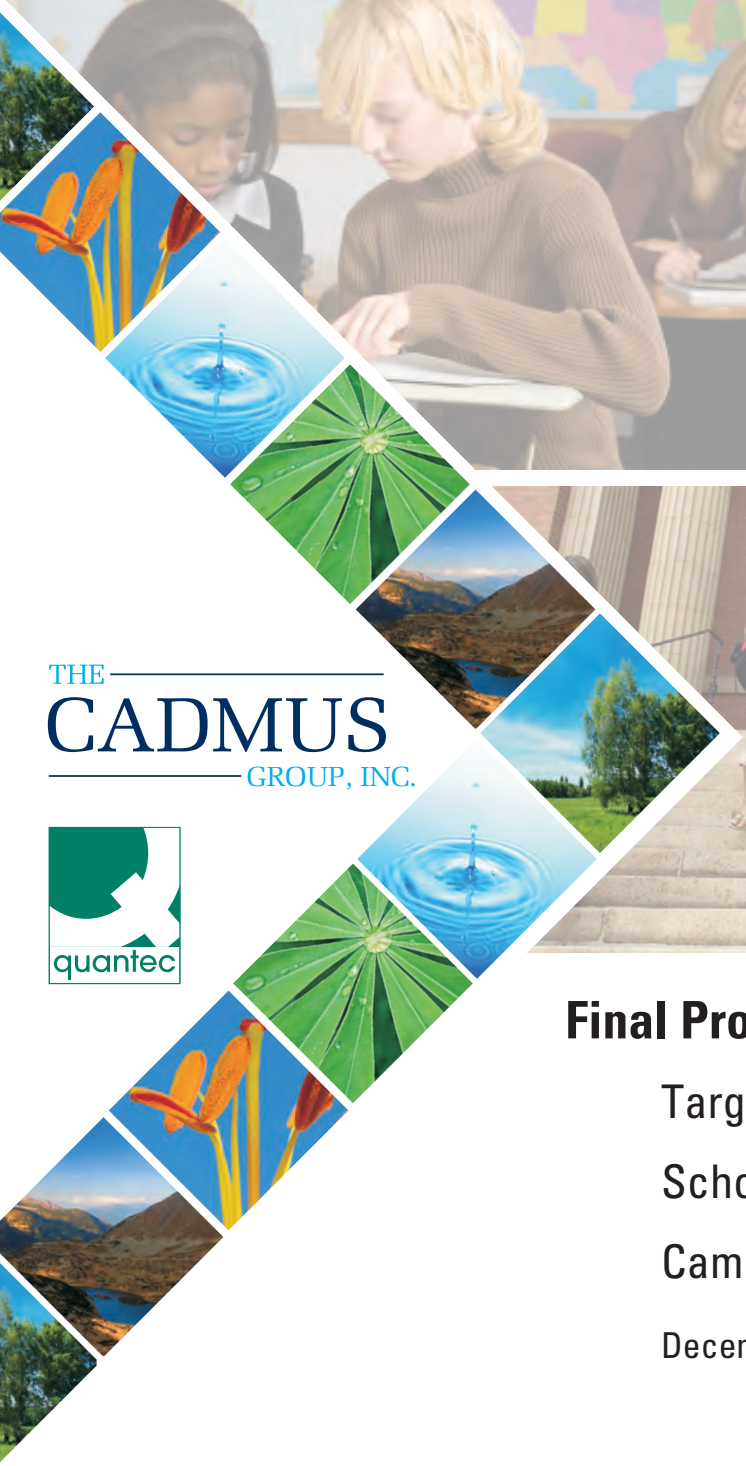

THE CADMUS GROUP, INC.

quantec

Final Process Evaluation Report:

Target Market Schools & Colleges Program

School Energy Efficiency Program

Campus Housing Energy Efficiency Program

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1. Executive Summary

This report documents the process evaluation conducted by the Cadmus Group (formerly Quantec, LLC) of three energy-efficiency programs targeted at Pacific Gas & Electric Company's (PG&E's) Schools and Colleges market. The evaluated programs include the Target Market Schools and Colleges program (TMS&CP), implemented by PG&E, and the School Energy Efficiency program (SEE) and Campus Housing Efficiency Solutions (CHES) program, implemented by Resource Solutions Group. The Government Partnership programs which provide energy efficiency services to existing facilities in the University of California and California State University systems, and the California community colleges, were not included in this report.

The primary study objectives were to document how the programs are actually implemented, assess customer (participant) satisfaction and identify needed improvements. To achieve these objectives, Cadmus conducted a number of data collection activities for each program, including staff interviews, a review of program documentation and a survey of program participants and nonparticipants[1].

The majority of the data originally was gathered from late 2007 to May 2008. Based on these data, Cadmus completed a draft report in September 2008 and submitted this report to PG&E for review and comment. To accurately reflect several changes to various aspects of program implementation and administration, PG&E requested that Cadmus conduct another set of in-person staff interviews in October 2008. Where appropriate, Cadmus has augmented and/or revised the findings or conclusions based on the data collected.

The key conclusions and recommendations emerging from the evaluation include the following:

1. **Conclusion: Customers of all three programs report high levels of satisfaction with their participation experience and program staff.** Feedback from the majority of program participants indicates high levels of satisfaction with their participation experience (in general) and program staff (in particular). While most were satisfied with the application process, participants recognize opportunities to streamline the process.

   Recommendation: Continue implementation of process improvement project and collect periodic feedback from internal and external stakeholders (participants). At the end of 2007, PG&E initiated a comprehensive process improvement effort to address some of the issues described in this report. This effort is exemplary and should be continued.

2. **Conclusion: Lack of effective coordination and communication on behalf of PG&E during the program design and early implementation stages resulted in significant implementation problems in all three programs.** Although the specific problems varied depending on the program, the early implementation stages of all three programs appear to have been negatively impacted by lack of coordination and communications on

[1] Nonparticipants are from facilities that decline to participate in TMS&CP, SEE or CHES.

a range of issues, including program design, consistency of incentives and assignment of service territories.

***Recommendation*:** Program design theory and goals should be communicated to staff at the beginning of the program cycle and reinforced throughout the program offering.

3. **Conclusion: Nonparticipants report installing energy-efficient equipment on their own.** The available data for nonparticipants suggest high levels of measure installation rates outside of the programs. Anecdotal evidence from program staff further supports this finding. While the reasons are not entirely clear, lack of close contact with PG&E, complexity of application process and insufficient incentive levels appear to be contributing factors. However, this conclusion, together with findings that a majority of participants had been considering upgrades prior to participation and had installed most of the measures without assistance within the past 2 years, call into question the underlying structure of these programs.

   Recommendation: PG&E should undertake a systematic review of program planning assumptions in conjunction with a baseline study of existing energy management practices in the Schools and Colleges sector.

4. **Conclusion: Coordination regarding marketing strategies and leads, while improved, remains insufficient in certain areas.** In an effort to support a common goal—identifying participants and implementing energy-efficiency projects, in October 2008 PG&E held a series of "sales storm" meetings (since renamed "strategic sales meetings") to enhance communication between the Target Market staff and the service and sales (S&S) staff regarding the rollout of target market-specific marketing campaigns. Despite strong initial attendance at these meetings, participation, especially among S&S staff, has decreased over time due to a perceived lack of dialog and discussion. Despite high regard for the quality of the sales campaigns, feedback from S&S staff indicates lack of sufficient coordination regarding timing and content of the campaigns, as well as priorities vis-à-vis other target markets. Given that, S&S representatives set their own priorities based on their perceptions of need, timing and savings priorities, regardless of the information promoted by the Target Market managers. Better coordination and recognition that marketing programs need to be calibrated to real market conditions would help these programs adapt and would ensure stronger acceptance by the sales force and thus an increase in sales efficiency.

   Recommendation: PG&E should ensure that the strategic sales meetings provide S&S staff with sufficient opportunities to review and comment on planned marketing efforts prior to launching them.

5. **Conclusion: Program data tracking is not sufficient for systematic assessment of program progress.** As part of the evaluation process, Cadmus examined various types of program data for all three programs. With regards to participant and measure data, Cadmus found the available data incomplete, lacking necessary details (especially regarding measure-level information) or missing all together. Cadmus further found the

available program documentation to be significantly more comprehensive and complete for the SEE and CHES programs.

Recommendation: PG&E's tracking database for these programs should be reviewed and enhanced where necessary.

2. Introduction

In June 2007, Pacific Gas & Electric Company (PG&E) awarded the Cadmus Group, Inc., (formerly Quantec, LLC) a contract to conduct a process evaluation of three programs under its umbrella Schools and Colleges (SC) program:

1. PG&E Target Market Schools & Colleges program (TMS&CP),
2. School Energy Efficiency program (SEE),
3. Campus Housing Efficiency Services (CHES) program.

While the TMS&CP—referred to as the "Core Program"—is implemented by PG&E, the latter two (referred to as third-party (or 3P) programs) are implemented by Resource Solutions Group (RSG). Following an initial administrative hold on the project, Cadmus completed the majority of its work between November 2007 and October 2008. This report documents the process evaluation and includes an overview of evaluated programs, evaluation methodology, key findings and Cadmus' conclusions and recommendations.

Program Descriptions

Target Market School Program

PG&E's 2006-2008 TMS&CP focuses on identifying cost-effective retrofit and new construction measures among K-12 schools, private colleges, and trade and professional schools, and assisting customers to install program measures. The program's primary offerings include audits, strategic services (benchmarking, energy management plans) and financial incentives for new construction and retrofit projects. Depending on customer needs, program staff may coordinate with staff from other PG&E departments (primarily account representatives) and/or other regional energy organizations (i.e., the California Energy Commission) to offer customers detailed information on cost-effective measure choices, incentives and low-interest loans.

School Energy Efficiency Program

The SEE program—implemented by RSG—focuses on identifying and providing incentives for viable energy-efficient retrofit measures in qualifying K-12 school facilities and private colleges/universities. In addition to informing participants about the availability of PG&E's standard incentives (based on deemed and calculated savings), SEE offers early commitment and early completion cash bonuses, as well as information on low-interest loans. The program offers a variety of implementation services ranging from bid support services, to complete project management assistance. RSG is authorized to offer the SEE program in 19 counties.

Campus Housing Efficiency Services Program

Generally similar in its design to the SEE program, the CHES program is designed to serve campus housing and dormitory facilities. RSG offers this program to all eligible customers throughout PG&E's entire service territory. The CHES program offers participants supplemental cash incentives (i.e., beyond PG&E's standard deemed and calculated incentives) as well as implementation services intended to overcome the first cost, information and search cost barriers. The program is limited to retrofit projects. Table 1 provides an overview of the three programs.

Table 1: Overview of Evaluated Programs

Program Name	Targeted Subsegment	Vintage	Services Provided	Incentives / Bonus	Service Area Coverage
TMS&CP	K-12 Schools Private Colleges Trade and Professional Schools UC/SU/CCC	Retrofit New Construction UC/SU/CCC (Retrofit only)	Audits Workshops Strategic Services (Benchmarking, Energy Management Plan) Application Management Retrocommissioning Application Support	Deemed Rebates Calculated Incentives Information/Coordination on Low Interest Loans	Assigned portion of PG&E territory for retrofit projects Entire PG&E service territory for new construction projects
SEE	K-12 Schools District Facilities Private Colleges and Universities (Non-UC/CSU)	Retrofit	Audits Installation Support Services Application Management	Deemed Rebates Calculated Incentives Early Commitment & Completion Bonus Information/Coordination on Low Interest Loans	Assigned portion of PG&E territory
CHES	Campus Housing & Dorms Off-Campus Student Housing	Retrofit	Audits Installation Support Services Assistance with Student-focused Educational Campaigns CFL Application Management	Deemed Rebates Calculated Incentives Early Commitment & Completion Bonus Information/Coordination on Low Interest Loans	Entire PG&E service area

Program Goals

PG&E's Schools and Colleges target market sector includes over 12,000 accounts that consume more than 2,300 GWh of electricity and 110 million therms (Mtherms) of natural gas per year, based on 2007 data. The customers included in this target market can be broken into five sub-segments: K-12 schools, colleges and universities, community colleges, trade and professional schools, and other schools. Table 2 provides an overview of the relative size of each sub-segment in terms of energy use and number of accounts, based on 2007 billing data.

Table 2: Total Number of Accounts and Total Annual Consumption of Electricity and Gas for PG&E Schools & Colleges Sector, 2007

	GWh	Percent	Mtherms	Percent	Number of Accounts	Percent
Subsegment	Total	%	Total	%	Total	%
K-12	1,389	60%	48	44%	6,738	56%
Colleges/Universities	580	25%	45	41%	758	6%
Community Colleges	226	10%	14	12%	221	2%
Trade & Professional Schools	66	3%	2	2%	2,176	18%
Other	51	2%	1	1%	2,156	18%
Total	2,310[2]	100%	111[3]	100%	12,049	100%

As outlined in Table 1, each of the three programs evaluated in this report targets a specific sub-segment, which in some cases is further delineated by ownership and/or facility type (e.g., public vs. private colleges/universities and campus housing). To meet PG&E's sector-wide savings goals for the 2006–2008 program period as well as to measure the efficacy of each program, PG&E assigned each program specific goals for energy savings (kWh and ktherms) and demand reduction (summer on-peak). Table 3 provides an overview of goals by program published in the respective program implementation plans (PIPs) filed with the California Public Utility Commission (CPUC) in 2006.

Table 3: Savings Goals

Program	Electric (GWh)	Gas (ktherms)	Demand (MW)
TMS&CP (PG&E)	33.71	34.7	4.07
SEE (RSG)	4.92	39.2	0.66
CHES (RSG)	3.01	82.2	0.47
Total	41.64	156.2	5.20

Evaluation Objectives

Based on the objectives put forth in the initial RFP, this evaluation was designed, on a program-by-program basis, to achieve the following five objectives:

[2] Includes rounding error.

[3] Includes rounding error.

- Document the information and activity flow between the program implementer and the market actors.

- Compare the current strategies and activities to the theory and logic models for each program; explore discrepancies; and update the theory and logic models where appropriate.

- Assess satisfaction among program participants with key interventions.

- Determine areas where improvements to program implementation can lead to more cost-effective energy savings.

- Document the program histories.

Evaluation Methodology

The ultimate goals of a process evaluation are to assess the quality and effectiveness of the program and to make recommendations for program improvement. This involves assessing how closely a program's actual implementation tracks the program theory and logic, as well as identifying the strengths and weaknesses of the program's actual implementation in the field.

While Cadmus was provided with a draft sector logic model, no program-level logic models existed for the three programs reviewed here. Thus, rather than comparing the actual implementation processes to the processes conceptualized in the program theories, this evaluation effort focused on developing program-specific logic models, which are included in this report. The results of this study will therefore provide a basis for future process evaluations.

The evaluation data presented in this report are based primarily on a detailed review of available program materials, in-depth interviews with program staff and a limited number of surveys with participants and nonparticipants.

Report Overview

The report is organized in seven sections. Following the introduction is an overview of market barriers existing in markets targeted by the three evaluated programs. Section 4 presents the evaluation approach. Sections 5 and 6 present detailed descriptions of evaluated programs, including logic models and process flow diagrams. The process evaluation findings are presented in Section 7. The conclusions and recommendations are presented in the Executive Summary.

3. Market Barriers

As illustrated in Table 1, the three evaluated programs primarily target the K-12 and college/university subsectors, and, to a lesser degree, trade and professional schools. In proportion to the total energy use, PG&E expects the K-12 subsegment to yield the majority of savings in the schools and colleges sector (Table 3). This section presents an overview of market barriers to the adoption of energy efficiency in K-12 schools primarily and the other targeted subsectors secondarily.

Barriers generally fall into one of four categories:

1. Financial resource barriers
2. Administrative process barriers
3. Operational barriers
4. Informational barriers

Financial Resource Barriers

The number of issues impacting the availability of funding for educational institutions varies widely and depends on an institution's type and ownership status, as well as on local priorities and public opinions. Consequently, a lack of financial resources for any given institution will translate into a unique set of constraints, assessment of competing priorities, high up-front costs and/or an aversion to long-term financing. Each of these is described below.

Lack of Resources

Ever-tightening school budgets constrain K-12 school and higher education decision-makers' choices about what to fund. In many cases, funding is so constrained that monies are available for only the most vital scholastic functions. As a result, all nonessential expenditures and projects, including investments in energy efficiency, are either dismissed or deferred indefinitely.

In many school districts, revenues, including energy-efficiency rebates, are supplemented by contributions from the general fund. In recent years, however, these General Fund contributions have been severely reduced.

Competing Priorities

Provision of educational services is staff-intensive. The majority of school budget funds is therefore allocated to salaries and benefits for teachers and support staff. According to the California Energy Commission (CEC), California schools spend $700 million a year — about 3 percent of their total budget — on energy. The CEC estimates that schools could reduce their energy use by about a third, thus saving 1 percent of their overall budget. However, given

competing priorities, the relatively small financial savings associated with energy-efficiency improvements tends to deprioritize energy-efficient measures for local decision-makers.

High Up-Front Costs

The higher initial cost of energy-efficient measures can bring about resistance at budgetary hearings, since some of the expenditures might be classified as capital improvements which are not eligible operational expenses. The purchase of a new HVAC system, for example, might be considered a capital improvement, and its purchase would therefore not be paid out of the school's yearly operational budget. An examination of line item budget allocations for California school energy-efficiency investments shows that the state has earmarked energy-efficiency improvements for schools during the past decade – mostly associated with new construction, but also to a lesser extent for retrofitted measures. However, in recent years these dedicated energy-efficiency funding sources have been dramatically scaled back. Given the targeted underwriting of these measures in the past, it is likely that funding for expensive energy-efficiency measures will not be included in the school's annual operating budget.

Aversion to Long-Term Financing

The availability of resources to finance energy-efficiency projects varies greatly by district and school. The majority of schools favor using a combination of their deferred maintenance budgets and General Fund contributions. However, steep budget cuts have resulted in increased resource competition within schools. Maintenance projects often lose priority to maintaining teacher staffing levels or program offerings. Large districts have the option of bond financing. This process, however, is inherently lengthy and uncertain, as it depends on voter approval. The CEC offers low-interest loan programs that schools can use to finance energy-efficiency projects. However, given the duration of the loans (typically 15 years) as well as a general disapproval of loan financing by many school boards, these loans are rarely used.

Split Incentives (Specific to Campus Housing and Trade/Professional Schools)

In addition to maintaining on-campus housing facilities, many colleges and universities contract with private companies to offer off-campus housing, usually multifamily housing apartments that are owned and operated by private entities. In many cases, owners of the off-campus housing are not interested in making the energy-efficiency investments since their renters, who pay their own electric bills, would accrue the benefits of these investments without incurring the costs. The same concept applies to trade and professional schools, which frequently do not own their facilities but rent them.

Administrative Process Barriers

Multiple Decision-Making Levels

Multiple layers of decision-making exist between schools, district, county, state education and construction agencies, making it very difficult to champion energy-efficiency initiatives through this complex process.

Legislative Requirements

The principal funding vehicle for schools, Senate Bill 50, allocates state funds on a first-come, first-served basis. This dynamic results in a rush to apply for funding rather than the preparation of in-depth proposals that analyze the longer-term impacts of investments. Since the data for return on investment can be difficult and time-consuming to obtain, reasoned financial proposals end up so far back in the queue that funding is totally dispersed before these proposals are considered.

Annual Budget Cycle

Due to the nature of school funding, it is impossible to benefit from savings derived from earlier investments. Each fiscal cycle awards an annual budget that ignores any previously accrued efficiencies. Because energy-efficiency benefits cannot be easily integrated into the yearly budget approach, proponents of energy-efficiency investments find it difficult to argue that these investments have a positive return on investment within 1 year. Cyclical funding forces decision-makers to favor consideration of initial costs over lifecycle costing.

Mismatch in Sources and Uses of Funds

In most public institutions, all revenues are first deposited into an operating fund. Expenditure accounts such as those for facilities/maintenance are funded from the general or operating fund based on priorities and perceived need. Specifically, this arrangement does not allow for energy-efficiency rebates and/or incentive payments to be credited to the facility/maintenance budget. This mismatch between the sources of funds and the crediting of related incentive revenues reduces staff's motivation to apply for incentives.

Operational Barriers

Lack of Technical Expertise

Lack of technical expertise among maintenance and administrative staff becomes a barrier to the introduction of effective energy conservation programs and efficient new technologies. This is especially true when budgetary adoption depends on a compelling representation of benefits by a champion with a solid understanding of the technical and long-term financial advantages of the proposed systems. Such technical expertise is often lacking at the local facility level.

Moreover, calculating projected benefits is not a trivial matter, for it requires using sophisticated analysis and knowledge of energy accounting methodologies. Finding champions that combine technical expertise, proficiency in energy-related economic forecasting, the ability to navigate the intricacies of the educational budget process, and the capability to effectively communicate all of this information to decision-makers represents a significant hurdle.

High Staff Turnover

High employee turnover is common in the academic community, especially in jobs such as plant and facilities management, which mirror similar responsibilities in the higher-paying private sector. This turnover reduces "institutional memory" about the benefits of prior investments and undermines the commitment toward structuring future savings that might accrue after a manager's departure. It is therefore not surprising that staff turnover in school administration and facility staff hampers the implementation of existing projects. Energy-efficiency projects then require repeated and ongoing education of staff regarding the importance and benefits of investing in energy efficiency in schools.

Risk Adversity

Many energy-efficiency programs involve technologies unfamiliar to facilities and administrative staff. Since failure of expensive and "cutting edge" energy-efficiency equipment would reflect poorly on local school administrators and school boards, they are their reticent to authorize its implementation. This "late-adopter" characteristic compounds the difficulty of deploying technology-dependent, energy-efficiency programs in the Schools and Colleges sector.

Timing Issues

Systems upgrades in schools and campus facilities must typically be completed during non-operating times, such as break times, holidays and night hours. As more and more schools migrate to operating year-round or renting their facilities out for other purposes during down-times (e.g., conferences, camps, etc.) the windows of opportunities to make system upgrades are shrinking. In addition, making system upgrades on holidays or during the night typically requires paying a premium to contractors. Lastly, given the limited timeframe for making upgrades, timely and accurate planning to be ready for implementation is critical. This can be a challenge, as planning and scheduling upgrades require collaboration of school and district administrative staff, contractors and utility staff.

Informational Barriers

Lack of Information

Aside from the aforementioned lack of technical expertise among school administrators, a scarcity of programs providing information about energy- and cost-reducing equipment and

O&M practices to administrators and budget decision-makers compounds the reluctance to invest in these measures.

Lack of Understanding of Nonenergy Benefits

Administrators and faculty have a very low awareness of potential nonenergy benefits related to efficient climate management in the academic setting. It has been frequently noted that decision-makers assume that the ambient conditions of the teaching environment will not be adverse to the educational objectives. But with heating and cooling equipment that continues to decline in relative economic efficiency (given rising energy costs) it will become increasingly difficult to produce these favorable ambient conditions consistently and across all manner of educational settings.

4. Evaluation Approach

A process evaluation consists of quantitative and qualitative assessments on the strengths and weaknesses of program components as implemented in the field. Process evaluation methods traditionally include surveys, documentation of processes, participation in activities, and qualitative analyses of program structure, record keeping, forms and outreach. Ultimately, process evaluation seeks to assess the quality and effectiveness of the program and to provide recommendations for program improvements.

To address the evaluation objectives as well as other standard process evaluation elements, Cadmus undertook the following tasks:

1. Reviewed all relevant documents provided by PG&E and RSG.
2. Completed initial interviews with program staff.
3. Developed draft program-level logic models and process flow diagrams.
4. Completed follow-up interviews and/or coordinated with program staff to review draft logic models and process flow diagrams; incorporated suggested revisions, and prepared final logic models and process flow diagrams.
5. Surveyed program participants and nonparticipants.
6. Developed draft and final report on evaluation findings and recommendations.

Following are descriptions of each of these key evaluation elements.

Document Review

This task's primary objective was to familiarize Cadmus staff with the backgrounds, operations and achievements of each program based on available documentation prior to conducting staff interviews. Working closely with respective program staff, Cadmus identified a list of key program documents for review. These included program design documents, marketing materials, annual and progress reports, and other internal data-tracking documents.

Staff Interviews

Following a detailed review of the program documents, our team conducted in-depth interviews with staff from the TMS&CP and the two third-party (3P) programs. We targeted our interviews to include staff directly involved in each program's design/development, administration, implementation and decision-making processes. The primary purpose of these interviews was to improve the evaluation team's understanding of each program and to help guide the development of logic models, process flow diagrams, and instruments for the participant and nonparticipant surveys.

Cadmus completed an initial set of staff interviews with TMS&CP staff in November 2007. Since then, the program has experienced staff turnover and other managerial and organizational changes. To capture these changes and their potential impacts on program implementation, Cadmus re-interviewed three staff members at the end of July 2008. Cadmus conducted a third set of interviews, primarily with program management and service and sales staff in October 2008. Interviews with RSG staff, for both the SEE and CHES programs, were conducted between July and August 2008.

The questions asked during the interviews were tailored to reflect programmatic differences, the interviewee's position (in-field project management vs. upper management) and the vintage of the facilities included in the program (retrofit and/or new construction). However, all interviews focused on a set of common issues and were designed to inform the development of program-specific logic models and flow diagrams, validate and/or update market barriers, and gather general feedback on the process of implementing the programs. Specifically, these topics included the following:

- Current implementation processes and strategies
- Market barriers
- Marketing and outreach activities
- Implementation challenges and lessons learned
- Coordination/communication between PG&E and RSG (where applicable)

Table 4 summarizes the number of staff interviews included in the initial evaluation plan and the number of interviews actually for each program.

Table 4: Summary of Completed Staff Interviews

Program	Targeted Interviews	Completed Interviews		
		November 2007	July/August 2008	October 2008
TMS&CP (PG&E)	6[4]	5	3	6
SEE (RSG)	2	1	4	
CHES (RSG)				
Total	8	6	7	6

Develop Logic Models and Process Flow Diagrams

A well-developed program theory should, in light of known barriers, clearly show expected causal relationships between goals, program activities and resulting effects. Strictly speaking, program theory refers to a textual description. A logic model, in contrast, is a graphical

[4]Completed staff interviews for the Core Program included interviews with program management staff (2), field staff (3), and administrative/technical staff (1).

representation of the program theory that shows how various intervention strategies and activities are linked to each program's intended outcomes and impacts. Typically, the development of a program theory also includes the identification of appropriate program progress and goal attainment metrics (key performance indicators or KPIs) that, when tracked, can be used to assess program effects.[5]

Since no program-specific logic models existed for the three programs being evaluated, the development of these logic models became a central focus of the project. As described above, the draft logic models were developed using program documents and background information, and the draft models were reviewed by program staff before being finalized.

In addition to logic models, we developed program-level process flow diagrams that show the key activities and processes involved in turning program offerings into energy savings.

Participant Surveys

Cadmus designed surveys to collect participants' feedback on the following topics:

- Participation and enrollment processes
- Perceived market barriers
- Interactions with PG&E or third-party staff
- Overall satisfaction
- Energy management processes

Target Market School Program

A total of 24 participants were interviewed to provide feedback on the TMS&CP: 13 with retrofit projects and 11 with new construction projects. To maximize the response rate, Cadmus, in close coordination with PG&E evaluation staff, sent each participant a letter on PG&E letterhead. Mailed approximately 1 to 2 weeks prior to fielding of the surveys, the letter explained the importance of the survey effort and requested the participants' participation. Cadmus fielded the surveys in-house and made at least 10 attempts to contact each potential respondent with each call placed on different days of the week and at different times of day. Cadmus left a maximum of three voice mails per potential respondent.

Table 5 provides an overview of targeted and completed surveys by program.

[5]A more thorough discussion of program theory and logic models can be found in Chapter 4 of the *California Evaluation Framework.*

Table 5: Summary of Participant Surveys

Program	Number of Surveys		
	Sample Frame	Targeted Completes	Completed
TMS&CP (PG&E)			
New Construction	146	9	11
Retrofit	44	31	13
SEE (RSG)	**	5[6]	1
CHES (RSG)	**	5[7]	1
Total	190	50	26

** No detailed participant data available.

Third-Party Programs

Due to the relatively small number of participants in the two 3P programs as well as to the significant overlap with the concurrent program impact evaluations (giving rise to concern about survey fatigue), Cadmus was not granted access to 3P participant data. In an attempt to collect at least some data from participants, Cadmus contacted ADM, the CPUC impact evaluator for the SC sector, to discuss the possibility of conducting joint participant surveys. While all parties were receptive to this potential option, the impact evaluation surveys were not scheduled to be fielded until fall 2008; despite repeated efforts to secure information on these surveys no data was forthcoming in time for this evaluation. In collaborating with this evaluation, RSG agreed to set up an interview with at least one participant for each of the SEE and CHES programs. While no detailed participation data were available, RSG provided Cadmus with self-reported information that indicated that as of July 2008, 40 sites had signed a project implementation agreement for the SEE program. No comparable data were provided for the CHES program.

Nonparticipant Surveys

Cadmus designed the nonparticipant surveys to gather feedback on the following topics:

- Understanding of energy efficiency
- Awareness of PG&E program offerings
- Barriers to participation
- Barriers to installation of efficient equipment

Sample Design

Due to RSG's request and PG&E's direction not to pursue participant surveys for the two 3P programs for this process evaluation, Cadmus could not develop a comprehensive list of program participants nor could we develop a list of nonparticipants. Therefore, only a sample of five TSMP nonparticipants is included in this study.

[6]The targeted number of completed surveys assumed joint data collection with the impact evaluation team, ADM. Based on the timeline of fielding the surveys; the data would not be available in time for this evaluation.

[7]See footnote above.

5. Target Market School Program

Program History

Prior to the current program period, PG&E's primary offering in this sector was the information-only School Resource Program (SRP). SRP was designed to combine the technical and financial resources of PG&E, the California Energy Commission (CEC), the U.S. Department of Energy's Rebuild America program and the Environmental Protection Agency (EPA) to provide educational and training services to K-12 school districts. The program used resource conservation managers (RCMs) to offer and facilitate provision of information and education workshops to staff working in administration, management, facility management, custodial service, food service and (lastly) teachers and students.

Equipoise Consulting Inc., evaluated SRP in 2006[8] and found that using the RCM approach of providing hands-on and consistent interaction, information, and follow-up was very successful in influencing the installation of energy-efficient equipment and introducing energy-efficient practices at schools. Customers also indicated a strong appreciation of the RCM's assistance in managing their energy costs. The evaluation also identified several recommended improvements, including sufficient training of new, junior RCM staff and more structured record keeping and data quality processes.

For the 2006–2008 program cycle, PG&E adopted a target market approach for promoting demand side management (DSM) to its nonresidential customers, with a strong focus on meeting specific energy-saving goals (kWh, kW and therms). For the program, this shift resulted in a significant change from the previous information-only approach to an approach focused primarily on encouraging the installation of measures with financial incentives. Specifically, the TMS&CP focuses on identifying and promoting the installation of energy-efficient measures in retrofit and new construction projects in K-12 schools, private colleges and professional/trade schools.

Logic Model

As mentioned above, no logic model was initially developed for this program. Figure 1 displays the logic model developed by the Cadmus evaluation team. This model represents the program as it is currently being implemented. Based on information gathered, the underlying logic of the program uses financial incentives and some limited educational services to encourage the installation of energy-efficient measures in the targeted subsegments (most importantly K-12 schools).

To address the market barriers in the targeted subsectors, the TMS&CP uses incentives and services to facilitate the identification and implementation of energy-efficiency upgrades in

[8] Pacific Gas & Electric Company's 2004/2005 Local School Resources Program and the Energenius® Program Evaluation. Equipoise Consulting Incorporated. August 24, 2006.

retrofit and new project applications. The key program activities include marketing and outreach, needs assessment, retrocommissioning services, strategic services (including benchmarking reports and energy management plans [EMPs]), cash incentives, program application management, and to a lesser degree, coordination with other market actors. In an effort to identify potential participants and address informational and operational barriers, specifically those of high staff turnover and lack of technical expertise, the program offers workshops and informational materials (e.g., case studies). The needs assessment is typically based on integrated or walkthrough audits that, in the form of a comprehensive audit report, provide potential participants with decision-quality information on all recommended measures. In the case of facilities with energy management systems, a detailed retrocommissioning report may outline cost-effective measure options. Both types of reports are expected to primarily address informational barriers. Offering strategic services (benchmark reports and EMPs) is primarily intended to increase customer awareness of energy-efficiency measures and program offerings and increase the likelihood of measure adoption.

While on one hand, benchmarking reports are intended to increase the likelihood of measure implementation, they are also intended to serve as a "hook" for program staff to provide potential participants with information about program offerings and measure options. Assisting participants in developing and implementing energy management plans is expected to ensure long-term energy savings as well as long-term behavioral changes regarding energy-efficiency management. The incentives are intended to offset the high, first cost of energy-efficiency measures and most of the remaining financial resources barriers identified in Section 3. Application support is expected to address the operational barriers and some of the financial resource barriers. Lastly, coordination with other market partners regarding dissemination of program and technical information, as well as coordination on financial resources, is expected to address the informational and financial resource barriers.

Anticipated short-term outcomes include increased awareness of energy-efficient options and an increase in the likelihood of installing measures. In the medium term, the outcomes include installation of measures and a reduction in energy use. Finally, the long-term anticipated program outcomes include a permanent reduction in energy use in the targeted subsectors, a reduction in emissions and other nonenergy benefits. Figure 1 provides the logic model for the TMS&CP.

Table 6 presents a detailed description of each linkage identified in the logic model.

Figure 1: Target Market School Program Logic Model

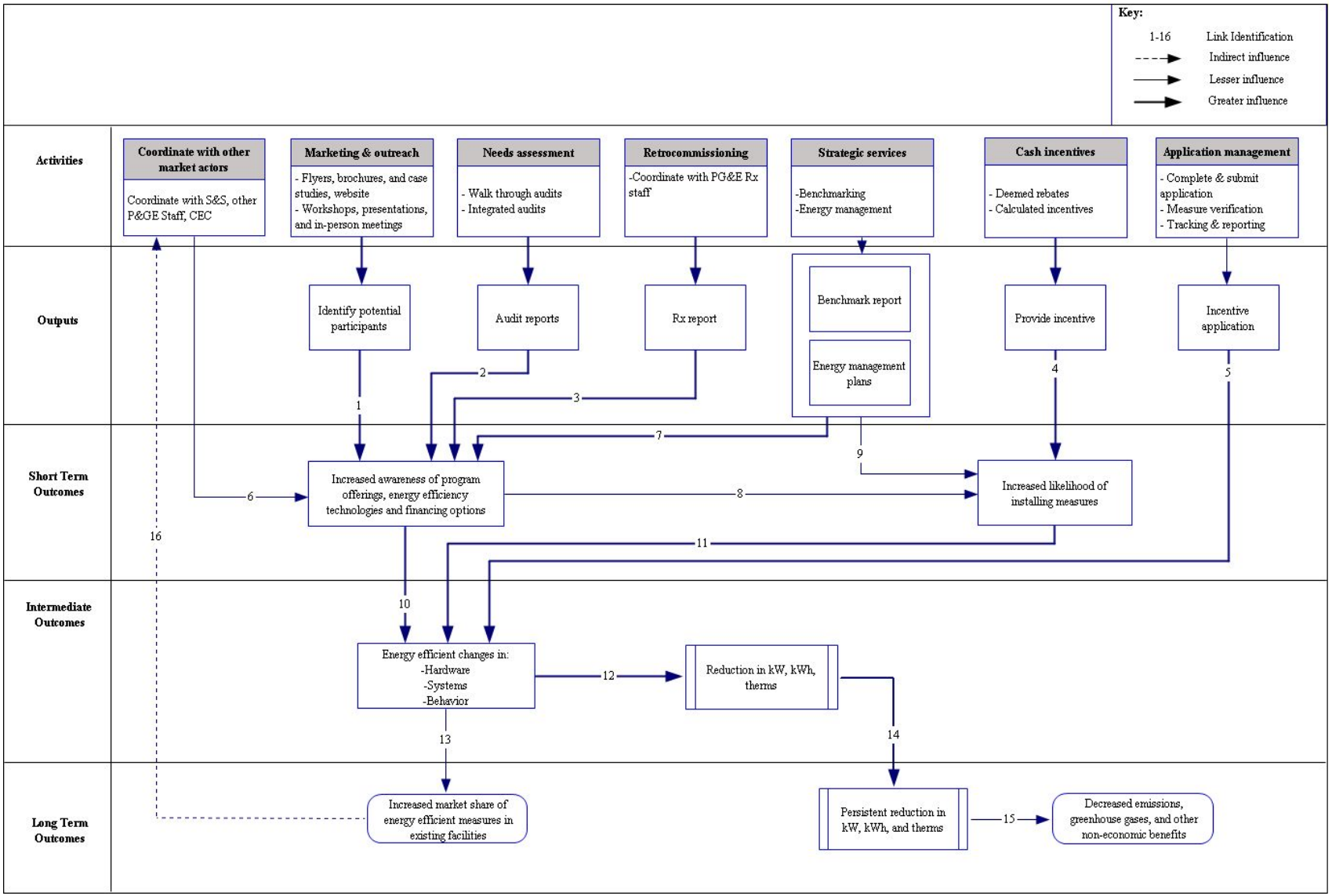


Table 6: TMS&CP Theory by Logic Model Link

Link ID Number	Key Purpose	Program Theory	Potential Indicators (KPI's)
1	Identify potential participants Provide workshops and educational materials	Customer marketing is effective in recruiting customers to the program and allowing PG&E access to the customers' sites in order to assess customer needs. Marketing and outreach will also increase potential participants' awareness of the energy-efficient options and program offerings. Workshops and educational materials increase awareness, knowledge and attitudes with respect to energy-efficiency options.	-Total number of customers contacted -Total number of customers recruited -Number of workshop participants -Number of case studies provided -Participants' assessment of value of workshop & case studies -Change in awareness/knowledge of energy-efficiency options
2	Provide audit reports	By providing potential participants with detailed audit reports, including all relevant measure information for a prioritized list of measures, gives participants actionable and technical information about savings and return on investment, directly addressing the informational barriers. The report also provides information about program offerings, including incentives and information about low-income financing.	-Number of audit reports -Number of recommended measures -Customers report that needs have been addressed -Customers find the provided information useful and credible
3	Provide retrocommissioning reports	Similar to the audit reports, the Rx reports provide potential participants with recommended retrocommissioning measures/actions, along with available incentives.	-Number of retrocomissioning reports -Assessment of clarity and completeness of reports
4	Provide incentives	Offsetting all or a portion of the high,first cost associated with implementing energy-efficiency measures is intended to address financial resource barriers, thereby increasing the likelihood of measure installation.	-Amount of incentive calculated at time of application/audit vs. that realized after completion of project (i.e., at verification).
5	Participants apply for incentives and program staff provides assistance in completion of application	Providing participants with assistance in completing the incentive application is intended to reduce the administrative burden associated with applying for incentives and rebates. Active management of the participation process from filing the application to completing the post-field inspection will ensure installation of energy-efficient measures.	-Number of applications received and approved -Number and types of measures listed in application -Time lapsed from filing application to receiving rebate check -Customer satisfaction with process
6	Coordinate with other market actors	Through coordination with other market actors, program staff ensure consistent and comprehensive messaging, as well as gather information on other program offerings that could, if combined with TMS&CP offerings, further increase the likelihood of measures being installed.	-Number of facilities that utilize financial resources offered by other market partners to pay for suggested measures -Number of key market actors & associations -Number of meetings attended -Number of participant sites PG&E collaborated on with other market actors

Link ID Number	Key Purpose	Program Theory	Potential Indicators (KPI's)
7	Provide benchmark reports and energy management plans	Benchmarking reports will help potential participants understand their relative performance compared to similar facilities. Assisting participants with the development and implementation of EMPs is expected to facilitate the institutionalization of best practices in energy management, which in turn contributes to the sustainability of savings. Both services are intended to increase participants' awareness and knowledge of energy-efficiency options and program offerings.	-Number of benchmarking reports produced -Number of energy management plans adopted and implemented -Number of facilities/districts with evidence that EMP is actively followed - Changes in participant awareness and knowledge of energy-efficiency options, technologies and program offerings -Changes in likelihood that participants will install measures
8	Turn increased awareness into increased likelihood of measure installation.	Effectively addressing informational and financial resource barriers by providing potential participants with information about program offerings, energy-efficiency options and financing options is expected to increase the likelihood of measure installation.	-Changes in participant awareness and knowledge of energy-efficiency options, technologies and program offerings -Changes in likelihood that participants will install measures -Number of incentive applications
9	Provide benchmark reports and energy management plans	Benchmark reports provide potential participants with useful information on energy intensity that can be used to justify the need for energy-efficiency improvements to customers. When implemented, EMPs have the potential to permanently change energy management practices with regards to purchasing decisions. Given that, both offerings address key financial resource, administrative process, and operational barriers that will increase the likelihood of participants installing recommended measures.	-Changes in participant awareness and knowledge of energy-efficiency options, technologies and program offerings -Changes in likelihood that participants will install measures
10	Turn increased awareness into installed measures	Increasing participants' knowledge about energy-efficiency options, program offerings and financing options is expected to increase measure installations and process improvements.	-Ratio of the number of measures suggested for installation vs. the number actually installed -Number of applications submitted -Number of measures installed
11	Motivate measure installation	Augmenting participants' knowledge of energy-efficiency and financing options and program offerings with strategic tools and incentives is expected to motivate measure installation.	-Ratio of the number of measures suggested for installation vs. the number actually installed -Number of applications submitted -Number of measures installed
12	Generate reductions in energy use and peak demand	Installing cost-effective measures offered through the program is expected to generate real energy and demand savings.	- Average reduction in kW, kWh and therms

Link ID Number	Key Purpose	Program Theory	Potential Indicators (KPI's)
13	Increase market share of energy-efficient measures.	Over time, enough customers reduce energy use such that increases of market share and measure penetration can be observed at site and at the market level	-Change in market share by measure
14	Ensure persistent reductions in energy use and peak demand	Though the participant may notice an initial reduction in energy use and peak demand after the completion of the project, proper maintenance of the installed measures will contribute to the sustainability of savings.	-Number of participant sites with EMPs -Change in operation & management practices including purchasing -Number of participant sites with energy champions -Ex post estimates of long-term energy and demand savings
15	Generate environmental benefits	Reduction in overall system energy use and demand will generate numerous environmental and nonenergy benefits.	-Reduction in energy use/bill for facilities that have participated in the program -CO2, NOx, SOx reduced per unit of savings -Increased student comfort, attention span, learning environment and grades.
16	Ensure good coordination with other market partners on energy-efficient options and technologies	As the market share of a given measure increases, close coordination with other market actors regarding overall market saturation and emerging technologies will provide a comprehensive and consistent approach to energy management.	-Number of competing programs/services without coordinated offerings/incentives

Key market barriers identified for this segment are: financial resource barriers, administrative process barriers, operational barriers and informational barriers. Table 7 illustrates how the current program activities map to these barriers, based on information collected from staff interviews. The cells marked in bold indicate activities/strategies that directly address a given barrier. Non-bolded items address a barrier indirectly and/or have a potential of addressing the barrier in some fashion.

Table 7: Link Between Program Activities/Strategies and Barriers

	Activities/Services						
Market Barriers	Workshops	Marketing Materials / Case Studies	Benchmarking	Energy Management Plans	Cash Incentives	Application Management	Coordination with Market Partners
Financial Resource Barriers							
Lack of Resources				x	X		
Competing Priorities		X	X	X	X		X
High Up-Front Costs		X			X		X
Aversion to Long-Term Financing	X		X				X
Administrative Process Barriers							
Multiple Decision-Makers	X	X				X	
Legislative Requirements							
Annual Budget Cycle							
Mismatch of Sources & Uses of Funds							
Timing Issues	x	x		X			
Operational Barriers							
Lack of Technical Expertise	X	X		X		X	
High Staff Turnover	X			X		X	
Risk Aversion							
Informational Barriers							
Lack of Information	X						
Lack of Understanding of Nonenergy benefits	X						

Overview of Program Elements

Organization and Management

The program manager, supervisor oversees the Team's activities along with teams for two other market segments and a Senior Program Manager supervises five target market project managers (TMPMs). Three of the TMPMs (approximately 2.5 FTEs) do mostly field work focusing on market development and some project management of retrofit projects, while two others (approximately 1.25 FTEs) focuses almost exclusively on processing new construction applications. Each of the field TMPMs operates in a designated service territory, the boundaries of which have been subject to several changes over time. Two of the TMPMs are located in remote offices, while the group superviser, Sr. Program Manager and three of the TMPMs are located at PG&E's headquarters. Each project manager has individual savings goals that, based on current PG&E policy, can only be satisfied by savings from custom projects.

TMPMs generally coordinate closely with Service & Sales Representatives to keep them informed of program activities, coordinate potential customer opportunities and program

offerings, and enable them to promote and explain the program to PG&E customers. Together, the TMPSs and account representatives promote PG&E's rebates and incentives for both deemed and custom measures.

Custom measures promoted by TMPMs generally fall into two categories: nonresidential retrofit (NRR) and nonresidential new construction (NRNC). While the administration and implementation of all NRNC projects is completely handled by staff within each target market, NRR projects are managed at a cross-segment level.

The rationale for maintaining a difference in the administration and implementation of NRNC and NRR programs is that calculating the baseline is more complex for retrofit projects than for new construction. The new construction baseline is primarily dictated by Title 24[9] or through an established reference point determined by industry standards, making calculations rather straightforward. On the other hand, calculating the baseline for retrofit projects requires consideration of existing inefficient equipment use, including actual load, operating hours, and so forth. Over time, the California utilities have developed a set of agreed-upon policies for calculating baselines to be consistent with each other and to comply with California Public Utility Commission (CPUC) regulations. PG&E reasoned that the greater complexity of baseline calculations required that the NRR component be centralized to ensure consistent application of the agreed-upon policies.

Other groups involved in both programs but falling under separate management are Service and Sales (S&S) representatives, the Portfolio Management Resource (PMR) group, review engineers and the Integrated Processing Center (IPC).

Per PG&E policy, S&S representatives own the primary customer relationship. As such, S&S representatives are the primary customer contact for all company services, including but not limited to energy-efficiency programs. Thus, S&S representatives carry the primary responsibility for generating project leads and applications. The S&S department is organized into seven areas, each of which is further delineated into three regions. Depending on the customer makeup of each area or region, the S&S representatives are organized slightly differently. For instance, some regions are segmented by target market while others are not. Typically, each region is serviced by senior account managers (top users), account managers (accounts >200 or 300 kW), account representatives (assigned accounts) and field representatives (all unassigned accounts).

The PMR group, located within the Targeted Markets section of PG&E's the Customer Energy Efficiency (CEE) department and headed by the program manager supervisor, oversees the application review process to ensure consistent application of statewide policies. One of its chief roles is interpreting the policies and procedures governing project qualification and the calculation of energy savings.

[9]Legislation was enacted in California in 1978 to establish statewide building standards. The standards are updated periodically under the purview of the California Energy Commission.

The review engineers review applications, perform pre- and post-installation (pre- and post-field) inspections and analyze savings. They may be within PG&E's Applied Technology Services (ATS) group or may be outside consultants. They are assigned to a project by PMR and interact with account representatives, project managers and customers in the review process.

The IPC provides company-wide data entry and data processing services. This group records applications in the company-wide management data service system (MDSS), serves as the central hub for processing of all project documents, and updates project records based on input from PMR.

Marketing and Outreach

The primary marketing and outreach is conducted by the S&S representatives. However, except in a few areas, S&S representatives are not segmented and are therefore responsible for providing service to all customers in their respective territories. S&S representatives operate under a sales/energy savings-oriented incentive structure that among criteria like customer satisfaction places high priority on measurable energy and demand savings. Depending on the customer mix in a given area, S&S representatives' priorities may include pursuing opportunities with schools and/or colleges. In these cases, or when a previous program participant contacts a TMPM directly, Target Market staff might provide customer-specific outreach to develop project leads. Based on the information provided during the October 2008 interviews, S&S representatives tend to focus on customers with large savings opportunities, while TMPMs tend to focus on unassigned accounts, smaller customers and/or previous program participants. The interviews further suggest that TMPMs work with S&S to keep them abreast of their customer interactions and any potential leads.

In general, the marketing and outreach activities for the Schools and Colleges target market include hosting workshops and vendor expos, attendance and presentations at a variety of conferences, and distribution of marketing flyers and case studies. Program management affords TMPMs significant freedom in tailoring their approaches to marketing and outreach. For instance, the two TMPMs focused primarily on retrofit projects are collaborating closely with account representatives to identify potential participants and collaborate in designing and hosting workshops. Due to the incoming flow of NRNC projects generated by S&S representatives, the outreach and marketing activities for the TMPM working on NRNC projects are more restricted and focus on developing relationships with architects, builders, construction companies and green building groups.

Activities and Offerings

Needs Assessment

Once a potential participant has been identified, the TMPM and account representative, either together or apart, complete an on-site assessment. Depending on the facility and complexity of the assessment, TMPMs may complete a walkthrough audit, use PG&E's nonresidential audit

program (coordinated by account representatives), or use the California Energy Commission's audit services provided under its Bright Schools program. The needs assessment, as documented in an audit report, will provide customers with a list of cost-effective measures, payback estimates, and information about financing options, including applicable financial incentives from PG&E.

Retrocommissioning Services

Prior to 2008, PG&E's retrocommissioning services focused almost exclusively on urban high-rises with sophisticated energy management systems. Following a decision to offer this service to large school districts operating energy management systems, TMPMs, in close coordination with PG&E's retrocommissioning staff, began to identify and sign up customers for participation. After an initial assessment, the customers receive a detailed retrocommissioning report outlining the suggested improvements.

Strategic Services

Over time, the TMS&CP staff have developed two strategic management tools: benchmark reports and energy management plans. For retrofit projects, the benchmarking report is created using an Excel-based tool developed by TMS&CP staff. The output provides customers with graphical comparisons (benchmarks) of energy use per student for each school and/or building, and it compares that energy intensity to similar districts/facilities. For new construction projects, TMPMs encourage customers to utilize the ENERGY STAR® Portfolio Manager tool to gain an initial understanding of a facility's energy efficiency. The ENERGY STAR Portfolio Manager can track year-to-year changes in energy use, providing a percentile score and a weather-normalized EUI (annual energy use per square foot), and it can track usage over time. By increasing the degree to which facilities managers understand their energy usage and are able to benchmark it against similar facilities, benchmarking reports may motivate them to make equipment or operational changes to increase their facilities' energy efficiency.

Financial Incentives

PG&E offers its customers two types of incentives: deemed savings rebates and calculated incentives. Deemed savings rebates apply to a large number of commonly installed measures for which savings estimates are readily available and accepted throughout the industry and California. PG&E maintains a catalog of qualifying measures and associated rebate amounts. Within PG&E, the Mass Market Target Market program provides support for all deemed savings measures. For more complex retrofit and all new construction projects, PG&E calculates incentives based on a detailed engineering analysis.

Process Flow

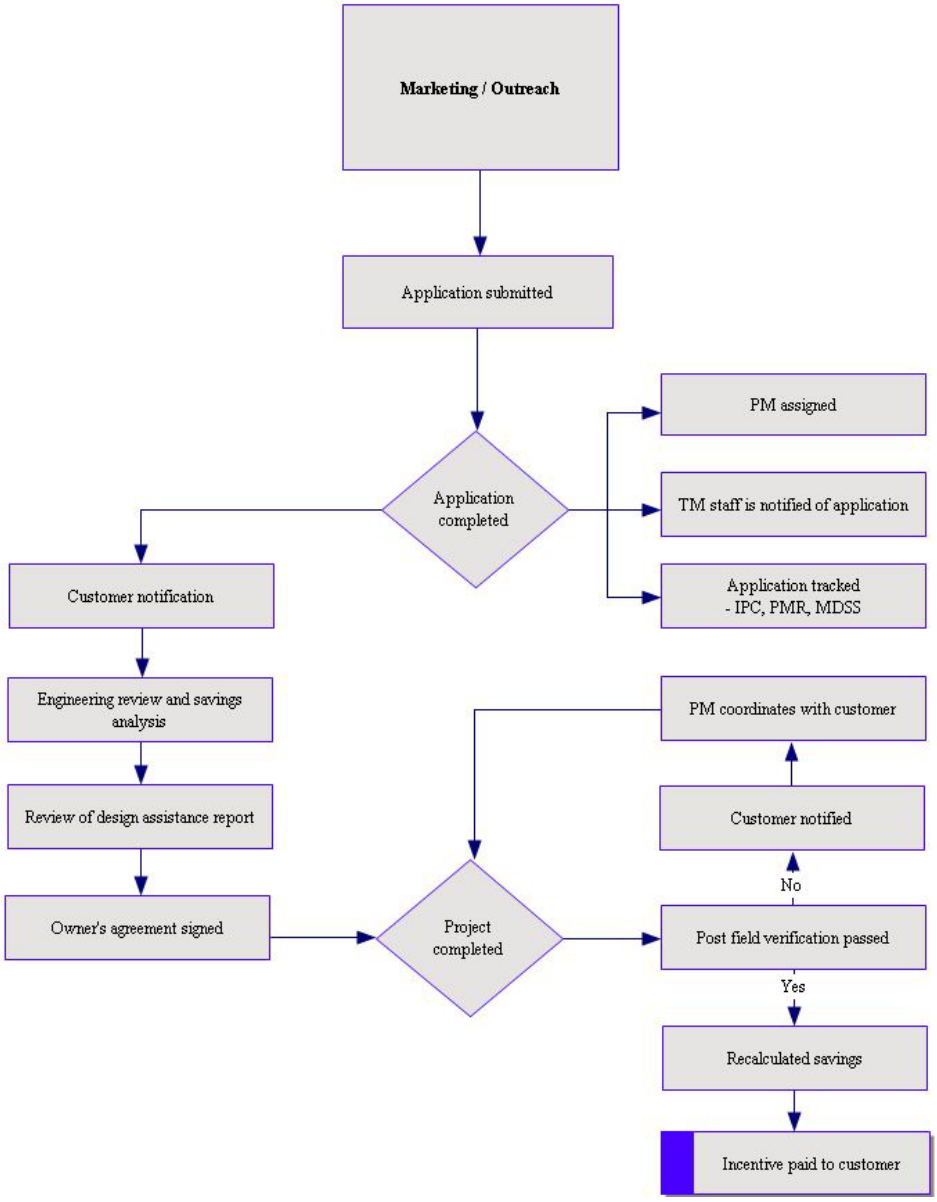
Based on information gathered from staff interviews and program documents, Cadmus developed a simplified overview, in the form of process flow diagrams, of the interactions and

steps involved in implementing the current program for new construction and retrofit projects. As noted, processes differ between new construction and retrofit projects. Hence, Cadmus developed separate flow diagrams for each type of project. Based on the information gathered during the October 2008 interviews, Cadmus is aware of the fact that PG&E, in association with Newcomb Anderson McCormick, has been working on implementing the initial phases of a comprehensive process improvement (PI) project. The PI project began in late 2007, primarily focusing on inefficiencies related to the processing and management of rebate and incentive applications. Specifically, the PI project is focused on identifying which elements of the NRNC and NRR need adjustment and on identifying and implementing consistent roles and responsibilities for TMPMs for both project types. Based on the information provided by Newcomb Anderson McCormick, the first two phases focused on addressing the known challenges of the NRR application management process, as well as specific usability issues. Version 2, expected to be rolled out in early 2009, will focus on data integrity and data quality issues, as well as further aligning the roles and responsibilities of all parties involved in the application processes. In the long term, the PI project is also expected to further address data quality and consistency issues and will include the launch of a replacement to PG&E's MDSS database. Due to the complexity of the issues involved and the time needed to implement the changes, the PI project is not expected be completed until the end of 2010. Given the ongoing changes to the project processes, especially those for NRR, the following process descriptions are based on the information gathered through the middle of 2008 and thus may not reflect all changes currently underway or considered for implementation as part of the PI project.

New Construction Projects

The NRNC process starts with account representatives and TMPMs working together on a variety of outreach and marketing efforts. For new construction projects, in addition to school personnel, TMPMs and account representatives may market to architects, contractors, builders and/or green building professionals. Once interest is established, the account representative will work with the customer (or the customer's architects/builders) to collect the necessary data for a new construction project. This process can be iterative in nature and depends on the size and complexity of the project, as well as the level of technical expertise available at the customer site.

Figure 2: New Construction Process Flow



Once the application is complete, the TMPM focusing on new construction typically processes the application. The application is tracked by the IPC and PMR, and data (including all supporting data) are scanned and added to the MDSS data repository. The IPC notifies the applicant that PG&E has accepted the completed application. The customer then commissions development of an engineering review, savings analysis and/or design assistance report. The design assistance report includes a number of suggestions for how the participant can implement the project, including cost-effective measures for installation. The applicant submits all documents to PG&E for technical and engineering review. Upon completing this review, PG&E asks the applicant to sign a project implementation agreement specifying measures, expected savings and proposed incentive amounts. Once the measures have been installed, PG&E

completes a post-field verification to ensure the measures have been installed and are operational. If PG&E accepts the post-field verification report, PG&E staff recalculate savings based on the actual performance of installed measures. Finally, incentive amounts are adjusted to account for any deviation in expected to verified savings, and the incentive check is cut and delivered to the customer.

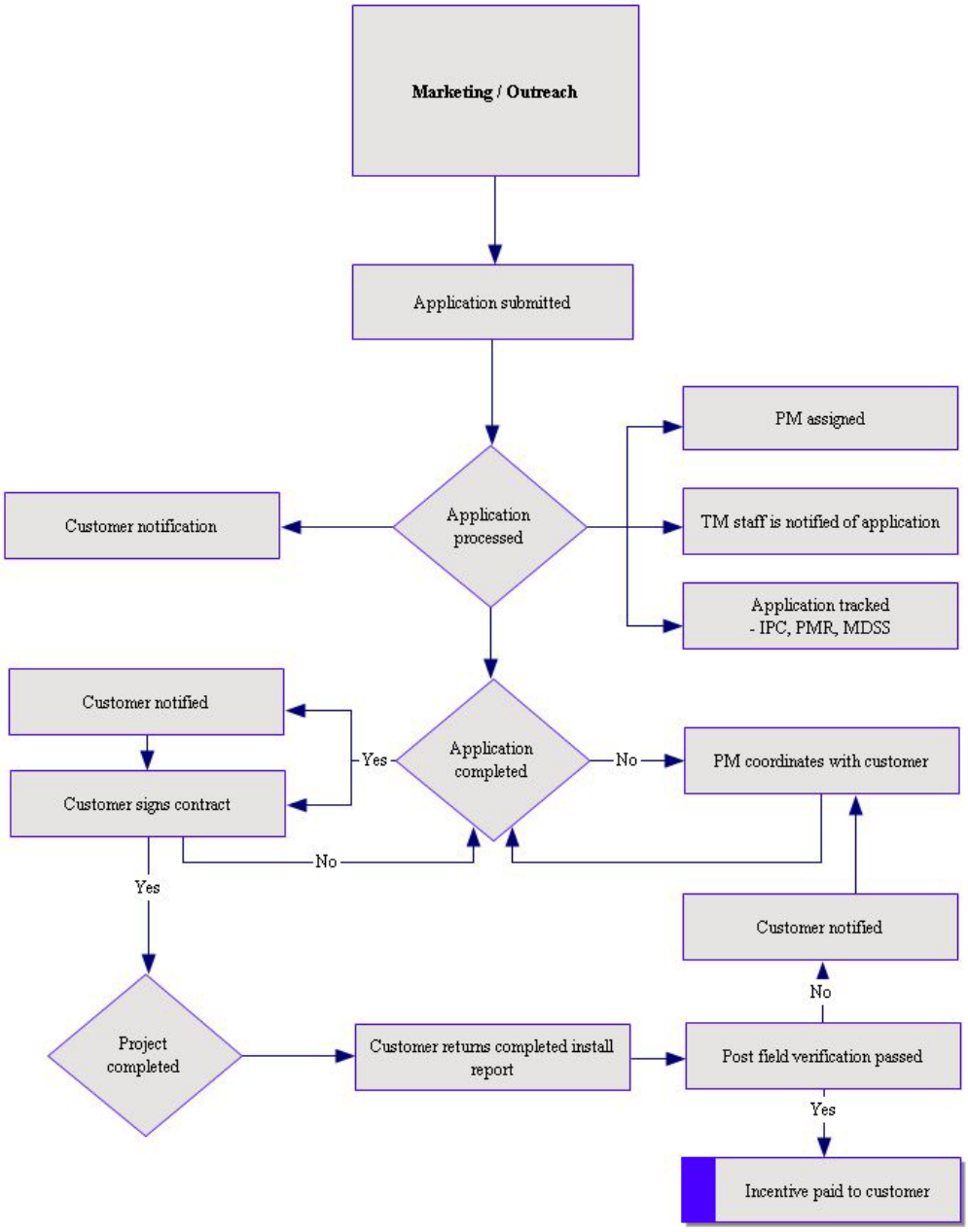
Retrofit Projects

While the first section of the retrofit process closely mirrors the NRNC's, one key difference is that applications can be submitted from the account representative and/or TMPM. While both groups collaborate closely in many cases, staff interviews indicated that account representatives often submit applications to the IPC without involvement from TMPMs in the marketing and outreach activities. Historically, TMPMs would not be aware of such applications, thus would not be involved with these accounts. In July 2008, PG&E began the process of implementing several significant changes to a variety of company-wide processes, one of which pertained to these issues. Under the new process guidelines, the IPC automatically alerts the TMPM of any application, regardless of who submitted it. The IPC will also assign each application to a TMPM, who is then responsible for tracking the progress of the application all the way to the incentive stage.

Marketing and outreach is conducted for identification of potential participants. Applications will be dispensed to potential participants and, once completed by applicants, will be processed by the TMPMs. Participants will be notified when their applications have been received by the target market staff, and a program manager will be assigned to the participant. Once processed, the application will be tracked within the program database.

If the application is determined to be incomplete, the participant will be notified, and the participant will coordinate with the TMPMs to address the missing items. Once the application is completed, the customer will sign the contract and the application can be accepted. Finally, the participant submits an installation report to provide the TMPM with details on project implementation (including measures installed); this will allow the staff to verify whether the participant has earned the incentive applied for. If the TMPM identifies issues with project implementation, the participant will be notified, and further coordination will be required to qualify for the incentive. This may include recalculating the incentive or inspecting the facility to look for areas where measures may have been improperly installed.

Figure 3: Retrofit Process Flow



6. Third-Party Programs

RSG implements both the SEE and the CHES program using a largely identical approach and program logic. To avoid unnecessary duplication, this section provides an overview of the general approach used and highlights program-specific differences where appropriate.

Program History

School Energy Efficiency Program

The SEE program dates to a 2001 pilot program with the Fresno Unified School District, which was implemented by the State and Consumer Services Agency (SCSA) with support from D&R International (D&R). Based on the pilot study results, SCSA, in coordination with the California Integrated Waste Management Board (CIWMB), applied for and received funding to offer a number of educational and technical services to 55 school districts as part of the SEE program. The program involved co-funding and coordination of nine agencies and organizations to provide the needed services within targeted school districts.

Based on the initial program experience, D&R received funding to implement the program during the 2004–2005 term. The 2004–2005 SEE program was designed to educate school facility staff and district administrators about energy-efficiency concepts and practices as well as to provide teachers with support in designing and implementing energy-efficiency curricula. The most notable change to the early SEE was that the D&R program was no longer based on a partnership concept; instead, the operations, administration and reporting functions were centralized. The 2004–2005 SEE program was "informational only" and designed to provide K-12 districts located in PG&E's service territory with resources and information to reduce and/or overcome some market barriers facing this market. Finally, the program was designed to instill sustainable, energy-conscious behavior and practices in both students and district administrative and facilities staff.

Based on the program evaluation published by Itron in 2006,[10] the 2004–2005 SEE program exceeded all participation goals in both the educational and facility service categories. Participants indicated a high degree of satisfaction with program offerings, especially the benchmarking reports and educational materials. In its evaluation of the program's facilities component, Itron found the program represented a "missing link" in the K-12 market, especially in light of insufficient resources to identify and promote energy efficiency within the bureaucratic school administration process. With regards to the educational component, Itron found it effective in integrating energy-related education into the classroom.

Based on the SEE program model put forth by D&R in the 2004–2005 program cycle, RSG developed a program proposal for the 2006–2008 program cycle. The new program focused on the facility services aspect of the previous program and largely eliminated the educational and

[10] Itron. "Evaluation of the School Energy Efficiency Program." Final Report. October 27, 2006.

curriculum elements. Specifically, the 2006–2008 SEE program was designed to encourage and reward participants who implement energy-efficient measures by providing them with one-on-one installation support services (IS services), decision-grade technical audit reports, cash incentives and cash bonuses. Depending on their needs, participants could choose between receiving cash incentives and receiving incentives as IS services instead of cash. Cash bonus incentives (for early commitment and early installation) were available regardless of whether the participant chose to receive cash incentives, IS services, or some combination of the two. The program targeted school districts, county office of education facilities and private colleges within 19 counties of PG&E's service territory, and incentives were provided on a first-come, first-served basis.

Campus Housing Efficiency Solutions Program

Colleges and universities are among utilities' largest customers. Thus, college and university facilities have been the focus of many different types of energy-efficiency programs, with the majority focusing on campus facilities. Campus housing, however, had been largely overlooked as a potential market for energy efficiency, primarily because student housing tends to be managed and operated separately from other campus facilities. To meet growing demand for student housing, many schools focus on new construction rather than retrofitting existing facilities. If retrofits are considered, the program typically focuses on essential upgrades such as technology upgrades, student amenities and seismic upgrades.[11]

To provide service to this previously underserved market, RSG developed a new program proposal for the 2006–2008 program period that was accepted for funding in 2006.

Logic Model

Detailed review of the theories underlying both programs revealed that, except in one element, both programs shared the same basic logic model. Given the similarities, this section presents a general discussion of the key program elements and highlights program-specific elements where appropriate. Program-specific logic models are included in Appendix G:.

To address the market barriers in the targeted subsectors, RSG devised a program concept that uses incentives and services to facilitate the identification and implementation of energy-efficiency upgrades. The key program activities include audits, incentives, cash bonuses, installation support services, application management, and, to a lesser degree, coordination with other market actors. The integrated audits are intended to directly address informational barriers. The incentives and cash bonuses are intended to offset the high first-cost barrier of energy-efficiency measures. Although not noted by RSG, Cadmus contends that the cash bonuses have the additional benefit of accelerating the decision-making process as well as the actual installation of measures. Cash bonuses directly address three of the financial resource barriers: lack of resources, competing priorities and high up-front costs. Offering varying levels of installation support services, ranging from bid support to full project management assistance in

[11]PGE 2050 Campus Housing Efficiency Solutions—D&R International. Program Implementing Plan. February 2006.

project implementation, the program aims to address operational barriers, specifically lack of technical expertise and high staff turnover.

In addition to all the activities of the SEE program, the CHES program offers CFL replacement campaigns targeted at incoming freshman. This activity includes coordination and support of campus staff and/or student groups to help them increase students' knowledge and understanding of energy-efficient lighting and plug load options. The short-term outcome of this activity includes installation of CFLs and an increase in knowledge among incoming students. The installed CFLs will result in reduced energy use (kWh) in the medium and long term. The increase in awareness and knowledge among students is expected to result in a prolonged reduction in energy use as students take this knowledge from college to their homes and workplaces.

The anticipated short-term outcomes for both programs include increased awareness of energy-efficient options, increase in the likelihood of installing measures, and for the CHES program, installation of CFLs. In the medium term, the outcomes include installation of measures, a reduction in energy use, and for the CHES program, an increase in student awareness and knowledge about energy-efficient options. Finally, the long-term anticipated program outcomes include a permanent reduction in energy use in the targeted subsectors and a reduction in emissions and other nonenergy benefits. Figure 4 provides the general logic model underlying both the SEE and CHES programs. Table 8 provides a summary of the underlying theory and potential indicators for each numbered connector.

Figure 4: General 3P Program Logic Model

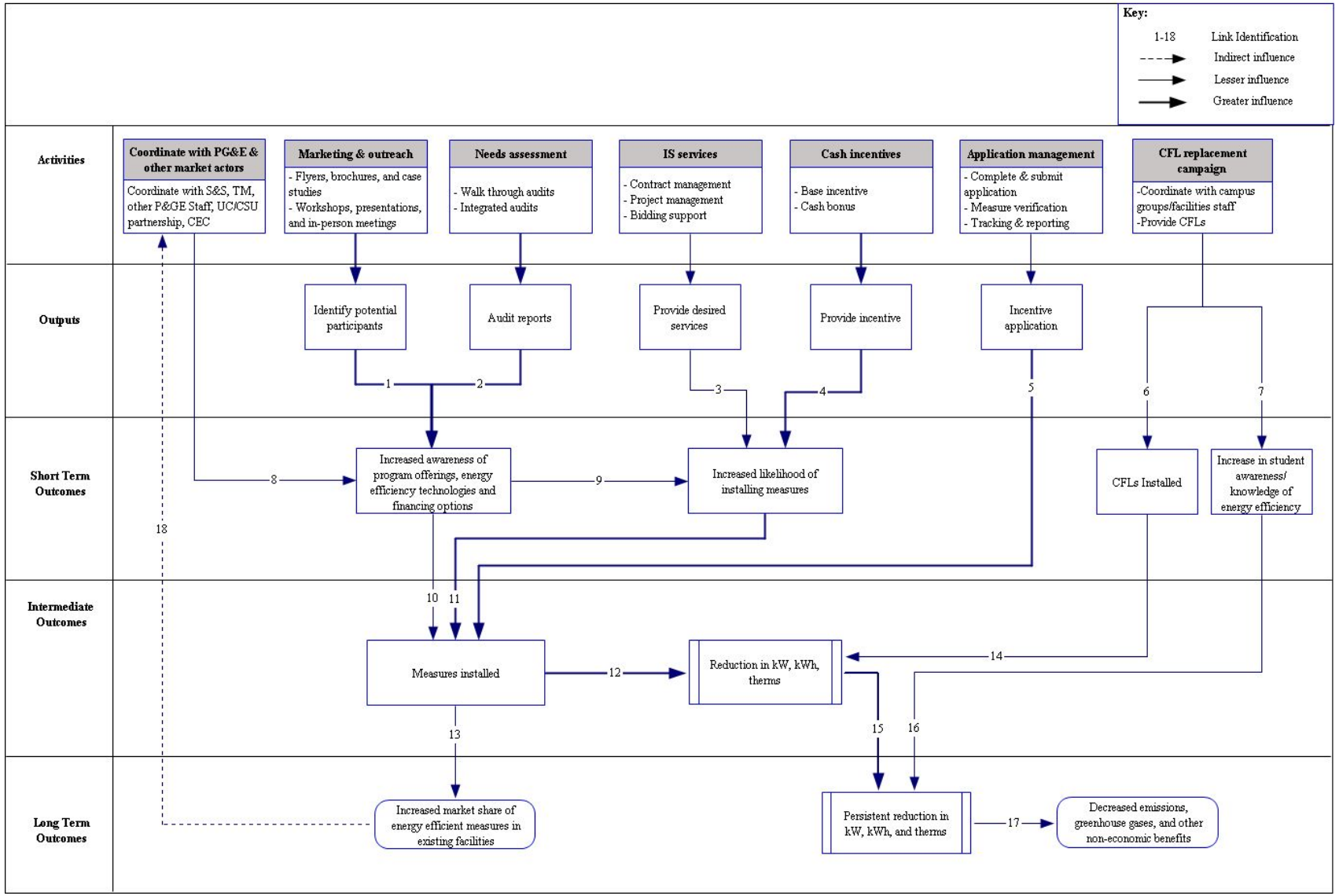


Table 8: Third-Party Program Theory by Logic Model Link

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
1	Identify potential participants Provide workshops and educational materials	Customer marketing is effective in recruiting customers to the program and allowing PG&E access to the customers' sites in order to assess customer needs. Marketing and outreach will also increase potential participants' awareness of the energy-efficient options and program's offerings. Workshops and educational materials increase awareness, knowledge and attitudes with respect to energy-efficiency options	-Total number of customers contacted -Total number of customers recruited -Number of workshop participants -Number of case studies provided -Participants' assessment of value of workshops & case studies -Change in awareness/knowledge of energy-efficiency options
2	Provide audit reports	Providing potential participants with detailed audit reports, including all relevant measure information, for a prioritized list of measures gives participants actionable and technical information about savings and return on investment, directly addressing the informational barriers. The report also provides information about program offerings, including incentives and information about low-income financing.	-Number of audit reports -Number of recommended measures -Customers report that needs have been addressed -Customers find the provided information useful and credible
3	Provide IS services	Program staff provides participant with desired IS services. Provision of necessary technical expertise via IS services will increase the likelihood and speed of measure installation.	-Number of participants using IS services -Types of IS services used -Participant satisfaction with IS services -Increase in likelihood of installing measures
4	Provide incentives	Offsetting all or a portion of the high first cost associated with implementing energy-efficiency measures is intended to address financial resource barriers, thereby increasing the likelihood of measure installation.	-Amount of incentive calculated at time of application/audit vs. that realized after completion of project (i.e., at verification).
5	Participants apply for incentives and program staff provides assistance in completion of	Providing participants with assistance in completing the incentive application is intended to reduce the administrative burden associated with applying for incentives and rebates. Active	-Number of applications received and approved -Number and type of

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
	incentive application	management of the participation process, from filing the application to completing the post-field inspection, will ensure installation of energy-efficient measures.	measures listed in application -Time lapsed between filing application and receiving rebate check -Customer satisfaction with application process
6	Provide CFLs as part of CFL replacement campaigns	Providing CFLs to incoming freshman for task lighting places energy-efficiency bulbs in high-use areas.	-Number of CFLs installed
7	Provide assistance with energy-efficiency educational campaigns for students	Energy-efficiency educational campaigns run by campus staff result in installed CFLs and an increase in awareness and knowledge of energy-efficiency options among students.	-Number of students participating in educational campaigns -Number of CFL replacement campaigns supported
8	Coordinate with other market actors	Through coordination with other market actors, program staff ensure consistent and comprehensive messaging, as well as gather information on other program offerings that could, if combined with TMS&CP offerings, further increase the likelihood of measures being installed.	-Number of facilities that utilize financial resources offered by other market partners to pay for suggested measures -Number of key market actors & associations -Number of meetings attended -Number of participant sites RSG collaborated on with other market actors
9	Turn increased awareness into increased likelihood of measure installation.	Effectively addressing informational and financial resource barriers by providing potential participants with information about program offerings, energy-efficiency options and financing options is expected to increase the likelihood of measure installation.	-Changes in participant awareness and knowledge of energy-efficiency-options, technologies and program offerings -Changes in likelihood that participants will install measures -Number of incentive applications
10	Turn increased awareness into installed measures	Increasing participants' knowledge about energy-efficiency options, program offerings and financing options is expected to increase measure installations and process improvements.	-Ratio of the number of measures suggested for installation vs. the number actually installed -Number of applications submitted

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
			-Number of measures installed
11	Motivate measure installation	Augmenting participants' knowledge of energy efficiency, financing options and program offerings with strategic tools and incentives is expected to motivate measure installation.	-Ratio of the number of measures suggested for installation vs. the number actually installed -Number of applications submitted -Number of measures installed
12	Generate reductions in energy use and peak demand	Installing cost-effective measures offered by the program is expected to generate real energy and demand savings	- Average reduction in kW, kWh and therms
13	Increase market share of energy efficient measures.	Over time, enough customers reduce energy use such that increases of market share and measure penetration can be observed at site and at the market level.	-Change in market share by measure
14	Reduce energy use	Installation of CFLs in student task lighting will generate reductions in energy use for this type of plug load.	-Number of CFLs installed.
15	Ensure persistent reductions in energy use and peak demand	Though the participant may notice an initial reduction in energy use and peak demand after the completion of the project, proper maintenance of the installed measures will contribute to the sustainability of savings.	-Change in operation & management practices including purchasing -Number of participant sites with energy champions -Ex post estimates of long-term energy and demand savings
16	Turn increased student awareness into long-term behavioral changes	Participation in educational campaigns focused on energy efficiency will increase students' understanding of energy efficient options and, if continuously encouraged and enforced, will lead to long-term reductions in energy and demand savings as students take this knowledge from college to their homes and workplaces.	-Number of students participating in educational workshops -Persistence of knowledge -Increase in likelihood students will continue to make energy-efficient choices
17	Generate environmental benefits	Reduction in overall system energy use and demand will generate numerous environmental and nonenergy benefits.	-Reduction in energy use/bill for facilities that have participated in the program -CO2, NOx, SOx reduced per unit of savings -Improved student comfort, attention span, learning environment and grades.

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
18	Ensure good coordination with other market partners on energy-efficient options and technologies	As the market share of a given measure increases, close coordination with other market actors regarding overall market saturation and emerging technologies will provide a comprehensive and consistent approach to energy management.	-Number of competing programs/services without coordinated offerings/incentives

Table 9 maps the impact of the program activities and services on market barriers.

Table 9: Impact of Program Activities and Services to Market Barriers

	Activities/Services						
Market Barriers	Marketing Materials / Case Studies	Integrated Audits	Installation Support Services	Cash Incentives	Bonus Incentives	Coordination with Market Partners	CFL Replacement Campaign
Financial Resource Barriers							
Lack of Resources			X	X	X	X	X
Competing Priorities	X	X	X	X	X		
High Up-Front Costs	X			X	X		X
Aversion to Long-Term Financing		X				X	
Split Incentive	x						
Administrative Process Barriers							
Multiple Decision Makers	X				X		
Legislative Requirements							
Annual Budget Cycle							
Mismatch of Sources & Uses of Funds							
Timing Issue	x	x	X				
Operational Barriers							
Lack of Technical Expertise	X	X	X				
High Staff Turnover	X	X	X				
Risk Aversion							
Informational Barriers							
Lack of Information		X				X	X
Lack of Understanding of Nonenergy Benefits						X	X

Based on information gathered from staff interviews, after an initial period of launching CHES, it became apparent the CHES program was competing with the UC/CSU/Investor Owned Utility (IOU) partnership program. Lack of coordination and information sharing during the program design stage resulted in both programs offering similar services but significantly different incentive levels. For instance, for a lighting measure, CHES offers participants 5 cents per kWh saved, while the UC/CSU/IOU partnership program offers 26 cents per kWh. Following failed attempts to set up contractually bindings agreements with UC or CSU to have all campus housing projects go through CHES, the CHES program experienced a migration of eligible participants from its program to the UC/CSU/IOU partnerships. Because much of the savings potential for CHES (based on the number of beds) is on UC/CSU campuses, the inconsistency of incentives resulted in elimination of much of CHES's target market.

To comply with the terms of its performance-based contract, the CHES program still pursues opportunities on non-UC/CSU campuses. However, the program's primary focus has shifted to the CFL replacement campaigns for the duration of the contract period. While this represents a significant reduction in program scope, Cadmus considers this shift to be a result of incentive inconsistencies rather than the program's lack of effectiveness.

Overview of Program Elements

Organization and Management

Given similarities in program design and the target markets, RSG uses a management approach that shares the same senior and technical (engineering) staff, as well as a client relationship management (CRM) system, for both SEE and CHES.

Shared senior staff include a project director who provides oversight of marketing outreach activities, project management and project reporting for programs; as well as a technical director who oversees engineering analysis, energy audits, database development and measure-level reporting. The project director also oversees all communications with PG&E staff and coordinates closely with PG&E's third-party program manager. Each program has a project manage, who oversees and leads project and customer management in the respective programs. Five in-house engineers and two subcontractor firms assist with the range of technical duties. The database manager ensures proper tracking and activities reporting for each program.

Marketing and Outreach

At the beginning of the implementation phase, RSG developed slightly different strategies for fielding the two programs. Because the SEE program had been around for a number of years, RSG utilized existing lists of previous program participants as well as a list of schools in its franchise territory. To focus its efforts, RSG prioritized potential participants in their assigned franchise area based on a number of criteria, including the district size, energy use, number of students and proximity to RSG offices. RSG conducted the initial outreach in two waves: the first focusing on the top 100 large, mostly urban districts, and the second including smaller districts and schools, as well as private colleges. Initially, outreach activities included inviting potential participants to workshops, sending out informational materials, making on-site visits and cold calling. To support its marketing and outreach activities, SEE program staff maintains an informational website.[12]

Unlike SEE, CHES is not limited to a franchise area; therefore, initial program activities focused exclusively on campuses with the largest number of campus housing facilities. Specifically, activities included attending joint customer meetings with the PG&E account representatives, making presentations at campus housing-related management meetings, and placing cold calls. Given the high concentration of campus housing in the UC/CSU system, program staff focused on generating interest among campus housing directors at those campuses.

[12] http://www.rsgrp.com/school.php

On an ongoing basis, SEE and CHES staff works closely with PG&E account representatives to coordinate and attend PG&E workshops or other conferences. During these workshops, RSG provides potential participants with informational brochures and case studies, as well as in-person testimony from previous participants.

Program Offerings

An overview follows of offerings common to both programs. The only activity unique to the CHES program is the CFL replacement campaign.

Energy Audit

Following the signing of a participant agreement, RSG engineering staff (or contractors) perform a detailed engineering audit of one or more existing facilities. Based on audit findings, engineering staff develop a detailed analysis for each building, including a list of cost-effective energy-efficiency measures, descriptive information for each measure, and project lifecycle cost and savings analyses.

Installation Support Services

To support participants who might lack staff with sufficient time and/or technical expertise to submit an application to receive incentives, the program offers installation support services (IS services). Specifically, participants can choose to use receive support services in a number of areas, including project financing, bid package development, bid support and evaluation, contracting and project management. Participants can choose to use IS services in lieu of cash incentives.

Project Financing Support

Participants receive one-on-one assistance with submission of an application for loans as well as the completion of supporting documentation to help expedite project funding.

Bid Package Development

All contractor bidding documentation is reviewed by RSG prior to submission, along with any deliverables, to ensure completeness and accuracy. RSG staff compare audit reports with any other necessary documents to make sure they are precise and error-free.

Bid Support and Evaluation

Site visits and walk-throughs are performed by the RSG staff during the project installation period, when the contractors are on site, to ensure the project goes according to the participation implementation agreement (PIA). All activities are documented, and at the end of the installation process, the participant receives copies of all documents.

Contracting and Project Management

All project deliverables are tracked in the project database. Periodic installation progress reports are provided to PG&E to supply further verification. Technical assistance required by the contractor or participant during the installation process may also be provided by RSG staff.

Using a cost catalogue authorized by PG&E, RSG provides participants interested in receiving IS services with an up-front cost estimate and the remaining net cash rebate amount. Depending on the project, RSG has the option of charging the participant a per-hour labor rate for any IS services grossly exceeding the initial service estimate.

Financial Incentives

The program offers participants two types of financial incentives: base incentives and bonus cash incentives. Base incentives include deemed rebates and calculated incentives provided by PG&E. Deemed incentives are based on PG&E's deemed measure catalogue. The calculated incentives are first calculated by RSG engineering staff, then submitted to PG&E for review and approval. Regardless of the type of financial incentive, RSG provides each participant with a summary of the maximum base incentive available from PG&E. If the participant is interested in receiving IS services, the base incentive amount is adjusted accordingly. All projects must go through post-field verification before incentive payments are authorized. RSG sends participants incentive checks directly.

In addition to the base incentive, both programs offer two types of bonus cash incentives: an early commitment bonus and an early installation bonus. All participants who return a final, signed PIA within 30 calendar days of delivery are eligible for an early commitment bonus of 10 percent of the total base incentive. Participants who complete the installation of the prescribed efficiency measures within 6 months of returning the final PIA receive a bonus incentive of 20 percent of the base incentive.

CFL Replacement Campaigns

The CHES program's CFL replacement campaigns combine two distinct elements: distribution of CFLs, and assistance to campus staff and or student groups to help them design, manage and implement student-focused educational campaigns. The program targets incoming freshman, typically through fall student orientation. At the end of the educational session, each student receives at least one CFL for installation as task lighting. Depending on the school, actual CFL installation might be the responsibility of the student or be assigned to facility staff, which guarantees a high degree of measure installation.

Process Flow

This section presents an overview of the general implementation process flow used for both programs. All program-specific elements are noted where applicable. Figure 5 presents diagrams of the general process flow for both programs.

Following the identification of a potential participant, the program project manager meets with the relevant participant staff. In the case of the SEE program, the project manager most commonly meets with facility and maintenance staff, while the CHES project manager typically meets with campus housing directors, facility staff and/or student groups.

Once a participant begins the application process, the project managers will check that the applicant is eligible to participate in the program. Once eligibility has been verified, the participant signs a program participation agreement (PPA) which initiates formal participation for each program.

After a participant has signed the PPA, the project managers meet with the participant to gauge the desired level of IS service and to discuss the relevance of previous audits (for past program participants). To avoid redundant services or measures, project managers check their own records as well as those provided by PG&E to ensure the program provides incentives only for previously uninstalled measures.

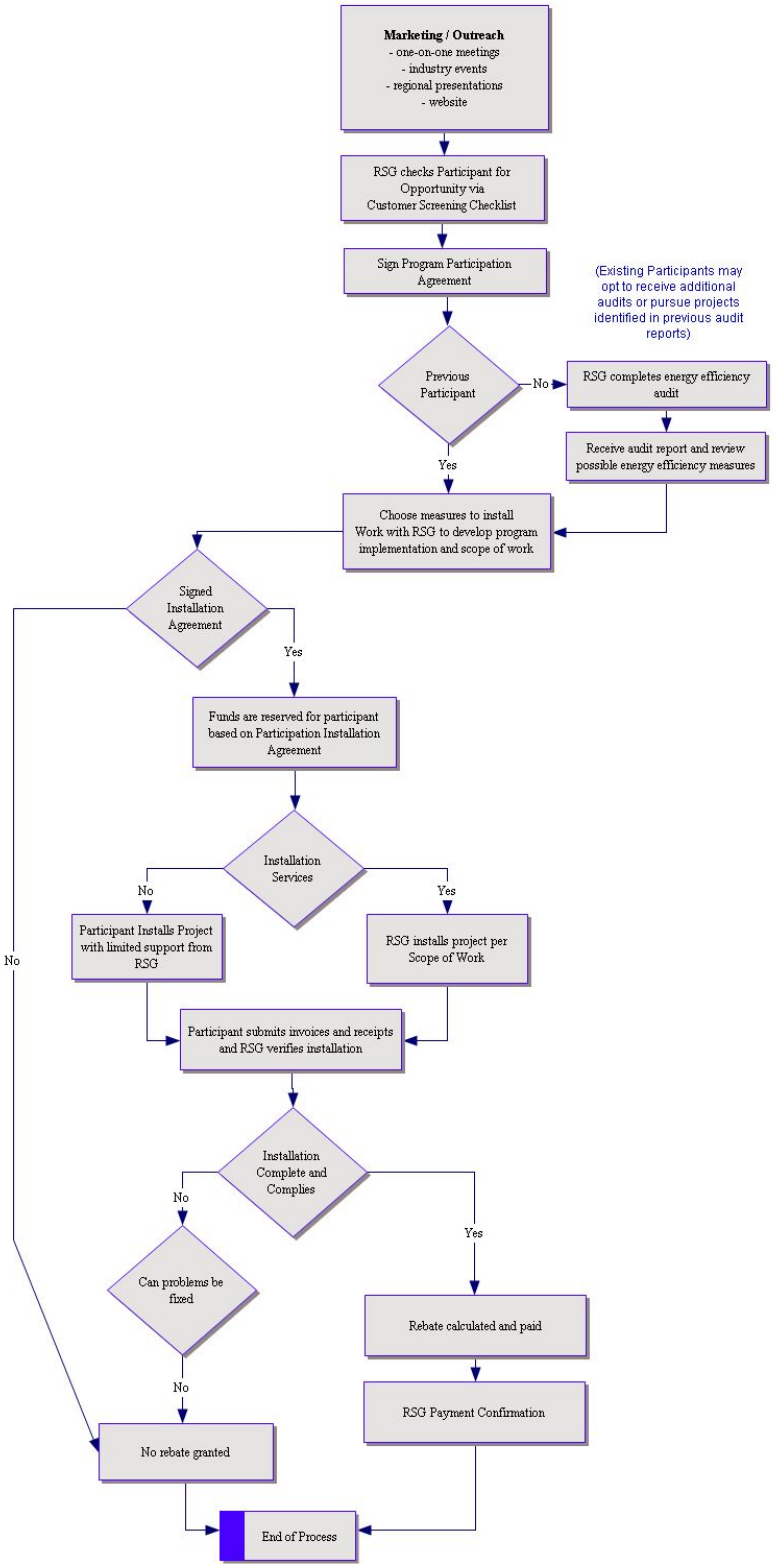
If an audit of a previous program participant indicates viable measures have not been implemented, project managers might choose to forgo another audit and instead use the measures previously suggested as a basis for the implementation plan. This approach allows the participant to move into the project installation phase (and therefore completion phase) much more quickly than a participant lacking such historic data. Once a PPA has been signed, the project manager schedules the engineering audit. The resulting audit report outlines all cost-efficient energy-efficiency measures proposed for a given facility and includes relevant financial and technical information for each measure.

The project managers then review the audit reports and underlying calculation spreadsheets to ensure that assumptions are reasonable, that facility and equipment information is accurate, and that there are no errors in the documents presented to participants. In the case of the CHES program, the audit engineer provides the participant with CFLs for all appropriate lighting fixtures.

The project manager closely coordinates with PG&E staff to ensure suggested measures and estimated savings are reasonable and meet PG&E's funding requirements.

If the participant agrees to the implementation of some or all of the recommended measures, the project manager drafts a final PIA, which contains all necessary details for the selected measures and a scope of work (SOW) defining which services (IS services) RSG will provide during the implementation phase. The SOW also contains information on and deadlines for receiving bonus cash incentives. Based on the completion of the final SOW, the project manager will draft a PIA and provide it to the participant for review and signature.

Figure 5: General Program Process Flow



Following signing of the PIA, the project manager reserves project funds in the program account. Depending on whether the participant chooses to receive any IS services; the project manager's involvement in the project implementation phase will depend on the participant's stated preferences. If a participant fails to meet key deadlines outlined in the PIA, RSG has the option of releasing the previously reserved project funds. If there is no equipment order schedule or project completion schedule to follow, RSG conducts a monthly analysis of each project to ensure reasonable progress toward measure implementation.

After project completion, the participant submits a request-for-payment form, including all invoices, receipts and any other materials. If a discrepancy is discovered, the project manager contacts the participant to determine the source of the problem and how the incorrectly installed measure impacts claimed energy savings. If there is no negative effect on claimed savings calculated prior to the installation of the measure, a note of discrepancy is made in the program database, but no further follow-up occurs; otherwise, the application and incentive may have to be modified in consultation with the participant.

Depending on the project type, RSG verifies measure installation by means of record review or, for a portion of all installed measures, by means of on-site verification. The latter is most commonly conducted by program engineering staff, with support from the project manager. The on-site verifications ensure the correct measure(s) have been installed and are operational. If a project includes installation of deemed savings measures, program engineering staff conduct on-site verifications for at least 30 percent of project sites. As required by PG&E protocol, all custom measures are inspected by post-field verification.

The project manager subsequently signs off on the project or suggests changes participants need to make to earn the incentive. If the project can be verified complete and in compliance with the PIA/PPA contracts, the final rebate is calculated, processed and sent to the participant.

7. Evaluation Findings

Based on data collected in this evaluation, Cadmus identified a number of common findings that apply either to all three programs or both 3P programs. In addition, we identified a number of program-specific process findings. All are presented below.

Common to All Programs

Implementation Activities

Program roll-out process was not well coordinated. Staff interviews with PG&E and RSG suggest that at the beginning of the roll-out period, account representatives were insufficiently informed about program offerings. While respondents noted being aware of some coordinated efforts to provide account representatives with specific information about their respective programs, nearly all had found account representatives lacking sufficient and accurate information. From the perception of program staff (PG&E and RSG), in a few isolated cases, inaccurate or incomplete information resulted in confusion at the customer level. Furthermore, program staff reported having to spend a significant amount of time and effort educating individual sales and service (S&S) representatives (and continuously did so as required by staff turnover). Interviewed program staff expressed interest in a more coordinated and efficient method of continuously educating S&S representatives to ensure the delivery of accurate and complete information to the end user.

Follow-up interviews with Target Market and S&S staff indicated that a recent reorganization of S&S has resulted in increased involvement of S&S in the dissemination of the program's information into the schools community. Furthermore, S&S and Target Market staff have now identified one central S&S manager who serves as the general conduit and one-stop access point for the Target Market staff in most issues related to the S&S team, including sales storm information and key contacts.

Joint workshops and face-to-face customer meetings appear to be most effective in getting facilities to make a participation decision. Feedback from staff interviews as well as participants indicates workshops and one-on-one meetings are the most effective ways of identifying potential participants and sharing information about program offerings and benefits.

Communication and Coordination

Identification of PG&E account representatives presents a barrier to efficient program implementation. While program staff reported generally effective working relationships with PG&E account representatives, interviews with program staff in late 2007 and early 2008 indicated that that the identification of account representatives in charge of a given account is difficult and very time-intensive. Staff report significant turnover in account representatives as well as a lack of an up-to-date, central source of data on account representative assignments. Program staff further report that high turnover among account representatives has resulted in a

continuous reduction in technical knowledge among account representatives that is not adequately replenished by training new representatives. Repeated interviews with Target Market and S&S staff in October 2008 suggest that many of these difficulties were a result of the recent reorganization within the S&S department and the lack of a central S&S contact. Target Market and S&S management reported that they have since designated a common contact within S&S. Initial staff feedback suggest that this relationship is effective and helpful in identifying appropriate S&S representatives.

Coordination between PG&E and third-party program staff improved in 2008. Initial interviews with PG&E program staff in November 2007 revealed significant tension between PG&E and 3P program staff. Most concerns were rooted in a lack of information sharing, assigned franchise territories and perceptions of competition for savings. Specifically, PG&E staff felt that these issues had resulted in customer confusion or offering of fragmented or less-than-optimal service. The staff interviews completed in August 2008 indicate a significant improvement in coordination (in particular) and working relationships (in general). Specifically, starting in January of 2008, TMS&CP management started to invite RSG staff to its monthly program meetings. According to both PG&E and RSG staff, RSG's attendance greatly improved coordination and information sharing. While PG&E staff continue to express concerns about being required to promote new construction projects throughout PG&E's entire service territory while being limited to an assigned franchise area for retrofit projects, staff report RSG's attendance at the meetings has been very well received.

Staff from both programs report being pleased with the recent collaboration of PG&E staff promoting retrocommissioning services in RSG's territory and, to a more limited degree, the sharing of leads in each others' territories. Feedback from RSG field staff suggests, from their perspective, the franchise territories have ceased to hamper provision of services to interested schools in collaboration with PG&E.

Customer Satisfaction

Customer satisfaction with programs appears high. Feedback from participants indicates high levels of satisfaction with their participation experience (in general) and program staff (in particular).

The majority of participants are satisfied with the application process, but application materials could be streamlined and shortened. Nearly all surveyed participants reported finding the application materials straightforward. Three participants with retrofit projects indicated being unsatisfied with the application process and found it too lengthy and cumbersome. When participants were asked how the application process could be improved, the most frequently listed suggestions pertained to streamlining the process and reducing unnecessary paperwork and process steps, specifically those related to engineering reviews. Starting in late 2007, PG&E hired Newcomb Anderson McCormick to develop and implement a series of process improvements focused on eliminating inefficiencies in the application processes, specifically the process for nonresidential retrofit project applications. Based on the information collected from Newcomb Anderson McCormick, PG&E's consultant on this project, the project is moving forward and the new processes will be rolled out in phases.

Program Results

Results regarding free ridership are inconclusive, but indicate potential for high levels. Given the primary purpose of a process evaluation and the lack of available participant data, Cadmus did not formally attempt to estimate free ridership. Participant survey data indicate, however, that the majority of participants had participated in other utility programs and were considering measure upgrades prior to learning of PG&E's rebates. Participant survey data further suggests the majority of participants in both the TMS&CP and 3P programs would have installed the measures without rebates and would have done so at about the same time as they did through participation. Most new construction participants and about half of retrofit participants indicated they would have been likely or very likely to install either all or the low-payback measures (lighting, HVAC) on their own within the next two years. Regardless, the majority of respondents also indicated program assistance significantly impacted their decision to install measures.

Common to Third-Party Programs

Implementation Activities

One-on-one technical advisor approach appears to be effective. Customers, as well as RSG staff's perception of customer preferences, indicate appreciation of RSG's current approach to providing one-on-one technical and administrative support in all participation stages. Customer feedback indicates they view RSG as an extension of their own staff and appreciate their help in dealing with paperwork, managing the application process and functioning as a liaison between PG&E and contractors.

Cash bonuses have a significant impact on the participation decision. Feedback from participants and program staff indicates cash bonuses played a significant role in participants' decision to file an application and implement the measure. Customers identified the additional amount of the available cash bonus (30 percent) as a key motivating factor to participate and implement measures quickly. Data provided by RSG in July 2008 indicates over 90 percent and 80 percent of participants, respectively, have earned the early commitment and early completion bonuses to date.

Few participants make use of installation support (IS) services. While participants appear to like having the option of using IS services, RSG data provided in July 2008 indicate that the majority of participants do not elect to receive any IS services. It appears most participants who chose to utilize IS services do so for larger projects. However, one participant who used IS services under the SEE program expressed great appreciation for IS availability and quality stating, "They provided very helpful services. I even use their (RSG) bid specs as templates for my own contracts now."

Providing assistance with measure installation for high payback measures would further increase the likelihood of measures being installed. Currently, RSG does not suggest or in any way recommend a contractor and/or vendor. RSG staff mentioned that RSG has been assessing

whether adding preferred providers or bringing in installation staff in-house would result in higher levels of measure installation.

General design of the SEE program appears to be effective. Findings from staff interviews and participant surveys indicate the current program design appears to be effective in attracting participants and motivating measure installations. Based on data provided by RSG in July 2008, program staff had contacted 150 potential participants, 63 of which engaged with the program. When asked what they would do to improve the program, both participants and program staff cited the need to reduce the length of application documents. The only other potential improvement cited by program staff was development of a more effective screening process to avoid conducting integrated audits for facilities not likely to install measures or follow through.

Inconsistencies in cross-program incentives create confusion and customer migration in CHES program. Based on information provided by PG&E and RSG program staff, lack of coordination at the program design stage resulted in significant inconsistencies in the financial incentives offered to customers with campus housing facilities. Specifically, the inconsistencies pertain to facilities that are part of the UC/CSU system and that are eligible to participate both in the CHES and the UC/CSU/IOU partnership programs. As UC/CSU/IOU partnership offers participants significantly higher incentives, the CHES program experienced significant migration of participants after staff had invested significant time and resources in completing audits and making measure recommendations. While program staff report very positive working relationships with the UC/CSU/IOU partnership staff, lack of consistent incentives between the two programs has resulted in unanticipated competition and, at times, customer confusion. Migration of UC/CSU participants to the partnership program has, according to program staff reports, eliminated the majority of potential for the program.

Communication and Coordination

Coordination and working relationships with PG&E Third Party manager and review engineers are effective. RSG staff reported good working relationships with their assigned 3P program manager and the PG&E engineering staff involved in reviewing savings estimates and finalizing savings claims.

TMS&CP Only

Implementation Activities

Current efforts addressing process improvements appear to be addressing key needs. In response to known problems and challenges in their internal processes for handling and processing project applications, especially for NRR projects, PG&E launched a process improvement project to focus on and resolve these issues. Interviews with PG&E's contractor for this project, Newcomb Anderson McCormick, clearly suggest a comprehensive and deliberate approach, including input from a wide range of stakeholders. Limited feedback from some of these stakeholders suggests that the process is going well and is addressing key needs. Based on the information collected from Newcomb Anderson McCormick, as well as feedback from

PG&E management and program staff, it appears likely that completion of this process will result in significant efficiencies and higher level of data quality and integrity.

Rollout was affected by a lack of common strategy for implementing the program. When Cadmus conducted the initial set of staff interviews in November 2007, all interviewed staff provided similar feedback. While two program staff members reported having been tangentially involved in the development of the program in 2006, most were unable to articulate the program theory. Despite these challenges, program staff was very willing to provide Cadmus with feedback on the program-related logic model and process flow diagrams. Staff and PMs are aware of this problem and ongoing discussions in the context of the PG&E Strategy Plan are addressing it.

Communication and coordination regarding marketing and sales strategy remain a challenge. Staff interviews conducted in October 2008 indicated that PG&E had instituted a series of "sales storm" meetings (since renamed "strategic sales meetings") to bring the Target Market staff and the S&S staff together and inform S&S staff of the Target Market team's activities in their territories. The feedback further suggests that despite strong initial participation from all key parties, participation from S&S staff has decreased notably over time. Interviewed S&S staff reported reducing their involvement due to a perceived lack of real dialog over the content and timing of the marketing efforts developed by the Target Market group. S&S representatives reported that, from their perspectives, the Target Market marketing plans are frequently out of sync with efforts of S&S teams, other segments, and/or sector-specific issues such as timing. Furthermore, S&S staff reported that although they consider the marketing plans good and helpful, they frequently ignore the different characteristics of the seven different S&S territories. Last but not least, S&S staff report receiving marketing strategies from multiple Target Market programs at the same time, leaving S&S staff to choose which plan to promote at any given time given the specific circumstances in their respective territories.

Typical measure installation cycle ranges from 1 to 3 years. Feedback from participants suggests the typical duration of the measure installation process (from learning about the incentives to measure installation) ranges from 1 to 3 years for retrofit projects and about 1 year for new construction projects.

Energy champions are rare among K-12 schools. When asked whether their schools and/or districts had energy champions, only 4 out of 23 respondents indicated they did. This may have implications for future program design for this market segment. Interviews with S&S staff confirmed this finding. S&S staff indicated that if energy champions are active and accessible, the likelihood and the savings potential of projects significantly increases, while the time required to implement these projects tends to decrease.

Communication and Coordination

Pursuit of joint goals—energy project installations—by S&S and TM staff has resulted in greater service coverage for PG&E. Feedback from S&S and TM staff indicates that despite their roles (S&S staff own the primary customer relationship and TM staff provide technical support to S&S and project management), pursuit of a common goal—filling the project pipeline—has resulted in the TM staff looking for and generating leads with customers not

pursued by S&S staff. Staff interviews suggest that, in general, S&S personnel tend to focus on opportunities that will produce higher savings in the short run. Given the fact that the savings potential for many schools tends to be smaller than that for other commercial or industrial facilities, such as food processing facilities, S&S representatives sometimes lack the time to focus on schools. In these cases and in cases where a customer might contact Target Market staff directly, Target Market staff ensure that these customers receive the needed assistance, and once interest is established, hand over the leads to the appropriate S&S representative. Although the staff interviews suggest that this approach is not formalized, the different motivations have in effect resulted in PG&E providing broader and more diverse coverage to customers in the schools and colleges sector than if S&S representatives were the only ones generating and following up on leads.

Program staff need more clarification regarding their specific roles and responsibilities within the team. When Cadmus conducted the initial set of staff interviews in November 2007, all interviewed staff members expressed uncertainty regarding individuals' roles and responsibilities. Program staff did not appear to function as an effective team. Staff turnover and lack of effective communication within the team and with management have contributed to these issues. Most staff noted that clarification of team members' roles and responsibilities is a key need from management. Cadmus reported this finding to PG&E in a memorandum at the beginning of December 2007. While the follow-up interviews conducted in early 2008 suggested remaining uncertainties, interviews with program management in October 2008 suggest that all program staff appear to fully understand and support the notion that the Target Market program's primary objective is acquisition of savings. However, the interviews indicated a continued lack of clarity among program staff with regards to their specific roles and responsibilities and group organization.

Nonparticipation does not appear to be due to a lack of awareness of PG&E offerings. Feedback from a small sample of nonparticipants indicates most were aware of PG&E's programs and/or had participated in PG&E programs in the last 5 years. Of the three that previously knew about the program, two knew because they were contacted by PG&E, and one learned about the program through word of mouth. These three had also participated in a PG&E energy-efficiency program within the last 5 years.

Customer Satisfaction

Respondents generally found PG&E staff to be receptive and quick to answer questions. While some were not satisfied with the process, almost all participants reported PG&E staff were receptive to inquiries and prompt in answering their questions. Also, the majority of participants reported no confusion over their primary contact at PG&E, which in all cases was their account representative.

Program Results

Target Market program appears to be on track to meet its 2008 energy savings goals. Based on information provided by the Target Market Program manager in October 2008, the program is on target to meet and exceed its energy (kWh and therms) and demand savings targets for 2008.

Based on these data, the program is likely to achieve more than double its kW and kWh goals and slightly more than its stated therm goal. Therefore, it should be noted that while the program may be able to improve its performance with better management, it has heretofore been able to reach its goals.

Available program data lacked sufficient detail. Data available for this evaluation lacked sufficient measure-level detail to analyze historical trends in program ramp-up, trends in measure adoption, current program progress, or the potential impact of different project managers using differing implementation approaches. This information was available, but not easily accessible due to its lack of digitized format.

All nonparticipants report having installed energy-efficient equipment in the last 5 years. Survey data indicate all surveyed nonparticipants had installed energy-efficient equipment in the last 5 years. When asked why respondents had not used PG&E's incentives, respondents cited lack of close contact with PG&E and no ability to use the incentives for intended upgrades. Most respondents reported being interested in installing additional measures in the future. Two respondents reported not having implemented these measures due to competing priorities and a general lack of resources related to California budget restrictions. Feedback from program staff supports this finding by reporting several instances where major projects went on their way without the customers considering PG&E as a source of funding. Offered reasons included the perception that administrative overhead related to applying for the incentives is not justified by the offered incentive levels.

Most nonparticipants are interested in receiving services from PG&E in the future. The majority of interviewed nonparticipants indicated interest in receiving services from PG&E in the future. Specifically, respondents indicated the desire to save money as the primary motivation. When asked to identify the time frame in which they intended to use PG&E's assistance for making upgrades, three out of five respondents cited a 2- to 3-year time frame.

Appendix A: Participant Survey Guide

PG&E Schools and Colleges
Program Participant Survey

A. Respondent's Contact Information (Complete before interview)

School Name: _____ Survey Date: _____

Contact Name:_____ Interviewer Initials: _____

Contact Phone Number: _____ Contact Title: _____

School District: _____

Hello, my name is _____ and I am calling on behalf of PG&E. We are evaluating efforts to assist schools and colleges and are looking for feedback to help PG&E to improve its offerings to schools like yours. Do you feel comfortable answering a few questions regarding your school's current energy efficiency practices or is there somebody else you recommend we talk to? [If an alternate is suggested, get contact name, title, and phone number.] Thank you!

- ❑ Alternate contact [record name, title, and phone number_____]
- ❑ No.....Thank person and terminate call
- ❑ Yes

The questions will take about 20 minutes, do you have that much time now, or is there a better time to contact you?

- ❑ No.....Schedule call back
- ❑ Yes

We appreciate your willingness to share your experiences. We do not intend to report your responses in any way that would reveal your identity or the identity of your school. I understand that you may not have the answers to all of the questions of this survey, please let me know if there is a better contact for any questions asked, and I will be happy to call that person to finish the survey.

B. Introductory Questions

1. Our records indicate that your school/district received financial assistance to implement capital projects from PG&E during 2007. Is this correct?
   1) Yes
   2) No ***[Thank and Terminate]***
   98) Don't Know ***[Thank and Terminate]***
   99) Refused ***[Thank and Terminate]***

2. How did you first hear about the available incentives from PG&E? [DO NOT READ]

1) (Contacted by PG&E)
2) (School contacted PG&E)
3) (Trade Publication)
4) (Marketing by Trade Ally, vendor or contactor)
5) (School approached trade ally, vendor or contractor)
6) (From another school/colleague/district; word of mouth)
7) (Through a school organization or professional organization/association)
8) (Through printed material sent by the Program; through outreach materials sent by the Program)
9) (At a trade show)
10) (Through family, friend, or neighbor)
11) (Participation in other PG&E programs)
12) (Other [SPECIFY: _____])
98) (Don't Know)
99) (Refused)

3. Were you considering upgrading equipment before learning about the availability of incentives from PG&E?

1) Yes
2) No
98) Don't Know
99) Refused

4. Why did you decide to participate?

_____

5. What were the primary reasons for installing high efficiency equipment?

_____

6. Has your school participated in other utility energy efficiency programs in the past five years? *(i.e. energy audit, other rebate programs, etc)*

1) Yes
2) No **[Skip to 8]**
98) Don't Know **[Skip to 8]**
99) Refused **[Skip to 8]**

7. Which programs has your school participated in? (name & year)

_____

For the next few questions, I would like to ask you about your experience with applying for the incentives?

8. How straightforward were the application materials?
    1) Not at all Straightforward
    2) Not very Straightforward
    3) Somewhat Straightforward
    4) Very Straightforward **[skip to 10]**
    98) Don't know **[Skip to 10]**
    99) Refused **[skip to 10]**

9. What made the application process difficult or confusing? [DO NOT READ RESPONSES; if more than one response, ask what was the MOST important one]
    1) The process took too long
    2) The applications materials were difficult to understand
    3) The program staff was not responsive
    4)Excessive amount of information requested for project review
    5) The incentives were less than I expected
    6) Other SPECIFY: _____
    98) Don't know
    99) Refused

10. Were your questions and inquiries answered promptly and sufficiently by PG&E staff?
    1) Yes
    2) No Please Explain
    98) Don't Know
    99) Refused

11. Did you have a clear idea of who you could go to for help?
    1) Yes
    2) No Please Explain
    98) Don't Know
    99) Refused

12. Who was your primary contact throughout the process? (*Name/Title of contact)*

_____

13. What improvements could be made to the application process?

_____

14. Overall, how satisfied were you with the application process?
    1) Not at all Satisfied
    2) Not very Satisfied
    3) Somewhat Satisfied
    4) Very Satisfied
    98) Don't know
    99) Refused

D. Measure Implementation

The next series of questions addresses your experience with the implementation of the measures.

15. Which measure(s) have you implemented to date?

_____

16. Why did you choose to implement this/these measure(s)?

_____

17. Now, using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement the measure(s) at this time.

18. The age or condition of the old equipment
    1) ___ (0-10)
    98) Don't know
    99) Refused

19. Availability of the incentives
    1) ___ (0-10)
    98) Don't know
    99) Refused

20. Previous experience with PG&E assistance?
    1) ___ (0-10)
    98) Don't know
    99) Refused

21. Information from PG&E marketing materials?

1) ___ (0-10)
98) Don't know
99) Refused

22. Endorsement or recommendation by your PG&E representative

1) ___ (0-10)
98) Don't know
99) Refused

23. Payback on the investment

1) ___ (0-10)
98) Don't know
99) Refused

24. Approximately how long did it take between learning about the availability of incentives and the actual installation of the measures?

_____ (months?)

25. How significant was PG&E's assistance versus other factors in your decision to implement the measure(s) that that was eventually adopted or installed?

1) Very significant
2) Somewhat significant
3) Somewhat insignificant
4) Very insignificant
98) Don't know
99) Refused

26. Without the assistance from PG&E, how likely would your school/district have been to install these measures within the next two years?

1) Not at all Likely **[Skip to 28]**
2) Not very Likely **[Skip to 28]**
3) Somewhat Likely
4) Very Likely
98) Don't know **[Skip to 28]**
99) Refused **[Skip to 28]**

27. Specifically, which measures would your school/district have installed without incentives?

_____

28. Were there any measures that PG&E recommended that have not been implemented?

1) Yes
2) No **[Skip to 32]**
98) Don't Know **[Skip to 32]**
99) Refused **[Skip to 32]**

29. Which ones were they?

_____

30. What prohibited you from installing these measures?

_____

31. Do you have plans to install these measures in the future?

1) Yes, When_____
2) No
98) Don't Know
99) Refused

32. Are there any other measures you are interested in installing but have not done so to date?

1) Yes
2) No **[Skip to 34]**
98) Don't Know **[Skip to 34]**
99) Refused **[Skip to 34]**

33. [if yes] What has precluded you from implementing these measures?

_____

E. Energy Management Process

The next series of questions addresses the decision making process at your school/district in regards to energy efficiency purchases and upgrades.

34. How do you typically learn about energy efficiency upgrades and technologies for your school? [DO NOT READ; CHECK ALL THAT APPLY]

1) Outside Vendors
2) PG&E Staff
3) Internet

4) Mailings
5) Bill Inserts
6) Colleagues at Other Schools
7) District Meetings/Activities
8) Professional/Trade Organizations/Publications – Specify:
_____
9) Other Specify:_____
98) Don't Know
99) Refused

35. Which source do you trust the most for information on energy efficiency upgrades and technology? [DO NOT READ; CHECK ALL THAT APPLY]

1) Outside Vendors
2) PG&E Staff
3) Internet
4) Mailings
5) Bill Inserts
6) Colleagues at Other Schools
7) District Meetings/Activities
8) Professional/Trade Organizations/Publications – Specify:
_____
9) Other Specify:_____
98) Don't Know
99) Refused

36. Within your school or district, who is the initial person that usually makes a recommendation to purchase or install energy efficient equipment?

_____

37. What typically happens after such a recommendation is made?

_____

38. Who typically manages day-to-day energy related issues, such as heating and cooling? *(Title of Person(s)*

_____

39. Are there any energy conservation leads (i.e., energy champions) at your facility/district?

- If so, who? *(Title of Person(s)*_____
- Probe: What specifically do they do? Who do they report to and work with? What influence do they have?

_____

40. Who is the primary person that makes purchasing decisions at your school? (Title of Person(s))_____
    98) Don't Know
    99) Refused

F. Conclusion

We are just about done. I have a few more questions about your general impressions of your experience participating in one of PG&E's programs. Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extent you agree or disagree with the following statements:

41. Participation exposed me to new energy efficient technologies.
    1) ___ (0-10)
    98) Don't know
    99) Refused

42. Participation strongly impacted my awareness and knowledge of energy efficiency practices.
    1) ___ (0-10)
    98) Don't know
    99) Refused

43. Participation strongly impacted my attitudes and perceptions of energy efficiency practices.
    1) ___ (0-10)
    98) Don't know
    99) Refused

44. Energy efficient technologies are a cost-effective investment for my school.

1) ___ (0-10)
98) Don't know
99) Refused

45. PG&E staff used my time and resources wisely.

1) ___ (0-10)
98) Don't know
99) Refused

46. I am satisfied with my interactions with PG&E [RSG] staff?

1) ___ (0-10)
98) Don't know
99) Refused

47. I am satisfied with the assistance provided by PG&E.

1) ___ (0-10)
98) Don't know
99) Refused

48. Do you have any comments related to your participation that we have not already discussed?

_____

Thank you again for your time.

Appendix B: Nonparticipant Survey Guide

PG&E Schools and Colleges

Program Nonparticipant Survey

A. Respondent's Contact Information (Complete before interview)

School Name: _____ Survey Date: _____

Contact Name:_____ Interviewer Initials: _____

Contact Phone Number: _____ Contact Title: _____

School District: _____

Hello, my name is _____ and I am calling on behalf of PG&E. We are evaluating PG&E's efforts to assist schools in saving energy and are looking for feedback to help PG&E to improve its offerings to schools like yours. Do you feel comfortable answering a few questions regarding your school's current energy efficiency practices, or is there somebody else you recommend we talk to? [If an alternate is suggested, get contact name, title, and phone number.] Thank you!

- ❑ Alternate contact [record name, title, and phone number_____]
- ❑ No.....Thank person and terminate call
- ❑ Yes

The questions will take about 20 minutes, do you have that much time now, or is there a better time to contact you?

- ❑ No.....Schedule call back
- ❑ Yes

We appreciate your willingness to share your experiences. We do not intend to report your responses in any way that would reveal your identity or the identity of your school. I understand that you may not have the answers to all of the questions of this survey; please let me know if there is a better contact for any questions asked, and I will be happy to call that person to finish the survey.

B. Familiarity with PG&E's Offerings

1. Are you aware that PG&E is offering assistance to schools interested in installing high-efficiency equipment such as lighting and energy management systems?

   1) Yes
   2) No **[Skip to 5]**
   98) Don't Know **[Skip to 5]**
   99) Refused **[Skip to 5]**

2. How did you first hear about the available incentives from PG&E? [DO NOT READ]

   1) (Contacted by PG&E)
   2) (School contacted PG&E)
   3) (Trade Publication)
   4) (Marketing by Trade Ally, vendor or contactor)
   5) (School approached trade ally, vendor or contractor)
   6) (From another school/colleague/district; word of mouth)
   7) (Through a school organization or professional organization/association)
   8) (Through printed material sent by the Program; through outreach materials sent by the Program)
   9) (At a trade show)
   10) (Through family, friend, or neighbor)
   11) (Participation in other PG&E programs)
   12) (Other [SPECIFY: _____])
   98) (Don't Know)
   99) (Refused)

3. Has your school participated in PG&E energy efficiency programs in the past five years? *(i.e. energy audit, other rebate programs, etc)*

   1) Yes
   2) No **[Skip to 5]**
   98) (Don't Know) **[Skip to 5]**
   99) (Refused) **[Skip to 5]**

4. Which programs has your school participated in? (name & year)

   _____

C. Energy Management Process

The next series of questions addresses the decision making process at your school/district in regards to energy efficiency purchases and upgrades.

5. Using this 0 to 10 rating scale, where 0 means "Not at all aware" and 10 means "strongly aware," please rate your school's/district's awareness and understanding of **energy efficiency**?

   1) _____
   98) Don't Know
   99) Refused

6. How do you typically learn about energy efficiency upgrades and technologies for your school? [DO NOT READ; CHECK ALL THAT APPLY]

    1) Outside Vendors
    2) PG&E Staff
    3) Internet
    4) Mailings
    5) Bill Inserts
    6) Colleagues at Other Schools
    7) District Meetings/Activities
    8) Professional/Trade Organizations/Publications – Specify:
    _____
    9) Other Specify:_____
    98) Don't Know
    99) Refused

7. Which source do you trust the most for information on energy efficiency upgrades and technology? [DO NOT READ; CHECK ALL THAT APPLY]

    1) Outside Vendors
    2) PG&E Staff
    3) Internet
    4) Mailings
    5) Bill Inserts
    6) Colleagues at Other Schools
    7) District Meetings/Activities
    8) Professional/Trade Organizations/Publications – Specify:
    _____
    9) Other Specify:_____
    98) Don't Know
    99) Refused

8. Within your school or district, who is the initial person that usually makes a recommendation to purchase or install energy efficient equipment?

    _____

9. What typically happens after such a recommendation is made?

    _____

10. Who typically manages day-to-day energy related issues, such as heating and cooling?

    *(Title of Person(s))*_____

11. Are there any energy conservation leads (i.e., energy champions) at your facility/district?

- If so, who? *(Title of Person(s)*_____
- *Probe: What specifically do they do? Who do they report to and work with? What influence do they have?*

_____

12. Who is the primary person who makes purchasing decisions at your school?

*(Title of Person(s))*_____

98) Don't Know
99) Refused

D. Measure Installation

The next series of questions focuses on the installation of energy efficient equipment at your school.

13. Have you installed any energy efficient equipment in your school within the last 5 years?

1) Yes
2) No **[Skip to 20]**
98) Don't Know **[Skip to 20]**
99) Refused **[Skip to 20]**

14. What equipment have you installed?

_____

15. What were the primary reasons for installing this equipment? [*if multiple measures, ask questions for all measures*]

_____

16. In your opinion, why did your school choose not to make use of PG&E's assistance? [*Probe for details*]

_____

17. Were there any specific issues/barriers that made using such incentives difficult for you/your school?

1) Yes
2) No **[Skip to 20]**
98) (Don't Know) **[Skip to 20]**
99) (Refused) **[Skip to 20]**

18. What were these barriers?

_____

19. What would it take to overcome these barriers?

_____

20. Do you have plans to upgrade energy management systems within the next two - three years?

1) Yes
2) No **[Skip to 23]**
98) Don't Know **[Skip to 23]**
99) Refused **[Skip to 23]**

21. Do you think your school will make use of PG&E's assistance for financing and implementing these measures?

1) Yes **[Skip to 23]**
2) No
98) Don't Know
99) Refused

22. Do you know why that would be the case?

_____

23. Are there any other measures or significant capital or facility improvements you are interested in installing but have not done so to date?

1) Yes
2) No **[Skip to 25]**
98) Don't Know **[Skip to 25]**
99) Refused **[Skip to 25]**

24. What has precluded you from implementing these measures?

_____

25. Using this 0 to 10 rating scale, where 0 means "Not at all interested" and 10 means "very interested," please rate your school's/district's interest in receiving services and/or assistance from PG&E.

1) _____
98) Don't Know
99) Refused

26. Why are you (interested/not interested)?

_____

F. Conclusion

27. Thank you again for your time.

Appendix C: Participant Survey Frequencies

PG&E Schools & Colleges 2007-95 Participants		
Do you feel comfortable answering a few questions regarding your school's current energy efficiency practices, or is there somebody else you recommend we talk to?		
Answer Options	Response Percent	Response Count
Yes	100.0%	15
No - Thank and terminate	0.0%	0
Alternate	0.0%	0
	answered question	15
	skipped question	0

PG& E Schools & Colleges 2007-95 Participants		
The questions will take about 20 minutes, do you have that much time now, or is there a better time to contact you?		
Answer Options	Response Percent	Response Count
Yes	100.0%	15
No - schedule call back	0.0%	0
	answered question	15
	skipped question	0

PG& E Schools & Colleges 2007-95 Participants		
Our records indicate that your school/district received financial assistance to implement capital projects from PG& E during 2007. Is this correct?		
Answer Options	Response Percent	Response Count

Yes	100.0%	14
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	14
	skipped question	1

PG& E Schools & Colleges 2007-95 Participants		
How did you first hear about the available incentives from PG&E? [DO NOT READ]		
Answer Options	Response Percent	Response Count
Contacted by PG& E	53.8%	7
School contacted PG& E	15.4%	2
Trade Publication	0.0%	0
Marketing by Trade Ally, vendor or contactor	0.0%	0
School approached trade ally, vendor or contractor	15.4%	2
From another school/colleague/district; word of mouth	7.7%	1
Through a school organization or professional organization/association	7.7%	1
Through printed material sent by the Program; through outreach materials sent by the Program	0.0%	0
At a trade show	0.0%	0
Through family, friend, or neighbor	0.0%	0
Participation in other PG& E programs	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0

Other (please specify)	15.4%	2
	answered question	13
	skipped question	2

Number	Other (please specify)
1	Involved since the beginning of the incentive program
2	Been involved for years

PG& E Schools & Colleges 2007-95 Participants		
Were you considering upgrading equipment before learning about the availability of incentives from PG&E?		
Answer Options	Response Percent	Response Count
Yes	69.2%	9
No	23.1%	3
Don't Know	7.7%	1
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants	
Why did you decide to participate?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	Because of the monetary incentive
2	Allows implementation of more energy savings measures that without assistance from PG&E
3	cost savings
4	incentives
5	Timing was right in terms of having the right people involved and recognizing opportunity
6	Financial viability
7	Financially a good decision
8	Paying for your incentives through utility any way
9	incentives
10	Helps leverage dollars and to save energy
11	Some money will roll over into future projects due to rebates
12	Real money, rebates are huge, money helpful for next group of projects.
13	Scheduled for upgrade- savings opportunity

PG& E Schools & Colleges 2007-95 Participants	
What were the primary reasons for installing high efficiency equipment?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	To save money on energy costs
2	Offset Utility costs and help save energy
3	cost saving/mandate
4	save money
5	on going energy savings
6	Energy savings
7	reduce cost of energy
8	Energy savings
9	Energy cost savings
10	Save energy, lower costs and energy efficient
11	Use less energy to run systems and cost to district reduced
12	Save energy, money and lower greenhouse gas footprint
13	Sustainability policy- do right thing for environment

PG& E Schools & Colleges 2007-95 Participants

Has your school participated in other utility energy efficiency programs in the past five years? (i.e. energy audit, other rebate programs, etc.)

Answer Options	Response Percent	Response Count
Yes	84.6%	11
No	7.7%	1
Don't Know	7.7%	1
Refused	0.0%	0
answered question		13
skipped question		2

PG& E Schools & Colleges 2007-95 Participants	
Which programs has your school participated in? (name &year)	
Answer Options	Response Count
	11
answered question	11
skipped question	4

Number	Response Text
1	IOU, savings by design
2	CVRP cost volume retrofit program, CSU energy partnership
3	CSU UC partnership programs
4	savings by design,
5	savings by design, vending visors
6	Ballast retrofits and lighting retrofits, cool roof projects, HVAC retrofits
7	CSU Partnership programs
8	Construction incentive program 2006
9	CCC_IOU/ MBC selects programs
10	Customized
11	unsure of program name

PG& E Schools & Colleges 2007-95 Participants		
How straightforward were the application materials?		
Answer Options	Response Percent	Response Count
Not at all Straightforward	15.4%	2

Not very Straightforward	7.7%	1
Somewhat Straightforward	38.5%	5
Very Straightforward	30.8%	4
Don't know	7.7%	1
Refused	0.0%	0
	answered question	13
	skipped question	2

PG& E Schools & Colleges 2007-95 Participants		
What made the application process difficult or confusing? [DO NOT READ RESPONSES; If more than one response, ask what was the MOST important one]		
Answer Options	Response Percent	Response Count
The process took too long	37.5%	3
The applications materials were difficult to understand	12.5%	1
The program staff was not responsive	0.0%	0
Excessive amount of information requested for project review	0.0%	0
The incentives were less than I expected	0.0%	0
Don't know	25.0%	2
Refused	0.0%	0
Other (please specify)	25.0%	2
	answered question	8
	skipped question	7

Number	Other (please specify)
1	High entry expense in IOU program
2	Rebates sometimes don't cover costs

PG& E Schools & Colleges 2007-95 Participants		
Were your questions and inquiries answered promptly and sufficiently by PG& E staff?		
Answer Options	Response Percent	Response Count
Yes	100.0%	13
Don't Know	0.0%	0
Refused	0.0%	0
No	0.0%	0
answered question		13
skipped question		2

PG& E Schools &Colleges 2007-95 Participants		
Did you have a clear idea of who you could go to for help?		
Answer Options	Response Percent	Response Count
Yes	92.3%	12
Don't Know	0.0%	0
Refused	0.0%	0
No	7.7%	1
answered question		13
skipped question		2

Number	No
1	too many people to deal with

PG& E Schools & Colleges 2007-95 Participants	
Who was your primary contact throughout the process? (Name/Title of contact)	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	R.W., account rep.
2	Local account rep
3	account rep
4	D.V.O.
5	Campus account rep D.H.
6	D.H.
7	Account rep
8	account rep
9	D.H.
10	S.S.
11	H.S.
12	E.J.

13	D.L.

PG& E Schools Colleges 2007-95 Participants	
What improvements could be made to the application process?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	Reduction of entry expense for IOU program
2	Streamline the process
3	No
4	Don't know
5	Streamline timeline
6	Quick turnover
7	Not many, partnership is working well, streamlined and easy.
8	Too many to count
9	Partnership was fantastic, no success with savings by design
10	Come to schools with data ready then tell us what can happen.
11	Improvement needed in maintaining records
12	Duplication of steps in engineering review. Multiple engineering firms looking and

	reviewing projects could be done with one competent engineering firm.
13	Accumulate data problems

PG& E Schools & Colleges 2007-95 Participants		
Overall, how satisfied were you with the application process?		
Answer Options	Response Percent	Response Count
Not at all Satisfied	7.7%	1
Not very Satisfied	15.4%	2
Somewhat Satisfied	53.8%	7
Very Satisfied	23.1%	3
Don't know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG& E Schools & Colleges 2007-95 Participants	
Which measure(s) have you implemented to date?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	All
2	Campus-wide lighting retrofit, HVAC retrofit

3	boilers, lighting retrofits, HVAC retrofits
4	Refrigeration, CFLs, outdoor mass lighting
5	Natural Gas measures, survey and assessment of steam system
6	Lighting retrofits, Fan/motor an d pumps installation
7	Monitor base commissioning
8	HVAC systems, lighting, roofs
9	Boiler controls and retrofit
10	New construction- electrical more energy efficient
11	Chillers, VFD water pumps- boilers, vending misers, motors on pumps and air handlers
12	Conversion to variable speed retrofit, v to v conversion, control system variable speed swimming drives
13	HVAC & lighting

PG&E Schools & Colleges 2007-95 Participants	
Why did you choose to implement this/these measure(s)?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	To offset costs
2	Offset utility costs
3	energy/cost savings
4	save energy costs

5	incentives were great
6	Energy savings and incentives
7	offset the cost of energy
8	offset energy cost
9	energy cost savings, incentive
10	cost saving
11	Energy cost savings
12	Long standing Energy Efficient program on Campus- always looking for programs for energy reduction
13	Funding available

PG& E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

The age or condition of the old equipment

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	7.7%	1
7	15.4%	2
8	23.1%	3
9	50.0%	5

10	15.4%	2
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement the measure(s) at this time: Availability of the incentives		
Answer Options	Response Percent	Response Count
0	7.7%	1
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	0.0%	0
7	15.4%	2
8	15.4%	2
9	61.5%	8
10	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Previous experience with PG&E assistance

Answer Options	Response Percent	Response Count
0	7.7%	1
1	0.0%	0
2	0.0%	0
3	7.7%	1
4	0.0%	0
5	23.1%	3
6	7.7%	1
7	15.4%	2
8	23.1%	3
9	7.7%	1
10	7.7%	1
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Information from PG&E marketing materials

Answer Options	Response Percent	Response Count
0	7.7%	1
1	0.0%	0
2	15.4%	2
3	0.0%	0
4	15.4%	2
5	15.4%	2
6	0.0%	0
7	15.4%	2
8	7.7%	1
9	15.4%	2
10	7.7%	1
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Endorsement or recommendation by your PG&E representative

Answer Options	Response Percent	Response Count
0	15.4%	2
1	7.7%	1
2	7.7%	1
3	0.0%	0

4	0.0%	0
5	7.7%	1
6	7.7%	1
7	15.4%	2
8	15.4%	2
9	15.4%	2
10	7.7%	1
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Payback on the investment

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	0.0%	0
7	7.7%	1
8	15.4%	2

9	61.5%	8
10	15.4%	2
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants	
Approximately how long did it take between learning about the availability of incentives and the actual installation of the measures?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	3 years
2	1 year
3	not sure
4	6 months
5	9 months
6	10-18 months
7	1 month to 2 years
8	10 months
9	6 months to a year
10	12 months

11	unsure
12	24 months
13	36 month - due to internal processes

PG&E Schools & Colleges 2007-95 Participants		
How significant was PG&E 's assistance versus other factors in your decision to implement the measure(s) that that was eventually adopted or installed?		
Answer Options	Response Percent	Response Count
Very significant	23.1%	3
Somewhat significant	53.8%	7
Somewhat insignificant	7.7%	1
Very insignificant	15.4%	2
Don't know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Without the assistance from PG&E, how likely would your school/district have been to install these measures within the next two years?		
Answer Options	Response Percent	Response Count
Not at all Likely	30.8%	4
Not very Likely	30.8%	4
Somewhat Likely	7.7%	1

Very Likely	30.8%	4
Don't know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants	
Specifically, which measures would your school/district have installed without incentives?	
Answer Options	Response Count
	5
answered question	5
skipped question	10

Number	Response Text
1	Central chiller plant, I-deck units, radiant heat/cool
2	All
3	Air handlers, VFD's and EMS controls
4	All of them
5	HVAC and Lighting

PG&E Schools & Colleges 2007-95 Participants		
Were there any measures that PG&E recommended that have not been implemented?		
Answer Options	Response Percent	Response Count
Yes	7.7%	1

No	76.9%	10
Don't Know	15.4%	2
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants	
Which ones were they?	
Answer Options	Response Count
	1
answered question	1
skipped question	14

Number	Response Text
1	Re-lamping

PG&E Schools & Colleges 2007-95 Participants	
What prohibited you from installing these measures?	
Answer Options	Response Count
	1
answered question	1
skipped question	14

Number	Response Text
1	Process of Facilities money scheduling- timing correctly

PG&E Schools & Colleges 2007-95 Participants		
Do you have plans to install these measures in the future?		
Answer Options	Response Percent	Response Count
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
Yes (when)	100.0%	1
	answered question	1
	skipped question	14

Number	Yes (when)
1	Next 5 years

PG&E Schools & Colleges 2007-95 Participants		
Are there any other measures you are interested in installing but have not done so to date?		
Answer Options	Response Percent	Response Count
Yes	38.5%	5
No	53.8%	7
Don't Know	0.0%	0

Refused	7.7%	1
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants	
What has precluded you from implementing these measures?	
Answer Options	Response Count
	5
answered question	5
skipped question	10

Number	Response Text
1	Work load and funding
2	costs
3	Cost, limited staff
4	Money
5	District wide energy plan not developed yet

PG&E Schools & Colleges 2007-95 Participants		
How do you typically learn about energy efficiency upgrades and technologies for your school? [DO NOT READ; CHECK ALL THAT APPLY]		
Answer Options	Response Percent	Response Count
Outside Vendors	15.4%	2
PG&E Staff	38.5%	5
Internet	30.8%	4

Mailings	15.4%	2
Bill Inserts	0.0%	0
Colleagues at Other Schools	38.5%	5
District Meetings/Activities	7.7%	1
Professional/Trade Organizations/Publications – Specify: _____	15.4%	2
Other Specify:_____	23.1%	3
Don't Know	0.0%	0
Refused	0.0%	0
	Other and/or Professional/Trade Orgs/Publications	3
	answered question	13
	skipped question	2

Number	Other and/or Professional/Trade Orgs/Publications
1	Energy Auditors
2	PG&E training center, Trade brochures, IES Ashtrade
3	There is a network through the State college system that filters information about EE upgrades

PG&E Schools & Colleges 2007-95 Participants

Which source do you trust the most for information on energy efficiency upgrades and technology? [DO NOT READ; CHECK ALL THAT APPLY]

Answer Options	Response Percent	Response Count
Outside Vendors	0.0%	0
PG&E Staff	46.2%	6
Internet	0.0%	0
Mailings	7.7%	1

Bill Inserts	0.0%	0
Colleagues at Other Schools	46.2%	6
District Meetings/Activities	7.7%	1
Professional/Trade Organizations/Publications – Specify: _____	15.4%	2
Other Specify:_____	15.4%	2
Don't Know	0.0%	0
Refused	0.0%	0
	Other and/or Professional/Trade Orgs/Publications	2
	answered question	13
	skipped question	2

Number	Other and/or Professional/Trade Orgs/Publications
1	Manufacturer data
2	Consultants

PG&E Schools & Colleges 2007-95 Participants

Within your school or district, who is the initial person that usually makes a recommendation to purchase or install energy efficient equipment?

Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text

1	D.T.
2	D.E.
3	Construction coordinator
4	R.R.
5	C.C.
6	P.T.
7	D.S.
8	T.S.
9	N.M.
10	F.H.
11	R.
12	S.G.
13	R.P.

PG&E Schools & Colleges 2007-95 Participants	
What typically happens after such a recommendation is made?	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	Investigation, application

2	Funding assessment, feasibility, implementation
3	feasibility then budgeting
4	Forward recommendation
5	Set priority and funding
6	Financial analysis, review, feasibility
7	Assess financial situation, approval through chancellors office
8	Evaluation of costs and feasibility
9	Feasibility process
10	Look for funding
11	Facilities Director reviews and or okays
12	Depends on size of project. Large projects- initial ee audit, good opportunity then re-evaluate to make sure that savings are real then goes to bid project
13	Look for funding

PG&E Schools & Colleges 2007-95 Participants	
Who typically manages day-to-day energy related issues, such as heating and cooling? (Title of person)	
Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	Not sure
2	T.N.

3	Energy manager
4	R.R.
5	C.C.
6	P.T.
7	D.S.
8	T.S.
9	N.M.
10	Director of Plant Services
11	R.
12	Utilities department
13	Maintenance and Operations

PG&E Schools & Colleges 2007-95 Participants		
Are there any energy conservation leads (i.e., energy champions) at your facility/district?		
Answer Options	Response Percent	Response Count
No	69.2%	9
Yes- If so, who? (title) What do they do, who do they report to and work with, what influence do they have?	30.8%	4
	answered question	13
	skipped question	2

Number	Yes- If so, who? (title) What do they do, who do they report to and work with, what influence do they have?
1	DE.

2	C.C.
3	P.T. as well as the rest of staff.
4	D.H.

PG&E Schools & Colleges 2007-95 Participants		
Who is the primary person who makes purchasing decisions at your school?		
Answer Options	Response Percent	Response Count
Don't Know	15.4%	2
Refused	15.4%	2
Title of Person(s)	69.2%	9
	answered question	13
	skipped question	2

Number	Title of Person(s)
1	D.T.
2	D.E.
3	energy manager
4	R.R.
5	C.C.
6	I.K.
7	M.B.
8	Depending on project... Director of Facilities or Administration
9	Facilities Director

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements: Participation exposed me to new energy efficient technologies.		
Answer Options	Response Percent	Response Count
0	0.0%	0
1	7.7%	1
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	7.7%	1
6	23.1%	3
7	7.7%	1
8	46.2%	6
9	0.0%	0
10	7.7%	1
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements: Participation strongly impacted my awareness and knowledge of energy efficiency practices.		
Answer Options	Response Percent	Response Count

0	0.0%	0
1	7.7%	1
2	7.7%	1
3	0.0%	0
4	15.4%	2
5	0.0%	0
6	23.1%	3
7	23.1%	3
8	15.4%	2
9	0.0%	0
10	7.7%	1
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements:

Participation strongly impacted my attitudes and perceptions of energy efficiency practices.

Answer Options	Response Percent	Response Count
0	7.7%	1
1	7.7%	1
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	23.1%	3

6	30.8%	4
7	15.4%	2
8	0.0%	0
9	0.0%	0
10	15.4%	2
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements: Energy efficient technologies are a cost-effective investment for my school.		
Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	7.7%	1
6	7.7%	1
7	7.7%	1
8	30.8%	4
9	15.4%	2

10	30.8%	4
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants

Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements:

PG&E staff used my time and resources wisely.

Answer Options	Response Percent	Response Count
0	7.7%	1
1	7.7%	1
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	7.7%	1
6	0.0%	0
7	23.1%	3
8	30.8%	4
9	7.7%	1
10	15.4%	2
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13

	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements: I am satisfied with my interactions with PG&E [RSG] staff?		
Answer Options	Response Percent	Response Count
0	15.4%	2
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	7.7%	1
5	0.0%	0
6	0.0%	0
7	23.1%	3
8	15.4%	2
9	15.4%	2
10	23.1%	3
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants		
Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements: I am satisfied with the assistance provided by PG&E .		
Answer Options	Response Percent	Response Count
0	15.4%	2
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	7.7%	1
5	0.0%	0
6	0.0%	0
7	15.4%	2
8	15.4%	2
9	23.1%	3
10	23.1%	3
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	13
	skipped question	2

PG&E Schools & Colleges 2007-95 Participants
Do you have any comments related to your participation that we have not already discussed?

Answer Options	Response Count
	13
answered question	13
skipped question	2

Number	Response Text
1	no
2	no
3	none
4	no
5	over all positive experience
6	incorporate load sharing
7	Thought that everything was fantastic, gave away 40,000 CFL could not have done this without PG&E's help
8	none
9	none
10	Nope....love program
11	No
12	The only change should be to the engineering review too much duplication
13	No

Appendix D: Participants New Construction

PG&E Schools Colleges 2007-95 Participants - NC		
Do you feel comfortable answering a few questions regarding your school's current energy efficiency practices, or is there somebody else you recommend we talk to?		
Answer Options	Response Percent	Response Count
Yes	100.0%	11
No - Thank and terminate	0.0%	0
Alternate	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC		
The questions will take about 20 minutes, do you have that much time now, or is there a better time to contact you?		
Answer Options	Response Percent	Response Count
Yes	100.0%	11
No - schedule call back	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants – NC		
Our records indicate that your school/district received financial assistance to implement capital projects from PG&E during 2007. Is this correct?		
Answer Options	Response Percent	Response Count

Yes	100.0%	11
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants – NC		
How did you first hear about the available incentives from PG&E? [DO NOT READ]		
Answer Options	Response Percent	Response Count
Contacted by PG&E	36.4%	4
School contacted PG&E	0.0%	0
Trade Publication	0.0%	0
Marketing by Trade Ally, vendor or contactor	9.1%	1
School approached trade ally, vendor or contractor	0.0%	0
From another school/colleague/district; word of mouth	0.0%	0
Through a school organization or professional organization/association	0.0%	0
Through printed material sent by the Program; through outreach materials sent by the Program	9.1%	1
At a trade show	0.0%	0
Through family, friend, or neighbor	0.0%	0
Participation in other PG&E programs	9.1%	1
Don't Know	0.0%	0
Refused	0.0%	0
Other (please specify)	54.5%	6

answered question	11
skipped question	0

Number	Response Date	Other (please specify)
1	06/09/2008 17:10:00	Engineers gave information to participant
2	06/09/2008 17:41:00	Mt Laurmoore energy Savings
3	06/09/2008 18:02:00	Architect
4	08/08/2008 18:06:00	Campus standard
5	08/08/2008 18:18:00	Engineers
6	08/08/2008 18:37:00	Consultant

PG&E Schools Colleges 2007-95 Participants - NC

Were you considering upgrading equipment before learning about the availability of incentives from PG&E?

Answer Options	Response Percent	Response Count
Yes	72.7%	8
No	18.2%	2
Don't Know	9.1%	1
Refused	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC

Why did you decide to participate?

Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 16:57:00	Currently in a lighting upgrade program and energy savings
2	06/09/2008 17:10:00	Long term cost savings
3	06/09/2008 17:41:00	Sustatinability
4	06/09/2008 18:02:00	New construction
5	06/09/2008 18:21:00	Cost savings
6	06/09/2008 18:29:00	Rebate
7	08/08/2008 18:06:00	Campus policy
8	08/08/2008 18:18:00	To get money back to offset costs of new energy efficient equiptment
9	08/08/2008 18:37:00	To take advantage of the available incentives
10	08/08/2008 18:59:00	Cost savings
11	08/08/2008 19:06:00	Incentives covered additional costs

PG&E Schools Colleges 2007-95 Participants - NC

What were the primary reasons for installing high efficiency equipment?

Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 16:57:00	Energy savings
2	06/09/2008 17:10:00	Long term cost savings
3	06/09/2008 17:41:00	To make projects as sustainable as the can get
4	06/09/2008 18:02:00	Money savings
5	06/09/2008 18:21:00	Save money
6	06/09/2008 18:29:00	Save money
7	08/08/2008 18:06:00	To save energy
8	08/08/2008 18:18:00	Long term usage and energy demand cost reduction
9	08/08/2008 18:37:00	Energy payback and to help offset the costs of equiptment replacement
10	08/08/2008 18:59:00	Save money for client
11	08/08/2008 19:06:00	Savings

PG&E Schools Colleges 2007-95 Participants – NC

Has your school participated in other utility energy efficiency programs in the past five years? (i.e. energy audit, other rebate programs, etc)

Answer Options	Response Percent	Response Count
Yes	81.8%	9
No	18.2%	2
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Which programs has your school participated in? (name & year)	
Answer Options	Response Count
	9
answered question	9
skipped question	2

Number	Response Date	Response Text
1	06/09/2008 16:57:00	Critial Peak Program
2	06/09/2008 17:41:00	Savings by design, So Cal Edison and PG&E
3	06/09/2008 18:21:00	So Cal gas program
4	06/09/2008 18:29:00	unsure
5	08/08/2008 18:06:00	Higher Ed Base Program
6	08/08/2008 18:18:00	don't remember names
7	08/08/2008 18:37:00	Don't remember
8	08/08/2008 18:59:00	Savings by design, So Cal Edison and PG&E
9	08/08/2008 19:07:00	High Performance School Program

PG&E Schools Colleges 2007-95 Participants - NC		
How straightforward were the application materials?		
Answer Options	Response Percent	Response Count
Not at all Straightforward	0.0%	0
Not very Straightforward	0.0%	0
Somewhat Straightforward	27.3%	3

Very Straightforward	45.5%	5
Don't know	27.3%	3
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC		
What made the application process difficult or confusing? [DO NOT READ RESPONSES; If more than one response, ask what was the MOST important one]		
Answer Options	Response Percent	Response Count
The process took too long	66.7%	2
The applications materials were difficult to understand	0.0%	0
The program staff was not responsive	0.0%	0
Excessive amount of information requested for project review	0.0%	0
The incentives were less than I expected	0.0%	0
Don't know	0.0%	0
Refused	0.0%	0
Other (please specify)	33.3%	1
	answered question	3
	skipped question	8

Number	Response Date	Other (please specify)
1	06/09/2008 17:42:00	Goes to a lot of different folks they seem to operate differently...not consistent

PG&E Schools Colleges 2007-95 Participants - NC		
Were your questions and inquiries answered promptly and sufficiently by PG&E staff?		
Answer Options	Response Percent	Response Count
Yes	90.9%	10
Don't Know	9.1%	1
Refused	0.0%	0
No	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC		
Did you have a clear idea of who you could go to for help?		
Answer Options	Response Percent	Response Count
Yes	81.8%	9
Don't Know	9.1%	1
Refused	0.0%	0
No	9.1%	1
answered question		11
skipped question		0

Number	Response Date	No
1	06/09/2008 17:00:00	E.M.

PG&E Schools Colleges 2007-95 Participants - NC	
Who was your primary contact throughout the process? (Name/Title of contact)	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:00:00	E.M.
2	06/09/2008 17:16:00	C.H.
3	06/09/2008 17:56:00	S.L.
4	06/09/2008 18:05:00	E.M.
5	06/09/2008 18:23:00	E.M.
6	06/09/2008 18:31:00	E.M.
7	08/08/2008 18:09:00	T.B.
8	08/08/2008 18:21:00	Engineer handled interactions so I am unsure
9	08/08/2008 18:40:00	B.M.
10	08/08/2008 19:02:00	L ____ cannot remember last name
11	08/08/2008 19:09:00	M.J.

PG&E Schools Colleges 2007-95 Participants - NC	
What improvements could be made to the application process?	
Answer Options	Response Count

	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:00:00	None
2	06/09/2008 17:16:00	n/a
3	06/09/2008 17:56:00	N/a
4	06/09/2008 18:05:00	None
5	06/09/2008 18:23:00	Nothing
6	06/09/2008 18:31:00	None
7	08/08/2008 18:09:00	Usually need to go through several people to get things to happen
8	08/08/2008 18:21:00	None
9	08/08/2008 18:40:00	none
10	08/08/2008 19:02:00	Application was easy needs to be excellerated
11	08/08/2008 19:09:00	Have an option to do it online

PG&E Schools Colleges 2007-95 Participants - NC		
Overall, how satisfied were you with the application process?		
Answer Options	Response Percent	Response Count
Not at all Satisfied	0.0%	0
Not very Satisfied	0.0%	0
Somewhat Satisfied	36.4%	4
Very Satisfied	45.5%	5

Don't know	9.1%	1
Refused	9.1%	1
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC	
Which measure(s) have you implemented to date?	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:00:00	HVAC EMS system, Lighing on Web based schedules, Systems in place for after hours lighting
2	06/09/2008 17:16:00	Lightbulbs- exceed title 24 ec systems
3	06/09/2008 17:56:00	Gas turbine/ photo solar / HVAC upgrade
4	06/09/2008 18:05:00	Build new school with HVAC
5	06/09/2008 18:23:00	Controls, BUildign automization, economizer system, hvac, lighting
6	06/09/2008 18:31:00	Control systems
7	08/08/2008 18:09:00	Don't know--can't remember

8	08/08/2008 18:21:00	Lighting, insulation and HVAC
9	08/08/2008 18:40:00	Still under construction of installing solar panels
10	08/08/2008 19:02:00	None still in the construction phase
11	08/08/2008 19:09:00	Cool roof, SEER ratings HVAC, insulation, motion detector lighting, ballasts more ee, low E glass, natural ventilation

PG&E Schools Colleges 2007-95 Participants - NC	
Why did you choose to implement this/these measure(s)?	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:00:00	Save money
2	06/09/2008 17:16:00	Operational cost savings
3	06/09/2008 17:56:00	More sustainable and save energy
4	06/09/2008 18:05:00	Money savings
5	06/09/2008 18:23:00	Save energy
6	06/09/2008 18:31:00	Cost savings
7	08/08/2008 18:09:00	Campus standard is energy efficiency practices
8	08/08/2008 18:21:00	Energy efficiency and long term use cost efficiency
9	08/08/2008 18:40:00	cost savings
10	08/08/2008 19:02:00	Still working on the installation...but it is for the savings

11	08/08/2008 19:09:00	EE savings, better enviornment for learning

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

The age or condition of the old equipment

Answer Options	Response Percent	Response Count
0	18.2%	2
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	0.0%	0
7	0.0%	0
8	9.1%	1
9	72.7%	8
Don't Know	0.0%	0
Refused	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Availability of the incentives		
Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	9.1%	1
6	9.1%	1
7	27.3%	3
8	27.3%	3
9	27.3%	3
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC		
Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time: Previous experience with PG&E assistance		
Answer Options	Response Percent	Response Count
0	0.0%	0

1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	18.2%	2
7	9.1%	1
8	36.4%	4
9	36.4%	4
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Information from PG&E marketing materials

Answer Options	Response Percent	Response Count
0	9.1%	1
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0

6	9.1%	1
7	27.3%	3
8	9.1%	1
9	18.2%	2
Don't Know	27.3%	3
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Endorsement or recommendation by your PG&E representative

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	9.1%	1
6	9.1%	1
7	18.2%	2
8	27.3%	3
9	18.2%	2
Don't Know	18.2%	2

Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Not at all important” and 10 means “Very important,” please rate the importance of each of the following in your decision to implement the measure(s) at this time:

Payback on the investment

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	0.0%	0
7	18.2%	2
8	0.0%	0
9	81.8%	9
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC	
Approximately how long did it take between learning about the availability of incentives and the actual installation of the measures?	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:00:00	3 months
2	06/09/2008 17:16:00	about 1 year...but not exact on the timeline information
3	06/09/2008 17:56:00	12 months
4	06/09/2008 18:05:00	unknown
5	06/09/2008 18:23:00	12 months
6	06/09/2008 18:31:00	1-2 months
7	08/08/2008 18:09:00	48 months
8	08/08/2008 18:21:00	12 months
9	08/08/2008 18:40:00	not completed
10	08/08/2008 19:02:00	still working on it
11	08/08/2008 19:09:00	18 months

PG&E Schools Colleges 2007-95 Participants - NC		
How significant was PG&E's assistance versus other factors in your decision to implement the measure(s) that that was eventually adopted or installed?		
Answer Options	Response Percent	Response Count

Very significant	27.3%	3
Somewhat significant	36.4%	4
Somewhat insignificant	18.2%	2
Very insignificant	9.1%	1
Don't know	9.1%	1
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC		
Without the assistance from PG&E, how likely would your school/district have been to install these measures within the next two years?		
Answer Options	Response Percent	Response Count
Not at all Likely	18.2%	2
Not very Likely	0.0%	0
Somewhat Likely	27.3%	3
Very Likely	45.5%	5
Don't know	9.1%	1
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC
Specifically, which measures would your school/district have installed without incentives?

Answer Options	Response Count
	8
answered question	8
skipped question	3

Number	Response Date	Response Text
1	06/09/2008 17:01:00	EMS sytems, computer shut down software, T8 or T5 lighting
2	06/09/2008 17:16:00	None
3	06/09/2008 18:24:00	Upgrading control system
4	06/09/2008 18:31:00	All of it... controls needed to change controls since they were 10-15 years old
5	08/08/2008 18:21:00	Not sure
6	08/08/2008 18:40:00	Solar panels
7	08/08/2008 19:02:00	unsure
8	08/08/2008 19:10:00	Unsure what we would have done without incentives

PG&E Schools Colleges 2007-95 Participants - NC

Were there any measures that PG&E recommended that have not been implemented?

Answer Options	Response Percent	Response Count
Yes	45.5%	5
No	54.5%	6
Don't Know	0.0%	0
Refused	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC	
Which ones were they?	
Answer Options	Response Count
	5
answered question	5
skipped question	6

Number	Response Date	Response Text
1	06/09/2008 17:01:00	HVAC upgrades
2	06/09/2008 17:17:00	redesign HVAC
3	06/09/2008 18:16:00	Refused
4	06/09/2008 18:24:00	Don't remeber
5	06/09/2008 18:32:00	Lighting ballast

PG&E Schools Colleges 2007-95 Participants - NC	
What prohibited you from installing these measures?	
Answer Options	Response Count
	5
answered question	5
skipped question	6

Number	Response Date	Response Text

1	06/09/2008 17:01:00	Budget constraints
2	06/09/2008 17:17:00	Cost prohibitive or ROI too far out
3	06/09/2008 18:16:00	refused
4	06/09/2008 18:24:00	refused
5	06/09/2008 18:32:00	Cost

PG&E Schools Colleges 2007-95 Participants - NC		
Do you have plans to install these measures in the future?		
Answer Options	Response Percent	Response Count
No	0.0%	0
Don't Know	0.0%	0
Refused	60.0%	3
Yes (when)	40.0%	2
answered question		5
skipped question		6

Number	Response Date	Yes (when)
1	06/09/2008 17:01:00	Funds are available
2	06/09/2008 18:32:00	Would like to when funds available

PG&E Schools Colleges 2007-95 Participants - NC		
Are there any other measures you are interested in installing but have not done so to date?		
Answer Options	Response Percent	Response Count
Yes	9.1%	1

No	45.5%	5
Don't Know	27.3%	3
Refused	18.2%	2
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC	
What has precluded you from implementing these measures?	
Answer Options	Response Count
	1
answered question	1
skipped question	10

Number	Response Date	Response Text
1	08/08/2008 18:10:00	cost

PG&E Schools Colleges 2007-95 Participants - NC		
How do you typically learn about energy efficiency upgrades and technologies for your school? [DO NOT READ; CHECK ALL THAT APPLY]		
Answer Options	Response Percent	Response Count
Outside Vendors	0.0%	0
PG&E Staff	45.5%	5
Internet	9.1%	1
Mailings	9.1%	1

Bill Inserts	0.0%	0
Colleagues at Other Schools	0.0%	0
District Meetings/Activities	0.0%	0
Professional/Trade Organizations/Publications – Specify: _____	18.2%	2
Other Specify:_____	45.5%	5
Don't Know	9.1%	1
Refused	0.0%	0
	Other and/or Professional/Trade Orgs/Publications	6
	answered question	11
	skipped question	0

Number	Response Date	Other and/or Professional/Trade Orgs/Publications
1	06/09/2008 17:18:00	Engineers
2	06/09/2008 18:18:00	Architects or designers
3	06/09/2008 18:26:00	40 years of expirience
4	08/08/2008 18:12:00	Engineering Firm and conferences
5	08/08/2008 18:22:00	Engineers
6	08/08/2008 18:49:00	CCIOU State Chancellors office

PG&E Schools Colleges 2007-95 Participants - NC

Which source do you trust the most for information on energy efficiency upgrades and technology? [DO NOT READ; CHECK ALL THAT APPLY]

Answer Options	Response Percent	Response Count
Outside Vendors	0.0%	0
PG&E Staff	36.4%	4

Internet	0.0%	0
Mailings	0.0%	0
Bill Inserts	0.0%	0
Colleagues at Other Schools	0.0%	0
District Meetings/Activities	0.0%	0
Professional/Trade Organizations/Publications – Specify: _____	9.1%	1
Other Specify:_____ _____	54.5%	6
Don't Know	18.2%	2
Refused	0.0%	0
	Other and/or Professional/Trade Orgs/Publications	6
	answered question	11
	skipped question	0

Number	Response Date	Other and/or Professional/Trade Orgs/Publications
1	06/09/2008 17:05:00	Energy education consultant for So Cal education facilities
2	06/09/2008 18:26:00	More than one sorce will not elaborate
3	06/09/2008 18:33:00	Lighting and HVAC specialist
4	08/08/2008 18:12:00	Conferences due to multiple peers, learn more from peers and their experiences than from direct marketing
5	08/08/2008 18:22:00	Engineers
6	08/08/2008 18:49:00	Energy efficiency consultant

PG&E Schools Colleges 2007-95 Participants - NC	
Within your school or district, who is the initial person that usually makes a recommendation to purchase or install energy efficient equipment?	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:05:00	Energy Manager, Director of facilities planning
2	06/09/2008 17:18:00	S.W. or Director of Maintenance
3	06/09/2008 17:58:00	Facilities Director
4	06/09/2008 18:18:00	Depends
5	06/09/2008 18:26:00	A.B.
6	06/09/2008 18:33:00	M.C.
7	08/08/2008 18:12:00	campus design team standards
8	08/08/2008 18:22:00	Director of Maintenance
9	08/08/2008 18:49:00	Multiple people given that projects are bond measure improvements
10	08/08/2008 19:04:00	Unsure
11	08/08/2008 19:18:00	Unsure

PG&E Schools Colleges 2007-95 Participants - NC
What typically happens after such a recommendation is made?

Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:05:00	The purchasing process begins
2	06/09/2008 17:18:00	Evaluate
3	06/09/2008 17:58:00	Goes to district buisness manager the ato Board of Trustees or Board of Directors
4	06/09/2008 18:18:00	Get approval- depends
5	06/09/2008 18:26:00	Goes through Chancellors office for review/ approval
6	06/09/2008 18:33:00	Just done it
7	08/08/2008 18:12:00	Project team manager for the campus design team standards takes care of it
8	08/08/2008 18:22:00	Wait for response from district
9	08/08/2008 18:49:00	The recommendation is sent to the facilities manager, energy consultants and bond measure consultants
10	08/08/2008 19:04:00	Unsure
11	08/08/2008 19:18:00	Unsure

PG&E Schools Colleges 2007-95 Participants - NC

Who typically manages day-to-day energy related issues, such as heating and cooling? (Title of person)

Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:05:00	Energy Manager
2	06/09/2008 17:18:00	Director of Maintenance
3	06/09/2008 17:58:00	N/a
4	06/09/2008 18:18:00	Director of Maintenance transporatation
5	06/09/2008 18:26:00	A.B.
6	06/09/2008 18:33:00	Maintenance tech
7	08/08/2008 18:12:00	The control shop/energy center
8	08/08/2008 18:22:00	Director of Maintenance
9	08/08/2008 18:49:00	Operations
10	08/08/2008 19:04:00	Unsure
11	08/08/2008 19:18:00	Unsure

PG&E Schools Colleges 2007-95 Participants - NC		
Are there any energy conservation leads (i.e., energy champions) at your facility/district?		
Answer Options	Response Percent	Response Count
No	100.0%	11
Yes- If so, who? (title) What do they do, who do they report to and work with, what influence do they have?	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC		
Who is the primary person who makes purchasing decisions at your school?		
Answer Options	Response Percent	Response Count
Don't Know	27.3%	3
Refused	9.1%	1
Title of Person(s)	63.6%	7
	answered question	11
	skipped question	0

Number	Response Date	Title of Person(s)
1	06/09/2008 17:05:00	Energy Manager / Director of Facilities Planning
2	06/09/2008 17:18:00	Director of Maintenance
3	06/09/2008 18:18:00	Superintendent and or Board of Trustees
4	06/09/2008 18:26:00	Energy and Construction manager
5	06/09/2008 18:33:00	M.C.
6	08/08/2008 18:22:00	Director of Maintenance
7	08/08/2008 18:49:00	T.N.

PG&E Schools Colleges 2007-95 Participants - NC		
Using this 0 to 10 rating scale, where 0 means "Disagree Strongly" and 10 means "Agree Strongly," please tell me to what extend agree or disagree with the following statements: Participation exposed me to new energy efficient technologies.		
Answer Options	Response Percent	Response Count

0	0.0%	0
1	0.0%	0
2	0.0%	0
3	9.1%	1
4	0.0%	0
5	27.3%	3
6	0.0%	0
7	9.1%	1
8	18.2%	2
9	36.4%	4
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC		
Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements: Participation strongly impacted my awareness and knowledge of energy efficiency practices.		
Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	9.1%	1
4	9.1%	1

5	9.1%	1
6	0.0%	0
7	18.2%	2
8	18.2%	2
9	36.4%	4
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements:

Participation strongly impacted my attitudes and perceptions of energy efficiency practices.

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	9.1%	1
4	0.0%	0
5	9.1%	1
6	9.1%	1
7	18.2%	2
8	36.4%	4
9	18.2%	2

Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC		
Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements: Energy efficient technologies are a cost-effective investment for my school.		
Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	9.1%	1
6	0.0%	0
7	18.2%	2
8	18.2%	2
9	54.5%	6
Don't Know	0.0%	0
Refused	0.0%	0
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements:

PG& E staff used my time and resources wisely.

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	9.1%	1
5	0.0%	0
6	9.1%	1
7	18.2%	2
8	18.2%	2
9	36.4%	4
Don't Know	9.1%	1
Refused	0.0%	0
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements:

I am satisfied with my interactions with PG&E [RSG] staff?

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	9.1%	1
4	0.0%	0
5	9.1%	1
6	0.0%	0
7	9.1%	1
8	9.1%	1
9	54.5%	6
Don't Know	0.0%	0
Refused	9.1%	1
	answered question	11
	skipped question	0

PG&E Schools Colleges 2007-95 Participants - NC

Using this 0 to 10 rating scale, where 0 means “Disagree Strongly” and 10 means “Agree Strongly,” please tell me to what extend agree or disagree with the following statements:

I am satisfied with the assistance provided by PG&E.

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0

4	0.0%	0
5	9.1%	1
6	9.1%	1
7	9.1%	1
8	9.1%	1
9	54.5%	6
Don't Know	0.0%	0
Refused	9.1%	1
answered question		11
skipped question		0

PG&E Schools Colleges 2007-95 Participants - NC	
Do you have any comments related to your participation that we have not already discussed?	
Answer Options	Response Count
	11
answered question	11
skipped question	0

Number	Response Date	Response Text
1	06/09/2008 17:06:00	Bakersfeild PG&E rep was not very responsive. The participant would like the rep to be more proactive and accessible.
2	06/09/2008 17:19:00	PG&E does a good job, nice having one contact person
3	06/09/2008 18:01:00	Don;t have problems with the energy incentive inplementation folks but the service implementation staff are horrible rti work with not on schedule, add fees during the implementing and too much paperwork
4	06/09/2008 18:20:00	New construction found to be challenging to have PG&E to install electricity hook-up. E.M. was great...with energy efficient materials. Time consuming to get things installed almost easier to just turn equiptment off then

		install EE equiptment.
5	06/09/2008 18:28:00	Good work- Bureaucracy in some areas but that is to be expected. Nice people helping not pushy, really pretty good program overall.
6	06/09/2008 18:35:00	Yes- infuture on rebatte I with that PG&E were more interactive at regional level, Higher ups at meetings with people who will use the programs
7	08/08/2008 18:14:00	I feel that PG&E project manager support has gone downhilll in the past few years, when we had a local rep we got things taken care of in an efficient manner and now I have to keep calling and following up to get anything done.
8	08/08/2008 18:22:00	No
9	08/08/2008 18:50:00	No
10	08/08/2008 19:05:00	No
11	08/08/2008 19:19:00	No

Appendix E: Nonparticipant Survey Frequencies

Do you feel comfortable answering a few questions regarding your school's current energy efficiency practices, or is there somebody else you recommend we talk to?		
Answer Options	Response Percent	Response Count
Yes	100.0%	5
No - Thank and terminate	0.0%	0
Alternate	0.0%	0
answered question		5
skipped question		0

The questions will take about 20 minutes, do you have that much time now, or is there a better time to contact you?		
Answer Options	Response Percent	Response Count
Yes	100.0%	5
No - schedule call back	0.0%	0
answered question		5
skipped question		0

Are you aware that PG&E is offering assistance to schools interested in installing high-efficiency equipment such as lighting and energy management systems?		
Answer Options	Response Percent	Response Count
Yes	60.0%	3
No	40.0%	2
Don't Know	0.0%	0
Refused	0.0%	0
answered question		5

skipped question	0

How did you first hear about the available incentives from PG&E? [DO NOT READ]		
Answer Options	Response Percent	Response Count
Contacted by PG&E	66.7%	2
School contacted PG&E	0.0%	0
Trade Publication	0.0%	0
Marketing by Trade Ally, vendor or contactor	0.0%	0
School approached trade ally, vendor or contractor	0.0%	0
From another school/colleague/district; word of mouth	33.3%	1
Through a school organization or professional organization/association	0.0%	0
Through printed material sent by the Program; through outreach materials sent by the Program	0.0%	0
At a trade show	0.0%	0
Through family, friend, or neighbor	0.0%	0
Participation in other PG&E programs	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
Other (please specify)	0.0%	0
answered question		3
skipped question		2

Has your school participated in PG&E energy efficiency programs in the past five years? (i.e. energy audit, other rebate programs, etc)		
Answer Options	Response Percent	Response Count
Yes	100.0%	3
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
answered question		3
skipped question		2

Answer Options	Response Count
	3
answered question	3
skipped question	2

Number	Response Date	Response Text
1	05/16/2008 20:05:00	Class room audit, roof and windows, Sky Light
2	05/20/2008 16:42:00	Energy Demand Bid program, 3 yrs ago new HVAC w/ out AC
3	05/21/2008 15:56:00	HVAC and Lighting

Using this 0 to 10 rating scale, where 0 means “Not at all aware” and 10 means “strongly aware,” please rate your school’s/district’s awareness and understanding of energy efficiency?		
Answer Options	Response Percent	Response Count
0 - Not at all aware	0.0%	0
1	0.0%	0
2	0.0%	0

3	0.0%	0
4	0.0%	0
5	20.0%	1
6	0.0%	0
7	0.0%	0
8	20.0%	1
9	40.0%	2
10 - Strongly aware	20.0%	1
98 - Don't know	0.0%	0
99 - Refused	0.0%	0
	answered question	5
	skipped question	0

How do you typically learn about energy efficiency upgrades and technologies for your school? [DO NOT READ; CHECK ALL THAT APPLY]

Answer Options	Response Percent	Response Count
Outside Vendors	60.0%	3
PG&E Staff	40.0%	2
Internet	0.0%	0
Mailings	0.0%	0
Bill Inserts	0.0%	0
Colleagues at Other Schools	0.0%	0
District Meetings/Activities	0.0%	0
Professional/Trade Organizations/Publications – Specify: _____	20.0%	1
Other Specify:_____	20.0%	1

Don't Know	0.0%	0
Refused	0.0%	0
Other and/or Professional/Trade Orgs/Publications		3
answered question		5
skipped question		0

Number	Response Date	Other and/or Professional/Trade Orgs/Publications
1	05/15/2008 21:22:00	Just by chance from other sources of information, word or mouth
2	05/20/2008 16:47:00	Like PG&E rep R.C.
3	05/20/2008 16:54:00	Bill Clinton Initiative for Energy Efficiency.

Which source do you trust the most for information on energy efficiency upgrades and technology? [DO NOT READ; CHECK ALL THAT APPLY]

Answer Options	Response Percent	Response Count
Outside Vendors	40.0%	2
PG& E Staff	80.0%	4
Internet	20.0%	1
Mailings	0.0%	0
Bill Inserts	0.0%	0
Colleagues at Other Schools	0.0%	0
District Meetings/Activities	0.0%	0
Professional/Trade Organizations/Publications – Specify: _____	20.0%	1
Other Specify:_____	20.0%	1
Don't Know	0.0%	0

Refused	20.0%	1
	Other and/or Professional/Trade Orgs/Publications	2
	answered question	5
	skipped question	0

Within your school or district, who is the initial person that usually makes a recommendation to purchase or install energy efficient equipment?	
Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:22:00	Business Manager – K.K.
2	05/16/2008 20:09:00	T.Z. - Finance Director
3	05/20/2008 16:47:00	J.S.
4	05/20/2008 16:54:00	VP of Facilities
5	05/21/2008 15:58:00	Director of Maintenance

What typically happens after such a recommendation is made?	
Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:22:00	Depending on scale of project goes to Superintendent, School Board
2	05/16/2008 20:09:00	Have meeting, take to school board
3	05/20/2008 16:47:00	Goes to Purchasing, then School Board
4	05/20/2008 16:54:00	review pricing and talk to CFO and President
5	05/21/2008 15:58:00	Goes to superintendent

Who typically manages day-to-day energy related issues, such as heating and cooling? (Title of person)	
Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:22:00	Maintenance manager and Operations Director
2	05/16/2008 20:09:00	They have Technicians
3	05/20/2008 16:47:00	Manager of Operations, Maintenance, Safety and Security – J.S.
4	05/20/2008 16:54:00	VP of Facilities – M.R.
5	05/21/2008 15:58:00	Director of Maintenance

Are there any energy conservation leads (i.e., energy champions) at your facility/district?		
Answer Options	Response Percent	Response Count
No	20.0%	1

Yes- If so, who? (title) What do they do, who do they report to and work with, what influence do they have?	80.0%	4
	answered question	5
	skipped question	0

Number	Response Date	Yes- If so, who? (title) What do they do, who do they report to and work with, what influence do they have?
1	05/15/2008 21:22:00	Business Manager - works with Superintendent, if OK educates the school board.
2	05/16/2008 20:09:00	Everyone involved at the school. Goes to Business Manager
3	05/20/2008 16:47:00	Manager of Operations, Maintenance, Safety and Security - works with superintendent
4	05/20/2008 16:54:00	CFO and President - work with Facilities and Board for large purchases.

Who is the primary person who makes purchasing decisions at your school?		
Answer Options	Response Percent	Response Count
Don't Know	0.0%	0
Refused	0.0%	0
Title of Person(s)	100.0%	5
	answered question	5
	skipped question	0

Number	Response Date	Title of Person(s)

1	05/15/2008 21:22:00	Superintendent, School Board, Tech Manager, Maintenance Ops
2	05/16/2008 20:09:00	Business Manager
3	05/20/2008 16:47:00	School Board
4	05/20/2008 16:54:00	CFO and President.
5	05/21/2008 15:58:00	Superintendent

Have you installed any energy efficient equipment in your school within the last 5 years?		
Answer Options	Response Percent	Response Count
Yes	100.0%	5
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
answered question		5
skipped question		0

What equipment have you installed?	
Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:25:00	Pool pump and boiler, New EE Gas Boiler, New Construction - Ovens and other EE Equipment
2	05/16/2008 20:10:00	Working on AC, Sky Lights

3	05/20/2008 16:48:00	HVAC / Heating System 1.7 Million
4	05/20/2008 16:55:00	Chiller, Lights, Printers and Copyers
5	05/21/2008 15:58:00	HVAC and Lighting

What were the primary reasons for installing this equipment? [if multiple measures, ask questions for all measures]

Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:25:00	Pool equipment old, new construction
2	05/16/2008 20:10:00	Save money, AC unit broken
3	05/20/2008 16:48:00	Replace old Boilers
4	05/20/2008 16:55:00	Old chiller, save money and energy
5	05/21/2008 15:58:00	save money

In your opinion, why did your school choose not to make use of PG&E's assistance? [Probe for details]

Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text

1	05/15/2008 21:25:00	in 2007 there was a lack of awareness, 2008 Resources Solutions Group helped out
2	05/16/2008 20:10:00	No contact with PG&E
3	05/20/2008 16:48:00	No real opportunities.
4	05/20/2008 16:55:00	did not know about programs
5	05/21/2008 15:58:00	No real opportunities.

Were there any specific issues/barriers that made using such incentives difficult for you/your school?

Answer Options	Response Percent	Response Count
Yes	20.0%	1
No	80.0%	4
Don't Know	0.0%	0
Refused	0.0%	0
answered question		5
skipped question		0

What were these barriers?

Answer Options	Response Count
	1
answered question	1
skipped question	4

Number	Response Date	Response Text
1	05/15/2008 21:26:00	People, School Board lack of knowledge

What would it take to overcome these barriers?

Answer Options	Response Count
	1
answered question	1
skipped question	4

Number	Response Date	Response Text
1	05/15/2008 21:26:00	Educating the School Board worked well.

Do you have plans to upgrade energy management systems within the next two - three years?

Answer Options	Response Percent	Response Count
Yes	60.0%	3
No	20.0%	1
Don't Know	0.0%	0
Refused	20.0%	1
answered question		5
skipped question		0

Do you think your school will make use of PG&E's assistance for financing and implementing these measures?

Answer Options	Response Percent	Response Count
Yes	100.0%	3
No	0.0%	0
Don't Know	0.0%	0
Refused	0.0%	0
answered question		3
skipped question		2

Do you know why that would be the case?	
Answer Options	Response Count
	3
answered question	3
skipped question	2

Number	Response Date	Response Text
1	05/15/2008 21:27:00	Building 5 new buildings - but contractors doing the buying
2	05/16/2008 20:12:00	Save money on equiptment
3	05/20/2008 16:56:00	interested in programs

Are there any other measures or significant capital or facility improvements you are interested in installing but have not done so to date?		
Answer Options	Response Percent	Response Count
Yes	80.0%	4
No	0.0%	0
Don't Know	0.0%	0
Refused	20.0%	1
answered question		5
skipped question		0

What has precluded you from implementing these measures?	
Answer Options	Response Count
	4

answered question	4
skipped question	1

Number	Response Date	Response Text
1	05/15/2008 21:28:00	California budget restrictions, vendors doing the buying
2	05/16/2008 20:13:00	Vendor buying equipment, school out of loop
3	05/20/2008 16:49:00	New high school being built.
4	05/20/2008 16:57:00	New College being built.

Using this 0 to 10 rating scale, where 0 means "Not at all interested" and 10 means "very interested," please rate your school's/district's interest in receiving services and/or assistance from PG&E.

Answer Options	Response Percent	Response Count
0	0.0%	0
1	0.0%	0
2	0.0%	0
3	0.0%	0
4	0.0%	0
5	0.0%	0
6	0.0%	0
7	0.0%	0
8	0.0%	0
9	20.0%	1
10	60.0%	3
Don't Know	20.0%	1
Refused	0.0%	0
answered question		5

skipped question	0

Why are you (interested/not interested)?	
Answer Options	Response Count
	5
answered question	5
skipped question	0

Number	Response Date	Response Text
1	05/15/2008 21:29:00	Save energy and money
2	05/16/2008 20:14:00	Vendor purchasing equipment
3	05/20/2008 16:50:00	Save energy and money and good PR with community
4	05/20/2008 16:57:00	save money / one issue is largest campus in San Diego
5	05/21/2008 15:58:00	save money

Appendix F: Staff Interview Guide

RSG Interview Guide: PG&E Schools & Colleges

Name

Title

Company

Program

Date

Phone

Program Overview

We have reviewed the participation handbook for the programs. Based on your experience implementing the program, have you made any adjustments/changes from the processes outlined in the handbooks? If so, which ones & why?

> What is the program theory – how do you expect the program to change the way that the target market behaves with respect to energy efficiency?

Is there overlap in terms of territory covered or services delivered between your program and the PG&E core program? If so, how is that overlap managed?

Has your program coordinated activities at all with the PG&E core program? If so, who and what type of coordination?

> [If reports coordination] In what ways, if any, has this affected delivery of services? Has it helped, hindered, or had some other effect?

[If no coordination] Do you think that service delivery would be improved by greater coordination? If so, what would you recommend?

What do you do to ensure no opportunities get lost between the various program offerings (PG&E, RSG, & PG&E's partnership with UC/CSU)?

What are your savings goals for the duration of the program? Do you have separate program goals for load reduction (kW) vs. reduction in energy use (kWh)? How do you ensure your program will meet both goals?

Implementation Issues

Marketing

Please describe what your staff has been doing to promote the program(s)?

Have marketing and outreach activities been coordinated in any way? If so, how?

What do you think has worked the best?

What has worked the least well?

Do you use success stories to demonstrate the benefit of participation? Have your customers asked for it? How do you do that and where/how do you distribute these case studies?

The initial program description envisioned a website for marketing. We understand you chose not to develop a website for CHES? Can you explain your reasons?

Other than what has been done or is being planned, can you think of any activities that are needed?

Identifying Potential Participants

How do you identify prospective contacts? Roughly what percentage of possible campuses have you made contact with? Whom do you typically target? Is staff turn over a problem?

How do you prioritize customers? How do you collect campus characteristics in terms of energy consumption & number of residences?

Roughly how many contacts (phone, print, in-person) does it take to secure a participant?

Roughly what percentage of your SEE/CHES participants have participated in your program(s) more than once? Do you adjust your process of working with them in any way? If so, how?

Coordination with Other Market Actors

What activities do you pursue to ensure that students have ready access to energy-efficiency equipment such as compact refrigerators? Who do you work with? How?

Do you provide campuses with information about PG&E's Savings by Design?

How do you coordinate Flex your Power?

Implementation Activities

Do you still use the resource management advisor? If so, how many staff fill this role? How are they assigned to participants? How well has this concept been working?

Regarding the Installation Support services, do you have in-house engineering support?

Who conducts audits? What qualifications do they have?

Who verifies installations of measures? What qualification do they have?

Please tell me about your experience with developing and coordinating student education and recognition campaigns.

Rebates

What percentage of your customers choose to make use of your installation support services vs. rebates?

What do you think drives this decision?

What type & amount of rebates do you pay? How did you determine the amount of the rebates?

How do they compare to the rebates paid by PG&E? (How are custom project incentives calculated?)

How does RSG assess the value of its implementation support services?

Are there standardized cost estimates for given services?

Are these estimates updated on an annual basis? Does PG&E approve these costs?

What happens if implementation support takes longer than expected? Is incentive amount adjusted?

Does PG&E verify the calculation of the Base Incentive? How are discrepancies handled?

What percentage of projects actually earn the Early Commitment Cash Bonus of 10%?

What percentage of projects actually earn the Early Install Cash Bonus of 20%?

In what percentage of projects do you install CFLs? How are savings credit calculated & allocated?

M&V

Has PG&E completed any inspections of installed measures? What happened?

Communication

I'd like to discuss communication, both among your program staff, between your staff and PG&E staff, and between your staff and your customers.

First, what are the lines of communication within your program staff? How frequently and how formally do you communicate about program issues? (Probe: meetings, emails/memos, phone calls?)

Have you experienced any communication challenges? For example, have there been any times when needed information didn't get delivered to the right person or didn't get delivered quickly enough?

What kinds of effects have such occurrences had on program performance?

Were you able to identify and deal with the causes? If so, how?

How do you communicate with PG&E staff? Is communication always as smooth as you'd like it to be?

What communication challenges have you experienced, if any?

How did you identify and deal with the causes?

Can you describe your communication with customers? For example, how frequently do members of the program staff communicate with customers, and how is the communication carried out?

Do customers have a way to contact program staff with problems or questions? How?

How are customers' problems and questions dealt with?

How would you change or improve communications, either within the program, between your staff and PG&E, or between your staff and your customers?

Staffing

How about staffing? Do you think that the staffing levels and organization for your program are as they should be?

Have there been any challenges that could have been lessened by changing the way the program was staffed? [If yes, probe for details]

What changes might you make to the way the program is staffed?

Tracking and Reporting

How about tracking and reporting procedures? Do you have any difficulties meeting PG&E's requirements?

Would you recommend any changes to the procedures?

Market Response

What aspects of the program do your customers seem to be most interested in or most satisfied with?

What concerns have they expressed?

What has the program done or what is being planned to address those concerns?

What percentage of the campus housing market have you saturated to date?

What is your prediction for how much potential you will be able to achieve in the next 3 years?

Which type of eligible PG&E customers (K-12 public, private school districts, county office of education, small government facility) have been most receptive to your SEE program?

What types of campuses have been most receptive to your CHES program offerings?

Implementation Barriers

What do you consider the key barriers to implementing EE in college housing/schools/colleges to be?

Has the level of program participation met your expectations? If not, in what way has it not met expectations? Why do you think this has been the case?

Have any challenges resulted from perceptions or attitudes about the value of the program among the *members of your target population*? If so, what?

How have you dealt with those perceptions and attitudes?

How about any challenges resulting from perceptions or attitudes about the value of the program among the vendors you work with or others who work with the customers you are targeting? If so, what?

How have you dealt with those perceptions and attitudes?

Has anything else made it difficult for you to enroll participants and/or carry out program requirements? If so, what?

What have you done to address those difficulties?

What percentage of potential customers have declined to participate? What are their reasons? What do you do to keep up on potential changes of their status?

What would you say are the program's strongest points?

What are its weakest points?

If you had a chance to do it all over again, what elements of the programs would you change to make it more effective?

Appendix G: Program-Specific Logic Models

Figure 6: CHES Program Logic Model

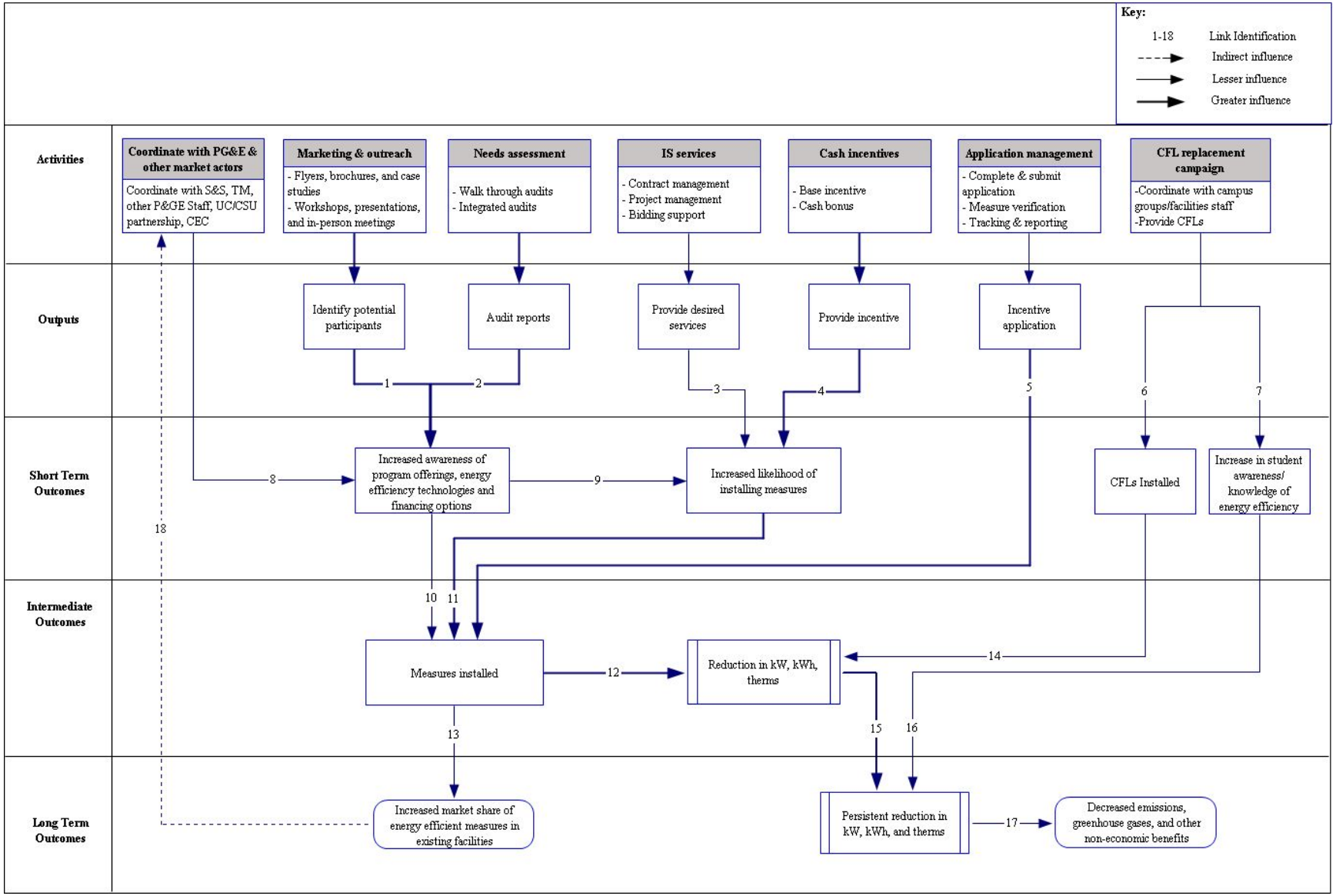


Figure 7: Schools & Colleges Core Program Logic Model

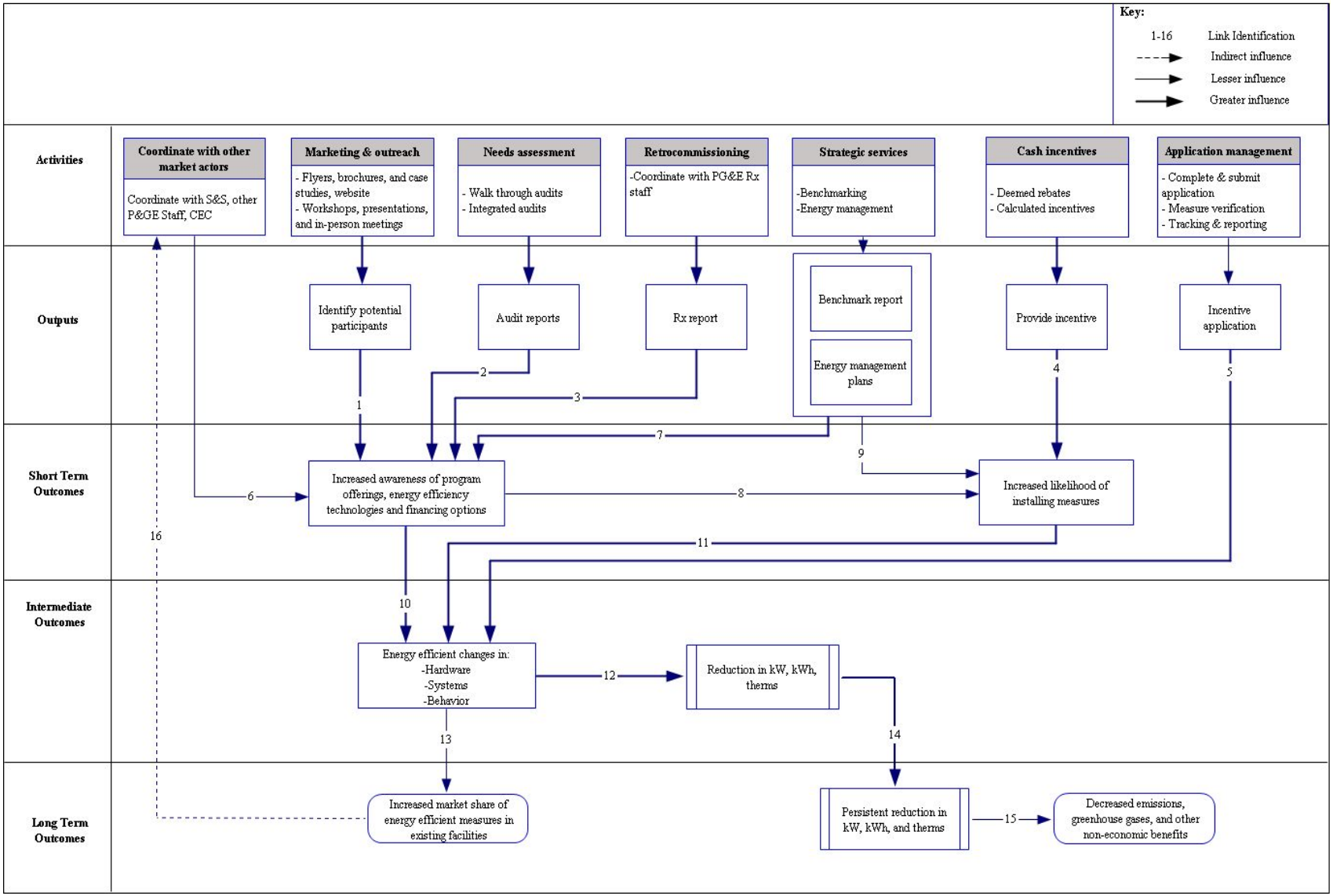


Figure 8: SEE Program Logic Model

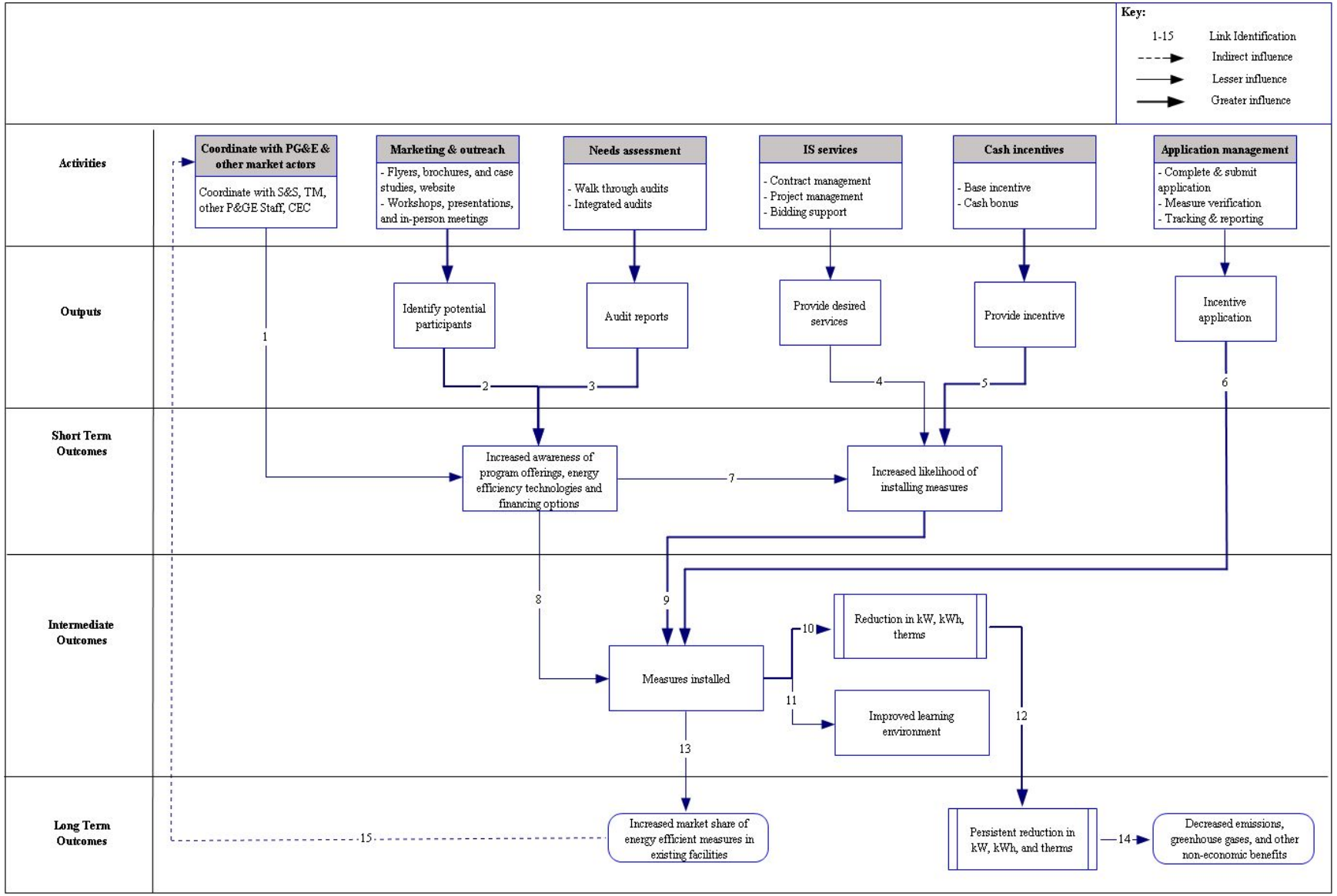


Table 10: SEE Program Theory by Logic Model Link

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
1	Coordinate with PG&E & other market actors.	By communicating with PG&E staff and other market actors, there is an increased likelihood that potential participants will receive more information about the CHES program's offerings and activities than they would naturally.	- Number of customers who have communicated with PG&E and other market staff regarding energy efficiency programs in college housing facilities.
2	Identify potential participants.	Through marketing and outreach, interest of the market audience may be gauged. Identified potential participants will come away from these interactions with an increased awareness of the CHES program's offerings.	- Number of potential participants identified.
3	Audit reports.	By interacting with potential participants and creating an audit report of participant's facilities, the RSG staff may educate and familiarize potential participants with the CHES program's offerings and financing options as well as the likely measures to be installed.	- Number of potential participants identified.
4	Provide desired services.	The installation support services provided by RSG throughout the program require close interaction with the customer. By forming such a relationship with the customer, it is likely RSG staff will be able to persuade the customer of the benefits of the measures incentivized by the program.	- Ratio of participants who take advantage of RSG's IS services vs. those who do not.
5	Provide incentive.	Reducing the economic and noneconomic burden of the project by providing incentives will make it more likely the participant will install the suggested measures as this is the only activity for which participants receive an incentive.	- Size of incentive calculated at time of application/audit vs. that realized after completion of project (i.e., at verification).
6	Incentive application.	Once the incentive application is complete, the participant will be able to go forward with installation of the measures given the assurance that once installed, the measures will be eligible for rebates.	- Number PIA's/PPA's received and approved.
7	Increased awareness of program offerings, energy efficiency technologies and financing options.	As participants become more familiar with the program, its offerings, and financing options available for their project barriers to their implementation of the project will be reduced, and the likelihood they will install the measures suggested by the RSG staff in the audit report will increase.	- How much of what type of information has been dispensed to participants vs. nonparticipants.
8	Increased awareness of program offerings, energy efficiency technologies and financing options.	Having knowledge of the CHES program's offerings, measures, and financing options for program implementation may lead directly to the installation of the measures if the participant is less deliberative than others.	- What is the ratio of the number of measures suggested for installation vs. the number actually installed?

Link ID Number	Purpose	Program Theory	Potential Indicators (KPI's)
9	Increased likelihood of installing measures.	Taking time to consider the measures suggested by RSG staff for installation as well as the offerings of the program will lead directly to the participant's implementation of the project and installation of the measures.	
11	Measures installed.	In addition to providing improvements in energy efficiency to the participants, the measures installed also represent improvements to the interior areas (often due to lighting upgrades) offering a superior learning environment.	- Average reduction in kW, kWh, and therms.
10	Measures installed.	By identifying measures which provide the most cost-effective improvements in energy efficiency returns to the participant, the participant will begin to see returns on their investment through reductions in kW, kWh, and therms, if applicable.	- Average reduction in kW, kWh, and therms.
12	Reduction in kW, kWh, therms.	Though the participant may notice an initial reduction in energy use after the completion of the project, proper maintenance of the installed measures should allow for decreases in energy use to continue for quite some time.	
13	Measures installed.	As the energy efficient measures are installed into a greater number of existing facilities due to the program, such measures will see a rise in their market share compared to less-efficient measures, which may have been used had the program not been enacted.	
14	Persistent reduction in kW, kWh, and therms.	Given the reduced energy use in facilities that have participated in the program, PG&E will see a reduction in demand for energy and, therefore, a reduction in emissions will occur as well as other noneconomic benefits stemming from the program.	- Reduction in energy use/bill for facilities that have participated in the program.
15	Increased market share of energy efficient measures in existing facilities	Once the initial energy-efficient measures have been installed due to the SEE program, it is likely that the participants will begin to coordinate to a greater degree with a variety of market actors as well as PG&E staff when taking on new projects focused on energy efficiency.	- Amount of post-program coordination by participant facilities on future projects

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