California and Energy: Agencies

California Public Utilities Commission
- Regulates investor owned utilities (IOUs)
- Sets rates, determines revenue requirements
- Approves electricity generation portfolios

California Energy Commission
- Efficiency standards for buildings and appliances
- Federal Stimulus program oversight (EE, RE, financing)
- AB758- Comprehensive residential and commercial retrofits

Air Resources Board
- Enforcement of air quality laws
- Implementation and enforcement of AB 32
California and Energy: EAP

Energy Action Plan:
“Loading order” of preferred resources
1. Energy efficiency
2. Demand response
3. Renewables and clean, distributed generation
4. Cleanest available fossil-fired generation

Strategic Plan: Market Transformation

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.
Strategic Plan: Key Targets

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

Strategic Plan initiated in 2007 and adopted in 2008

Strategic Plan Process

Stakeholders
- Start with many individual contributions

Sub-committees
- Broad set of ideas

Prioritization
- First
- Next
- Important
- Pending

Group Recommendation
- Stakeholder Buy-In

Focus
Strategic Plan: Goals & Results

7 Residential Strategies
- Aggressively Pursue Existing Residential Whole-house Solutions
- Transform Plug Load Forecasted Demand Increase
- Develop New Construction Whole-house Solutions
- Customer Education, Monitoring and Visual Display Tools
- Consistent Framework for policy and tools
- Local Ordinances
- Integration—one-stop shop

Whole House Goals
- 2015
  - Energy use in existing homes will be reduced by 20%
- 2020
  - 3/4 of existing Single Family homes reduce purchased energy by 30%
  - 1/4 of existing Single Family homes reduce purchased energy by 70%
  - 100% of existing multi-family homes reduce purchased energy by 40%

Strategic Plan → Energy Upgrade CA

2007
- Residential focus
- 136 unique stakeholders
- Facilitated 4 individual day-long workshops around CA
- Form and lead sub-committees

Agreement and buy-in on top 7 Residential strategies

Strategic Plan: The Guiding Document For CA Efficiency

2009
- Facilitated 5 individual day-long workshops around CA
- Provided written critiques of staff proposals
- Attracted participation of EPA and Dept. of Energy

Stakeholder approved program design process—largest program in US.

$116 million Statewide “Whole House” Programs

Energy Upgrade CA (IOU portion)
Energy Upgrade CA: Total Funding

Total Funding (2010-2012): $275 million

- $116 million IOU Residential Whole House Programs
- $33 million California Statewide Community Development Association contract (SEP)
- $50 million Comprehensive Residential Retrofit Program (SEP)
- $12.9 million Direct EE and Conservation Block Grants
- $20 million Clean Energy Workforce Development Program
- $30 million DOE Better Buildings Program
- $13 million Employment Development Department Workforce Investment Act (WIA)
- Additional local government EECBG and WIA funds

Strategic Plan: Statewide Coordination

2010-2012 Energy Upgrade California

CEC Program

IOU Programs

Benefits to CA

Home Owner

Contractor

$159 in CEC and DOE administered funds + $1,000 Private Investment

$116 Ratepayer Funds

- Most advanced state retrofit program
- 4:1 or better leverage of ratepayer funds
- Up to 42,000-52,000 homes treated (2010-2012)

* Programs include some marketing, education and training
<table>
<thead>
<tr>
<th>Next Steps for Energy Upgrade CA</th>
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<tbody>
<tr>
<td><strong>Utility Program Ramp-Up</strong></td>
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<tr>
<td>• $116 budgeted for 2010-2012</td>
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<tr>
<td>• Over 95% to be spent in 2011-2012</td>
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<td>• Over 500 homes at various stages of retrofit across CA</td>
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<tr>
<td><strong>Multi-Family and Middle Income Direct Install expansion</strong></td>
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<td>• SDG&amp;E MF pilot (Q2 2011); Statewide (~Q4, 2011)</td>
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<td>• Existing MIDI Pilot in PG&amp;E territory</td>
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<tr>
<td><strong>Energy Upgrade CA website</strong></td>
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<tr>
<td>• Went live February 14, 2011</td>
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<td>• Contractor database organized by zip code</td>
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<td><strong>Stakeholder Engagement</strong></td>
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