California Public Utilities Commission

Fact Sheet

Statewide Emerging Technologies Program (2013-2014)
July 2013

On September 18, 2008, the California Public Utilities Commission (CPUC) adopted the state's first Long Term Energy Efficiency Strategic Plan, which represents a single roadmap to achieve maximum energy savings across all major groups and sectors in California. This comprehensive Plan is the state's first integrated framework of goals and strategies for saving energy. The Plan covers government, utility, and private sector actions, reinforcing energy efficiency as the highest priority resource in meeting California's energy needs.

The Emerging Technologies (ET) Program supports increased energy efficiency market demand and technology supply by contributing to the development and deployment of new and under-utilized energy efficiency (EE) measures (i.e., technologies, practices, and tools). The ET Program facilitates the use of new measures in achieving California's aggressive energy and demand savings goals. The ET Program performs these activities through the Technology Development Support, Technology Assessment, and Technology Introduction Support subprograms.

Program By Utility	PG&E	Edison	SDG&E	SoCalGas	Total
Technology Development	$834,302	$3,684,510	$405,000	$125,757	**$5,049,569**
Technology Assessments	$5,720,925	$8,284,797	$1,458,079	$1,006,034	**$16,469,835**
Technology Introduction	$5,363,368	$9,216,123	$837,000	$1,384,936	**$16,801,427**
Total by Utility	**$11,918,595**	**$21,185,430**	**$2,700,079**	**$2,516,727**	**$38,320,831**

Total Energy Savings are not calculated for the Emerging Technologies Programs (ETP) because savings caused by these programs are indirect. Any savings realized from the ETP are reflected in other programs' savings when measures are installed.

The Technology Development Support Subprogram

The Technology Development Support (TDS) subprogram targets opportunities for EE technology development. Technology development support takes early-stage technologies or concepts and transforms them into market-ready products, helping bridge the gap between research and development (R&D) and the market. The development support process has resulted in more energy efficient technologies such as televisions, computer monitors, illuminated signs, and lighting fixtures. An example of a support effort could be the development of performance specifications for a technology allowing manufacturers to better target their technology development efforts.

The TDS subprogram also provides training and networking for entrepreneurs and companies offering energy saving technologies. This effort is achieved through Technology Resource Innovator Outreach (TRIO).

The Technology Assessments Subprogram

The Technology Assessments (TA) subprogram evaluates the performance claims and overall effectiveness of energy efficient measures that are new-to-market or under-utilized. These assessments may build on data/information from testing at customer or field sites, laboratory testing, or paper studies. Assessments can also generate the data necessary for energy efficiency rebate programs to estimate energy and demand savings over the life of the measure.

Assessment proposals are screened before an assessment is initiated. The screening process considers:

- The measure's alignment and projected contribution to energy efficiency program strategies and California Energy Efficiency Strategic Plan goals,
- The degree to which the assessment impacts the measure's adoption rate,
- The information necessary for energy efficiency program inclusion and the effectiveness of an assessment in producing this information,
- Resources necessary to execute the assessment.

To ensure that technology lab assessments are conducted properly, state-of-the-art test facilities staffed with knowledgeable engineers and scientists are available to ET project managers. These facilities focus on initiatives like refrigeration, lighting, water heating, and air conditioning.

The Technology Introduction Support Subprogram

The Technology Introduction Support subprogram increases market exposure or awareness of technologies that are market-ready. Introduction efforts may include demonstration of the energy savings potential of individual technologies—or a system or group of technologies—to assist technology penetration in the market. The ET Program may also find the right market actors and get them to experience the technologies first hand in real life settings, or educate contractors on the benefits and proper installation techniques of new technologies.

Additionally, the Technology Resource Innovator Program (TRIP) administers targeted, technology-focused solicitations in order to pair under-utilized, market-ready technology providers with experienced third-party implementers.

The Emerging Technologies Coordinating Council

In addition to administering the above subprograms, the ET Program facilitates the Emerging Technologies Coordinating Council (ETCC). The ETCC is a collaborative forum for discussion on ET activities. The ETCC includes California's investor-owned utilities, the Sacramento Utility District, the California Energy Commission, and the CPUC. Efforts are focused on identifying, assessing, and supporting the commercialization of energy-reducing technologies. More information on the ETCC can be found at http://www.etcc-ca.com/about-us.