

CA | Energy Efficiency Strategic Plan

Industrial Action Plan

August 8, 2013
San Francisco, CA



- Introduction
- The Strategic Plan
- California Industrial Sector & National Initiatives
- Industrial Chapter: Vision & Goals
- Break Out Groups
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- Wrap-Up and Next Steps



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INTRODUCTION



- Agency Staff and Consultants
- Meeting Objective
- Introductions



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THE STRATEGIC PLAN



Expected Sources of GHG Reductions per AB32

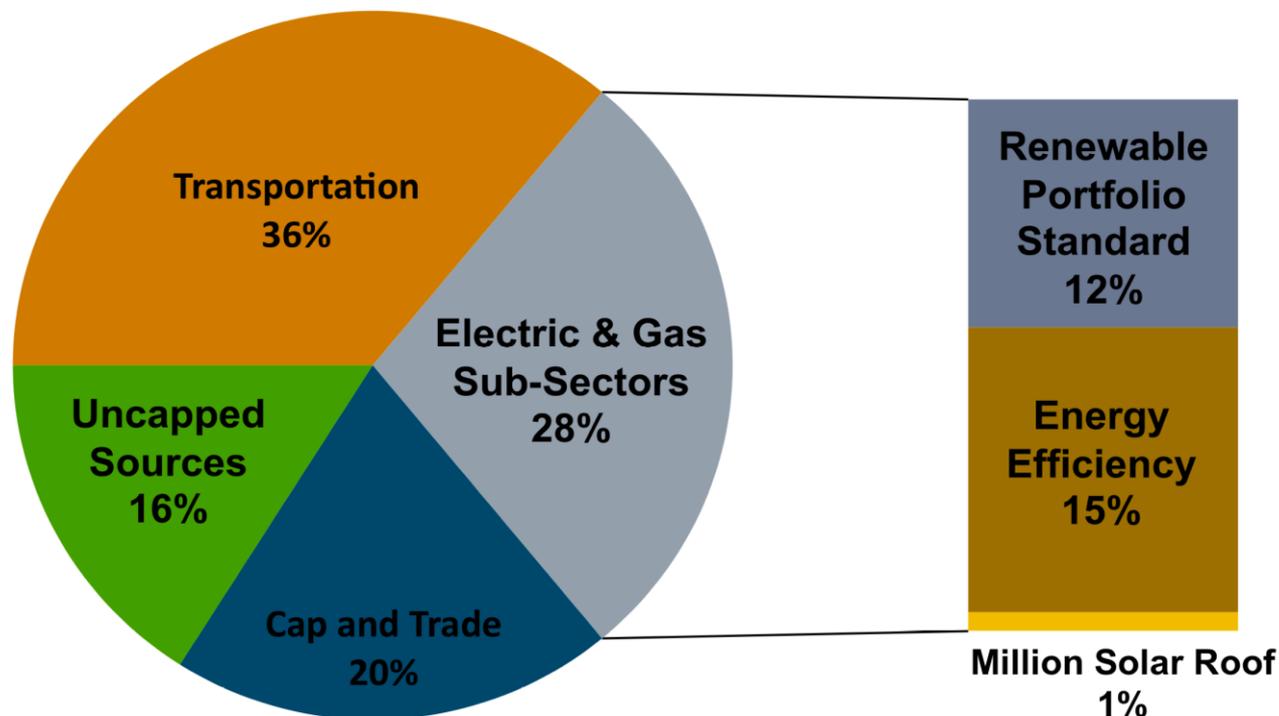
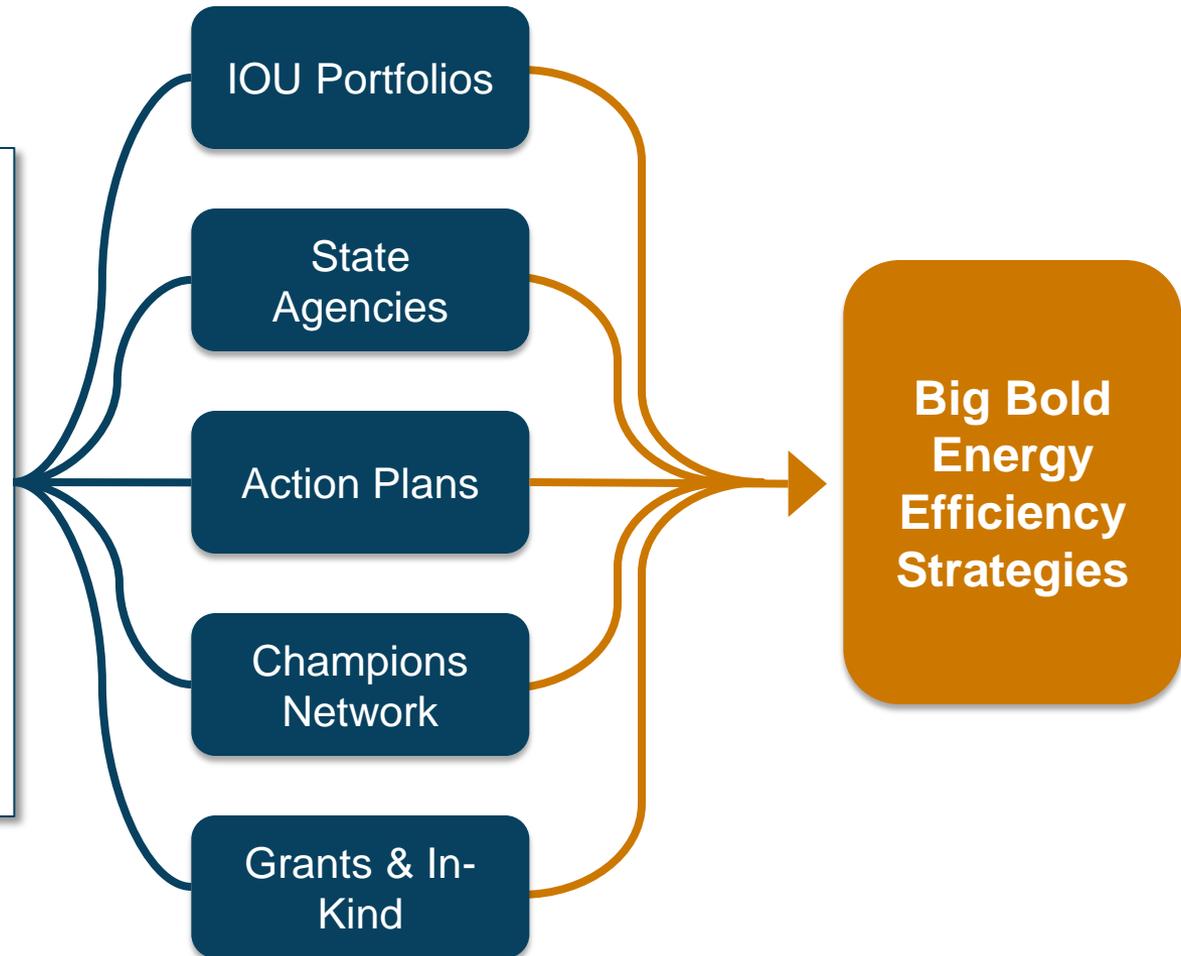
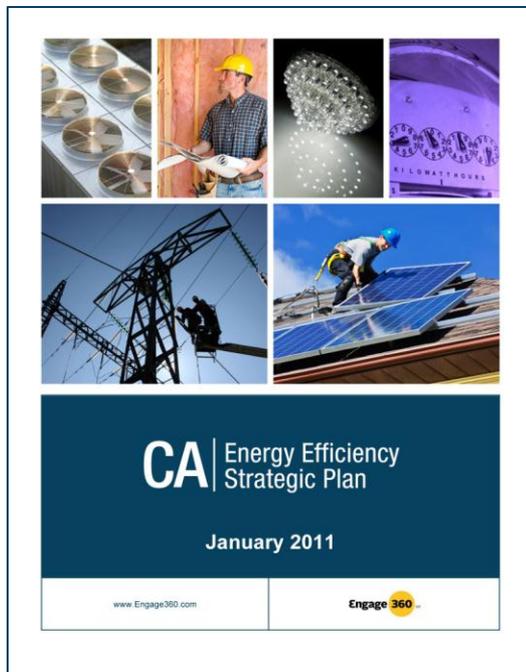


Figure 1: California Air Resources Board Scoping Plan, December 2008, Table 2 (p. 17)

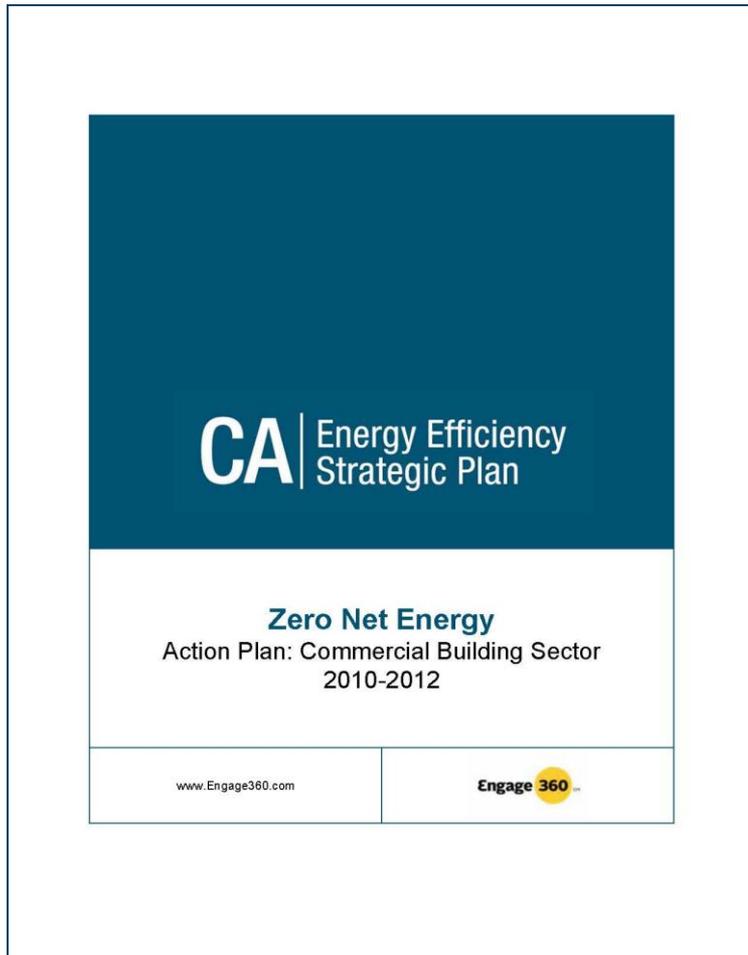
The Strategic Plan



Strategic Plan: Big Bold Goals



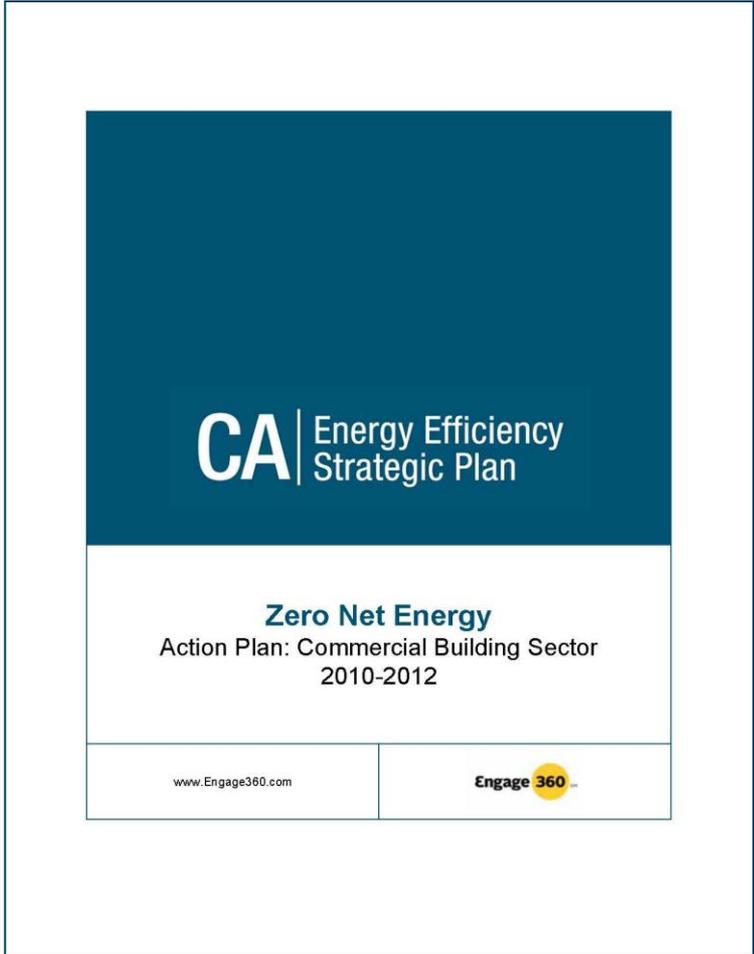
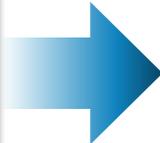
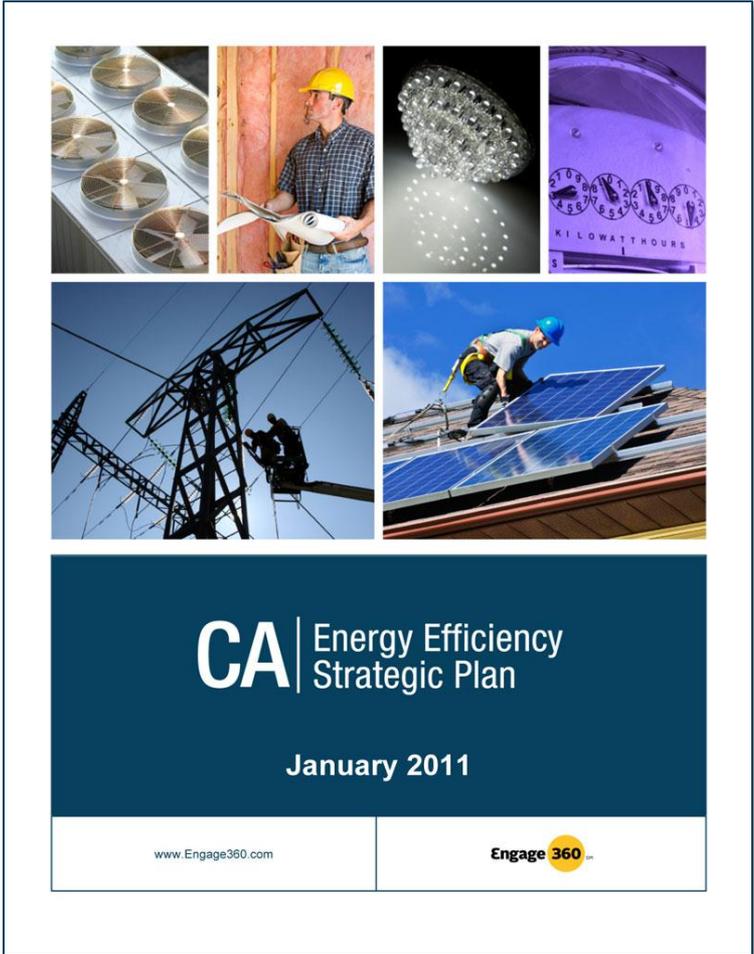
- All new residential construction in California will be zero net energy by 2020
- All new commercial construction in California will be zero net energy by 2030
- Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate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



Examples of Plan Success:

- Executive Order: New CA buildings 2025+ to be ZNE
- Title 24 requires new building commissioning plans
- Western HVAC Performance Alliance
- Federal standards for quality installation & maintenance
- 2013-14 EE portfolio supports lighting MT
- IDSM and workforce training playing greater role in IOU EE portfolios.

Action Plans



Action Plans



- **Deemed** - fixed incentive/savings amounts per unit measure
- **Custom** - Calculated incentives and technical and design assistance for integrated EE/DR/DG initiatives
- **Energy Advisor** - Audit services provide actionable energy usage and cost saving strategies to support customer's education, and motivate participation in IOU-led demand side programs
- **Continuous Energy Improvement (CEI)** - Consultative service targets long-term and strategic energy planning
- **Water-Energy nexus** – increased focus going forth
- **Emerging Technologies** – confirms value of new technologies or new applications of past technologies



- Research to clarify value of water savings
 - Participation in Commission organized PCG group to determine embedded energy and avoided cost for projects involving water/energy savings
 - Statewide Water Energy coordination group to share identified opportunities related to cost-effective Water/Energy programs
- Emerging Technologies, Energy Advisor, Deemed, Custom all will increase focus on identifying and incenting water opportunities
- Third Party allies already working on:
 - Water provision/waste water treatment
 - Food processing



Continuous Energy Improvement (CEI) seeks to support long term commitment to energy management through education, training customers and the workforce about energy efficiency and savings while providing customized technical/project support.

In 2013-14 build on the 2010-12 experience.

To enhance cost effectiveness, PG&E will:

- Continue to support large customer cohorts
- Expand CEI offering to SMB customers through cohorts/online engagement



- Recent 2010-12 Research Results
 - WO033 Custom Project impact evaluation
 - Industrial/Agriculture 3P and Core Program Assessment Studies
 - Industrial Strategic Studies on: Cement, Plastics, Minerals, Metalworking, Paper, Chemicals, Glass, Water/Waste water
 - CEI process and impact evaluations
 - SDG&E and SCG Non-Residential Process Evaluations
- Future 2013-14 Research will focus on:
 - Impact
 - Early EM&V: baseline &/or UES parameters, ISP
 - Market characterization/assessment
 - Process



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CALIFORNIA INDUSTRIAL SECTOR & NATIONAL INITIATIVES



- The Value Proposition & Universal Benefits (ACEEE)
- AB 32 2013 Scoping Plan Update (ARB)
- EPIC: Clean Energy Technologies for Greater Reliability, Lower Costs, Increased Safety (CEC)
- Case Study: Olam Spices

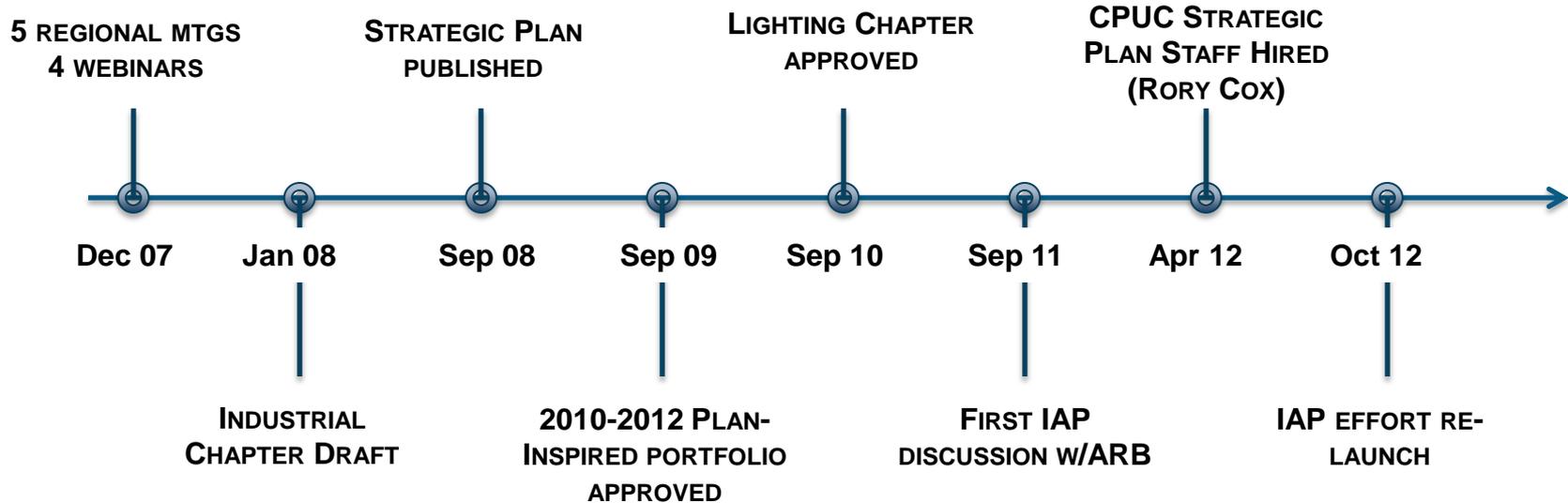


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INDUSTRIAL CHAPTER: VISION & GOALS



History of the Industrial Action Plan



Vision: CA Industry will be vibrant, profitable and exceed national benchmarks for EE & resource management

GOAL	GOAL RESULTS (by 2020)
Integrate EE savings w/achievement of GHG goals and other resource management objectives	<ul style="list-style-type: none">• By 2012, goals, designs, funding of industrial resource management programs fully coordinated
Build market value of and demand for energy efficiency through branding and certification	<ul style="list-style-type: none">• Certification and benchmarking is standard practice* by 2020• By 2020, energy intensity will be reduced at least 25 percent• Trained workforce in energy management and systems EE
Provide centralized technical and public policy guidance for resource efficiency and workforce training	<ul style="list-style-type: none">• Industrial consumers will use to inform actions and manage energy/resource use with best practices



- **Goal 1:** California industry's energy intensity will be reduced by 25 percent from the current baseline by 2025 through energy management techniques, process improvements and equipment upgrades.
- **Goal 2:** Energy management strategies will be integrated with other resource management objectives, especially GHG emission reductions.
- **Goal 3:** Businesses responsible for a majority of the industrial sector's energy use will set baselines and benchmark energy usage and GHG emissions as standard practice by 2020.



Industrial Chapter: Proposed Goals

Goal 4: Industrial users meet greater than 50 percent of on-peak period usage needs via self generation using demand response, cogeneration, renewables and thermal energy storage by 2025.

Goal 5: All industrial users have adopted long-term energy management plans by 2020 as part of ongoing business operations, and are tracking performance as part of a commitment to continuous energy management.

Goal 6: All employees at industrial facilities are informed about principles of energy management, conservation and efficiency, leading to an understanding of their contribution to the facility's footprint and role in meeting organization energy management goals.

Goal 7: By 2025, 50% of medium and large industrial customers (peak demand > 200 kW) have a *capital budgeting approach* that supports and prioritizes energy efficient projects and equipment.



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BREAK OUT DISCUSSION



- Group 1: Vision Statement and Goal 1 (Energy Intensity Reduction)
- Group 2: Goals 2 & 3 (Integration with GHG Goals and Benchmarking)
- Group 3: Goals 4 & 5 (On-site generation & Energy Management Plan)
- Group 4: Goals 6 & 7 (Workforce Education & Capital Budgeting)



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REPORT BACKS



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NEXT STEPS



Next Steps

- Second workshop: September 17, CARB, Sacramento
- Third workshop: October 15, CPUC, Los Angeles CPUC office
- Written feedback to rory.cox@cpuc.ca.gov.



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THANK YOU!

