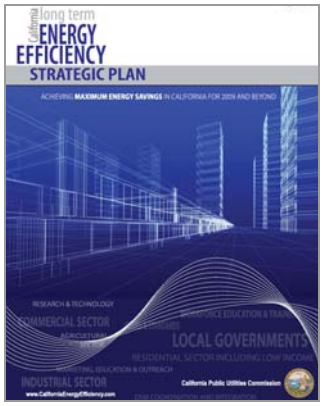
CALIFORNIA'S LONG-TERM ENERGY EFFICIENCY STRATEGIC PLAN



EXECUTIVE SUMMARY

I. INTRODUCTION

The California Public Utilities Commission (CPUC), with support from the Governor's Office, the California Energy Commission, the California Air Resource Board, the state's utilities, local government, and others, has adopted the California Long-Term Energy Efficiency Strategic Plan. Released September 2008, this Plan sets forth a statewide roadmap to maximize achievement of cost-effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond. Over 40 public workshops and meetings were held during its development and over 500 individuals and organizations provided input into the Plan.[1] This White Paper is designed to give policy makers and other interested parties a brief overview of the development and content of the Plan, its connection to other California efforts regarding energy efficiency, energy, and climate change, and the process by which the Plan will influence energy efficiency efforts going forward.

II. THE PLAN IN THE CONTEXT OF CALIFORNIA'S HISTORICAL ENERGY EFFICIENCY EFFORTS

Since the 1980s, California has led the nation in stabilizing low levels of per capita energy use. California's achievements in energy efficiency are the results of a concerted public effort embodied by both the development of progressively stringent statewide energy codes and standards for buildings and appliances, and ratepayer-funded energy efficiency programs administered by the state's electric and gas utilities. Through these measures, California has increasingly sought to rationalize energy use, drive innovation in energy-efficient technologies, and mitigate the detrimental impacts of wasteful energy use.

Over the years, successive CPUC decisions have created a policy framework to motivate investor-owned utilities to develop and continuously expand energy efficiency programs on behalf of their customers. This policy framework is composed of a number of elements including: the State's adopted *loading order* which establishes energy efficiency as the first-

[1] The Plan in its entirety and supporting materials, including the decision which officially set forth Plan development, are available at www.californiaenergyefficiency.com

priority resource for utility procurement; *aggressive goals* set based upon up-to-date potential studies to ensure utilities are striving for the maximum achievable efficiency resource; *decoupling* of sales from revenues for electric and gas utilities, along-side *performance-based incentive mechanisms* to resolve a fundamental bias against efficiency investment by energy utilities; a robust funding stream for such invested comprised of a *public goods charge* and *procurement funding*; and CPUC-managed *evaluation, measurement and verification* work to ensure claimed savings are real and attributable to program effort. Due in a large part to this combination of policy elements, California leads the nation in energy efficiency.

However, due to a number of convergent trends including unprecedented demand growth, increasing fuel costs, and the pressing need to reduce greenhouse gas emissions in a rapid and low cost manner, there has never been a more important time for energy efficiency in California.

III. SUMMARY OF THE 2008 LONG TERM STRATEGIC PLAN

Broadly, with this Strategic Plan California aims to provide a roadmap for a dramatic scaling-up of statewide energy efficiency efforts to meet today's urgent energy challenges. While the policies of the past three decades have been successful in raising public awareness of energy issues and laying the groundwork for large-scale efficiency efforts, achieved savings have come largely by way of short-term programs with limited market impacts. The unifying objective of this Plan is to compel sustained market transformation which moves California beyond its historic reliance on such programs and towards long-term, deeper savings achievable only through high-impact programs. The success of California's efforts will be measured by the pace of market trends towards more efficient technologies and practices in both codes and standards and voluntary actions in the private marketplace. While ratepayer-funded programs will continue to be a principal means of efficiency delivery, they will be targeted to support continuous changes in the marketplace for energy efficiency.

This transformation will require continual evolution in program design and implementation and a far broader set of stakeholders engaged in energy efficiency than has historically been the case. The Strategic Plan targets four end use market sectors:

- Residential
- Commercial
- Industrial
- Agriculture

In addition, the CPUC has identified seven cross-cutting sectors critical to implementation:

- Heating, Ventilation and Air Conditioning (HVAC) systems
- Demand Side Management (DSM) Coordination and Integration
- Workforce Education and Training (WET)
- Marketing, Education and Outreach (ME&O)
- Research and Technology

- Codes and Standards
- Local Governments

Each chapter of the Plan provides a profile of the sector as it stands now; a vision for its transformation; the incremental goals necessary to achieve the vision and the strategies necessary to reach these goals; and an implementation plan for each strategy, detailing necessary partnerships and timelines for near-term, mid-term and long-term success.

Key to the Plan's success are four specific programmatic goals which are widely viewed as ambitious, high-impact efforts. These goals, the "Big, Bold Energy Efficiency Strategies", were selected not only for their potential impact, but also for their easy comprehension and their ability to galvanize market players.

The Big, Bold Energy Efficiency Strategies are:

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

For each of these measures, the Strategic Plan focuses attention on recommendations for coordinated action among the state, its utilities, the private sector, and other market players. The recommendations take advantage of the wide-variety of stakeholder expertise engaged in the strategic planning process as the CPUC and utilities, with input from sector-specific working groups, have consecutively refined the implementation strategies which are at the heart of the Plan.

IV. IMPLEMENTING THE PLAN

The implementation of the Plan will demand immediate action on many fronts. In the near-term, the Commission is committed to leading the effort to coordinate necessary implementation actions. In particular, we will:

- Direct our staff to take a number of steps necessary to implement the Plan, including development of a statewide energy efficiency brand and integrated marketing education and outreach (ME&O) strategy
- Set up working groups that will pursue specific goals and sector strategies; out of that effort, a statewide energy efficiency organization may well develop.
- Continue to work with the California Air Resources Board as it develops its plan for the implementation of AB 32.
- Continue to work with the CEC, especially in areas of the Plan where the CEC logically will take a lead role, such as zero net energy buildings and HVAC.

Additionally, the CPUC's regulated utilities have filed applications seeking authorization for over $3.7 billion of energy efficiency programs for the 2009-2011 timeframe. Ensuring that utilities 2009-2011 portfolios are consistent with the goals and strategies in the Plan will be a formidable task and represent a large portion of the CPUC's continuing role in ensuring the realization of Plan objectives.

Finally, we intend to update the Plan in 2010, so that it can be incorporated in utility plans for energy efficiency programs for 2012-2014 and reflect updated data collection efforts, including market assessment and market potential studies, and ensure the planning effort remains aligned with related statewide long-term resource plans, such as those associated with air quality, water, land use, and climate mitigation.