PA Consulting Group

# Southern California Edison

## Summary Report: Process Evaluation of the 2006–2008 Local Government and Institutional Partnership Programs—Final Report

February 3, 2009

CALMAC Study ID SCE0261.01

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|---|---|
| SCE2518 | Local Government Energy Action Resources |
| SCE2567 | Mammoth Lakes Partnership |
| SCE2568 | Ridgecrest Partnership |
| SCE2519 | Ventura County Partnership |
| SCE2520 | South Bay Partnership |
| SCE2521 | Bakersfield and Kern County Partnership |
| SCE2522 | South Coast Partnership |
| SCE2523 | Community Energy Partnership (Non-Resource) |
| SCE2524 | Community Energy Partnership (Resource) |
| SCE2525 | San Gabriel Valley EE Partnership Program |
| SCE2526 | California Community Colleges |
| SCE2527 | California Dept. of Corrections and Rehabilitation |
| SCE2528 | SCE-SCG County of Los Angeles Partnership |
| SCE2529 | County of Riverside Partnership |
| SCE2530 | UC-CSU-PG&E-SCE-SCG-SDG&E Partnership |

# Southern California Edison

## Summary Report: Process Evaluation of the 2006–2008 Local Government and Institutional Partnership Programs—Final Report

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# *EXECUTIVE SUMMARY*

This executive summary overviews the results of the process evaluation for Southern California Edison's (SCE) 2006–2008 Local Government and Institutional Partnerships Portfolio. PA Consulting Group (PA) conducted the process evaluation from December 2007 through August 2008.

SCE's 2006–2008 Local Government and Institutional Partnership Programs Portfolio is comprised of fifteen partnerships, twelve of which were covered under this process evaluation study[1]. The partnership programs for 2006–2008 receive funding from the California Public Utilities Commission under the Public Goods Charge (PGC)[2]. SCE's partnership portfolio consists of the following programs:

- University of California/California State University Partnership Program
- California Community Colleges Partnership Program
- California Department of Corrections and Rehabilitation Partnership Program
- Ventura County Partnership Program
- South Bay Partnership Program
- LA County Partnership Program
- Bakersfield-Kern Energy Watch Partnership Program
- The County of Riverside Partnership Program
- The Community Energy Partnership Program
- The South Coast Partnership Program
- The Local Government Energy Action Resources Partnership Programs (including Santa Ana, Ridgecrest and Mammoth Lakes)
- The San Gabriel Valley Partnership Program

The California Energy Action Plan of 2005 establishes energy efficiency as the state's top priority procurement resource and calls for the utilities to invest in energy efficiency whenever

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[1] The Community Energy Partnership has both resource and non-resource components that have two separate program implementation plans. The Palm Desert Partnership Demonstration Program is a pilot program and therefore was not included in this process evaluation.

[2] The Public Goods Charge (PGC) originated with Assembly Bill 1890 in 1996, which restructured the state's electricity markets. As part of AB 1890, energy efficiency programs were funded with proceeds from the PGC. With the passage of Assembly Bill 1105 in 1999, authority over the PGC energy efficiency programs were shifted from the CPUC to the CEC.[2] In September 2002, AB 117 was passed into law. Section 381.1, which was added to Public Utilities Code, permits community choice aggregators (CCAs) to apply to administer cost-effective energy efficiency and conservation programs. The CPUC also adopted certain procedures in Decision (D.) 03-07-034 (dated July 10, 2003) to implement portions of AB 117 affecting the allocation of energy efficiency program funds.[2]

it is more cost effective than power plants. The Energy Action Plan permits utilities to fund partnership programs between a regulated utility and a designated "partner," where the partner will work directly with the utility to provide energy-efficiency services.

These partnerships are administered by the IOUs, in some cases with implementation support from government agencies or non-profit community organizations to encourage increased energy-efficiency behaviors among targeted groups. The goal of the partnerships is to more effectively assist partners with addressing barriers to understanding and implementing energy efficiency and other demand side management (DSM) initiatives. Activities include, but are not limited to, retrofits, retro-commissioning, education and training opportunities, outreach to target customer groups, direct installation or delivery of energy-efficiency equipment, and referrals into utility programs.

## EVALUATION METHODOLOGY

The primary objectives of the process evaluation were to provide feedback regarding SCE's Local Government and Institutional Partnerships, where they stand in relation to the achievement of targets and goals for the 2006–2008 cycle, and to provide findings and comments for consideration in the next cycle of partnership programs for 2009–2011. The evaluation's goals were to:

- Review the programs within the context of the partnership market segment to determine if there are unnecessary overlaps between the programs, if significant parts of the market are being missed by the program designs, and/or if the targeted markets should be defined differently.
- Document program theories, program goals, and implementation strategies.
- Provide real-time feedback to program implementers with specific focus on improving program recruitment and delivery and identifying both implementation and program design problems for review and modification.
- Assess the effectiveness of the programs and provide recommendations for improvement. Recommendations should include comparison to current industry best practices.
- Evaluate areas of customer and partner satisfaction/dissatisfaction and provide recommendations for developing an ongoing system for tracking customer feedback.
- Identify barriers and obstacles to meeting program goals.

The process evaluation included secondary data review and analysis as well as primary data-collection activities to support the evaluation's objectives. Primary data-collection activities included:

- In-depth interviews with utility, partner, third-party implementation staff, and participating facility managers across the twelve programs.
- Interviews with SCE staff working with each partnership including the program manager and the relevant account managers/account executives and public information officers that work with the partnerships.
- Surveys of residential and commercial program participants and non-participants.

## OVERALL CONCLUSIONS AND RECOMMENDATIONS

SCE's portfolio of partnership programs is successful on many fronts. SCE's partnership portfolio is on track to meet its energy goals established for the 2006–2008 program cycle. Many of the partnerships appear to have laid the foundation for long-term capacity building that have affected policies and practices of local government and institutional partners. The partnerships also appear to have raised the visibility of energy efficiency within participating communities via marketing and outreach activities. Finally, the partnerships have employed unique strategies to increasing energy-efficiency program participation in order to address barriers for their target segments.

SCE has a strong start for the 2009-2011 program cycle. SCE should be able to build on the successes of the 2006-2008 program cycle while addressing lessons learned from the 2006-2008 program cycle.

Below are portfolio-level conclusions and recommendations for SCE's Local Government and Institutional Partnership Portfolio. These portfolio-level findings are based on the evaluation results of the individual partnership programs discussed in detail in the report.

### Conclusions

**Achievement of goals.** At a portfolio-level, SCE's partnership portfolio is on track to meet their kWh goals established for the 2006–2008 program cycle. Demand kW goal achievement is lagging kWh, but is also on track. The main reported inhibitor of partnerships' achievement of goals is slow program start-up. In many cases this is reportedly due to contract delays.

In general, the non-resource partnerships claim to have exceeded their targets. In most cases, the process evaluation findings support these claims for various reasons including long-term capacity building (discussed next) and the partnerships bringing something unique to the table to increase participation in SCE's core programs.

**Long-term capacity building.** The potential for longer-term savings varies by program type, but appears to be high. To varying degrees, the statewide institutional partnerships provide training associated with energy retrofits and MBCx and are working to make an impact on campus and organizational purchasing policies and building practices. Almost all local government partnerships are delivering training programs.[3]

**Partnership keys to success.** The most successful partnerships are those in which all partners are fully engaged in the program. The term "engaged" indicates both buy-in to the partnership concept and commitment to making its implementation work. The majority of SCE's partnerships demonstrated partner engagement.

Clear communication appears to be the biggest key to successful partnerships based on the process evaluation of the twelve different programs. This clear communication needs to

[3] While all local government partnerships program plans include training, there are some who had not delivered training at the time of the process evaluation because they are instead focusing on achieving their resource goals.

involve utility and local government or institutional partner staff and third-party program implementers (if applicable). Interviews across multiple partnership programs revealed that for some partnerships there was a breakdown in communication between the local government or institutional partner and the utility partner staff. Communication topics include changes in SCE offerings, SCE activities related to the program, and any projects and savings resulting from referrals into other SCE's core programs.

Partnerships that have successfully brought other relevant organizations to the table have expanded the reach of the partnership. For example, the South Coast Partnership is now collaborating effectively with the water and gas utility.

**Statewide programs.** The statewide partnerships work well in terms of policy development and collaboration between partners and utilities. There are significant differences in how some of these partnerships are implemented at the utility level, but partners are quite complimentary about SCE's implementation efforts.

**Unrealized value.** The process evaluation indicates that these programs are successful on many fronts. Examples include educating local governments about energy efficiency potential and opportunities, helping local government decision makers move toward acting on projects, providing expertise to facilitate projects that otherwise would not happen, reaching customers who would not otherwise participate in core programs, and building public awareness. Utility and local government and institutional partner staff share the common concern that the partnership programs will not be given adequate credit for the role they play in stimulating energy saving behaviors and installation of measures beyond those that are easily counted. SCE's Affinity Model[4] for the 2009–2011 program cycle may be able to address this concern of representing the value the partnerships bring.

**Staffing resources.** Staffing is an important issue for both institutions and local governments, particularly because partnership funds are not designed to fund staff in perpetuity. Local government and institutional staff tend to have limited time to dedicate to partnership work, yet it is important that the partnership have adequate staff resources—at whatever level—to ensure the necessary work is accomplished to support the partnership's initiatives. In general, partners are constrained in terms of staffing resources, especially local government and institutional staff. Consequently, partner staff reported that third-party implementers were essential to getting the partnership activities done.

**Clarity of focus.** First and foremost, the IOUs work with the partners through these partnership programs to understand and more effectively address barriers they have to implementing energy efficiency and other DSM initiatives. The partnership program model has two main dimensions: it is a resource acquisition vehicle and it is a community outreach and engagement tool. The challenge is that the current partnership program model assumes local governments and institutions have significant roles to play in delivering direct and indirect kWh and kW energy savings—roles that are important but necessarily vary with each partnership based on the capacity and capabilities brought to the endeavor. This challenge is addressed in the program design documents, written commitments, and contractual documents that articulate the responsibilities of the external partners that they must fulfill in

[4] This model has since been renamed the Energy Leader Model

exchange for the PGC funding provided. While several SCE partnerships are doing well achieving both resource and non-resource goals, some resource partnership programs such the County of Riverside are not achieving their non-resource goals because they are concentrating on their resource goals.

**Balancing resource and non-resource objectives.** One potential risk associated with partnership programs is the dual nature of resource and non-resource activities. Because the partnership portfolio aims at delivering near-term energy savings as well as building capacity and capabilities necessary for long-term energy savings, it may be more appropriate to articulate a partnership program's goals in terms of both near-term or immediate resource goals and long-term resource goals. Many of the partnership programs such as UC/CSU partnership program are both taking actions to obtain immediate savings as well as laying the groundwork for longer term savings through what are now termed non-resource activities such as training.

**Recording non-resource activities.** The CPUC recognized the potential value of non-resource activities by focusing attention on these partnership elements in the impact evaluation that was launched during the time of this study. While some of the IOUs or partnership programs maintain a database that captures non-resource activities, currently the long term value of these activities is not attributed back to the partnerships. .Continuing to capture non-resource activity information will be critical to realizing the benefits of the non-resource elements of the programs in the future, while documenting program progress.

**Length of programs and program maturity.** The process evaluation indicates that the local government and institutional partnership concept has gained momentum from its first program cycle. Those programs that started under the earlier program cycle reached a level of maturity under the 2006–2008 cycle that allowed for more progress to be made. It is clear that both the IOUs and the CPUC underestimated the amount of time it takes to set up partnerships with their complex relationships, multi-party contractual documents, and range of services. Several of the partnerships did not begin until the second year of the 2006–2008 program cycle due to these contractual issues. SCE's criteria for selecting partnerships for the 2009–2011 cycle includes giving priority to partnerships that were successful in the 2006–2008 cycle. This prioritization will allow partnerships to capitalize on the momentum they have built in the 2006–2008 program cycle.

**Program Tracking.** Program databases are critical tools for reviewing and documenting program progress. Databases are also critical for identifying and tracking energy impacts associated with programs and are a means for optimizing program energy impacts. Utilities did not receive clear guidance from the CPUC regarding capturing indirect impacts, so there had been no universal tracking system and, for some partnership programs, the lack of a centralized tracking system presented a barrier to program administration.

**Customer segments targeted.** In general, the partnerships have been more successful in building awareness and serving commercial customers. However, the commercial market has distinct submarkets that are more or less approachable through the local government and institutional partnerships program mechanism. Partnerships may be most able to influence locally owned and operated businesses.

Residential customers are harder to reach and to gain their participation in energy efficiency programs as evidenced in the customer survey results. However, there are some SCE

partnerships that are conducting strong residential program support campaigns that include aggressive outreach.

**Incentives and technical assistance.** SCE's partnership portfolio has raised the visibility of energy efficiency. Many of the projects would not have happened without the incentives or technical assistance provided by the partnership program.

**Recommendations**

Recognizing the success of the partnership programs on many levels, we offer the following recommendations for SCE and the CPUC to consider for the 2009–2011 program cycle to take advantage of lessons learned and best practices from the 2006–2008 program cycle.

**Revisit the length of the partnership program cycles to recognize the diversity of community needs and the capabilities of communities to mount effective partnerships.** It takes many years to build strong partnerships. Three-year funding cycles for local government and institutional partnerships are too short. We recommend that five- or seven-year funding cycles be considered. With the extended funding cycles, there should be clearly established expectations for outcomes as well as impacts and the continued funding of partnerships should be predicated on meeting goals representing these outcomes and impacts. Local government and institutional partnerships vary from each other. SCE needs to be prepared to work with partnerships to support programs of varying sophistication.

**Ensure program funding does not lapse.** The history of DSM is littered with good programs that have been destroyed because of lapses in funding. Partnership program offerings are particularly sensitive to such lapses. If the decision is to continue funding of partnership programs in three-year cycles, then it is incumbent on the IOUs and the CPUC to make decisions early or to provide bridge funding to prevent lapses.

**Streamline the contracting process and establish the contracts early to avoid delays.** SCE's 2006–2008 partnerships have been particularly troubled by the amount of time required to get contracts into place, which have delayed program progress in many cases. We recommend the IOUs streamline the contracting process in order to enable the partnerships to begin work more promptly. A few examples of what IOUs can do is to develop model contracts, limit negotiations, and assign sufficient staff to get the contracts in place most efficiently.

**Review the need for resources by program, taking into consideration the individual needs of the programs.** A recurring theme through all of the programs is the need for more resources. Presently, allocations are based primarily on the cost-benefit ratios for the direct delivery of energy-efficient measures. We recognize that the CPUC and the IOUs have a fiduciary responsibility to optimize the energy-savings benefits across programs. However, variances in partnerships mean the resource needs should consider these variances. For example, newer programs also may have greater needs than established programs.

Overall, we encourage the allocation of more resources to the partnership programs based on the successes documented in this process evaluation. Additionally, funding for emerging partnerships that may need more resources to establish themselves should be reviewed closely.

At least in the case of local government and institutional partnerships, we recommend that the method of allocations needs to be reconsidered in the next round of funding. The Affinity Model[5] may be a good start at addressing proper resource allocation to the partnerships, supporting a mix of resource and non-resource activities. For example, emerging programs could be allowed to divide their programs into resource and non-resource segments. Resource segments would be subject to the same benefit cost criteria as other programs. In the short term, non-resource segments would be allowed to demonstrate that they have met stated goals for particular outcomes.

**Provide ongoing support for technical assistance.** A consistent finding across the partnership programs is the heavy workloads of the staff in partnerships including the local governments, organizations, and utilities. Mechanisms for providing more staff resources need to be investigated both within SCE as well as within the local government and institutional partners. At least some partnerships felt that their lack of technical expertise was a barrier to moving forward. Partnerships felt that having outside administrative and technical support was important to being effective. We recommend that the IOUs create a pool of technical talent that local government and institutional partnerships can draw upon to support their programs. Local government programs could use a project management model in which the local government partner identifies and then appropriates that needed skills and capabilities from the pool.

**Support local government or institutional partner funding efforts**. Local partners should be challenged to increase their leverage over time. The ability of partners to obtain internal funding for projects is an important constraint and may lead to delay or failure in partnership programs meeting resource goals. In making the case for internal funding, being able to develop larger packages of projects with which senior managers were more willing to deal, helped some local governments and institutional partners. The credibility of the utilities and the incentives were also positives in obtaining internal funding to move ahead with projects.

**Communicate regularly and provide consistent and timely feedback.** An emergent theme across all of the partnerships was the need for consistent, frequent, and timely feedback and communication. Feedback is needed between partners within the partnerships, partners and third-party program implementers, participants and partners, and among all the partners in SCE's portfolio. Partnerships were particularly interested in knowing how they were doing and what others were doing. First, we recommend periodic teleconferences and perhaps an annual gathering be held in order for partnerships to exchange information. Additionally, evaluators need to be more proactive and timely in conducting surveys to track program progress, particularly in terms of its indirect impacts. Last, information needs to be streamlined so that each utility can have immediate feedback about activities and the commitments by customers, especially among multi-utility partnerships.

**Draw on partnership best practices identified through the process evaluation.** Many communities have efforts focused on increasing the efficiency of their public buildings. The LA County Partnerships represents a particularly good model for this. Best practices to be gleaned from this partnership include: using a central energy management system (EMS) to prioritize buildings and project opportunities; contracting with a vendor to retro-commission

[5] Now the "Energy Leader" model.

buildings after they are screened; using the vendor to train facility managers; and monitoring the buildings continuously using the EMS.

Other best practices identified in the process evaluation are 1) providing "one-stop" shopping for community energy needs, 2) designing comprehensive partnership programs that include electric, gas, water, waste management, and green buildings, and 3) creating energy efficiency plans when the partnership program is targeting multiple buildings.

A best practice identified across several SCE partnership programs was SCE's account staff engagement in the partnership. For example, SCE was most effective in the statewide CCC partnership program as a result of SCE staff's proactive and direct involvement with the community colleges.

**Develop a tracking system that is usable and accessible between utilities for multi-utility programs and partners and utilities.** The lack or difficulty of data tracking was an opportunity for improvement raised across several of the partnerships. The IOUs and their local government and institutional partners need to develop universal and simple tracking systems for the partnership programs. This will also enable increased feedback for partners as discussed above.

**Clearly brand each partnership.** Branding plays an important role in helping to promote these programs. It is important to create clear brands and avoid brand confusion. There is a need to address the problem of competing brands in terms of branding in general and the use of different brands for similar services in the same local area. When planning participation in events, it is incumbent on partners to coordinate their participation with each other.

## LIST OF ACRONYMS

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|---|---|
| ACEEE | American Council for an Energy-Efficient Economy |
| AIA | American Institute for Architecture |
| ASHRAE | American Society of Heating, Refrigeration, and Air Conditioning Engineers |
| BK | Bakersfield-Kern Energy Watch Partnership Program |
| CCC | California Community Colleges |
| CCSE | California Center for Sustainable Energy |
| CDCR | California Department of Corrections and Rehabilitation |
| CEP | Community Energy Partnership |
| CFL | Compact Fluorescent Lamp |
| CPUC | California Public Utilities Commission |
| CSU | California State University |
| CSUOC | California State University Office of the Chancellor |
| DSM | Demand Side Management |
| EEGA | Energy Efficient Groupware Application |
| EMS | Energy Management Services |
| ESCO | Energy Services Company |
| GHG | Greenhouse Gas |
| HDMC | Honeywell DMC |
| HEW | High Efficiency Washer |
| ICLEI | International Council for Local Environmental Initiatives |
| IOU | Investor Owned Utility |
| LED | Light Emitting Diode (high-efficiency lighting) |
| LEED | Leadership in Energy and Environmental Design |
| LGEAR | Local Government Energy Action Resources |
| LGP | Local Government and Institutional Partnership |
| MBCx | Monitoring-based Commissioning |
| M&V | Monitoring and Verification |
| MWD | Metropolitan Water District of Southern California |
| NAM | Newcomb Anderson McCormick |
| PAM | Program Administrative Manager |
| PGC | Public Goods Charge |
| PG&E | Pacific Gas & Electric |
| PIP | Program Implementation Plan |
| SB | South Bay Energy Savings Center |
| SCE | Southern California Edison |
| UC | University of California |
| UCOP | University of California Office of the President |
| UCSD | University of California, San Diego |
| VCREA | Ventura County Regional Energy Association |

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# 1. INTRODUCTION AND PARTNERSHIP OVERVIEWS

This report presents the results of the process evaluation conducted for Southern California Edison's (SCE) 2006–2008 Local Government and Institutional Partnership Programs Portfolio. The process evaluation was conducted from December 2007 through August 2008.

The California Energy Action Plan of 2005 establishes energy efficiency as the state's top priority procurement resource and calls for the utilities to invest in energy efficiency whenever it is more cost effective than power plants. The Energy Action Plan permits utilities to fund Partnership programs between a regulated utility and a designated "partner," where the partner will work directly with the utility to provide energy-efficiency services. These Partnerships consist of activities managed by government agencies or non-profit community organizations to encourage increased energy-efficiency behaviors among targeted groups. Partners' roles vary depending upon the specific activities undertaken and the skill sets and resources of each. The presumption in each partnership, however, is that the utility and the other partner (whether local or state government agency or a community-based non-profit) each bring something to the table to make the partnership work.

The primary purposes of the process evaluation were to provide feedback regarding SCE's Local Government and Institutional Partnership Programs, where they stand in relation to the achievement of targets and goals for the 2006–2008 cycle, and to provide findings and comments for consideration in the next cycle of partnership programs for 2009–2011.

## 1.1 OVERVIEW OF THE PARTNERSHIPS

SCE's 2006–2008 Local Government and Institutional Partnership Programs Portfolio consists of the following thirteen programs.

**Table 1-1 SCE Local Government and Institutional Partnership Programs Overview**

| Program | | Overview |
|---|---|---|
| **SCE 2530** | **University of California/California State University Program (UC/CSU)** | The partnership is a statewide program designed to achieve immediate and long-term energy savings and peak-demand reduction within California's higher education system. The combined funding of nearly $4,000,000 for the 2006–2008 program establishes a permanent framework for sustainable, comprehensive energy management at campuses served by California's four IOUs. The program employs four key strategies to meet its goals—energy-efficiency retrofits, monitoring-based commissioning (MBCx), emerging-technology demonstrations, and training and education. |

| Program | | Overview |
|---|---|---|
| **SCE 2526** | **California Community Colleges Program (CCC)** | The partnership offers incentives for retrofit and new construction projects, MBCx, and educational training for the community colleges targeted to facilities staff. The CCC system includes 110 campuses, each of which is responsible for its own energy use. This partnership is modeled after the UC/CSU partnership. Unlike the UC/CSU systems in which all the campuses coordinate closely with central offices, California's community colleges have full autonomy over their campuses and facilities, with little to no central coordination. This results in a different set of issues and barriers for the CCC Partnership. |
| **SCE 2527** | **California Department of Corrections and Rehabilitation Program (CDCR)** | The CDCR Program is a statewide program with partnership participation by all four California IOUs. It focuses on increasing the energy efficiency of the facilities on prison campuses, and as such is similar to the statewide UC/CSU partnership. There are two components: (1) The attainment of immediate long-term peak energy and demand savings through customized assessments, calculated rebates, and building commissioning. (2) The establishment of a permanent framework for sustainable energy-management program at CDCR facilities statewide through training of building design and project staff, facilities and energy managers in improved operation and management techniques and how to identify and obtain additional energy-efficiency opportunities. The program seeks to implement projects identified in utility energy audits, and to secure additional facility savings. The program uses an energy service company (ESCO) model for implementation of the measures, in which a third party provides capital, installs measures, monitors savings, and is repaid on a performance basis. |
| **SCE 2519** | **Ventura County Regional Energy Association (VCREA)** | The program is an alliance between Ventura County Regional Energy Alliance (VCREA), SCE, and SCG to create the VCERC, a local clearinghouse for energy information and public sector technical assistance and energy project management. Energy-efficiency services are provided to public agencies and community asset organizations within the region through in-depth technical assistance and project implementation support. In addition, the program offers an energy resource center, energy education and training and outreach events. |
| **SCE 2520** | **South Bay Energy Savings Center (SB)** | The South Bay Partnership program provides an energy resource center, and supports fifteen local governments in the South Bay area for provision of energy information, workshops, and community outreach. It also provides energy-efficiency technical assistance to cities and businesses in the area for the identification of energy-efficiency opportunities and the acquisition of energy-efficiency rebates through the utility core programs. |

| Program | | Overview |
|---|---|---|
| **SCE 2528** | **LA County (LAC)** | This partnership program involves SCE and SCG (for gas measures) in targeting LA County departments and facilities to achieve immediate electric and gas energy savings and peak-demand reduction at county facilities by applying retro-commissioning (RCx) processes. The RCx processes will result in the implementation of recommended energy-efficiency measures to optimize the operation of HVAC and Lighting systems in each building. |
| **SCE 2521** | **Bakersfield-Kern County Energy Watch (BK)** | The Bakersfield and Kern County Energy Watch Partnership is designed to achieve immediate, long-term peak energy and demand savings and establish a permanent framework for sustainable, long-term, comprehensive energy-management programs. Additionally, it sets the foundation for sustainability and best practices for the partnership's participating jurisdictions and customers through information and direct installation of energy-efficiency equipment. The program is a continuation of a successful 2004–2005 program. PG&E is the partnership's lead utility. |
| **SCE 2529** | **County of Riverside (CR)** | This partnership program will deliver immediate electric and gas energy savings and peak-demand reduction in Riverside County facilities. These energy savings will be accomplished by implementing retrofit and modernization projects utilizing SCE's traditional programs such as Standard Performance Contract (SPC) or Savings by Design and will also include a pilot retro-commissioning (RCx) project in one of the County's buildings. |
| **SCE 2523** | **Community Energy Partnership—Non-Resource (CEP-NR)** | The Community Energy Partnership is a hybrid and multidimensional partnership for the delivery of sustainable energy efficiency in Southern California. The program was designed to draw on the expertise provided by the Energy Coalition, a not-for-profit that has specialized in promoting energy efficiency by working with local municipalities. The program draws on the strengths of key energy stakeholders in participating cities to create a powerful synergy. These cities include Irvine, Corona, Santa Monica, San Bernardino, Moreno Valley, Cathedral City, Palm Desert, Hermosa Beach, Brea, and Santa Clarita. |
| **SCE 2524** | **Community Energy Partnership—Resource (CEP-R)** | This is the resource component of the CEP and it involves the cities, SCE, SCG, and the Energy Coalition working collaboratively to create awareness about efficiency through the delivery of energy efficient products to homes and small businesses. The program creates a stream of immediate "hard" savings through a variety of initiatives including community efficiency tune-ups, demonstration projects, and community outreach events; Tune-Up Audits (with distribution of some measures); and distribution of Efficiency First! packs that contain a variety of small measures and materials about core programs. |

| Program | | Overview |
|---|---|---|
| **SCE 2522** | **South Coast (SC)** | The program assists and facilitates residents, businesses, and other city and county government officials in understanding, managing, and reducing their energy use and costs, and positions the partners as leaders in the region in energy-management practices. Although this program was filed separately, it follows the LGEAR model providing technical assistance to partners and funnels them to SCE's existing portfolio of energy programs. |
| **SCE 2518** | **Local Government Energy Action Resources (LGEAR)** | The LGEAR program forges partnerships between the utility and local governments interested in providing energy-efficiency services and in reducing their own energy consumption. The SCE program currently has two participating local governments in the 2006–2008 cycle—Mammoth Lakes and Ridgecrest. This partnership seeks to assist local governments in the development of an energy action plan to reduce energy consumption in their communities and to promote the concepts of sustainable communities. The Mammoth Lakes partnership implements the LGEAR concept working with the town of Mammoth and the High Sierra non-profit organization to identify and respond to the energy needs of the town and funnel customers to existing SCE programs as appropriate. The Ridgecrest partnership is implementing the LGEAR concept with the city of Ridgecrest in a similar manner. |
| **SCE 2525** | **San Gabriel Valley (SGV)** | The San Gabriel Valley Energy Wise Program (SGVEWP) is a residential and nonresidential partnership between SCE and the Southern California Association of Governments (SCAG). The partnership works to raise awareness of energy efficiency and complete targeted retrofit and retro-commissioning projects in city facilities. This partnership provides energy education, retrofit assistance, and retro-commissioning (RCx) as well as design consultation and energy analysis of new construction and renovation project plans. |

## 1.2 REPORT STRUCTURE

This report consists of the following chapters and appendices.

- Chapter 1, Introduction and Partnership Overviews
- Chapter 2, Portfolio-level Program Theory and Logic Model
- Chapter 3, Methodology
- Chapter 4, Portfolio-level Data
- Chapters 5–16, Partnership Level Findings
- Chapter 17, Portfolio Conclusions and Recommendations
- Appendix A, Programs' Logic Models
- Appendix B, In-depth Interview Protocols
- Appendix C, Survey Instruments
- Appendix D, Program-specific Survey Methodology and Response Rates

# 2. METHODOLOGY

Southern California Edison (SCE) contracted PA to conduct a process evaluation of its 2006–2008 Local Government and Institutional Partnership Programs Portfolio. The evaluation's goals were to:

- Review the programs within the context of the partnership market segment to determine if there are unnecessary overlaps between the programs, if significant parts of the market are being missed by the program designs, and/or if the targeted markets should be defined differently.
- Document program theories, program goals, and implementation strategies.
- Provide real-time feedback to program implementers with specific focus on improving program recruitment and delivery and identifying both implementation and program design problems for review and modification.
- Assess the effectiveness of the programs and provide recommendations for improvement. Recommendations should include comparison to current industry best practices.
- Evaluate areas of customer and partner satisfaction/dissatisfaction and provide recommendations for developing an ongoing system for tracking customer feedback.
- Identify barriers and obstacles to meeting program goals.

PA's overall evaluation strategy was designed to meet these goals.

## 2.1 EVALUATION STRATEGY

PA's scope of work with SCE encompassed five tasks:

- Task 1—Conduct the project initiation meeting
- Task 2—Develop the final research plan, review program materials and budget, and document program and implementation theory
- Task 3—Data collection and analysis—interviews
- Task 4—Data collection and analysis—surveys
- Task 5—Management, reporting, and final presentation.

Tasks 3 and 4 were the bulk of the evaluation strategy and efforts. These tasks will be discussed more fully in the next section.

## 2.2 PRIMARY DATA COLLECTION ACTIVITIES

The primary data collection activities included in-depth interviews with SCE, partner and program implementer staff, ESCOs, and participating facility managers. Primary data collection activities also included a telephone survey of residential and commercial participants and nonparticipants. Table 3-1 details the primary data collection activities

conducted for each partnership. First, we provide an overview of the in-depth interviews and telephone surveys.

- In-depth interviews were conducted with utility staff, government or institutional partner staff, program implementation staff, ESCOs, and participating facility managers. Program-specific plans identified the groups of individuals to be interviewed, as different programs comprised of a different mix of stakeholders and market actors. In total, PA conducted 160 in-depth interviews with utility, partner, and implementation staff across the twelve programs[6]. Depending on the role of the interviewee, interviews ranged from 20 minutes to over an hour.
- PA interviewed two to four SCE staff working with each partnership. SCE staff interviewed included the program manager and the relevant account managers/account executives and public information officers that worked with the partnerships.
- Telephone surveys were conducted with both residential and commercial program participants and nonparticipants. The participant surveys were administered in May and June 2008. The nonparticipant surveys were administered in July and August 2008.
- PA conducted 274 surveys of residential participant customers and 307 surveys of residential nonparticipants' customers for a total of 581 surveys with residential customers.
- PA conducted 322 surveys of commercial participant customers and 373 surveys of commercial nonparticipants for a total of 695 surveys with commercial customers.
- Four partnerships out of twelve provided residential participant data and were included in the survey: Bakersfield-Kern County, Community Energy Partnership, South Bay Energy Savings Center, and South Coast.
- Five partnerships out of the provided commercial participant data and were included in the survey: Bakersfield-Kern County, Community Energy Partnership, South Bay Energy Savings Center, Ventura County, and San Gabriel Valley.

6 We have combined the resource and non-resource Community Energy Partnership for data collection and analysis resulting in twelve instead of thirteen programs.

**Table 2-1 Summary of Data Collection Activities**

| Program Name | | Interviews |
|---|---|---|
| SCE 2521 | Bakersfield-Kern County Energy Watch | • 3 Utility staff<br>• 3 Bakersfield-Kern staff<br>• 10 ESCOs<br>• 52 residential participants<br>• 74 commercial participants<br>• 77 residential nonparticipants<br>• 74 commercial nonparticipants |
| SCE 2518 | LGEAR | • 6 utility staff<br>• 3 local government staff<br>• 2 facility managers |
| SCE 2524<br>SCE 2523 | Community Energy Partnership (Resource and Non-Resource) | • 3 Utility staff<br>• 2 Energy Coalition staff<br>• 10 local government staff<br>• 69 residential participants<br>• 68 commercial participants<br>• 77 residential nonparticipants<br>• 75 commercial nonparticipants |
| SCE 2528 | LA County Partnership | • 6 Utility staff<br>• 3 LA County staff |
| SCE 2520 | South Bay Energy Savings Center | • 3 utility staff<br>• 10 facility staff from partner agencies<br>• 2 peer city staff<br>• 79 residential participants<br>• 79 commercial participants<br>• 76 residential nonparticipants<br>• 70 commercial nonparticipants |
| SCE 2519 | Ventura County Partnership | • 3 utility staff<br>• 10 partner agencies<br>• 5 residential participants<br>• 78 commercial participants<br>• 79 commercial nonparticipants |
| SCE 2529 | County of Riverside | • 2 utility staff<br>• 1 partner staff<br>• 1 facilities manager |
| SCE 2522 | South Coast—Santa Barbara | • 3 utility staff<br>• 2 partner organization staff<br>• 6 local government staff<br>• 69 residential participants<br>• 77 residential nonparticipants |
| SCE 2525 | San Gabriel Valley | • 4 utility staff<br>• 2 partner staff<br>• 2 program implementer staff<br>• 4 facilities managers<br>• 23 commercial participants<br>• 75 commercial nonparticipants |
| SCE 2530 | UC/CSU program | • 3 utility staff<br>• 2 UC/CSU state staff<br>• 2 implementation contractor staff<br>• 8 campus energy managers |
| SCE 2526 | California Community Colleges Program | • 3 utility staff<br>• 2 CCC state staff<br>• 1 implementation contractor<br>• 7 campus facility managers |

| Program Name | | Interviews |
|---|---|---|
| SCE 2527 | CDCR Rehabilitation Program | • 2 utility staff<br>• 3 CDCR staff<br>• 6 ESCOs<br>• 5 facility managers |

## 2.3 SECONDARY DATA ANALYSIS ACTIVITIES

In addition to conducting primary research, PA's evaluation team reviewed a significant number of background documents and reports on individual programs and the portfolio overall. The materials reviewed include:

- SCE's *Energy Efficiency Partnerships Desk Procedures Manual*
- SCE's filings with the CPUC regarding its 2006–2008 program portfolio including SCE's quarterly and monthly reports on the Energy Efficiency Groupware Application (EEGA) website
- The relevant program implementation plans
- Program application materials and forms
- Program marketing materials, where appropriate
- Partnership websites, when applicable
- Evaluation reports from the 2004–2005 program cycle, when available
- Call for abstracts for the 2009–2011 partnership cycle
- CPUC straw man for the 2009–2011 partnership cycle
- SCE's Affinity Model for Partnerships for the 2009–2011 program cycle

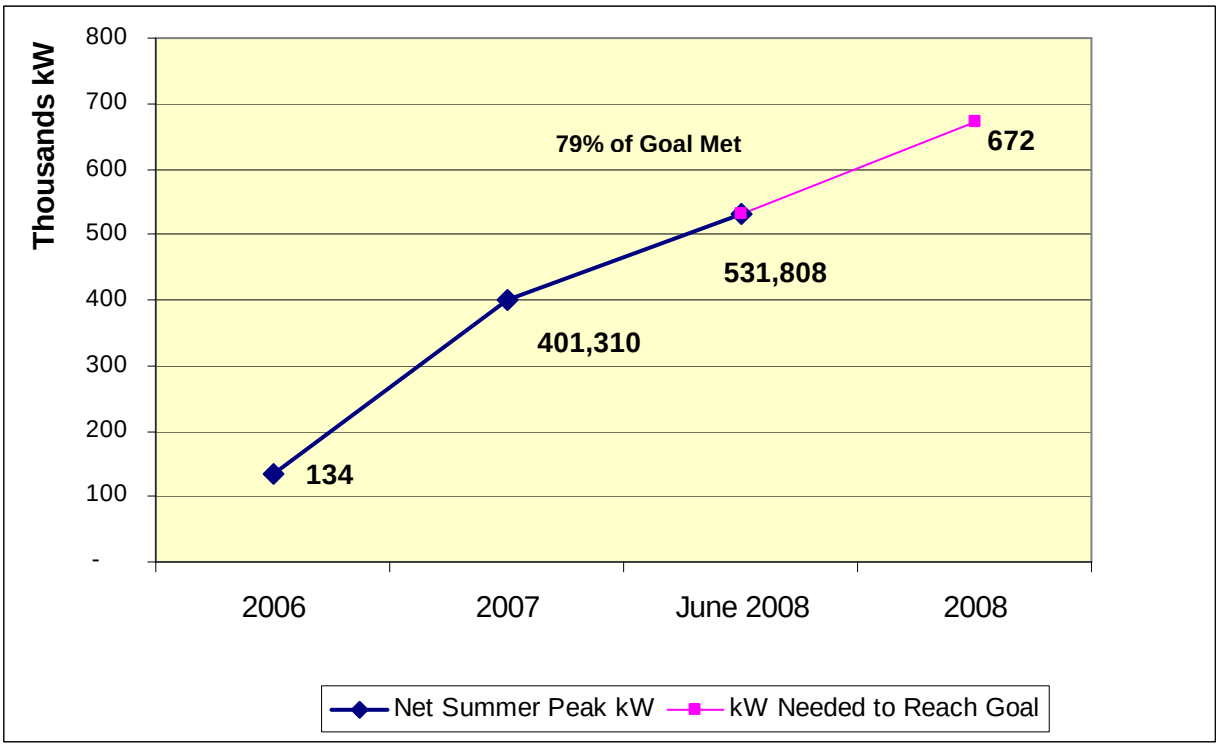
# 3. PORTFOLIO-LEVEL DATA

This chapter presents the portfolio-level data for 2006–2008 SCE Local Government and Institutional Partnership Programs. First, the portfolio-level data regarding direct resource savings are presented for the overall portfolio and then comparatively by partnership program. Then we present overarching partnership-level participant and nonparticipant survey results.

## 3.1 ENERGY SAVINGS FOR SCE PARTNERSHIP PROGRAM PORTFOLIO

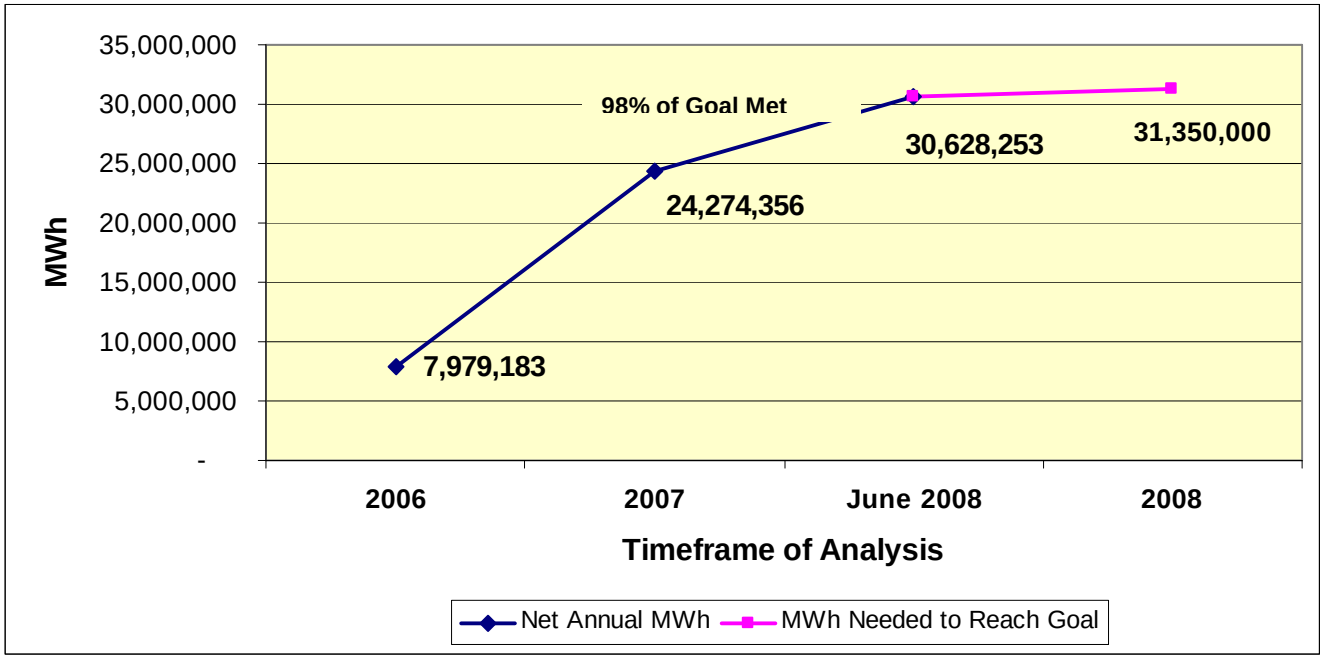
The SCE Partnership Portfolio is well on its way to meeting, and possibly exceeding, both its net summer peak kW savings and net kWh savings for the 2006–2008 cycle. By June 2008, with 31 of the 36 months of the cycle (86 percent of the cycle), the kW savings goal was 79 percent met and the KWh savings goal was 98 percent met (See Figures 3-1 and 3-2 respectively[7]).

**Figure 3-1 Progress Towards New Summer Peak Goal (kW) for SCE Partnership Portfolio**




[7] *SCE 2006–2008 Portfolio Summary Report*. May 2008. Table 1.5, Portfolio Impacts-Cumulative.

**Figure 3-2 Progress Towards Energy Saving Goal (MWh) for SCE Partnership Programs**




## 3.2 ENERGY SAVINGS FOR INDIVIDUAL SCE LOCAL GOVERNMENT AND INSTITUTIONAL PARTNERSHIP PROGRAMS

Nine out of the twelve programs have specific resource savings goals. In reviewing the data available by June 2008, SCE's 2006–2008 Local Government and Institutional Partnership Programs Portfolio is in line to meet resource savings goals in most of these programs.

Figures 3-3 and 3-4 show the status of SCE's partnerships against their kW demand reduction and kWh energy-savings goals.[8] The figures present the cumulative savings as of June 2008 in relation to the 2006–2008 partnership program budget and goals. Analysis of reported data is helpful in identifying the strongest and weakest performers from the standpoint of energy savings.

**Strongest Performers**

- UC/CSU and Ventura County Partnerships are the most successful in their progress towards 2006–2008 program goals and are likely to exceed their goals (both kW and kWh) by the end of the program cycle.

[8] Since not all partnerships have resource goals, the figures include only those programs for which a particular metric is relevant.

- The Bakersfield-Kern Partnership[9] and Community Energy Partnership have demonstrated strong performance by achieving over 50 percent of their stated goals both in demand reduction and energy savings.
- The San Gabriel Partnership is on target to meet their program goals and has reached 75 percent of its kWh savings.
- The CCC partnership, which stands out due to the sheer size of the educational facilities and energy-saving potential, has made commendable progress in achieving 51 percent and 44 percent of its kWh and kW targets.

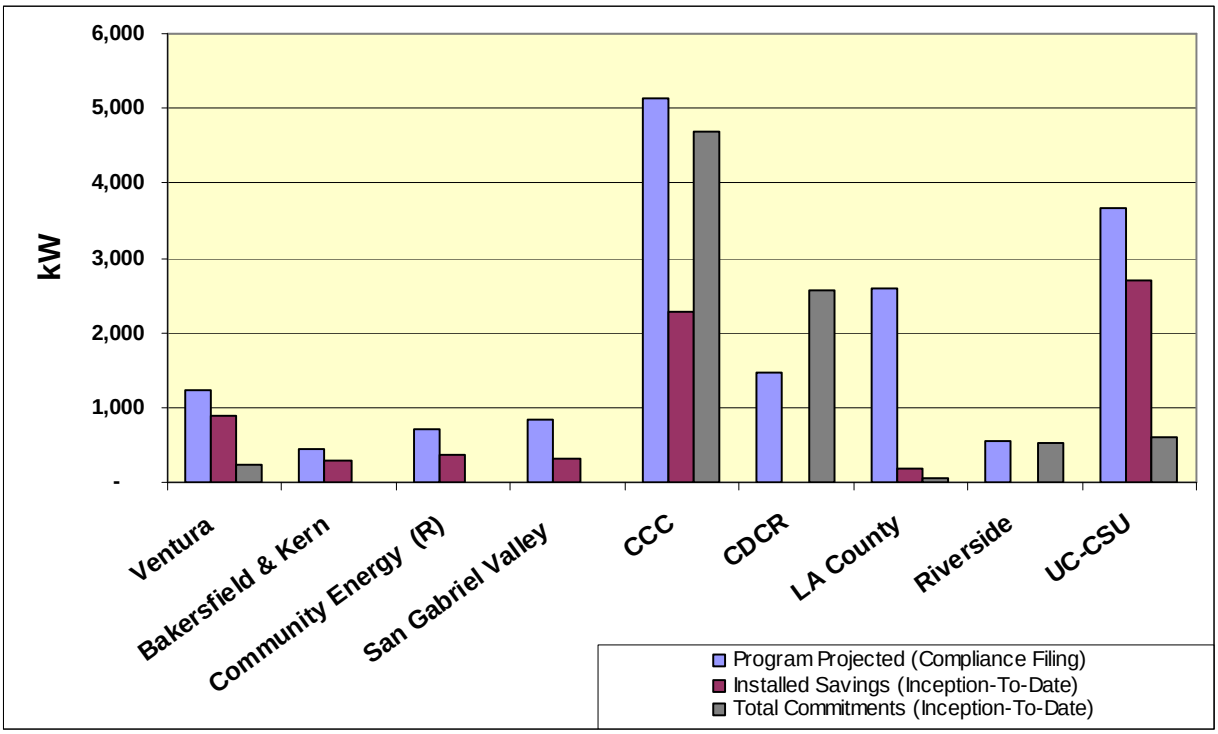
**Weakest Performers**

- As of June 08, Riverside County Partnership has achieved one percent of its kWh goals and no demand reduction results have been reported. While the program has made progress since then, the largest identified retrofit project will not realize energy savings until 2009.
- Despite having committed almost all program funds, The CDCR partnership has not reported any energy savings or peak-demand reduction. Most of its projects are still in planning and implementation phase. Again, the program has identified several projects that will realize savings, but not until 2009.

As Figure 3-4 illustrates, Ventura County and UC/CSU are close to meeting demand reduction goals. The Riverside County Partnership has not reported any kW demand reduction results. The same applies to the CDCR Partnership, which did not post any kW summer peak reductions as of June 2008; however, the total kW commitments are exceeding targets by 76 percent.

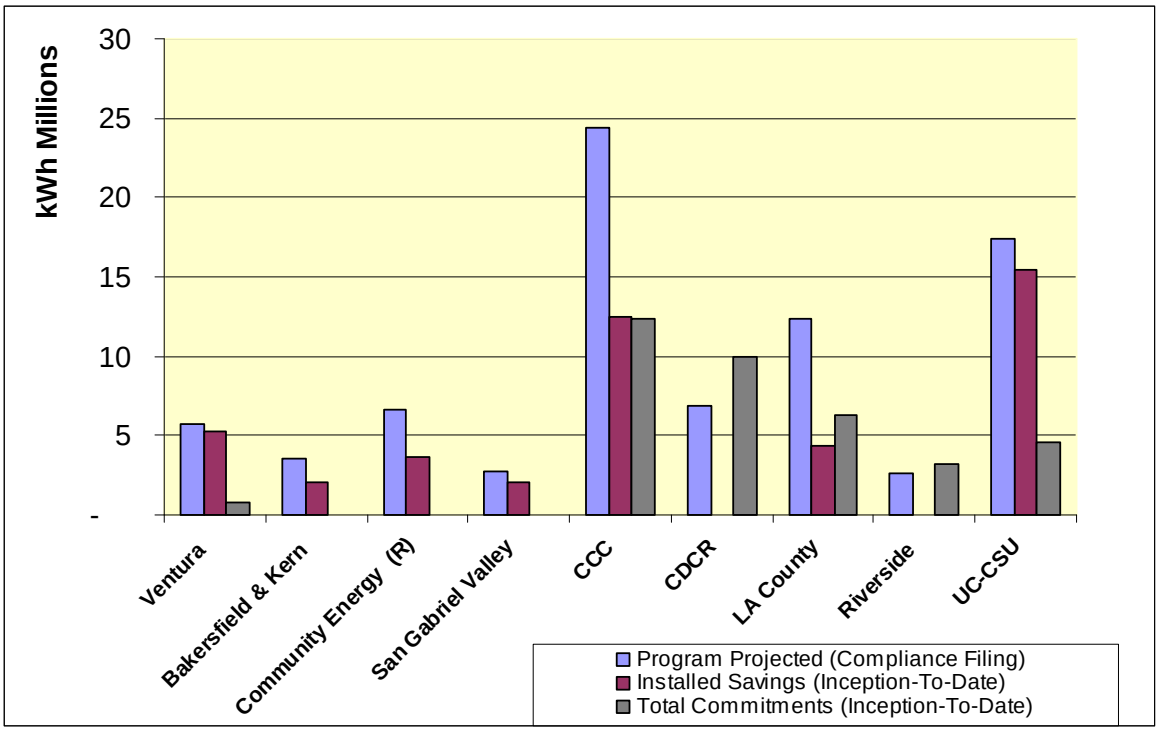
[9] Bakersfield and Kern Partnership was falling short of its goals during the first quarter of 2008, however the program has managed to successfully overcome implementation barriers and is expected to be on target prior to the end of 2008.

**Figure 3-3 Progress Towards Summer Peak Goals (kW) for SCE Partnership Programs**




A review of the net annual kWh savings provides a similar picture (Figure 3-5). In terms of net annual kWh savings, the Ventura County and UC/CSU programs are very close to meeting or even exceeding their goal. The Bakersfield-Kern, Community Energy and San Gabriel Valley programs also appear to be on target. Conversely, the Riverside County Partnership Program is not on track to meet its goals unless all committed projects are completed in 2008. Nor is the CDCR Partnership Program, which has not achieved any kWh energy savings; however, the program may exceed its goals if the total committed projects are implemented.

**Figure 3-4 Progress Toward Energy Savings Goals (kWh) for SCE Partnership Programs**



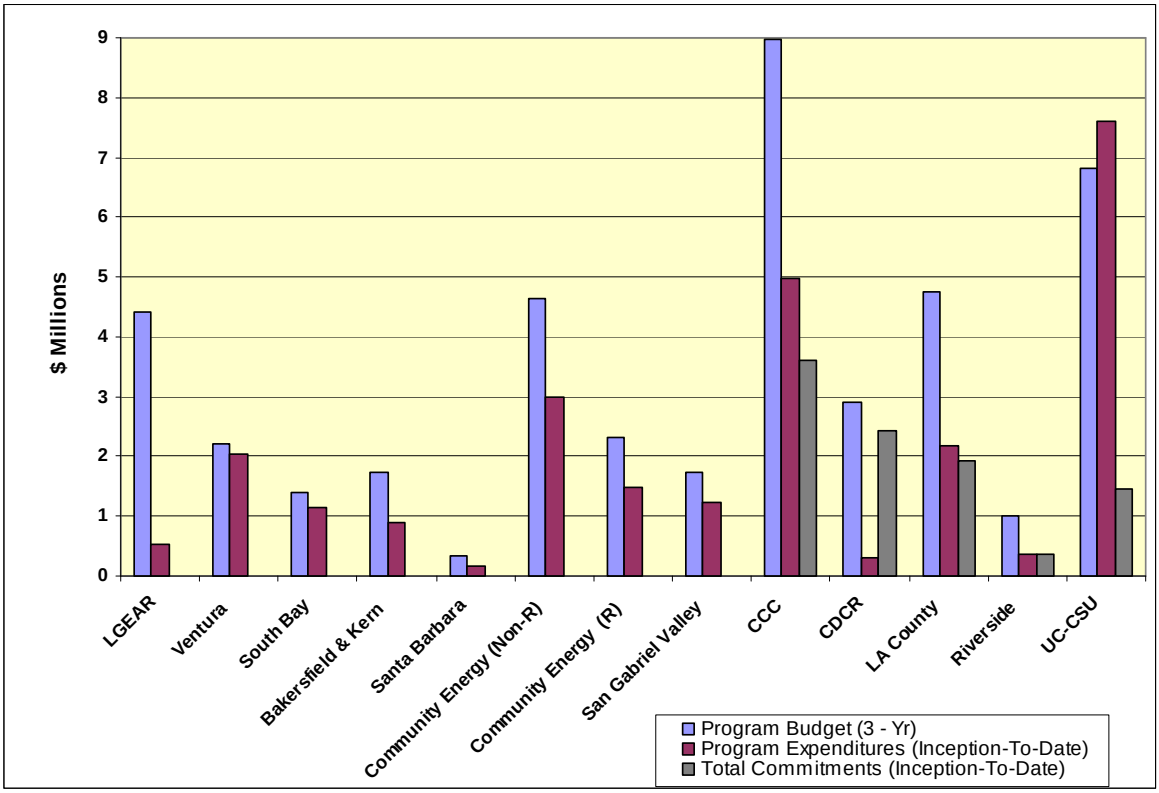

## 3.3 PARTNERSHIP EXPENDITURES

Figure 3-5 shows expenditures per partnership program relative to their budget for the 2006–2008 cycle. Nine out of the twelve SCE partnership programs have already spent significant amounts of their budgets (anywhere from 50 percent to 111 percent). This is particularly notable for the South Bay (83 percent), Ventura County (93 percent), and UC/CSU (which has spent 11 percent *over* its $6.8 million budget) partnership programs.

The UC/CSU Partnership is the second largest program budget after the CCC Partnership. The CCC partnership reports that 55 percent of its $8.9 million program budget has been spent and an additional 40 percent has been committed. The LA County Partnership and the County of Riverside Partnership have considerable portions of their program budgets committed (41 percent and 36 percent).

On the other end of the spectrum are LGEAR and CDCR that have hardly tapped into the available funding (12 percent and 10 percent). However, an additional 84 percent of the total program funding for CDCR ($2.9 million) is committed.

**Figure 3-5 SCE Partnership Program Expenditures and Total Commitments against Budgets**




## 3.4 SUMMARY SURVEY FINDINGS

The participant and nonparticipant surveys were conducted with residential and small commercial customers. Topics covered included their views on energy efficiency and program satisfaction. This section presents findings from these surveys and represents participants and nonparticipants of various Local Government and Institutional Partnership Programs.

### 3.4.1 Reliable Providers of Services and Information

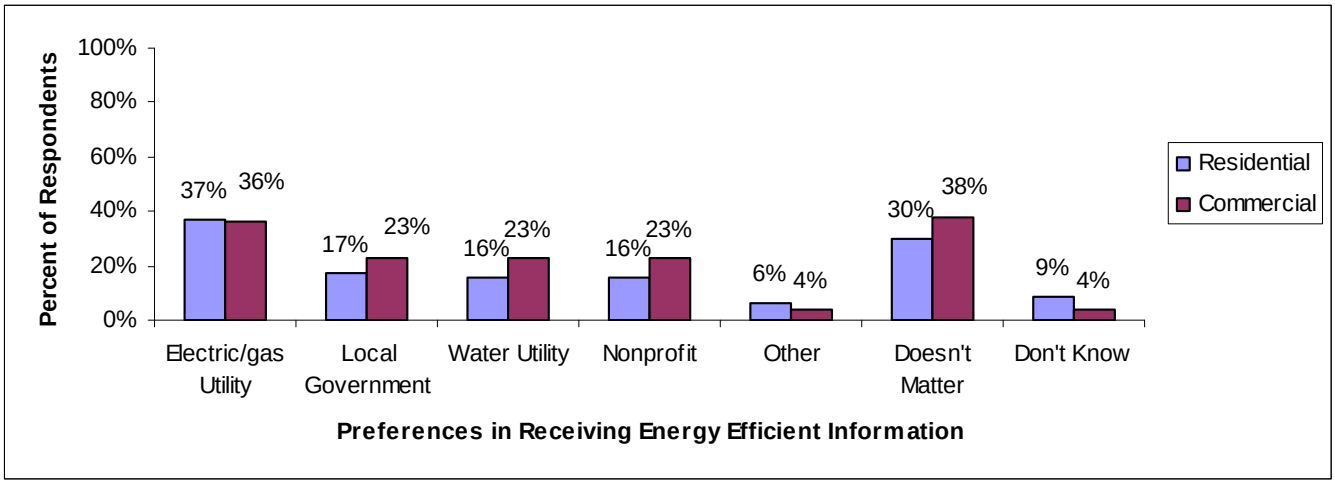
***For both residential and small commercial customers, SCE is a preferred and trusted source for energy-efficiency information.***

PA researchers asked all survey respondents about their preferences for energy-efficiency services and information (Figure 3-6). Thirty-seven percent of residential survey respondents prefer to receive energy-efficiency services from SCE. Seventeen percent prefer to receive services from a local government and sixteen percent from a nonprofit agency. However, approximately another third of residential customers (30 percent) did not have a preference about the provider of energy-efficiency services.

Similarly, about a third of commercial respondents surveyed (36 percent) would prefer to receive energy-efficiency information and services, such as those offered in the partnership

programs, from the utility. Twenty-three percent would prefer to receive information from local government, twenty-three percent from a non-profit group, and thirty-eight percent do not have a preference.

**Figure 3-6 Preferences in Receiving Energy Efficient Information**




Source: Residential participant and commercial participant surveys (2008), question PD1

When asked if various organizations differed in their ability to provide energy-efficiency information and services, over half agreed there was a difference (52 percent of commercial customers and 56 percent of residential customers). According to one residential customer:

> *"The government may have more ability, but they may not be doing anything. The utilities may have more knowledge."*

Small business customers voiced the same sentiment, with over a third of these respondents preferring to receive information related to energy efficiency and water conservation from a utility. According to two commercial customers:

> *"I think the utility companies have more knowledge based on experience."*

> *"Utilities are providing the service. Some are a little more aggressive than others. SCE seems to be leading the field."*

### 3.4.2 Energy Efficiency of Residential Buildings

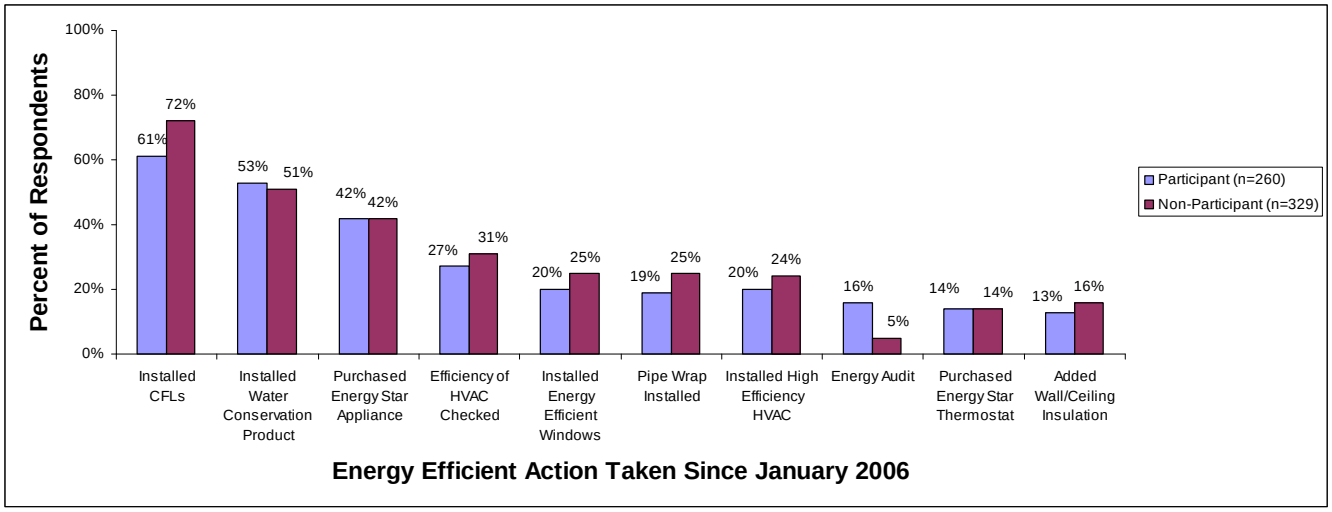
***SCE's residential customers in partnership areas are fairly energy conscious with the majority of customers reporting haven taken some energy efficient action. The survey results indicate the partnership programs may have reached people who had taken fewer energy-efficiency actions on their own than nonparticipants. To the extent that is the case, this is a strong accomplishment.***

Residential program participants and nonparticipants interviewed claim to have taken a variety of energy-efficiency actions in the past two years (Figure 3-7). The most common actions taken by both participants and nonparticipants in the partnership programs were

installing CFL or energy efficient lighting, purchasing ENERGY STAR® appliances and installing water conservation products.

Nonparticipants appear more likely to say they took energy-efficiency actions since January 2006. This could suggest that the partnership reached customers who were less energy efficient than nonparticipants, although the only statistically significant difference is that a higher percentage of non-participants reported having installed CFLs.

**Figure 3-7 Energy Efficient Action Taken Since January 2006**

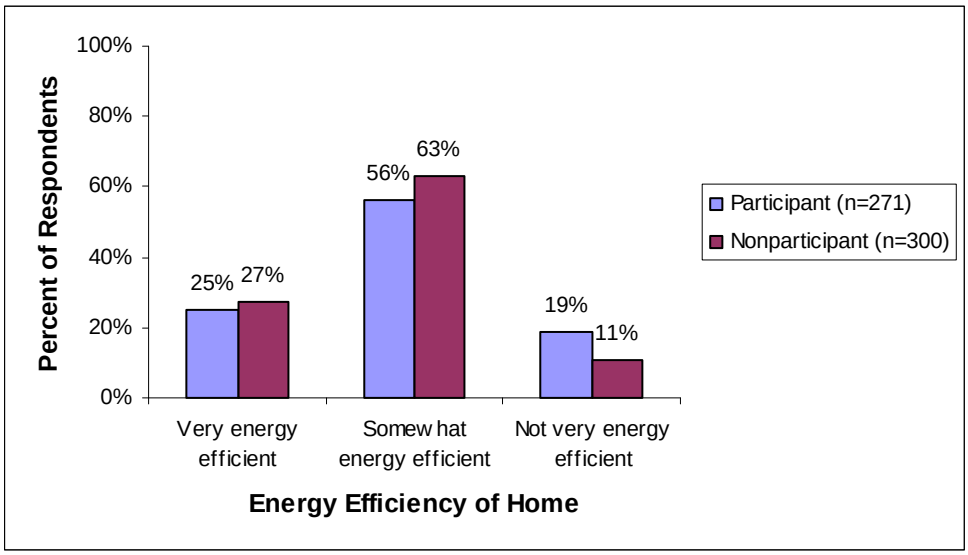



Source: Residential participant and residential nonparticipant surveys (2008), question EE1

***There is evidence that the partnership programs attracted participants who needed energy-efficiency assistance the most.***

Participants feel their homes are less efficient than nonparticipants as exhibited by the fact that they are less likely to say that they are very or somewhat energy efficient and more likely than nonparticipants to say that they were not very efficient. Although the differences are not statistically significant (chi square=7.565 (p ~=0.11) the trend is there. One interpretation of these data is that the partnerships attracted those people who knew they needed efficiency the most.

**Figure 3-8 Energy Efficiency of Home**




Source: Residential participant and residential nonparticipant surveys (2008), question U1A

### 3.4.3 Customer Satisfaction[10]

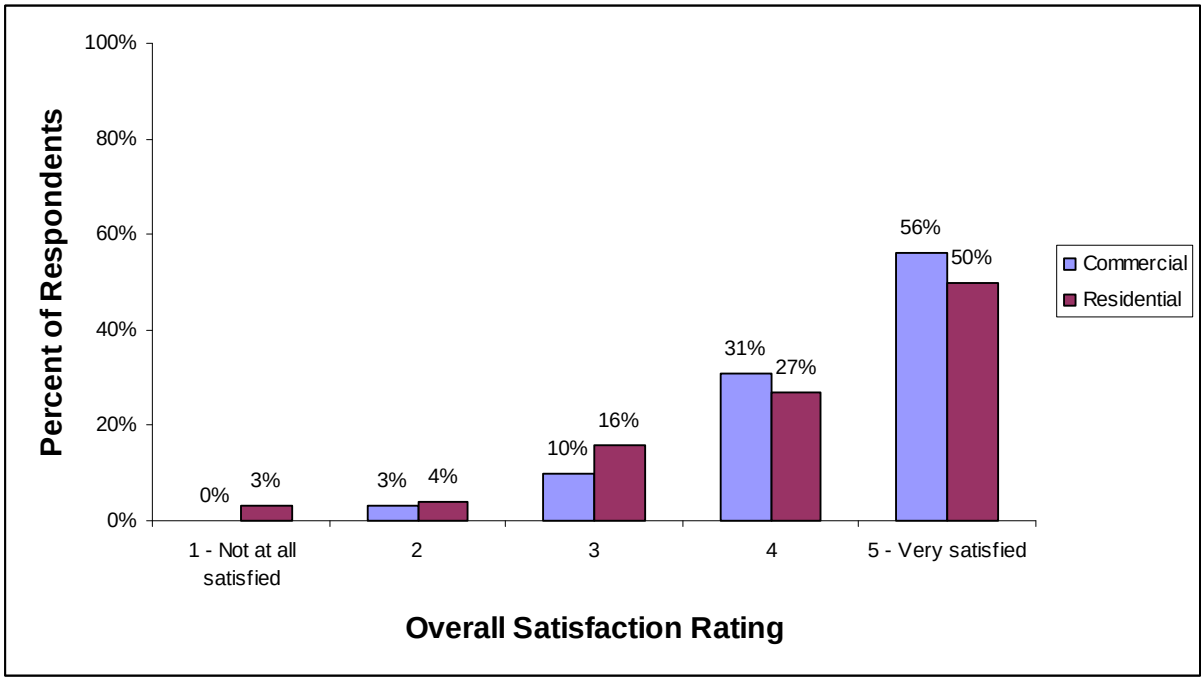
***Both residential and commercial participant satisfaction with SCE's partnership programs are high.***

***In addition, partnership program efforts have increased customers' satisfaction with both SCE and the local government or institutional partner.***

Participants generally voiced high levels of satisfaction with the partnership programs. When asked to rate their satisfaction, approximately half of both residential respondents (50 percent) and commercial respondents (56 percent) said they were very satisfied with the partnership program.

[10] Source: Residential and commercial participant survey (2008), question GP1.

**Figure 3-9 Overall Satisfaction Rating**




Source: Residential participant and residential participant surveys (2008), question GP1

Furthermore, as a result of the program experience, all of the residential participants interviewed said they were either more satisfied or just as satisfied with the SCE partner organization. Similarly, commercial customers stated they were very satisfied with SCE as a result of participating in the program. Forty-eight percent said that they were more satisfied while 49 percent said that they have the same level of satisfaction.

Respondents were then asked about their experience with the relevant partnership. Below are responses from several respondents on their experience with the partnership.

**Commercial**

> *"It was a blessing; he saved me money for something I wanted to do anyway but hadn't." (Bakersfield-Kern)*
>
> *"The info was provided clearly and the gentleman answered a lot of questions and he had a lot of supporting handouts." (Ventura County)*
>
> *"They did exactly what they said they were going to do. They replaced all the bulbs with no cost to me and a lower cost down the road...they did what they promised." (Bakersfield-Kern)*
>
> *"It seemed like they really wanted to help you. They didn't just throw information at you and then get you to leave. They are a very helpful group" (South Bay)*

**Residential**

> *"I appreciate the fact that someone else is willing to provide something with benefit. It was no cost to me." (Bakersfield-Kern)*
>
> *"The way the men approached me and made me feel very comfortable…they were knowledgeable… that the change would be more energy efficient in the long run." (Bakersfield-Kern)*
>
> *"I am very impressed that they did something like that. It cost them money but they did it to save energy, and to do it as a service instead of charging you." (Community Energy Partnership)*
>
> *"The product came in a brown paper bag. Everything in it was recyclable; that was nice" (South Coast)*

### 3.4.4 Referrals into Other Programs[11]

***Thirty-one percent of eighty commercial participants interviewed report receiving information about other SCE programs, a quarter of these have signed up for the programs to-date.***

***The survey results suggest limited effectiveness of program referral information for residential customers.***

As part of some programs, participants received materials or application forms for other utility programs. Thirty-one percent of commercial respondents said that they received this type of material. Of those who received the material, 25 percent have signed up for the other utility programs. This percentage will likely grow over time because of the large percentage of commercial customers who are now aware of the program. It also takes time from gaining information to taking an action such as participating in a program.

Residential respondents were less likely to say they received information about other programs than commercial customers. Thirty-one percent of residential customers received information about other utility programs. The percentage of residential customers who received information and then signed up for programs was lower than commercial as well. Sixteen percent of those who received information, in turn signed up for the utility programs.

Since most of the partnerships reported distributing information to residential as well as commercial customers, it is unclear if fewer residential customers received information than commercial customers did, or if residential customers are just less cognizant of the information they received. It is possible that commercial customers are more interested in energy efficiency—in some cases their job may involve energy use and management—and therefore take more heed of information provided. However, another possibility is that commercial customers are better targets for referrals to SCE's programs. Our hypothesis is that it is likely a combination of these two factors.

[11] Source: Residential and commercial participant surveys (2008), question M1.

### 3.4.5 Nonparticipant Interest in Program

***There is a modest level (25 percent or less) of customer awareness of the partnership programs among nonparticipants. While the majority of commercial customers are very or somewhat interested in participating in the partnership program, over half of residential customers are not and report a variety of barriers to participation.***

As part of the nonparticipant survey, PA's researchers described the relevant partnership program and asked nonparticipants if they had heard of the program. As Table 3-1 below shows, for two of the partnership programs (Bakersfield-Kern and South Bay) commercial respondents were more likely to have heard of the program than residential customers.

Awareness was highest for the Community Energy Partnership for residential nonparticipants. There was no statistical difference in the awareness of residential and commercial customers for the Community Energy Partnership.

Community Energy Partnership, Bakersfield-Kern, and South Bay experienced similar rates of awareness for commercial nonparticipants.

**Table 3-1 Percentage of Partnership Nonparticipants Interviewed Aware of Program**

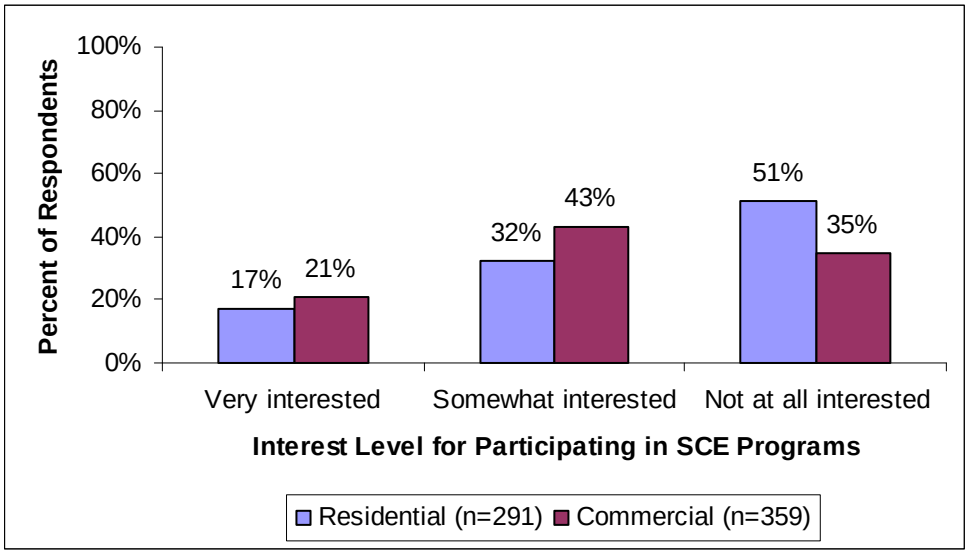
| Program | Residential Respondents | Commercial Respondents |
|---|---|---|
| **Community Energy Partnership** | 26% (n=76) | 24% (n=71) |
| **Bakersfield-Kern** | 10% (n=77) | 27% (n=73) |
| **South Bay** | 11% (n=75) | 29% (n=66) |
| **South Coast** | 11% (n=72) | NA |
| **San Gabriel** | NA | 14% (n=74) |
| **Ventura County** | NA | 14% (n=78) |

Source: Residential nonparticipant and commercial nonparticipant surveys (2008), question NP1

Researchers then asked nonparticipants to rate their level of interest in participating in the program. Commercial respondents demonstrated more interest in the program than residential respondents did. Twenty-one percent of commercial respondents said that they were very interested in the program and 43 percent said that they were somewhat interested.

Residential respondents, on the other hand, were more likely to show no interest. Half (51 percent) of residential respondents said that they were not at all interested in participating in the program.

**Figure 3-10 Interest Level for Participating in SCE Programs**



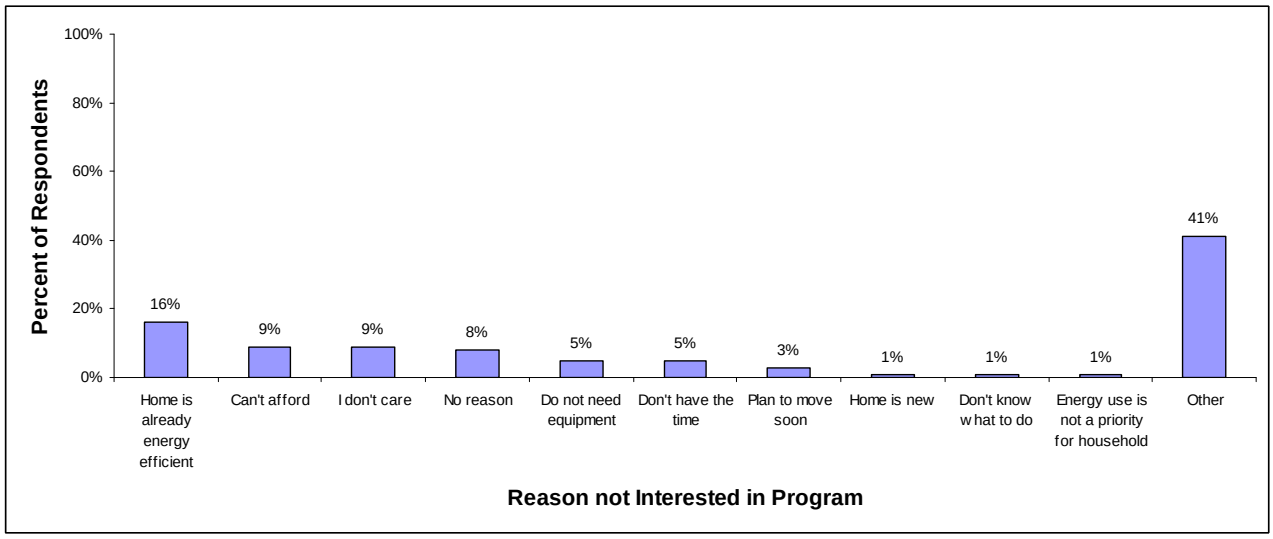

Source: Residential nonparticipant and commercial nonparticipant surveys (2008), question NP3

### 3.4.6 Residential Customer Barriers to Participation[12]

As a follow-up for those indicating that they are not at all interested in participating in the program, respondents were asked why they were not interested in receiving the services from the various programs. The main reason residential respondents cited for not wanting to participate in a program was because they believe that their home was already energy efficient (16 percent).

[12] Source: Residential nonparticipant survey (2008), questions NP1–NP6.

**Figure 3-11 Reason not Interested in Program (n=149)**




Source: Residential nonparticipant survey (2008), question NP4

Reasons for lack of program interest also varied amongst the different SCE programs available. Community Energy Partnership and South Bay Partnership program respondents were most likely to say they did not care about participating in the program (thirteen percent respectively). Only three percent of Bakersfield-Kern residential respondents mentioned not caring about program participation. Several respondents also indicated that they were too busy and did not have time to participate in the program—a commonly reported barrier for energy-efficiency program participation.

After hearing the description of the programs, some respondents eligible for the direct install or audit programs said that they did not want anyone in their home and they wanted their privacy (Bakersfield-Kern and South Coast). Several of the elderly residential respondents also gave their age as a reason for not being interested—they either reported disabilities or stated that the partnership was too much work for someone their age and they did not want to learn about the new technologies.

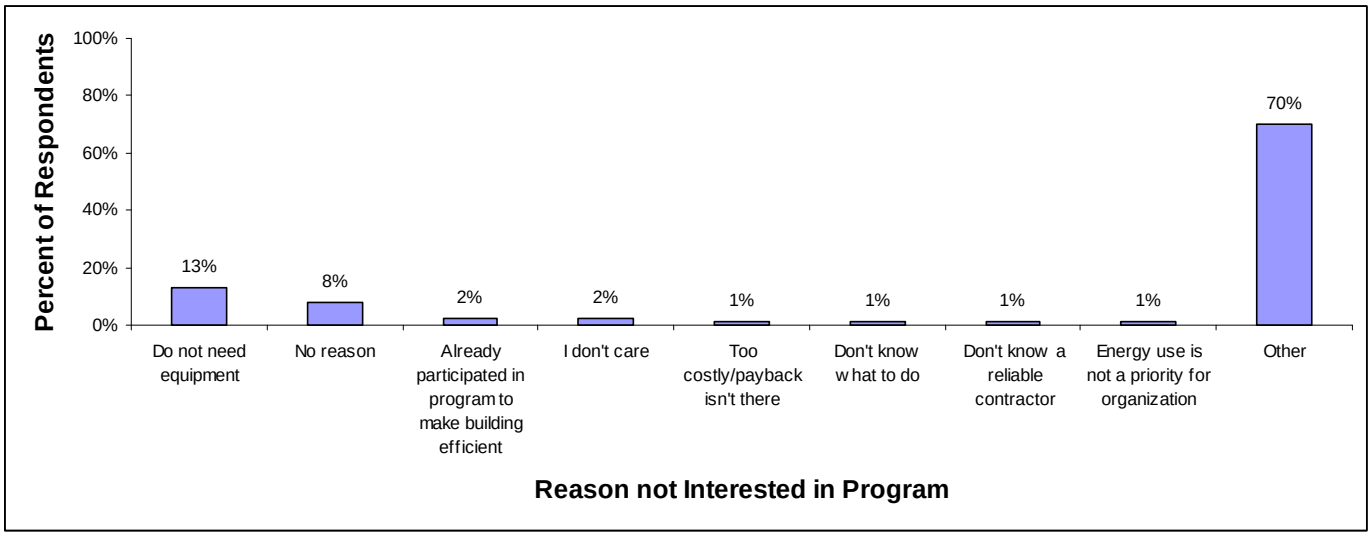
Residential customers who said they were not at all interested in program participation listed a few other reasons that they did not want to participate:

> *"We can provide for ourselves and I'd rather have you provide for people who cannot provide for themselves." (Bakersfield-Kern)*
>
> *"I already did an online audit so I know what I have to do to improve efficiency." (South Bay)*
>
> *"Is not applicable, most of control is in management's hands [apartment]." (South Bay)*

### 3.4.7 Commercial customer barriers to participation[13]

When commercial respondents were asked why they were not interested in participating in the SCE program, nearly eight percent of respondents from each program did not give a specific reason or indicated that they did not know why they were not interested in program participation.

**Figure 3-12 Reason not Interested in Program (n=127)**




Source: Commercial participant survey (2008), question NP4

One of the main reasons given by commercial respondents for not wanting to participate in the program was that they did not need the equipment (13 percent overall). This was noted by nearly 30 percent of Bakersfield-Kern, ten percent of Community Energy Partnership, six percent of San Gabriel, and five percent of South Bay respondents that were not interested in participating in the program.

The size of the business seemed to be another factor for commercial respondents. Several respondents noted that their business was too small to benefit from an energy-efficiency program. They felt that since only minimal changes could be made, the business employees could make them. However, this is a misperception barrier since smaller retrofits often yield good kWh savings and fast payback for customers.

Commercial respondents that were part of large corporations reported that internal bureaucracy was a barrier. These respondents frequently said that they would have to get program participation approved by corporate prior to participation.

Below are a few responses from commercial participants stating why they were not interested in participating in a partnership program.

[13] Source: Commercial non-participant survey (2008), questions NP1–NP6.

*"Our building is already energy efficient. We have won awards for this." (San Gabriel)*

*"We cannot spend time on training." (San Gabriel)*

*"We are already in the process of changing all of our lighting and things and we are possibly looking into changing locations." (South Bay)*

Understanding these views of program nonparticipants can help programs think through their outreach strategy. For example, larger companies may need more assistance to sell program participation to upper management. And programs may need to explain the benefit of program participation to smaller customers as well as provide them an easy way to participate. For this reason, direct install programs have frequently been a successful mechanism for serving smaller commercial customers.

### 3.4.8 Program Penetration[14]

***The nonparticipant sample indicates good levels of program penetration for commercial customers, less program penetration for residential customers.***

The sample for the nonparticipant portion of the study was drawn from a random selection of SCE customers using zip codes to determine in which partnership programs they are eligible to participate. Eighteen percent of the commercial customers who were surveyed and eligible said they already participated in the program. This was most prevalent for South Bay, with 26 percent stating they have already participated in the program.

**Table 3-2 Previously Participated in Program (n=455)**

| Program | Percent |
|---|---|
| South Bay | 26% |
| Bakersfield-Kern | 23% |
| Energy Coalition | 21% |
| San Gabriel | 11% |
| Ventura | 7% |

Source: Commercial nonparticipant survey (2008), question NP2

Because the nonparticipant sample was a scientific, random sample of nonparticipants, we can generalize from the results that program penetration for commercial customers is around eighteen percent of the commercial customer population

Residential customers were less likely to say they participated in the program. Only four percent of residential customers had previously participated in the program. These results indicate program penetration is less than five percent for the residential population.

[14] Source: Commercial and residential non-participant surveys (2008), question NP2.

**Table 3-3 Previously Participated in Program (n=340)**

| Program | Percent |
|---|---|
| Bakersfield-Kern | 6% |
| Energy Coalition | 5% |
| South Coast | 2% |
| South Bay | 1% |

Source: Residential nonparticipant survey (2008), question NP2

### 3.4.9 Commercial Customers Installation and Purchasing Decisions

***Reaching corporate decision-makers is critical for commercial customers with more than one location. Energy is a key factor in equipment purchasing decisions.***

PA asked the commercial customers with more than one location, about the level at which equipment purchase and installation decisions are made in their organizations (Table 3-4). Decisions were rarely made at the regional level. Most decisions were made at the corporate or the local and location level.

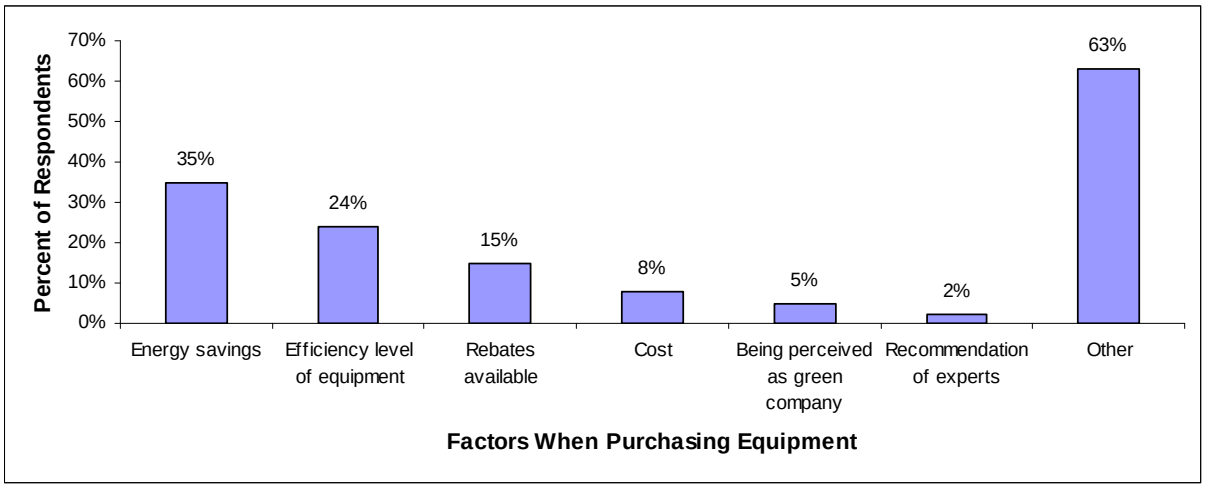
**Table 3-4 The Level at which Decisions to Install and Purchase are Made**

| | Corporate level | Regional level | Local level | Location level | Other |
|---|---|---|---|---|---|
| **Bakersfield-Kern (n=20)** | 25.0% | 10.0% | 20.0% | 25.0% | 20.0% |
| **Energy Coalition—Tune-Up (n=12)** | 33.3% | 0.0% | 16.7% | 33.3% | 16.7% |
| **San Gabriel Valley (n=13)** | 30.8% | 0.0% | 53.8% | 7.7% | 7.7% |
| **South Bay (n=43)** | 23.3% | 4.7% | 41.9% | 14.0% | 16.3% |
| **Ventura County (n=38)** | 26.3% | 7.9% | 36.8% | 18.4% | 10.5% |

Source: Commercial participant survey (2008), question O2

Commercial customers were also asked what factors are considered when purchasing energy efficient equipment during a remodel or new construction. Energy savings was the biggest factor, which was indicated by 35 percent of respondents (Figure 3-13). Businesses also looked into the efficiency level of equipment prior to making energy efficient purchases (24 percent). Over half of respondents reported other factors. These included quality of the product or brand, client's preference, product performance, and the life of the product.

**Figure 3-13 Factors when Purchasing Energy Efficient Equipment (n=217)**




Source: Commercial participant survey (2008), question O4

# 4. UC/CSU PARTNERSHIP PROGRAM

## 4.1 INTRODUCTION

The state of California houses 23 California State University (CSU) and 10 University of California (UC) campuses. Ten campuses are in SCE's service territory. These systems consume a significant amount of energy and represent a significant portion of the energy use in the state[15], which partners recognize as an opportunity for energy-efficiency improvements.

The UC/CSU program began during the 2004–2005 cycle to overcome the barriers universities faced when trying to participate in utility energy-efficiency programs. The partnership's success during the 2004–2005 program cycle led to its inclusion during the 2006–2008 program cycle. The success of this partnership also led to the creation of the CCC and CDCR Partnership partnerships for the 2006-2008 program cycle (described in Chapters 6 and 7).

The UC/CSU program is a statewide partnership that includes all four of the state's investor-owned utilities as well as all fourteen of the campuses within the University of California and California State University systems. SCE is the lead utility. The program offers incentives for energy efficient retrofits and monitoring-based commissioning (MBCx), along with training for campus facility staff.

The program is one of the more ambitious partnership programs, with a significant statewide 2006–2008 budget of $40 million, $6.8 million of which is allocated to SCE. SCE's goal for the 2006–2008 program includes energy savings of 2.6 million kWh and 0.55 MW peak demand.

## 4.2 PROGRAM BACKGROUND AND STRUCTURE

### 4.2.1 Program Description

The university systems are run out of central offices—the University of California Office of the President (UCOP) and the California State University Chancellor's Office (CSUCO). Both central offices are directly involved in developing system-wide budgets and work closely with the respective campuses in each system. SCE has one staff person dedicated to the UC/CSU and CCC Partnership Programs.

The program concept includes three major components—energy-efficiency retrofits, monitoring-based commissioning, and energy-efficiency education and training.

1. **Energy-efficiency retrofits.** Retrofit efforts include lighting and controls, HVAC systems, and energy-management controls. According to interviews, the majority of the savings are realized through the retrofit component of the program. Retrofits need to be deemed cost-effective to be considered for installation.

[15] SCE 2530, UC/CSU/IOU Energy Efficiency Partnership, program implementation plan (PIP) per the EEGA website.

2. **Monitoring-based commissioning (MBCx).** The monitoring-based commissioning reviews building operations and installation of the equipment. The service goes beyond this traditional definition in several ways. First, the installations provide a built-in measurement and verification capability. Additionally, it provides education necessary to identify further energy-efficiency investment opportunities and become a "continuous commissioning" program and sustain savings.
3. **Energy-efficiency education and training.** This non-resource component of the program provides education and information dissemination to UC/CSU campus managers, project managers, and staff. The partnership's training component has three sub-components:
   a. Courses held directly by the partnership, most of which are run internally on the campuses on such issues as MBCx
   b. External courses on such topics as LEED and Building Operator Certification (BOC), for which participants are reimbursed
   c. Attendance at the annual sustainability conference, at which one campus receives an annual best practices award.

The UC/CSU partnership is supervised by a management committee that consists of representatives from each of the four utilities, the UCOP and the CSUCO. SCE, as lead utility, employs the statewide program administrative manager. The firm of Newcomb, Anderson, McCormick (NAM) was hired as the program administrative manager through a competitive bidding process. NAM coordinates bi-weekly management meetings with the management committee via teleconference and in-person meetings every few months.

Campus facility managers identify potential projects on their campuses, and then work with the UCOP and the CSUCO to obtain funding. The partnership pays up to 80 percent of the cost, depending on the energy savings associated with qualifying measures. The remainder comes from the campus budget.

Once the UCOP/CSUCO has signed off on a potential project, it goes through a due diligence review by SCE. The results of that review then go back to the campus, and any proposed project over $70,000 receives a pre-inspection. The next step is a review by the full management team, which must approve the project before work begins. Once the project is approved, SCE signs an agreement with the campus, and work proceeds on the project. The agreement includes a schedule. Campuses receive 60 percent of the projected rebate when work begins and 40 percent after the project has been completed and passed inspection.

### 4.2.2 Program Logic Model and Implementation Theory

According to the logic model provided in Appendix A, Figure A-1, the UC/CSU's main activities include education, training, and energy projects. These activities are to result in six outputs: (1) a best practices manual, (2) training via workshops, (3) outreach programs on all 14 campuses, (4) development of an Energy Services Company (ESCO) infrastructure, (5) project file review, and (6) paperwork and incentive facilitation.

### 4.2.3 Data Tracking

NAM is responsible for maintaining the program tracking system and database. The tracking system details the status of projects over the life of the program cycle. The online tracking

system also includes a document library with all program records and a system that tracks each project's progress from design to completion.

All partners have access to the project tracking system, but its use varies by utility. Partners can use it to run a variety of reports at any time. SCE keeps electronic binders on both UC/CSU and CCC programs to track their progress.

## 4.3 KEY FINDINGS

***The partnership is on track to meet its energy goals.***

The program's projected energy savings for the three program years is 2.6 million kWh and 0.55 MW peak demand. The program is on track to meet goals by end of 2008, and may exceed its goals for SCE. As of June 2008, the program had reported 15.4 million kWh energy savings, which represents 88 percent of the target savings.

***The UC/CSU Partnership Program, recognized by a national organization as an exemplary program, is well subscribed to in terms of education components of the program. Interviews revealed that SCE and UC/CSU coordination has been a contributor to the program's performance.***

The UC/CSU Partnership program is running well. The ACEEE documented it's success in the report, *Exemplary Energy Efficiency Program*[16]. According to the report, "The program is effectively transforming the California commissioning marketplace as many of these professionals [referring to engineers, consultants, and campus facility staff] have carried their knowledge and experience into other market sectors." ACEEE lauds the program for providing the nation's most comprehensive energy-efficiency program serving the higher education sector.

Campus participation in the internal partnership-offered training courses as well as external course offerings marketed and reimbursed by the partnership totaled approximately 2,045 person-days of training through December 2007. Most programs are oversubscribed, which indicates the high level of demand from the campuses for the training. Campus facility managers indicated that the building operator training, in particular, is one of the partnership's most valuable opportunities, and that they would like to see more opportunities to offer that course to participants.

Interviews revealed that SCE's part in the partnership program has been particularly successful due to the excellent coordination between SCE and UC/CSU. As discussed in the next section, partners feel the communication between SCE and themselves has been open and that SCE has provided the necessary support to provide services effectively.

The program is growing to such a degree that the plan is for funding levels to increase significantly in the next program cycle. Discussions revealed that funding could increase

[16] York, Dan, Marty Kushler, and Patti White, "Compendium of Champions: Chronicling Exemplary Energy Efficiency Programs from Across the U.S." Published by American Council for an Energy Efficient Economy, Report Number U081 (February 2008).

significantly from $30 million across the three-year program to $30 million annually. Both the UC and CSU representatives welcome the potential expansion and believe the strong working relationships that exist today will pave the road for greater savings during the 2009–2011 program cycle.

***Program partners expressed high satisfaction for SCE and their relationship with the utility. However, campuses identified several opportunities for improvement.***

PA researchers interviewed representatives from the two university systems. SCE received high marks from these university systems for working with them as a full partner. Representatives said they would not be able to provide the same services without the partnership program and that the utility funding has produced energy savings that would not have been captured otherwise.

One of these universities remarked that the technical support was critical to their ability to offer the program effectively, which they feel SCE has successfully provided. They said they are reliant on the partnership's technical support and feels the technical support makes this a "true" Partnership.

The campuses are appreciative of the work being done and find SCE easy to deal with. Campuses also commented that SCE's process has been easy to follow.

Both the UCOP and CSU chancellor's office complimented the utility for its efforts to work with campus schedules. Both systems are pleased with SCE's program efforts and staff.

One area for improvement emerged through interviews with facility staff. There was discussion from staff that they would like to see greater involvement from SCE earlier in the planning process. Specifically, they stated they would benefit from greater engineering assistance from the utility to do the preliminary assessment.

Another area of improvement relates to the distribution of funds. Currently, the program distributes its funds to individual campuses rather than retaining central control. Interviewees expressed that this is not an optimal way to distribute the funds, as the campuses then have the opportunity to spend the funds on other projects.

Moving into the next planning cycle, the program plans to circumvent this issue by centralizing the funding streams to the UC and CSU systems. The UC and CSU systems will maintain control of the money allocated for efficiency improvements, rather than delegating it to the individual campuses where it is often diverted to other projects. Thus, the central administration will be able to help keep the overall program on track to meet its goals

***Barriers to program implementation and/or achieving higher level of savings were identified through the research process. The barriers include staffing, funding levels, program cycle, project duration, the approval process, and new construction needs.***

Interviewees identified six barriers to program implementation and/or achieving a higher level of savings. The first barrier identified was inadequate internal staffing on campuses. Interviews noted the campus capital staff has many responsibilities, and it is hard to get their attention. Smaller campuses have to hire a third party to do full project design, which takes time and money. Therefore, they would like to see more technical assistance from utilities.

Second, interviewees expressed that it was difficult to get money from the campuses to cover portions of projects that the partnership does not cover. The campuses have a fixed amount of money to spend on capital improvements annually, so energy projects compete with other non-energy investments for that funding. An advanced/early notification by the utility about the amount of funding available for the next program cycle will help facility managers plan better for energy-efficiency projects.

The third barrier, an administrative barrier, identified is the length of a program cycle. The time restriction of a program cycle, while not noted as a barrier per se, was discussed by universities as a limitation to the program. Universities would like to see an ongoing program that is not bound by the artificial restrictions of the CPUC's program years. Interviews describe the desire for an "evergreen" program that provides funding on a rolling basis rather than a strict 36-month cycle as currently established. The sentiment is that the program takes a considerable amount of time to ramp up and by the time the program is steadily making progress or worked out any issues it begins to ramp down.

Along the same lines as the program cycle, program partners would like to see a longer project duration. Projects usually take a long time to develop, at least a year. Therefore, it would be desirable to have a project pre-planning period of one year, submit projects, get them approved, and then roll them into a three- to five-year cycle.

The fifth barrier noted—the duration of the approval process—primarily affects reported savings. Several individuals interviewed noted that they felt the approval phases were slow and the window of opportunity was small to claim the savings. Clearly, the reported savings is not lagging behind the goals. Yet, the program may be able to recognize the savings more realistically with a more efficient approval process.

Last, the inability to address new construction needs was cited as a barrier. New construction is provided by a separate program—Savings by Design. According to interviews, there is significant opportunity for the program to address and achieve greater savings from these new construction projects. Interviewees suggested that new construction be an active component of the program. They program is considering incorporating the new construction component for the next program cycle.

## 4.4 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

SCE's portion of the UC/CSU Partnership by all accounts is very successful. Several factors clearly play a role in the program's success.

- **All of the partners are engaged and committed to making the program work.** The partnership was able to work out some issues during its initial cycle, leading to a much stronger program overall during the 2006–2008 program cycle.
- **All partners' roles are defined clearly and are operating as defined.** The UCOP has had staff changes during the 2006–2008 program cycle, but those changes did not impact the program negatively because each partner's roles are clear, NAM is a very able administrator, and new staff stepped right into those roles.
- **Regular communication has facilitated program success.** The partnership management meetings initially were held on a monthly basis, but have become bi-weekly as project activity has increased. In addition to the monthly meetings, SCE

has additional teleconferences with the UCOP and CSUOC and the individual campuses as often as is needed. The frequent communication ensures that any issues that arise are handled quickly and efficiently, thus keeping the program on track to meet its goals.

- **The program has been able to grow and evolve.** The 2006–2008 program incorporated several changes from the 2004–2005 program, based on the experience gained during the initial two program years.
- **SCE staff work closely with local facilities.** SCE representatives, in working closely with UC/CSU campuses, have helped to make the participation as smooth as possible for those facilities.

Because of the close working relationship between SCE and its partners, partner concerns already are being addressed in the 2009–2011 program design. One area identified by the universities is improving the effectiveness of the program and increasing the opportunities to realize savings. For example, during the 2006–2008 cycle any new construction on a UC or CSU campus are addressed by a separate program—Savings by Design—rather than the partnership. In the next program cycle, it has been suggested that new construction be included in the partnership program. This will allow the universities to address the efficiency of all facilities—both new and existing—through one program.

The partnership is examining how best to meet the universities' request for an "evergreen" program that will better match campus planning cycles rather than being tied directly to the CPUC's defined program periods. The current cycle is only three years, but there is a sentiment that this is not a long enough period to ramp up the program and then achieve the targets established.

Discussions about the 2009–2011 cycle have focused on expanding program funding significantly from $30 million across the three-year program to $30 million annually. Both the UC and CSU representatives welcome the potential expansion and believe the strong working relationships that exist today will pave the road for greater savings during the 2009–2011 program cycle.

In addition to the points above, interviews identified additional opportunities for improvement.

- **Training.** BOC (Building Operator Certification) has been very successful and popular among facility staff. They would like to have it promoted more and combined with training at utility facilities. The program should review the option of providing specialized training to individual campuses (e.g., proprietary system of control).

  Interviews also revealed that additional in-depth training for facility staff would be beneficial. The in-depth training should be customized, and focus on the needs of the individual campus.
- **Online energy-efficiency forum.** In a peer-to-peer networking approach, an online energy-efficiency forum could provide an opportunity for facilities to share and disseminate information with each other. The format of this forum could include a chat room, space for posting success stories, hurdles faced in implementing projects, and reference sources.

- **Engineering assistance.** Interviews suggested a greater need for utility involvement in the program planning stages. As such, utilities should consider providing engineering assistance to do preliminary energy-efficiency assessments.

# 5. CCC PARTNERSHIP PROGRAM

## 5.1 INTRODUCTION

The California Community Colleges (CCC) program is a nonresidential program, first established in the 2006–2008 program cycle. The CCC program is a statewide Partnership program that includes all four of the state's investor-owned utilities. SDG&E is the lead utility for the CCC Partnership.

The momentum for developing the CCC program came from the success of the 2004–2005 UC/CSU program. CCC was designed to follow the UC/CSU model, with a central management committee that would work with the Community College Chancellor's Office (CCCO) to promote energy efficiency at the state's 109[17] community colleges. CCCO opted to participate in the partnership program because of its comprehensive approach to energy efficiency.

The CCC system is not organized centrally, thus each community college manages its participation in the program individually. Currently, only 54 of the community colleges are participating in the program.

The SCE CCC Partnership goal for the 2006–2008 cycle is energy savings of 24.4 million kWh and 5.15 MW of peak demand. SCE is the only utility on track to meet its CCC Partnership goals. SCG, SDG&E, and PG&E do not expect to meet their goals.

## 5.2 PROGRAM BACKGROUND AND STRUCTURE

### 5.2.1 Program Description

California's Community Colleges have $18 billion in public bond funding to spend on improving the facilities of CCCs. The funding will, among other improvements, support retrofit and new construction projects over the next ten years.

The CCC Partnership program was developed to incorporate energy-efficiency efforts into these planned retrofit and new construction projects. It is set up similar to the UC/CSU Partnership with a management committee that includes the four participating utilities, the CCCO, and the program administrator. Newcomb, Anderson, McCormick was selected to serve as the program administrator through a competitive bidding process similar to the one carried out for the UC/CSU program.

The program concept includes three major components—energy-efficiency retrofits, new construction assistance, and energy-efficiency education and training. One additional component is presented separately in this discussion—monitoring-based commissioning.

[17] The number of campuses reported varies by source and tends to range from 109–110 campuses. (E.g., program logic paper, Quarterly report, "California Community College Partnership Program Sustainable Collaborative Presentation" from 2006).

1. **Energy-efficiency retrofits.** The program meets with community college district administrative and facility staff to identify potential energy-efficiency opportunities. The program also directs participants to incentive resources that will help offset the costs of the investments. Examples of retrofit opportunities include lighting retrofits (T5 technology, LED applications), lighting control applications, and HVAC upgrades.
2. **New construction assistance.** As outlined in the program concept, this element of the program will help community colleges in designing their new construction projects to be in compliance with Title-24 minimum standards. This assistance was to include design review, development of design guidelines, and incentivizing of the incremental costs of energy efficiency in these new construction projects. New construction, while included in the program concept, is in practice not offered by the program. As discussed in the "Key Findings" section below. Savings by Design addresses the new construction needs.
3. **Energy-efficiency education and training.** The program offers training opportunities to CCC staff and project managers. The trainings piggyback on training opportunities offered through the UC/CSU program. The subject matter of the trainings is determined by the needs of the campuses participating in the program.
4. **Monitoring-based commissioning (MBCx).** Not detailed as a separate line item in the Program Implementation Plan (PIP), monitoring-based commissioning ensures that the facilities are operating at an optimal energy-efficiency level. Additionally, it provides opportunities to identify further energy-efficiency investment opportunities. The monitoring-based commissioning component of the program is deemed as a pilot, and has not yet resulted in significant energy savings. The *First Quarterly Narrative Report* from 2008 noted the program had several projects approved at campuses, which included two MBCx workshops to provide information related to program requirements and promote program participation.

The partnership prgoram's focus in the 2006–2008 program cycle has been almost completely on developing retrofit projects. Savings for new construction projects are being recognized under the Savings by Design program.

The CCC Partnership program was designed with the assumption that the CCCO would be able to play a role similar to that played by the UCOP and CSUCO with the UC/CSU Partnership. In this role, the decision-making and management is centralized. However, the community colleges have a decentralized, district-based structure, in contrast to the UC/CSU centralized decision-making structure. The lack of centralization has posed a challenge to the partnership overall in terms of reaching the individual community college campuses. Campuses must be contacted through their districts, each of which has its own elected Board of Governors. The Board of Governors is the decision-making entity on program participation. And while the CCCO can advertise the program, it has no direct influence on participation.

### 5.2.2 Program Logic Model and Implementation Theory

Figure A-2 in Appendix A shows the program's overall program theory and logic model. The program theory and logic model is identical to the UC/CSU program. The major activities are education, training, and energy projects. These activities are to result in six outputs: (1) a best practices manual, (2) training via workshops, (3) outreach programs on all 54 campuses, (4) development of an Energy Services Company (ESCO) infrastructure, (5) project file review, and (6) paperwork and incentive facilitation.

## 5.3 KEY FINDINGS

***The CCC Partnership program reports achieving 51 percent of its energy-savings goals as of June 2008, with an additional 12.3 million kWh and 4,700 kW committed. Initially noting a shortfall in savings for participating utilities, the program began redirecting its marketing and outreach efforts.***

The SCE CCC Partnership goal for the 2006–2008 cycle is energy savings 24.4 million kWh. As of June 2008, the program reported energy savings of 12.4 million kWh, which amounts to 51 percent of the total program goal. An additional 12.3 million kWh are committed. The program will reach its goals if these committed savings are realized in this program cycle.

The program also has the goal of reaching 5,146 kW of peak demand. The program is seeing a greater shortfall in peak-demand savings against its goals, with only 44 percent realized as of June 2008. Again, the total commitments reported by the program are significant (4,688 kW) and, if realized, the program would significantly surpass its goals.

An enhanced outreach, marketing, and program development effort has continually attempted to identify opportunities to promote greater savings resulting from the program. This effort was initially directed to help PG&E, SCG, and SDG&E improve their progress toward savings goals, but affects SCE customers as well. Examples of these efforts include sweeps of campuses to identify project opportunities and identification of "quick turnaround projects" that could deliver significant savings such as emerging technologies and monitoring-based commissioning information technologies applications.

As of the *First Quarterly Report* in 2008, the program projects to meet its goals assuming these outreach and project development opportunities will be successful and the committed savings are achieved within the program cycle.

***Time and staffing constraints within the community colleges hinder the ability for facility managers to support project opportunities through the program. However, with the staffing constraints in mind, facility managers noted appreciation that SCE provides a single point of contact model for providing support to facility managers.***

The SCE program manager works closely with any campus that expresses interest in participating. Once the campus decides to participate, the program manager helps them to complete all the program paperwork. Because the chief business officers and district boards are the financial decision makers, the program manager must obtain agreement from both, as well as from the facilities manager, before a project can progress.

Community college staff with whom PA spoke indicated that they are pulled in too many directions to devote significant time or resources to exploring energy-efficiency projects. While some community colleges cited financial constraints, most campuses are constrained by the demands on the facility manager. Not only are these facility managers responsible for any projects requiring capital investment, but they are generally also responsible for maintenance projects. The staff constraints, along with the additional funding for community college upgrades, means that there is not significant time to devote to the program. Therefore, it is not surprising that nearly all said that they could not participate in the program without extensive utility support.

Facility managers of the community colleges are time and resource constrained. Whereas the UC/CSU usually have dedicated energy managers for each campus, the community college campuses tend to have one facilities manager whose job includes, but is not focused on, energy issues. Additionally, community college campuses tend to be more expansive in terms of the physical space they encompass and the location of their buildings, which creates additional time constraints on the facility managers. Therefore, it is often the case that they have difficulty even completing the administration processes.

As a result of these constraints, the CCC program needs much more time and effort from the program manager than does the UC/CSU program. Facility managers voiced that it would be beneficial to them if utility program staff provided a greater level of assistance, particularly early in the planning process. Specifically, they stated they would benefit from greater engineering assistance from the utility to do the preliminary assessment.

Evidence indicates that one way SCE has been able to provide additional support is by simplifying how the partners interact with the utility. Unlike the other participating IOUs, SCE provides a single point of contact for facility managers. This single point of contact was noted through interviews as a benefit to overextended staff. One comment expressed by several community colleges served by other utilities is that they would prefer to have one single point of contact "like at SCE" so that they would have one person whom they know they can call with any questions. This single point of contact structure is appealing to the community colleges and SCE should be praised for being a model utility in successful cooperation and interaction with community college facility managers.

***Program marketing and outreach has continually evolved throughout the program cycle. SCE took a different approach to marketing than the other participating IOUs, which may have proven to be more effective.***

Program marketing to the community college campuses has evolved since program inception. In 2006, the partnership management team contracted with a non-profit group called the Foundation for Community Colleges to market the program across the state. The rationale was that because the Foundation works with many community colleges on issues like bulk purchasing, its existing relationships could be leveraged to market the partnership. However, at the end of the first year, the Foundation had done little to market the program and the management team had to develop a statewide new marketing and outreach approach.

While SDG&E and PG&E relied heavily on the Foundation for marketing and outreach, SCE took a more proactive approach. SCE has an account representative who is dedicated to working with community colleges. This account representative serves as a single point of contact for all the community colleges' needs, including their participation in this Partnership program. The account representative was able to quickly build on her existing relationship with the community colleges to enroll them in the program. As a result, SCE is the only one of the four utility partners that is likely to meet its 2006–2008 CCC Partnership goals. SCG has benefited from SCE's proactive approach and has revised its own program implementation approach to also involve its key account representatives' more directly.

The outreach efforts are somewhat thwarted by the relatively low value of funds compared to the $18 billion in public funding that the state voted to use for community college upgrades and expansions. Overall, Partnership program funding ($22 million total for the state) is a "drop in the bucket" compared to the public funding. In recognition of the greater challenge

associated with getting the community colleges involved, the program offers a higher incentive rate than the UC/CSU Partnership, but that rate has not been sufficient to engage the community colleges.

***There has been little activity within the training and education component of the program; resource efforts have taken a higher priority.***

The CCC Partnership includes a training and education component similar the UC/CSU Partnership. However, training has been a relatively low priority during this program period compared to meeting resource goals.

In one example, the management team spent a year working on getting community college districts to adopt the California High Performance Schools system[18], which covers every aspect of operations from landscaping to equipment maintenance and ties in with overall state sustainability and energy-efficiency goals. It became clear after a year that it would take longer than one Partnership program cycle for the community colleges to adopt this system, so the management team has instead focused on enrolling community college facility managers in programs offered through IOU-funded Energy Centers. Management team members anticipate that the training will be a greater focus in the partnership's next phase.

Representatives from the community colleges have participated in a large number of sustainability conferences during the 2006–2008 Partnership. Facility staff members from the community colleges have attended the annual UC Santa Barbara UC/CSU Sustainability conferences and energy-efficiency related presentations at the annual Community Colleges Facilities Coalition conferences in Sacramento.

Additionally, the management team is discussing how the partnership might be integrated into curriculum development at the individual campus level. One example being considered is training HVAC technicians on energy efficient maintenance.

While training has not played as great a role in this initial CCC Partnership program as initially conceived, several of the staff interviewed feel strongly that the partnership has successfully increased awareness about energy-efficiency issues at the individual district and campus level. They feel this increased awareness will make project implementation easier in the next program cycle.

***Interviews report resource barriers to incorporating partnership and project information into the program tracking database in a timely manner. The program is considering alternative means for collecting and documenting project data, potentially piggy-backing on the current community college database system.***

As is the case with UC/CSU, NAM maintains the program tracking system and database. All partners have access to the project tracking system, but its use varies by utility. The online tracking system includes a document library with all program records and a system that

[18] "The mission of the Collaborative of High Performance Schools is to facilitate the design of high performance schools; environments that are energy and resource efficient, healthy, comfortable, well lit; and contain the amenities needed for a quality education. CHPS developed the nation's first green building rating program especially for schools." See website for further details: http://www.chps.net/.

tracks each project's progress from design to completion. Partners can use it to run a variety of reports at any time.

NAM has found it difficult to get timely information from the campuses to put into the database. The original thinking was that the campuses would maintain their own information on the website, but that has not happened because campus facility managers are overextended. The utilities have taken on the responsibility for getting information updates from the campuses, but the campuses do not always respond quickly to requests for updates. Therefore, the information is not as current as is the data on the UC/CSU system.

The community colleges have developed their own database system for tracking campus maintenance. The system does not include energy efficiency at this time but does have significant information on campus facilities. CCCO is working with the utilities to get access to this system, which will provide the utilities with information about their local campuses' needs.

***Interviews identified barriers to program implementation and/or achieving higher level of savings. The barriers include staffing, funding levels, program cycle, project duration, and new construction***

Interviews identified five barriers to program implementation and/or achieving a higher level of savings. These barriers are the same as those identified for the UC/CSU program. However, it is important to note that while the barriers are the same, due to the high resource constraints discussed earlier in this chapter the barriers tend to be more pronounced for the CCC Partnership.

- **Inadequate internal staffing for community colleges.** Community colleges are expansive and include many buildings more than the UC and CSU campuses. Interviews with each community college staff confirmed how overextended they are. Therefore, they would like to see more technical assistance from utilities.
- **Getting money from the campuses to cover portion of project that the partnership does not cover.** The community colleges have a fixed amount of money to spend on capital improvements annually, so energy projects compete with other non-energy investments for that funding. Also, an advanced/early notification by the utility about the amount of funding available for the next program cycle will help facility managers plan for future energy-efficiency projects.
- **Length of program cycle.** The process findings from the CCC Partnership interviews illustrates why community colleges would prefer the program cycle to be lengthened. It takes time to understand the market it is serving and the culture of the partners and, though the program is modeled after the UC/CSU, the culture and organization of community colleges differs from UC and CSU campuses. By the time the program begins to make progress or work out any issues it will begin to ramp down.
- **Project duration.** Along the same lines as the program cycle, program partners would like to see a longer project duration. Projects usually take a long time to develop: at least a year. Therefore, it would be desirable to have a project pre-planning period of one year, submit projects, get them approved, and then roll the projects into a three- to five-year cycle.

- **Inability to address new construction needs.** New construction is provided by a separate program—Savings by Design. According to interviewees, there is significant opportunity for the program to address and achieve greater savings from these new construction projects. Interviewees suggested that new construction be an active component of the program. The program identified this as an area in need of change for the next program cycle and is planning to incorporate new construction into its program offerings.

## 5.4 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

All parties believe that one of the most effective aspects of this program is the regular and ongoing communication among all the partners. While the partnership continues to identify and address various issues, the strong communication between the partners makes such work possible.

The evaluation process identified three issues that the Partnership needs to address for the 2009–2011 program cycle. First, Partnership funding levels are not yet high enough to attract community college attention on a large scale. This is not so much an incentive-level issue; rather, it is an issue of whether the funds available to the community colleges are significant enough to get their attention. When they have the extensive funds available and encouraging upgrades to facilities via the public bonds funding, the level of funding offered through the CCC Partnership is not enough to either capture or retain the community colleges' attention.

At the time of this evaluation, the program was developing their 5–7 year maintenance and capital improvement plans. The program uses these plans to develop the 2009–2011 Partnership program goals. The colleges expressed that it would be useful to have an understanding of what their budgets would be for the next program cycle so they could plan their energy-efficiency projects accordingly.

Second, community colleges have significantly less resource capacity to implement this Partnership than do the UC and CSU campuses on which the program was modeled. SCE resources are being leveraged to help stretch the community college resources and provide greater administrative assistance than anticipated.

Program partners are working together to revise the program for the 2009–2011 program period. The program is already addressing several of the issues identified during the 2006–2008 CCC Partnership in designing the 2009–2011 program.

- The partnership plans to increase education opportunities and provide assistance in developing energy-efficiency plans. The evaluation found campus need for greater assistance with their energy-efficiency plans and direction for how to integrate those activities into their existing plans. Building in this type of assistance will increase program effectiveness overall. The CCCO hopes to work with districts to develop an energy plan that will be reviewed and approved at the central level.
- The 2009–2011 program will include new construction opportunities. Incorporating new construction into the program profile will introduce greater savings opportunities for the partnership.

Additionally, evaluation efforts identified the following opportunities for improvement.

- Consider adding one or more program assistant to the SCE team. While SCE was lauded in interviews for their presence in the program and work with the campuses, the reality is that there are too many community colleges in SCE's service territory for one person to provide the level of assistance needed. Having an additional person to support the program manager will help facilitate data gathering and maintenance both at the utility and statewide levels.
- Work with at least one community college within each utility service territory to develop and deliver the program's training and education component. Using community colleges to provide training will ensure capacity is built locally and will provide a model other colleges can adopt.
- Implement a peer-to-peer program. The CCC Partnership already offers community colleges an opportunity to learn from each other through its participation in the UC/CSU Sustainability conference and the annual Community Colleges Facilities Coalition conference. The partnership can build on that base by matching colleges within utility service territories so that those that are active in the program can provide advice to others that are less active. Such a program will also help to reduce the overall burden on the utility to provide ongoing support to the community colleges, thus helping the program to move in the direction of a more even Partnership.
- Consider the viability of taking the community colleges out of the three-year funding cycle and giving them their own cycle that better meets their decision-making structure (such as five years). This recommendation is similar to the UC/CSU recommendation that suggests an "evergreen" program moving forward.
- Consider the partnership paying for energy personnel to assist with projects. Provided how constrained staff are, this assistance could provide some relief and help address the limited staff that is an issue across the campuses. For example, partnership-paid staff could screen and develop campus projects, review building plans, etc.

# 6. CDCR PARTNERSHIP PROGRAM

## 6.1 INTRODUCTION

The California Department of Corrections and Rehabilitation (CDCR) Partnership was a new statewide Partnership under the 2006–2008 program cycle. This statewide Partnership program, led by PG&E, is a nonresidential program targeting prisons and youth facilities. Program offerings include incentives for retrofit projects, continuous commissioning, and training for the facility managers.

The CDCR operates 34 adult facilities, 8 youth facilities, and 16 parole offices throughout California, with a combined conditioned space of almost 50 million square feet. The CDCR was selected as a partner for several reasons, the most notable being their history in promoting energy-efficiency projects.

No energy savings have been reported to date as no SCE customer facilities have completed their installations yet under this program. This, according to interviews, is due to a backlog of work. However, the program is considered to be on target and it is expected it will reach program goals by the end of the 2006–2008 cycle period.

## 6.2 PROGRAM BACKGROUND AND STRUCTURE

### 6.2.1 Program Description

The CDCR Partnership promotes energy-efficiency projects and best practices at the correctional facilities and offices run by the CDCR. The CDCR Partnership is new, established for the 2006–2008 rate cycle.

The CDCR Partnership is a centrally managed program. The Department has a Director of Energy Management who oversees the facilities management operations of all California correctional facility campuses (over 130 campuses, some with multiple buildings). This individual identifies energy-efficiency opportunities, trains facility managers, and coordinates project work. Using a central management approach eliminates the need for each individual campus to pursue its own facilities' maintenance, improvement, and construction projects.

The program implementation plans developed by the four IOUs for the CDCR Partnership envisioned at least three major components—retrofit projects, retro-commissioning, and education and training:

1. **Energy-efficiency retrofits.** ESCOs work with the CDCR to update early feasibility studies with their own detailed assessments, and install measures using incentives from the program. The projects, capped at $1 million, were required to fall within a five-year payback. ESCOs install the measures and the IOUs provide incentives based on first-year savings. The balance of costs not covered by the program is paid through financing offered by the Department of General Services.
2. **Monitoring-based commissioning.** This program component was designed using the 2004–2005 UC/CSU commissioning program as a basis. The program defined this offering as going beyond the standard commissioning program in that (a) the installation will ensure an extensive and comprehensive built-in measurement and

verification capability, (b) the commissioning will be combined with education and training to optimize and sustain the energy savings, and (c) the program will use the institution's facility management to identify additional opportunities.

3. **Education and training.** The program was designed to offer training opportunities to CDCR project managers and facilities staff on energy efficiency and best practices, building upon work that was done during the 2004–2005 cycle for UC/CSU modified to the CDCR facility environment.

The partnership focused almost completely on developing retrofit projects during the 2006–2008 program cycle. The retrofit component of the program was viewed as having the greatest energy-savings potential; therefore, the CDCR and IOUs decided to devote their resources and energies to honing the process for this program element.

In 2006, the four IOUs commissioned audits of the major CDCR facilities. Those audits provided a preliminary list of cost-effective retrofit measures at each of the institutions. In the same period, the CDCR issued a Request for Qualifications to energy service companies, lighting contractors, and energy-management companies to develop energy-efficiency projects for the CDCR. Eleven ESCOs were selected through this process.

The CDCR provided selected ESCOs initial audit results and instructed them to perform an investment grade audit of the facilities assigned to them. Based on this audit, ESCOs proposed to the CDCR a project plan that passed several financial criteria. Specifically, the project was required to (1) have a maximum payback of five years, (2) provide a positive cash flow from savings in the first year, and (3) cost less than $1 million.

The Partners hired Newcomb, Anderson, McCormick to act as an "owner's representative" for the program. NAM is responsible for conducting technical assessments, verifying the financial calculations, and supporting the Partners in processing and approving the projects.

The financing of the capital investment retrofit projects comes from two sources. First, utility-offered rebates offset the initial cost. The value of the rebates is determined based on the first year kWh savings. The Energy $mart financing program offered by the California Department of General Services, provides another financing option. Through the Energy $mart program, California government entities can obtain financing at rates that are typically half those of commercial loans.

### 6.2.2 Program Logic Model and Implementation Theory

As shown in Figure A-3 in Appendix A, the main activities of the CDCR program are marketing, education and training, identification of retrofit projects, and continuous commissioning. These activities are to result in six outputs: (1) energy-management staff communications, (2) best practices, (3) trainings and workshops, (4) project approval, (5) develop ESCO infrastructure, and (6) installation of metering equipment.

Based on this process evaluation, there is only one element of the program logic that can be confirmed for SCE—the Retrofit Project element—since this is the only program element that achieved any level of implementation to date. Based on our research, there are two elements that were not reflected in the original logic model that we have now included in the logic model in this final report.

- **Technical review of work scope proposals.** All projects experience a technical review, whereby recommended retrofits must pass a five-year payback criteria. ESCOs comment that this was not originally articulated as a requirement but, based on interviews, it is a confirmed element of the approval process for projects to proceed.
- **Financial package.** The securing of financing for the project was not reflected in the original logic model, and yet this became a critical factor in the program process. Projects that receive approval for the financing step can proceed to implementation.

## 6.3 KEY FINDINGS

***The program has made no progress toward its energy-saving goals based on reported savings; however, the program claims the committed projects will result in sufficient energy savings to reach their goal by the end of the program cycle. The delay in achieving savings was attributed to financing issues at the state level.***

The CDCR program for SCE has a three-year net goal of 24.4 million kWh energy savings and 1.46 MW demand reduction. The June 2008 monthly program report indicates that there has been no progress made towards these goals. However, with the approved campuses preparing to realize the projected savings, the program is reported as on target to achieving its kWh savings goals.

According to the latest *Quarterly Narrative Report* posted by SCE, the management team approved projects based on applications from CDCR for all four IOUs totaling 49 percent of the kW goal, 76 percent of the kWh goal, 52 percent of the therms goal, and encumbering 68 percent of the incentive budget. All projects reviewed and approved by the management team met IOU due diligence review criteria based on CPUC filed plans.

Staff interviewed believe that the program has suffered from stalled project implementation due to financing issues for the State's portion of the costs. Those issues, which were only recently resolved, have resulted in a significant backlog of projects awaiting implementation. The partnership expected that those projects would move forward quickly from the point of the resolution. Since most proposed projects have less than a 24-week implementation cycle, CDCR expects that the majority of these projects will be completed by the end of the 2006–2008 program cycle.

Last, due to the delays in implementing projects none of the training has taken place. The focus of the program for the remaining seven months is to get as many projects completed as possible to contribute to the resource energy-savings goals.

***Establishing a means for providing financing to participating facilities is seen as a primary success for the partnership Program. With that said, the process took longer than expected and was an initial barrier to project implementation.***

As described above, the program provides a financing option to participating facilities through the Energy $mart program. The Partners worked closely with the California Department of General Services to integrate the financing option into the CDCR Partnership program.

The partnership members, particularly the IOUs, feel that their collective pressure to establish the process to provide financing to participating facilities was a primary success for this

program. It provides a means for facilities to address program costs not covered by IOU rebates at a rate discounted from those traditionally offered to commercial customers.

Unfortunately, this process took longer than anticipated and, in turn, was a significant barrier to project implementation. The financing needed to be in place to approve the projects and, without the financing option being in place, projects stalled. Since securing the financing, the management team has been reviewing project applications and processing them on a regular schedule

With the mechanism for financing established, an additional barrier arose—the financing approval process for projects. The financing has to be approved for a project before it can move forward. As an example, one ESCO expressed incredulity that a project with almost 90 percent covered by IOU incentive money was not allowed to proceed without the balance of financing worked out and approved. In this case, waiting for the financing details delayed the project for several weeks.

The resolution of the financing problem—using Energy $mart—has far-reaching implications for energy-efficiency projects in state facilities well beyond those included in this Partnership. These funds will allow state facilities beyond prison facilities to be upgraded. CDCR provided the impetus for establishing a system to finance facilities such as correctional facilities. As such, the evaluation credits the partnership for its contribution to breaking down that significant barrier to energy savings in the government sector.

***Program partners believe that the early feasibility studies were useful for informing the program in the planning process; however, ESCOs are not as satisfied with the process as considerable investment was required to review the initial feasibility studies in light of facility changes. Even so, they are excited about productively moving the program forward.***

Early in the program cycle, the program Partners conducted preliminary feasibility studies. These studies were then provided to ESCOs when they were assigned to a facility.

Although the audits did not result in project plans as quickly as anticipated due to the delays in securing the financing option, program Partners believed that conducting these feasibility studies was a useful activity. The information obtained allowed the program to develop a reasonable plan for budgeting, assess the capacity needed to address the opportunities, and estimate potential energy savings and demand reduction. Also, the audits provided the program with the information necessary to develop a program database.

Unfortunately, Partners did not anticipate such a long delay between the original audits and project implementation, and the feasibility studies had to be redone by the individual ESCOs to verify the audit findings and assess any changes in the facility. These audits took a considerable amount of time and expense to complete.

Given the delays in project approval, and the (albeit remote) possibility of project rejection by the management team, some ESCOs do not want to incur these costs and want the program to reimburse them for these investment grade audits. The program will have to deal with this issue going forward. Otherwise, the earlier audits have been useful in establishing the scope and potential savings for the overall program.

ESCOs' initial contract values were based on the early feasibility reviews. As project plans at times changed considerably based on a follow-up audit, the contract values needed to change. As such, ESCOs interviewed voiced the desire to have their own review of the facilities be the basis of their contractual agreement to deliver savings.

Aside from the audit issue, most ESCOs expressed their excitement that the program is moving forward and much needed work is getting done. They were pleased that the program had finally passed the financial hurdles and contracts were being released. They also reported that the CDCR Partnership communicated with them and the other stakeholders regularly and effectively.

***Program Partners and participants express satisfaction with the program. Project management, particularly the champion model, is reported effective. However, ESCOs and facility managers expressed some frustration with the central management model. They would like to communicate directly with each other and the utilities rather than explicitly through the Director of Energy Management.***

Facility managers report that interactions between the SCE staff, the lead utility (PG&E), and/or CDCR have been generally positive. Several facility managers also noted their satisfaction with the ESCOs, although the lack of project implementation made it difficult to evaluate the effectiveness of the ESCOs.

Additionally, program partners were positive about their interactions with each other. All IOU program managers at this point appear to be aligned in their shared goal of getting as many projects implemented before year-end as can be done in a quality manner.

It is clear that the program enjoys a strong central champion in the CDCR Program Manager. The program champion is the head of facilities for the entire CDCR operation and is responsible for over 130 campuses.

This central leadership and strong champion model was particularly useful during the first phase of the program at the point of establishing processes and procedures. The nature of the work required, such as the political and organizational tasks of working through policy and procedural mechanisms, reportedly pulled from the champion's strengths. Additionally, the champion was in the position to entreat individual facility managers to actively participate in the program.

However, securing financing options consumed the champion's time to the exclusion of other activities (e.g., facility manager training). A less centralized management structure may have resulted in more activities being addressed; it is possible that other tasks could have proceeded while the financing issue was being worked out.

***Program partners and ESCOs believe NAM is effective as a project administrator.***

Initially, the project due diligence and management was to be completed in-house by CDCR. The process was more cumbersome than anticipated, and CDCR was quickly overwhelmed and looked to outside contractors for assistance.

The management team selected NAM to serve as project administrator. NAM was hired to provide assistance to CDCR especially in the areas of ESCO coordination and technical

evaluation and oversight. The contractor performs the due diligence for CDCR and packages the projects for financing.

The management team seems generally pleased with NAM's performance and believes using NAM is a cost-effective solution to the internal lack of staff time. Interviews estimate that using NAM saves the CDCR a considerable amount in personnel costs. Additionally, the management team reported that NAM greatly facilitated project flow by standardizing project submission forms, simplifying costing, and providing cost-benefit analysis. One ESCO lauded the efforts of NAM to standardize the project documentation, claiming it was very useful and a necessary change. NAM also created a projects database that serves to support IOU reporting to the commission, which created time efficiencies.

***Several ESCOs believed that the $1 million cap for facility projects was too low. A facility can consist of multiple buildings, and the project funding limit can be quickly expended without tending to all the possible cost-effective retrofits. One ESCO suggested allowing higher budgets for a facility and completing fewer projects.***

A single CDCR participating "facility" can consist of multiple buildings at one site or campus (e.g., residential facilities, garages, warehouses, workhouses). Therefore, any one CDCR facility could provide the opportunity for any number of energy-efficiency upgrade projects throughout multiple buildings.

Thus, while $1 million seems like an adequate amount for a facility, due to the size and complexity of each campus, this amount was a constraint given the size of potential projects. ESCOs reported that this cap prevented excluded retrofit opportunities from being part of the project package.

One ESCO respondent suggested that it might be more cost effective to devote adequate funding for capturing all the energy-savings opportunities at a few campuses rather than try to do a few things at many CDCR campuses. Contractors are already allocating resources to the facility, so this approach may be more cost effective. As the program currently stands, ESCOs would have to return to the facility to capture the additional energy savings not captured through the program.

## 6.4 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENTS

The program has a significant commitment for energy savings that SCE anticipates will be realized before the end of the program cycle. Additionally, there appears to be additional potential for significant savings from the CDCR program, as ESCOs continue to uncover savings opportunities in their review of the facilities.

The project management team on this program appears to be extremely effective and have resulted in significant policy changes that will have long lasting effects beyond just the CDCR facilities. For example, the commitment of the management team for the CDCR program—including the IOU members, the CDCR project manager and the administrative contractor NAM—enabled the team to develop and apply a financing program that will also enable other state facilities to move ahead with energy-efficiency opportunities. Unique among the partnership programs, the CDCR program uses ESCOs to deliver services. The management team successfully secured a pool of ESCOs for implementation of projects with an effective oversight and quality control team in NAM. This ESCO model could be replicated for other state projects where there is a similar oversight mechanism.

The collaboration on this program appears to be going very well and the program is planning to address barriers that hampered it during the 2006–2008 cycle for the 2009–2011 program. However, interviews with facilities managers suggest that they would like utilities to continue to interact directly with facilities managers at the sites, rather than exclusively through the central office of CDCR. This may be a missed opportunity for the utility to build relationships with these important contacts that should be strengthened going forward.

ESCOs commented that the $1 million facility cap impairs the program's potential. One ESCO suggested that the partnership would have been more successful if it provided more services to fewer facilities  Presuming that targeting a select few CDCR facilities would be politically feasible, doing more work in fewer facilities might have achieved the same energy savings in a more cost and time-effective manner.

Moving forward, additional opportunities for improvement exist.

- Move to less centralized control under the construction phase. While the centralized approach may have been necessary for setting up the program and overcoming the initial barriers, the second phase might benefit from a less centralized approach where ESCOs can work directly with facility managers. Once projects have been fleshed out, submitted, and approved, it would appear that a more decentralized model might be appropriate to enable the ESCOs to communicate and work directly with the facilities managers as projects proceed.
- Reconsider the funding cap and payback threshold. The current level of funding, along with the five-year payback threshold, encourages ESCOs to design the projects by selecting the "low hanging fruit." However, once the first round of projects are completed and the less costly, high opportunity technologies are implemented, the program may need to reconsider the payback threshold. Also, because of the funding cap, ESCOs felt that many energy-savings opportunities were being left on the table because of this restriction. If feasible, the program should consider the costs and benefits to revising these two metrics.

# 7. VENTURA COUNTY PARTNERSHIP PROGRAM

## 7.1 INTRODUCTION

The Ventura County Partnership Program is both a resource and non-resource program that provides a local clearinghouse for energy efficiency, demand response, and water conservation information and training. The non-resource component of the program is the main focus of this evaluation; however, resource findings are also discussed.

The partnership is a continuation of a Partnership program that established the Ventura County Energy Resource Center (VCERC) in 2004[19]. The program was enhanced to target "community asset" organizations such as schools, hospitals, museums, and community centers. The partnership identified these organizations as groups that had under-invested in energy-efficiency upgrades.

The partnership is a collaboration between SCE (as lead utility) and SCG along with the Ventura County Regional Energy Alliance (VCREA). The VCREA is a Joint Powers Agency (JPA) and, at the time of developing the program theory, represented the County of Ventura, Ventura Community College District, Casitas Municipal Water District, Ventura Regional Sanitation District and the Cities of Ventura, Oxnard, Thousand Oaks, and Santa Paula.

As denoted in the Program Implementation Plan, the objectives of Ventura Partnership are to[20]:

- Provide specialized energy-efficiency service offerings to Ventura local governments, community asset organizations, small businesses and other target market segments in the region.
- Identify opportunities for municipal building retrofits, new construction, commissioning and retro-commissioning, as well as funnel existing IOU energy programs.
- Leverage local government communication infrastructure to inform their local communities about the wide variety of energy-efficiency and demand-reduction offerings available to them and encourage participation.

## 7.2 PROGRAM BACKGROUND AND STRUCTURE

### 7.2.1 Program Description

This non-resource program strives to create short- and long-term energy and demand savings for Local Government organizations and the communities. The means to doing this is through energy-efficiency education, information, and service offerings. The three primary elements of the program are:

[19] 2006-2008 Program Implementation Plan (PIP) for SCE 2519, obtained from EEGA.
[20] EEGA.

1. **Energy information through the Ventura County Energy Resource Center.** The program, through VCERC, provides a clearinghouse for energy-efficiency information, education, and technical resources. VCERC is open to the public for community use and research through their meeting rooms and energy and environmental impacts library. Examples include a county LED holiday light exchange held at the center, a regional newsletter, and "Energy Efficiency 101" classes for the youth market.
2. **Energy-efficiency training and workshops.** VCREA provides outreach to local communities for training and workshops that target businesses, residents, homeowner associations, business and social groups, seniors, mobile home park residents, and building operation professionals. This training focuses on specific energy-efficiency technologies for building operation managers and system designers (including training on efficiency in pump technology and lighting).
3. **Energy efficiency for public agencies.** This programmatic component offers energy-efficiency improvement support to public facilities. This support includes (1) development of work scopes for projects, (2) pre-qualification of contractors and serving as project management during construction phases, (3) energy audits, and (4) low-interest loan assistance.

In addition, the program refers customers to incentive programs. Through a qualification process directed by VCREA, buildings are identified for potential energy improvements and, if found to meet the qualification parameters, are funneled to the appropriate IOU program where the project is provided with incentive funding. The VCREA is not given credit for the funneling activity as it is not a specific program goal.

The executive director heads the partnership, manages the program general activities, and provides education to clients through delivery of workshops and educational seminars on energy efficiency. The program manager, an engineer with many years of auditing and energy consulting experience, manages the day-to-day operations and seminar presentations. Both individuals report to the Board and serve as the liaisons between the cities and the utilities supporting the program.

The program manager performs the on-site audits to support the application for project incentive and financing. Additionally, the program manager supports the businesses while efficiency projects are evaluated.

### 7.2.2 Program Logic Model and Implementation Theory

Figure A-4 in Appendix A presents the logic model for Ventura County Partnerships. As the logic model shows, the partnership's primary activities include organization and provision of education and training, general awareness campaigns, and community events. These three activities are to result in seven outputs: (1) marketing campaigns, (2) newsletters, (3) workshops and trainings, (4) recycling and Earth Day events, (5) energy-efficiency expo and best practices events, (6) multi-family lighting days, and (7) business expos and conferences.

## 7.3 KEY FINDINGS

***The program has exceeded its non-resource goals, even amidst the delay in program progress due to contract issues. The program also claims significant energy savings.***

The annual goals revolve around non-resource activities that fall within one of three groups: general awareness campaigns, education and training classes and workshops, and community events.

- General awareness campaigns include quarterly newsletters, press advertisements, and a marketing campaign that includes flyers, bill inserts, and posters.
- Education and training classes/workshops provide education to the public, business, and residential sectors.
- Community events include recycling and clean-up events, Earth Day events, and Ventura Chamber of Commerce business expositions.

Partnership program managers explained to the evaluators that although the partnership is a continuation from the 2004-2005 program cycle, the partnership was slow to gain momentum due to the lag time required to develop and sign the Partnering Contract with the utilities. They noted that that lag delayed initiation of the program, but the program claimed to be on target at the end of its first quarter of operation[21]. Utility staff confirmed that these contractual issues existed, although they stated that the partners were provided with funding and a reserve to continue the program until formally executed.

Regardless of the contractual issues faced, the partnership made significant strides to fulfill all marketing goals set for them for the initial year and, according to the most recent *Quarterly Report Narrative* (2008), the program is ahead of its three-year goals and ahead of schedule. The documentation expands on this, saying the SCE utility partner provided funding, which had been depleted, to allow the partnership to maintain momentum.

As this is both a resource and non-resource program for SCE, the three-year energy-saving goals are set to be 5.7 million kWh and 1.2 MW. Although the non-resource portion does not have savings goals, the program projected it would influence savings through services it offers. For example, VCREA employs a technical expert who provides customer-specific assistance for project planning and management—which is not typical within other Partnership groups. This technical assistance helps to fast-track projects that would normally not be.

The program also influences savings through its designation of an “energy champion.” The partners report that a main objective of the partnership is for the participating cities to create an environment that promotes the responsible use of the energy resources in their county. To do this, the program assigns “energy champions” to the cities. These energy champions work together and with other entities to support state, national, and local energy-efficiency goals for electricity and gas usage. However, it is not clear from interviews that this model is being implemented effectively for the Ventura Partnership.

***The partnership Program provides education and training opportunities for its participants, concentrating on nonresidential sectors. The partnership also disseminates information through community events and uses a variety of marketing venues to inform the public about the program.***

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[21] *Quarterly Report Narrative from First Quarter 2006.*

The program provides energy-savings information to all customer sectors through the VCERC. The program also provides recommendations and data to promote changes in behavior and purchasing decisions that promote energy efficiency. While the partnership provides information to residential customers through VCERC, it focuses its attention on nonresidential customers. These customers tend to yield the greatest savings opportunities per building.

At the beginning of the program period, VCERC developed a training plan and quarterly schedule. All training and workshop events specifically promote incentives available through the partnership as well as relevant IOU energy-savings programs. Each training event provided information on available programs, program implementation, and barrier removal (technical, operational, financial, etc.). Some workshops specifically targeted customers eligible for the incentives program.

Partnership personnel work with appropriate city officials to plan and implement community outreach events. For example, in 2006 VCREA distributed utility and program brochures to mobile homes with the assistance of city officials. Other events include CFL change-outs or other measures for public housing units, refrigerator and freezer recycling sweeps, small business hard-to-reach retrofit sweeps, mobile home direct installations, and re-lamping programs.

VCREA markets to potential participants using a variety of marketing tools. Different venues for marketing include brochures, training packets distributed at community events, the Ventura County Economic Development Association newsletter, and other publications. The program also markets through community events such as LED holiday light exchanges. Last, the VCREA developed a *Kiosk System* where kiosks placed around the community contain program-marketing materials.

***The Program offers technical assistance to its customers through audits and project recommendations. The technical assistance results in projects and yields energy savings.***

The partnership program collaborates with VCREA to help identify facilities and agencies where cost-effective energy opportunities exist. After performing energy audits, the program provides incentives and funnels facilities to the SCE core programs where further technical and incentive support can be obtained.

In addition to identifying opportunities, the partnership provides technical support and project management during the project implementation. The partnership also assists clients in locating the proper contractor for project installations, documenting the upgrades, and computing the available incentive from the utility. The technical representative provides cost-effectiveness analysis to the facility staff and illustrates how different levels of incentives influence cost-effectiveness. They then use this platform to demonstrate how to compute rebate levels for each specific project.

The technical manager for the partnership performs the audits and determines the cost-effectiveness of measures and projects which are calculated using the E3 Calculator provided by Energy and Environmental Economics, Inc.

SCE facilitates the identification and scoping of energy-savings projects and commits the required incentive funds available through other IOU programs where necessary. The pipeline of energy-efficiency projects are primarily comprised of electric measures.

***Partners report that all cities are involved in the program; however, questions exist about how to engage city and county officials in additional involvement.***

VCREA staff believes that all cities are engaged in the program, although the level of engagement varies by city. While some cities are actively seeking project opportunities and work with VCREA on a regular basis, other cities do not work directly with VCREA or initiate new projects.

VCREA staff believes that those cities that are not as engaged are simply not "up to speed" on energy efficiency and the impact of energy efficiency on building energy bills. The theory is that the degree to which cities participate varies depending on the level of understanding the city has regarding energy efficiency.

With this in mind, continuing to improve the awareness and literacy of cities regarding the benefits of energy efficiency should be paramount. Interviews with program partners revealed movement in this direction; less involved cities have expressed a desire to phase in their involvement. For the cities that have not been active participants up to this point, continued education in energy management and efficiency until they are "up to speed" on the topics will influence their future involvement.

In another effort to engage cities, the program is considering how to encourage city and county officials to attend Partnership meetings. Individuals managing energy use for the public agencies tend to be the audience that attends these meetings. And while the county officials are not expected to attend these meetings, they are invited. Increasing city and county official's attendance may further promote the cities to be more involved in the program.

***VCREA staff believes that an increased budget for incentives and staffing would benefit the program and move more projects from the planning to implementation stage. The program is considering funding options.***

Staff of VCREA, as well as program participants within the municipalities, suggested the funding levels as an area for improvement. Specifically they discussed the rebate money available to participants. The intent was for the partnership to funnel projects to the utility incentive and rebate programs that had funds available, such as *On Bill Financing*. However, individuals interviewed noted that they could be more successful at influencing project initiation if the incentive funds were more broadly available. They believed this could be done if the utility allocated a larger amount of rebate money to the partnership. Additionally, staff believes increased funding would improve the return-on-investment ratio for the energy-efficiency opportunities, thereby promoting additional opportunities for implementation.

One identified application where a higher level of funding would be beneficial is when participants are short of the investment necessary for the project. For example, the partnership identified opportunities in government buildings that require higher monetary investment than they could support. The provision of additional funding for incentives would push these "borderline" (borderline in terms of the payback needed for the government to

move forward with the project, not in terms of overall cost-effectiveness) proposed projects towards implementation.

Another application where further funding would be useful is for additional technical staff. Interviewees reported that staff is overextended and would benefit from additional personnel.

Staff at the partnership mentioned that there may be other funding sources through the Energy Commission and other organizations. They want to assess funding options beyond the funds provided by the utilities.

***VCREA staff expressed a desire for a means to communicate best practices and lessons learned, similar to a peer-to-peer program approach. VCREA staff also voiced frustration at the delay in communication related to utility offerings and would like coordination to improve.***

In order to share experiences, best methods, unique approaches, and enhancements to their program, VCREA staff would like to receive a regular update on other partnership activities. The current Quarterly Report Narratives for the partnership programs are available on the Internet after events take place. Some VCREA staff felt the material is too outdated for use.

Another suggestion follows a similar approach—a peer-to-peer program component. This would involve partnerships communicating experiences to improve processes and promote greater energy efficiency. Through this type of communication channel, VCREA staff would like the opportunity to assess other programs' successes for consideration in their own program and coordinate similar activities with other Partnerships.

Additionally, VCREA staff report they struggle to keep up with the changes and new offerings in utility programs. Interviewed staff commented that oftentimes they would "happen on" to new utility initiatives in their daily contact with their clients. They expressed that they would like to receive advance notice of changes and upgrades to the utility core programs.

***Community partner's satisfaction with the program varied. Dissatisfaction stemmed from issues such as lack of program awareness, unclear understanding of program offerings, and insufficient staffing.***

The reviews that the partnership received from the participating communities ranged from the discontented to the very pleased. Those communities who are involved are satisfied with the support the partnership provides and believe VCREA does a good job of leveraging the utility contributions and providing technical support. One interviewee highlighted his great satisfaction with VCREA as "being a one-stop shop for everything environmental and energy. They help me do my job and improve services."

Partner interviewees suggested various reasons why the partnership may not be operating as well as it could. These items are listed in no particular order.

- **Inadequate awareness.** Some communities seem not to be aware of the existence of the VCREA. One respondent, promoted to his current post recently, learned about the VCREA only six months ago when his predecessor mentioned it, even though the respondent has been employed with the city nearly five years.
- **Partnership offerings.** Those customers who are aware of the VCREA but are not participating do not have a clear idea of what it offers, what might be of added value,

and how that might differ from what they would receive by just calling SCE directly. Additionally, it was suggested that organizations such as water conservation districts should be included more effectively.

- **Insufficient staffing.** As with other Partnerships, VCREA commented that they are staff constrained. Coalition building and outreach are resource and time intensive. VCREA staff reported there are too many people to reach out to and maintain contact with, and not enough time to perform programmatic activities. As a consequence of understaffing, municipal facilities do not receive the attention they need and, as a result, VCREA staff believe the projects do not move forward quickly or efficiently.

As another measure of satisfaction, PA asked ten city partners to rate the partnerships on a scale of 1 to 10, where 1 means the partnership is doing most of the implementation work and 10 means the city needs the funding but does most of the work. Respondents ranked the partnership widely. With a "5" being the ideal, true partnership, two respondents ranked the relationship with VCREA a "5" or a "6" because they feel the working relationship is good, with open communication.

One respondent ranked the program a "7." Although he appreciated the VCREA outreach to agricultural and industrial end-users, he felt that his organization held most of the responsibility for programmatic activities.

When interviewed, only one respondent out of ten city partners was disappointed with the partnership and had the perception of the partnership failing to deliver on promises made. He felt that the partnership was lacking in its commitment to the stated goals, although he provided no specific examples. He also commented that VCREA needs to increase staff in order to help municipalities translate the partnership programs into policies, ordinances, codes, and other city programming. Currently, consultations are only available on a project-by-project basis. This type of assistance is not currently in the scope of the program.

Overall, though, most participating respondents said that they have a good relationship with VCREA. They commented that the VCREA staff is accessible, provides good information, and has the required technical competence. "They are always willing to help," said one respondent.

By addressing the above noted issues appropriately, the partnership should be able to enjoy and leverage effectively what seems like growing awareness and interest in resource conservation and efficiency in many of the municipalities across Ventura County.

## 7.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

The partnership provided education opportunities to residential and commercial customers via workshops. Residential workshop topics include *Remodeling for Energy Efficiency and Energy Efficiency in Your Home.* Commercial workshop titles include *Energy Efficiency for the Home for Real Estate Agents, Solar Briefing*, and *Making Non-profit Businesses Energy Efficient.*

SCE provided workshop participant data in PDF format, which was data-entered and became the sample source. Only ten residential sample points were included; therefore, while six of

these individuals were contacted and interviewed by PA researchers, their responses should be viewed as qualitative.

PA researchers also spoke with 76 commercial participants. Their responses are included quantitatively below.

***Residential customers reported positive experiences with the program in terms of what they learned and received through the workshops.***

Residential customers surveyed said they attended the workshop or event to learn how to save energy. All participants said the workshop was somewhat useful or very useful in helping them to understand how they can save energy in their home. This may be because they believe the workshop provided specific things they can do to save energy; all but one respondent said the workshop did this. Additionally, all respondents said they received brochures and written brochures as part of their participation and that these materials were either somewhat or very useful.

Overall, respondents were satisfied with their workshop experience. No respondent rated their satisfaction a 1 or 2 on a 5-point scale (1=not at all satisfied, 5=extremely satisfied).

***Commercial customers attended workshops for a variety of reasons, the primary reason being to learn how to save energy. The majority stated that the workshop was useful and provided benefits to their organization.***

Commercial customers that attended workshops offered by the partnership did so for a variety of reasons. The primary reasons were to learn how to save energy and save money. In addition to these reasons, customers also said they wanted to learn about new energy efficient technologies as well as understand 'green' building issues. The workshops play into these latter customers' goals with workshops such as *Energy Efficiency and Climate Change Issues for Land Use Planners* and *Solar Briefing*.

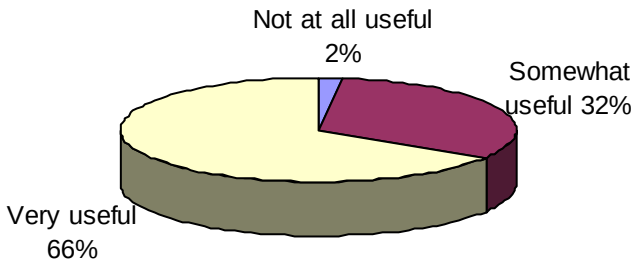
**Table 7-1 Ventura County Commercial Participants Reason for Participation (n=76)**

| Benefit | Percent |
|---|---|
| Learn how to save energy | 50% |
| Learn how to save money | 15% |
| Learn how to install energy efficient measures | 12% |
| Learn about new energy efficient technology | 31% |
| Learn how to be more environmentally friendly | 6% |
| To understand 'green' building issues | 13% |
| Other | 43% |

Source: Commercial participant survey (2008), question W3

Customers most notably felt the workshops were useful in helping them learn ways to save energy. Two thirds of respondents reported the workshop was very useful and nearly a third noted the workshop was somewhat useful. Only two percent said the workshop was not at all useful (Figure 7-1).

**Figure 7-1 Usefulness of Workshop in Understanding Ways to Save Energy (n=78)**




Source: Commercial participant survey (2008), question W9

In addition, over half of respondents (58 percent) said they used the information they received from the workshops to make changes in their organization. These respondents provided the changes they made, such as replacing their current lighting with more efficient options (38 percent); purchasing and installing efficient equipment (36 percent); and reviewing their facility's energy use (19 percent). Other changes they made as a result of what they learned in the workshops included: using Title 24 calculations on residential homes; providing internal staff or clients with information about green building practices; making system design changes; and seeking out rebate programs for efficiency upgrades.

As a follow-up question, commercial respondents that said they made any changes were asked how the workshop influenced them to make those changes. They were asked to rate the workshop's influence on a 10-point scale (1=not at all influential and 10=very influential). Respondents generally felt the workshops influenced their decisions and rated the level of influence an average of 7.4 on the 10-point scale (standard error of 1.745).

To support respondents' claim of usefulness of the workshop, nearly seventy percent of all respondents interviewed reported that in the future they plan to use information or concepts provided in the workshop. Examples of what they plan to do include making their building more efficient such as by installing efficient lighting, incorporating information into city plans and regulations, and implementing green building projects.

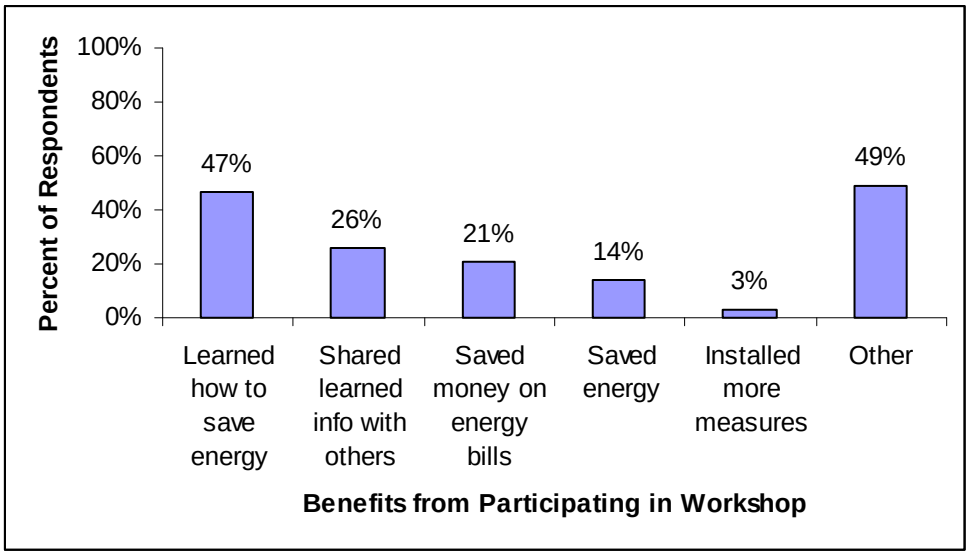
> *"We plan to apply for one of the ENERGY STAR certification programs."*
>
> *"Follow up with the city planning department to encourage them to come up with a resolution for green building in the city."*

Respondents also noted that they learned about resources they can go to from the workshop.

> *"As we go forward with future projects, we have some resources to call upon to have people help us move forward."*
>
> *"…we now have a better understanding of the rebates available..."*

Figure 7-2 further exemplifies the benefits provided by Ventura County Partnership participants. All Ventura County Partnership participants reported that their organization benefited in some way from participating in the workshop. While the benefits of learning how to save energy and money on energy bills are positive, what is particularly powerful in this figure's message is that a quarter of respondents said they felt one benefit was that they were able to share information with others. This filtering of information to others will not only draw others into the program, but will also provide a ripple effect of increasing the opportunities for energy efficiency.

**Figure 7-2 Reported Benefits from Participating in Workshop (n=70)**




Source: Commercial participant survey (2008), question W15

Other reported benefits for participating in the workshop included becoming more educated, learning about alternative energy sources, gaining knowledge on energy efficient equipment, and becoming more connected with nonprofit organizations.

## 7.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

The partnership offers resource and non-resource opportunities to its participants and supports resource activities through audits and referrals into SCE's core programs. The program reports they have exceeded their targets for the partnership.

The program received mixed reviews from partner cities on their satisfaction with the program. Evaluation efforts uncovered various opportunities for program improvement, one of which was to engage more cities. There is variation in city engagement levels, which also leads to a variation in satisfaction. However, with reported limited funding and overextended staff, this is not always an easy activity.

The recommendations for changes from respondents varied widely. One suggested change was to expand VCREA staff in order to focus on specific areas, deepen technical expertise, and broaden the organization's impact in the market. In addition to this recommendation, interviewees suggested a number of other opportunities for the program.

- **Provide support for staff and trainings as necessary.** Although those who have benefited from the partnership praised their working relationship with VCREA, their willingness to help and their technical knowledge, more hurdles need to be addressed before this Partnership achieves its full potential. The VCREA needs more staff not only to specialize technically, but also to improve their outreach and follow-up with potential partners, while increasing local awareness. This expanded staff might also require some training (formal or informal) to boost their coalition building and institutional strengthening skills and to improve partner selection.
- **Modify and expand outreach.** The presentation that VCREA gives as part of its outreach seems to require modification so that it demonstrates the flexibility of the partnership program (to address a given municipality's needs) and shows the impact (i.e., energy savings) of both the education and outreach and municipal retrofit components. This modification would help to better show the value of participating. With expanded outreach assistance and expertise, VCREA could also help participating municipalities understand concepts, practices, and benefits of energy efficiency which would allow them to better disseminate the energy-efficiency message to other staff and their communities.
- **Improve feedback and communication loops.** Many involved in the evaluation interviews raised the topic of feedback. VCREA staff mentioned the need for more interaction with utility staff regarding the latest initiatives being implemented within the regional reach of this partnership. On several occasions, VCREA staff found that new utility programs implemented in the area could have been linked to the marketing outreach for this Partnership. In addition, at times the utilities engaged in neighborhood "blitzes" of program offerings unbeknownst to VCREA staff. Since the partnership is sometimes called upon to serve as an adjunct utility regional representative, it must field questions regarding these blitzes. Having information prior to the utility activity would empower this Partnership to provide additional information to their clients on efficiency opportunities.

- **Develop a functional database for partnership use.** This Partnership tracks customers who are referred into the utility core programs, but does so in a rather laborious manner that might be inconsistent from project to project. Having a utility-developed or approved database structure would ensure that all needed information for evaluation would be available in a manner that could be compared to other Partnership data.

  This database should capture program-specific activities so that these activities can be measured against stated goals. For example, all non-resource activities and participant data should be collected, including workshops completed and outreach efforts (even if it is just to list the effort and estimated number of attendees). The database should also capture resource-level information, such as baseline equipment, equipment installed, estimated energy savings, and incentive amounts. Last, the database should document information discussed during an audit or technical assistance process, including the recommendations made to facility and referrals into the IOU program. This level of information would provide a means for the VCREA and the IOU to track the effectiveness of funneling customers into IOU programs, and would also provide an opportunity to follow-up with participants to understand if they moved forward with any of the recommendations posed.

  Also, records are maintained on paper and in Microsoft Excel format. These methods are unsophisticated and relatively manual; therefore, data requests by the utilities require more staff time than necessary. It is suggested that future data collection be based upon a method/format that can be summarized or produced through the analyses of data formats that are common amongst the Partners. The utilities can recommend the best format for the partnership to utilize and to facilitate future data collection.

- **Relay information on implementation and results of funneling.** Aside from the tracking database noted above, the Partners would like to receive information about projects referred into utility programs. Partners noted that they do not receive data regarding measure implementation after their referral to the utility programs. Data on the work completed as a result of the referral should be summarized and provided back to the partnership for their own records and to identify areas for improvement or for greater emphasis in their marketing.

# 8. SOUTH BAY PARTNERSHIP PROGRAM

## 8.1 INTRODUCTION

The South Bay Partnership is a non-resource program that provides a local clearinghouse for energy efficiency and water conservation information and training, although the program does have resource goals not reflected in the PIP. These services are provided at the South Bay Environmental Savings Center (SBESC), a local resource for energy-efficiency information and education. The partnership is a continuation of what was considered an effective Partnership program that was established the SBESC in 2004[22].

The partnership program is a collaboration among SCE and SCG along with the South Bay Cities Council of Governments (SBCCOG) and the SBESC. The lead utility for this program is SCG.

The program places a strong emphasis on funneling businesses to the partner utilities account representatives through the education, training, and information activities. The partnership monitors which potential participants have been referred into a utility core program and follows up with them as appropriate. The partnership supports sixteen local governments in the South Bay area as well as local communities and businesses.

This successful non-resource Partnership exceeded its 2006–2008 program period goals, which are denominated in terms of outreach events and activities. The goals were surpassed in September 2007.

## 8.2 PROGRAM BACKGROUND AND STRUCTURE

### 8.2.1 Program Description

The partnership is based on the successful linking of and joint authority of 15 Bay Area cities who work together for the mutual directive of maximizing the quality of life and productivity in their region. The executive director of the Council of Governments heads the partnership and a program manager manages the day-to-day operations. Both individuals report to the Board and serve as the liaisons between the cities and the utilities supporting the program. There are several contract administration and accounting staff, along with technical staff, who perform audits and provide support to the businesses while efficiency projects are performed.

The partnership management acts as a liaison to the public who utilize this program and to the Board of the Council of Governments. Being former elected officials, the partnership management reports they have experience that allows them to circumvent or facilitate some of the major stumbling blocks associated with proposing, approving, and funding major energy-efficiency projects. Often, they personally know the government employees involved in the energy projects and work closely with these employees to expedite their budgetary

[22] 2006–2008 Energy Efficiency Program Theory for SCE2520, obtained from EEGA

approval processes. They also provide information to the appropriate city staff regarding new technologies being targeted or new and available utility programs operating within the region.

Representatives from each city sit on the Council, with some representatives participating on the Board of Directors.

The Council did not originally engage in energy-efficiency issues, but realized that they could enhance their members' benefits by entering into a Partnership contract with SCE and SCG to promote energy efficiency. Now the Council serves as an example to cities by making energy and water efficiency improvements in their own facilities.

The partnership program focuses on the following two major activities:

- **Disseminate energy information to all sectors of the community.** Through the SBESC, the program provides the communities with a central source of energy-efficiency information (both from an energy and water conservation perspective). Additionally, the center provides information to residents, businesses, and local governments on utility programs available to them and then funnels potential participants into applicable utility programs.
- **Provide training and workshops.** Training and workshops, typically held at the SBESC, are available to all sectors of the communities such as businesses, residents, seniors, mobile home parks, and building professionals. The program outlines energy code training as a specific area of interest along with other training targeted to the needs of the communities. The program customizes workshop and training opportunities to the target audience, and provides "off-hours" workshops to accommodate scheduling difficulties, particularly for difficult-to-reach businesses

In addition to the primary elements listed above, the program also provides energy audit assistance, facilitation and coordination of The South Bay Public Facilities Energy Efficiency Project (EE+) lighting retrofit initiative, and referrals, or funneling, into other programs.

- **Energy audits.** Energy audits are conducted as part of The South Bay Public Facilities Energy Efficiency Project (EE+) program. The intention of the audits is to stimulate equipment retrofitting and building system changes to reduce energy use.
- **Lighting facilitation initiative.** Another component of The South Bay Public Facilities Energy Efficiency Project (EE+) is the lighting retrofit initiative. This initiative works closely with potential participants to identify and implement lighting retrofit projects through the rebated Express Efficiency Program. The program has also hired a contract engineer to work at the center once a week to address technical questions from the public and to facilitate EE+ initiatives.
- **Program referrals.** The program is putting significant emphasis into funneling customers to the partner utilities through the education, training, and information activities. This program monitors which potential participants have been funneled into a utility core program and follows up with them as appropriate.
- **Giveaways.** The program does CFL giveaways, typically associated with participants' education, training, and information events and includes a highly successful holiday light exchange.

### 8.2.2 Program Logic Model and Implementation Theory

Figure A-6 in Appendix A presents the logic model for the South Bay Cities Partnership. As the logic model shows, the partnership's primary activities include the provision of program information, energy education, city facilities technical assistance, and new construction technical assistance. These four activities are to result in six outputs (1) exhibits, displays, and cable TV public service announcements, (2) Energy Lending Library, (3) community sweeps, (4) workshops, (5) audits, technical and incentives assistance, and (6) early identification through permitting process.

## 8.3 KEY FINDINGS

***As a non-resource program, the South Bay Partnership Program has event rather than savings goals. The program exceeded its goals early in the program cycle. Allocated funding has been exhausted and the program asserts that additional funding could provide further outreach opportunities.***

The original PIP set up the program as non-resource, although the program does have an internally set savings-goal of 3 Million kWh. which is in the Partnership Agreement. The savings are funded through the Express Efficiency or SPC.

Although the program has these soft savings-goals, the process evaluation focused on the non-resource activities, which were defined in the original PIP. The program does not have resource goals. The program established very specific annual targets for training opportunities. These activities are detailed below.

- Workshops for businesses (four annually)
- Workshops for government (two annually)
- Workshops for residential customers (ten annually)
- Community sweeps (one annually)
- Community outreach events (six annually).

Program managers believe they have been successful at program outreach and feel additional funding would benefit the program and community. The additional funding would be partially earmarked to attempt to reach the businesses that might have a difficult time attending meetings and workshops during regular business hours. Additional funding could also allow the program to provide workshop and outreach events at the business sites so that the owners and employees would not need to leave their business' premises.

***The program markets itself and distributes energy-efficiency information via a variety of venues.***

SBESC developed a marketing and outreach plan designed to reach the community through various marketing and media venues. The plan intends to market the program to all sectors of the community, including residential, small business, non-profit, and government organizations.

The program is marketed through direct mailings, program literature, and fact sheets. The program uses personal opportunities, such as face-to-face meetings, customer education, and outreach events, to promote the program. Additionally, electronic resources such as electronic newsletters and a web page are employed. The SBESC also develops public service announcements for local cable television (CATV) as well as coordinates opportunities for local cable television interview shows with local elected officials, IOUs, and SBESC representatives. The program gains input and approval by the IOUs for these activities.

The SBESC distributes statewide and national energy-efficiency information, including marketing information related to other programs. An Energy Lending Library's exhibits and displays focus on energy efficiency and available programs.

Program staff feels they have been successful in marketing the program. However, the partnership depleted their funding early in the program cycle. Partnership staff believes that additional funding would allow them to market the program even further

***The partnership offers technical assistance to nonresidential customers through Energy Efficiency Plus. The technical assistance provides audits, recommendations for improvements, direction into utility programs, and paperwork assistance. Customers expressed satisfaction with the assistance in interviews.***

The partnership offers technical assistance to nonresidential customers through *Energy Efficiency Plus* (EE+). A contractor, hired by the partnership, provides audits and makes recommendations for improving the energy efficiency of buildings. The program also takes the opportunity to direct customers into utility programs through the recommendation process.

The audits performed for this Partnership support the application for incentives offered by the electric and gas utilities. For general information regarding energy efficiency within a building, customers can access the partnership website and link to SCE's online energy surveys.

The utility does not provide feedback to the partnership regarding completed projects, so the partnership is unable to assess the success of the marketing and information dissemination provided to participants. SBESC keeps internal records of those who were funneled to the utility along with the audit results and recommendations. However, SCE reports referrals if they can be attributed to a specific referral. However, SBESC would like more formal and regular feedback in this area. The utility may consider providing more information about these referrals, even when they do not result in savings (e.g., the facility inquires about the program but it does not move forward to a project). This feedback does not necessarily translate into energy savings and provides credit to the program for the referral. However, it could be a mechanism for SBESC to determine the effectiveness of their marketing and referrals to the IOU programs.

In an effort to assess participant satisfaction, a partnership contractor contacted partnership participants in 2007 and 2008. These calls asked participants which measures they installed after the referral. Additionally, the calls assessed participant satisfaction with the program.

From a perusal of the results of that initial follow-up, it seems that most participants were satisfied with the information provided to them by the partnership. Additionally, the data indicates that measure installation did take place after the program referred them into the utility core programs. The exact number of referrals that resulted in projects could not be assessed through this process evaluation.

Overall, interviews with city partners indicate they believe the partnership has increased the public and participating members' level of awareness and buy-in for energy efficiency. Several city partners stated that energy efficiency has since become a more regular topic among city staff during City Council meetings and a greater consideration of energy efficiency exists in purchasing and planning decisions. Several city partners provided examples of where specific actions or measures installed were a result of the program. Examples included lighting installations, HVAC retrofits and switching all traffic lights to LEDs.

***While overall SCE and the program received positive feedback, city partners expressed varying levels of satisfaction with the partnership program and their interactions with SCE as part of the partnership. Partners reported there was an initial lack of involvement by the utilities, which has been addressed and has improved their satisfaction with the utility. The level at which city Partners feel the program is a true Partnership also varies.***

PA researchers spoke with partnering city staff as part of the evaluation. Overall, most respondents expressed their satisfaction with the partnership and the Center in particular. A few expressed their enthusiastic support for everything the SBESC offers, listing their wide programming scope (from energy to water), excellent outreach to both cities and residents, and the convenience of a "one stop shop" for programmatic assistance. While a couple of respondents mentioned that the information and support provided is a little too "generic," these responses were in the minority. One city is so impressed with the partnership that they believe it should be the state model for Partnerships.

SBESC initially felt that utility involvement was less than satisfactory in that they wanted the utilities to be more involved than they were. For example, the SBESC and IOUs did not initially meet on a scheduled basis to discuss the partnership. This lack of communication led to a disconnect between the partners. In response, the partnership changed the process and mandated that partner meetings occur monthly. This change helped boost the relationships between the IOUs and SBESC, along with that of the participating clients.

PA asked seven city partners to rate the partnership on a 10-point scale (1=city has no capacity and need utility to do it all and 10=the city partner is doing most of the work). Responses varied by city interviewed. With a "5" being the ideal, three respondents ranked the partnership between a 2.5 and a 4, meaning they feel they lean on the utility (and intermediary organization) for more of the partnership's momentum and effectiveness. These cities were typically smaller, less active cities that experience chronic understaffing.

Three cities felt they did much more of the work than the utilities did, ranking the partnership between 7.5 and 10. Two of these cities attributed the rating to what they saw as unresponsiveness from SCE representatives or staff.

Only one ranked the partnership as a true "5" where each partner provides 50 percent of the effort and resources. This respondent said that the education and outreach materials were critical, and that the "*Utilities are doing their job."*

Interviewers asked city partners if the partnership met their expectations, and if they had any recommendations for improvements. The majority of respondents said the partnership met or exceeded their expectations and provided several recommendations that they feel would improve their satisfaction with the program. The recommendations focused primarily on program offerings and marketing efforts.

- **Inclusion of solid and liquid waste.** Although appreciative of the comprehensive energy and water-related programming, two city partners suggested that liquid and solid waste needed to be included, especially for coastal cities. Liquid and solid wastes are major energy consuming services for municipalities. While communities were pleased with the general comprehensive potable water and energy-efficiency outreach, they would like help reducing the energy consumption of solid and liquid waste processing.
- **Marketing to agencies and the general public.** Several city partners suggested that marketing should expand to engage other agencies within the cities, such as the water and sanitation agencies. City partners also suggested that while the marketing and outreach efforts have been effective, they believe improvements could be made in how information is disseminated to the general public. "*[I] just wish that more of the public knew about [SBESC] and used them as much as they could. They are a great resource and the public doesn't take advantage of them as they should."* Different approaches include marketing the success stories and the potential for action more effectively.

***Staff from participating municipalities (city partners) commented they, and the program, would benefit from additional communication from utilities. They would like to improve the feedback loop related to their performance, the planning processes, utility offerings, and the impact of program referrals.***

Staff interviewed from participating municipalities raised the topic of utility feedback as an area for improvement. First, these city staff commented that they would benefit from feedback on their performance in the partnership and improvements that could be made to the program. Program management felt that this level of feedback would push them to be better contributors to energy efficiency. One proposal was that the utility compare their activity to other local government Partnerships and level of referrals into the utilities' core programs. They feel benchmarking this program against other programs would identify areas for improvement.

Additionally, these city partners felt removed from the utility program planning activity in the 2006-2008 planning cycle. They discussed that goals are presented to them as opposed to being allowed to develop the goals with the utility. While developing the goals with all program Partners may slow down the process, engaging the city partners would provide buy-in to the goals of the program and may provide insight into the goals established. This is a factor that SBESC and SCE should be mindful of when planning for the next program cycle.

These interviewees also voiced that the utility did not always communicate activities within their area which may be important for them to know. For example, it was a surprise to them when they found out that the utility performed certain energy-efficiency activities (such as neighborhood blitzes) without their knowledge. If the program had that knowledge beforehand, management felt they could have contributed to the success and provided added elements for greater reach.

Last, program management expressed frustration at not receiving feedback related to the results of the referrals into the utility core program. They would like to be able to assess the program's impacts from the program participant's actions directly related to their referral. This information would be useful to the program staff for future goal achievement and for public

relations purposes. It would also make them feel more engaged in the utility's energy-efficiency initiatives.

A review of the participant survey data indicates that there is some level of customer participation in IOU programs as a result of program referrals. About one-third of residential program participants, and just over half of commercial customers that were interviewed as part of the evaluation of the South Bay Partnership said they received information about other utility programs (n=60 and 63, respectively). Of these, almost a quarter of residential and a third of small commercial respondents said they signed up to participate in the IOU program (n=33 and 32, respectively).

In addition, the CPUC is currently funding an indirect impacts study for a variety of the partnership programs. This impact evaluation will ascertain program influence in terms of direct participants into other IOU programs and impacts from education and training opportunities.

## 8.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

PA researchers surveyed seventy-seven residential customers who attended workshop(s) offered by the partnership program. Workshop titles include *Tips for Reducing Your Energy Bill*; *Remodeling with Energy Efficiency*; and *Energy Efficiency 101 Workshop*. The survey captured participants' experiences with the workshops, including any equipment they may have received as part of their workshop experience. This section discusses the results of these questions.

SBESC provided the participant information that served as the sample population. The information included contact names, workshop name, and a mixture of branded handouts distributed or made available to participants via the workshop. These handouts are typically referrals to rebate programs (e.g., *2006–2008 Energy Efficiency Programs for Businesses* and *2007 Home Efficiency Rebate Programs*) and recommendations for energy efficiency (e.g., *45 Ways to Save*).

***Residential customers most notably attended workshops offered by SBESC to learn to save energy and save money on their energy bills. They felt the workshops were useful, and that the workshop provided information that they could, and in some cases would, apply in their home. Overall, residential customers expressed satisfaction with their experience with the South Bay Partnership.***

Residential customers cited a variety of reasons for attending the workshops offered by SBESC, most notably being to learn how to save energy, followed by understanding how to save money on their energy bills (Table 8-1 below). Other reasons for attending the workshop included networking with others, interest in free inspections, information about appliances (e.g., water heaters), and interest in rebates.

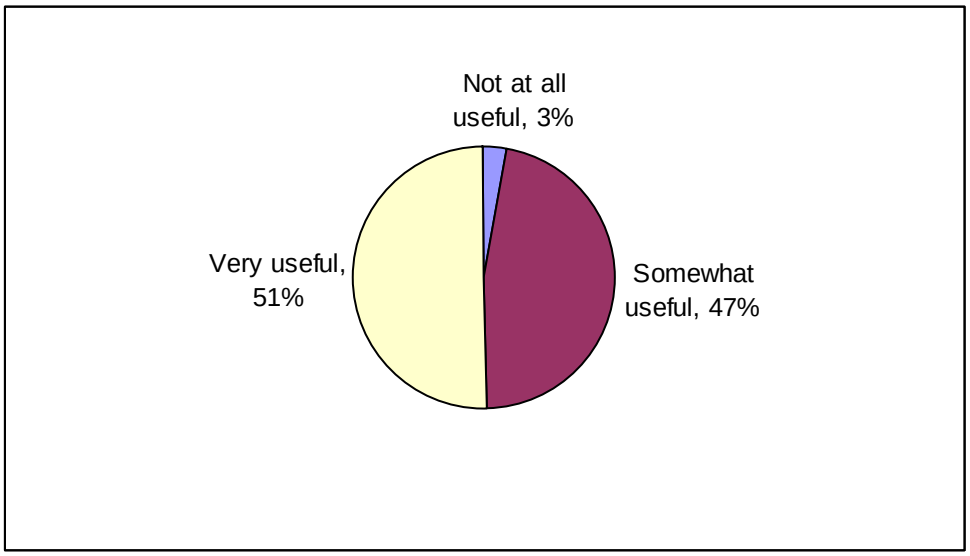
**Table 8-1 Reasons for Attending Workshops (n=71)**

| Reason | Percent |
|---|---|
| Learned how to save energy | 31% |
| Save money on energy bills | 21% |
| Interested in material | 8% |
| Remodel home | 5% |
| Considered adding solar panels | 4% |
| Saw ad | 3% |
| Right thing to do | 1% |
| Want to help utility | 1% |
| Other | 58% |

Source: Residential participant survey (2008), question SE3

Nearly all respondents felt the workshops were very useful (51 percent) or somewhat useful (47 percent) for understanding how to save energy in their home. Only three percent said they did not feel the workshop was at all useful (Figure 8-1).

**Figure 8-1 Usefulness of Attending Workshops (n=71)**



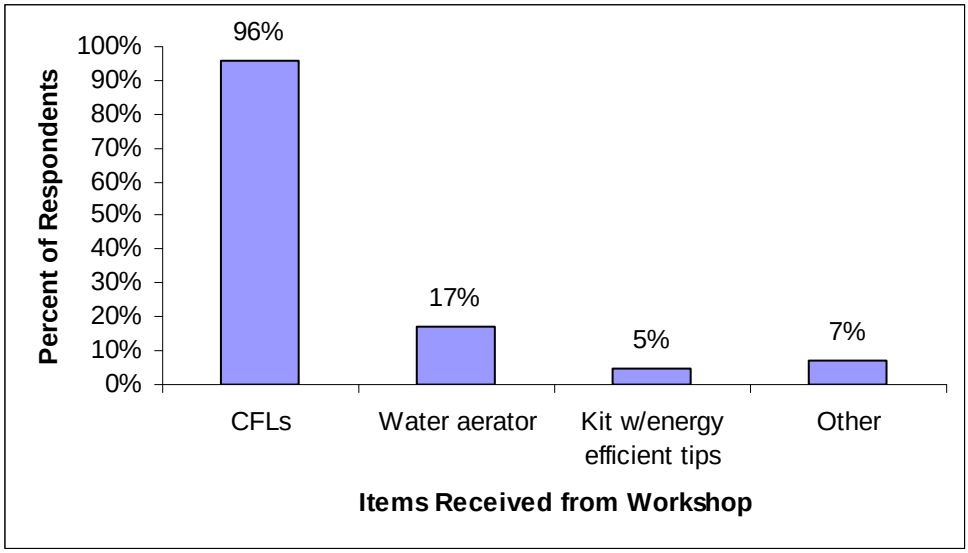

Source: Residential participant survey (2008), question SE4

Respondents noted that the workshops provided them with specific things they could do to save energy, including purchasing energy efficient appliances, lowering water heater temperatures, and installing low-flow showerheads. Nearly 90 percent of the respondents said they have completed some of these recommended activities since attending the workshops. The most commonly noted was that they installed CFLs (69 percent). A small

percentage[23] also reported installing low-flow showerheads or conserving water, evaluating, replacing, and/or sealing their windows, and installing a new thermostat.

Eighty percent of households interviewed said they received a "take-away" from the workshops, such as a lighting or water saving product. Of those who received equipment, almost all said they received a CFL, and an additional five percent said they received a kit with energy efficient tips.

**Figure 8-2 Items Received from Workshop (n=54)**




Source: Residential participant survey (2008), question SE10

Overall, satisfaction was high for the workshops administered by SBESC. The average satisfaction rating was 4.1 on a 5-point scale where 5 is very satisfied. The respondents that rated their satisfaction 3 or below provided recommendations for ways that they could have been more satisfied. The most commonly noted issue was that the information provided in the workshop was too basic and they wanted information that is more specific.

> *"Maybe demonstration on the weatherstripping and other things on keeping the heating and cooling cost down"*
>
> *"Wish they can give a little more specific information. Needed to be more concrete. Should have been more of a "how to" than basic overview. It was very basic…"*
>
> *"If it was tailored more for my specific needs. It was basic and I'm a little more knowledgeable on the subject."*

[23] Fewer than two percent within each item mentioned.

Interviewers asked respondents how they benefited from the workshop. In general, households felt their participation in the workshop had resulted in energy savings and, subsequently, savings on their energy bills (37 percent). Nearly a third said they benefited because they learned how to save energy (28 percent).

Sixteen percent of residential respondents said they did not feel they benefited from the workshop. Interestingly, only two of these individuals rated their satisfaction with the workshop experience low (a 2 or below on a 5-point scale), with over half of these individuals rating their satisfaction high (4 or 5 on a 5-point scale). Although sixteen percent did not feel they benefited, a majority remained satisfied with the program.

***Similar to residential customers, commercial respondents said they attended workshops to learn how to save energy and money. Nearly all respondents found the workshop useful, and said they made changes as a result of what they learned about in the workshop.***

Workshops provided to commercial customers revolved around a variety of topics. Workshop names include: *Title 24 Overview; Energy Efficiency for Businesses; Self-Generation Workshop: Solar Focus; and Green Building for Architects & Building Professionals.*

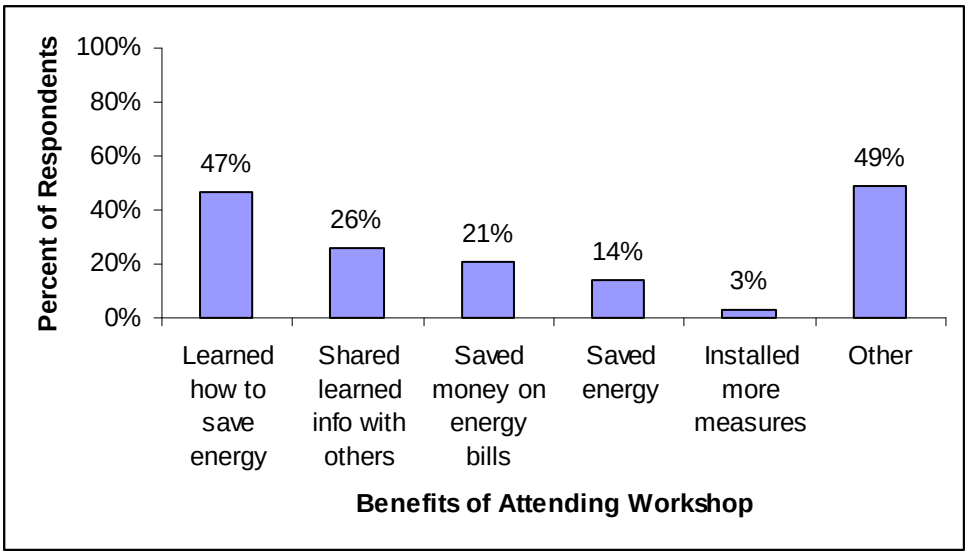
Like residential customers, commercial customers primarily say they attended the workshops to learn how to save energy (34 percent) and save energy on their electricity bill (21 percent). Four percent said they are considering adding solar panels as a reason for attending the workshops.

Overall, customers felt the workshops were useful; 71 percent said the workshops were very useful, and an additional 27 percent said the workshop was somewhat useful. Almost half (45 percent) said they did something in their organization as a result of what they learned about in the workshop. Of these respondents, nearly sixty percent (58 percent) said they replaced the lighting with more efficient lighting.

Respondents that made these changes to their facilities were asked how influential the workshop was in their decision to make the change. Respondents generally felt the workshop was influential, rating the level of influence an average 7.9 on a 1 to 10 scale, where 10 is extremely influential (standard deviation of 1.894). In fact, over half of the respondents rated the level of influence an 8, 9, or 10 (58 percent, n=38). Only 10 percent of respondents provided a rating lower than 6.

Respondents cited various benefits of the workshop including that they learned how to save energy and they believe they have saved or will save money on their energy bill. Over a fifth of respondents also said they were able to share the information learned with others (Figure 8-3). Other benefits for participating in the workshop include becoming greener/more energy efficient; understanding programs available, receiving information on new code requirements, saving water, obtaining rebates, and receiving grant assistance.

**Figure 8-3 Reported Benefits of Attending Workshop Offered by South Bay (n=77)**




Source: Residential participant survey (2008), question SE14

## 8.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

Overall, the partnership program is working well. Program elements that received favorable mention include the centralized information resource offered by the SBESC, the significant outreach and education efforts, and the partnership's work with the cities to identify opportunities for cost savings. City partners who were less familiar with energy efficiency initially appreciated the assistance in learning about regulations (e.g., Title 24 and AB32) and energy efficiency in general. Program participants expressed a high level of satisfaction with their interactions with the program.

Despite generally positive feedback and perception of fulfilled expectations, several city partners discussed that they do not believe there is enough awareness among the general public about the SBESC and the resources they offer. The interviewees did not attribute this lack of awareness to SBESC efforts; rather, the difficulty of reaching this population. Even when making this comment, one of the respondents recognizes the excellent service SBESC offers and its significant effort in providing outreach: *"The SBESC does an excellent job and no one's better."* In fact, when asked what's working best about the partnership, nearly all of the city partners interviewed mentioned outreach, communication, and/or education.

However, there is still concern from a few interviewed that the general public or the residential market is not as aware of the SBESC as the respondents would like them to be. They believe that improved marketing and outreach would increase awareness and the number of customers taking advantage of the information provided by the SBESC. This comment was specifically directed at residential customers, although it could be applied to all sectors of the community.

Several cities partners interviewed noted that additional funding could improve the marketing and outreach effort. They envision that staff would allow the SBESC to provide a greater level

of in-person market opportunities to residences, which they believe may more successfully engage the residential sector.

The evaluation process identified the following opportunities for improvement.

- **Develop a database to track customer referrals.** This Partnership tracks customers who are funneled into the utility core programs, but is not consistent with who they track and how the data is tracked. Having a utility-developed or approved database structure would ensure that all needed information for evaluation would be available in a manner that can be compared to other Partnership data. It is suggested that future data collection be based upon a method/format that can be summarized or produced through the analyses of data formats that are common amongst the Partners. The utilities can recommend the best format for the partnership to utilize and to facilitate future data collection.
- **Communicate results of referrals.** Aside from the tracking database noted above, SBESC representatives would like to receive information about projects referred into utility programs. The individuals interviewed from SBESC noted that they do not receive information regarding measures installed after their referral to the utility programs. Data on the work completed as a result of the referral should be summarized and provided back to the partnership for their own records and to identify areas for improvement or to direct their marketing strategies. This would also allow the partnership to see how their activity plays within the utility planning and goal setting.
- **Improve feedback and communication loops.** SBESC expressed that they would like a better feedback loop between the utility and themselves. First, they would like to receive feedback on their performance so they could know what they are doing well and what they need to do better to increase their impact on the communities. Program Partners also mentioned they would like to be more integrated in the program planning initiatives. In addition, Program Partners expressed that they would like the utility to better communicate events in their areas. Having information prior to the utility activity would empower this Partnership to provide additional information to their clients on efficiency opportunities.

# 9. LA COUNTY PARTNERSHIP PROGRAM

## 9.1 INTRODUCTION AND SUMMARY

The LA County (County) Partnership program is a three-way Partnership between the County (lead by staff at the Energy Management Division of the Internal Services Department), SCE, and SCG. The partnership's primary purpose is to support retro-commissioning for larger County facilities.[24] Vendors, under contract to SCE and directly managed by County staff, carry out the retro-commissioning work.

Overall, based on information from all three partners, the LA County Partnership is working well.[25] The relationship of the partners is collegial and active, the decision-making is shared, communication is regular and constructive, and the roles are clear. Building upon past experience (since 2002), the program process has evolved and has a proven track record.

In the 2002–2003 program cycle, the County operated a similar program as a third-party program. The utility oversaw, but was not directly involved, with the program. For the 2004–2005 program cycle, the Commission strongly urged third-party program operators to partner with utilities when it was appropriate to do so. As a result, the current LA County Partnership program was formed and was continued for the 2006–2008 program cycle. The major difference between the third-party operation and the partnership is that the utilities as partners are now much more involved with decision-making. These decisions include selection of the vendors that complete the technical work such as retro-commissioning, and, in the case of SCE, handling the contracting.

## 9.2 PROGRAM BACKGROUND AND STRUCTURE

### 9.2.1 Program Description

The County Board of Supervisors created the Internal Services Department (ISD) in 1989. It is organized into four business operations: Facilities Operations Service, Information Technology Service, Purchasing and Contracts Service, and Administration and Finance Service. The Facilities Operations Service includes the Energy Management Division (EMD), which, among other responsibilities, has overseen energy-efficiency projects for the county's 38 departments since its inception in 1994 and provides much of the staff directly involved in the LA County Partnership.[26]

In addition to seeking funds to carry out energy-efficiency projects and managing those projects, the EMD manages the County's utility budget; acquires utility services and products (electricity, water, gas); operates power plants/cogeneration facilities to provide heating and

[24] The utilities also provide some assistance for the LA County Green Building and Green Purchasing Ordinances. However, this analysis only deals with the retro-commissioning aspects of the LA County Partnership.
[25] The information in this analysis is based on interviews with SCE and SCG staff, as well as staff from LA County's Energy Management Division and a review of the partnership's 2006–2008 plan and other background materials.
[26] Few other counties in California have dedicated energy-management services like LA County.

air conditioning to County complexes, and ensures the correctness and payment of utility bills. For this service, they charge county departments a two percent overhead fee that in turn pays for the division; this fee is the sole source of funding for the EMD.[27]

The EMD does not have an annual budget for carrying out energy-efficiency projects. Thus, it seeks funds from the county, which may allocate funds for specific projects. The EMD may also seek funds from the CPUC and utilities. EMD is able to provide all of its services to the partnership Program as "in-kind" and does not charge any administrative costs.

While the EMD is the primary contact for the LA County Partnership, it works closely with internal partners such as:

- The Alterations & Improvements Division, which provides remodeling/ refurbishments, computer cabling, air-conditioning, etc.
- The Maintenance & Operations Division, which provides maintenance and repair services to 200 facilities (about 20,600,000 square feet)
- The Custodial Services Division that provides custodial/grounds maintenance for 160 facilities (about 13,300,000 square feet).

### 9.2.2 Partnership Scope

The partnership among the EMD, SCE, and SCG is one of shared responsibilities, with all three entities significantly involved in making decisions about the program. Together a core Partnership team selects the projects to be done. SCE provides the contracting services for the vendors and administers the payments and both utilities provide administrative oversight.[28] EMD provides the "nuts and bolts" of daily management—doing the scheduling and managing the projects in their facilities. The three partners review project progress and results.

While vendors provide engineering analysis, utilities may also provide such analysis on an as-needed basis. With the primary focus on retro-commissioning County buildings, buildings are evaluated and then tuned up and brought back to their "original" operating standard. Because the County has done more than $50 million in lighting, chiller, and VFD upgrades since 1994, evaluation and change-outs of these items are usually not cost effective and are typically not part of projects.

However, during the evaluation phase of the program, a vendor may discover that a new chiller or boiler is needed or the Building Maintenance Division may have identified needed equipment replacements. The Building Maintenance Division then may apply for utility incentives to supplement County funds so that a more efficient piece of equipment can be installed. The partnership program may then coordinate their retro-commissioning efforts with the equipment change-out activity.

[28] SCE provides the contracting services because until recently, contracts of more than $100,000, required County Board approval, which made it difficult to move projects quickly.

### 9.2.3 Program Logic Model and Implementation Theory

Figure A-6 in Appendix A shows the logic model for the LA County Partnership. As the logic model shows, the partnership's primary activities include retrofit projects, retro-commissioning, and education. These activities are to result in six outputs (1) retrofitting county facilities (2) providing incentives for incremental energy savings (3) addressing system deficiencies (4) training facility managers (5) implementing selected recommendations and (6) expanding the partnership to other agencies.

## 9.3 KEY FINDINGS

***The program exceeded its therms goals, and is optimistic they will meet their kWh goals.***

In past cycles, the partnership has exceeded its goals. At the time of this assessment, the partnership has exceeded its therms goals but is lagging slightly in meeting its kWh goals. This is due to a vendor not being able to do the tasks described in the scope of work and having to change vendors, which took time. The project manager expressed cautious optimism that the goals will still be reached.

***The partnership team collaboratively determines the specifications for each potential project, which is defined by six phases. Technologies implemented need to be deemed cost-effective and post-inspections ensure the equipment is installed properly and will yield estimated savings.***

The partnership team meets on a bi-weekly basis and with vendors as necessary. The EMD provides a list of County buildings, their energy use intensity, and other information. The EMD develops the information from utility billings or through its Enterprise Energy Management Information System (EEMIS). The partnership team reviews this information and selects buildings to be targeted for retro-commissioning. SCE then puts these projects out to bid.

Once a vendor is selected and a contract signed, there are six phases to the project:

- Planning
- Investigation and pre-functional testing
- E-quest modeling and measure identification
- Implementation of measures
- Post-implementation testing to ensure equipment and sequences are working right, re-running E-quest based on what was done, and developing a savings table
- Training for maintenance personnel.

In the planning phase, the EMD works with the vendor to plan the evaluation of the building. This involves establishing a timeline and working with the agency occupying the building to establish a timeframe for visits and obtaining access.

The investigative phase involves auditing of the building, obtaining energy use benchmarks for the building, investigating how the systems are set and operated, investigating how well

the systems are running, and then doing an "as-is" baseline simulation of the building using E-quest. The simulation is normalized against current energy usage. The assessment may identify a need for controls and missing or broken controls For example, it may find problems with time clocks, failed equipment such as economizers, settings for hours of operation that are inconsistent with the way the building is used, and pre-heating or cooling settings that may be unnecessary or exceed what is necessary.

With observations in hand, the vendor will then simulate improvements and assess the cost-effectiveness of various measures. A list of measures is provided to the partnership team that selects options for implementation. To help ensure fair pricing, vendors are informed up-front that all measures are done via change order and that they may not be selected to perform the implementation. Generally, however, the same vendor receives a change order to implement the measures.

In the post-implementation phase, the installation and software changes are examined to insure that the equipment has been installed and programmed correctly and that the operational sequences are properly ordered. E-quest is re-run with the changes and compared to building energy use data. If the building is not already connected to the county EMIS system, this is completed during implementation. In buildings already connected to EMIS, additional monitoring points may be installed.

***The partnership program is reviewing means to sustain the energy savings resulting from retro-commissioning, which can be diminished by facility and/or engineering staff. The plan includes educating staff, monitoring building performance, and regularly maintaining buildings.***

One of the major threats to the persistence of savings from retro-commissioning is the disabling or bypassing of sensors, equipment, or control equipment. Another threat is the resetting of control parameters to previously-used settings.

As such, LA County found that buildings might need a major retro-commissioning as often as every four years unless there is pro-active attention to and maintenance of the retro-commissioning guidelines. Thus, LA County has chosen a "sustained commissioning" path to avoid repeated retro-commissioning efforts and to ensure savings persist. This path involves three elements.

- Involvement and training of the facility engineering staff
- Monitoring of building performance
- Maintenance of buildings.

**Involvement and training of the facility engineering staff.** Facility engineers have input to the vendor during the retro-commissioning process. The vendor is required to provide an operations manual that explains system operations, the operating parameters, and the changes that have been made to the system as a result of retro-commissioning.

In addition, the vendor is required to deliver on-site training with county facility engineering personnel who have responsibility for the building. The purpose of the training is to provide hands on experience with the system, familiarize the engineering staff with the new equipment, and familiarize the engineer with the new settings and programs and the rationale for those settings and programs. The goal of the training is to reduce the potential for system

changes that reduce savings, but at the same time make it easier for them to fulfill their primary goals of keeping buildings open and their occupants satisfied and comfortable.

**Monitoring of building performance.** The county's EEMIS, which was installed in 2002, allows them to monitor building performance. EEMIS gathers real time metered data from the largest facilities including data from air conditioning, lighting, and other building loads. It allows for real-time analysis and intelligent control over energy usage, as well as comprehensive data warehousing, reporting, and monitoring. It also allows the county to analyze current and project future energy use.

During retro-commissioning, sensors and controls are connected to EEMIS. The system is programmed to provide alarms when equipment fails or is failing, or when the system is being operated outside of design parameters. This system allows centralized management staff to identify problems early and to take corrective action. The system also allows facility engineers to maintain comfort and efficiency.

**Maintenance of buildings.** The final leg of sustaining savings is proactive maintenance. Because problems such as failed economizers or sticking valves can be identified early, facilities engineers can plan and use their time productively to deal with maintenance issues. This early warning also helps them anticipate what they face before ever reaching the site. Finally, rather than dealing with a slowly deteriorating system, the county is able to maintain the system at specification over a long period. Thus, the initial savings from the retro-commissioning continue to accrue.

***The County maintains that while they welcome a continuation of the partnership, they have the capability of administering the program outside of the partnership with the utility. There would be benefits in doing so for the County; however, they see the value of partnering with the utility and note they are committed to growing their relationship with the utility.***

While all parties plan and are pleased to continue the partnership, County staff noted that they successfully ran the program on their own during the 2002–2004 cycle and feel they could do so again. One of the key reasons for the partnership, aside from the CPUC's strong recommendation that local governments partner with utilities, was that the utilities would be able to more easily handle vendor contracts. As it turns out, contracting delays contributed to the program being slow to reach it goals and, in addition, the County changed its contracting policies so that contracts of less than a million dollars no longer need County board approval. The sense among the LA County staff is that they are now more nimble than the utilities in their ability to handle the contracts. A change to the county doing the contracting has been discussed for the 2009–2011 cycle.

In addition, County staff noted that they do not charge any administrative fees for their services on the partnership program while the utilities do. Thus, operating the program would be cheaper without the partnership.

County staff also expressed some sensitivity about the amount of time spent by the utilities on quality control. Some LA County staff feel that the generation of "work papers" is time consuming and probably unnecessary. Their viewpoint is that they have hired vendors for their expertise and vendor proposals are carefully reviewed. The results are confirmed through post-implementation monitoring. They find the work paper process cumbersome, do not understand its value, and say it results in revisiting decisions to no observable purpose.

Thus, County staff see trade-offs between their running the program and having a Partnership. They acknowledge that the utilities bring unique aspects to the table, including additional engineering analysis skills and a clear and likely more reliable funding source than the County. They also respect their partners and would rather have a Partnership than have utility oversight without their real involvement in the program.

Their utility counterparts are satisfied with the partnership and would like to see it expanded to retrofits and new construction. They acknowledge that the County can do the program on their own, but also suggest that utilities may have more funding than the County for projects.

## 9.4 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

In general, the partnership works very well. All parties indicated that this is a successful, collaborative undertaking with good results, in terms of both savings and in the satisfaction of program partners and participants. The partnership combines experience and a highly competent County and utility team. While some glitches have occurred in this cycle, particularly with the need to change vendors, which delayed the program from reaching their kWh goals, all respondents spoke highly of the program and want to see it continue.

The production of the training manual, the training of facility operators, the connection of the system to the EEMIS and other aspects of this program that lead to sustained savings over time appear to be unusual, yet especially effective, for retro-commissioning programs. Gathering the buy-in of facilities staff through initial involvement and training and having the EEMIS detect and alert them to system problems are key components to having savings persist.

While all parties assume (and welcome) a continuation of the partnership into the next cycle, County staff also noted it is well equipped to pursue funding and operate the program if need be. County staff note that running the program solo could reduce costs, since they do not charge administrative costs while the utilities do. They also hoped it might reduce the need for monitoring and evaluation “work papers” which take considerable resources and for which they see limited value, given their focus on persistence and monitoring building performance over time. Last, the County’s contracting limitations that made utilities the better choice for handling vendor contractors have now been relaxed, making them the likely choice for these program responsibilities in the future. Both County and SCE staff value the partnership. County staff said they greatly prefer partnering with the utilities than having them in a purely oversight role.

# *10. BAKERSFIELD-KERN PARTNERSHIP PROGRAM*

## 10.1 INTRODUCTION

The Bakersfield and Kern County Energy Watch Partnership was designed to achieve immediate, long-term peak energy and demand savings and establish a permanent framework for sustainable, long-term, comprehensive energy-management programs. Additionally, it sets the foundation for best practices for the partnership's participating jurisdictions and its customers through education and direct installation of energy-efficiency equipment. The program is a continuation of a successful 2004–2005 program.

The program—jointly offered by PG&E, SCG, and SCE—partners with the City of Bakersfield (the City) and Kern County (the County). SCE customers are served largely by Kern County and the western edge of the City of Bakersfield.

The partnership is reducing energy use by providing energy-efficiency information and direct installation of energy-efficient equipment to homeowners and small businesses in targeted areas, while continuing to retrofit municipal properties. Both existing homeowners and new homebuyers are targeted for audit and direct install measures, while small businesses receive walk-through audits and direct install measures. The program was enhanced in 2008 to offer training to city building inspectors.

## 10.2 PROGRAM BACKGROUND AND STRUCTURE

### 10.2.1 Program Description

The Bakersfield-Kern Energy Watch Partnership is a multi-faceted program that provides services to multiple sectors of the population, including residential, small commercial, and municipal facility customers. The program strives to achieve savings through installation of energy-efficient technologies while promoting the long-term savings through workshops and education opportunities.

The program has four major components—direct installation, municipal audit and retrofit, training and education, and a homebuyer program.

- **Direct installation for residential and small business customers.** The program directly installs electric and natural gas measures into residential and small business facilities. A walk-through audit conducted by a CHEERS-trained auditor determines the direct installation. For small commercial customers, the program retrofits inefficient lighting with more efficient options such T5 and T8 lamps and occupancy sensors. For residential customers (including low-income customers, a targeted hard-to-reach population), the program provides compact fluorescent light bulbs and indoor hardwired fixtures. Additionally, the program installs water conservation and natural gas technologies. A direct installation contractor, Staples Marketing, canvasses targeted areas and provides the efficient equipment to businesses and households at no cost.
- **Municipal facility projects.** There are two types of municipal facility projects. The first is an audit and retrofit component. The program completes audits of municipal facilities to identify project opportunities for energy-efficiency retrofits.

The second type of project is direct delivery where the program provides the equipment to municipal facilities who in turn install the equipment. This component was developed in reaction to municipal facilities not having the funds to have another contractor install the equipment. Staples Marketing administers the direct delivery of the municipal facility projects.

- **Energy education and training.** The program offers education and training through SCE's Agricultural Technology Application Center and PG&E's Pacific Energy Center for city staff, residential and small business contractors, and other market actors (e.g., engineers) on topics such as energy-management systems, new construction, codes and standards, and emerging energy-efficiency technologies. The partnership selects courses based on the potential to effect energy savings and the needs of the community. While training offerings exist for end-users, the program shifted its focus early in the program cycle to provide training for groups that would influence behaviors and purchasing patterns such as the contractors and architects.
- **Homebuyers program.** Through this component of the program, homeowners receive an energy audit of their recently purchased home and along with free energy-efficient equipment (e.g., CFLs, faucet aerators, and low flow showerheads). Trained CHEERS-certified professionals complete the audit and identify ways the homeowner can improve the efficiency of their home. Additionally, the program provides recommendations for incentive programs they can participate in through one of the three participating utilities from which they receive their electric and gas service. Staples Marketing provides services for the Homebuyers Program and markets the program through realtors and events.

### 10.2.2 Program Logic Model and Implementation Theory

Figure A-6 in Appendix A shows the logic model for the Bakersfield-Kern Partnership. As the logic model shows, the partnership's primary activities include marketing and outreach, training and education, residential projects, small business projects, and municipal projects. These activities are to result in six outputs (1) marketing materials, (2) media activities, (3) 20 workshops, (4) canvassing of targeted areas, (5) audits and installation of energy-efficiency equipment, and (6) identification of additional projects via audits.

This logic model represents the initial program concept. The logic model is, for the most part, consistent with the program as it is currently being offered. One difference is that the Homebuyers program is not detailed as a separate programmatic component; rather, it is represented in the Residential Projects section. Another programmatic component not explicitly relayed in the logic model is the retrofitting of municipal facilities.

## 10.3 KEY FINDINGS

***The program is reportedly falling short of meeting its program energy saving and demand goals due to the length of time to complete large projects. However, the program estimates it will still meet its target by the end of the program cycle.***

Program-related savings are achieved primarily via the direct install component of the program, followed by the municipal retrofits. Staples Marketing exceeded their goals for the direct install, and expended its Small Business direct install budget.

Even with the direct install exceeding its goals, the program is falling short of its goals. Per the *Monthly Energy Efficiency Program Data Report* from June 2008, the program achieved 58 percent of its energy-saving goals and 63 percent of its demand-savings goals. The budget spent is reflective of the savings reported. Only 52 percent of the Bakersfield-Kern program budget was expended as of June 2008.

According to the *Quarterly Report Narrative* from the first quarter of 2008, although the program is short of its goals they expect to achieve the projected savings by the end of the program cycle. They explain the deficiency as a product of the time it has taken to complete larger municipal projects.

The program plans to realize additional savings through the Small Business direct install and Homebuyers program through the remainder of the year. Staples Marketing stopped promoting these services when the funding depleted. However, the program shifted funds to restart the Small Business direct install and the Homebuyers program activities.

There is question, also, if the reported savings are current and an accurate reflection of achieved savings. Early in the evaluation, PA researchers learned that PG&E was not processing invoices in a timely manner. This affected the savings reported by the program, making it appear that there were fewer savings.

***Staples Marketing's role in the partnership program is expansive and addresses the needs of Residential, Small Business, and Municipal customers.***

Staples Marketing provides a multitude of services for the Bakersfield-Kern Partnership. Their responsibilities include marketing and outreach, residential audits and direct installations, small business audits and direct installations, and direct delivery of municipal retrofits. Staples Marketing's activities under these elements are described in more detail below.

**Marketing and outreach activities.** These activities are conducted at fairs, home shows, etc. For example, there is a home show twice a year in Bakersfield where Staples Marketing sets up displays such as an SCE mobile display and a PG&E pool pump display.

PG&E, as lead utility, maintains the database that tracks the marketing and outreach activities. Utilities raised, in interviews, concerns that the system may be inadequate for tracking these activities. They would like to see a better system to track these activities, as well as participants or individuals reached under these activities if available.

**Residential audits and direct installations.** Staples Marketing uses the home shows and canvasses neighborhoods to recruit households for the residential audit and direct install program component. The residential audit consists of a walk-through with the homeowner by a representative from Staples Marketing. Although the audit results mostly in CFLs replacing incandescent bulbs, program data shows that residential customers are also receiving gas-saving water efficiency measures (low-flow showerheads and faucet aerators).

**Small business audits and direct installations.** Staples Marketing also recruits small businesses through events and canvassing targeted areas. The program also leverages the visit to a participating small business to meet other businesses in the area when doing the audit and direct installation. They do this most prevalently when installing equipment in strip malls. The contractor goes door-to-door to recruit additional participants.

Staples Marketing uses a software tool proprietary to the Bakersfield-Kern program to determine what type of equipment should be installed in the small business and to provide additional recommendations for energy-efficiency retrofits. Unfortunately, after the audit is complete the program does not provide any sort of report that the small business can reference. Respondents identified this as an area where the program could improve and optimize the recommendation and referral process.

**Direct delivery of municipal retrofits.** Through the direct delivery of municipal projects, Staples Marketing recommends and orders equipment but does not complete the installation. The facility installs the equipment, thereby saving money on the installation.

The program only realizes the savings and makes payments toward the equipment if the equipment is installed. Additionally, the equipment needs to be installed properly. Therefore, Staples Marketing visits the facility to make sure the equipment is installed. The utilities also do quality assurance checks on the installation.

This program component is innovative and not noted in any other partnership program reviewed through this evaluation. This service provides the ability for facilities to implement energy efficiency more cost-effectively by employing the services of their already-staffed facility managers, while benefiting from the technical assistance and expertise of the program.

Additionally, this program component is replicable. Evaluation efforts with other partnership programs indicate that moving non-residential projects from concept to completion is oftentimes time consuming purely because of the time it takes for these facilities to establish cost-effectiveness and fund the projects. This type of offering may provide those partnerships the capability of more quickly implementing these projects.

***The partnership program experienced staff turnover and contractor changes in the 2006–2008 program cycle. With staffing stabilized, these changes do not appear to have affected program progress.***

Early in the program cycle, Winegard Energy Inc, a California-based contractor specializing in marketing and weatherization of residential and small business buildings, was responsible for direct installation for residential customers. However, their contract ended early in the program cycle and Staples took over the direct install component of the program after Winegard's contract ended. By most accounts, this change did not hinder the progress of the residential direct installations.

In addition to the shift in contractors, PG&E experienced staff turnover within the 2006–2008 program cycle. This turnover does not seem to have had a significant impact on program operations and was not raised an as issue within process interviews. Once the current program manager for PG&E was in place, the program operated smoothly, and the partners appear to be positively engaged. Turnover at PG&E does not appear to have been a continuing issue.

***Partners interviewed expressed satisfaction with the program and relationships with each other. However, the billing and tracking mechanisms were noted by Partners interviewed as an area for improvement.***

All individuals interviewed as of the Bakersfield-Kern Partnership program expressed satisfaction with the program relationships and communications. Staples Marketing lauded

the communication as one of the best aspects of the program. They specifically noted the collaboration between themselves and the City and County to identify savings opportunities as particularly effective.

Interviewees also expressed satisfaction with Staples Marketing. They believed that Staples Marketing was effective in delivering services, particularly to the residential customers. One interview specifically singled the residential component of the program out, saying that Staples Marketing was "doing a good job in reaching the target population and providing value to them." All parties interviewed also expressed satisfaction at how they work together to market the program and identify opportunities, a program element managed by Staples Marketing.

However, interviews identified that while the relationship with the three partnering utilities has been largely successful, program billing has been problematic. There are reported instances when PG&E delayed in processing SCE invoices. Invoices are the process to claim savings; therefore, this delay prevented SCE from claiming energy savings on a timely basis for their monthly reporting to the CPUC.

Also related to the tracking system, one of the greatest challenges for the overall evaluation has been to get good data lists from PG&E for each of the three utilities. PA staff attempted to work with PG&E to obtain the lists to for the facility manager and customer surveys. PA was never able to receive lists for these interviews.

PA researchers also had trouble obtaining lists for the participant surveys. PG&E could only provide lists for participants within their own territory. Additionally, the information received for SCE customers was extremely limited for both small business and residential sectors.

A representative from PG&E confirmed that although they are the lead utility, their tracking databases only reflect participants in their service territory. They receive hardcopy invoices from Staples Marketing that represent the measures installed for the other utilities, but do not enter customer level data. Interviews suggest that PG&E does not capture customer specific data as logging other utilities' customer data is a confidentiality concern for PG&E and the other utilities.

These experiences suggest that the program could benefit from a better, more integrated tracking system. The system should allow users to efficiently log invoices, show the status of invoices, and track program participants and progress for all participating Partners.

***Interviews identified a variety of barriers to administering the program. These barriers include the vastness of Kern County in terms of size and reach, changes in rebate qualification requirements, and the level of financial investment required to implement retrofit projects.***

Interviewees for the most part felt the program was operating well. Other than the invoicing issue referenced above, the program partners were positive about their relationships with the utilities.

However, from a program-specific (rather than SCE-specific) standpoint, interviews identified numerous barriers for program administration. One issue is the relatively large size of Bakersfield County, noted as the biggest obstacle in program administration by one interviewee. Because the county is fairly large, and distances need to be covered to deliver

program benefits, it is not cost-effective to visit some areas of the county frequently, particularly the rural areas. To make the process more cost-effective, a minimum number of installations needs to be set up to warrant a visit to the area.

Interviews also identified marketing to the rural areas as a barrier for program uptake. The partnership has tried different marketing strategies, such as radio and local television advertisements. Unfortunately, these approaches have yielded limited success.

Another difficulty faced by the program was a change in rebate qualification requirements. The example provided by the partner interviewed specifically mentioned PG&E as the utility that changed the requirements, which resulted in dissatisfied customers that planned installations around the initial assumption. Although this comment was related to PG&E specifically, the point is noted in this report as something to keep in mind if it has occurred or were to occur with SCE within a program cycle. The solution to this issue is communication. The individual interviewed suggested that if a change in qualifications were to happen that the partners would be informed well ahead of time so that the information could be effectively disseminated.

One last barrier identified by a representative of the City of Bakersfield is the level of investment required by target populations to complete retrofit projects. The City of Bakersfield focuses its attention on government building upgrades and low-income and small business installations. These populations tend to have significant funding constraints and little to no disposable income. This constraint, coupled with a reduced level of funding for the 2006–2008 program cycle, has hindered the City's ability to move projects from concept to completion.

***There has been significant emphasis on achieving resource goals. Partners interviewed felt this emphasis is at the expense of providing a more comprehensive service to its participants. Contractors suggested incorporating an education piece as part of the audit process to leave with participants.***

As the Bakersfield-Kern program is primarily a resource program, it is reasonable to expect that there would be the greatest emphasis on making progress toward its resource goals. However, program partners interviewed expressed that this focus on reaching resource goals may be limiting the impact the program has on its customers by limiting the education opportunities[29]. Individuals interviewed felt that the direct install component of the program dominates the site visits at the expense of a more comprehensive customer interaction.

In fact, respondents specifically noted the need to provide more information after the audit process as an area for improvement. No information is left behind for program participants to review and refer to after an audit is complete. Providing this information would provide an opportunity for the contractor to discuss the recommendations more fully and reinforce the messages conveyed during the walk-through audit.

[29] PA process evaluations with the four IOUs identified this as a common issue across many of the government Partnership programs.

***There is no significant overlap in participants or program activities between the Bakersfield-Kern and other Partnership programs.***

One researchable topic identified in the evaluation plan was whether there were any issues of overlap between the Bakersfield-Kern program and other Partnership program activities. Interviews did not identify any issues associated with program overlap for the Bakersfield-Kern program in SCE territory.

One example is any overlap between the CDCR program and its work with the Lerdo Corrections Facility. Kern County also targets this facility through the Bakersfield-Kern program. Interviews did not reveal any issues related to this overlap in territory.

As another example, LGEAR Ridgecrest Partnership serves facilities in Kern County. Interviews with Ridgecrest said they are geographically far from the county seat and do not experience overlap with the Bakersfield-Kern program.

## 10.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

To further assess the program and its offering, PA researchers conducted telephone interviews with residential and small business program participants. The Bakersfield-Kern survey focused on two program elements: direct install and workshop attendance. The data file provided by SCE details customer contact information, as well as the measures customers received. The data also provided the number of measures installed, and cost of measure for the program.

The SCE sample, aggregated so each record only represented one household or one contact at an organization, included 479 residential records and 63 small commercial records. The sample represents participants that received the direct install component of the program.

***Residential customers that received direct installation services primarily learned of the program through word of mouth. Most participants received information during the direct installation process and found the information useful.***

***There is evidence that customers removed installed lighting measures for various reasons; however, without the program, half these respondents would have purchased an incandescent bulb.***

Residential customers primarily heard about the direct install program through a friend, neighbor, or relative (39 percent). Other ways of learning about the program include landlord, newspaper article, energy fair, community display, and door to door canvassing of their neighborhood by the program.

Interviews asked what type of information participants received as part of the program. Almost ninety percent of residents received information from the representative. Thirty percent received information on how to save energy in the home, and 13 percent received information on how to take care of the measure or appliance. Other responses include ways to save money on their energy bills, how to shop for energy efficient measures, and the wattage of CFLs versus incandescent bulbs.

Of those who received information from the representative, 80 percent found the information very useful. The average usefulness was rated at 4.2, on a 5-point scale with 5 being very

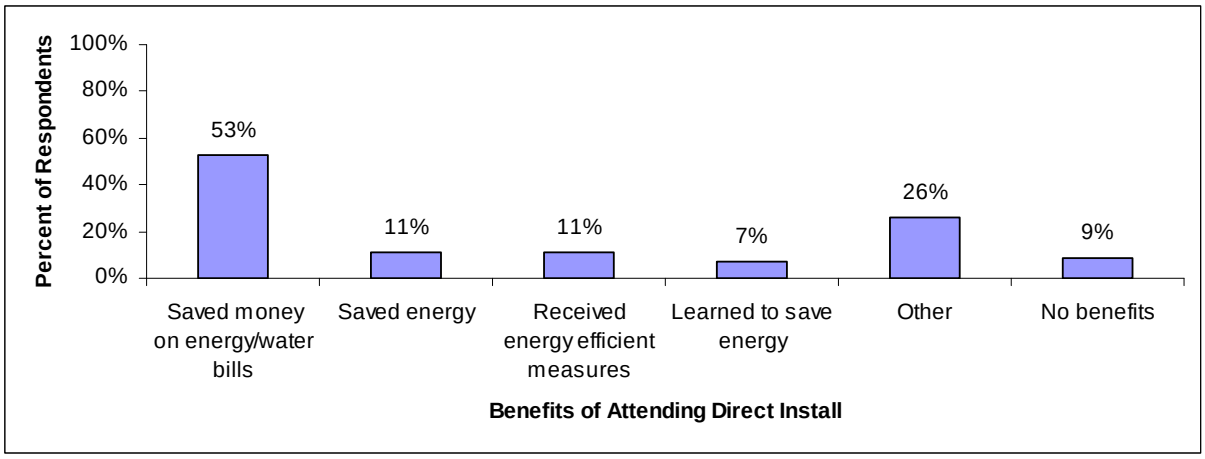
useful. Only two respondents said the information was not at all useful. According to these respondents:

> *"[The information would have been more useful] if they had showed me a cost savings analysis."*

> *"I think I would have liked information about different programs related to energy."*

Respondents cited various benefits of the program including that they learned how to save energy and they believe they have saved or will save money on their energy bill. Half of the respondents said that they already believe they saved money on their energy or water bills since participating in the program (Figure 10-1). Other benefits noted by respondents include becoming greener or more energy efficient, understanding available programs, receipt of information on new code requirements, saving water, obtaining rebates, and incentive assistance.

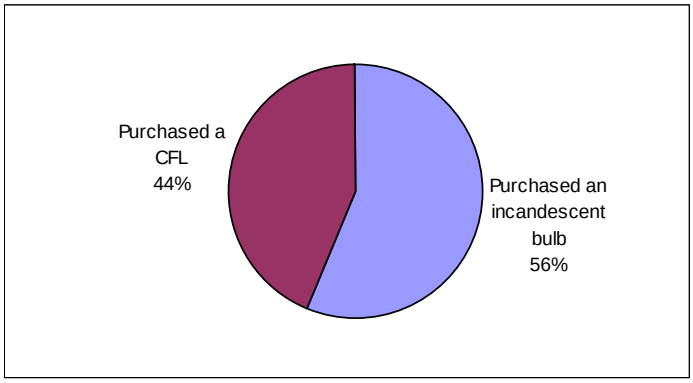
**Figure 10-1 Benefits of Attending Direct Install Offered by Bakersfield-Kern (n=46)**




Source: Residential participant survey (2008), question DI14

Bakersfield-Kern directly installed lighting equipment, specifically energy efficient fixtures and compact fluorescent light bulbs. On average, customers received 1.9 bulbs, but only an average of 1.0 bulb were still installed at the time of the interview. When asked why bulbs were removed, respondents said that it was because the bulb burned out, broke, or did not work in a dimmer switch. They were then asked what they would have done if the direct install program was not available. Over half of the respondents said that they would purchase an incandescent bulb (Figure 10-2).

**Figure 10-2 Replacement Action when a Bulb Burns Out (n=41)**




Source: Residential participant survey (2008), question C6

Participants interviewed were overall very satisfied with the lighting they received through the program. Ninety percent of the respondents said that they were satisfied or very satisfied. The average rating for their satisfaction was 4.6, with a 5 being very satisfied.

***Commercial customers attended workshops and training events offered by Bakersfield-Kern for a variety of reasons, most notably being to learn how to save energy in their business. Nearly three-quarters of participants felt the event was very useful for them and/or their organization.***

***Over half of respondents reported using the information to make changes in their organization. Respondents also said they were able to share the information learned with other colleagues.***

Small business customers interviewed heard about the Bakersfield-Kern workshop primarily through an SCE representative or the SCE website. They also report hearing about workshop opportunities through a manufacturer or distributor and word of mouth.

Respondents reported different motivators for participating in the workshop. Nearly forty percent of the respondents said that they attended the workshop to learn how to save energy in their business. The second most prevalent response was to learn about new energy efficient technologies (Table 10-1). Other responses included to learn about the new requirements and to gain more information on the Title 24 laws.

**Table 10-1 Reasons for Participating in Workshop (n=22)**

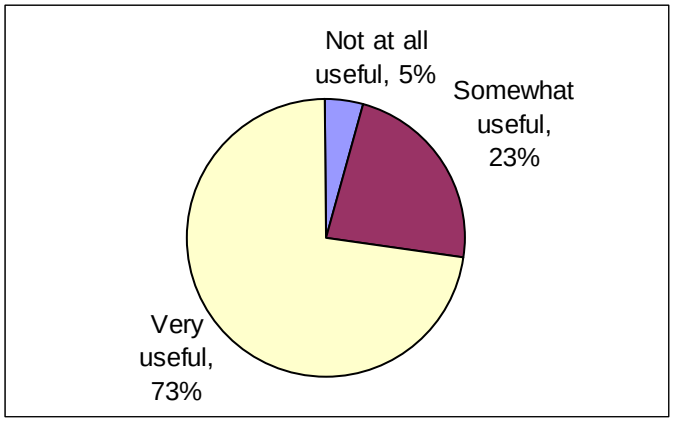
| Reason | Percent |
|---|---|
| Learn ways to save energy in business | 36% |
| Learn about new energy efficient technologies | 32% |
| Learn how to install energy efficient measures | 23% |
| Understand 'green' building issues/practices | 9% |
| Learn ways to save money | 9% |
| Learn about ways to be more environmentally friendly | 5% |
| Other | 50% |

Source: Commercial participant survey (2008), question W3

About half of the program participants, 48 percent, stated that their organization has used information from the workshop to make changes in their facility. Survey respondents said that they feel the biggest change in organization practice is that the employees are more educated and they can now better serve their customers. One respondent stated that they no longer receive calls from upset customers, because the organization now has the knowledge to conduct their work properly. This shows that the workshop was beneficial to the participants, and they now have a better background knowledge and can better serve their customers.

Respondents said they found the event quite useful in helping to understand ways to save energy. Only five percent of the commercial customers at the Bakersfield-Kern workshop found the event not at all useful (Figure 10-3).

**Figure 10-3 Usefulness of Workshop in Understanding Ways to Save Energy (n=22)**




Source: Commercial participant survey (2008), question W9

All of Bakersfield-Kern workshop participants believe their organization benefited from attending the workshop. Fifty-eight percent of respondents said that they learned how to change energy using behaviors and how to save energy. Additionally, thirty-two percent of program participants said that they were able to share what they learned with others. A few others mentioned benefits of the program include installing more measures on their own,

saving energy, and becoming more aware of Title 24 codes, which also benefits the customer.

***Small business respondents that received direct install services through the Bakersfield-Kern program were generally satisfied with the program. Nearly all lighting technologies installed were reportedly installed at the time of the interview. Respondents believe they saved energy and money as a result of the program.***

The Bakersfield-Kern Partnership also provides direct install services to commercial customers. They go into business and primarily replace lighting equipment. Lighting is the focus of this analysis, as it is the most commonly provided measure.

Commercial customers heard about the Bakersfield-Kern direct install program primarily through community sweeps (24 percent). Another common way of becoming aware of the program was by word of mouth, which was mentioned by 16 percent of program participants. The next most common way of hearing about the program is through a utility representative.

Program participants had different motivations for taking part in the direct install program. Almost 60 percent of respondents noted that a reason to participate was to learn how to save money for the business. Fifty-three percent also said that they were interested in the direct install program because they wanted to learn more about saving energy and to have more efficient lighting (Table 10-2). A few respondents said that their motivation to participate in the direct install component was because it was free or because it was “a good thing to do.”

**Table 10-2 Reasons for Participating in the Direct Install Program (n=51)**

| Reason | Percent |
|---|---|
| Save money | 57% |
| Save energy/have more efficient lighting | 53% |
| Needed new bulbs | 20% |
| Get better lighting/lighting advice | 12% |
| Help the environment/prevent global warming | 2% |
| Needed to dispose of old bulbs | 2% |
| Other | 22% |

Source: Commercial participant survey (2008), question L3

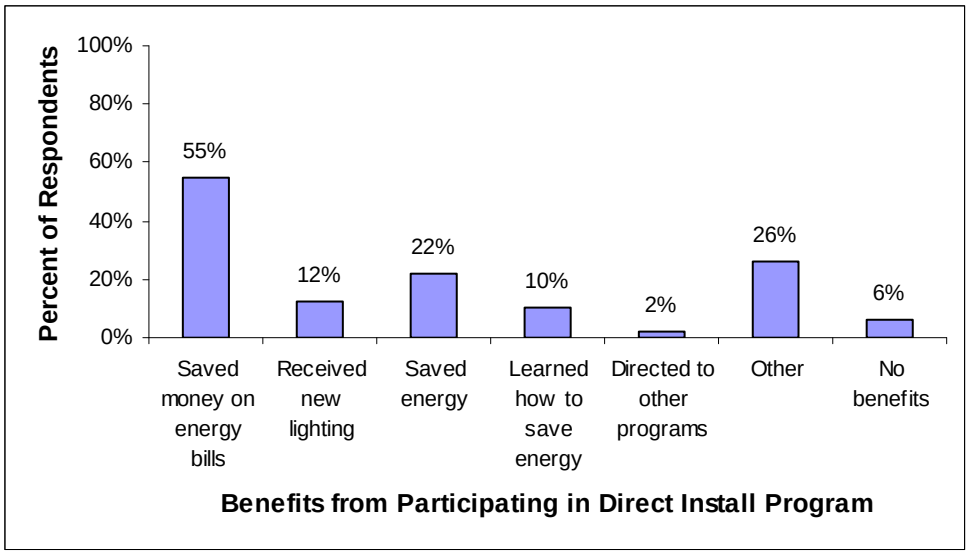
Respondents report that the majority of the lighting equipment installed through the program are still installed. As part of the program, respondents said they received an average of 29 efficient bulbs or fixtures. Respondents’ responses to the number of bulbs or fixtures still installed averaged 29 pieces of lighting equipment.

Of those that removed the lighting equipment, the majority said it was due to the bulbs burning out. One respondent also noted that using the bulbs drastically increased the energy bill, so they removed all of the bulbs and the energy bill went back down.

As a follow-up, direct install program participants were asked how satisfied they were with the quality of lighting from the lighting they received. Eighty-eight percent of respondents said that they were satisfied with the lighting. The average score was a 4.4, on a five-point scale with five being very satisfied.

Small business respondents noted various benefits of direct install services. The most common benefit of the program was saved money on energy bills, which was mentioned by 55 percent of respondents. Almost a quarter of the respondents also said that they have saved energy as a benefit of the program (Figure 10-4). A few program participants also mentioned that they have benefited by obtaining better quality and brighter lighting.

**Figure 10-4 Benefits from Participating in the Direct Install Program (n=51)**




Source: Commercial participant survey (2008), question L13

## 10.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

Bakersfield-Kern is a strong Partnership that has matured over time. The partnership is shifting toward a peer exchange model, whereby the experienced County staff are now moving toward engaging more local governments within the County to participate in the program. It is almost too large in its multifaceted approach, in that it takes more than one IOU lead to manage all the components, but each of the components have been doing well so one cannot conclude that there is a need to change the multifaceted approach.

The most significant area for improvement noted by all parties interviewed is the need for a central tracking system that is capable of capturing all program-related data. This information includes participant information, workshop attendance, and invoicing status. Unfortunately, using a lead IOU to maintain the database creates confidentiality and staff resource issues. The utility is not able to capture information about other IOU customers. Additionally, interviewees report that the invoicing process takes an inordinate amount of time to complete for all utilities. However, accurately maintaining a program and invoicing database is a critical component to successful program management.

Moving forward, the program should also continue to evaluate different means for reaching rural customers. One means of doing this is by connecting with other programs that effectively market to rural customers to identify “best practices.” In 2008, the program shifted its attention toward smaller cities within Kern County as they feel they have sufficiently reached other locales within the County. These smaller, more rural cities are difficult to reach,

however, and the program may need to look to less traditional methods to reach the population. One rural city in Kern County, Ridgecrest, feels their needs are being effectively served by participating in SCE's LGEAR model for partnerships.

Last, the program should continue to evaluate a means for providing a post-audit report for residential and small business customers after an audit is complete. The report would serve several functions. First, it would provide an opportunity to reinforce the messages and recommendations relayed during the audits. Second, participants may forget specific recommendations, and the report would provide a good reference and more effectively funnel customers into IOU programs. Finally, the program could use data captured in the report to track customers funneled into IOU programs and provide opportunities for additional follow-up.

# *11. COUNTY OF RIVERSIDE PARTNERSHIP PROGRAM*

## 11.1 INTRODUCTION

The County of Riverside (County) Partnership is a two-way partnership between the County (lead by staff at the County Energy Management Division) and SCE. The program targets nonresidential customers.

The County of Riverside is primarily a resource-based program. The partnership program focuses on retrofits, retro-commissioning, and "modernization" of County of Riverside facilities.

## 11.2 PROGRAM BACKGROUND AND STRUCTURE

Riverside County is the fourth largest county in the state, stretching nearly 200 miles and comprising over 7,200 square miles of fertile river valleys, low deserts, mountains, foothills and rolling plains. Riverside County shares borders with densely populated Los Angeles, Orange, San Diego, and San Bernardino Counties, as well as Imperial County and Arizona, extending from within 14 miles of the Pacific Ocean to the Colorado River.

The County reports that they historically participated in SCE's core programs so becoming more involved through the partnership was the next logical step for them. In recent years, the County invested over $30 million on improvement projects in its facilities. These projects were implemented with the expectation of exceeding the minimum requirements of Title 24 by 20 percent. County partner staff reported they take the partnership seriously and it is a priority for them.

SCE is the primary administrator of the partnership. SCE hired a specialty consultant through the partnership program that facilitates the program application process for the County. County staff consist of the County Energy Manager who is supported by 3 other staff members.

The program provides incentives for the Municipal Retrofit and Retro-Commissioning/Monitoring-based Commissioning programs. The partnership program offers increased incentive levels over SCE's core program incentive levels. The partnership plans to continue in the next program cycle and to include Southern California Gas.

### 11.2.1 Program Components

The partnership has started with its focus on County facilities. The County is assessing all county-owned buildings in its inventory for their energy-savings potential and creating a list of candidate buildings that could benefit from retrofit and retro-commissioning. The County will continue to assess each building in its inventory for future retrofit or retro-commissioning projects.

The County expects to facilitate program participation and provide technical assistance to any County nonresidential customers. This has not happened yet. While the PIP also cites "outreach and education element with the goal of raising awareness about the benefits of

being energy efficient" as a non-resource component, no activities of this nature have taken place to-date.

The reach of the partnership program has been limited to-date and has not extended beyond County facilities even though the program planned to offer outreach, education, and technical assistance to the broader community.

### 11.2.2 Program's Logic Model and Implementation Theory

Figure A-8 in Appendix A presents the logic model for the County of Riverside Partnership. As the logic model shows, the partnership program's primary activities include outreach, education and training, referral activities and municipal support. These activities are to result in seven outputs (1) outreach materials, (2) workshops, (3) referral into core programs, (4) technical audits, (5) identification of projects, (6) retro-commissioning, and (7) technical assistance and incentives.

The first three activities are taking place, but primarily for County facilities. The partnership has begun some municipal support and has identified one city project for review.

## 11.3 KEY FINDINGS

***The program has spent a third of its funding, but has not reported any savings as of June 2008. The program was slow to ramp up due to contract issues. However, projects are in progress and the program claims they are on track to meet their goals.***

A third (33 percent) of program funding for the three-year cycle had been spent as of the first quarter of 2008, leaving over $600,000 to be spent over the final nine months of the program. The *Quarterly Report Narrative* for Quarter 1, 2008 claims the program is "on track." However, the EEGA data does not show any savings related to the program.[30]

The program was slow to start because the contract was not finalized until the second year of the partnership. In fact, both utility and County partners interviewed reported that the contract delays were a major area for improvement as it delayed program progress significantly. Despite the slow start, the partnership program has been gaining momentum, although many of the identified projects will not realize energy savings until 2009. The project had eight completed or committed projects and an additional eight projects under review at the time of the process evaluation.

In some instances, the partnership's championship of the project was essential for a project coming to fruition. An example is the Riverside County Regional Medical Center (RCRMC). This is an air handler VFD project at the Riverside County Regional Medical Center. This cost-effective project had consistently fallen through the cracks for lack of interest and sponsorship since it was first identified in 2005. The partnership team diligently promoted this project and a meeting with RCRMC executive management led to action. Now this is a committed project.

[30] As of the May 2008 status report posted on the CPUC's EEGA website.

***Interviews with County and SCE partners indicate high satisfaction for the program and communication between partners.***

The County partner reports high satisfaction with the program. The County partner reports that the additional technical assistance and program application facilitation provided through the partnership program's third-party consultants as well as the partnership's championship of projects in County facilities has increased the County's participation in SCE's core energy-efficiency programs.

Interviews with utility and county partner staff indicate that the partnership has successfully established good, consistent communication between the County and SCE. These two groups meet biweekly. The County reports the partnership has increased their communication with SCE by 100 percent and they are highly satisfied with the partnership.

> *"It is a good thing on lots of levels. I'm glad it's working well." —Partner*

***The reportedly high level of satisfaction is diminished slightly by staffing concerns. Staffing constraints may be partially caused by the growth of the County.***

Staffing resources appear to be a major limiting factor for the County of Riverside. While the partner is satisfied with the partnership and is able to use the partnership to complete County projects, their staff constraints appear to be limiting the additional activities that take place.

There also may not be appropriate incentives for the overworked County staff to extend the partnership beyond County facilities. This limited local government staff is a common theme across Partnerships as will be discussed in the Portfolio-level key findings.

The constrained County staff may be partially a result of the growth of the County. Recent years have brought dramatic population growth to Riverside County. Riverside is the fifth largest county in California (and 13$^{th}$ in the nation), with a population of 1.95 million in 2005. This is an increase of 400,000 people since 2000.

## 11.4 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

The additional resources provided to the County from the third-party specialty consultants hired through the partnership program are reported as key to the County implementing more energy-efficiency projects.

> *"The process is much more streamlined and this has increased the number of projects we have been able to do."—Partner*

In addition, the partnership program allows the County to take a more customized approach to improving its facilities. For example, the partnership program is working with Savings by Design for a New Palm Desert Sheriff Station. A letter of interest for this new building was signed by the County and submitted to Savings by Design in December 2007. This is a new construction plan for a facility that will replace (functionally, not physically) the existing Palm Desert Sheriff Station. Savings by Design was brought in early so that comprehensive design recommendations could be incorporated into the building.

> *"The partnership allows us to customize the project for how we really use the facility versus a standard model." —Partner*

One of the largest opportunities for improvement is to establish a means to leverage the County staff's experience with the partnership program and increase energy efficiency by reaching other County nonresidential customers. The involvement of the County staff indicates the partnership has helped build the technical capabilities of the County staff. The County said they plan to use this expertise to help other County-area businesses (institutional, small business, other government, etc.) to implement energy-efficiency projects. However, to date this has only happened in a very limited extent for cities.

# 12. COMMUNITY ENERGY PARTNERSHIP PROGRAM

## 12.1 INTRODUCTION

The Community Energy Partnership (CEP) is a multidimensional Partnership that has the goal of delivering sustainable energy-efficiency services to customers in Southern California. The two participating IOUs—SCE and SCG—partner with the Energy Coalition to administer the program.

The program also draws on the strengths of key energy stakeholders' partner cities. The partnering cities include Irvine, Corona, Santa Monica, San Bernardino, Moreno Valley, Cathedral City, Palm Desert, Hermosa Beach, Brea, and Santa Clarita. These cities cover a wide geographical area with diverse climatic zones. They also represent some of the most innovative and engaged cities on sustainability, climate change and energy efficiency in the state. For instance, Palm Desert is piloting two programs—one with the CPUC and another in conjunction with SCE, SCG, and the CEP. Both programs review ways to reduce kW and kWh in severe climate zones.

The CEP program covers both resource and non-resource activities. Although the program documentation categorizes the resource and non-resource programs separately, the Energy Coalition does not separate the two in their offerings. The rationale behind separating the two program elements was to avoid burdening the resource budget with non-resource activities unrelated to resource activities and thus lowering its cost-effective ratio. The program's primary focus is delivering energy savings, regardless if the savings are a result of resource or non-resource events.

The resource program creates a stream of immediate savings through a variety of initiatives including direct installation to residential and small business customers, demonstration projects, and community outreach events. The program also promotes energy efficiency through CFL giveaways.

The non-resource component includes training and workshop opportunities. There is a potential for indirect savings resulting from the non-resource component of the program. Also, the program includes a component called PEAK Student Energy Actions (PEAK). PEAK is a central feature of the non-resource component of the program that provides an energy-efficiency information curriculum to 4$^{th}$ to 6$^{th}$ grade students. The PEAK Schools program has been adopted by many cities that participate in the partnership program and the Energy Coalition has taken it nationwide and even overseas.

## 12.2 PROGRAM BACKGROUND AND STRUCTURE

### 12.2.1 Program Description

The Community Energy Partnerships Program integrates both resource and non-resource savings into one partnership program. The theory is that the non-resource components of the program will supplement and perpetuate the savings offered through the resource component of the program as well as affect participants' behaviors and purchasing decisions to yield indirect savings. Under the premise of these program goals, the program provides two distinct types of offerings: direct installation of equipment and educational activities.

- **Direct install.** Direct installation of equipment is offered to residential and small commercial customers under the Tune-Up component of the program. The Energy Coalition completes walk-through audits and provides the direct installation services and the program incorporates a variety of measures primarily revolving around lighting applications (e.g., CFLs, T8 lamps) and water conservation measures.
- **Education.** The program provides education opportunities via a variety of venues. Examples of venues include PEAK student lessons[31], Energy Rallies, and community events. The program also provides workshops to both residential and nonresidential customers.

  Another opportunity for the program to provide education is through the Tune-Up program component. Audits are a means for providing information related to additional energy-saving opportunities and behavior changes the participant can make to save energy. Tune-up installers are paid a flat fee for educating the recipient at each Tune-up. This discussion is supplemented with a detailed handout that covers ways to save energy in lighting, building envelope, and water use end-uses.

### 12.2.2 Program Logic Model and Implementation Theory

Figure A-9 in Appendix A illustrates the logic model for the Community Energy Partnerships program, incorporating both the resource and non-resource components of the program. As the logic model shows, the partnership's primary activities include demonstration efficiency makeovers, local government energy plans, PEAK student services, residential services, and small business services. These activities result in seven outputs (1) education activities, (2) demonstration projects, (3) efficient lighting distribution, (4) installation of gas measures; (5) school curriculum and outreach activities, (6) residential Tune-Ups, and (7) small business Tune-Ups.

## 12.3 KEY FINDINGS

***As of June 2008, the partnership program claimed 56 percent of savings and expended nearly two-thirds of its budget. The program projects it will reach its goals by the end of the program cycle through expanded efforts to complete small business Tune-Up projects.***

As of the June 2008 reporting on EEGA, the SCE CEP program achieved 3,691 MWh of savings against its goal of 6,604 MWh, representing just over half of the savings goals. Both the resource and non-resource program components report that the program expended sixty-four percent of the budget to reach these goals and/or fulfill non-resource program elements.

The *Quarterly Report Narrative* from First Quarter of 2008 claims the program is on target to reach its goals. The report denotes that the program worked with participating cities to generate additional Tune-Up leads. The funding for the Small Business Tune-up Component increased to promote additional energy savings and reach the target savings.

[31] The PEAK component focuses on distributing information through municipalities and schools. Students are targeted, which in effect become the PEAK households as they transfer the knowledge they receive to their home.

The Energy Coalition feels significant pressure to deliver the resource goals and consequently has reduced attention to other activities that are lower priority.

***Although there was early contention between the Energy Coalition and utilities, interviews found general satisfaction with the partnership relationship. However, interviews with the Energy Coalition and participating utilities indicate there is room for the partnership to improve in terms of the coordination and communication between all of the partners. Program branding is one example of where the partners should better coordinate.***

SCE and the Energy Coalition commented that this Partnership has evolved into a strong Partnership where both parties play important roles and have balanced influence over the activities and goals for the program. This was not always the case, as interviews revealed some early contention between the utilities and the Energy Coalition.

Earlier in the partnership, there was utility perception that the Energy Coalition was primarily concerned with its own profile and brand, and most prominently displays their information when promoting the program. However, the Energy Coalition noted that they make sure the IOU partners' logos are prominent in materials. Additionally, they claim that they make concerted efforts to ensure customers understand the utilities' role in the partnership program and the services they provide.

Another issue raised that alluded to a lack of collaboration and branding coordination was the presence of both Energy Coalition and utility booths at events. There have been events produced under the program whereby the Energy Coalition had a booth promoting the partnership program activities and the utilities similarly had booths at the same event. The Energy Coalition feels this causes confusion among customers and sends the wrong signal about the partnership. This type of situation led the organization to feel there was a lack of cooperation and coordination between the two organizations. Additionally, it does not promote a sense of a unified front and true Partnership from the customer's perspective.

Interviews with both the Energy Coalition and the utility indicate that the partnership has evolved into a more positive relationship. More recently, the program seems to be benefiting from the different but equally important roles that the two groups play—the Energy Coalition brings political muscle, community organizing, and strong outreach capabilities, while SCE provides technology expertise and content.

***The emphasis on resource activities was an area of frustration for the Energy Coalition.***

SCG and SCE instructed the Energy Coalition to focus its efforts to meet resource goals. The program was struggling to achieve its resource goals; therefore, the utilities instructed the Energy Coalition to spend less effort on the non-resource, capacity-building activities and focus on the Tune-Up and other resource-generating program activities.

The Energy Coalition expressed frustration with this approach. As a community-based organization, they are generally committed to building energy efficiencies through education and outreach initiatives. In fact, they view this as one of the strengths that they bring to the partnership.

***Participating cities were positive about the partnership program and felt their expectations were being met. Their perception of the program structure and partners is also generally positive; however, there are some that feel the structure creates another layer of unnecessary bureaucracy.***

Participating cities also remarked positively about their experience with the program. Overall, the combination of the resource and non-resource components reportedly satisfies or exceeds the requirements of the participating communities. They feel the mix of offerings in the partnership reinforces the message of energy efficiency. Also, most interviewed cities said that they liked having a one-stop shop for their energy and water conservation needs—whether simply information or assistance in staffing an event, doing direct outreach, or performing an energy audit.

PA asked participating cities to rate the partnerships on a scale of 1 to 10, where 1 means the utility is doing most of the implementation work and 10 means the partner is doing most of the work. This program seems to be close to ideal for most respondents. Six of the 10 ranked the partnership as a "5"—the ideal. The remaining respondents ranked it as a "4", saying that they felt as communities that they relied on the utilities and the Energy Coalition to do a bit more to maintain the momentum of the program, citing budget and staff constraints.

Typically, the expectations of the communities focused on having a centralized information source, outreach, and tune-ups to senior citizens (including Meals on Wheels), mobile home residents, multi-family rental units, and PEAK students. For a few, it was working on a specific retrofit project or a larger pilot initiative such as Palm Desert's.

For the most part, respondents said the program met their expectations and most were content with their relationship with the utilities. However, a few said that although they were interested in any collaborative opportunity that would increase energy efficiency, they felt that expanding projects with the utilities would be too cumbersome and demanding, citing excessive paperwork, additional staff time, and contract negotiations as the major hurdles.

City partners for the most part commended the work of the Energy Coalition. Respondents noted that Energy Coalition staff is very energetic and generally has a good vision of what is necessary to achieve the program goals. Additionally, one partner stressed the importance of the Energy Coalition, saying there are strong opinions about both SCG and SCE and having an intermediary like the Energy Coalition is necessary to buffer those feelings and make a Partnership work.

There were some, though, that felt that having an intermediary organization built in an unnecessary layer of bureaucracy and resulted in miscommunication. Several partners interviewed also commented that they felt the Energy Coalition tended to over-promise and under-deliver due to chronic understaffing. They believe the chronic understaffing results in greater burnout and higher attrition rates, affecting program quality[32].

[32] It is important to remember that the information represents the opinions of individuals interviewed.

***Partnering cities' level of commitment to energy-efficiency improvements varied, and often was a reflection of the commitment of the communities and elected officials to energy efficiency.***

Partnering cities' level of involvement in the program varied considerably, from those who are extremely involved to those who are only slightly, if at all, involved. Those who are aggressively involved in the partnership participate in all elements of program (e.g., PEAK, Tune-Up, events), or use the partnership to leverage innovative projects. Other partnering cities are more passive in their participation and work with the program to do lesser-impact activities such as distributing flyers.

The interviews with partnering cities explored these differences in participation levels. The most prevalent reason identified was the differences in the level of commitment of their participating communities. The greater the commitment from the community and, particularly, elected officials, the more active the partnering city tended to be in the program.

For example, more aggressive cities, like Santa Monica or Palm Desert, report a high level of commitment from their elected officials. This level of commitment allows them to push the envelope and tackle a plethora of energy-saving opportunities. Other committed cities may not be aggressive in terms of projects, but are purposeful in the populations they are targeting. These cities also work along with the elected officials and community to distribute program benefits.

As an example of the opposite view of buy-in, one city lamented that the current budget crisis impaired his ability to do more and looked forward to the day when his city council would view energy efficiency as fiscally prudent. "At least," he said, "awareness is building."

***Partnering cities, when asked what was working well, produced examples such as the Tune-Up and PEAK components as well as the comprehensiveness of the program. Recommendations noted include increasing outreach and more information about State initiatives.***

PA researchers probed partnering cities about what was working well with the program and what they felt was most in need for improvement. Responses varied as much as the needs and priorities of the participating cities. For some, the most notable component that they felt was working well as the residential Tune-Ups and the education and outreach (including PEAK and First Energy Packs) components. For others, the general support and "plug and play" programming that the Energy Coalition offers topped the list. Still others highlighted the access to the utilities as well as the synergy that all partners brought to the table as being greater than the sum of its parts.

Partnering cities interviewed also provided a handful of recommendations for improving the program. These recommendations include more information on the State's Million Solar Roofs, creating a more holistic approach, increasing outreach, expanding to more cities, and increasing the number of technical tours. The specific recommendations are detailed below. They are listed in no particular order.

> *"More information on the State's Million Solar Roofs initiative [would be useful] so the City can better understand the return on investment and payback assumptions, and assist residents in the permitting process."*

> *"[It is] hard to align the Public Benefits Charge program with the City's needs. Going upstream and downstream is not sufficient. The CPUC is still struggling with what cities can offer. A more holistic approach with longer range planning (beyond the two to five years of a rate cycle) should be incorporated. The utilities' consultants and cities alike need to understand where local governments fit best into the process. Thanks to the current long-term strategic planning now underway, this is beginning to become clearer."*
>
> *"How to boost outreach and implementation uptake at the local level is critical and it is more than just handing out information. Ensuring that the information is applied is critical and it affects local, regional, and statewide demand response programming."*
>
> *"The partnership needs to expand to more cities. Constituents should not have to be told there are no rebates or incentive available for them because they live in or moved to the "wrong" community."*
>
> *"Partnership programming should be more comprehensive and include other sustainability issues beyond energy such as water."*
>
> *"More technical tours would be very helpful. Seeing the application [of a given measure] in person really opens your eyes. It would also present the opportunity to reach out to other neighboring Partnerships [South Bay, South Coast, Ventura Co.] to see what works and what doesn't."*

***The Energy Coalition maintains resource data in a web-based program database. The database captures a plethora of information, including customer details, equipment installed in the building at the time of the audit, equipment installed by the program, and the top three recommendations made to the participant.***

The Energy Coalition details all projects on a web-based database that captures all activities through Tune-Up, the direct install component of the program. The Energy Coalition provided evaluators access to the online Tune-Up database. Using this database, it is possible to view a listing of all projects completed, filterable by date and sector. The database lists the date the program installed measures, contractor name, customer contact information, and whether the customer completed a follow-up survey and the results of that survey.

The database also provides specific audit details, completed by the contractor. Information retained includes energy-saving recommendations, measures installed in participants' buildings prior to the program, characteristics of these measures (e.g., refrigerator age, building envelope conditions), and utility programs participants to which program participants were referred.

The database includes a reporting vehicle that allows the user to review participant information and program activities in a variety of different ways. One report, for example, provides an analysis of recommendations. The recommendations can be viewed by participant sector (residential or small business) and can be modified to fit a specific period.

## 12.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

This section presents results of participants' experiences with the program. The Energy Coalition provided program participant data for the Energy Coalition and Community Energy Partnerships Program. The data file came in two formats, depending on the program element:

- The Tune-up data, which provides information about direct installations, was extracted from Energy Coalition's Tune-up Database. The comprehensive file provided contact information for each participant, as well as measure-specific details including the specific measures installed (e.g., CFLs) and quantity of those measures installed.
- Workshop participant data was provided in both Excel format and PDF files, which were data entered. The files supplied participant contact details and information related to measures included and handed out as part of the workshop (e.g., faucet aerators and CFLs).

All participants that participated in workshops per the Energy Coalition and said they receive electric service from SCE[33] are included in the workshop analysis. The analysis excludes participants surveyed that received only gas-related measures.

***Residential customers that attended workshops did so for a variety of reasons, most notably to learn how to save energy. These customers were satisfied with their workshop experience.***

PA interviewers spoke with households that attended workshops offered through the program. These residential customers primarily said they attended the event to learn how to save energy or save money on electricity bills.

Ninety percent of the participants said the workshop was somewhat useful or very useful in helping them to understand how they can save energy in their home. This is because they believe the workshop provided specific things they can do to save energy or save money. Additionally, respondents said that they received CFLs or water aerators, all of which were installed.

Eighty percent of the respondents were satisfied with their workshop experience. The average satisfaction rating was 4.2, on a 5-point scale with 5 being very satisfied.

***Residential customers primarily heard about the Tune-Up program through word of mouth The audits provided over half of respondents with specific recommendations for improving efficiency in the home. Only about half of installed bulbs were still installed at the time of the interviews.***

Interviewers also spoke with households that received measures through the Tune-Up program component. The most common way to hear about Energy Coalition's direct install program was through a friend, neighbor, or relative (37 percent). Table 12-1 below indicates a

[33] This question is pertinent to residential customers only, per the question "From which utility do you receive your natural gas." Respondents who answered "don't know" responses are also included in the data.

few other ways of hearing about the program. Some of the other responses given include television, landlord, door to door, and child's school.

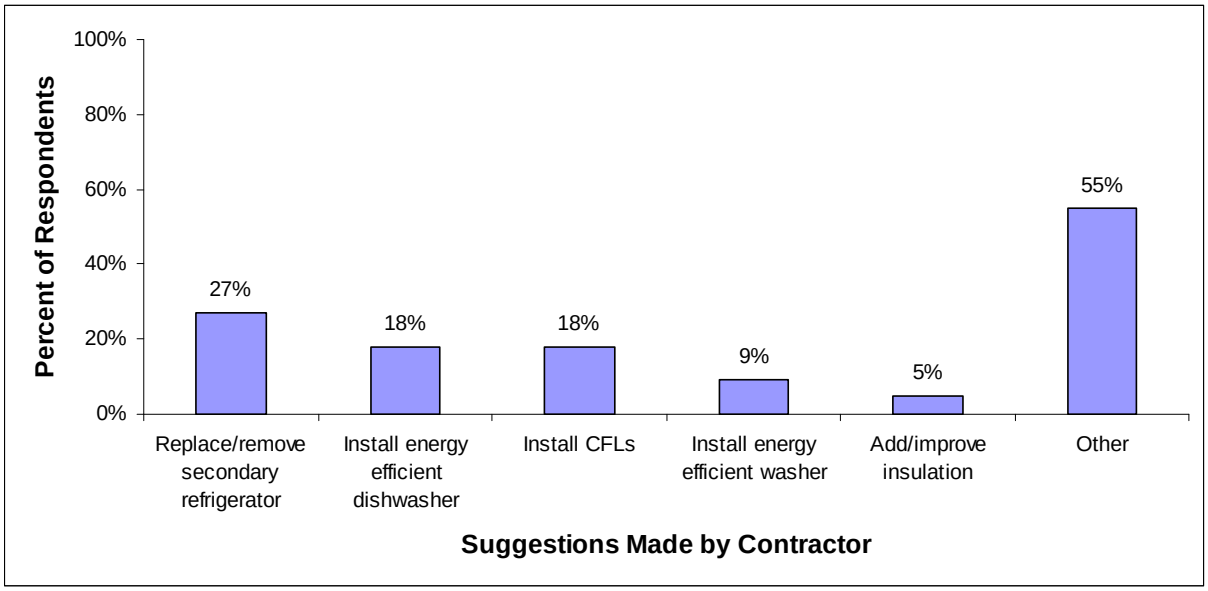
**Table 12-1 Heard about Direct Install Program through Energy Coalition (n=54)**

| Source | Percent |
|---|---|
| Friends/neighbors/relatives | 37% |
| Community displays | 6% |
| Energy fairs | 6% |
| Local government | 4% |
| Water utility bill stuffing | 2% |
| Electric/gas bill stuffing | 2% |
| Community sweeps | 2% |
| Newspaper article | 2% |
| Other | 41% |

Source: Source: Residential participant survey (2008), question DI3

The partnership program conducts an in-home energy analysis as part of the direct install process. During the energy audit, representatives spent an average of a little over an hour at the customers' homes and noted various improvements that could be done to improve energy efficiency in the homes. In fact, 52 percent of respondents said that the representative made suggestions on appliances that should be installed in the home to make it more energy efficient. Of the respondents who had suggestions made, 27 percent said the auditor recommended they replace or remove the secondary refrigerator (Figure 12-1). A few other suggestions made by contractors include install a gas dryer, buy a plug for the refrigerator to make it more energy efficient, change filters on the air conditioner, and remove dimmer switches so CFL bulbs may be used instead of incandescent bulbs.

**Figure 12-1 Suggestions Made by the Contractor (n=22)**



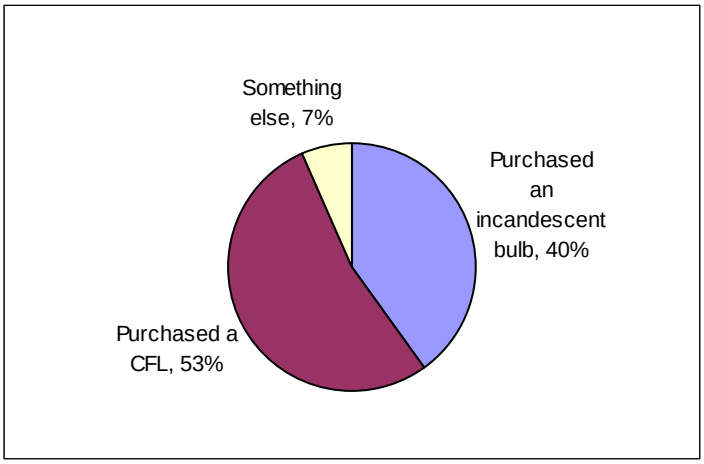

Source: Residential participant survey (2008), question EA8

Seventy percent of the respondents said that they will act on the contractor suggestions to improve home energy efficiency. Program participants who decided not to act on contractor suggestions did so because of a lack of money or time.

Respondents primarily received lighting measures as part of the Tune-Up program. During the direct install, respondents reported receiving average of 3.2 CFLs. However, not all of these bulbs are still installed in the residents' homes. Of the 3.2 bulbs that were installed, only an average of 1.5 bulbs are still installed.

Respondents noted that all of the CFLs they were given are not still installed because they broke or burned out. If the direct install program had not been available, over half of respondents said that they would replace burned out bulbs with CFLs (Figure 12-2). Due to CFLs not being available for all fixtures yet, a couple respondents said that the replacement would depend on what fixture the bulb was for.

**Figure 12-2 Replacement Action When a Bulb Burns Out (n=60)**




Source: Residential participant survey (2008), question C6

The program also provides materials related to energy-efficiency tips and other programs. Eighty-five percent of participants that recall receiving this information found it useful.

Overall, respondents were very satisfied with the program and its offerings. On a five-point scale, where 1 is not at all satisfied and 5 is very satisfied, respondents rated their satisfaction an average of 4.4.

A few suggestions were made by the participants on how to improve program offerings. Regarding the in-home energy audit, several respondents said that they would have liked to see a savings comparison between the different products and more in-depth discussions and information.

Respondents who felt the program could be improved also noted that they would have like to see a few more takeaways on education information. Along with these pieces of information, they said it would be useful to have contact information for those who could answer specific questions. What is odd about this recommendation is that the program reportedly provides this information. So, either the respondent does not recall receiving the information or they

are referring to information beyond what the partnership provides. No specific information was provided in the interviews.

***Small business customers report receiving an average of 19 lighting applications in their facility. This is higher than the average of 13 applications reported in the program database. Over half of respondents also report receiving information on ways to save energy through the audit process. Overall, small businesses reported being satisfied or very satisfied with the program and cited a number of benefits to their organization.***

The Tune-Up database provided information related to the installation of equipment in Small Business facilities through the Tune-Up program. According to the database, the program primarily installs lighting applications along with some gas-related technologies (e.g., faucet aerators). Because lighting is the most prevalently installed measure, the analysis focuses on those lighting applications, along with the audit process.

Small business respondents heard about the direct install program through various sources. As with residential customers, word of mouth was the best way to hear about the program (24 percent), while community sweeps was mentioned by 14 percent of respondents. A few of the other ways to become aware of the program include the chamber of commerce, and being contacted by a subcontractor.

Energy Coalition direct install participants had different motivations for taking part in the program. The most common reason to participate was to save energy and have more efficient lighting, which was noted by 64 percent of the respondents. Fifty-six percent of respondents also saw saving money as a reason to participate (Table 12-2). A couple other responses given as motivations to participate include: the program was free, and it was the right thing to do.

**Table 12-2 Reasons for Participating in the Direct Install Program**

| Reason | Percent |
|---|---|
| Save energy/have more efficient lighting | 64% |
| Save money | 56% |
| Get better lighting/lighting advice | 10% |
| Help the environment/prevent global warming | 7% |
| Needed new bulbs | 3% |
| Other | 21% |

Source: Commercial participant survey (2008), question L3

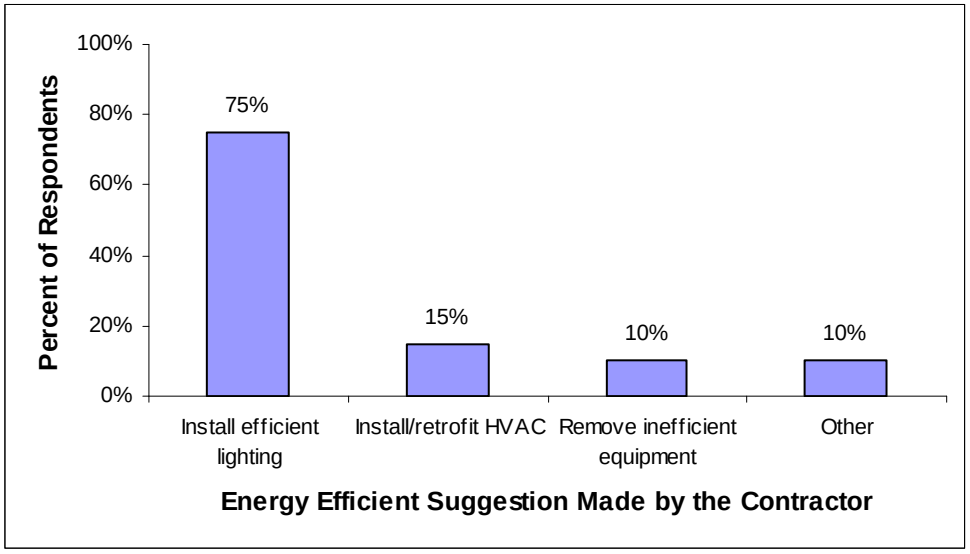
An added benefit to the Energy Coalition direct install program was that the participants received free lighting fixtures and bulbs to install in their business. According to the survey data, participants received an average of 19 bulbs or fixtures and the majority of them were installed at the time of the interview. However, the number of bulbs installed for these same cases per the program database is slightly lower, only about 13. This finding suggests that either participants generally overstated the number of bulbs or fixtures they received during the direct install program or installers gave away more bulbs than necessary to capture more savings. Without a more extensive verification activity it is not possible to determine which is the case via this evaluation effort.

Since participating in the program, only nine percent of respondents have purchased energy-efficient lighting. The quantity of free bulbs and fixtures given away may have decreased the need for business to buy the bulbs or fixtures on their own. Of those who purchased lighting for their company after participating in the program, 80 percent reported that the lighting they purchased was more efficient or the same efficiency compared to what they would have purchased prior to participating in the program. Eighty-six percent of commercial workshop participants also stated that their experience with the program was either very influential or somewhat influential when making purchasing decisions on new lighting. One respondent also noted that solar lighting was installed in the business.

The auditor conducts a walk-through of the facility to inform the direct install and provide additional information to small businesses. As part of the audit, participants received different types of information and services. Thirty-five percent of respondents said the program provided brochures or discussed ways to save energy in the building.

During the energy audit of the business, 58 percent of respondents said that contractors made suggestions as to what equipment should be installed to make the building more energy efficient. Installing efficient lighting was the most common suggestion, made to 75 percent of respondents (Figure 12-3). Fifteen percent also said contractors suggested installing or retrofitting a HVAC system. All respondents said that they would act on the suggestions.

**Figure 12-3 Energy Efficient Suggestion Made by the Contractor (n=20)**



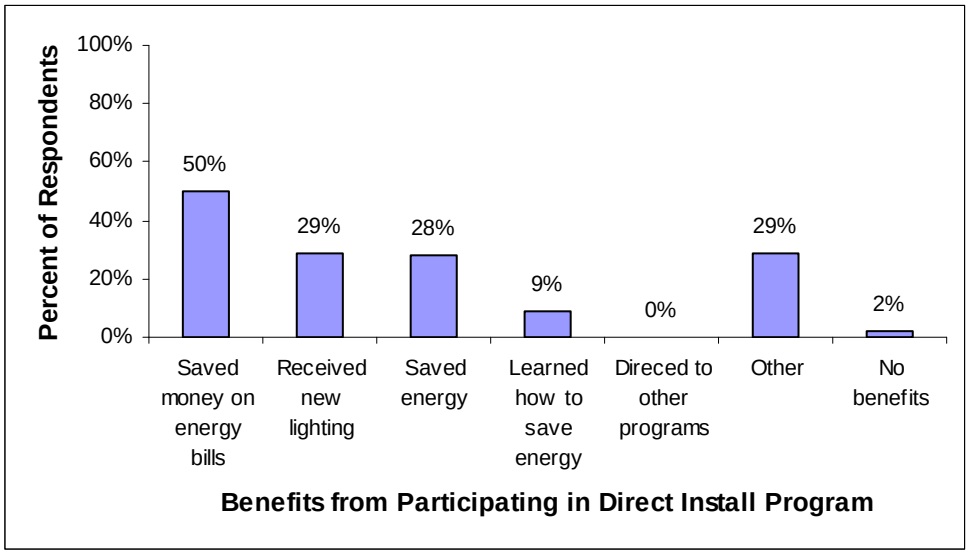

Source: Commercial Participant Survey (2008), Question EA7

Energy Coalition energy audit program participants were then asked how they benefited from the program. Saving money for the business was the most common response, 32 percent of respondents. Twelve percent of the respondents learned where the building needs improvements. One respondent also noticed an increased morale at the company, and specifically said:

> *"We feel good about ourselves...the morale has boosted and the customers love us more...we mentioned on our website that we have gone green...and the employees love it as well...we get a better quality of employees."*

Overall, commercial participants were also reportedly satisfied with the program, with 96 percent saying they were either satisfied or very satisfied. Additionally, respondents noted various benefits of the direct install component of the program. Fifty percent of the respondents felt that they benefited from the program by saving money on energy bills for the business. Receiving new lighting (29 percent) and saving energy (28 percent) were other prevalent benefits mentioned (Figure 12-4). A few respondents also noted that their business benefited by receiving bulbs that are brighter, give off less heat, last longer, and overall better quality.

**Figure 12-4 Program Benefits Reported by Commercial Respondents (n=68)**




Source: Commercial participant survey (2008), question L13

## 12.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENTS

Overall, this is a successful Partnership program that leverages the enthusiasm and momentum of some innovative and active cities addressing the issues of sustainability, climate change and energy efficiency. The partnership also includes cities that are short staffed and do not enjoy the level of resources or prioritization of energy efficiency that some of the more active and wealthier communities can afford. Nevertheless, the program seems to be meeting the expectations of participants. Across the region, awareness is reportedly building in the cities' staff, elected officials, and the general public.

It is clear that there needs to be some structural changes. Efforts should be made to expand the reach of the partnership to include the counties, COGs, and other cities and relevant organizations within the CEP territory. By appropriately and adequately expanding staff at the

Energy Coalition, more current and potential Partnership members could leverage the expertise of the cutting edge cities (e.g., Santa Monica, Irvine, Palm Desert) by sharing best practices and lessons learned[34].

At the same time, there should be greater attention paid to the range of needs in the partner communities and the programmatic structure so that programming has the flexibility to adjust to differences between communities. By combining these last two points—by being more collaborative and transparent—the partnership could increase overall energy savings through greater market penetration and implementation. This would also encourage greater buy-in from each city as the officials and residents reap the benefits of reinvesting the Public Goods Charge funds in their community.

Last, the evaluation recommends that program planning extend beyond one rate cycle. This recommendation is made at the portfolio-level and within other partnership programs, but is also noted in this section as it is relevant for CEP. By taking a long-term view (as is now occurring with the Strategic Plan), the partnership can build and maintain better momentum and achieve the energy efficiency and greenhouse gas reductions that will be required. Long-term planning would also facilitate other important statewide energy-management instruments such as demand response planning.

[34] It is unclear from program interviews whether there is unnecessary overlap with Palm Desert Participation activities.

# 13. SOUTH COAST PARTNERSHIP PROGRAM

## 13.1 INTRODUCTION

The South Coast Partnership program is a non-resource program with the goal of reducing residential and small business energy usage in Santa Barbara County. The partnership is between SCE and the large city of Santa Barbara and the smaller cities of Carpinteria and Goleta (newly incorporated) as well as the County of Santa Barbara. The population of the various partners is in Table 13-1 below.

**Table 13-1 Population of South Coast Partnership Program (2000 Census)**

| City or County | Population |
|---|---|
| City of Carpinteria | 14,194 |
| City of Goleta | 55,204 |
| City of Santa Barbara | 92,325 |
| Santa Barbara County | 399,347 |

The program provides education opportunities to residents, business, and city and county government officials to facilitate their knowledge toward managing and reducing their energy use and costs. The program also includes several events such as lighting exchanges.

## 13.2 PROGRAM BACKGROUND AND STRUCTURE

There is a general agreement in the cities and the county about the importance of resource conservation and efficiency. Most participating communities are looking at Architecture 2030, LEED and exceeding Title 24 by 10–20 percent, and changing their policies, city planning and long-term visions accordingly. The City of Santa Barbara looks to Portland, Oregon, and San Francisco as green cities to emulate, as it tries to enter the national pantheon of leading green cities. The residential customer survey results discussed earlier also showed that South Coast area customers are generally supportive of energy efficiency.

The Community Environment Council (CEC) is a third-party vendor that provides some implementation and facilitation services for the partnership program. For example, CEC maintains the partnership program website. Some utility and local government partner staff reported tension between CEC and the local government partners.

### 13.2.1 Program Components

Most of the activities in this partnership program are focused on outreach and referrals to SCE's core programs. The program refers residential, mobile home, and small business customers to existing SCE programs through various community sweeps and outreach efforts.

Some partners have had strong marketing efforts to support SCE's nonresidential and mobile home direct install programs. The program does not claim savings for these efforts since they are captured under SCE's core programs. Some interviewees felt that SCE's use of outside

contractors with minimal local knowledge limited its ability to effectively serve customers through these direct install programs.

The program has very strong outreach components, which are expect to continue through out 2008. These include:

- Participation in community activities and fairs such as EarthDay, the Goleta Lemon Festival, and HarborDay.
- Meeting with local trade ally organizations to promote energy efficiency including the Santa Barbara Contractors Association and Architecture 2030.
- Media advertisements and maintaining a website with energy-efficiency tips
- Hosting both a CFL Exchange and a Holiday Light Exchange.

The partnership also provided a training opportunity, an off-site training course on Title 24. The training was offered locally in Santa Barbara.

### 13.2.2 Program's Logic Model and Implementation Theory

The program logic model can be found in Appendix A, Figure A-10. As the logic model shows, the primary activities are outreach and referral activities to increase participation in SCE's core programs. These activities are to result in three outputs: (1) information campaigns, (2) participation in community events, and (3) referrals into core programs.

## 13.3 KEY FINDINGS

***Only forty percent of the program's budget was expended as of the first quarter of 2008; however, the program claims to be reaching its goals.***

The partnership has spent approximately 40 percent of its three-year program budget as of the end of the first quarter 2008 with over $100,000 to spend in the remaining nine months. The program is planning several outreach activities to spend these funds, including increased participation in community events to increase the visibility of the partnership program and media advertisements.

In its *Quarterly Report Narrative* from first quarter 2008, the partnership claims it is meeting expectations. Its explanation for this ranking is:

> *This program was filed in concept only with the expectation to develop a mechanism for contracting with the parties, forming a partnership planning group and refining and implementing a detailed program plan. A high-performance partnership team comprising energy champions from the County of Santa Barbara, each of the cities of Carpinteria, Santa Barbara and Goleta, SCE Energy Efficiency, Local Public Affairs, Business Customer Division representatives is fully functional. Energy information and several energy-efficiency programs are being deployed in the area. Investment-grade audits of public facilities have also been completed for Partners' facilities and projects will be funneled to Standard Performance Contract and Express Efficiency programs.*

Interviews with SCE and local government partner staff support this claim. Furthermore, evaluators assert that the partnership has effectively broadened their high-performance team by working collaboratively with other utilities (water and gas) and strategic organizations such as Architecture 2030 and the Santa Barbara Contractor Association.

***Partner cities initially did not feel their needs were being met, but their satisfaction grew as the partnership evolved.***

The City of Santa Barbara and Santa Barbara County are the two largest local government partners. At the beginning of this evaluation, they did not feel their needs were being fully met. However, as the partnership has progressed the partnership group is feeling much better cohesion and coordination, according to interviews with local government partners.

The two smaller cities reported greater satisfaction with the partnership. These cities said they are thrilled to have access to the program because it leverages their limited city budgets and staff.

It was reported that although there are commonalities to leverage, it is important not to have a one-size fits all approach because of the differences among the partners. They need things tailored to their individual communities.

***Partners reported that the third-party vendor was vital to the partnership. However, the program's progress may have been limited by contention between the Partners and the vendor.***

It was reported that the third-party vendor was vital to getting the work done that needed to be done to support the partnership. At the same time, the process interviews conducted indicate that tension between the government partners and the third-party vendor may be limiting the effectiveness of the partnership this program cycle. While there were several different sides concerning the sources of the tension, the process evaluator's primary conclusion is that CEC feels it should be a full partner (as opposed to a third-party vendor) with a greater role in decision-making because of its contributions, reputation and capabilities, which are considerable. Some of the government partners disagreed. The PIP has been clarified to indicate that partnership agreements will be with "*municipalities"* within the County of Santa Barbara including the County of Santa Barbara.

***Partners feel the program has used marketing and outreach effectively to refer customers into SCE's energy-efficiency programs.***

Government partners and the third-party vendor feel they have been successful in referral efforts. To increase their referrals for the small business direct install program, the partnership program sponsored a dedicated outreach person from SCE for the small business direct install program. While the Nonresidential Direct Install Program for the Santa Barbara region has concluded, the Comprehensive Mobile Home program was still working in the Santa Barbara area at the time of the process evaluation. The partners plan to focus on an increased delivery of SCE's Living Wise program to the region's elementary schools in the remainder of 2008.

The partnership program is promoting further nonresidential program participation in SCE's core programs through an Energy Champion decal for businesses to display. The partnership is coordinating this with the Santa Barbara County Water District. The Energy Champion

decal is its sustainability recognition program and it contains a strong energy-efficiency element largely due to the partnership's input.

***The government partners commitment to energy efficiency is seen through their pursuit of energy-efficiency projects in their own facilities.***

The municipal and county partners have had Investment-grade audits of their public facilities completed largely as a result of the partnership raising their own internal commitment to energy efficiency. The identified projects are being funneled to SCE's Standard Performance Contract and Express Efficiency programs.

***The partnership program is hampered by the service territory division between Northern and Southern Santa Barbara.***

Interviews report that the service territory division between Northern and Southern Santa Barbara County hampers the South Coast partnership program. The Northern portion falls within PG&E's service territory and the Southern portion falls within SCE's service territory.

SCE was reported as very engaged in the partnership, but in need of greater coordination with PG&E, who provides service to the northern part of the County. Greater coordination between SCE and PG&E was recommended by government partners and the third-party vendor in order to improve uniformity and implementation across the County.

However, it is unclear to what extent great coordination between SCE and PG&E to serve the County will happen in this or the next program cycle. PG&E has started a separate partnership program with the County of Santa Barbara for the northern part of the County. PG&E's partnership program is distinct from South Coast and will be coordinating more closely with a partnership with San Luis Obispo.

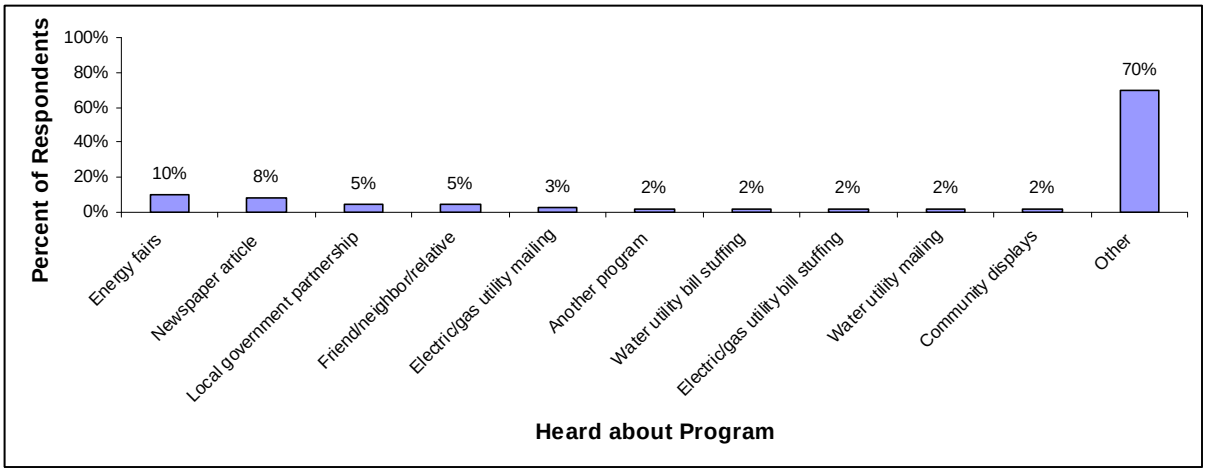
## 13.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

The participant telephone surveys focused on the partnership program's distribution events. SCE provided researchers with files that detail these events. PA researchers gathered participant data from South Coast Energy Efficiency Partnership questionnaires completed with households that attended events. A total of 274 residential participants were identified via this resource. PA was able to complete 63 telephone surveys with residential participants. All interviews focused on the CFLs distributed through the program.

***The program gave residential customers free CFLs at events. Respondents report installing half of the bulbs given away.***

The South Coast Partnership Program distributes free CFLs at community and training events. Residential customers primarily heard about the South Coast Partnership Program from energy fairs, a newspaper article, a booth at an Earth Day event and the city of Santa Barbara. Other ways participants heard about the program include word of mouth, electric or gas utility mailing, and water utility mailing. This illustrates the importance of the partnership's collaboration with other utilities.

**Figure 13-1 Heard about Program (n=63)**

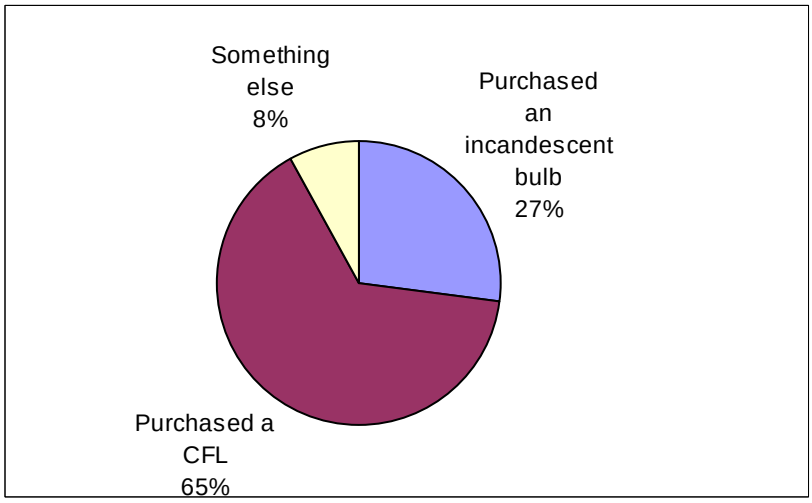



Source: Residential participant survey (2008), question C2

As part of the CFL giveaway program, respondents reported receiving an average of 2.3 bulbs. However, respondents reported installing only 1.2 bulbs in their homes on average. Respondents cited several reasons for not installing the CFLs, such as they gave them away, installed them somewhere else, the bulbs did not work in all fixtures, the bulbs burned out, or they are in storage until a replacement is needed.

To get a sense of the residential customers' bulb purchasing preferences, they were asked what they would do when their next bulb burns out if the program had not been available. Sixty-five percent of the participants said that they would still have purchased a CFL (Figure 13-2).

**Figure 13-2 Replacement Action when a Bulb Burns Out (n=63)**




Source: Residential participant survey (2008), question C6

***Respondents provide a variety of ways they benefited from the program, with the minority of respondents stating there was no benefit. Most respondents said they were satisfied with the bulbs and information they received, but a few provided suggestions for improvement.***

Eighty-six percent of the respondents from the South Coast Partnership Program said that they benefited from taking part in the program. The two most prevalent benefits from the program include learning the benefits of CFLs and receiving the CFL bulbs (19 percent respectively). As indicated in Table 13-2, saving energy (14 percent), saving money (13 percent), and the environmental benefits (13 percent) were also noted as being common program benefits. One participant noted that a benefit was learning about the programs the city has to offer.

**Table 13-2 Benefits from Participating in the Direct Install Program (n=63)**

| Benefit | Percent |
|---|---|
| **Learned about benefits of CFLs** | 19% |
| **Received CFLs** | 19% |
| **Saved energy** | 14% |
| **Saved money** | 13% |
| **Environmental benefits** | 13% |
| **Avoided purchasing new bulbs** | 3% |
| **Other** | 30% |
| **No benefits** | 14% |

Source: Residential participant survey (2008), question C7

Respondents generally claim to be satisfied with the program. Eighty-three percent of the respondents said that they were satisfied or very satisfied with the direct install program (4 or 5 on a 5-point scale, with 5 being very satisfied). However, a few respondents provided suggestions for improving the program. A few comments made on reasons for not being satisfied are listed below.

> *"More educational advocacy and more suggestions for how to reduce energy."*
>
> *"If the free bulb would have last as long as they said it would."*
>
> *"It would have been better if they would have had the kind of light bulbs I needed."*

## 13.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

The partners express high satisfaction with the partnership and plan to continue the partnership in the next program cycle. The partners have also decided to stay together as a team to continue the communication and momentum they have built.

While the South Coast Partnership is primarily a non-resource program, which has given them a great deal of flexibility, partners are planning to expand to resource activities in the

next program cycle. The process findings suggest that the partnership is developed enough to successfully pursue resource activities.

All parties interviewed report that the partnership is successful in opening lines of communication between the three cities, the County and SCE. Furthermore, the municipal partners report that the partnership has really brought energy efficiency to the forefront of their thinking. It was reported by SCE staff that the level of engagement took a year to build, but the partners now see the benefits of the partnership program to their constituents. Now they are coming together regularly, sharing responsibilities, and discussing best practices.

The evaluation process uncovered several recommendations for improvements or consideration in the next program cycle. These recommendations include:

- Expand the partnership's relationship building with area contractors including possibly using them as vendors for resource components in the next program cycle. The partnership program has already laid a strong foundation for this by building a relationship with the Santa Barbara Contractor's Association in the 2006–2008 program cycle.
- Increase budget transparency. Some partners voiced they were never sure what money they had to do what. This may account for less than half of the three-year budget being spent with only nine months remaining in the program cycle.
- Communicate goals more effectively. Some partners voiced a need for more specific and comprehensive data relating to program goals to better tailor and target programming for their communities. SCE has addressed this in large part for the 2009–2011 program cycle through their Affinity Model which makes program goals more clear and transparent for partners.
- Assess organizations involved in the partnership. Certain entities involved with the partnership, such as the Santa Barbara Downtown Merchants Organization are both too small and their members are too small to take advantage of the programming offered. Others, such as the Chamber of Commerce, may be better potential organizations for outreach efforts to the private sector.
- Increase staffing support provided by a third-party vendor. This will allow more tailoring to the communities and longer-range planning. This will also be important if the partnership program has resource goals in the next program cycle.
- Increase coordination with the PG&E partnership with the County of Santa Barbara. Of particular interest, the two partnerships may want to jointly sponsor and conduct outreach for trainings.

# 14. LGEAR PARTNERSHIP PROGRAM

The Local Government Energy Action Resources (LGEAR) Partnership is an umbrella that allows municipalities to have a direct partnership with SCE. There is not a third-party implementer under the LGEAR model.

At this time, three cities are participating in the partnership—the Town of Mammoth Lakes, the City of Ridgecrest, and the City of Santa Ana. Although the City of Santa Ana joined LGEAR in 2008, it is not included in this process evaluation, as it is new to the LGEAR Partnership.

The primary responsibility for cities participating in the LGEAR program is to undertake marketing and outreach activities to inform households and businesses in their jurisdictions about energy-efficiency opportunities. The local government partners are also encouraged to direct customers to energy-efficiency programs offered by SCE and third parties. The cities themselves have no resource savings goals for the partnership program.

## 14.1 PROGRAM BACKGROUND AND STRUCTURE

Participating cities differ in how they work with the partnership. Ridgecrest is directly involved with the partnership, and does not use an external contractor. A city staff member has primary responsibility for the partnership. She is working on it about a quarter time and reports it is a priority for the city.

The Town of Mammoth Lakes hired an external contractor, High Sierra Energy Foundation, to manage the town's energy use. High Sierra Energy Foundation is administering the partnership on the town's behalf. Therefore, it is High Sierra that communicates with the partnership for Mammoth Lakes, although the town manager fully supports the partnership as established in interviews.

### 14.1.1 Program Components

Program components revolve heavily around outreach activities. Both cities provided the following outreach activities:

- Holiday LED Light Exchange and Operation Light Exchange.
- LivingWise, the energy-efficiency hands-on activities program for the 6th grade, implemented in 2008.
- The High Sierra Energy Summit
- Newspaper and radio marketing campaigns

Additional outreach activities were reported by the cities. These activities are detailed below, followed by the city that implemented the activity.

- Information tables at community events including CFL and free caulk giveaways (Mammoth Lakes).

- Promotion of Ducted Evaporative Cooler rebate, which is now part of the Home Energy Efficiency Rebate (HEER) Program. The partnership program offered an additional incentive to Ridgecrest residents to broaden participation in the program. It launched additional incentive for the first 100 residents that participated (Ridgecrest).

The cities also focus on referrals to SCE programs. Referral activities include:

- A multi-family rebate sweep (Mammoth Lakes focused on resort condominiums)
- Outreach to small business for SCE's small business direct install program.

Mammoth Lakes identified other referral opportunities beyond those described above. First, the city identified opportunities for Savings by Design and other programs. Also, the program supports SCE's refrigerator round-up/delivery initiative. There is not an appliance store close to Mammoth Lakes. The partnership program arranged for Sears to deliver ENERGYSTAR refrigerators and the partnership program rebated delivery costs to overcome availability barriers.

The cities also provides training opportunities through the SCE Customer Technology Application Center (CTAC). The training focuses on Title 24 and is offered at Cerro Coso College as well as the High Energy Summit.

### 14.1.2 Program's Logic Model and Implementation Theory

Appendix A, figure A-11 shows the program logic model for LGEAR. The partnership program's primary activities in their program theory is outreach and referrals to SCE programs. These activities lead to three outputs (1) information campaigns, (2) participation in community events, and (3) core program referrals.

## 14.2 KEY FINDINGS

***The program reportedly exceeded its goals and has increased energy-efficiency capacity of the partners.***

SCE's *Quarterly Report Narrative* from Quarter 1, 2008, marked that the partnership exceeded expectation. The report states:

> *"Both Mammoth Lakes and Ridgecrest partnerships have been well received. SCE and the partners are working on additional activities to customize existing energy-efficiency programs."*

The process evaluation supports this ranking, but asserts that there is much more happening with the LGEAR partnerships that make it exceed expectations beyond the narrative in the *Quarterly Report Narrative*. For one, both municipalities are very engaged, strategic-thinking partners. The partnerships have resulted in increased energy-efficiency capacity of the municipal partners as far as town practices and policies concerning energy efficiency. Furthermore, both local government partners have identified unique characteristics of their populations and used the partnership program to address program barriers for their population such as the incentive to cover delivery charges for ENERGY STAR refrigerators.

***All partners report satisfaction with the partnership and the ability to serve hard-to-reach locales. However, cities commented that they would like to see greater involvement by the SCE account managers.***

City partners expressed high satisfaction with the partnership. Additionally, both city partners and SCE staff reported that the LGEAR partnership has been very successful in bringing SCE programs and services to rural areas that were previously under-served because of their geographically distant location.

> *"Because we are remote, we've had very little access to SCE and education, the partnership has brought this to us." –Partner town manager*

> *"It's allowed opportunities to bring services and products to rural areas. Otherwise rural areas were pretty minimally served before LGEAR."— Partner city staff*

City partners discussed their relationship with SCE, and specifically mentioned the SCE public affairs staff person as playing an integral role in the partnership. However, they also felt the need for greater involvement by SCE account management staff. They recognized the geographic distances make it difficult for account managers to visit customer sites often, but felt they would benefit from these visits.

Both cities were submitting abstracts for partnerships for the next program cycle. Ridgecrest was again submitting a stand-alone abstract because they felt they were better served in the LGEAR model because of their geographically distant location than the Bakersfield-Kern Partnership (Ridgecrest is in Kern County). The perception was the County partnership would benefit Bakersfield and more urban areas as opposed to Ridgecrest two hours away from the county seat.

Mammoth Lakes was expanding to a regional proposal. Mammoth Lakes reported they worked with their Council of Government (COG) to do a Regional Transit Authority project. This was a success; therefore, they wanted to pursue greater regionalization of projects and policies. Both municipal partners were interested in doing a nonresidential direct install program in the next program cycle.

## 14.3 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

Partners and SCE staff interviewed felt the partnership has been very successful in establishing a culture of energy efficiency in their communities and bringing SCE core programs to rural areas.

SCE partner staff reported that the LGEAR partnership bring considerable value to SCE. "*They open doors for us*." Likewise, the local government partners reported that the partnership brings considerable value to them. In general, they feel because they are rural and remote they would not enjoy the education, outreach, and opportunities available to them now without the partnership.

What the LGEAR model has also allowed is flexibility in serving Ridgecrest and Mammoth Lakes based on their different needs. The flexibility given through the LGEAR model has given the government partners the ability to make program options that address specific barriers in their localities that the partners are in a unique position to understand and address.

Examples include the delivery rebate for ENERGY STAR refrigerators, retrofitting resort condominiums and the Ducted Evaporative Cooler Rebate.

One opportunity for improvement is for SCE account management to be more present with the partner cities. The cities reported this is an area that would improve their experience with the partnership. Additionally, city partners reported that the SCE public affairs staff person played an integral role in the partnership. This role should continue in the next program cycle.

# *15. SAN GABRIEL VALLEY PARTNERSHIP PROGRAM*

## 15.1 INTRODUCTION

The San Gabriel Valley Partnership is a resource-focused program with non-resource activities. The partnership program has primarily focused on retrofit and retro-commissioning projects in city facilities, and raising energy-efficiency awareness among municipalities in the Valley. Non-resource elements include training, marketing and outreach to both residential and nonresidential customers.

## 15.2 PROGRAM BACKGROUND AND STRUCTURE

The partnership is between SCE and the Southern California Association of Governments (SCAG). Intergy is the contracted third-party implementer. All cities in the San Gabriel Valley are eligible to participate in the partnership program.

Intergy provides design consultation and energy analysis of new construction and renovation project plans for participating cities. Intergy also provides retrofit assistance and Retro-Commissioning (RCx) for participating cities. Intergy contracts directly with the Council of Governments (COG) to provide outreach for the partnership program. The partnership program has completed projects in several different cities in the Valley to-date.

San Gabriel, similar to other partnerships, also had a delayed partnership contract. As a result, Intergy was not hired until the second program year of the partnership.

### 15.2.1 Program Components

The program is structured similarly to a third-party program with one main difference being the community education and outreach provided through the partnership program. The primary activity of the partnership program is outreach to local municipalities and facilitation of their energy-efficiency projects. This primary focus also differentiates it from a third-party program as SCAG is supposed to help open the door to the municipalities within the Valley.

The program also offers customized incentives for municipal facilities.

Two cities were completing Energy Action Plans with the assistance of the partnership program at the time of the process evaluation. Energy Action Plans for Cities serve as a roadmap for future energy-efficiency projects and funding, according to interviewees.

The partnership program has sponsored several nonresidential training workshops focusing on different technologies. The program outreaches to businesses through working with the local Chambers of Commerce to refer them to SCE programs. The program outreaches to residential customers through attending community events. The third-party program implementer reported attending 10 different outreach functions at the time of their interview. The program implementer also maintains a program website, www.sgvenergywise.org

### 15.2.2 Program's Logic Model and Implementation Theory

Appendix A, Figure A-12 illustrates the program logic model for the partnership program. As the logic model shows, the activities include general awareness campaigns, education and training, funneling activities, and municipal services. These activities are to result in six outputs (1) outreach at community events, (2) workshops, (3) core program referrals, (4) technical audits, (5) commissioning and re-commissioning,and (6) energy action plans.

While the partnership program has conducted general awareness and outreach activities to refer customers to SCE core programs, the process evaluation indicates the program activity that is receiving the primary focus is its support and technical assistance for municipalities. This is consistent with the partnership's PIP.

## 15.3 KEY FINDINGS

The San Gabriel Partnership Program is on track to meet their resource goals by the end of the year, although they are having more difficulty achieving their demand than their energy savings. The program implementer reported that they will most likely exceed their kWh goals in order to achieve their kW goals. They believe that the balance of demand savings for energy savings was set incorrectly, which is why they are having difficulties achieving their kW but not their kWh goals.

***From multiple perspectives, there is evidence that COG may be a better partner for SCE than SCAG.***

Overall, respondents across the board felt the Southern California Association of Governments (SCAG) brings limited value to the partnership. SCE contracts directly with SCAG for the partnership. Multiple reasons for SCAG's limited involvement were discussed and included SCAG does not have close relationships with the Valley's cities, SCAG is understaffed, SCAG is not committed to the partnership and SCAG's bureaucracy makes it difficult for it to be responsive.

On the other hand, most respondents felt that the Council of Government (COG) does bring considerable value to the partnership. COG is directly contracted by the third-party program implementer to do outreach and education. It was hypothesized that the COG's greater role may be because they are directly accountable for results.

Cities report the COG as very influential in getting them to participate in the partnership program. Some cities report that members of their council now serve on the COG as a result of the partnership progrram.

> *"The COG is allowing the cities an opportunity to get together and learn from each other."—City facility manager*

***Cities report high satisfaction with the program because of additional assistance provided by the third-party implementer over regular SCE assistance. There is also an increased lighting incentive that is viewed as a positive for moving municipalities forward with retrofits.***

Participating cities reported they like the partnership program because they are receiving more personalized assistance with extra handholding than SCE can provide. The third-party

program implementer is able to bring resources, such as vendor insight (e.g., recommendations of contractors, how to solicit services), that SCE cannot.

> *"We would have been spinning our wheels without them (Intergy)."—City facility manager*

Participating cities reported that the partnership program has definitely brought increased SCE services to them and helped increase their energy-efficiency projects.

> *"We are just a little city here in the San Gabriel Valley and our proactive council has been greatly helped in moving things along by the partnership."—City facility manager*

Furthermore, the partnership program has larger incentives than SCE core programs, which were reported in interviews with cities and the third-party implementer as very important to getting budget-constrained municipalities to move forward with projects. But at the same time, cities discussed that they can not move projects forward just because of the incentive. They face budget constraints and bureaucracy that delays projects even with larger incentives available.

In addition to its energy savings from municipal projects, the commercial participant surveys indicate that the partnership-sponsored trainings are also generating energy savings, though not tracked, because they are resulting in behavior changes.

***Overall, the partnership is viewed as working well, but is working out several communication issues among the partner team that has resulted in confusion.***

It was reported that the third-party program implementer is functioning similar to an account executive. There is also a SCE account executive and five regional public affairs staff. |As a result there was some confusion about the roles of the different staff members. Therefore, it is important for the partnership team to clearly define roles and responsibilities and meet regularly. The program manager recognized that there have been communication issues and reported that a priority for the partnership is improving communication and clearly defining roles and expectations for the various members of the partnership.

## 15.4 PARTICIPANT TELEPHONE SURVEY FINDINGS

The program participant list for the San Gabriel Valley Partnership included 59 commercial participants. All participants were included in the data for a total of 23 completed surveys. The summary of these findings are presented below; however, when reviewing the results, please keep in mind that the findings are based on a small number of completed surveys.

***Commercial participants interviewed stated that they used the information they received in workshops to make changes in their organization. The most prevalent change they made was to replace inefficient with efficient lighting. These respondents noted additional benefits from the workshop, such as learning how to save energy and having information to pass onto others.***

The San Gabriel Valley data provided information for customers that participated in an Energy Efficiency 101 workshop or Advanced Energy Efficiency Training workshop. The list included commercial customers and faith or community-based organizations.

Commercial respondents had different motivations for participating in the San Gabriel Valley workshop. Nearly fifty percent of respondents said that they participated because they wanted to learn about ways to save energy in their business. The second biggest reason to participate was to learn about ways to save the money for the organization (30 percent). Some of the other reasons for taking part in the workshop include learning the new energy code standards, and the program covered laws that the organization enforces (Table 15-1).

**Table 15-1 Reasons for Participating in Workshop (n=23)**

| Reason | Percent |
|---|---|
| Learn ways to save energy in business | 48% |
| Learn ways to save money | 30% |
| Learn about new energy efficient technologies | 26% |
| Learn how to install energy efficient measures | 17% |
| Understand 'green' building issues/practices | 9% |
| Learn about ways to be more environmentally friendly | 9% |
| Other | 35% |

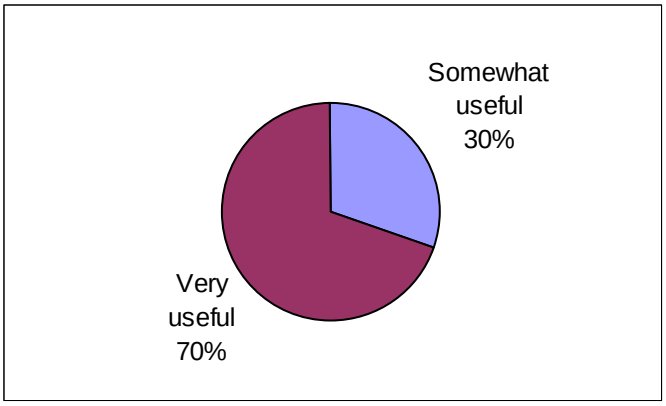
Source: Commercial participant survey (2008), question W3

Ninety-two percent of respondents said that their organization has made energy efficient changes since participating in the workshop. This is a statistically significant finding indicating that the training did result in behavior changes that have generated additional energy savings from the partnership program.

The most common change was replacing less efficient lighting with more efficient lighting (58 percent). Respondents also noted that they purchased or installed more energy efficient equipment (25 percent) and reviewed energy use in their business (17 percent). A few other changes respondents noted that they made include looking for energy savings every time they work on a home, and followed up with church members with information on the web.

When asked how useful the workshop was in understanding ways to save energy, all respondents said that it was either somewhat useful or very useful (Figure 15-1).

**Figure 15-1 Usefulness of Workshop in Understanding Ways to Save Energy (n=23)**




Source: Commercial participant survey (2008), question W9

As part of the workshop, 91 percent of the participants received brochures or literature as takeaways. Everyone who received takeaways from the workshop found the material useful. All respondents said the literature was useful to them.

In addition to receiving takeaways, all workshop participants said that they benefited from attending the San Gabriel Valley workshop. Fifty percent of program participants mentioned that they benefited from the workshop by learning how to change energy using behaviors and learned how to save energy. Another common workshop benefit was that the participant was able to share the information that they learned with others (36 percent). Some of the other benefits noted include knowledge about the California energy requirements, clarification of the commercial lighting code, and gaining information for drafting policies.

## 15.5 CONCLUSIONS AND OPPORTUNITIES FOR IMPROVEMENT

Eligible cities' involvement in the partnership program varies considerably because of their different commitment to energy efficiency and their own budget constraints, according to partner and third-party implementer interviewees. While the better incentives through the partnership program are helpful in getting cities to move forward with projects, it was also discussed that it would be nice to have increased flexibility to implement innovative projects to capture energy savings. According to city facility manager interviews, the largest motivator for cities to participate in the partnership is the technical assistance provided by the third-party implementer that goes beyond what SCE can offer.

While there are several positive aspects of the San Gabriel Valley Partnership, the partnership is operating more as a third-party program than a government partnership. The main reason for this appears to be because the SCAG is not an active, involved partner. The 2006–2008 cycle shows positive engagement from the COG, though the COG is not a "partner" in this program cycle, but instead is hired by the third-party implementer to do outreach.

In the next program cycle, the COG or another local government entity should be sought out to partner with SCE in place of SCAG.

In addition, it was reported by cities that account managers and executives were key to their participation in the partnership program. Therefore, account managers and executives should continue to be an integral part of the partnership. At the time of the process interviews, there were some communication issues in the partnership relating to understanding the various roles and responsibilities of the SCE partner staff and the third-party implementer. The program will need to continue to improve communication and coordination among the partners and the third-party implementer moving forward.

# *16. PORTFOLIO CONCLUSIONS AND RECOMMENDATIONS*

Each chapter provides key findings, conclusions, and recommendations for the partnerships reviewed in this evaluation. This chapter brings the report full-circle and provides conclusions at the portfolio-level. Then we provide recommendations for SCE's Local Government and Institutional Partnership Portfolio addressing the study's primary objectives.

## 16.1 CONCLUSIONS

**Achievement of goals.** At a portfolio-level, SCE's partnership portfolio is on track to meet their kWh goals established for the 2006–2008 program cycle. Demand kW goal achievement is lagging kWh, but is also on track.

Two partnership programs—CDCR and the County of Riverside—are substantially behind on their energy-savings goals. While these partnership programs have gained momentum lately and resulted in committed projects, it is likely several of the identified projects will not realize energy savings until 2009.

The main reported inhibitor of partnerships' achievement of goals is slow program start-up. In many cases this is reportedly due to contract delays. Many partnerships reported they did not start until the end of the first program year or the start of the second program year. However, as of the end of the first quarter of 2008, all partnerships appeared to be in full swing and have aggressive plans for the remainder of the year.

At the time of the process evaluation, strongest performers in terms of energy-savings goal achievement are Ventura County, UC/CSU, Bakersfield and Kern, Community Energy Partnership, San Gabriel Valley and CCC. (CCC is only a strong performer for SCE, which is attributed to its different approach to the partnership than the other IOUs as discussed under that partnership section).

In general, the non-resource partnerships claim to have exceeded their program targets. In most cases, the process evaluation findings support these claims for various reasons including long-term capacity building (discussed next) and partnership programs bringing something unique to the table to increase participation in SCE core programs.

However, utility, local government and institutional partner staff expressed a desire to understand how their work helped SCE make progress toward utility resource goals by reporting the outcome of referral activities. This suggests an opportunity for a tracking system of referrals to quantify energy savings resulting from partnership program non-resource activities. While some partnership programs track their referral activities, others are not.

**Long-term capacity building.** The potential for longer-term savings varies by partnership program type, but appears to be high. To varying degrees, the statewide partnerships provide training associated with energy retrofits and MBCx and are working to impact campus and organizational purchasing policies and building practices. Several of the partnership programs such as San Gabriel Valley, Mammoth Lakes, and Ridgecrest are also doing Title 24 training

events in their areas. Almost all local government partnership programs are delivering trainings.[35]

Some local government and institutional partners have made greater commitments in these areas than others and those that do credit this more active pursuit of energy efficiency to their partnership participation. Partnerships that have been the most successful in long-term capacity building may be those where SCE has contracted directly with the local governments such as in the LGEAR and South Coast model as well as partnerships that have a longer duration such as the UC/CSU and LA County partnership.

**Partnership keys to success.** The most successful Partnerships are those in which all partners are fully engaged in the program. The term "engaged" is used to indicate both buy-in to the partnership concept and commitment to making its implementation work. Partnerships where partners expressed the greatest level of satisfaction also were those where partners collaborated well together and built upon each others' strengths.

In addition, SCE's successful local government and institutional partnership programs have at least one dedicated local government staff person—or champion—as well as other staff throughout the local government or the organization who participate on some level. The champion and/or engaged staff of the local government or organization must be present at the table to bring in their unique ideas and resources to make it a true partnership.

Clear communication appears to be the biggest key to successful partnerships based on the process evaluation of the twelve different partnerships. This clear communication needs to not only involve local government and institutional partner staff and third-party program implementers (if applicable), but SCE also needs to have a strong presence at the table as well. This includes the partnerships' program managers, accounts managers, account executives, and public information officers.

Partnerships that have successfully brought other relevant organizations to the table have expanded the reach of the partnership. For example, the South Coast Partnership is now collaborating effectively with the water and gas utility.

**Statewide programs.** The statewide partnerships work well in terms of policy development and collaboration between the insititutional partners and the utility partners. There are significant differences in how some of these partnership programs are implemented at the utility level, but institutional partners are quite complimentary about SCE's implementation efforts.

**Unrealized value.** This process evaluation indicates that these programs are successful on many fronts. Examples include helping local government decision makers move toward acting on projects, providing expertise to facilitate projects that otherwise would not happen, reaching customers who would not otherwise participate in core programs, and building public awareness. Many SCE and local government and institutional partners are concerned that the partnerships will not be given adequate credit for the role they play in stimulating energy-

[35] While all local government partnerships PIPs include training, there are some that had not delivered training at the time of the process evaluation because they are instead focusing on achieving their resource goals.

saving behaviors and installation of measures beyond those that are easily counted. The concern is that, in the absence of a way to measure indirect program impacts, such as those that show up in SCE core programs, partnership value to the overall efficiency portfolio will be underrepresented.

SCE's Affinity Model for the 2009–2011 program cycle may be able to address this concern of representing the value the partnership programs bring. The Affinity Model provides stepped incentives based on performance. Partners can participate at silver, gold, or platinum levels. The stepped incentive system may provide the correct motivator to better capture and quantify the value of the partnership programs.

**Staffing resources.** Staffing is an important issue on the local government and institutional level, particularly because partnership funds are not designed to fund staff in perpetuity. Local government and institutional staffs tend to have limited time to dedicate to partnership work, yet it is important that the partnership have adequate staff resources—at whatever level—to ensure the necessary work is accomplished to support the partnership's initiatives.

It is a key for success for partnerships, as discussed above, that the partnership programs have at least one dedicated local government or institutional staff person as well as others throughout the organization who participate on some level.

The importance of staffing resources provided to partnership programs by third-party implementers who can work closely with partnership staff is noted. Partner staff reported that the third-party implementer was key to getting the partnership activities done. And in many cases, the third-party implementer provided technical assistance that was important for the target markets. One example is the San Gabriel Valley Partnership Program where technical assistance offered by the partnership program was key to getting cities to participate in the program. In the case of Mammoth Lakes, the town's energy use is managed by a third-party contractor who does much of the work for the partnership, but the town manager also takes an active interest in the partnership.

**Clarity of focus.** The partnership program model has two main dimensions: it is a resource acquisition vehicle and it is a community outreach and engagement tool. The challenge is that the current Partnership Program model assumes local governments and institutions have significant roles to play in delivering direct and indirect kWh and kW energy savings—roles that are important but necessarily vary with each partnership based on the capacity and capabilities brought to the endeavor. This challenge is addressed in the program design documents, written commitments, and contractual documents that articulate the responsibilities of the external partners that they must fulfill in exchange for the Public Goods Charge (PGC) funding provided.[36]

[36] The Public Goods Charge (PGC) originated with Assembly Bill 1890 in 1996, which restructured the state's electricity markets. As part of AB 1890, energy efficiency programs were funded with proceeds from the PGC. With the passage of Assembly Bill 1105 in 1999, authority over the PGC energy efficiency programs were shifted from the CPUC to the CEC.36 In September 2002, AB 117 was passed into law. Section 381.1, which was added to Public Utilities Code, permits community choice aggregators (CCAs) to apply to administer cost-effective energy efficiency and conservation programs. The CPUC also adopted certain procedures in Decision (D.) 03-07-034 (dated July 10, 2003) to implement portions of AB 117 affecting the allocation of energy efficiency program funds.

PA's evaluation effort examined the extent to which SCE's external partners (1) fully understand and accept this obligation, (2) have the capacity (resources) and capability (skills) to fulfill this role, and (3) feel a direct obligation to fulfill the energy-savings commitments. Not surprisingly, the partners that are most fully engaged are those that meet all three of the above criteria. Every Partnership that is not performing as well fails to meet at least one of these criteria.

**Balancing resource and non-resource objectives.** One potential risk associated with partnership programs is the dual-nature of resource and non-resource activities. Because the partnership program portfolio aims at delivering near-term energy savings as well as building capacity and capabilities necessary for long-term energy savings, it may be more appropriate to articulate a partnership program's goals in terms of both near-term or immediate resource goals and long-term resource goals. Many of the partnership programs are both taking actions to obtain immediate savings as well as laying the groundwork for longer term savings through what are now termed non-resource activities.

There is a tension that has existed in the partnership programs portfolio between delivering the energy-savings commitments related to the PGC incentive mechanism (achieving the metrics), building local government and institutional capacity to deliver services over the long run, and providing the non-resource elements detailed in the PIP. Programs are a reflection of the goals that are set for them. If partnership program goals are articulated as annual energy savings, then the programs will focus on obtaining energy savings. One illustration of this finding is the County of Riverside, which has done no non-resource activities to-date although they are articulated in the PIP because it is focusing on its resource goals. The Community Energy Partnership, although administering non-resource activities, is another example of a partnership frustrated by this challenge.

In order to obtain critically needed resources for the State, the focus on obtaining energy savings is appropriate. However, with that kind of focus, much of the capacity and capability building for which the partnership program concept is so well suited could be marginalized. To balance the two objectives, partnership goals need to ensure that longer-term savings—as well as near term energy-savings targets—are realized and that progress toward reaching both goals is measurable.

**Recording non-resource activities.** The CPUC recognized the potential value of non-resource activities by focusing attention on these partnership program elements in the impact evaluation that was launched during the time of this study. Although regulatory documents point to the need for the IOUs to maintain information to allow for their evaluation, few of the IOUs, including SCE, maintain such data (e.g., contact information for participants in non-resource activities). The CPUC's decision to place more emphasis on indirect impacts and non-resource program elements than originally intended for the 2006–2008 program cycle has placed significant additional pressure on SCE program managers to document these activities and create databases for evaluation purposes.

**Length of programs and program maturity.** The process evaluation indicates that the local government and institutional partnership concept has gained momentum from its first program cycle. Those programs that started under the earlier program cycle reached a level of maturity under the 2006–2008 cycle that allowed for more progress to be made. It is clear that both the IOUs and the CPUC underestimated the amount of time it takes to set up partnerships with their complex relationships, multi-party contractual documents, and range of

services. Several of the partnership programs did not begin until the second year of the 2006–2008 program cycle due to these contractual issues.

While most of those interviewed for this evaluation believe the partnership programs will lead to increased local government and institutional capacity to implement energy-efficiency actions and measures, there was discussion that a three-year program cycle is insufficient time in which to achieve the results these programs can ultimately produce. The need for a longer program cycle became obvious when comparing those programs that began during the 2004–2005 cycle with those that started in 2006. More mature programs like the UC/CSU Partnership are functioning more effectively and delivering greater savings. A longer program cycle might make sense for this type of program. All of the interviewed local government and institutional partners were planning on continuing in the 2009–2011 program cycle. Our understanding of SCE's criteria for selecting partnerships for the 2009–2011 cycle includes giving priority to partnerships that were successful in the 2006–2008 cycle. This prioritization will allow partnerships to capitalize on the momentum they have built in the 2006–2008 program cycle.

**Program Tracking.** Program databases are critical tools for reviewing and documenting program progress. Program managers and stakeholders can use databases to identify the populations they are serving, markets that are being underserved, and services that are provided through the programs. Databases are also critical for identifying and tracking energy impacts associated with programs and are a means for optimizing program energy impacts.

- Utilities did not receive clear guidance from the CPUC regarding capturing indirect impacts, so there had been no formal tracking for non-resource programs or components until the issue was raised in mid 2008.
- The level of tracking of programs' participants vary significantly from exceptionally detailed tracking of all audit, installation, and education offerings, to little or no tracking at all.
- While statewide partnership programs are tracked at a central level by implementation contractors, SCE program managers may want to put their own tracking system in place so that they can maintain a strong project pipeline system.

Accurate and timely recording and tracking of program activities is exceedingly important to the success of programs. The more entities involved "touching" the systems and responsible for reporting their information, the more complicated the tracking process tends to be. This underscores the importance, though, of devoting time early in the program process to develop an effective tracking system and one that is used consistently by program partners.

**Communication channels.** Interviews across multiple partnerships revealed that for some partnerships there was a breakdown in communication between the local government or institutional partner and utility. Communication topics include changes in SCE offerings, SCE activities related to the program (such as blitzes), clear articulation of goals and expectations, budget transparency and any projects and savings resulting from referrals into other SCE's core programs. In addition, several partners reported there was a breakdown in communication about SCE's call for abstracts for 2009–2011 partnerships. Partnerships that incorporate and practice strong communication practices can only result in improving and streamlining program performance and partner satisfaction.

**Customer segments targeted.** In general, the partnership programs have been more successful in building awareness and serving commercial customers. This is not surprising given that there are larger energy-savings opportunities with commercial customers who are fewer in number with greater consumption. However, the commercial market has distinct submarkets that are more or less approachable through the local government and institutional partnerships program mechanism. Partnerships may be most able to influence locally owned and operated businesses and much less able to influence large regional and national building owners, manufacturers, retail chains, and housing developers with far away decision-makers. Large regional and national owners are for the most part already aware and scan local settings for incentives that they can obtain.

Residential customers are harder to reach and to gain their participation in energy-efficiency programs as evidenced in the customer survey results. However, there are some SCE partnership programs that are doing strong residential program support campaigns that include aggressive outreach using the media, website and brand building, unique offerings to increase referrals and specific targeting based on partners' knowledge of the residential population and housing stock. Examples include South Coast, Mammoth Lakes and Ridgecrest. To the extent that SCE is interested in building more activities directed to residential customers, these partnership programs provide a good starting place of best practices.

**Incentives and technical assistance.** SCE's partnership portfolio has raised the visibility of energy efficiency. Many of the projects would not have happened without the incentives or technical assistance provided by the partnership programs. The visibility provided by the incentives from the partnership program may be as important as the actual money.

## 16.2 RECOMMENDATIONS

Recognizing the success of the partnership programs on many levels, we offer the following recommendations for SCE and the CPUC to consider for the 2009–2011 program cycle to take advantage of lessons learned and best practices from the 2006–2008 program cycle.

### 16.2.1 Revisit the length of the partnership program cycles to recognize the diversity of community needs and the capabilities of communities to mount effective partnerships.

It takes many years to build strong partnerships. The most successful partnerships have histories that extend well into the past. New partnerships that are just getting off the ground may need special care and feeding and more resources to establish themselves. Not all local government and institutional partnerships are equal. SCE needs to be prepared to work with partnerships to support programs of varying sophistication. Given this, we make the following recommendations:

- Three-year funding cycles for local government and institutional partnership programs are too short. We recommend that five- or seven-year funding cycles be considered.
- With the extended funding cycles, there should be clearly established expectations for outcomes as well as impacts and the continued funding of partnership programs should be predicated on meeting goals representing these outcomes and impacts.

### 16.2.2 Ensure program funding does not lapse.

The history of DSM is littered with good programs that have been destroyed because of lapses in funding. Partnership program offerings are particularly sensitive to such lapses. If the decision is to continue funding of partnership programs in three-year cycles, then it is incumbent on the IOUs and the CPUC to make decisions early or to provide bridge funding to prevent lapses.

### 16.2.3 Streamline partnership contracting to enable the partnership to begin work promptly.

SCE's 2006–2008 partnerships have been particularly troubled by the amount of time required to get contracts into place, which have delayed program progress in many cases. We make the following recommendations to streamline the contracting process in order to enable the partnerships to begin work more promptly:

- Model contracts should be developed.
- Negotiations should be limited to a few weeks.
- The IOUs should assign sufficient staff to get the contracts in place quickly.
- The CPUC needs to streamline its involvement in the process.

### 16.2.4 Review the need for resources by program, taking into consideration the individual needs of the programs.

A recurring theme through all of the programs is the need for more resources. At the present time, allocations are primarily based on the benefit cost ratios for the direct delivery of energy efficient measures. We recognize that the CPUC and the IOUs have a fiduciary responsibility to optimize the energy-savings benefits across programs. Most programs are demonstrating that they can deliver direct and cost effective energy savings. In light of this, our recommendations are:

- Overall, we encourage the allocation of more resources to the partnership programs based on the successes documented in this process evaluation.
- As noted above, emerging partnerships may especially need more resources to establish themselves.
- At least in the case of local government and institutional partnerships, we recommend that the method of allocations needs to be reconsidered in the next round of funding. The Affinity Model may be a good start at addressing proper resource allocation to the partnerships, supporting a mix of resource and non-resource activities.
- Local government and institutional partners must also recognize that while additional resources might allow them to gather substantial additional savings, the benefit cost ratio for those savings may not be optimal in comparison to other programs.
- It is clear that with care and diligence, the non-resource benefits for many of the partnership activities, for example training, can be measured. The CPUC is currently funding an impact evaluation of local government and institutional partnership

programs that will result in energy-saving estimates for several non-resource activities. The results of this impact evaluation should be useful to SCE in future planning efforts that will need to balanced resource and non-resource activities.

- SCE may want to consider integrating the following tiered and segmented system for allocating resources into the Affinity Model.
  - Emerging programs could be allowed to divide their programs into resource and non-resource segments.
  - Resource segments would be subject to the same benefit cost criteria as other programs.
  - In the short term, non-resource segments would be allowed to demonstrate that they have met stated goals for particular outcomes. An example of an outcome is measures installed as a result of training. Alternatively, they could be allowed to demonstrate benefit cost ratios of more than one.
  - At some point in the future, these non-resource programs would be required to show that they are cost effective.

### 16.2.5 Provide ongoing support for technical assistance.

A consistent finding across the partnership programs is the heavy workloads of the staff in partnerships including the local governments, organization and utilities. Mechanisms for providing more staff resources need to be investigated both within SCE as well as within the local government partners. At least some partnerships felt that their lack of technical expertise was a barrier to moving forward.

Partnerships felt that having outside administrative and technical support was important to being effective. Other large programs, for example, a large influx of construction funding for campuses and schools, can distract staff and detract from the ability to engage with their partnership.

Within that context, we offer the following recommendations:

- The forte of local government and institutional partnership programs is their access to government structures and local institutions and business. Local government programs have less technical expertise. We recommend that the IOUs create a pool of technical talent that local government and institutional partners can draw upon to support their programs. Local government programs could use a project management model in which the local government partner identifies and then appropriates that needed skills and capabilities from the pool.
- Other utilities, for example, BC Hdyro, have established programs in which they pay for some or all of the cost of an energy manager or other types of program personnel at specific industrial sites. This model, known as a staff support model, could be considered for the partnerships.
- If a staff support model is utilized, it is important that it include a mentoring role to prepare local government and institutional partnership programs to become more self-sufficient.

### 16.2.6 Support local government or institutional partner funding efforts.

Local partners should be challenged to increase their leverage over time. The ability of partners to obtain funding for projects is an important constraint and may lead to delay or failure in partnership programs meeting resource goals. In making the case for funding, some local government and institutional partners were helped by being able to develop larger packages of projects with which senior managers were more willing to deal. The credibility of the utilities and the incentives were also positives in obtaining funding to move ahead with projects.

### Communicate regularly and provide consistent and timely feedback.

As identified above in the study's conclusions, effective communication and interaction are keys to the success of the partnerships. The profession, social, and networking abilities of the partnership liaisons are critical to the interactions of the partnerships. Partners' interactions with the utilities and other partner organizations received mixed reviews but were mostly positive. Where the interactions were good, the role of the utility and other organizations tended to be viewed as positive. Where the interactions were minimal, there was little perceived value to partnership involvement or the partner role tended to be viewed as negative or adversarial.

An emergent theme across all of the partnership programs was the need for consistent, frequent, and timely feedback and communication. Feedback is needed between local government partners within the partnerships, partners and program implementers, the utility partner staff, between participants and partners and among all the partners. Partnerships were particularly interested in knowing how they were doing and what others were doing. However, improved feedback requires better tracking systems as identified below.

- Feedback is important to the partnership and the communities involved in terms of sustaining and building the partnership and in terms of making it visible within the community. More feedback is needed.
- We recommend periodic teleconferences and perhaps an annual gathering be held in order for partnerships to exchange information
- Evaluators need to be more proactive and timely in conducting surveys. More tracking is needed especially of those things that form the basis for longer-term savings. Surveys for educational and training activities would be especially useful but should be focused on resulting behaviors.
- For multi-utility partnerships, feedback needs to be streamlined so that each utility can have immediate feedback about activities and the commitments by customers.

### 16.2.7 Draw on partnership best practices identified through the process evaluation

Many communities have efforts focused on increasing the efficiency of their public buildings. The LA County Partnerships represents a particularly good model for this. Best practices to be gleaned from this partnership are:

- The use of a central energy-management system (EMS).

- Buildings are prioritized based on information from that system and other information.
- Buildings are screened and contracts are let to a vendor to do retro-commissioning.
- When the buildings are retro-commissioned connections are made to the EMS if they do not already exist.
- The vendor provides a training manual for facility staff.
- The vendor trains facility staff.
- The buildings are continuously monitored from the EMS with proactive maintenance and operations creating a sustained efficient use of energy.
- While this system is particularly well suited to larger buildings, it can be adapted to work with small buildings as well. We strongly recommend that partnerships be challenged and incentivized to create such systems.

A best practice identified across several SCE partnership programs was SCE's account staff engagement in the partnership. For example, SCE was most effective in the statewide CCC partnership program as a result of SCE staff's proactive and direct involvement with the community colleges.

Additional implementation best practices gleaned from the process evaluation include:

- When the target is multiple buildings belonging to the local government or institutional partner or multi-client partnerships, there is value in creating an energy-efficiency plan for these buildings. Communities and institutions assisted to do this.
- The desire for one stop shopping was a recurring theme in the process evaluation results. Having multiple programs each focused on separate technologies or sets of practices makes funneling and participation harder and creates confusion. SCE may want to consider creating "one-stop shops" where communities can find the resources they need.
- Many communities have a need to integrate their programs to comprehensively include water, waste management, and green buildings. The CPUC and IOUs need to recognize this trend and look for ways to smoothly integrate electric and gas efficiency into sustainable community efforts. Several partnerships such as South Coast have successfully started these more holistic sustainable approaches to energy efficiency.

### 16.2.8 Develop a tracking system that is usable and accessible between utilities for mulit-utility programs and between partners and utilities

The lack or difficulty of data tracking was an opportunity for improvement raised across several of the partnerships. The IOUs and their local government and institutional partners need to develop universal and simple tracking systems for the partnership programs. These tracking systems need to be able to track:

- Inquiries
- Participation in non-resource activities

- Direct installations
- The design of the systems need to support both program and evaluation needs
- Referrals to SCE's core programs generated from partnership activities
- The systems need to be flexible with simple interfaces that will allow field use with participants at training and events

### 16.2.9 Clearly brand each partnership

Branding plays an important role in helping to promote these programs. It is important to create clear brands and avoid brand confusion. There is a need to address the problem of competing brands in terms of branding in general and the use of different brands for similar services in the same local area. When participation in events is planned, it is incumbent on partners to coordinate their participation with each other.

## 16.3 SUMMARY

SCE's portfolio of local government and institutional partnership programs is successful on many fronts. SCE's partnership portfolio is on track to meet its energy goals established for the 2006–2008 program cycle. Many of the partnerships appear to have laid the foundation for long-term capacity building that have affected policies and practices. The partnerships also appear to have raised the visibility of energy efficiency within their communities. Finally, the partnerships have employed unique strategies to increasing energy-efficiency program participation in order to address barriers for their target segments. At the same time, areas for improvement were identified. SCE has a strong start for the 2009-2011 program cycle and should be able to build on the successes of the 2006-2008 program cycle while addressing lessons learned from the 2006-2008 program cycle.

# *APPENDIX A: PROGRAM LOGIC MODELS*

This appendix presents the local government portfolio-level program theory and logic model[37], followed by individual program logic models.

## A.1 PORTFOLIO-LEVEL PROGRAM THEORY

The Local Government and Institutional Partnership Programs are intended to address a perceived gap in the delivery of energy-efficiency services that local governments are in a unique position to fill. While IOUs and third-party providers in California have accomplished significant gains in energy efficiency, there are still segments of the population that are underserved or, for various reasons, have not fully participated in these programs. By leveraging existing services and communications vehicles in their communities, local governments are seen as ideal conduits for delivering energy savings. Because of their similar capabilities, some state agencies and non-profit organizations have also been included under the Local Government and Institutional Partnership Programs portfolio for the 2006–2008 cycle.

Local governments and institutions can play a key role in promoting energy conservation, energy efficiency, and alternative energy. The CPUC's 2008 "straw man," *Achieving Aggressive Energy Efficiency Goals in Local Communities and Statewide*[38] enumerates the following functions of local governments that need to be recognized, strengthened, and reinforced for a statewide approach to energy. Functions include:

- Setting policies and establishing goals for their communities
- Leading by example, with built projects and implementation of policies
- Enforcing state energy efficiency/conservation codes and standards
- Adopting stricter local codes for new and existing buildings
- Incentivizing projects that voluntarily exceed state and local minimum energy standards
- Requiring higher energy standards for projects in redevelopment districts and/or for meeting affordable housing goals
- Requiring municipal contractors and vendors to meet higher energy-efficiency standards for services and products that they provide to the local government
- Developing and implementing programs that are tailored to their communities' needs
- Collaborating with other entities, including IOUs, in outreach initiatives and providing education and technical assistance to local residents and businesses if resources are available

[37] This diagram is consistent with the portfolio-level logic model developed by PA as part of the CPUC evaluation of the partnership Programs.
[38] http://www.californiaenergyefficiency.com/local_govt.shtml.

- Promoting energy efficient communities through community design, land use, and zoning requirements
- Recognizing local individuals and businesses for exemplary energy management
- Promoting green technology oriented economic development.

The partnership model is intended to build the capacities (resources) and capabilities (skills) of local governments and institutions. Partners would then have the resources and skills for delivering energy services within communities; raising awareness among the public (households and businesses) about energy-saving opportunities; and directly realizing opportunities to save energy within homes, businesses, local and state government, and community facilities.

The partnership program model has two main dimensions; it is both a resource acquisition vehicle and community outreach and engagement tool. The challenge is that the partnership program model assumes local governments have significant roles to play in delivering direct and indirect kWh savings—roles that are important but necessarily vary with each Partnership based on the capacity and capabilities of each Partner. This challenge is addressed in the program design documents, written commitments, and contractual documents that articulate the responsibilities of the external partners that they must fulfill in exchange for the Public Goods Charge (PGC) funding provided.[39]

## A.2 LOGIC MODEL

A program logic model illustrates a set of interrelated program activities that combine to produce a variety of outputs that in turn lead to key short-term, intermediate, and long-term outcomes. The following evaluation activities supported the development of the Local Government and Institutional Partnership Programs portfolio-level logic model:

- Program documentation review
- Interviews with program design and delivery staff

The *California Energy Efficiency Evaluation Protocols: Technical, Methodological, and Reporting Requirements for Evaluation Professionals* (The TecMarket Works Team, 2006), based largely on the *California Evaluation Framework*, does not require a program theory and logic model for every program. However, SCE agrees with the CPUC that program theories and logic models are indispensable for the effective and efficient design and delivery of the Local Government and Institutional Partnership Programs as well as in assessing their energy and demand impacts.

[39] The Public Goods Charge (PGC) originated with Assembly Bill 1890 in 1996, which restructured the state's electricity markets. As part of AB 1890, energy efficiency programs were funded with proceeds from the PGC. With the passage of Assembly Bill 1105 in 1999, authority over the PGC energy efficiency programs were shifted from the CPUC to the CEC. In September 2002, AB 117 was passed into law. Section 381.1, which was added to Public Utilities Code, permits community choice aggregators (CCAs) to apply to administer cost-effective energy efficiency and conservation programs. The CPUC also adopted certain procedures in Decision (D.) 03-07-034 (dated July 10, 2003) to implement portions of AB 117 affecting the allocation of energy efficiency program funds.

The Local Government and Institutional Partnership Programs logic model flows from top to bottom and is organized according to six basic categories:

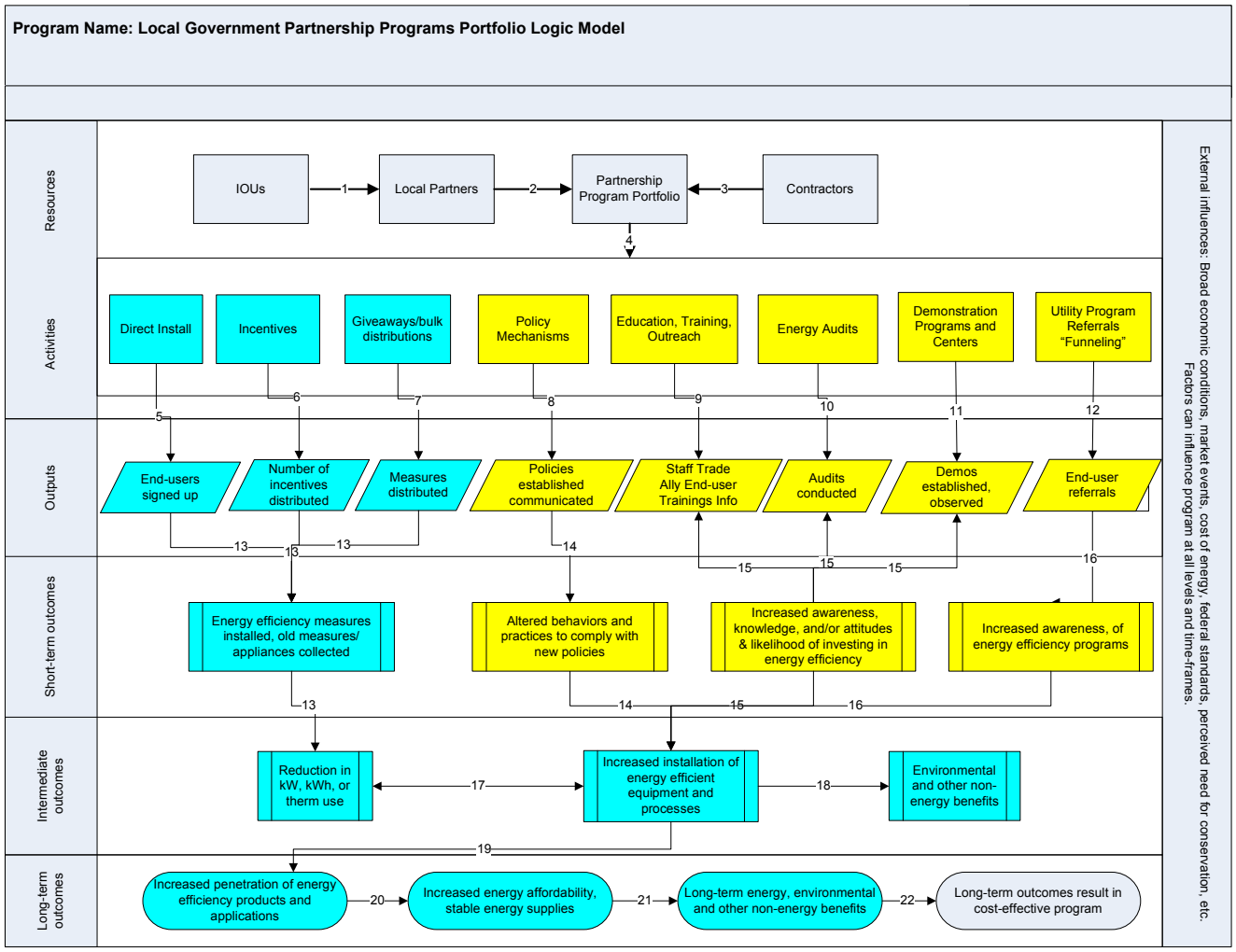
- Program resources
- Program activities
- Outputs
- Short-term outcomes
- Intermediate outcomes
- Long-term outcomes.

In addition, the logic model notes a variety of external influences that can also influence the program's outcomes. External influences include political and economic factors such as the housing and credit crisis that will affect local government tax revenues and gasoline prices.

Figure A-1 provides SCE's Local Government Program Portfolio-level logic model. Direct resource activities are highlighted in blue in the partnership program logic model. These include partnership efforts that include direct installs, incentive mechanisms and giveaways, and bulk distributions, such as for CFLs.

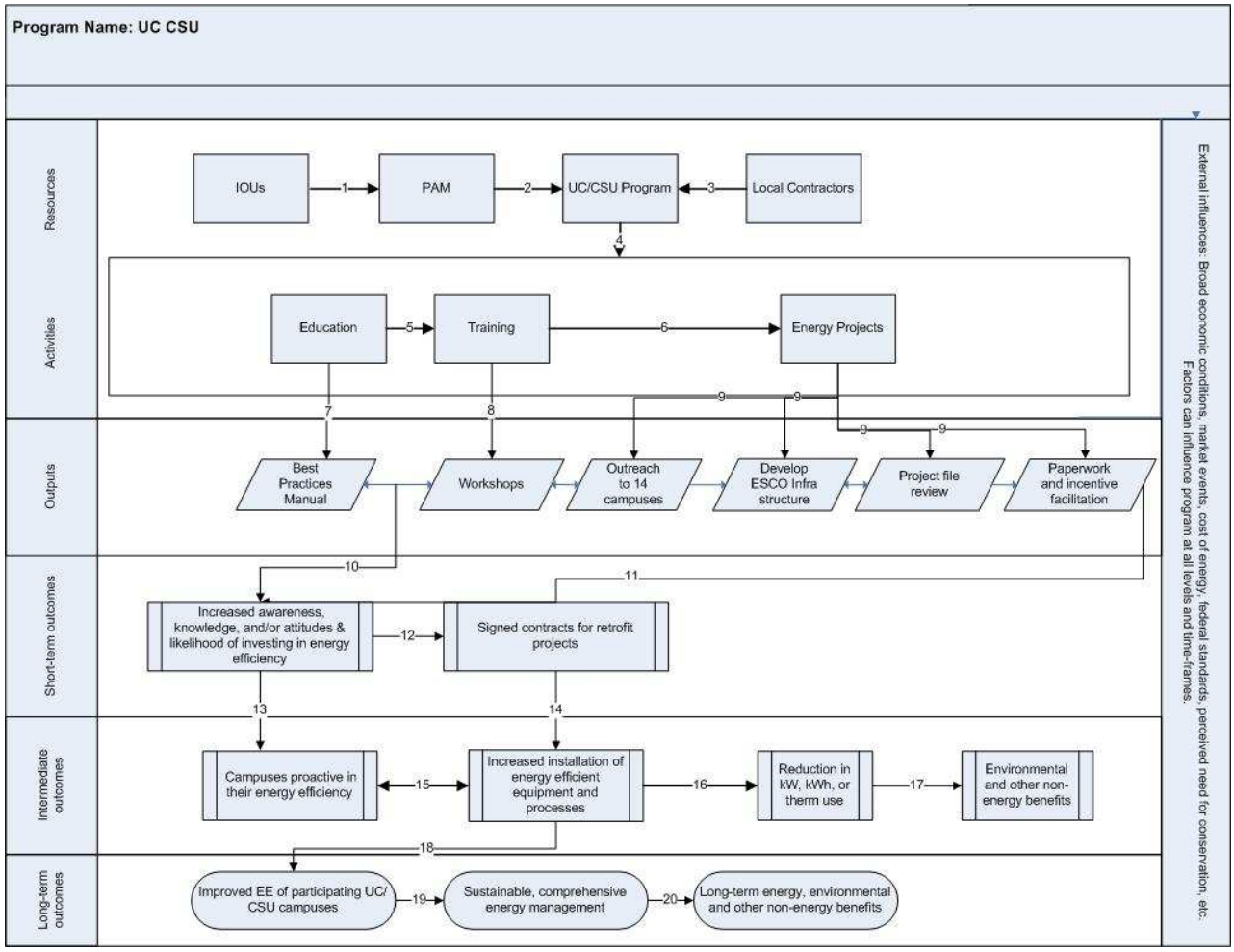
Indirect resource activities are highlighted in yellow. Most of the indirect resource activities involve capacity building such as policy-work, education, and demonstration projects. Another major indirect resource activity for SCE Partnerships includes efforts to "refer" customers to participate in SCE's core energy-efficiency programs. The theory behind all of these activities is that in the long-term they will result in sustainable energy, environmental, and other non-energy benefits.

## Figure A-1 SCE Local Government Program Portfolio Logic Model



Individual partnership programs' logic models are provided below.

**Figure A-2 UC/CSU Logic Model**



## Figure A-3 CCC Logic Model

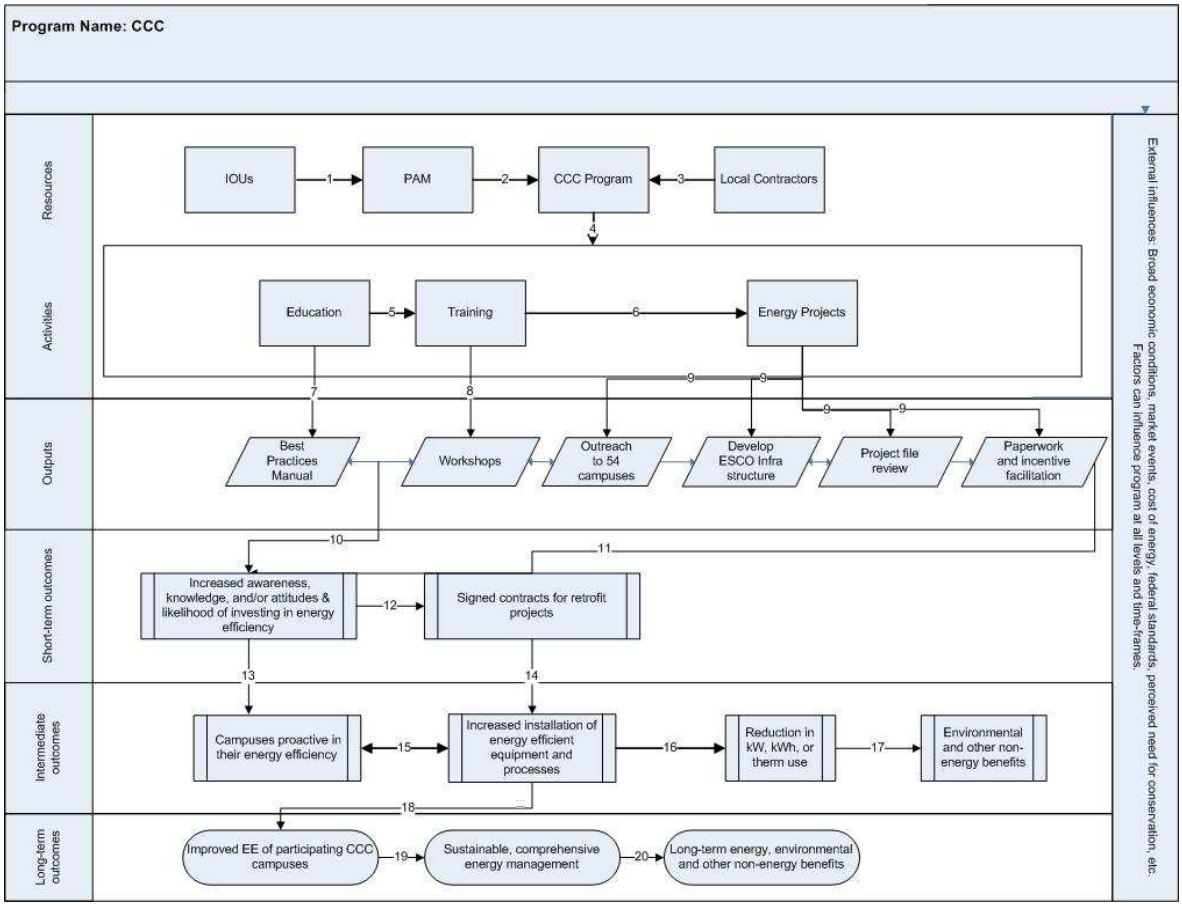
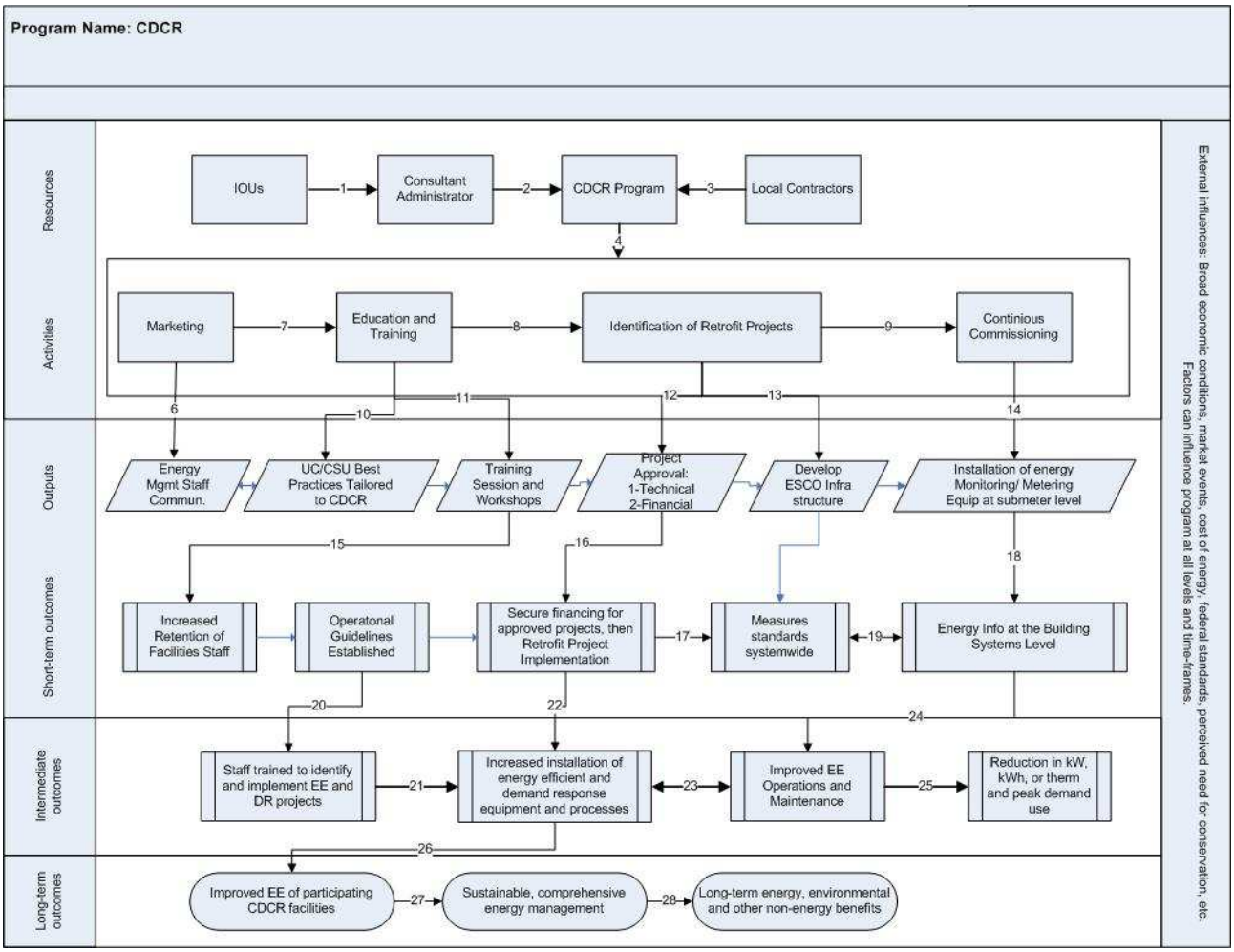
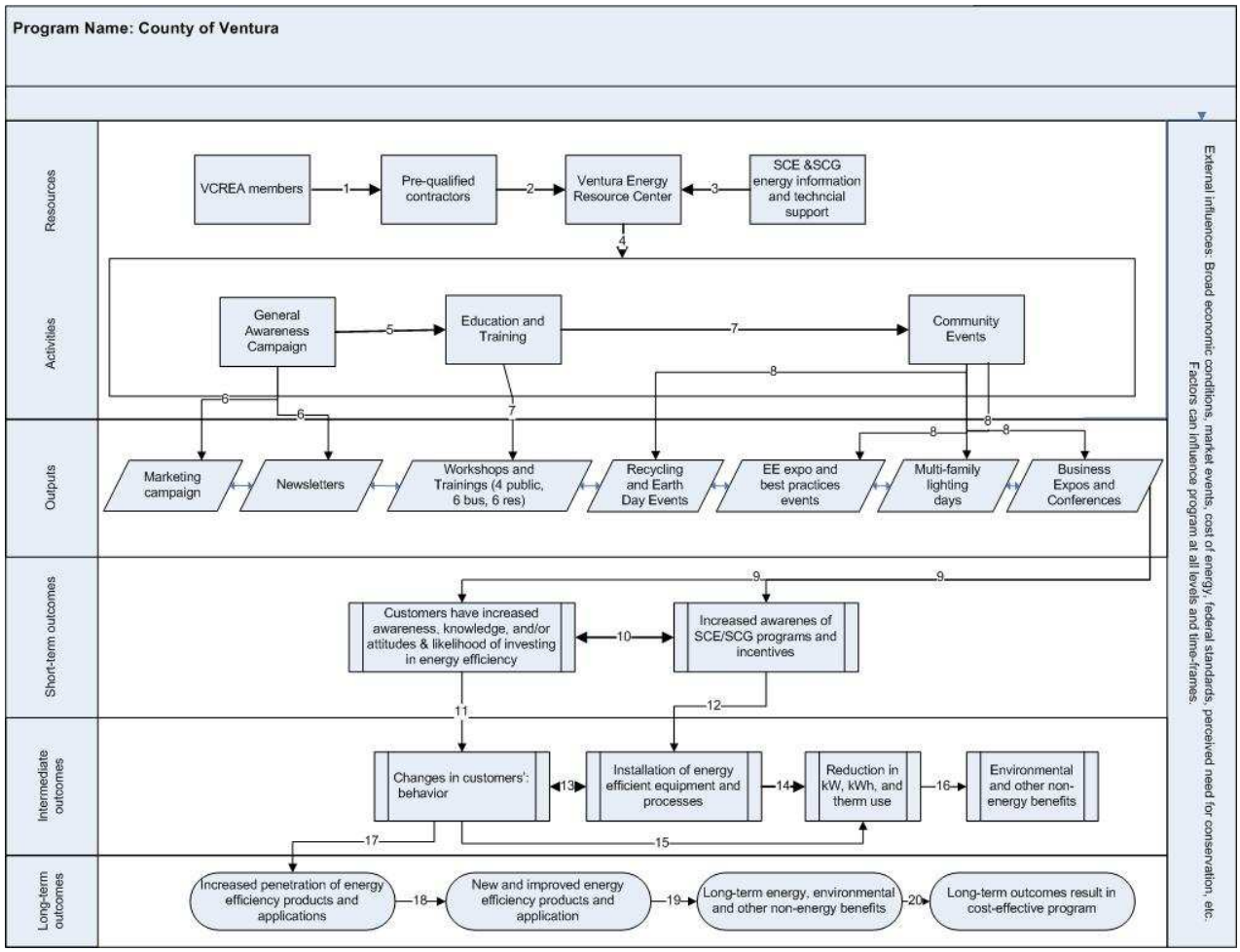


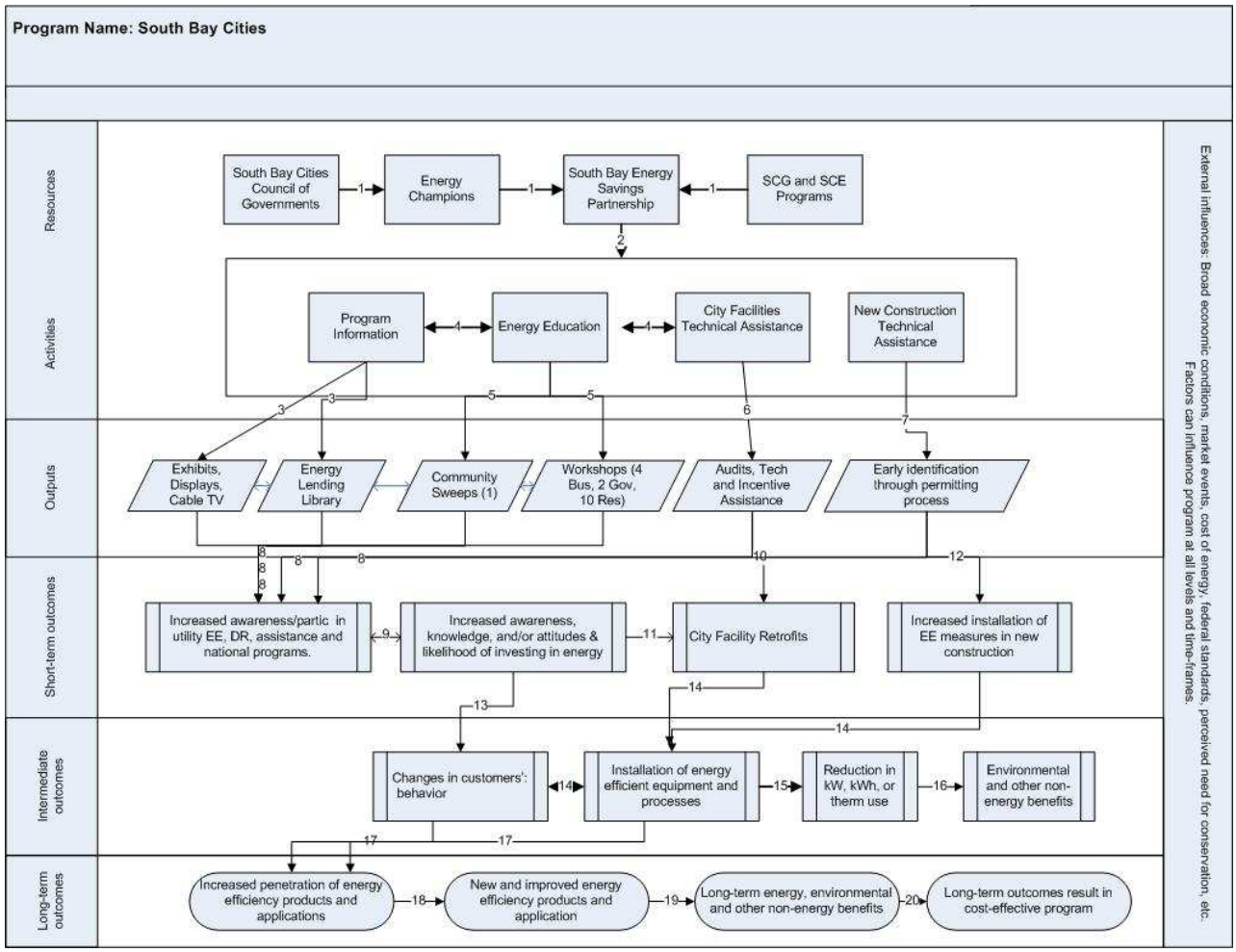
**Figure A-4 CDCR Logic Model**



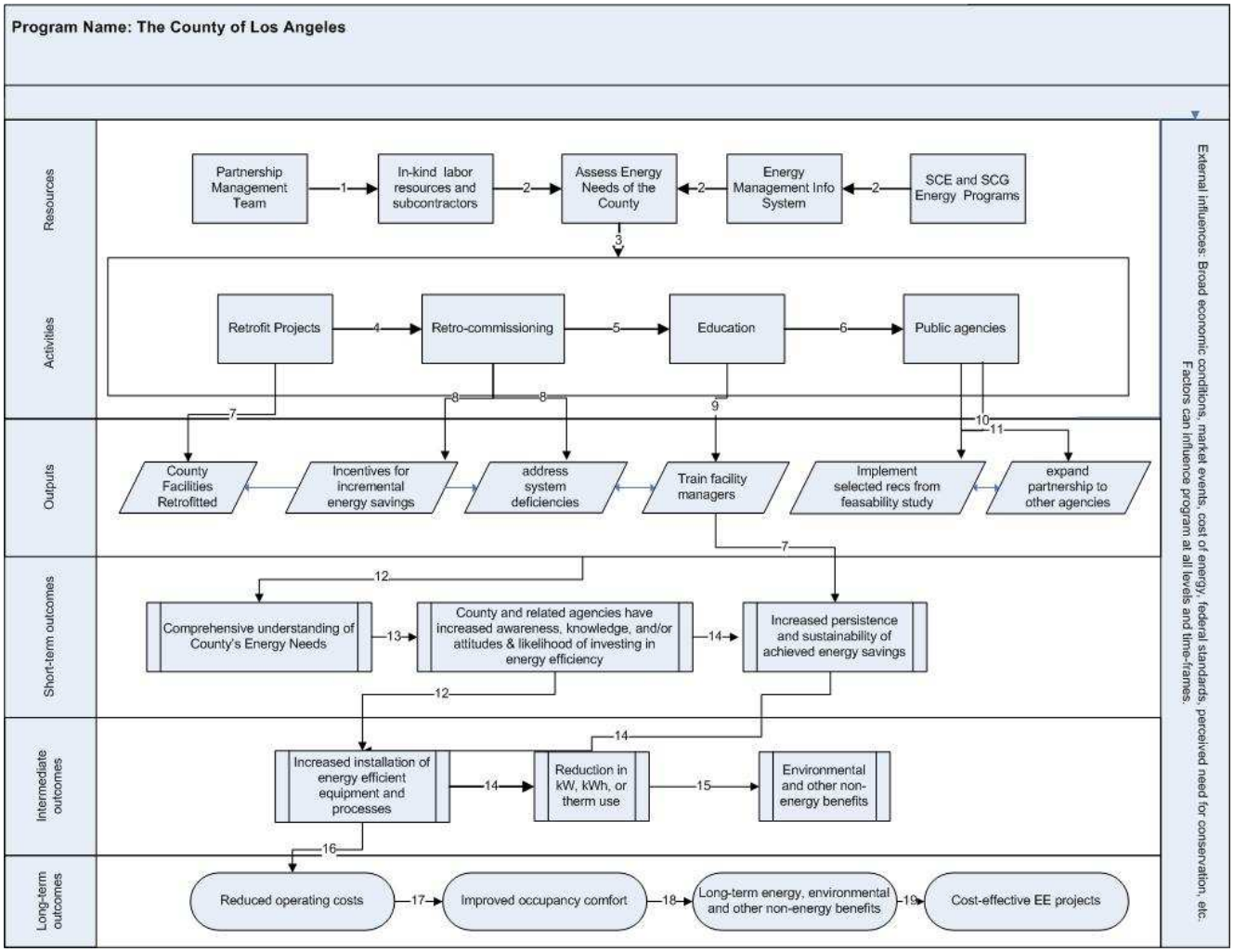
## Figure A-5 Ventura County Partnership Logic Model



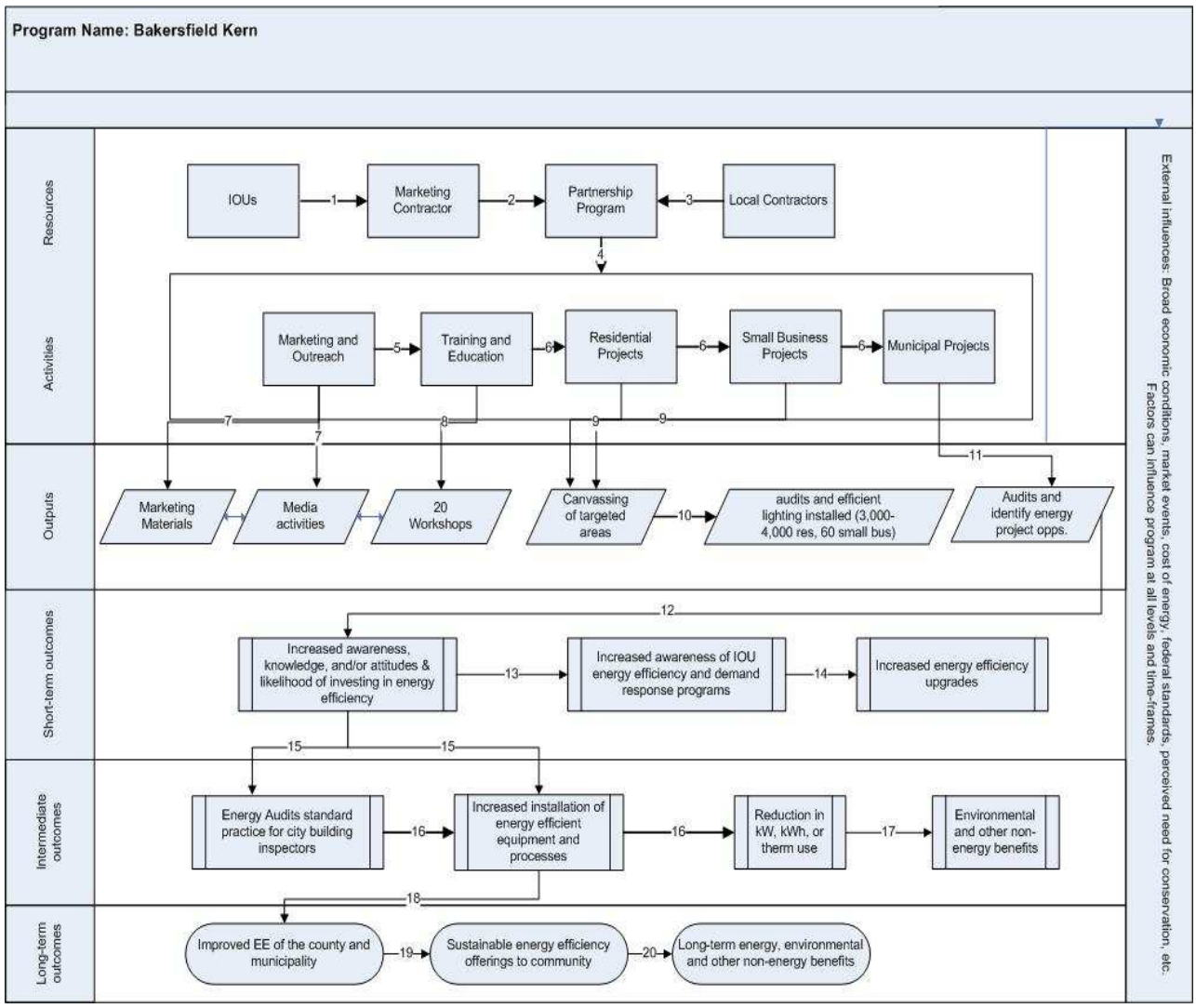
## Figure A-6 South Bay Partnership Logic Model



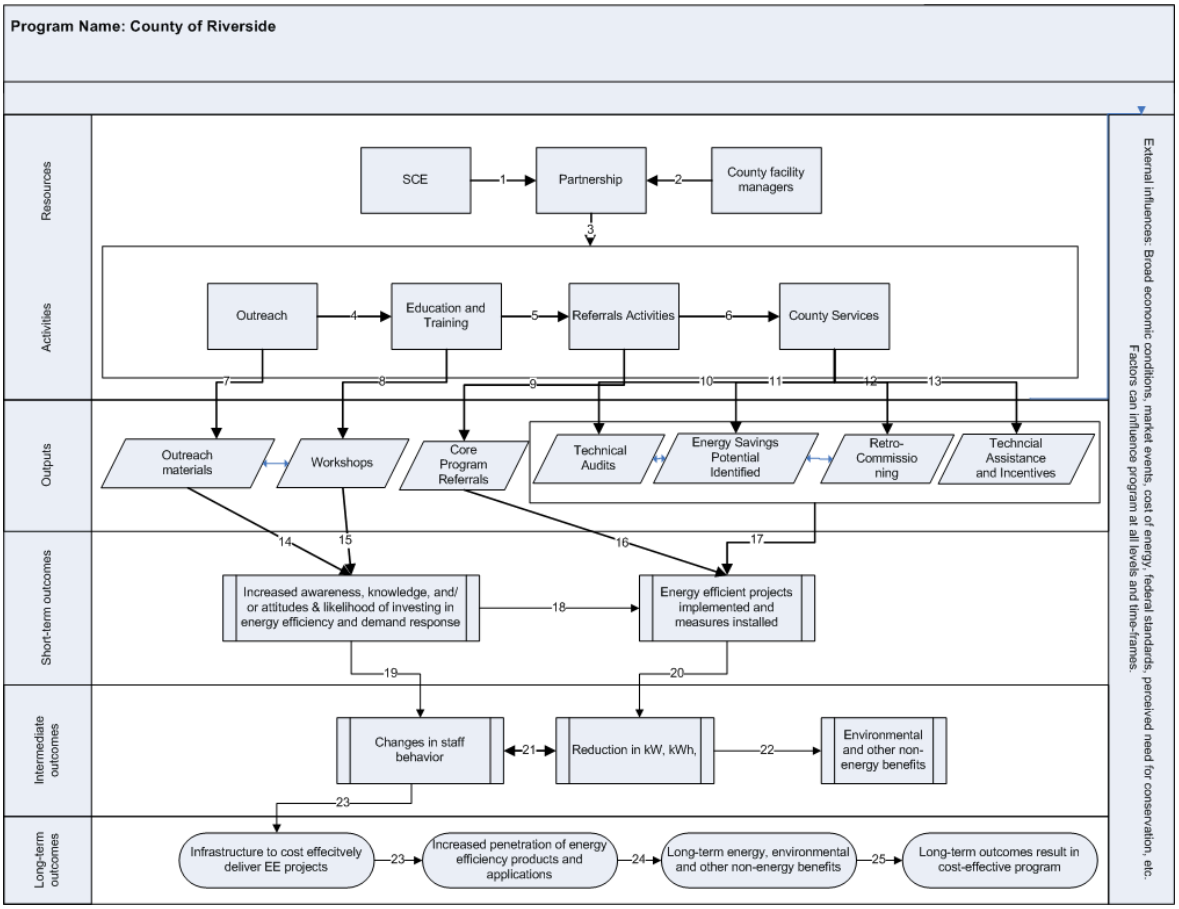
## Figure A-7 LA County Partnership Logic Model



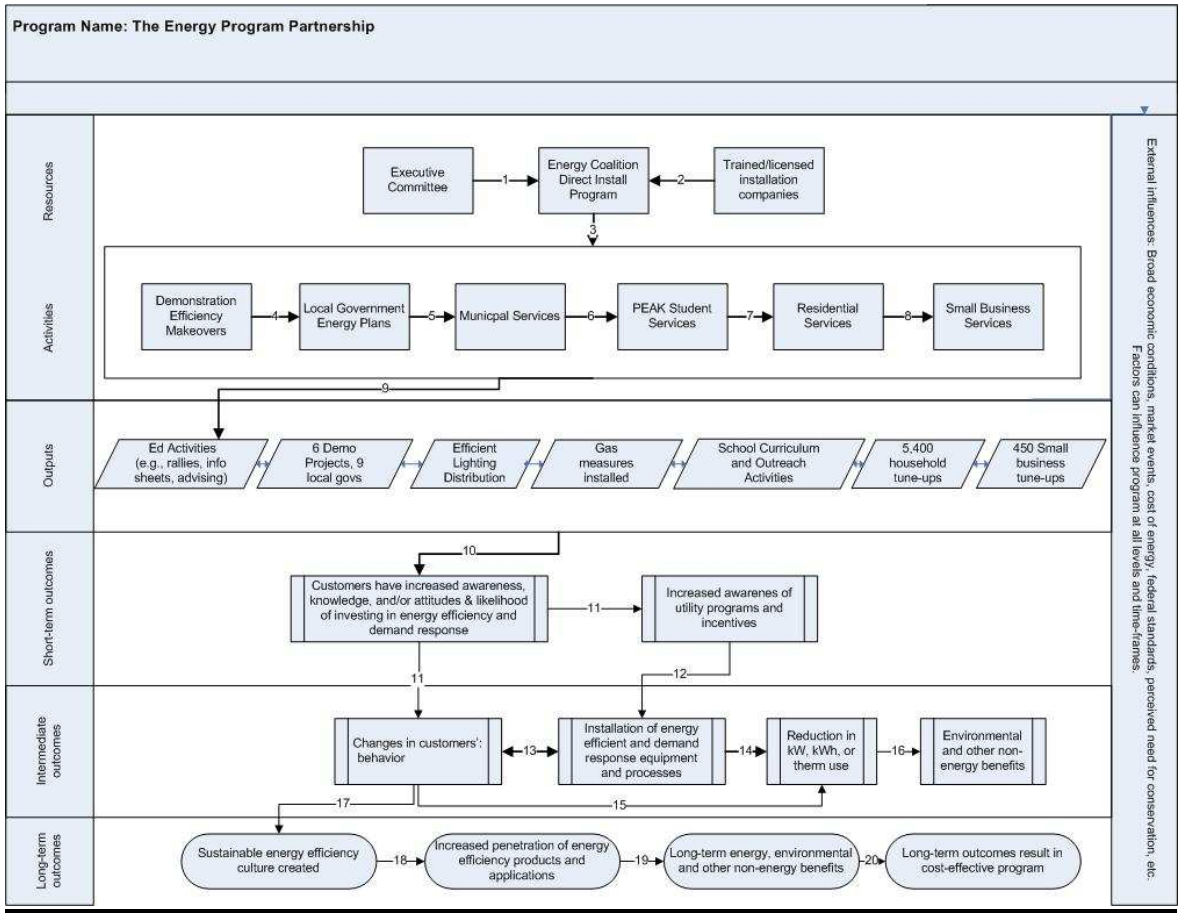
## Figure A-8 Bakersfield-Kern Country Logic Model



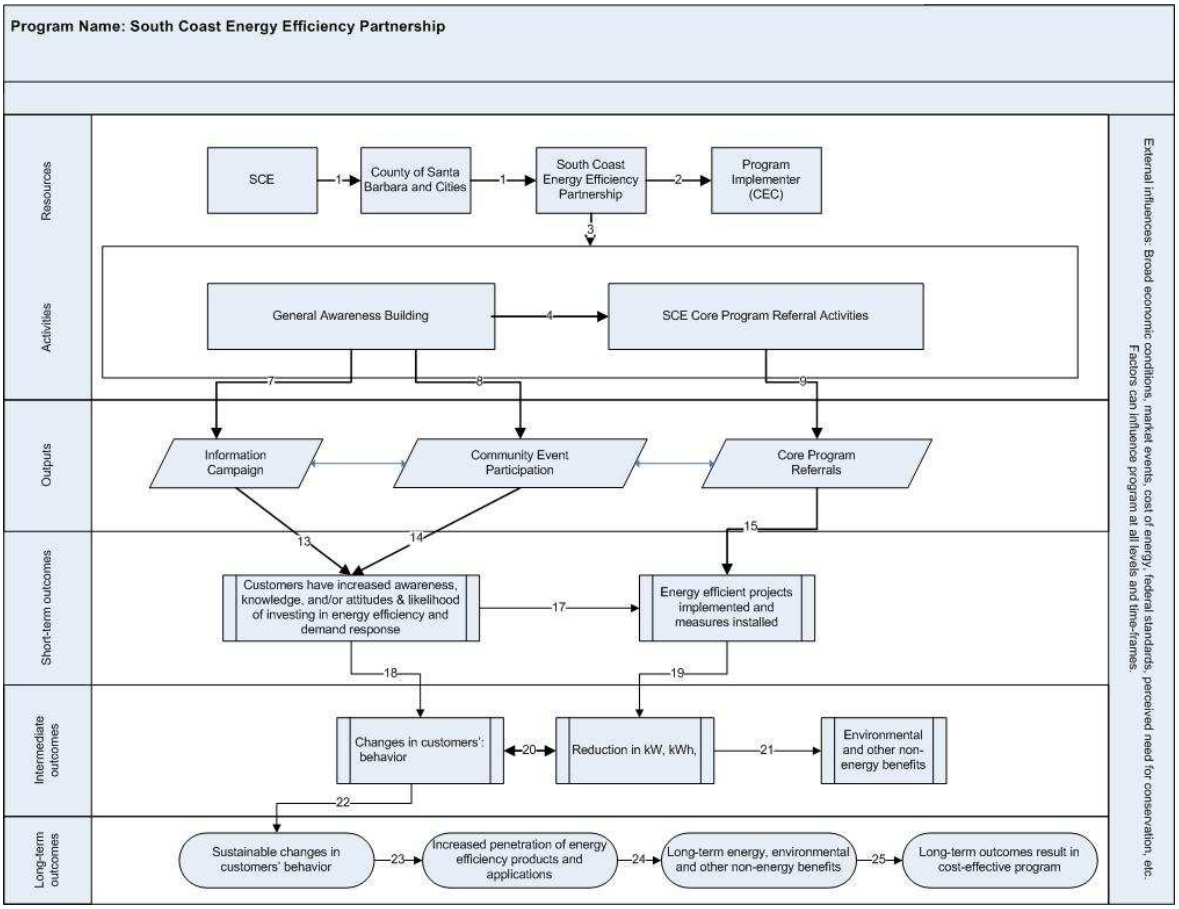
## Figure A-9 County of Riverside Partnership Logic Model



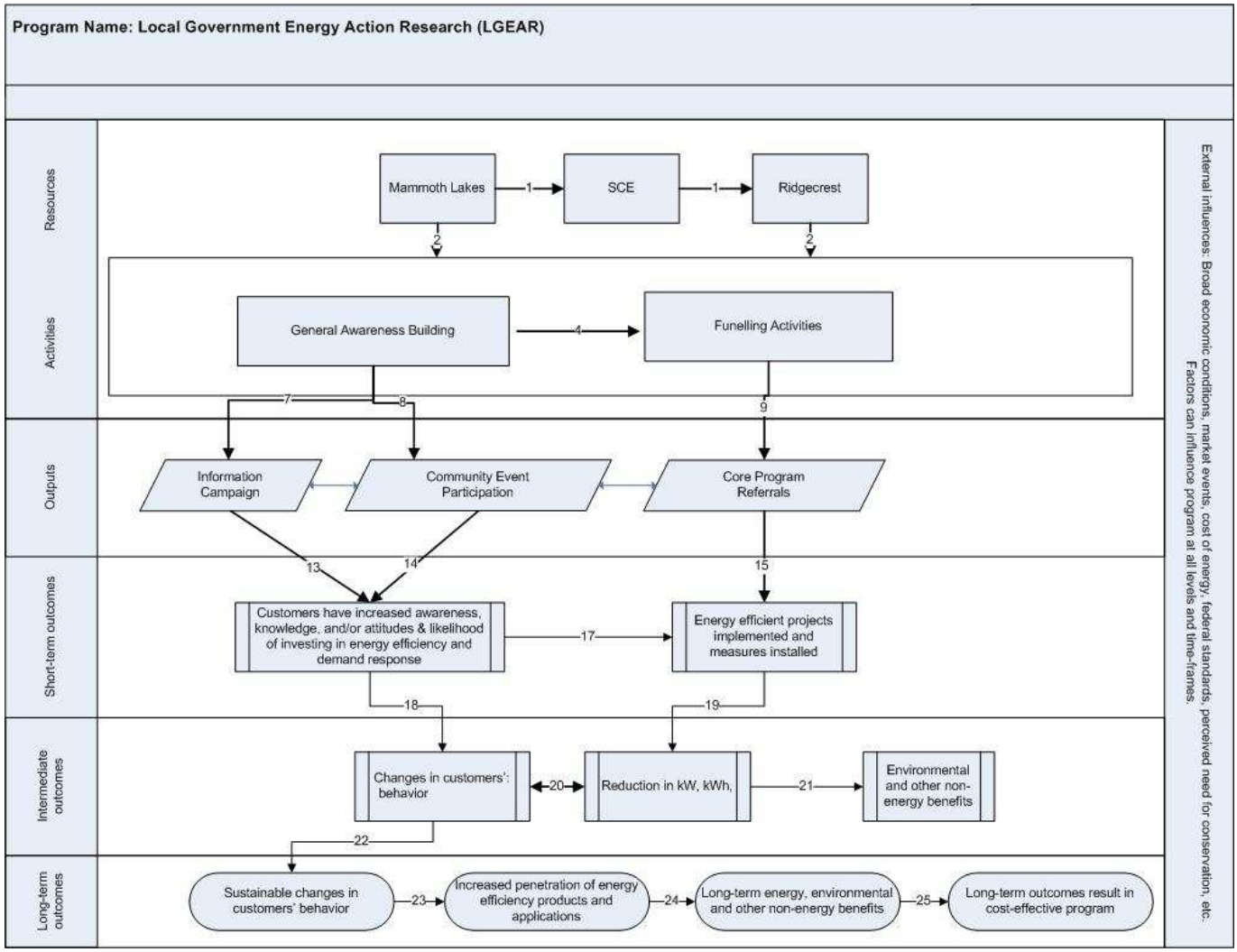
## Figure A-10 Community Energy Partnership Logic Model



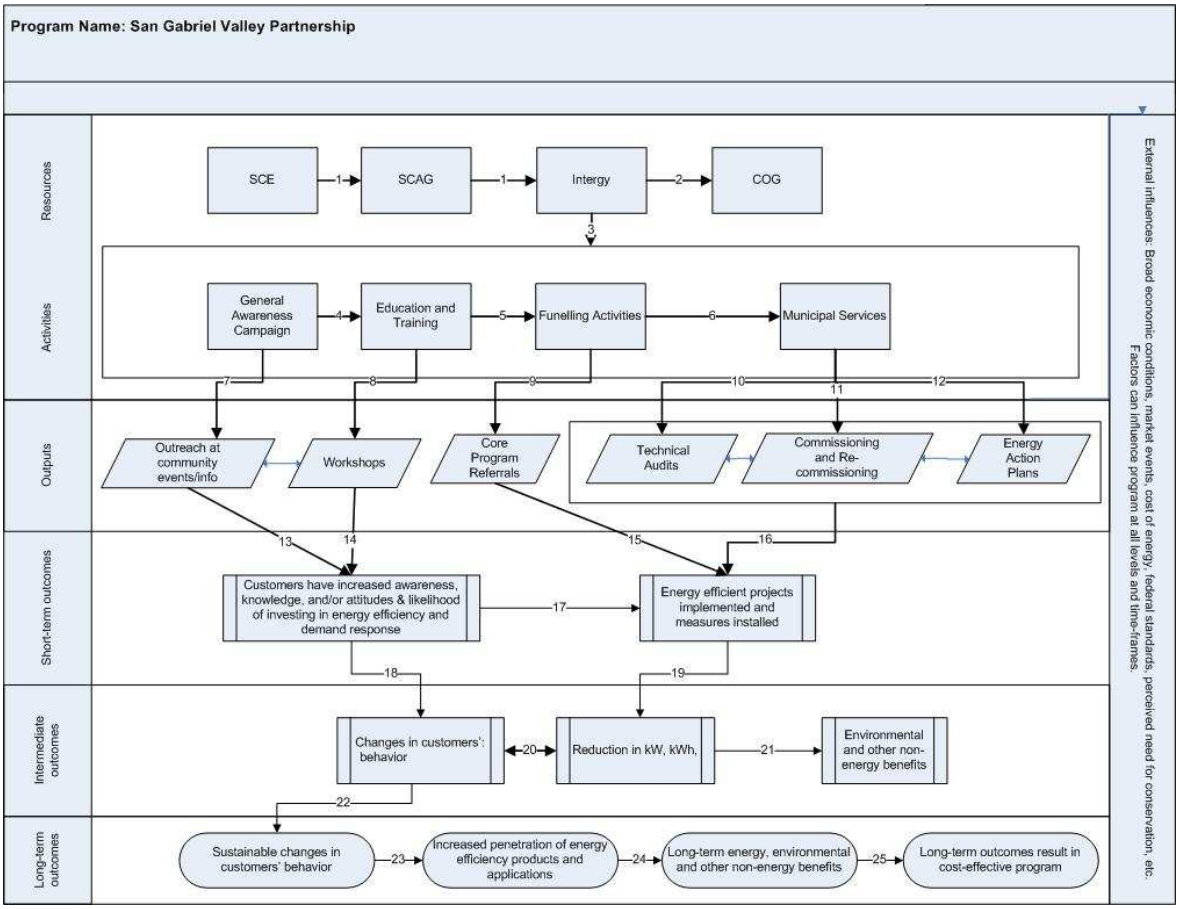
## Figure A-11 South Coast Partnership Logic Model



## Figure A-12 LGEAR Partnership Logic Model



## Figure A-13 San Gabriel Valley Partnership Logic Model



# *APPENDIX B: IN-DEPTH INTERVIEW PROTOCOLS*

## B.1 PARTNER INTERVIEW PROTOCOL

**Roles and Responsibilities.**

1. What is your role in the _____Partnership Program? How long have you held this position? If less than one year, who is your predecessor?

2. Which **utility (IOU)** sponsors do you interact with? Which is the lead utility for this partnership? What is your level of interaction with the sponsoring utilities?

3. What **implementation contractors** do you work with? Are they under contract to your organization or the IOU?

4. What responsibilities does your organization have in return for the funding provided? (Reporting? Delivering savings?)

5. Whose responsibility is it to:
   a) collect names and contact info on who is receiving services
   b) document actions taken, measures installed
   c) calculate energy savings

6. What resources does the program use and are they adequate?
   a) Budgets
   b) Measures
   c) Tools for analysis/audit software
   d) Contractors/vendors

7. Is the program or activity identified as a partnership with the IOU in any way? How prominent would you say the utility is in your marketing of the program or activity? Very, somewhat not much, etc. What is the reason for this strategy? (intentional downplaying of IOU involvement, unintentional, etc.)

8. Are roles and responsibilities among the key parties clear and effective? Why/why not?

9. Whose (or what organization's) role is the most essential to program success?

**Program Goals.**

10. What are the objectives of the _____Partnership Program **for your organization**?

11. Did your organization initiate the partnership application? If not, what organization initiated the program?

12. To what extent did your organization already provide EE services prior to participating in the 2006–2008 partnership program:
    a) To a large extent—several years of experience providing EE services to constituents
    b) To some extent—recent or small amount of EE services to constituents
    c) None—no prior experience or virtually none in providing EE services to constituents

13. Why did your organization elect to pursue a partnership with the IOU(s) through this vehicle?

14. Would you be providing these same services to the same degree without the partnership program?

15. I'd like to understand what the respective organizations bring to the partnership. On a scale of 1 to 10, where 10 means that you run the program with minimal utility involvement and 1 means the utility runs the program with minimal involvement from your organization, where would you place this partnership? Why is that?

16. What metrics and/or goals are established by your organization to determine success? Do you have individual performance goals associated with the _____Partnership Program? What are they?

17. What barriers exist that your partnership is trying to overcome?

18. Some programs are considered RESOURCE Programs. What does this mean? (Do they consider it their responsibility to deliver energy savings in return for the funding provided?)

19. In what ways is your organization/type of organization better able to influence energy-efficiency actions among the target markets than the IOUs? (will be compared against survey results)

**Program Delivery**

20. Let's envision a flow chart of this Partnership Program (process mapping activity). Tell me about:
    a) intake—ways in which a participant finds out about the services offered (includes marketing and outreach)
    b) services delivered
    c) data recorded and put into a database?
    d) decision-points in regard to what projects proceed? Are these points of control exercised by the IOU sponsors versus the implementation contractor?
    e) project completion—when is a project considered complete an recorded as such?

21. What do you feel are the weakest points of this process flow? Why is that?

22. How effective are the outreach and marketing activities associated with this partnership?

23. How is your program branded? By this I mean … Is there a NAME or LOGO that is associated with activities promoted by the program that customers would recognize?

24. From the **customer's perspective**, do you feel this process works well? What do you think they feel is the weakest point in the process from the customer's perspective?

25. What hard-to-serve markets are being targeted/reached/not being reached?

26. What level of action is being taken (measures installed on time)? Are you satisfied with the level of action being taken? What barriers are preventing more actions from being taken?

27. Which strategies have been most effective with the following groups (if targeted):
    a) Low income residents
    b) Local government agencies (retrofitting LG buildings)
    c) Small business
    d) Non-English language groups
    e) General residential
    f) Elderly
    g) Other hard to reach groups?

28. How do you feel the program delivery process could be improved?

**Program Administration**

29. Are administrative processes between your organization and *[the IOU sponsor(s)—insert the appropriate utilities here, e.g. SDG&E, SCG, or all four for the statewide programs]* adequate, excessive or inadequate?

30. Is information easily and readily available for you to perform your duties under the program? Why / why not?

31. What are the formal and informal communication procedures between your organization and the IOU sponsor(s)? Do you feel they are adequate? What could be improved?

32. How clear and useful are the systems in place for reporting and budgeting purposes?

33. Partnerships aim to leverage unique qualities of local government for delivering energy-efficiency services. What does your organization bring to the partnership that is unique and could not be delivered by an IOU?

34. What do you think of the effectiveness of this approach of using local governments to implement EE programs? In what ways does it make sense, and in what ways not?

**Program Implementation and Customer Response**

35. Earlier we talked about participation levels. Are your levels of activity in the program consistent with where you expected to be in relation to goals or plans? How about in terms of numbers of activities completed? (no. of trainings, no. of people trained?) How about in terms of numbers of customers taking EE actions?

36. Beyond the measures and services provided under this partnership, what specific **other IOU programs** does this program promote or directly recruit customers for, if any? Do you feel the program coordinates adequately with other programs available to the customers? Do you track customers' participation in these other programs?

37. What do you think about the potential for this partnership program to achieve its targets for the 2006-2008 cycle? Why/why not?

38. What target market groups are you able to reach that others could not? What groups are still underserved?

39. How do you obtain feedback about this program from participants/customers? What formal and informal processes are in place to get feedback?

40. What feedback, if any, have your received from participants/customers?

41. What stakeholders are critical to the success of this program?

42. What follow up activities or QC procedures, if any, are performed to check on installed measures or contractors' work?

**Program Issues**

43. What are your top 3 issues of concern regarding this program? What ideas can you suggest for resolving these issues?

44. What, if anything, might affect future activities?

45. Do you feel the IOU(s) devotes adequate resources to provide good services under the partnership? What could they do better?

46. What needs to be done to increase program success in terms of achievement of goals? What of these actions are within your control? Some other group's control? (If the latter, whose?)

47. Will you reapply? With what changes? Any new initiatives?

**Evaluation Data**

48. We will be surveying _____as part of our evaluation of this partnership. What do you feel are the key issues we should address when talking with them? Ask for each.

Any other questions or issues you would like to raise regarding the partnership program as part of this process evaluation?

## B.2 LOCAL GOVERNMENT REPRESENTATIVE IN-DEPTH SURVEY GUIDE

**LOCAL GOVERNMENT REPRESENTATIVE SURVEY**
(ask for SCE and SCG as appropriate)

Interviewer: _____ Date: _____

Interviewee: _____

Agency: _____

Program Affiliation: _____

***INTERVIEWER NOTE: Whenever the question specifies the utility, noted by [EDISON/THE GAS COMPANY] within the question, ask for each utility where the program is relevant.***

***NOTE: THIS SURVEY IS ONLY FOR MUNICIPALITIES, NOT FOR VCREA, THE ENERGY COALITION, OR SOUTH BAY. THEY GET A DIFFERENT INTERVIEW PROTOCOL.***

**Introduction:**

My name is [INTERVIEWER NAME] from PA Consulting Group. Our company is under contract with *[Edison/The Gas Company—or both]* to evaluation their Partnership Programs.

[IF PARTICIPANT OR WAS A PARTICIPANT] I am calling to speak to you about your city/county's involvement in the **[Partnership Program name**]. I understand you are the key individual in your organization who has been involved with the program. Is that correct? [IF YES, CONTINUE. IF NOT, GET APPROPRIATE CONTACT AND CALL BACK.]

I'd like to talk with you about a few topics related to this program and your agency's involvement. Is this a good time? If not, can you suggest a more convenient time?

[IF NOT A PARTICIPANT] I am calling to talk to you about the [**Partnership Program Name]**. Could I please just ask you a few questions related to your organization and your awareness of the [**Partnership Program Name]**.

[IF NEEDED: Your input to this study is very important to our clients, and your answers will be held in confidence. You responses will not be shared with either the partner organization or the utilities but will rather be summarized in a report along with the responses of other local government representatives.]

[LAST RESORT: If you prefer I can email you the questions and ask that you write in your responses.]

**Participation Status:**

1. Is your [**CITY**] an active participant in the [**PARTNERSHIP PROGRAM NAME**]?

   Yes GO TO PARTICIPANT QUESTIONS

   No GO TO NONPARTICIPANT QUESTIONS

**Nonparticipant Questions**

2. Were you ever an active participant in the [**PARTNERSHIP PROGRAM NAME**]?

3. A. [IF WERE A PARTNER PREVIOUSLY] How long ago were you a partner? For how long were you participating in the program? Why are you no longer participating?

   B. What was the primary value of the partnership services to your local government? To those target groups the program is meant to serve, e.g. facilities managers, small businesses, or residential consumers?

   C. From your experiences, what could be improved about the partnership? [NOTE: IMPROVEMENTS COULD ALREADY HAVE BEEN MADE SINCE PARTICIPATING]

4. A. [IF NOT PARTICIPATING AND NEVER AN ACTIVE PARTNER] Are you aware of this partnership program offered by [**the Gas Company/Edison/Edison and the Gas Company**]?

   ***INTERVIEWER—IF NOT AWARE, WILL NEED TO EXPLAIN PARTNERSHIP AND PROGRAM TO THEM.***

   B. Have you ever been approached by [**Edison / the Gas Company**], or approached [**Edison/the Gas Company**] to partner on this program?

   C. [IF YES] Why aren't you participating?

   D. Do you have any interest in participating in the partnership with [**Edison / the Gas Company**]?

   E. [IF INTERESTED] What interests you about the partnership with [**Edison / the Gas Company**]? How do you feel the partnership could be beneficial to your organization? To those you service? Why do you think this?

   F. [IF NOT INTERESTED] Why aren't you interested in participating?

   G. What are the barriers to your organization's involvement in the partnership with [**Edison / the Gas Company**]? How could these barriers be overcome?

5. In what ways, if any, do you feel local governments differ in their ability to engage people and businesses in energy efficiency than other groups that deliver energy services? What particular strengths does your local government have? What weaknesses or limitations for delivering energy-efficiency services and messages does your local government have?

***THANK PARTICIPANT AND END INTERVIEW***

**Participant Questions**

5. Why is your local government participating in the program? What are your expectations for the partnership?

6. Do you have a signed memorandum of understanding, resolution or other formal agreement governing your participation? Yes / No

   [AND IF THEY DO, WITH WHOM? SOME WILL BE WITH THE UTILITY AND SOME WILL BE WITH OTHER ORGANIZATIONS]

**Level of Engagement on Energy Programming *(overall)*:**

7. Has this partnership changed the priority of energy efficiency in the allocation of municipal funding?

8. Do you expect that level of funding to increase, decrease or stay the same over the next 3-5 years?

9. Which elements in the set of service [for Energy Coalition] or of the offered set of services [for other partnerships] is your local government engaged in promoting? (Reference the specific partnership program's services inquire about awareness of each item and whether they are utilizing each one.)

   1. Community Workshops
   2. Training
   3. Assessments of local government facilities
   4. Outreach to residential consumers
   5. Outreach to businesses
   6. Promotion of [Edison or the Gas Company] programs
   7. Distribution of energy-efficiency measures (CFLs, low flow showerheads, faucet aerators, etc.)
   8. Other activities

10. How did you prioritize or select the elements of the set of services you are emphasizing?

11. Of these, which are most successful and why do you think that is so? Which have been least successful?

    Are there portions of the partnership or [other] services and utility programs you have not taken advantage of? What ones? What is the reason why you have not taken advantage of other portions of the partnership or [other] services and utility programs?

**Internal capacity:**

12. How many people in your agency or department work on this partnership? How many worked on energy efficiency prior to the program's start?

13. How is the funding[40] you receive allocated in the following areas. Please provide a percentage, where the sum adds up to 100 percent. ***[TRY TO GET, AT MINIMUM, THE MAJOR CATEGORIES, THEN PROBE FOR ALLOCATIONS WITHIN MINOR CATEGORIES]***

    Administrative:
    a. Staff/labor
    b. Facility (Energy Center)
    c. Consultants/Contractors
    d. Other? [specify_____]

    Marketing & Outreach:
    e. Marketing and outreach events
    f. Marketing materials, brochures
    g. Publications

    Direct Implementation:
    h. Training & Education
    i. Direct install—measures
    j. Other? [specify_____]

14. What is the level of commitment on the part of the elected officials? Whose participation and commitment is essential from your agency for this partnership to be successful?

15. [***IF A LOW LEVEL OF COMMITMENT***] Why do you believe there is a low level of commitment? In what ways can this be overcome?

16. How (if at all) has your agency's participation in this program altered decision making processes regarding energy efficiency in your local government?

[40] Note that this is not the funding received by the partnership from the IOU, but rather this is for instances where the local government participants in a regional partnership receive funding from the partner (like CEP, or VRECA).

**Leveraging grassroots participation:**

17A. In what ways, if any, do you feel local governments differ in their ability to engage people and businesses in energy efficiency than other groups that deliver energy services? What particular strengths does your local government have? What weaknesses or limitations for delivering energy-efficiency services and messages does your local government have?

17B. How do you use your leverage in engaging and stimulating public agencies, cities or counties to achieve real results in energy efficiency in your program?

18. Are there ways in which your local government could do more to achieve behavioral changes? If so, what more could be done? (Government policies, procedures, outreach, etc.)

**Partnership Quality:**

19. On scale of 1 to 10 where 5 is a true partnership where each party brings resources to the table, 1 means you have no capacity and need the utility to do it all, and 10 means you need the funding but want to or do most of the work yourself , where does this partnership fall?

20. Why do you rate it that way?

21. How supportive is your council and/or elected officials of this partnership?

22. How supportive are they regarding the concept of energy efficiency /sustainable communities in general?

23. How difficult was it/is it to get buy-in to these activities from decision makers in your community and public agency?

**Results:**

24. How effective have these services been for encouraging actual changes in behavior in your community and public agency? E.g., do you think people are making more of an effort to save energy?

25. How effective have these services been for encouraging actual changes in behavior in your local government agency(ies)? How do you know? ***[PROBE FOR ENERGY EFFICIENCY'S INCLUSION AS PART OF REGULAR BUSINESS PRACTICES]***

26. How do you define effectiveness? What does it mean for the program to be effective?

27. What specific measures or actions result in energy savings and how do you track that?

28. What barriers remain that prevent more of the services being used and more in the community from participating?

    a. Lack of awareness of opportunity and savings

    b. Lack of technical knowledge

    c. No skills for implementing projects

    d. No knowledge of vendors to do the work

    e. Lack of funding, financing

    f. Motivation—Nothing in it for me

    g. Other priorities

**Utility Presence/involvement:**

29. What is the extent of active involvement of [**Edison/the Gas Company**] in this partnership? Do you consider this level of involvement adequate, not enough or too much? Why is that?

30. How has your experience in this partnership altered your opinion about [**Edison/the Gas Company**]? Is your opinion more positive, less positive or about the same as before your experience with this partnership?

31. What issues do you have if any regarding your relationship with [Edison/the Gas Company]?

32. How likely are you to engage directly with [**Edison/the Gas Company**] in the future to pursue these types of services?

33. Do you feel that the existence of an intermediary organization like [**South Bay, Energy Coalition, etc.**] is important and if so why? ***[ONLY ASK FOR SOUTH BAY, VENTURA, COMMUNITY ENERGY PARTNERSHIPS, AND SOUTH COAST]***

34. In what specific ways does [Organization Name] provide value to making energy efficiency happen in your community or public agency?

**Actions/Behavioral Changes:**

35. What evidence do you have, if any, of actions taken and behavioral changes as result of the educational and outreach components offered through this partnership?

36. How could one better capture this information?

37. Are there lists of participants or other data we could use to show results?

38. What barriers would need to be overcome in order for you to engage in more of the services offered in this partnership?

**Promotion and Activities:**

40. Beyond this partnership, what other [**Edison/Gas Company**] programs are promoted through your portfolio of energy-efficiency activities?

41. To what extent has the partnership increased participation in these programs? Do you have evidence to support this?

42. To what extent have people been made more aware of the opportunities through the partnership?

43. Do you believe there is room for additional promotion or outreach that is not being pursued? What would that be?

44. What actions and behavioral changes have taken place due to the program (where they would not have otherwise taken place)? How do you see this?

**Direct Attribution:**

45. Which of your city's activities have contributed measurable energy savings? Have these savings been quantified and reported to the utility/CPUC?

46. When you talk about overall impact of your program, what % of the energy savings referred to in the question above would you directly attribute to the partnership activities?

47. What % would you have implemented without these services?

**Satisfaction and Relationships**

48. What is the primary value of the partnership services to your local government? To those target groups the program is meant to serve?

49. How well do you feel the utility is doing its job in the partnership—any problems? How about the {partnership organization}? Are there any areas that the utility does particularly well? Any areas where you feel there could be some improvement?

50. Have your expectations for this relationship been met? How and how not? What is one thing would you change?

**Conclusion:**

51. What's working (top 3)?

52. What are your biggest concerns (top 3) about the program?

THANK YOU FOR TIME AND INPUT!

## B.3 FACILITY MANAGERS SURVEY

(UC/CSU, CCC, LA County, Bakersfield-Kern, Ventura, San Gabriel Valley, LGEAR)

Interviewer: _____ Date: _____

Interviewee: _____

Campus: _____

Program Affiliation: _____

My name is _____ from PA Consulting Group. Our company is under contract with the California utilities to evaluation their Partnership Programs. I am calling to speak to you about your city/county/agency's involvement in the **[name of] Partnership**. I understand you are the key individual in your organization who has been involved with the program. Is that correct? I'd like to talk with you about a few topics related to this program and your agency's involvement. Is this a good time? If not, can you suggest a more convenient time? _____. Your input to this study is very important to our clients, and your answers will be held in strict confidence. You responses will not be shared with either the partner organization or the utilities but will rather be summarized in a report along with the responses of other facility managers.

LAST RESORT: If you prefer I can email you the questions and ask that you write in your responses.

**My questions relate to the [name of] Partnership Program**

**Participation:**

- Are you familiar with this program? Y / N ?
- If yes, what services/aspects of this partnership program have you used and which ones have you found most useful?
- If participating, what is your primary motivation? What are your expectations for the program?
- If not familiar with the program, do you use outside services/contractors to assist you in your facilities management? Do you have unmet needs (capital constraints, training/education, difficulty reducing energy costs)?
- If familiar but not participating, why not? What are the barriers to engagement?

**Program Goals:**

- If participating, does the program as currently structured serve your biggest needs? What needs are *not* being met?
- How could the program better serve you? What existing barriers do you see to the program achieving its energy-savings goals? What are some ways to overcome those barriers?

**Program Delivery:**

- Have the outreach and support materials met your needs and been easy to use?
- Describe how you interact with program staff (Partnership organization/utility).
- How well do you think the program delivery process works? Has the program encouraged actual changes in behavior? How do you know?
- What specific measures or actions result in energy savings and how are those savings tracked?
- How could the delivery process be improved?
- Is information management adequate (i.e. do you have access to the information and knowledge transfer/training that you need)?
- On scale of 1 to 10 where 5 is a true partnership where each party brings resources to the table, 1 means you have no capacity and need the utility to do it all, and 10 means you need the funding but want to or can do most of the work yourself , where does this partnership fall?

**Implementation and Response:**

- Internal capacity building—what was pre-engagement capability vs. your current capabilities? Did the partnership improve your organization's capabilities? If so, how?
- Do you receive any funding through the partnership? On what are these funds spent? (general categories and percentages)
    - Staff/labor
    - Education/training
    - Measures (retrofits, retro-commissioning, monitoring-based commissioning, new construction)
    - Other (specify _____)
- How is the communication between you and the utility? You and the partnership organization? Do you have recommendations on how to improve/optimize it?

**Utility Involvement**

- How much do you feel the utilities presence in the partnership activities versus the presence of the [NGO]?
- How did you feel about SCE/SDGE/PGE and The Gas Co before your experience with this partnership? How do you feel about them now?
- How well do you feel the utility is doing its job in the partnership? Any problems? How about the [partnership organization]?
- Have your expectations for this partnership been met? How and how not? What one thing would you change?
- How likely would you be in the future to engage the utility directly to pursue these types of services? Or do you feel that the existence of the facilitator is important. If so, why?

**Metrics**

- How do you measure success with this Partnership program? Are these metrics clearly articulated to the customers (or to you, as a customer)?
- How would you increase participation among the CCC and UC/CSU
- Do the program incentives address your (the facility manager's) needs effectively?
- What energy or demand reduction benefits have you seen as a result of this program? (direct attribution—% of savings)
- How do you know? Are these benefits tracked? How so?

- What % of these demand reductions would have been implemented in the absence of this partnership?

**Conclusion:**

- What is working well (top 3)?
- What is needs improvement (top 3 concerns)?

## B.4 COLLEGE/UNIVERSITY FACILITY MANAGERS SURVEY

(UC/CSU, CCC)

Interviewer: _____ Date: _____

Interviewee: _____

Campus: _____

Program Affiliation: _____

My name is _____ from PA Consulting Group. Our company is under contract with the California utilities to evaluation their Partnership Programs with the UC/CSU and Community College systems. I am calling to speak to you about your campus' involvement in the **[name of] Partnership**. I understand you are the key individual on this campus who has been involved with the program. Is that correct? I'd like to talk with you about a few topics related to this program and your campus' involvement. Is this a good time? If not, can you suggest a more convenient time? _____. Your input to this study is very important to our clients, and your answers will be held in strict confidence. You responses will not be shared with either the UC/CSU/CCC main offices or the utilities but will rather be summarized in a report along with the responses of other facility managers.

LAST RESORT: If you prefer I can email you the questions and ask that you write in your responses.

**My questions relate to the [name of] Partnership Program**

**Participation:**

- Are you familiar with this program? Y / N ?
- If yes, what services/aspects of this partnership program have you used and which ones have you found most useful?
- If participating, what is your primary motivation? What are your expectations for the program?
- If not familiar with the program, do you use outside services/contractors to assist you in your facilities management? Do you have unmet needs (capital constraints, training/education, difficulty reducing energy costs)?
- If familiar but not participating, why not? What are the barriers to engagement?

**Program Goals:**

- If participating, does the program as currently structured serve your biggest needs? What needs are *not* being met?
- How could the program better serve you? What existing barriers do you see to the program achieving its energy-savings goals? What are some ways to overcome those barriers?

**Program Delivery:**

- Have the outreach and support materials met your needs and been easy to use?
- Describe how you interact with program staff (UC/CSU/CCC head offices, NAM, utility).
- How well do you think the program delivery process works? Has the program encouraged actual changes in behavior on your campus? How do you know? *Probe to see what changes, if any, have taken place in purchasing and approval processes.*
- What specific measures or actions result in energy savings and how are those savings tracked?
- How could the delivery process be improved?
- Is information management adequate (i.e. do you have access to the information and knowledge transfer/training that you need)?
- On scale of 1 to 10 where 5 is a true partnership where each party brings resources to the table, 1 means you have no capacity and need the utility to do it all, and 10 means you need the funding but want to or can do most of the work yourself , where does this partnership fall?

**Implementation and Response:**

- Internal capacity building—what was pre-engagement capability vs. your current capabilities? Has the partnership improved your campus' capabilities? If so, how?
- Have you received any funding through the partnership? On what are these funds spent? (general categories and percentages)
    - Staff/labor
    - Education/training
    - Measures (retrofits, retro-commissioning, monitoring-based commissioning, new construction)
    - Other (specify _____)
- How is the communication between you and the utility? You and the [Chancellor's Office/Office o the President]? Do you have recommendations on how to improve/optimize it?

**Utility Involvement:**

- How much do you feel the utilities' presence in the partnership activities?
- How did you feel about SCE/SDGE/PGE and The Gas Co before your experience with this partnership? How do you feel about them now?
- How well do you feel the utility is doing its job in the partnership? Any problems?
- Have your expectations for this partnership been met? How and how not? What would you change?
- How likely would you be in the future to engage the utility directly to pursue these types of services?

**Metrics**

- What metrics would you use to measure this program's success? Have these metrics been defined for you, and if so, how clearly have then been articulated?
- What do you think needs to be done to increase UC/CSU/CCC campus participation in the program?
- Do the program incentives address your (the facility manager's) needs effectively?
- What energy or demand reduction benefits have you seen as a result of this program? (direct attribution—% of savings)

- How do you know? Are these benefits tracked? How so?
- What % of these demand reductions would have been implemented in the absence of this partnership?

**Conclusion:**

- What is working well (top 3)?
- What is needs improvement (top 3 concerns)?

## B.5 ESCO AND LIGHTING AND CONTRACTOR INTERVIEW PROTOCOL

**CDCR Government Partnership**
**Process Evaluation**
**ESCO and Lighting contractor Interview protocol**

### Introduction

Note: Because senior staff will be conducting interviews, the Energy Service Company and lighting contractor interviews will be semi-structured. Therefore the following interview protocol is only a guide to ensure certain topics are covered, but evaluators will follow the flow of the interview and modify questions as needed to fit the interviewee's circumstance.

Notes to Interviewer: As of 1/25/08, no projects have received final financing to go forward. So none of the actual retrofit work has begun. But funding approval is expected soon and may have occurred by the time this interview is conducted. The projects are tracked in the accompanying spreadsheet, and the status of each as of the end of 2007 is summarized in "Project Summary" Column N.

**NAME:** _____

**COMPANY:** _____

**TITLE:** _____

**PHONE:**_____

**INTERVIEWER:**_____

**DATE COMPLETED:** _____**LENGTH:** _____

**Type of company [From Sample Information]**

1. Energy Service Company
2. Lighting Contractor
3. Consultant

My name is _____, with PA Consulting Group. The California Investor Owned Utilities have hired us to evaluate the California Department of Corrections and Rehabilitation (CDCR) Partnership Program. I would like to ask you some questions about your experience with the program. The information you provide will assist us in identifying ways for the program to be more effective. This interview should take approximately 30 minutes to an hour of your time, depending on your concerns. Can we take some time now to do the interview? (If no, when would be a convenient time?)

**Firmographics—ALL**

F1. To get us started, could you briefly tell me a little bit about your business (or position)? What types of services do you offer? Probe for number of projects completed in typical year.

F1A. What percent of your projects/equipment sold are in California? What percent qualified for incentives from electric and gas utilities?

F2. What parts of California do you primarily work in? By IOU service territory: SDG&E, SCG, SCE or PG&E?

F3. How many employees (full-time equivalents) does your company employ?

F4. Are you a subsidiary or branch of a bigger company? (Other options: franchise, dealer, manufacturer rep).

**Program Involvement—ALL**

P1. Could you describe for me your participation the CDCR Government Partnership Program?

P2. What other Utility sponsored incentive programs in California have you participated in? How long have you participated in them?

P3. Why did you decide to participate/get involved in the CDCR Partnership program? *(Do not prompt)*

Now I would like to discuss the various stages of qualification, project development and proposal, project review (due diligence), and approval

P4. Did you feel the requirements of the original request for qualifications from CDCR were reasonable? Why/why not? How did they compare to those for other programs? What if anything would you recommend changing?

P5 . Were you satisfied with your facility (i.e. correctional facility that you were given to audit and identify project) assignment for which to develop a project?

P6. Do you think that the criteria that the program set for qualifying projects and measures were reasonable? Are they more or less stringent than what you have experienced for other programs? How do you think it should be changed in the future?

P7. Was the CDCR and utility staff supportive and helpful in assisting your firm in performing the audits and providing information needed to develop the projects?

P8. Was the technical review process (aka due diligence) reasonable in your view in terms of time, information, and other requirements? (Probe). What, if anything would you recommend to change it, recognizing its need for regulatory compliance.

P9. Do you feel there are adequate program communications? How do you like to receive communications about the program?

P10. How would you describe your interactions with program staff? (minimal, helpful, very involved, probe to characterize)?

P11. Do you expect that your firm will submit projects for approval in the future (next year) under the CDCR program? Why?

P12. Are there other types of energy-efficiency programs in California that you participate in /are aware of?

P12a. If yes, how would you compare the administrative and approval requirements of the CDCR Program with them? Do you think there are lessons learned for the CDCR Partnership from these other programs? Probe.

P13. What additional services would you like to see the program provide customers?

P14. What can be done to increase the number of energy-efficiency project completed through the program?

**Administrative Requirements**

E1. On a scale of 1 to 5 where 1 is 'not at all difficult' and 5 is 'very difficult', how would you rate the program's administrative requirements (e.g., application requirements and rebate processing) for you? Why do you give this ranking?

E2. What is working well about from your point of view? How would you like to see the process improved?

**IOU differentiation**

This program is part of a partnership between the CDCR and all four investor owned utilities in California. SDG&E, SCG, SCE and PG&E.

U1. Which of the four utilities do you interact with? How do those interactions differ?

U2. In which of their services territories are you operating projects? Do you have a specific geographic restriction to only be working within some service territories, or can you operate in all four?

U3. Please identify any issues you have regarding the program activities with each utility that you have experience with. What is working best about that utility's involvement and what needs work?

A. San Diego Gas and Electric

B. Southern Cal Gas

C. Southern California Edison

D. PG&E

U4. What gas-savings opportunities are identified and being pursued? Are there enough opportunities to meet gas energy-savings targets?

U5. What issues if any are associated with the electric savings opportunities? Any problem meeting electric savings targets?

U6. How important do you feel the utility's involvement is in the program partnership? Why is that?

U7. These partnership programs were set up to tap into skills and resources of both parties, in this case the CDCR as one partner and the utilities as the other combined partners. On scale of 1 to 10 where 5 is a true partnership where each party brings resources to the table, 1 means the outside partner, (in this case CDCR), has no capacity and needs the utility to be heavily engaged, and 10 means CDCR just needs the funding but want to or can do most of the work itself, where does this partnership fall?

**Conclusion**

C1. What do you think is working best in the CDCR Partnership Program?

C2. What do you think is most in need of improvement?

C3. Is there anything else that we haven't discussed that you would like the evaluation to note?

**Thank you for your time. This completes our interview.**

## B.6 INTERNAL ACCOUNT MANAGERS/REPS INTERVIEW GUIDE

**Introduction**

We are conducting interviews with SCE staff involved in the design and delivery of the Government Partnership Programs (GPP) as part of the process evaluation of the GPPs. The information we obtain in these interviews will not be reported by individual. The interview results will be combined with the results of other data collection activities such as interviews with program managers and the partners to make recommendations about the GPPs' operations. Depending on your role in the Program, the interview should take from 15 to 20 minutes.

Our notes indicate that you are the account manager/rep for (Program)? Is this correct? If not ask which GPP, if any, they do work with.

*Note: Not all interview guide sections will apply to all interviewees or Programs. Interviewees will only be asked about relevant topic areas for their role and Program.*

I. General Information on Roles and Responsibilities

A. What are your responsibilities regarding this Program? What role do you play, if any, in:

- planning, designing, managing, and administering the Program,
- targeting and marketing the Program to customers
- assisting in Program administration
- establishing and assessing Program performance, and
- other aspects of the Program

B. What SCE staff, partners and contractors do you interact with regarding this Program and what are their responsibilities? Are responsibilities well-defined? Are staff resources adequate?

C. What are your interactions with other stakeholders (e.g., CPUC, other utilities, etc.) in your responsibilities related to the GPP?

D. What are your interactions with customers targeted through the Program?

E. What resources do you use in completing your responsibilities for the Program?

F. What other types of information or support would you like to most effectively complete your program responsibilities?

II. Program Information *(If applicable)*

A. How does the GPP disseminate energy-efficiency information? Probe about type of information, venue for dissemination and target audiences.

B. What do you think are the most effective types of information dissemination? The least effective?

C. What impacts do you think the Program's information has had on the energy efficiency of the target audience?

D. What types of program information do you think are resulting in the most energy savings? The least?

E. How has the program's information changed since you have been involved with the Program? Have those changes been effective? Are there additional information dissemination changes being considered?

F. How does the GPP's dissemination of information differ from how SCE disseminates energy-efficiency information? What are the pros/cons of the GPP's approach?

III. Educational Outreach *(if applicable)*

A. Could you briefly describe the main categories of educational outreach offered through the GPP? For trainings, probe about how training topics are determined.

B. How are participants targeted and recruited for each of the main categories of educational outreach? What role does the GPP partner play in customer recruitment? What value does the GPP's role in recruitment bring?

C. What is customer receptivity to each of the main categories of educational outreach?

D. Are there certain target segments that are reluctant to participate or hard to reach? How is the GPP partner able to reach those segments?

E. Which educational outreach activities have you found to have the highest likelihood of resulting in actual behavioral changes and energy savings?

IV. Audits *(if applicable)*

A. What is customer demand for audits? How has the partner affected customer demand for audits?

B. How are audits scheduled and the work-flow managed to complete these? How are projects prioritized to receive technical assistance or an on-site audit? What role does the GPP play in the administration of audits? SCE staff?

C. What is customer response to recommendations made as a result of design audits? To what extent do you think the audits are resulting in behavioral changes? Installed measures? How does the partner's involvement affect customer response?

V. Measures *(if applicable)*

A. Is the program promoting [or installing] the right set of measures from your perspective of the Program's target audiences? Probe for any recommendations abut measures.

B. How are participants targeted and recruited for measure installation?

C. Is the implementation of measures going smoothly? What, if any, issues has the Program encountered? Have you or another member of SCE dealt with issues encountered? How?

D. Are there certain target segments that are reluctant to participate or hard to reach? How is the Partner reaching these segments?

E. What other missed opportunities do you feel are not being captured by the GPP? How might these be addressed in the future?

VI. Program Goals

A. Are the Program's goals and objectives reasonable? Why or why not?

B. Are all of the Program's goals and objectives being met? If not, what factors are preventing certain goals from being met? What could increase the program's performance in relation to these goals?

VII. Data Tracking

A. What procedures are you aware of/involved in regarding GPP tracking of activity levels?

B. What could be done to improve the capture of information such that the programs impacts can be fairly assessed?

VIII. Conclusion

A. What suggestions do you have for program elements or designs that are most effective and should be considered in the next round of GPPs?

B. What do you think are the most important criteria that should be considered by SCE in selecting partnerships for the next round?

C. Are there any other topics that we have not covered in this interview that we should be aware of for our process evaluation of the (Program)?

**This concludes our interview. Thank you for your time.**

# *APPENDIX C: SURVEY INSTRUMENTS*

## C.1 RESIDENTIAL PARTICIPANT SURVEY

**Partnership Program Participant Survey**
**Process Evaluation**
**Residential Survey**

Hello, my name is [interviewer name], and I'm calling on behalf of **UTILITY OR PROGRAM.** May I speak with [named respondent]?

1 Yes
2 No *[attempt to convert; if R not available, ask for an adult who makes decisions on how household uses energy]*

I'm with PA Consulting Group, an independent research firm. We have been hired to evaluate services available to customers of **UTILITY OR PROGRAM**. I'm not selling anything; I'd just like to ask your opinion about these types of services and whether you've taken advantage of them. I'd like to assure you that your responses will be kept confidential and your name will not be revealed to anyone.

(**Why are you conducting this study**: Studies like this help the utility and its partners better understand customers' awareness of and interest in energy programs and services.

(**Timing**: This survey should take less than 15 minutes of your time. Is this a good time for us to speak with you? *IF NOT, SET UP CALL BACK APPOINTMENT OR OFFER TO LET THEM CALL US BACK AT 1-800-454-5070*)

(**Sales concern**: I am not selling anything; we would simply like to learn about your awareness of services that could save energy in your home, and your opinions about these services. Your responses will be kept confidential. If you would like to talk with someone about this study, feel free to call **[Program contact]**

*(NOTE: For all questions, "don't know" and "refused" will be coded if offered as a response.)*

**S1.** First, do you own or rent your home?

1 Own
2 Rent

**S2.** In which type of building do you live?

1 Single family home
2 Multi-family dwelling (2-4 units)
3 Apartment buildings (5 or more)
4 Other (specify)

**S3.** Per our records, your zip code is [READ ZIP CODE]. Is this correct?

1 Yes
2 No —→ Could you please tell me the correct zip code?

**S4.** From what utility do you buy your electricity?

1 Southern California Edison (SCE)
2 Pacific Gas & Electric (PG&E)
3 Los Angeles Department of Water and Power (LADWP)
4 Sacramento Municipal Utility District (SMUD)
5 Other (record)
D Don't know

**S5.** From what utility do you buy natural gas?

1 Southern California Gas (SCG)
2 Pacific Gas & Electric (PG&E)
3 Other (record)
D Don't know

## Attitudes Toward and Use of Energy-Efficiency Services

Thank you. I now have a few questions related to your home and energy use.

**U1A.** Would you say that your home is very energy efficient, somewhat energy efficient or not very energy efficient?

1 Very energy efficient [SKIP TO U2]
2 Somewhat energy efficient [SKIP TO U2]
3 Not very energy efficient
D Don't know

**U1B.** Why don't you think your home is very energy efficient [DO NOT READ; INDICATE ALL THAT APPLY]

1 Home is old
2 Home is drafty / does not feel tight
3 Have not done anything to make the home energy efficient
4 Have old, inefficient appliances
5 Household behaviors (i.e., leave lights on)
6 Other (record)
7 Don't know

**U2.** On a scale of 1 to 5, with 1 being not at all important and 5 being very important, how important is lowering the cost of your energy bills to you?

1 Not at all important
2
3
4
5 Very important
D Don't know

**U3.** How much, on average, are your monthly electric bills?

**U4**. On a scale from 1 to 5 where 1 is not at all active and 5 is very active, how active would you say your local government is in promoting energy-efficiency messages and helping you to save energy with specific programs?

1 Not at all active
2
3
4
5 Very active
D Don't know

**U5**. Are you aware of any school -based programs that promote energy efficiency?

1 Yes
2 No [SKIP TO NEXT SECTION]
D Don't know [SKIP TO NEXT SECTION]

**U6** Do you have school aged children that participate in these programs?

1 Yes
2 No [SKIP TO NEXT SECTION]
D Don't know [SKIP TO NEXT SECTION]

**U7** What is the name of the program? [RECORD RESPONSE]

## Education/Workshop Program Module

ASK FOR NON-RESOURCE EDUCATION PROGRAMS THAT PROVIDE EDUCATION AND TRAINING OR RESOURCE PROGRAMS THAT OFFER EDUCATION AND TRAINING. OTHERWISE, SKIP TO NEXT SECTION.

**SE1.** Our records indicate you attended a workshop] in [DATE], where they provided information related to ways to save energy in your home. This may have occurred at a location such as [Provide description based on program]. Do you recall attending a session like this?

1 Yes
2 No [SKIP TO NEXT SECTION]
D DK

**SE2.** Who sponsored the session? [DO NOT READ; RECORD ALL THAT APPLY]

1 Southern California Gas
2 Southern California Edison
3 Ventura County Energy Resource Center/Regional Energy Alliance
4 South Bay / South Bay Energy Savings Center
5 Local Government Energy Action Resources (LGEAR) , Mammoth Lakes / Ridgecrest
7 Energy Coalition
8 County / City of Santa Barbara, Goleta and Carpenteria
9 Other [RECORD]

**SE3** Why did you attend this activity or workshop? [DO NOT READ; RECORD ALL THAT APPLY]

1 Wanted to learn about ways to save water/energy in my home
2 Wanted to learn about ways to save money on utility bills
3 Heard about it from others
4 Saw it and stopped by
5 Want to protect the environment
6 It's the right thing to do
7 Want to help out the utility
8 It was sponsored/recommended by local government organization
9 Other [RECORD]
10 Don't know

**SE4.** How useful was the event in helping you understand ways to save energy in your home: Not at all useful, somewhat useful, or very useful?

1 Not at all useful
2 Somewhat useful
3 Very useful

**SE5.** Did the event provide you with specific things you can do in your home to save energy?

1 Yes
2 No [SKIP TO SE7]
D Don't know [SKIP TO SE7]

**SE6.** **Since attending** the workshop, what energy-saving actions have you taken in your home? [RECORD ALL THAT APPLY]

1 Nothing
2 Lowered water heater temperature
3 Use programmable thermostat or adjust temperature when not at home
4 Installed CFLs
5 Purchased energy efficient appliances
6 Other [RECORD]

**SE7.** As part of this event, did you receive any brochures or written information to take home with you?

1 Yes
2 No [SKIP TO SE9]
D Don't know [SKIP TO SE9]

**SE8.** How useful did you find this information in helping you understand ways to save energy in your home? Not at all useful, somewhat useful, or very useful.

1 Not at all useful
2 Somewhat useful
3 Very useful

**SE9.** Did you receive any other take-aways as part of the event, such as CFLs? [INTERVIEWER, IF NECESSARY: "TAKE-AWAYS ARE ITEMS THE WORKSHOPS MAY HAVE GIVEN AWAY FOR YOU TO USE IN YOUR HOME TO SAVE ENERGY]

1 Yes
2 No [SKIP TO SE13]
3 Don't know [SKIP TO SE13]

**SE10.** What did you receive? [DO NOT READ; INDICATE ALL THAT APPLY]

1 A kit or box of energy-efficiency tips/equipment
2 CFLs
3 Water aerators
4 Pipe wraps
5 Other [RECORD]

**SE11.** Did you use or install this/any of these items?

1 Yes
2 No [SKIP TO SE13]
3 Don't know [SKIP TO SE13]

**SE12.** What did you use or install?

1 CFLs
2 Water aerators
3 Pipe wraps
4 Low-flow showerheads
5 Other [RECORD]

**SE13.** What information or activity from this event did you feel was the most useful for you? [RECORD RESPONSE]

**SE14.** What benefits, if any, have you or your household received from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned how to change energy using behaviors / learned how to save energy
2 Able to share what I learned with others
3 Installed more measures on my own
4 Saved energy
5 Saved money on energy bills
6 Make home more comfortable
7 Affect climate change / environmental benefits
8 Other (specify_____)
9 No benefits
10 Don't know

**SE15.** How satisfied are you with the workshop you attended? Please rate your satisfaction on a scale from 1 to 5, where 1 is not at all satisfied and 5 is more satisfied.

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**SE16.** [IF RATE 3 OR LESS] How could you have been more satisfied with the workshop? [RECORD RESPONSE]

## Direct Install Module

ASK OF PARTICIPANTS THAT RECEIVED ENERGY EFFICIENT MEASURES VIA DIRECT INSTALL, EXCLUDING CFLS (E.G., INTERIOR HARDWIRE LIGHTING, APPLIANCES, ETC.)

Ask of each measure direct installed.

**DI1.** Our records indicate someone from [PROGRAM NAME/ORGANIZATION] came into your home and installed [MEASURE] in [MONTH/YEAR]. Is this correct?

1 Yes
2 No
D DK

**DI2.** [IF NO] What is incorrect? [Probe if necessary with below categories]

1 Do not recall someone coming to home [SKIP TO NEXT SECTION]
2 Measures listed are incorrect →
ASK AND RECORD: WHAT ARE THE CORRECT MEASURES?
3 Date is incorrect
4 Other [RECORD] [SKIP TO NEXT SECTION IF NECESSARY]

**DI3.** How did you hear about the program? [DO NOT READ; RECORD ALL THAT APPLY]

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Friends/neighbors/relatives
11 Newspaper article
12 Other [RECORD]

**DI4.** How long was the representative at your home to install the [MEASURE]? _____ hours

**DI5.** What information did you receive from the representative as part of the visit?

1 None
2 How to take care of or use the measure
3 How to save energy in my home (general brochures and discussions)
4 Measures/appliances I should install to save energy in home
5 Ways to improve the draftiness/tightness of home
6 Other [RECORD RESPONSE]
D Don't know

**DI6.** **[IF RECEIVED INFORMATION]** How useful was the information you received from the visit? Please rate on a scale from 1 to 5, where 1 is not at all useful and 5 is very useful.

1 Not at all useful
2
3
4
5 Very useful
D Don't Know

**DI7.** [IF DI6<4] How could information have been more useful for you? [RECORD RESPONSE]

**DI8.** Had you planned to install [MEASURE] before the program?

1 Yes
2 No
D Don't know

**DI9.** Without the program, would you have installed [MEASURE] at the time you did?

1 Yes
2 No
D Don't know

**DI10.** Is the measure still installed in your home?

1 Yes
2 No
D Don't know

**DI11.** [IF NO] Why isn't the measure still installed? [RECORD RESPONSE]

**DI12.** How satisfied are you with this program? Please rate your satisfaction on a scale from 1 to 5, where 1 is not at all satisfied and 5 is more satisfied.

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**DI13.** [IF RATE 3 OR LESS] How could you have been more satisfied with the program? [RECORD RESPONSE]

**DI14.** What benefits, if any, have you or your household received from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned how to change energy using behaviors / learned how to save energy
2 Received energy efficient measures
3 Saved energy
4 Saved water
5 Saved money on energy/water bills
6 Able to share what I learned with others
7 Other (specify)
8 No benefits
9 Don't know

**CFLs Rebate/Buy-down/Direct Install/Give-Away Module**

ASK OF PARTICIPANTS WHO REDEEMED BULBS VIA CFL PROMOTION OR AS PART OF A DIRECT INSTALL PROGRAM GIVE-AWAY

**C1A.** [IF RECEIVED BULBS VIA REBATE] Our records indicate you participated in a program where you redeemed a rebate for CFL bulbs for the value of $X. Is this correct?

1 Yes
2 No [INTERVIEWER: PROBE "Is it the value you disagree with, or do you now recall participating?". IF STILL NO, SKIP TO M1]

**C1B.** [IF RECEIVED BULBS VIA DIRECT INSTALL] Our records indicate you participated in a program where [ADMINISTERING AGENCY] came to your home and installed [X CFL bulbs] Is this correct?

1 Yes
2 No [SKIP TO NEXT SECTION]

**C1C.** [IF RECEIVED BULBS VIA GIVE-AWAY] Our records indicate you received [X CFL bulbs] as part of participating in [AUDIT/WORKSHOP NAME]. Is this correct?

1 Yes
2 No [SKIP TO NEXT SECTION]

**C2.** How did you hear about the [PROGRAM NAME] program?

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Friends/neighbors/relatives
11 Newspaper article
12 Other [RECORD]

**C3.** In total, how many CFLs did you receive through this program? _____

**C4.** Of these, how many are currently installed in your home? _____

**C5.** [IF C4<C3] What happened to the [C3-C4] bulbs that aren't installed? [RECORD RESPONSE]

**C6.** If the program were not available, what would you have done when your light bulbs had burned out? Would you have…

1 Purchased an incandescent bulb to replace it
2 Purchase a CFL to replace it/them
3 Not have replaced it/them at all
4 Something else? [RECORD]

**C7.** What benefits, if any, have you or your household received from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Avoided purchasing new bulbs
2 Was able to receive CFLs
3 Learned about the benefits of CFLs over incandescent bulbs
4 Saved energy
5 Saved money on energy bills
6 Environmental benefits
7 Helped the utilities or community
8 Other (specify)
9 No benefits
10 Don't know

**C8.** How satisfied are you with this program? Please rate your satisfaction on a scale from 1 to 5, where 1 is not at all satisfied and 5 is more satisfied.

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**C9.** [IF RATE 3 OR LESS] How could you have been more satisfied with the program? [RECORD RESPONSE]

## In-home Energy Analysis Module

ASK OF PARTICIPANTS WHO RECEIVED AN IN-HOME ENERGY ANALYSIS INCLUDING TUNE UP PARTICIPANTS

**EA1.** Our records indicate that [AGENCY/PARTNERSHIP] came to your home to review how your home uses energy and provide suggestions to save energy in your home. Is this correct?

1 Yes
2 No [SKIP TO NEXT SECTION]

**EA2.** How did you hear about the [PROGRAM NAME] program?

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Friends/neighbors/relatives
11 Newspaper article
12 Other [RECORD]

**EA3.** How long did a representative spend at your home? _____ hours

**EA4.** What information did you get as part of the visit?

1 How to save energy in my home (general brochures and discussions)
2 Measures/appliances I should install to save energy in home
3 Ways to improve the draftiness/tightness of home
4 Other [RECORD RESPONSE]
D Don't know

**EA5.** How useful was the information you received from the visit? Please rate on a scale from1 to 5, where 1 is not at all useful and 5 is very useful.

1 Not at all useful
2
3
4
5 Very useful
D Don't Know

**EA6.** [IF EA5<4] How could information have been more useful for you? [RECORD RESPONSE]

**EA7.** [IF EA4<>2] Did the program make suggestions on appliances or measures you should install in your home to make it more energy efficient?

1 Yes
2 No [SKIP TO EA13]
D Don't know [SKIP TO EA13]

**EA8.** What suggestions did the contractor make? [SELECT ALL THAT APPLY]

1 Install an energy efficient washer
2 Install an energy efficient dishwasher
3 Replace or remove secondary refrigerator
4 Replace heating system
5 Replace cooling system
6 Install CFLs
7 Add/improve insulation
8 Other (specify)

**EA9.** Will you act on [any of these suggestions/this suggestion]?

1 Yes
2 No [SKIP TO EA12]
D Don't know [SKIP TO EA13]

**EA10.** [IF MORE THAN ONE] Which ones? [RECORD RESPONSE]

**EA11.** Are there any suggestions the contractor made that you decided not to do?

1 Yes
2 No [SKIP TO EA13]
D Don't know [SKIP TO EA13]

**EA12.** Why did you decide not to follow through with those suggestions? [RECORD RESPONSE]

**EA13.** What benefits, if any, have you or your household received from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned how to change energy using behaviors / learned how to save energy
2 Able to share what I learned with others
3 Installed more measures on my own
4 Saved energy
5 Saved money on energy bills
6 Other (specify_____)
7 No benefits
8 Don't know

**EA14.** How satisfied are you with this program? Please rate your satisfaction on a scale from 1 to 5, where 1 is not at all satisfied and 5 is more satisfied.

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**EA15.** [IF RATE 3 OR LESS] How could you have been more satisfied with the program? [RECORD RESPONSE]

## Other Program Awareness and Interest

**M1.** As part of your participation in [this program/these programs], did you receive materials or application forms for other utility programs?

1 Yes
2 No
D DK

**M2.** [IF YES ABOVE] Did you sign up for other utility programs?

1 Yes
2 No
D DK

**M3.** [IF YES ABOVE] Which programs? [RECORD PROGRAM(S)]

**M4**. Do you know of other organizations in your area where you could receive these types of services?

1 Yes [What organization?]
2 No

## Energy-Efficiency Actions Taken

**EE1.** I'm going to read a list of things you can do to make your home more energy efficient. Please say "yes" or "no" to indicate whether you have made any of these efficiency improvements to your home since January 2006.

1 Yes
2 No
D Don't know

In the last two years, have you . . .

a. Had an energy audit conducted of your home, where a professional walks through your home and identifies ways that you can improve the energy efficiency of your home or appliances?

b. Had a hot water blanket or pipe wrap installed?

c. Installed water conservation products such as a low flow showerhead or faucet flow restrictors?

d. Installed compact fluorescent or other energy efficient lighting [IF RECEIVED LIGHTING: beside what you received through the program]?

e. Purchased an ENERGY STAR labeled appliance for your home [IF RECEIVED REBATE FOR APPLIANCE: other than the [appliance/appliances] you purchased]? (**IF YES**, Which ones?_____)

f. Purchased an ENERGY STAR labeled thermostat for your home?

g. Had the efficiency of your heating, cooling or water heating equipment checked?

h. Installed a high-efficiency furnace, heat pump, water heater or air conditioner? (**IF YES**, What type of equipment did you install_____?)

i. Added insulation to the walls, ceilings or crawlspaces?

j. Installed new energy efficient windows or doors?

k. Made other improvements to increase the energy efficiency of your home? (**IF YES**, What have you done? _____)

IF SAID NO OR DON'T KNOW TO ALL, SKIP TO EE5

**EE2.** [IF SAID MADE AT LEAST 1 IMPROVEMENT ABOVE] Why did you make these improvements? [DO NOT READ; RECORD ALL THAT APPLY]

1 To save energy / water
2 To save money on my utility / water bill
3 Environmental benefits
4 Information received from workshop or program
5 It is the right thing to do
6 Make home more comfortable
7 Everyone else is doing it
8 Other
9 Don't know

**EE2A.** [If any EE1=1 AND PARTICIPANT] For the energy-efficiency improvement(s) you said you made in the past two years, did you do this based on your participation in the [program]?

1 Yes → Which program?
2 No [SKIP TO NEXT SECTION]
D Don't Know [SKIP TO NEXT SECTION]

**EE2B.** [If any EE1=1 AND NONPARTICIPANT SAMPLE] For the energy-efficiency improvement(s) you said you made in the past two years, did you do this based on your participation in a community or utility-sponsored program?

1 Yes → Which program? [RECORD]
2 No [SKIP TO NEXT SECTION]
D Don't Know [SKIP TO NEXT SECTION]

*IF NON-PARTICIPANT, SKIP TO NP1*

**EE3.** [If EE2A=1] How influential was the [program] in your decision to take that action? Please rate on a scale of 1 to 5, where 1 is not at all influential and 5 is very influential.

1 Not at all influential
2
3
4
5 Very influential
D Don't Know

**EE4.** [If EE3=1] Would you have taken this action without participating in the [LIST NAMES OF PROGRAMS NOTED IN EE2A]

1 Yes
2 No
D Don't know

**EE5.** [ASK IF ALL EE1=NO] What are some of the reasons you have NOT made energy-efficiency improvements to your home?
[DO NOT READ; INDICATE ALL THAT APPLY]

1 No reason given
2 Home is new
3 Can't afford/too costly
4 Cost/benefit trade-off is too low
5 Don't know what to do
6 Plan to move soon
7 Too difficult to do by myself
8 Don't have the time
9 Home is already energy efficient/I'm already doing everything I can
10 Just haven't got around to it yet
11 Don't know a reliable contractor
12 I don't care
13 Other (Specify)
14 Don't know

## General Partnership Questions

*IF DID NOT PARTICIPATE IN ANY PARTNERSHIP PROGRAM, SKIP TO NEXT SECTION.*

**GP1.** On a scale from 1 to 5, where 1 is not at all satisfied and 5 is very satisfied, what would you rate your overall satisfaction with your involvement in the [PROGRAM NAME/WORKSHOP]?

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**GP2.** Who sponsored this program? [UNPROMPTED, THEN PROMPTED. NOTE SPECIFIC NAME IF OFFERED]

1 Electric utility
2 Gas utility
3 Water utility
4 Environmental or non-profit group
5 City or county government
6 Other_____
D Don't know

**GP3.** What was most positive about your experience with this program? [RECORD RESPONSE]

**GP4.** What was the least effective part of your experience with this program? [RECORD RESPONSE]

**GP5.** Do you feel you are more satisfied, less satisfied, or have the same level of satisfaction with [LOCAL GOVERNMENT PARTNER] as a result of participating in the program?

1 More satisfied
2 Less satisfied
3 Same satisfaction
D Don't know

**GP6.** Do you feel you are more satisfied, less satisfied, or have the same level of satisfaction with [UTILITY] as a result of participating in the program?

1 More satisfied
2 Less satisfied
3 Same satisfaction
D Don't know

**GP7.** Were you more likely, less likely, or just as likely to participate in the program because of the involvement of [local government partner]?

1 More likely (Why do you say that?)
2 Less likely (Why do you say that?)
3 Have no effect

## Final Perception

*ALL RESPONDENTS TO ANSWER*
EVALUATOR/SENIOR INTERVIEWER NOTES: CAREFULLY HOW HOUSEHOLDS ARE ABLE TO RESPOND TO THESE QUESTIONS, AND THE USEFULNESS OF THE QUESTIONS.

**PD1.** There are various organizations that provide information and services to help you save energy or water, such as local governments, nonprofit groups, and utility companies. From what types of organizations would you prefer to receive this type of information…. [READ CHOICES. INDICATE ALL THAT APPLY]

1 Local government
2 Nonprofit organization
3 Electric/gas utility
4 Water utility
5 Other organization → Which organization (RECORD)
6 Does not matter
D Don't know

**PD2.** Why is that? [RECORD RESPONSE]

**PD3A.** Do you feel these organizations differ in their ability to provide you with services to help you save energy or water?

1 Yes
2 No [IF PART SKIP TO PD4, IF NONPART SKIP TO D1]
D Don't know [IF PART SKIP TO PD4, IF NONPART SKIP TO D1]

**PD3B** How do you think they differ? [RECORD RESPONSE]

IF NONPART SKIP TO D1

**PD4.** Finally, what do you believe is the source of funding for this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 The [PARTNER NAME]
2 My local government
3 My electric or gas utility
4 My gas utility
5 My water utility
6 Ratepayers
7 Taxes
8 The State of California
9 The federal government
10 Other [RECORD]
D Don't know

## Demographics

I JUST HAVE A COUPLE MORE QUESTIONS ABOUT YOUR HOUSEHOLD.

D1 [IF OWN] In what year was your home built?

1 2000 or later
2 1990 to 1999
3 1985 to 1989
4 1980 to 1984
5 1970 to 1979
6 1960 to 1969
7 1950 to 1959
8 1940 to 1949
9 1939 or earlier
D Don't know

D2 What condition do you feel your home is in? Excellent condition, good condition, fair condition, poor condition, or terrible condition?

1 Excellent
2 Good
3 Fair
4 Poor
5 Terrible
D Don't know

D3 [IF POOR OR TERRIBLE] Why do you feel your home is in [terrible/poor] condition? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Home is drafty/uncomfortable
2 In need of many repairs (roof, siding, etc)
3 Structure is bad
4 Home is just old
5 Other [SPECIFY]

D4 Including yourself, how many people are currently living in your household?

____PEOPLE

D5 Do you have any….

| | |
|---|---|
| A. IF D4=1, SKIP Children under 6 living with you? | 1 Yes 2 No D DK R Refused |
| B. Adults over 60 in your household? | 1 Yes 2 No D DK R Refused |
| C. Disabled individuals in your household? | 1 Yes 2 No D DK R Refused |

D6. Are you currently…?

1 Married
2 Widowed
3 Divorced
4 Separated
5 Never married
R Refused

**D7** Are you Spanish, Hispanic, or Latino?

1 Yes
2 No
D Don't know
R Refused

**D8** What is your racial classification? Is it…

1 American Indian
2 Alaskan Native
3 Asian or Pacific Islander
4 African American or Black
5 White
6 Other (Specify)
D Don't know
R Refused

**D9** I am going to read to you some income ranges. Please estimate your total gross annual household income, before taxes, for this year. Include all sources of income for including all earned wages in the household, all salary, financial assets, pensions, public assistance, or any other service. Will your total annual household income in 2007 be…

[IF NECESSARY, READ: We know that most people consider their income to be very private information. Your income and name will not be disclosed to anyone, for any purpose.]

1 Less than $15,000
2 $15,000–29,999
3 $30,000–39,999
4 $40,000–49,999
5 $50,000–59,999
6 $60,000–69,999
7 $70,000–79,999
8 $80,000–89,999
9 $90,000–99,999
10 $100,000–109,999
11 $110,000–149,999
12 $150,000–200,000
13 Greater than $200,000
14 Don't know
15 Refused

End THANK YOU FOR YOUR TIME.

## C.2 RESIDENTIAL NONPARTICIPANT SURVEY

**Partnership Program Nonparticipant Survey**
**Process Evaluation**
**Residential Survey**

Hello, my name is [interviewer name], and I'm calling on behalf of **PROGRAM** and your local utility**.** May I speak with [named respondent]?

1 Yes
2 No *[attempt to convert; if R not available, ask for an adult who makes decisions on how household uses energy]*

I'm with PA Consulting Group, an independent research firm. We have been hired to evaluate services available to local utility customers. I'm not selling anything; I'd just like to ask your opinion about these types of services and whether you've taken advantage of them. I'd like to assure you that your responses will be kept confidential and your name will not be revealed to anyone.

(**Why are you conducting this study**: Studies like this help the utility and its partners better understand customers' awareness of and interest in energy programs and services.

(**Timing**: This survey should take less than 15 minutes of your time. Is this a good time for us to speak with you? *IF NOT, SET UP CALL BACK APPOINTMENT OR OFFER TO LET THEM CALL US BACK AT 1-800-454-5070*)

(**Sales concern**: I am not selling anything; we would simply like to learn about your awareness of services that could save energy in your home, and your opinions about these services. Your responses will be kept confidential. If you would like to talk with someone about this study, feel free to call [Program contact]

*(NOTE: For all questions, "don't know" and "refused" will be coded if offered as a response.)*

**S1.** First, do you own or rent your home?

1 Own
2 Rent

**S2.** In which type of building do you live?

1 Single family home
2 Multi-family dwelling (2-4 units)
3 Apartment buildings (5 or more)
4 Other (specify)

**S3.** Per our records, your zip code is [READ ZIP CODE]. Is this correct?

1 Yes
2 No —→ Could you please tell me the correct zip code?

## Attitudes Toward and Use of Energy-Efficiency Services

Thank you. I now have a few questions related to your home and energy use.

**U1A.** Would you say that your home is very energy efficient, somewhat energy efficient or not very energy efficient?

1 Very energy efficient [SKIP TO U2]
2 Somewhat energy efficient [SKIP TO U2]
3 Not very energy efficient
D Don't know

**U1B.** Why don't you think your home is very energy efficient [DO NOT READ; INDICATE ALL THAT APPLY]

1 Home is old
2 Home is drafty / does not feel tight
3 Have not done anything to make the home energy efficient
4 Have old, inefficient appliances
5 Household behaviors (i.e., leave lights on)
6 Other (record)
7 Don't know

**U2.** On a scale of 1 to 5, with 1 being not at all important and 5 being very important, how important is lowering the cost of your energy bills to you?

1 Not at all important
2
3
4
5 Very important
D Don't know

**U3.** How much, on average, are your monthly electric bills?

**U4**. On a scale from 1 to 5 where 1 is not at all active and 5 is very active, how active would you say your local government is in promoting energy-efficiency messages and helping you to save energy with specific programs?

1 Not at all active
2
3
4
5 Very active
D Don't know

**U5**. Are you aware of any school -based programs that promote energy efficiency?

1 Yes
2 No [SKIP TO NEXT SECTION]
D Don't know [SKIP TO NEXT SECTION]

**U6** Do you have school aged children that participate in these programs?

1 Yes
2 No [SKIP TO NEXT SECTION]
D Don't know [SKIP TO NEXT SECTION]

**U7** What is the name of the program? [RECORD RESPONSE]

## Energy-Efficiency Actions Taken

**EE1.** I'm going to read a list of things you can do to make your home more energy efficient. Please say "yes" or "no" to indicate whether you have made any of these efficiency improvements to your home since January 2006.

1 Yes
2 No
D Don't know

In the last two years, have you . . .

a. Had an energy audit conducted of your home, where a professional walks through your home and identifies ways that you can improve the energy efficiency of your home or appliances?

b. Had a hot water blanket or pipe wrap installed?

c. Installed water conservation products such as a low flow showerhead or faucet flow restrictors?

d. Installed compact fluorescent or other energy efficient lighting?

e. Purchased an ENERGY STAR labeled appliance for your home? (**IF YES**, Which ones?)

f. Purchased an ENERGY STAR labeled thermostat for your home?

g. Had the efficiency of your heating, cooling or water heating equipment checked?

h. Installed a high-efficiency furnace, heat pump, water heater or air conditioner? (**IF YES**, What type of equipment did you install?)

i. Added insulation to the walls, ceilings or crawlspaces?

j. Installed new energy efficient windows or doors?

k. Made other improvements to increase the energy efficiency of your home? (**IF YES**, What have you done?)

IF SAID NO OR DON'T KNOW TO ALL, SKIP TO EE5

**EE2.** [IF SAID MADE AT LEAST 1 IMPROVEMENT ABOVE] Why did you make these improvements? [DO NOT READ; RECORD ALL THAT APPLY]

1 To save energy / water
2 To save money on my utility / water bill
3 Environmental benefits
4 Information received from workshop or program
5 It is the right thing to do
6 Make home more comfortable
7 Everyone else is doing it
8 Other
9 Don't know

**EE2B.** [IF SAID MADE AT LEAST 1 IMPROVEMENT ABOVE] For the energy-efficiency improvement(s) you said you made in the past two years, did you do this based on your participation in a community or utility-sponsored program?

| | | |
|---|---|---|
| 1 | Yes → | Which program? [RECORD] |
| 2 | No | [SKIP TO NEXT SECTION] |
| D | Don't Know | [SKIP TO NEXT SECTION] |

**EE5.** [ASK IF ALL EE1=NO] What are some of the reasons you have NOT made energy-efficiency improvements to your home?
[DO NOT READ; INDICATE ALL THAT APPLY]

1 No reason given
2 Home is new
3 Can't afford/too costly
4 Cost/benefit trade-off is too low
5 Don't know what to do
6 Plan to move soon
7 Too difficult to do by myself
8 Don't have the time
9 Home is already energy efficient/I'm already doing everything I can
10 Just haven't got around to it yet
11 Don't know a reliable contractor
12 I don't care
13 Other (Specify)
14 Don't know

## Program Questions

**NP1.** I'd like to ask you a few questions about [PROGRAM] . As part of this program, you would have [INSERT PROGRAM DESCRIPTION]. Before today, have you heard of this program?

1 Yes
2 No [SKIP TO NP3]
D Don't know [SKIP TO NP3]

**NP2** Have you participated in this program?

1 Yes
2 No [SKIP TO NP3]
D Don't know [SKIP TO NP3]

**NP2a** What did you do as part of your participation in the program?

[RECORD ANSWER]

**NP2b** When did you participate in the program?

[RECORD ANSWER]

[SKIP TO NP6]

**NP3** Please tell me if you feel you would be very interested, somewhat interested, or not at all interested in receiving services through a program such as the [PROGRAM]

1 Very interested
2 Somewhat interested
3 Not at all interested
D Don't know

**NP4.** [IF REPLIED NOT AT ALL INTERESTED IN NP1] Why wouldn't you be interested in receiving these services? [DO NOT READ; INDICATE ALL THAT APPLY]

1 No reason
2 Home is new
3 Do not need equipment (washers/CFLs)
4 Can't afford/too costly
5 Don't know what to do
6 Plan to move soon
7 Too difficult to do by myself
8 Don't have the time
9 Home is already energy efficient/I'm already doing everything I can
10 Don't know a reliable contractor
11 I don't care
12 Energy use is not a priority for my household
13 Other (Specify)
14 Don't know

**NP5.** [ASK IF SAID AWARE OF PROGRAM, BUT DID NOT PARTICIPATE] You said you heard of the program, but have not participated. Why haven't you participated in the program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Do not need services provided by the program
2 Have not gotten around to participating
3 Do not know how to participate
4 Do not want to participate
5 Do not need equipment (washers/CFLs)
6 Other [RECORD]
D Don't know

**NP6.** Do you know of other organizations in your area where you could receive these types of services?

1 Yes [What organization]
2 No

## Final Perception

EVALUATOR/SENIOR INTERVIEWER NOTES: CAREFULLY HOW HOUSEHOLDS ARE ABLE TO RESPOND TO THESE QUESTIONS, AND THE USEFULNESS OF THE QUESTIONS.

**PD1.** There are various organizations that provide information and services to help you save energy or water, such as local governments, nonprofit groups, and utility companies. From what types of organizations would you prefer to receive this type of information…. [READ CHOICES. INDICATE ALL THAT APPLY]

1 Local government
2 Nonprofit organization
3 Electric/gas utility
4 Water utility
5 Other organization → Which organization (RECORD)
6 Does not matter [SKIP TO PD3A]
7 Don't know [SKIP TO PD3A]

**PD2.** Why would you prefer this organization / these organizations? [RECORD RESPONSE]

**PD3A.** Do you feel these organizations differ in their ability to provide you with services to help you save energy or water?

1 Yes
2 No SKIP TO D1
D Don't know SKIP TO D1

**PD3B** How do you think they differ? [RECORD RESPONSE]

## Demographics

I JUST HAVE A COUPLE MORE QUESTIONS ABOUT YOUR HOUSEHOLD.

D1 [IF OWN] In what year was your home built?

1 2000 or later
2 1990 to 1999
3 1985 to 1989
4 1980 to 1984
5 1970 to 1979
6 1960 to 1969
7 1950 to 1959
8 1940 to 1949
9 1939 or earlier
D Don't know

D2 What condition do you feel your home is in? Excellent condition, good condition, fair condition, poor condition, or terrible condition?

1 Excellent
2 Good
3 Fair
4 Poor
5 Terrible
D Don't know

D3 [IF POOR OR TERRIBLE] Why do you feel your home is in [terrible/poor] condition? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Home is drafty/uncomfortable
2 In need of many repairs (roof, siding, etc)
3 Structure is bad
4 Home is just old
5 Other [SPECIFY]

D4 Including yourself, how many people are currently living in your household?

____PEOPLE

D5 Do you have any….

| | |
|---|---|
| A. IF D4=1, SKIP Children under 6 living with you? | 1 Yes 2 No D DK R Refused |
| B. Adults over 60 in your household? | 1 Yes 2 No D DK R Refused |
| C. Disabled individuals in your household? | 1 Yes 2 No D DK R Refused |

D6. Are you currently…?

1 Married
2 Widowed
3 Divorced
4 Separated
5 Never married
R Refused

**D7** Are you Spanish, Hispanic, or Latino?

1 Yes
2 No
D Don't know
R Refused

**D8** What is your racial classification? Is it…

1 American Indian
2 Alaskan Native
3 Asian or Pacific Islander
4 African American or Black
6 White
6 Other (Specify)
D Don't know
R Refused

**D9** I am going to read to you some income ranges. Please estimate your total gross annual household income, before taxes, for this year. Include all sources of income for including all earned wages in the household, all salary, financial assets, pensions, public assistance, or any other service. Will your total annual household income in 2007 be…

[IF NECESSARY, READ: We know that most people consider their income to be very private information. Your income and name will not be disclosed to anyone, for any purpose.]

1 Less than $15,000
2 $15,000–29,999
3 $30,000–39,999
4 $40,000–49,999
5 $50,000–59,999
6 $60,000–69,999
7 $70,000–79,999
8 $80,000–89,999
9 $90,000–99,999
10 $100,000–109,999
11 $110,000–149,999
12 $150,000–200,000
13 Greater than $200,000
14 Don't know
15 Refused

End THANK YOU FOR YOUR TIME.

## C.3 COMMERCIAL PARTICIPANT SURVEY

**Partnership Program Participant Survey**
**Process Evaluation**
**SCE/SCG/PG&E**
**Commercial Survey**

Hello, my name is [interviewer name], and I'm calling on behalf of SPONSOR and your local utility**.** May I speak with [named respondent]?

1 Yes
2 No *[attempt to reach contact or someone else who may have attended, else terminate]*

I'm with PA Consulting Group, an independent research firm. We are conducting a study about some of the services available in California to commercial customers. I'd just like to ask about these types of services and [IF NONPARTICIPANT: whether you've taken advantage of them IF PARTICIPANT: your experiences with the programs that offer these services]. Your responses will be kept confidential and your name will not be revealed to anyone.

(**Why are you conducting this study**: Studies like this help the utility and its partners better understand customers' awareness of and interest in energy programs and services.

(**Timing**: This survey should take less than 15 minutes of your time. Is this a good time for us to speak with you? *IF NOT, SET UP CALL BACK APPOINTMENT OR OFFER TO LET THEM CALL US BACK AT 1-800-454-5070*)

(**Sales concern**: I am not selling anything; we would simply like to learn about your awareness of services that could save energy in your business, and your opinions about these services. Your responses will be kept confidential.

*(NOTE: For all questions, "don't know" and "refused" will be coded if offered as a response.)*

DK=DON'T KNOW
R=REFUSED

**S1.** First, could you tell me if you help specify, recommend, or approve equipment purchases for your facilities?

1 Yes
2 No [IF NONPARTICIPANT: get other respondent contact info; thank and terminate]

**S2.** What is your organization's primary building activity? Is it… (READ)

1 Education
2 Food sales
3 Food service
4 Health care
5 Lodging
6 Retail
7 Office
8 Public use building
9 Something else?

**S3.** What is your title? (DON'T READ)

1 Owner/operator
2 President
3 Manager
4 Purchasing agent
5 Other (RECORD)

## Participation Confirmation

**IF SAMPLE SHOWS ATTENDED WORKSHOPS OR TRAININGS**

**P1** According to our records, you attended a workshop training through [PROGRAM]. Workshops or trainings you attended include: [FILL WITH WORKSHOP NAME]. Is this correct?

1 Yes [SKIP P2]
2 No

**P2** Did you attend any workshops offered by [program]?

1 Yes What workshops did you attend? [Record and continue]
2 No [Thank for time and terminate]

*IF CONFIRMS PARTICIPATION, WORKSHOP =1*

**IF SAMPLE SHOWS RECEIVED EQUIPMENT—DIRECT INSTALL**

**P3** According to our records, you received [MEASURE DESCRIPTIONS] through a program offered by the [PARTNERSHIP]. Is this correct?

1 Yes [SKIP P4]
2 No

**P4** Is there someone else who would know about your organization's participation in the program?

1 Yes—Continue (ENTER CONTACT INFO and TRANSFER)
2 Yes—Not available (ENTER CONTACT INFO and EXIT)
3 No [Thank for time and terminate]

**IF SAMPLE SHOWS RECEIVED REBATES**

**P5** According to our records, you received rebates for the following equipment: [DESCRIPTION OF EQUIPMENT]. These rebates were provided by a program offered by [PARTNERSHIP]. Do you remember participating in the program?

1 Yes [SKIP P6]
2 No

**P6** Is there someone else who would know about your organization's participation in the program?

1 Yes—Continue (ENTER CONTACT INFO and TRANSFER)
2 Yes—Not available (ENTER CONTACT INFO and EXIT)
3 No [Thank for time and terminate]

*IF CONFIRMS PARTICIPATION, INCENT=1*

**IF SAMPLE SHOWS RECEIVED TECHNICAL ASSISTANCE—AUDITS**

**P7** According to our records show someone came in and performed an audit or provided technical assistance for your building. These services were provided by a program through [PARTNERSHIP].

Do you recall receiving the audit?

1 Yes [SKIP P8]
2 No

**P8** Is there someone else who would know about your organization's participation in the program?

1 Yes—Continue (ENTER CONTACT INFO and TRANSFER)
2 Yes—Not available (ENTER CONTACT INFO and EXIT)
3 No [Thank for time and terminate]

*IF CONFIRMS PARTICIPATION, AUDIT=1*

**NONPARTICIPANT SAMPLE**

**P9.** I would like to confirm that your business is located in [READ NAME OF CITY]. Is this correct?

1 Yes [SKIP TO NP1]
2 No [GET NAME OF CITY]

## Commercial Workshops/Training/Education Module

**W1** How did you first hear about the workshops offered through [PARTNER]? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Flyers from utility
2 Flyers from [PARTNER]
3 Flyers from somewhere else (Probe on who)
4 Manufacturer/distributor
5 Tradeshow
6 Website (Which website?)
7 SCE/SCG/PG&E
8 [PARTNER] employee
9 Calendar of events
10 Other Utility (which utility)
11 Other (specify))

**W2.** Who sponsored the session? [DO NOT READ; RECORD ALL THAT APPLY]

1 Southern California Gas
2 Southern California Edison
3 Ventura County Energy Resource Center/Regional Energy Alliance
4 South Bay / South Bay Energy Savings Center
5 Local Government Energy Action Resources (LGEAR), Mammoth Lakes / Ridgecrest
7 Energy Coalition
8 County / City of Santa Barbara, Goleta and Carpenteria
9 Other [RECORD]
10 Don't Know

**W3** Why did your organization participate in the workshop(s)? [DO NOT READ; INDICATE ALL THAT APPLY]

1 To learn about ways to save energy in our business
2 To learn about ways to save money
3 To learn how to install energy-efficiency measures
4 To learn about new energy-efficiency technologies on the market
5 To learn about ways to be more environmentally friendly (Saving the planet)
6 To understand 'green' building issues and practices
7 Other (specify)
8 Don't Know

**W4** Has your organization used any of the information from the workshops to make changes in your facility?

1 Yes
2 No [SKIP TO W7]
D DK [SKIP TO W7]

**W5** What specifically have you done in your organization as a result of what you learned in this event? [DO NOT READ; RECORD ALL THAT APPLY]

1 Replaced less efficient lighting with more efficient lighting
2 Reviewed energy use in business
3 Reviewed water use in business
4 Purchased or Installed more energy efficient equipment
5 Purchased or installed more water efficient equipment
6 Changed behavior to be more efficient (turning off lights, turning down A/C or heat)
7 Tuning up HVAC
8 Other (specify)
9 Nothing

**W6** [IF W5<9] On a scale of 1 to 10, with 1 being not at all influential and 10 being extremely influential, how influential was the information you received in the workshop in your decision to do that/these things?

**W7** Do you plan to use any (IF DID SOMETHING ALREADY: other) concepts and technologies you learned about from the workshop(s)?

1 Yes
2 No [SKIP TO W9]
D DK [SKIP TO W9]

**W8** What do you plan to do? [RECORD RESPONSE]

**W9.** How useful was the event in helping you understand ways to save energy: Not at all useful, somewhat useful, or very useful?

1 Not at all useful
2 Somewhat useful
3 Very useful

**W10.** Do you think the information you received will help your organization save energy?

1 Yes
2 No
D Don't know

**W11.** As part of this event, did you receive any brochures or literature to take with you?

1 Yes
2 No [SKIP TO W13]
D Don't know [SKIP TO W13]

**W12.** How useful did you find the literature in helping you understand ways to save energy in your organization? Not at all useful, somewhat useful, or very useful.

1 Not at all useful
2 Somewhat useful
3 Very useful

**W13** Have you participated in any other utility energy-efficiency programs as a direct result of your interactions with [PROGRAM]?

1 Yes (which utility and program)
2 No
D DK

**W14.** Do you feel your organization has benefited from participating in the program?

1 Yes
2 No [SKIP TO ER1]
D DK [SKIP TO ER1]

**W15.** How has your organization benefited from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned how to change energy using behaviors / learned how to save energy
2 Able to share what I learned with others
3 Installed more measures on my own
4 Saved energy
5 Saved money on energy bills
6 Other (specify)
7 No benefits
8 Don't know

## Equipment Rebates Module (Other Than Lighting)

ASK OF PARTICIPANTS THAT RECEIVED REBATES TOWARD ENERGY-EFFICIENT EQUIPMENT. ASK FOR EACH MEASURE CATEGORY RECEIVED (E.G., HVAC, LIGHTING, ETC).

**ER1.** Our records indicate you purchased a [MEASURE] and redeemed a rebate for [$X] for in [YEAR]. Is this correct?

1 Yes
2 No
D DK

**ER2.** [IF NO] What is incorrect? [Probe if necessary with below categories]

1 Purchased equipment but did not receive a rebate
2 Did not purchase any new equipment through the program
3 Purchased different type of equipment (What equipment)
4 Timing is incorrect
5 Other [RECORD]

IF ER2=1 OR ER2=2, SKIP TO NEXT SECTION

**ER3.** How did you hear about the program? [DO NOT READ; RECORD ALL THAT APPLY]

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Friends/neighbors/relatives
11 Newspaper article
12 Other [RECORD]

**ER4.** How convenient was it for you to redeem the rebate? Please rate on a scale from 1 to 5, where 1 is not at all convenient and 5 is very convenient.

1 Not at all convenient
2
3
4
5 Very convenient
D Don't Know

**ER4a.** [IF ER4<=3] Why wasn't it convenient for you to redeem the rebate? [RECORD RESPONSE]

**ER5.** Had you planned to purchase a new [MEASURE] before you heard about the program?

1 Yes
2 No
D Don't know

**ER6.** How important was the program in your decision to purchase a high efficiency [MEASURE] rather than a less efficient [MEASURE]? Please rate on a scale of 1 to 5, where 1 is not at all important and 5 is very important.

1 Not at all important
2
3
4
5 Very important
D Don't Know

**ER7.** Without the rebate offer, would you have purchased a high-efficiency [MEASURE] at the time you did?

1 Yes
2 No
D Don't know

**ER8.** [IF NO] Would you have purchased a lower efficiency [MEASURE], a different high-efficiency [MEASURE], the same [MEASURE] at a later time, or not made a purchase at all?

1 Lower efficiency [APPLIANCE]
2 Different high-efficiency [APPLIANCE]
3 Same [APPLIANCE] at a later time
4 Would not have made any purchase
D Don't know

**ER9.** How has your organization benefited from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Saved water
2 Saved energy
3 Reduced water bill
4 Reduced energy bill
5 Have a better appliance
6 Was able to purchase appliance that could not purchase before
7 Environmental benefits
8 Help the utilities or community
9 Other (specify)
10 No benefits
11 Don't know

## Direct Install Module (Other Than Lighting)

ASK OF PARTICIPANTS THAT RECEIVED ENERGY EFFICIENT MEASURES VIA DIRECT INSTALL, EXCLUDING CFLS (E.G., INTERIOR HARDWIRE LIGHTING, ETC.)

ASK OF EACH MEASURE DIRECT INSTALLED.

**DI3.** How did you hear about the program? [DO NOT READ; RECORD ALL THAT APPLY]

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Word of mouth
11 Newspaper article
12 Technical assessment / audit
13 Other [RECORD]

**DI1.** I just want to confirm someone from [PROGRAM NAME/ORGANIZATION] came into your organization and installed [MEASURE] in [MONTH/YEAR]. Is this correct?

1 Yes
2 No
D DK

**DI2.** [IF NO] What is incorrect? [Probe if necessary with below categories]

1 Do not recall someone coming to organization [SKIP TO NEXT SECTION]
2 Measures listed are incorrect →
ASK AND RECORD: WHAT ARE THE CORRECT MEASURES?

3 Date is incorrect
4 Other [RECORD] [SKIP TO NEXT SECTION IF NECESSARY]

**DI4.** Without the program, would your organization have installed new [MEASURE] at the time you did?

1 Yes
2 No [SKIP TO DI6]
D Don't know

**DI5.** Would the [MEASURE] have been lower efficiency, the same efficiency, or higher efficiency than what was installed through the program?

1 Lower efficiency
2 Same efficiency
3 Higher efficiency
D Don't know

**DI6.** Is the measure still installed?

1 Yes
2 No
D Don't know

**DI7.** [IF NO] Why isn't the measure still installed? [RECORD RESPONSE]

**DI8.** How have you or your business benefited from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned how to change energy using behaviors / learned how to save energy
2 Received energy efficient measures
3 Saved energy
4 Saved water
5 Saved money on energy/water bills
6 Able to share what I learned with others
7 Other (specify_____)
8 No benefits
9 Don't know

## Lighting Rebate/Direct Install Module

**L1A.** [IF RECEIVED BULBS VIA REBATE] Our records indicate you participated in a program where you redeemed a rebate for [LIGHTING DESCRIPTION] for the value of $X. Is this correct?

1 Yes
2 No [SKIP TO NEXT SECTION]

**L1B.** [IF RECEIVED BULBS VIA DIRECT INSTALL] Our records indicate you participated in a program where a rep from [ADMINISTERING AGENCY] came to your organization and installed lighting measures which will include: T8 ballasts, Compact fluorescent bulbs, or Indoor light fixtures. Is this correct?

1 Yes
2 No [SKIP TO NEXT SECTION]

**L2.** How did you hear about the [PROGRAM NAME] program?

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Word of mouth
11 Newspaper article
12 Other [RECORD]

**L3.** Why did you participate in the program? [DO NOT READ, INDICATE ALL THAT APPLY]

1 Needed new bulbs
2 To save energy/have more efficient lighting
3 To save money
4 To help the environment/prevent global warming
5 To get better lighting/lighting advice
6 Needed to dispose of old bulbs
7 Other (specify)

**L4.** In total, how many efficient bulbs and fixtures did you receive through this program?

**L5.** Of these, how many are currently installed?

**L6.** [IF L5<L4] What happened to the [L4-L5] bulbs that aren't installed? [RECORD RESPONSE]

**L7.** In general, how satisfied are you with the quality of the lighting from these bulbs? Please tell me on a 1 to 5 scale, where 1 is not at all satisfied, 3 is moderately satisfied, and 5 is very satisfied.

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**L8.** [IF L6>1 AND L7<3] Was your dissatisfaction with the lighting quality a reason why some of the bulbs are not installed?

1 Yes
2 No
D Don't know

**L9.** If the program were not available, what would you have replaced these light bulbs with when they burned out? Would you have…

1 Replaced the bulbs with ones that were similar to what you had
2 Replaced the bulbs with more efficient light bulbs
3 Not have replaced the bulbs at all
4 Something else? [RECORD]

**L10.** Since the program, has your company purchased other lighting for your building outside of the program?

1 Yes
2 No [SKIP TO L13]
D Don't know [SKIP TO L13]

**L11.** Was the lighting you purchased more efficient, the same efficiency, or less efficient than the lighting you would have purchased before this program?

1 More efficient
2 Same efficiency
3 Less efficient
4 Other [RECORD]
D Don't know

**L12.** How influential was your experience with the program in your decision to purchase lighting that was high-efficiency? Very influential, somewhat influential, or not at all influential?

1 Very influential
2 Somewhat influential
3 Not at all influential
D Don't know

**L13.** How has your organization benefited from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Received new lighting
2 Learned how to change energy using behaviors / learned how to save energy
3 Directed us to other programs
4 Saved energy
5 Saved money on energy bills
6 Other (specify)
7 No benefits
8 Don't know

## Energy Audit/Technical Assistance

ASK OF PARTICIPANTS WHO RECEIVED AN ENERGY AUDIT OR TECHNICAL ASSISTANCE, INCLUDING TUNE-UP PARTICIPANTS

**EA1.** Our records indicate that [AGENCY/PARTNERSHIP] came to your organization to CONDUCT AN ENERGY AUDIT and provide suggestions to save energy. Is this correct?

[Press 1 to continue]

**EA2.** How did you hear about the [PROGRAM NAME] program?

1 Another program (which program?)
2 Local government partnership activities
3 Water utility bill stuffing
4 Electric / gas utility bill stuffing
5 Water utility mailing
6 Electric / gas utility mailing
7 Community Sweeps
8 Community displays
9 Energy fairs
10 Friends/neighbors/relatives
11 Newspaper article
12 Other [RECORD]

**EA3.** What information or service did you get as part of the visit? [DO NOT READ; INDICATE ALL THAT APPLY]

1 How to save energy in building (general brochures and discussions)
2 Measures company should install to save energy
3 Contractors to use to design an efficiency project
4 Demand response program options
5 Referrals to other programs / rebates (Which programs did you receive referrals to?)
6 Installation of measures (What measures?)
7 Other [RECORD RESPONSE]
D Don't know

**EA4.** How useful was the information you received from the visit? Please rate on a scale from1 to 5, where 1 is not at all useful and 5 is very useful.

1 Not at all useful
2
3
4
5 Very useful
D Don't Know

**EA5.** [IF EA4<4] How could information have been more useful for you? [RECORD RESPONSE]

**EA6.** Did the program make suggestions on equipment you should install?

1 Yes
2 No [SKIP TO EA12]
D Don't know [SKIP TO EA12]

**EA7.** What suggestions did the contractor make?

1 Install efficient lighting
2 Install / retrofit HVAC
3 Remove inefficient equipment (What equipment?)
4 Other (specify)

**EA8.** Will you act on [any of these suggestions/this suggestion]?

1 Yes
2 No [SKIP TO EA11]
D Don't know [SKIP TO EA11]

**EA9.** [IF MORE THAN ONE] Which ones? [RECORD RESPONSE]

**EA10.** Are there any suggestions the contractor made that your organization will not do?

1 Yes
2 No [SKIP TO EA12]
D Don't know [SKIP TO EA12]

**EA11.** Why won't you follow through with those suggestions? [RECORD RESPONSE]

**EA12.** How has your organization benefited from participating in this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Learned where building needed improvements
2 Directed organizations to other programs / resources (**What programs/resources?**)
3 Direct installed measures
4 Saved energy
5 Saved money on energy bills
6 Other (specify)
7 No benefits
8 Don't know

## Other Program Awareness

**M1.** As part of your participation in [this program/these programs], did you receive materials or application forms for other utility programs?

1 Yes
2 No
D DK

**M2.** [IF YES ABOVE] Did you sign up for other utility programs?

1 Yes
2 No
D DK

**M3.** [IF YES ABOVE] Which programs? [RECORD PROGRAM(S)]

**M4**. Do you know of other organizations in your area where you could receive these types of services?

1 Yes [What organization:_____]
2 No

## General Partnership Questions

*IF NONPARTICIPANT, SKIP TO NEXT SECTION.*

**GP1.** On a scale from 1 to 5, where 1 is not at all satisfied and 5 is very satisfied, what would you rate your overall satisfaction with your involvement in the [PROGRAM NAME/WORKSHOP]?

1 Not at all satisfied
2
3
4
5 Very satisfied
D Don't Know

**GP1a.** How could you have been more satisfied with the program? [RECORD RESPONSE]

**GP2.** Who sponsored this program? [READ IF NECESSARY. INDICATE ALL THAT APPLY] [NOTE SPECIFIC NAME IF OFFERED]

1 Electric utility
2 Gas utility
3 Water utility
4 Environmental or non-profit group
5 City or county government
6 Other_____
D Don't know

**GP3.** What was most positive about your experience with this program? [RECORD RESPONSE]

**GP4.** What was the least effective part of your experience with this program? [RECORD RESPONSE]

**GP5.** Do you feel you are more satisfied, less satisfied, or have the same level of satisfaction with [LOCAL GOVERNMENT PARTNER] as a result of participating in the program?

1 More satisfied
2 Less satisfied
3 Same satisfaction
D Don't know

**GP6.** Do you feel you are more satisfied, less satisfied, or have the same level of satisfaction with [UTILITY] as a result of participating in the program?

1 More satisfied
2 Less satisfied
3 Same satisfaction
D Don't know

**GP7.** Were you more likely, less likely, or just as likely to participate in the program because of the involvement of [local government partner]?

1 More likely (Why do you say that?)
2 Less likely (Why do you say that?)
4 Have no effect

## Partnership Perception Questions

**PD1.** There are various organizations that provide information and services to help you save energy or water, such as local governments, nonprofit groups, and utility companies. From what types of organizations would you prefer to receive this type of information…. [READ; INDICATE ALL THAT APPLY]

1 Local government
2 Nonprofit organization
3 Electric/gas utility
4 Water utility
5 Other organization → Which organization (RECORD)
6 Does not matter
D Don't know

**PD2.** Why is that? [RECORD RESPONSE]

**PD3A.** Do you feel these organizations differ in their ability to provide you with services to help you save energy or water?

1 Yes
2 No [IF PART SKIP TO PD4, IF NONPART SKIP TO O1]
D Don't know [IF PART SKIP TO PD4, IF NONPART SKIP TO O1]

**PD3B** How do you think they differ? [RECORD RESPONSE]

**PD4.** What do you believe is the source of funding for this program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 The [PARTNER NAME]
2 My local government
3 My electric utility
4 My gas utility
5 My water utility
6 Ratepayers
7 Taxes
8 The State of California
9 The federal government
10 Other [RECORD]
D Don't know

## Organizational Questions

My last questions for you are about your organization.

**O1** How many locations does your organization have?

**O2** [IF ABOVE >1] Are decisions to purchase and install equipment made . . . [READ LIST]

1 At the corporate level?
2 At the regional level?
3 At the local level?
4 At the location level?
5 Other (specify)

[IF S1<>1, SKIP TO END]

**O4** What factors into the decision about the level of energy efficiency when purchasing new equipment or during a remodel or new construction? (DO NOT READ; INDICATE ALL THAT APPLY)

1 Rebates available
2 Recommendation of experts
3 Manufacturer warranties
4 Energy savings
5 Being perceived as green company
6 Standard specifications for business
7 Required for business in other regions
8 Efficiency level of equipment available from manufacturers
9 Past experience with equipment brand
10 Building codes
11 Other (specify)

**O5** I would like to understand how the following factors fit into your decision to purchase new energy using equipment. For each please rate on a 1 to 10 scale where 1 is not at all important and 10 is very important. How important is… [READ EACH; ROTATE LIST]

a. The amount of energy the equipment can save
b. The price of the equipment, including installation costs
c. The payback period
d. Company culture or policies
e. Its impact on the environment
f. How well the equipment performs/does the job
g. The recommendation of the distributor
h. The recommendation of others in the same business

**Thank you for your time. Do you have any final comments or questions?**

## C.4 COMMERCIAL NONPARTICIPANT SURVEY

**Partnership Program Nonparticipant Survey**
**Process Evaluation**
**SCE/SCG/PG&E**
**Commercial Survey**

Hello, my name is [interviewer name], and I'm calling on behalf of PROGRAM and your local utility**.**
[IF RESPONDENT NAME GIVEN] May I speak with [named respondent]?

[IF COMPANY NAME ONLY OR IF NAMED RESPONDENT NOT AVAILABLE] May I speak with someone who helps specify, recommend, or approve equipment purchases?

1 Yes [NAMED RESPONDENT] [SKIP TO Intro1]
2 Yes [NOT NAMED RESPONDENT]
3 No [terminate] [SKIP TO DISPOSE]

**NCNAME**
New respondents name? [RECORD]

**NCPHONE**
New respondents phone number? [RECORD]

**Intro1**
I'm with PA Consulting Group, an independent research firm. We are conducting a study about some of the services available in California to commercial customers. I'd just like to ask about these types of services and whether you've taken advantage of them. Your responses will be kept confidential and your name will not be revealed to anyone.

**Intro 2**
(**Why are you conducting this study**: Studies like this help the utility and its partners better understand customers' awareness of and interest in energy programs and services.

(**Timing**: This survey should take less than 10 minutes of your time. Is this a good time for us to speak with you? *IF NOT, SET UP CALL BACK APPOINTMENT OR OFFER TO LET THEM CALL US BACK AT 1-800-454-5070*)

(**Sales concern**: I am not selling anything; we would simply like to learn about your awareness of services that could save energy in your business, and your opinions about these services. Your responses will be kept confidential.

*(NOTE: For all questions, "don't know" and "refused" will be coded if offered as a response.)*

DK=DON'T KNOW
R=REFUSED

**S1.** First, could you tell me if you help specify, recommend, or approve equipment purchases for your facilities?

1 Yes [SKIP TO S2]
2 No

**S1a.** May I speak with someone who does?

1 Yes [RECORD OTHER CONTACT INFO] [SKIP TO NCNAME]
2 No [terminate]

**S2.** What is your organization's primary building activity? Is it… (READ)

1 Education
2 Food sales
3 Food service
4 Health care
5 Lodging
6 Retail
7 Office
8 Public use building
9 Something else?

**S3.** What is your title? (DON'T READ)

1 Owner/operator
2 President
3 Manager
4 Purchasing agent
5 Other (RECORD)

## Business Location Confirmation

**P9.** I would like to confirm that your business is located in [READ NAME OF CITY]. Is this correct?

1 Yes
2 No [GET NAME OF CITY]

## Nonparticipant Program Questions

**NP1.** I'd like to ask you a few questions about [PROGRAM] [INSERT PROGRAM DESCRIPTION]. Before today, have you heard of this program?

1 Yes
2 No [SKIP TO NP3]
D Don't know [SKIP TO NP3]

**NP2** Have you participated in this program?

1 Yes
2 No [SKIP TO NP3]
D Don't know [SKIP TO NP3]

**NP2a** When did you participate?

[RECORD RESPONSE]

**NP2b** What did you do as part of your participation in the program?

[RECORD RESPONSE]
[SKIP TO NP6]

**NP3** Please tell me if you feel you would be very interested, somewhat interested, or not at all interested in receiving services through a program such as the [PROGRAM]

1 Very interested
2 Somewhat interested
3 Not at all interested
D Don't know

**NP4.** [IF REPLIED NOT AT ALL INTERESTED IN NP3] Why wouldn't you be interested in receiving these services? [DO NOT READ; INDICATE ALL THAT APPLY]

1 No reason
2 Building is new
3 Do not need equipment (HVAC/CFLs)
4 Too costly/payback isn't there
5 Don't know what to do
6 Already participated in programs to make building efficient
7 Don't know a reliable contractor
8 I don't care
9 Energy use is not a priority for organization
10 Other (Specify)
11 Don't know

**NP5.** [ASK IF SAID AWARE OF PROGRAM, BUT DID NOT PARTICIPATE] You said you heard of the program, but have not participated. Why haven't you participated in the program? [DO NOT READ; INDICATE ALL THAT APPLY]

1 Do not need services provided by the program
2 Have not gotten around to participating
3 Do not know how to participate
4 Do not want to participate
5 Do not need equipment (HVAC/CFLs)
6 Other [RECORD]
D Don't know

**NP6.** Do you know of other organizations in your area where you could receive these types of services?

1 Yes [What organization]
2 No

## Partnership Perception Questions

**PD1.** There are various organizations that provide information and services to help you save energy or water, such as local governments, nonprofit groups, and utility companies. From what types of organizations would you prefer to receive this type of information…. [READ; INDICATE ALL THAT APPLY]

1 Local government
2 Nonprofit organization
3 Electric/gas utility
4 Water utility
5 Other organization → Which organization (RECORD)
6 Does not matter [SKIP TO PD3A]
7 Don't know [SKIP TO PD3A]

**PD2.** Why would you prefer this organization / these organizations? [RECORD RESPONSE]

**PD3A.** Do you feel these organizations differ in their ability to provide you with services to help you save energy or water?

1 Yes
2 No [SKIP TO O1]
D Don't know [SKIP TO O1]

**PD3B** How do you think they differ? [RECORD RESPONSE]

## Organizational Questions

My last questions for you are about your organization.

**O1** How many locations does your organization have?

**O2** [IF ABOVE >1] Are decisions to purchase and install equipment made . . . [READ LIST]

1 At the corporate level?
2 At the regional level?
3 At the local level?
4 At the location level?
5 Other (specify)

**O4** What factors into the decision about the level of energy efficiency when purchasing new equipment or during a remodel or new construction? (DO NOT READ; INDICATE ALL THAT APPLY)

1 Rebates available
2 Recommendation of experts
3 Manufacturer warranties
4 Energy savings
5 Being perceived as green company
6 Standard specifications for business
7 Required for business in other regions
8 Efficiency level of equipment available from manufacturers
9 Past experience with equipment brand
10 Building codes
11 Other (specify)

**O5** I would like to understand how the following factors fit into your decision to purchase new energy using equipment. For each please rate on a 1 to 10 scale where 1 is not at all important and 10 is very important. How important is… [READ EACH; ROTATE LIST]

a. The amount of energy the equipment can save
b. The price of the equipment, including installation costs
c. The payback period
d. Company culture or policies
e. Its impact on the environment
f. How well the equipment performs/does the job
g. The recommendation of the distributor
h. The recommendation of others in the same business

**Thank you for your time. Do you have any final comments or questions?**

# *APPENDIX D: PROGRAM-SPECIFIC SURVEY METHODOLOGY AND RESPONSE RATES*

Program-specific survey response rates and methodology will be inserted in the final version of this report.

## D.1 RESPONSE RATE TABLES

**Table D-1 Response Rates, Overall**

| | Participant | | Nonparticipant | |
|---|---|---|---|---|
| **Sample Disposition** | **Commercial** | **Residential** | **Commercial** | **Residential** |
| ***Sample Size*** | **918** | **909** | **1968** | **880** |
| Temporarily disconnected | 1 | 23 | 3 | 6 |
| Fax/data line | 13 | 6 | 9 | 6 |
| Number not in service | 39 | 28 | 17 | 13 |
| Disconnected number | 24 | 35 | 20 | 12 |
| Business/Residential number | 9 | 26 | 118 | 19 |
| Ineligible—deceased | 0 | 3 | 6 | 8 |
| ***Adjusted Sample Size*** | ***832*** | ***788*** | ***1795*** | ***816*** |
| Hard Refusal | 56 | 90 | 221 | 113 |
| Soft Refusal[1] | 9 | 25 | 10 | 12 |
| Incompletes (partial interviews) | 10 | 13 | 24 | 20 |
| Unavailable for duration | 8 | 11 | 52 | 4 |
| Incapable/incoherent | 0 | 4 | 4 | 11 |
| Language barrier/non-English | 20 | 60 | 57 | 12 |
| Active | ***417*** | ***278*** | ***1054*** | ***338*** |
| ***Completed Surveys*** | **312** | **307** | **373** | **306** |
| ***Response Rate***[2] | 37.5% | 39.0% | 20.8% | 37.5% |

[1] Attempts were made to convert all soft refusals

[2] Number of completed surveys divided by adjusted sample size

**Table D-2 Response Rates, Residential Participants**

| Sample Disposition | Bakersfield-Kern | Energy Coalition | South Bay | South Coast | Ventura County |
|---|---|---|---|---|---|
| ***Sample Size*** | **119** | **272** | **256** | **252** | **10** |
| Temporarily disconnected | 0 | 9 | 0 | 3 | 0 |
| Fax/data line | 0 | 1 | 3 | 1 | 0 |
| Number not in service | 2 | 8 | 3 | 5 | 0 |
| Disconnected number | 7 | 8 | 7 | 2 | 0 |
| Business/Residential number | 0 | 1 | 6 | 18 | 1 |
| Ineligible—deceased | 1 | 0 | 2 | 0 | 0 |
| ***Adjusted Sample Size*** | ***109*** | ***245*** | ***235*** | ***223*** | ***9*** |
| Hard Refusal | 12 | 20 | 18 | 32 | 0 |
| Soft Refusal[1] | 2 | 3 | 14 | 6 | 0 |
| Incompletes (partial interviews) | 3 | 2 | 4 | 2 | 0 |
| Unavailable for duration | 2 | 1 | 4 | 2 | 1 |
| Incapable/incoherent | 0 | 1 | 1 | 0 | 0 |
| Language barrier/non-English | 10 | 14 | 7 | 1 | 0 |
| Active | ***32*** | ***132*** | ***109*** | ***106*** | ***2*** |
| ***Completed Surveys*** | **48** | **72** | **78** | **74** | **6** |
| ***Response Rate***[2] | 44.0% | 29.4% | 33.2% | 33.2% | 66.7% |

[1] Attempts were made to convert all soft refusals

[2] Number of completed surveys divided by adjusted sample size

**Table D-3 Response Rates, Residential Nonparticipants**

| Sample Disposition | Energy Coalition | Bakersfield-Kern | South Bay | South Coast |
|---|---|---|---|---|
| ***Sample Size*** | **220** | **200** | **240** | **220** |
| Temporarily disconnected | 1 | 4 | 1 | 0 |
| Fax/data line | 4 | 1 | 1 | 0 |
| Number not in service | 0 | 4 | 3 | 6 |
| Disconnected number | 3 | 4 | 5 | 0 |
| Business/Residential number | 6 | 5 | 4 | 4 |
| Ineligible—deceased | 0 | 3 | 2 | 3 |
| ***Adjusted Sample Size*** | ***206*** | ***179*** | ***224*** | ***207*** |
| Hard Refusal | 38 | 21 | 28 | 26 |
| Soft Refusal[1] | 3 | 0 | 5 | 4 |
| Incompletes (partial interviews) | 2 | 4 | 8 | 6 |
| Unavailable for duration | 2 | 0 | 1 | 1 |
| Incapable/incoherent | 0 | 4 | 3 | 4 |
| Language barrier/non-English | 2 | 1 | 7 | 2 |
| Active | ***82*** | ***72*** | ***97*** | ***87*** |
| ***Completed Surveys*** | **77** | **77** | **75** | **77** |
| ***Response Rate[2]*** | 37.4% | 43.0% | 33.5% | 37.2% |

[1] Attempts were made to convert all soft refusals

[2] Number of completed surveys divided by adjusted sample size

**Table D-4 Response Rates, Commercial Participants**

| Sample Disposition | Bakersfield-Kern | Energy Coalition | San Gabriel | South Bay | Ventura County |
|---|---|---|---|---|---|
| ***Sample Size*** | **232** | **172** | **59** | **268** | **187** |
| Temporarily disconnected | 0 | 1 | 0 | 0 | 0 |
| Fax/data line | 0 | 6 | 1 | 5 | 1 |
| Number not in service | 0 | 0 | 0 | 0 | 0 |
| Disconnected number | 11 | 1 | 4 | 6 | 2 |
| Business/Residential number | 2 | 1 | 1 | 4 | 1 |
| Ineligible—deceased | 0 | 0 | 0 | 0 | 0 |
| ***Adjusted Sample Size*** | ***219*** | ***163*** | ***53*** | ***253*** | ***183*** |
| Hard Refusal | 9 | 15 | 0 | 22 | 10 |
| Soft Refusal[1] | 1 | 4 | 0 | 2 | 2 |
| Incompletes (partial interviews) | 3 | 6 | 0 | 0 | 1 |
| Unavailable for duration | 1 | 1 | 1 | 2 | 3 |
| Incapable/incoherent | 0 | 0 | 0 | 0 | 0 |
| Language barrier/non-English | 7 | 13 | 0 | 0 | 0 |
| Active | ***127*** | ***62*** | ***29*** | ***148*** | ***90*** |
| ***Completed Surveys*** | **71** | **62** | **23** | **79** | **77** |
| ***Response Rate[2]*** | 32.4% | 38.0% | 43.4% | 31.2% | 42.1% |

[1] Attempts were made to convert all soft refusals

[2] Number of completed surveys divided by adjusted sample size

**Table D-5 Response Rates, Commercial Nonparticipants**

| Sample Disposition | Energy Coalition | Bakersfield-Kern | San Gabriel | South Bay | Ventura County |
|---|---|---|---|---|---|
| ***Sample Size*** | **386** | **423** | **368** | **446** | **345** |
| Temporarily disconnected | 0 | 0 | 0 | 3 | 0 |
| Fax/data line | 0 | 5 | 4 | 0 | 0 |
| Number not in service | 4 | 4 | 3 | 6 | 0 |
| Disconnected number | 3 | 9 | 2 | 6 | 0 |
| Business/Residential number | 11 | 60 | 12 | 23 | 12 |
| Ineligible—deceased | 1 | 3 | 2 | 0 | 0 |
| ***Adjusted Sample Size*** | ***367*** | ***342*** | ***345*** | ***408*** | ***333*** |
| Hard Refusal | 37 | 43 | 49 | 60 | 32 |
| Soft Refusal[1] | 1 | 0 | 0 | 4 | 5 |
| Incompletes (partial interviews) | 5 | 5 | 5 | 5 | 4 |
| Unavailable for duration | 14 | 12 | 9 | 12 | 5 |
| Incapable/incoherent | 2 | 0 | 0 | 1 | 1 |
| Language barrier/non-English | 2 | 4 | 21 | 21 | 9 |
| Active | ***231*** | ***204*** | ***186*** | ***235*** | ***198*** |
| ***Completed Surveys*** | **75** | **74** | **75** | **70** | **79** |
| ***Response Rate***[2] | 20.4% | 21.6% | 21.7% | 17.2% | 23.7% |

[1] Attempts were made to convert all soft refusals

[2] Number of completed surveys divided by adjusted sample size