

ESCO, Investor-Owned Utility and Government Relationships in California, USA

Emily Schell

Asst. Project Manager, Association of Monterey Bay Area Gov'ts
International MBA, Monterey Institute of International Studies

Basics of California Model

- Biggest source of ESCO market creation in California
- California's model for creating funds for energy efficiency
- California Public Utilities Commission (CPUC) – rulemaking, program selection and oversight
- Investor-Owned Utilities – fund collection and program implementation
 - Pacific Gas & Electric Co (PG&E)
 - San Diego Gas & Electric (SDGE)
 - Southern California Edison (SCE)
 - Southern California Gas Co (SCG)

Outcomes To Date

- 2006-08 program
 - \$1.9 billion budget
 - 10,341 gigawatt hours saved
 - 1,776 megawatt peak demand reduction
 - 138 million Therms natural gas saved
- See <http://eega2006.cpuc.ca.gov/> to view results of California Public Utilities Commission's program results

Details of Implementation

- 1996 (AB 1890) & 2000 (AB 1002) legislature
- Public Goods Charge: ~1% of electric fees
- Demand Side Management Charge: ~0.7% of natural gas fees
- \$540 million raised annually
- \$1.9 billion budget for energy efficiency for 2006-08

Program Development Process

- Fees collected from energy end-users with alongside utility charges
- Funds routed from Investor-Owned Utility (IOU) to California Public Utilities Commission (CPUC)
- Program parameters and long-term strategy put forth by CPUC
- Program proposals developed by IOUs and submitted to CPUC for funding consideration
- Program portfolio selected by CPUC, funding provided to IOUs to implement selected programs, providing value back to end-users

Affects on ESCO Market

- California ESCOs were surveyed:
 - What encourages customers to implement energy saving projects ?
 - No. 1 response (26% of respondents) – financial incentives or utility rebates
 - Beside the loan program (funded through this model), what other services can we provide to help your industry?
 - Top Responses:
 - Provide rebates and incentives for energy efficiency projects
 - Educate public agencies and others about ESCO services
 - Provide referrals and/or list of potential projects to ESCOs
 - This model creates funding for all of the above

Affects on Local Efforts

- Despite statewide scope, very localized in implementation
- Each IOU working within own service territory, managing programs carried out by local organizations – Local Government Partnerships
- Local organizations, such as Association of Monterey Bay Area Governments (AMBAG), able to tailor programs explicitly to local needs while reporting progress back to IOU and CPUC

Future Outlook

- \$3.1 billion for 2010-2012
- Expected to:
 - Avoid the construction of three 500 megawatt power plants
 - Saves almost 7,000 gigawatt hours of electricity and 150 million metric therms of natural gas
 - Avoid 3 million tons of greenhouse gas emissions
 - Create between 15,000 and 18,000 new jobs

Applicability to Asian Countries

- Transferable anywhere in which end-users pay regular energy charges
- Easiest with more centralized energy supply infrastructure or relatively few number of providers
- Central governing body necessary (equivalent to California's Public Utilities Commission)
- Potential for mass market transformation in ESCO, energy efficiency and renewable energy markets
- Room for improvements – administrative cost cutting, decentralization, expedited process

Concluding Summary

- End-users paying for energy efficiency projects, incentives, education and more via extensive regulatory process resulting in statewide and local programming
- Potential for drastic results over short periods due to vast funding levels achievable
- Excellent source of support for ESCO market
- Transferable model for other regions

Emily Schell

Seaside, California, USA

+1 831 601 5395

lauraemilyschell@gmail.com