SCE's Emerging Technologies Program - HVAC Strategy

Western Cooling Efficiency Center Affiliates Forum
May 7, 2013

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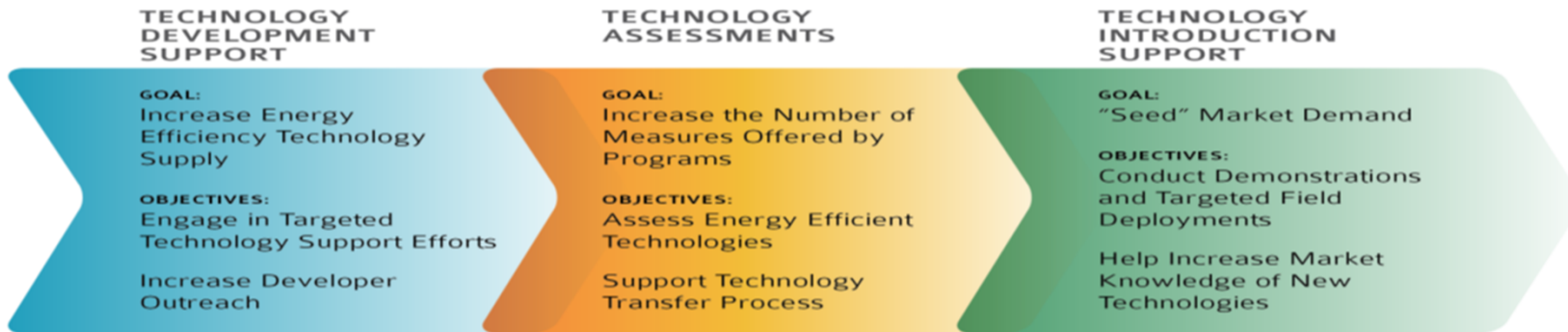
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SCE ETP Framework

Mission

To support increased energy efficiency market demand and technology supply by contributing to development, assessment and introduction of new and under–utilized energy efficiency (EE) measures (that is, technologies, practices, and tools), and by facilitating their adoption as measures supporting California's aggressive energy and demand savings goals.

Program Elements

TECHNOLOGY DEVELOPMENT SUPPORT

GOAL:
Increase Energy Efficiency Technology Supply

OBJECTIVES:
Engage in Targeted Technology Support Efforts

Increase Developer Outreach

TECHNOLOGY ASSESSMENTS

GOAL:
Increase the Number of Measures Offered by Programs

OBJECTIVES:
Assess Energy Efficient Technologies

Support Technology Transfer Process

TECHNOLOGY INTRODUCTION SUPPORT

GOAL:
"Seed" Market Demand

OBJECTIVES:
Conduct Demonstrations and Targeted Field Deployments

Help Increase Market Knowledge of New Technologies

Product Areas

Residential, Commercial, Industrial and Agricultural Sectors

HVAC	Lighting & Daylighting	Plug Loads & Electronics	Whole Building	Process Loads

Continuous Improvement

Transparency and Communication	Committment to Timeliness	Coordination and Partnerships	Responsive to Market Needs

ET 2013-2014 Program Design –
Three-Pronged Approach

Technology Development Support—<u>Increase energy efficiency technology supply</u>

Engage in targeted technology support efforts; increase developer outreach

Technology Assessments—<u>Increase the number of measures offered by programs</u>

Assess energy efficient technologies; support technology transfer

Technology Introduction Support—<u>"seed" market demand</u>

Conduct demonstrations and targeted field placements; help increase market knowledge of new technologies

Together, the three strategies work in concert to help technologies make the leap from idea to adoption. The visual below illustrates the diffusion of innovation—how ETP provides support across the lifecycle of technologies from the Innovators stage to Early Adopters and Early Majority.
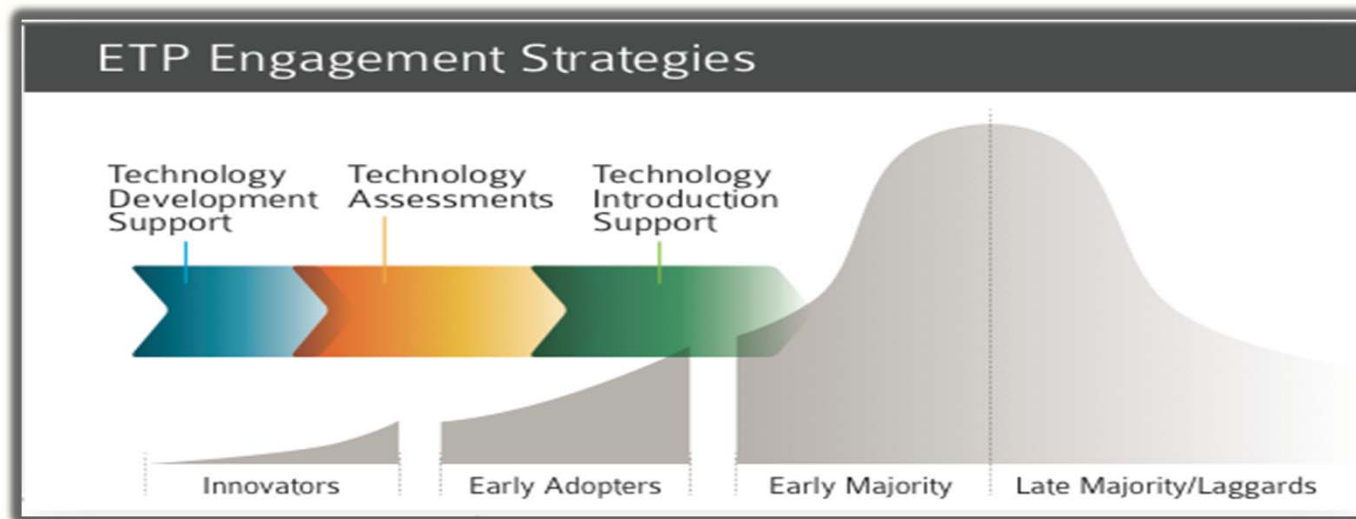
Program Strategies and Tactics

Subprogram	Technology Development Support	Technology Assessments	Technology Introduction Support
Goal	Increased EE technology supply (Support the development of new technologies)	Increased number of measures offered by EE programs (Identify promising technologies for EE programs)	Support technology introduction including IDSM/whole-building deep-energy reduction solutions ("Seed" market demand among targeted end users)
Objectives	• Conduct targeted technology development support projects to benefit EE measure development • Conduct technology developer outreach through workshops	• Assess EE measures, including integrated demand-side management (IDSM) measures • Support the Transfer of measures from the ETP into the EE programs, with the goal of producing energy savings and/or demand reduction	• Conduct technology introduction activities • Conduct 3rd Party Solicitations - Technology Resource Innovation Program (TRIP)
Specific Tactics	• Develop standardized performance specification • Outreach through Technology Resource Innovation Outreach (TRIO) and Open Forums	• Single and multi-site technology Evaluations • Experimental Demonstrations and multi-site assessments	• Multi-site technology placements (i.e. demonstration or showcases) • TRIP Solicitations
Cross-Cutting Tactics	• Develop/Implement ETP Technology Roadmap to guide program activities in alignment with key Drivers and ETP stakeholder needs • Support "Deemification" of measures • Field and Laboratory Performance Evaluations to support measure development • Market Studies	• Behavioral Studies • White papers • Tool Development • Disseminate Finding (Reports and fact sheets) • Training programs • Leverage strategic partners	
Barriers Addressed	• Information or search costs • Performance uncertainties • Organizational practices or customs	• Product or service unavailability • Hidden costs • Asymmetric information and opportunism	

ETP Roadmap – HVAC
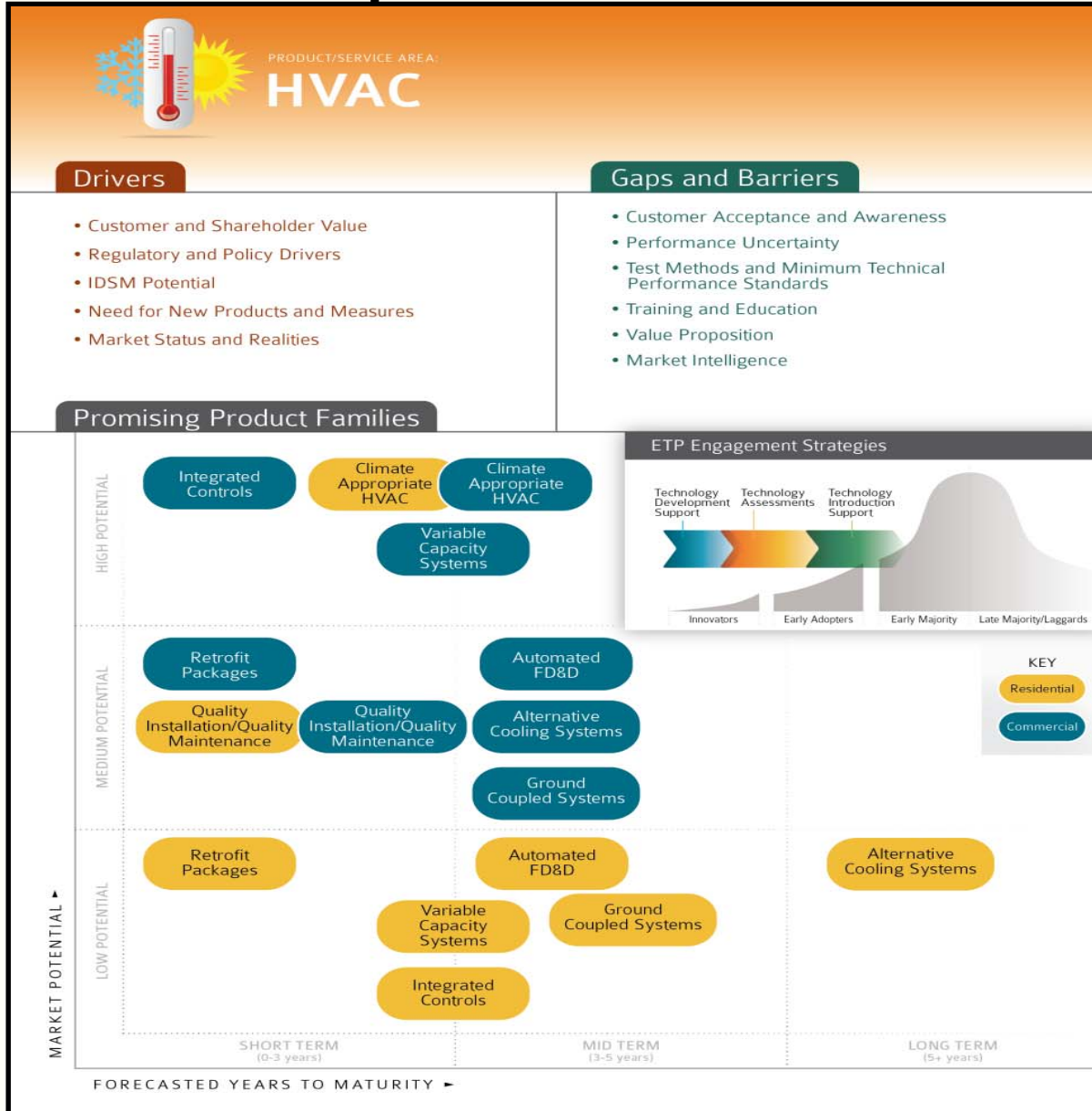
2013-14 ETP Budget

Statewide: $38 million

SCE: $21.2 million, 3% of SCE total