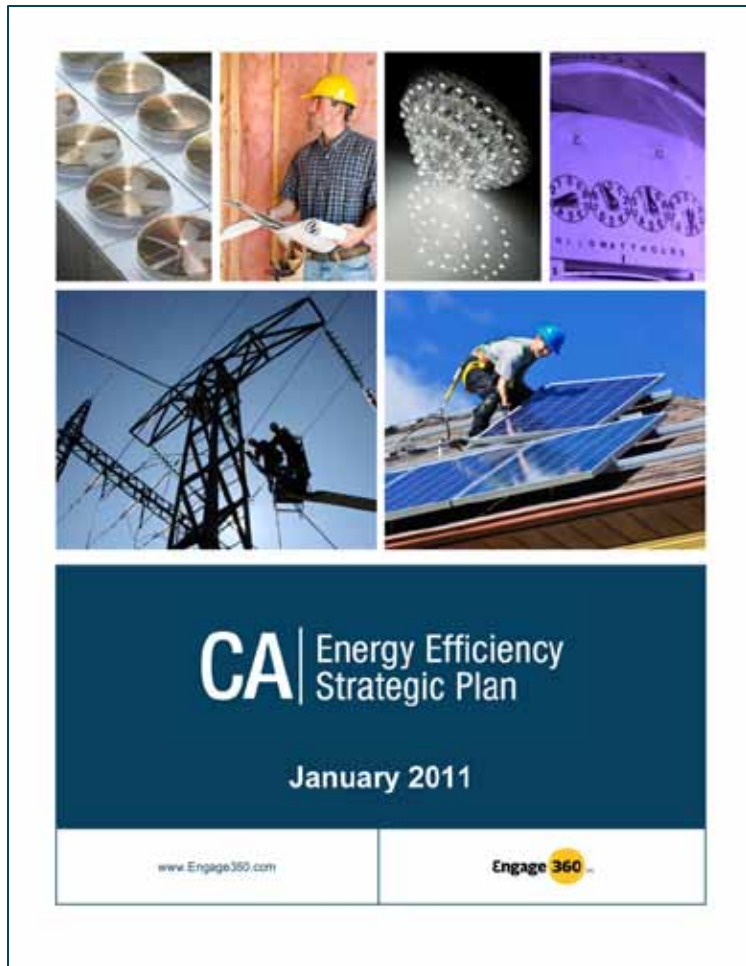
Action Plans

Champions
Network

Foundation
Grants

Big Bold
Energy
Efficiency
Strategies

STATE OF THE PLAN: Action Plans



ZNE Action Plan



- CPUC has approved \$3.8 billion in funding for 2010-212 EE programs
 - \$3.1 billion general EE programs
 - \$718 million for low-income EE programs
 - \$2 + billion targeted at retrofits of existing structures and related to AB 758
- 12 statewide programs implemented consistently across IOU service territories, each corresponding to a chapter of the Strategic Plan

Program	Budget	Program	Budget
Residential	\$718 M	Emerging Technologies	\$68 M
Commercial	\$863 M	Codes & Standards	\$30 M
Industrial	\$405 M	Integrated DSM	\$11 M
Agricultural	\$128 M	Workforce Education & Training	\$102 M
New Construction	\$ 137 M	Marketing Education & Outreach	\$ 80 M
HVAC	\$128 M	Lighting Market Transformation	\$1.5 M

- Whole-house residential retrofit
 - Targeting 100,000 homes
 - \$111million incentive program offering basic (prescriptive) and advanced (performance) packages
 - Single family available now
 - Multi-family available Q3 2011
 - Leveraging ARRA funded programs administered by the California Energy Commission
- Go to: <https://energyupgradeca.org>



Reduce energy use. Save money. Create jobs.



- New clean energy brand
- Based on a social marketing platform
- Join the movement at www.engage360.com



Other 2010-2012 “Strategic Plan” Programs Related to AB 758

- Benchmarking of commercial buildings
- Retro-commissioning audits
- Heating Ventilation and Air Conditioning (HVAC) quality maintenance and quality installation
- Continuous energy improvement (energy management)
- Emerging technologies programs
- Zero Net Energy and Local Government Innovator Pilots
- Lighting Market Transformation Program
- On-bill Financing
- Workforce, Education and Training (WE&T)
- Integrated Demand-side Management (IDSM)

Thank you!

Energy Efficiency website:

<http://www.cpuc.ca.gov/PUC/energy/energy+efficiency>

<http://www.californiaenergyefficiency.com>

<http://www.engage360.com>

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Q&A