



Process Evaluation of the San Bernardino County Local Government Partnership Program

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I Executive Summary

The San Bernardino County Local Government Partnership (San Bernardino County LGP) is a partnership between San Bernardino County, Southern California Edison Company (SCE) and Southern California Gas Company (SoCalGas) that began in October of 2008.¹ San Bernardino County provides numerous services including law enforcement, tax collection, and public health and social services, in addition to some municipal services for both incorporated and unincorporated areas in the vast territory.² To provide these services, San Bernardino County maintains facilities with more than 2 million square feet of floor space. The purpose of the San Bernardino County LGP is to leverage the combined strengths of San Bernardino County, SCE and SoCalGas to identify and implement energy efficiency projects and activities within San Bernardino County.

The San Bernardino County LGP is designed to improve energy efficiency in San Bernardino County through municipal facility retrofit and retro-commissioning. This includes identification and implementation of energy efficiency retrofit and retro-commissioning projects at San Bernardino County facilities, energy efficiency education and best practices training, emerging technologies, integration with demand response services, coordination with funding sources, and coordination with other investor-owned utility (IOU) program offerings (e.g., Core Programs, solar, water and others).

The 2013-2014 Energy Efficiency Program Implementation Plans (PIPs) for SCE and SoCalGas include additional information on the 2015-2016 planned activities for the San Bernardino County LGP.³

The San Bernardino County LGP structure differs between the two IOUs, SCE and SoCalGas. Under SCE, the San Bernardino County LGP is classified as a resource program, meaning that the program directly claims energy savings.⁴ Under SoCalGas, the San Bernardino County LGP is classified as a non-resource program meaning that while the

¹ SoCalGas did not officially join the partnership until 2010.

² San Bernardino County is the largest county by area in the United States, with over 20,000 square miles of territory covering a variety of geographic landscapes and including 24 cities and over 60 unincorporated areas.

³ Southern California Edison Company. *Customer Energy Efficiency And Solar Division Program Implementation Plans. Exhibit 4C – Local Programs*. 2013.

Southern California Gas Company. *2013-2014 Energy Efficiency Programs Local Government Partnership Program - Program Implementation Plan*. 2013.

The 2013-2014 Program Implementation Plans (PIPs) are the most current applicable PIPs available for the local government partnerships.

⁴ California Public Utilities Commission. *Energy Efficiency Policy Manual*. R.09-11-014. 2013.

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/EEPPolicyManualV5forPDF.pdf

partnership generates energy savings, it does not claim savings directly, but rather funnels projects to Core Programs that claim energy savings.⁵

The remainder of this report presents the results of the San Bernardino County LGP process evaluation. Evergreen Economics focused this evaluation on program activities completed in 2015 through 2016. As this was the first standalone evaluation of the San Bernardino County LGP, however, we also highlight additional activities from the 2008-2014 period to provide additional program context as needed.

Table 1 provides a summary of the process evaluation objectives along with an assessment of each objective.

⁵ While the San Bernardino County LGP funnels municipal building retrofit activities to SoCalGas Core Programs, this is a different activity to the Core Programs Coordination activity area, which involves community outreach to engage residents and businesses in Core Programs. The San Bernardino County LGP does not engage in this activity area.

Table 1: Process Evaluation Objectives and Assessment

Objective	Assessment
1. Provide documentation of the San Bernardino County LGP's suite of activities at the time of the evaluation.	The evaluation identified and documented San Bernardino County LGP activities based on interviews with San Bernardino County LGP staff and review of program documentation. (Section 4)
2. Document how the San Bernardino County LGP has adopted and implemented LGP-specific recommendations from the previous process evaluation, if any.	As this was the first evaluation conducted on the San Bernardino County LGP, there were no previous evaluation recommendations.
3. Identify whether the San Bernardino County LGP is currently being implemented according to its logic model/change theory.	The San Bernardino County LGP partners did not meet savings goals in 2015 or 2016 but are conducting activities consistent with the underlying program logic/change theory as described in the Program Implementation Plans. (Section 4)
4. Document the San Bernardino County LGP's successes and challenges.	The evaluation found that the San Bernardino County LGP did not meet goals for the 2015-2016 program cycle. (Section 4)
5. Assess partner satisfaction within the San Bernardino County LGP.	San Bernardino County LGP partners were satisfied with their partners. (Section 4)
6. Identify whether the San Bernardino County LGP is on track to meet California Public Utilities Commission (CPUC)-approved program objectives.	The San Bernardino County LGP did not meet its 2015 or 2016 savings objectives. (Section 4)
7. Provide recommendations regarding design and/or implementation of the San Bernardino County LGP.	The evaluation team identified key findings, successes and challenges, and developed actionable recommendations to improve the design and implementation of the San Bernardino County LGP. (Section 8)

1.1 Key Findings

We summarize the key evaluation results below and provide additional details on the findings and analysis methods in the main body of the report.

Municipal Building Retrofits Activities

- Staff from San Bernardino County, SCE and SoCalGas⁶ all expressed very high satisfaction with the San Bernardino County LGP overall, with all interviewees

⁶ In the remainder of this document, 'San Bernardino County staff' refers to staff at the County of San Bernardino who work to support the LGP, and, 'SCE staff' and 'SoCalGas staff' refer to staff at SCE and

rating their satisfaction with their partners' participation between 8 and 10 on a 0-10 point scale, with 10 indicating the highest level of satisfaction. Interviewees all noted that overall, the San Bernardino County LGP had been successful in terms of meeting its energy savings goals since its inception in 2008 until 2014; however, the San Bernardino County LGP faced challenges in 2015 and 2016 that have led to lower than expected savings. All partners are optimistic that they can work together to overcome these challenges and that they can meet their goals in 2017.

- Projects in 2015 and 2016 achieved approximately 286,231 kWh and 840 therms in energy savings.⁷ In 2015 and 2016, the San Bernardino County LGP completed the following retrofit and retro-commissioning projects in municipal buildings:
 - Five Savings By Design projects;
 - A county-wide project for block heater replacement on backup generators;
 - HVAC optimization throughout County facilities (350 units county-wide in 2015-2016);
 - Three pump replacement projects; and
 - Lighting and controls systems projects at 11 facilities.
- The San Bernardino County LGP continues to provide a critical source of funding for new projects through coordination with Core Programs and the revolving fund that San Bernardino County has developed using incentives and rebate funds from prior energy efficiency projects.

Key Challenges

San Bernardino County, SCE and SoCalGas staff noted three challenges:

- Because the San Bernardino County LGP contract is renewed annually and the dates of the agreement do not align with the dates when rates are released by the California Public Utilities Commission (CPUC), or with incentive program years, project planning is often difficult. This one-year contract structure of the San Bernardino County LGP agreement was identified as the most significant challenge by the San Bernardino County staff member we interviewed. SCE and SoCalGas staff also noted this as a challenge. San Bernardino County LGP staff from all partner organizations are engaged in discussions to try and remedy this problem by extending the contract term, but this has not occurred to date.
- Updates to the Title 24 building code have resulted in commonly utilized measures becoming ineligible for SCE and SoCalGas energy efficiency programs, which has

SoCalGas respectively who work to support the LGP. When other staff from any of the organizations are referenced, their roles will be explicitly described in the text.

⁷ The kWh savings are from monthly reports on EEstats.cpuc.ca.gov. Therm savings are self-reported savings from interviewee.

made it much more difficult to promote retrofit and retro-commissioning projects to municipal customers. As a result, San Bernardino County LGP staff have reduced their internal energy savings goals and removed energy savings goals altogether as an indicator of performance reported to the San Bernardino County Board of Supervisors, because the goals are unattainable. According to one interviewee, this situation could lead to problems renewing the LGP contract as it is currently structured.

- San Bernardino County and SCE staff both identified the lengthy CPUC and IOU project review period and their rigorous documentation requirements as a challenge. San Bernardino County LGP projects are required to be approved and completed within a fiscal year, and IOU and CPUC review has led to some project delays and cancellations, or to San Bernardino County undertaking projects without approval for incentives and assuming the risk of the project being rejected.

1.2 Recommendations

Based on the evaluation results, we provide the following actionable recommendations for the San Bernardino County LGP:

- We recommend that San Bernardino County LGP staff continue negotiations to extend the term of the agreement to be a multi-year term that better aligns with SCE and SoCalGas program cycles. This would provide greater flexibility for project identification and completion, and would remove an administrative barrier for the San Bernardino County LGP.
- We recommend that San Bernardino County, SCE and SoCalGas staff add a recurring agenda item to their monthly meetings to discuss the impact of the 2016 Title 24 changes. Specifically, San Bernardino County staff requested assistance with identifying alternative strategies, including any opportunities for other measures, to complete projects identified prior to the 2016 Title 24 changes. This will help San Bernardino County staff understand the impact of Title 24 changes better, and will help ensure that opportunities for energy efficiency projects are not missed.
- We recommend that SCE, SoCalGas, the CPUC and San Bernardino County work together in the following ways to address the issues related to the length of the custom process:
 - We recommend that SCE and SoCalGas connect San Bernardino County to future Ex-ante Working Group meetings to share their experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while agreement to establish fixed timeframes has been reached, there are still plans for further refinement. It would be useful for San Bernardino County to participate in these discussions.

- We recommend that San Bernardino County make internal deadlines clear to both the IOUs and the CPUC during the custom review process.
- We recommend that SCE and SoCalGas share their internal tracking of the CPUC review process with the San Bernardino County staff so that staff are aware of which projects may be delayed in the approval process longer than projects that were not selected for review by the CPUC.

The results of our evaluation research indicate that the San Bernardino County LGP faced some challenges that prevented it from meeting savings goals in 2015 and 2016, despite conducting numerous energy efficiency projects and generally operating in a manner consistent with the program logic models, which we describe in later sections of this report. While the San Bernardino County LGP did not meet its energy savings goals, there is relatively high satisfaction among the partners regarding overall participation and operation of the partnership. The San Bernardino County LGP partners are cautiously optimistic that they can overcome the challenges and return to successfully meeting the program goals as they have done in previous program cycles (2008-2014).

2 Introduction

Across California, local government partnership (LGP) programs combine the strengths of both local governments and the investor-owned utilities (IOUs) to leverage the unique opportunities and resources of local communities to implement energy efficiency projects. The San Bernardino County Local Government Partnership (the San Bernardino County LGP) is a partnership between San Bernardino County, Southern California Edison Company (SCE) and Southern California Gas Company (SoCalGas) that began in October of 2008.⁸ The San Bernardino County LGP serves the largest county by area in the United States with over 20,000 square miles of territory covering a variety of geographic landscapes and including 24 cities and over 60 unincorporated areas. About 95 percent of San Bernardino County is either completely undeveloped (80%) or used for military purposes (15%), with the remaining 5 percent developed for residential, commercial or industrial use. San Bernardino County provides numerous services including law enforcement, tax collection, and public health and social services, in addition to some municipal services for both incorporated and unincorporated areas in the vast territory.

The San Bernardino County LGP is administered by the San Bernardino County Project Management Division (PMD), which resides within the Real Estate Services Division, in collaboration with SCE and SoCalGas staff.⁹ The San Bernardino County PMD is responsible for managing over 2 million square feet of floor space in facilities including large, complex structures such as detention facilities, hospitals and courthouses, as well as office buildings and other facilities. The PMD is responsible for energy management at all San Bernardino County facilities, including oversight of energy-efficiency projects countywide. The PMD presently employs ten full time project managers to oversee county facilities projects, which includes energy efficiency projects at municipal buildings.

The purpose of the San Bernardino County LGP is to improve energy efficiency in San Bernardino local government buildings through identification and implementation of energy efficiency retrofit and retro-commissioning projects.¹⁰ There were no Strategic Plan

⁸ SoCalGas did not officially join the partnership until 2010.

⁹ Over the life of the San Bernardino County LGP, energy management and management of the San Bernardino County LGP has fallen under the purview of three different departments: the Facilities Management Department (2008-2010), the Architecture and Engineering Department (2010-2015), and the Project Management Division (2015-present).

¹⁰ Southern California Edison Company. *Customer Energy Efficiency And Solar Division Program Implementation Plans, Exhibit 4C – Local Programs*. 2013.

Southern California Gas Company. *2013-2014 Energy Efficiency Programs Local Government Partnership Program - Program Implementation Plan*. 2013.

The 2013-2014 Program Implementation Plans (PIPs) are the most current applicable PIPs available for the local government partnerships.

Support activities in 2015 or 2016.¹¹ While the San Bernardino County LGP has directed municipal projects through Core Programs¹² – primarily the Savings By Design and Direct Install programs – there is no Core Programs Coordination activity with the broader San Bernardino community, and there has not been any historically. The San Bernardino County LGP structure differs between the two IOUs, SCE and SoCalGas. Under SCE, the San Bernardino County LGP is classified as a resource program, meaning that the program directly claims energy savings.¹³ Under SoCalGas, the San Bernardino County LGP is classified as a non-resource program meaning that while the partnership generates energy savings, it does not claim savings directly, but rather funnels projects to Core Programs that claim energy savings.¹⁴

In 2015, the San Bernardino County partnership was moved from being considered an SCE Institutional Partnership to a Local Government Partnership.¹⁵ The San Bernardino County LGP does not follow the Energy Leader model of other SCE LGPs, in which activities to engage the broader community are undertaken. In addition to the main focus of retrofit and retro-commissioning activities, the San Bernardino County LGP also looks for opportunities in the following areas as per the SCE and SoCalGas PIPs:¹⁶

- **Energy Efficiency Education and Best Practices Development and Training** – The San Bernardino County LGP facilitates education and training for facility and maintenance personnel. The education and training activity supports the outreach and education initiatives as articulated in the County’s energy and environmental policies. Limited education and training has taken place, specifically training for San Bernardino County staff on the importance and value of energy efficiency, as well as training on Title 24 code changes.
- **Identifying Emerging Technology Opportunities** – The San Bernardino County LGP partners work together to identify potential opportunities to facilitate the

¹¹ The San Bernardino County LGP engaged in Strategic Plan Support activities before 2015. In 2012, the San Bernardino County LGP developed an in-house energy management system software upgrade to allow the county to pay accounts, track its gas/electric accounts and identify the largest energy users based on energy cost/sq. ft.

¹² Core Programs refer to large energy efficiency programs in SCE’s and SoCalGas’ program portfolios, including residential, commercial and third party programs.

¹³ California Public Utilities Commission. *Energy Efficiency Policy Manual*. R.09-11-014. 2013. http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/EEPPolicyManualV5forPDF.pdf

¹⁴ While the San Bernardino County LGP funnels municipal building retrofit activities to SoCalGas Core Programs, this is a different activity to the Core Programs Coordination activity area, which involves community outreach to engage residents and businesses in Core Programs. The San Bernardino County LGP does not engage in this activity area.

¹⁵ Under SoCalGas, the San Bernardino County LGP has been structured as a Local Government Partnership since its inception.

¹⁶ See PIP citation in prior footnote.

installation of emerging technologies, and, where applicable, provide incentives and technical aid for installing emerging technologies in San Bernardino County facilities. San Bernardino County installed a new Siemens Building Automation system in 11 county facilities.

- **Coordination with Other IOU Programs** – The San Bernardino County LGP can be utilized as a “portal” to other IOU energy programs such as the California Solar Initiative, Self-Generation Incentive Program, and Demand Response, as well as related agricultural, water efficiency and green building programs. San Bernardino County has engaged with the Self-Generation Incentive and Green Building Programs.

3 Research Objectives and Methods

3.1 Research Objectives

The research objectives for this evaluation included the following:

1. Provide documentation of the San Bernardino County LGP's suite of activities at the time of the evaluation;
2. Document how the San Bernardino County LGP has adopted and implemented recommendations from previous process evaluations, if any;
3. Identify whether the San Bernardino County LGP is currently being implemented according to its logic model/change theory;
4. Document the San Bernardino County LGP's successes and challenges;
5. Assess partner satisfaction within the San Bernardino County LGP;
6. Identify whether the San Bernardino County LGP is on track to meet CPUC-approved program objectives; and
7. Provide recommendations regarding design and/or implementation of the San Bernardino County LGP, to improve progress towards its filed objectives in the next program year.

Please note that the evaluation activities did not include the following:

- Recommendations on the IOU-specific program models under which the San Bernardino County LGP operates;
- Comparative or best practice research between the San Bernardino County LGP and other LGPs, since only a limited number of LGPs will be evaluated each year; or
- Feasibility assessment of activities the San Bernardino County LGP is not already conducting.

3.2 Research Methods

This theory-based evaluation began with the development of a program logic model that linked the San Bernardino County LGP activities to immediate outputs and to longer outcomes that were consistent with the underlying program goals. Once the evaluation team identified outputs and outcomes that would provide evidence of the San Bernardino County LGP's progress toward its goals, we developed a data collection plan to gather information from a variety of different sources.

A program logic model is a graphical representation of the program that reflects a program's *current* activities, the results (outputs) of those activities, and their relationship to short-term and long-term outcomes. Used as an evaluation tool, the logic model provides a program with feedback on whether the program is being implemented in a way

that is consistent with the original underlying program theory. Recommendations for improvement are made when the evaluation findings identify areas where the observed program activities and results are not consistent with the program logic, as these areas of inconsistency are indicators that the program may not be on track to achieve its long-term goals.

The San Bernardino County LGP logic model describes the activities and immediate outputs of the San Bernardino County LGP, as well as the expected outcomes of these activities and the pathways through which these will be achieved over time. The evaluation team reviewed program and project documents, and held discussions with program management staff to develop program theory and construct the program logic model.

Using the logic model as a guide, Evergreen completed the following research activities during the first round of process evaluations:

1. Reviews of Program Implementation Plans;
2. Reviews of existing LGP logic models where available (otherwise, Evergreen developed new ones);
3. Reviews of program progress reporting (e.g., internal IOU dashboards, budget status reports to the CPUC);
4. Reviews of LGP marketing collateral;
5. Reviews of Quarterly Strategic Plan activity updates to the CPUC;
6. Comprehensive in-depth interviews with IOU program managers;
7. Comprehensive in-depth interviews with local government staff members and LGP implementers for multi-jurisdiction LGPs; and
8. Web-based surveys of local government staff members (where in-depth interviews were not feasible).

In Section 4, we include a logic model for the Municipal Building Retrofits activity area in which the San Bernardino County LGP engages. This section provides a detailed description of San Bernardino County LGP activities shown in the logic model. Note that the logic model provides a graphical summary of the main San Bernardino County LGP activities and outcomes, and we have omitted some less prominent activities to simplify the diagram. The sole focus of the San Bernardino County LGP in 2015 and 2016 was Municipal Building Retrofits and Retro-Commissioning activities. While the 2012 through 2014 Program Implementation Plans list Strategic Plan Support and Core Programs Coordination activities among the suite of possible activities, the San Bernardino County LGP did not undertake any activities in these areas. The San Bernardino County LGP conducted Strategic Plan Support activities prior to 2015.

After Evergreen identified the data collection methods that would help us assess progress towards goals, we worked with SCE and SoCalGas staff to identify the most appropriate personnel to interview from SCE, SoCalGas and San Bernardino County. For the San Bernardino County LGP, Evergreen conducted four interviews: one interview with a San Bernardino County PMD staff member, interviews with two SCE staff members, and an interview with one SoCalGas staff member. These interviews took place in November and December of 2016.¹⁷

¹⁷ In the remainder of this document, 'San Bernardino County staff' refers to staff at the County of San Bernardino who work to support the LGP, and, 'SCE staff' and 'SoCalGas staff' refer to staff at SCE and SoCalGas respectively who work to support the LGP. When other staff from any of the organizations are referenced, their roles will be explicitly described in the text.

4 Municipal Building Retrofits

The Municipal Building Retrofits activity area of the San Bernardino County LGP is designed specifically to assist local governments with:

- Retrofitting or retro-commissioning local government facilities; and
- Integrating demand response with energy efficiency projects, including providing technical assistance such as energy audits and training.

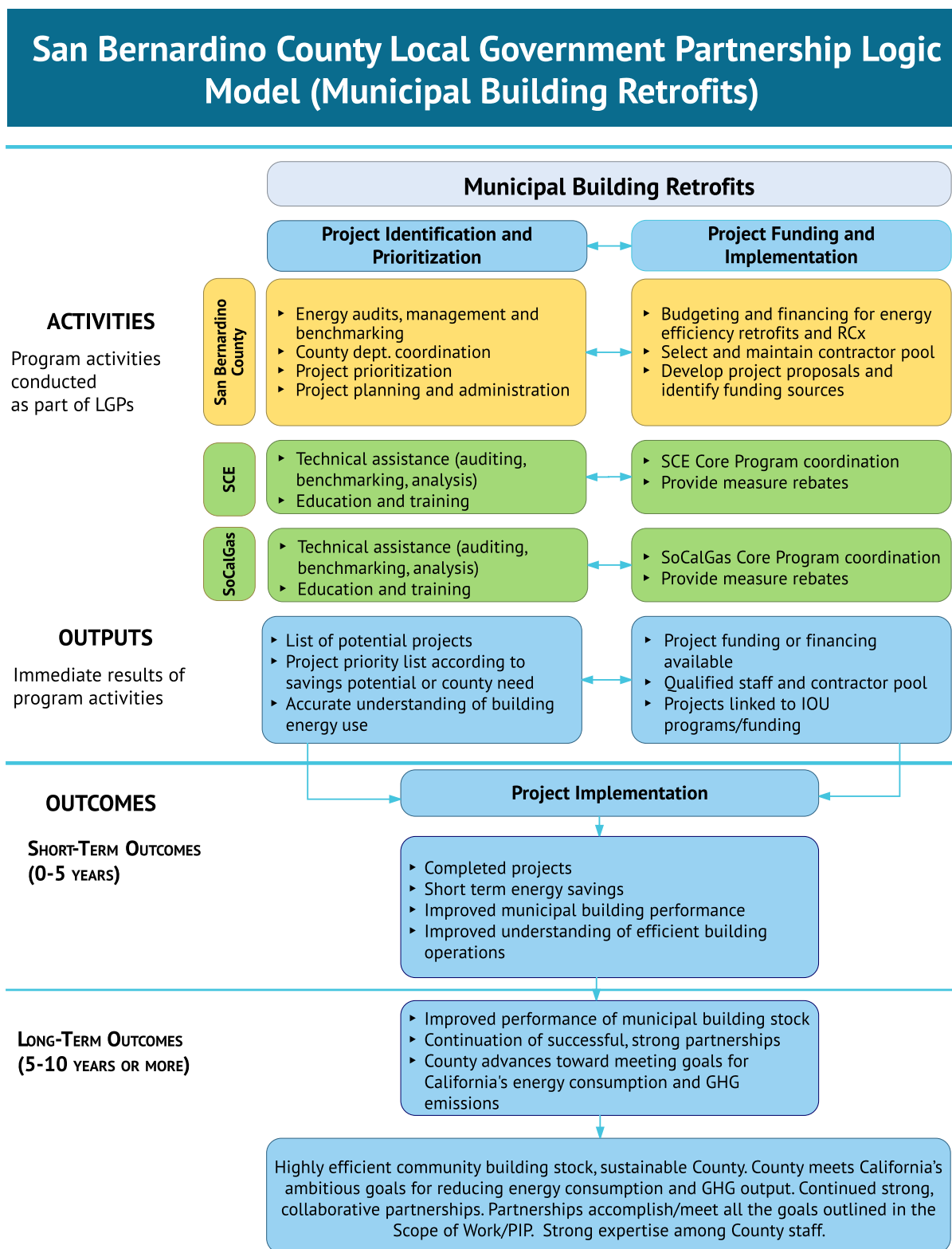
Through these activities, the goal of the San Bernardino County LGP is for San Bernardino County, SCE and SoCalGas staff to work closely to foster government facilities' energy savings and to place energy efficiency projects in the context of sustainability and climate change initiatives. Ultimately, through these activities and a collaborative relationship between SCE, SoCalGas and San Bernardino County, the San Bernardino County LGP aims to improve energy efficiency in municipal building stock, enabling San Bernardino County to become an energy champion in the community and helping it meet California's ambitious goals for reducing energy consumption and greenhouse gas emissions.

As we discussed in Section 3.2, our evaluation of the San Bernardino County LGP began with development of a program logic model for the activity area in which the San Bernardino County LGP engages, to serve as a guide to define specific outputs and outcomes for evaluating each section. We show the logic model of the San Bernardino County LGP's Municipal Building Retrofits activities as Figure 1 on the following page.

The logic model presents a high level overview of the San Bernardino County LGP's Municipal Building Retrofits activities, showing the pathways from activities to long-term outcomes, and should be read from top to bottom. Blue arrows indicate the pathways from activities to immediate outputs and then to short-term and long-term outcomes. The arrows also show relationships between the different activity pathways, which we represent as separate columns in the diagram.

Each program activity area contributes to the overall long-term program goals that we describe in the last row of the model. Note that the logic model provides a graphical summary of the main San Bernardino County LGP Municipal Building Retrofits activities and outcomes, and we have omitted some less prominent activities to simplify the diagram. The San Bernardino County LGP Municipal Building Retrofits activities have generally been consistent with those shown in the logic model.

Figure 1: Municipal Building Retrofits Logic Model



To determine the success of the Municipal Building Retrofits activities, the evaluation team interviewed staff members from among the San Bernardino County LGP partners. The evaluation team spoke with one San Bernardino County Project Management Division (PMD) staff member, two SCE staff members and one SoCalGas staff member who work on the San Bernardino County LGP that had experience with the retrofit and retro-commissioning activities.

Overall, the interviewees characterized the San Bernardino County LGP's retrofit and retro-commissioning activities as being highly collaborative and as providing valuable assistance to San Bernardino County in trying to improve the efficiency of the County's building stock. The partners meet regularly, with formal meetings every month that last several hours, and interim communication regarding specific projects as needed. All interviewees were highly satisfied with the communication and collaboration among all organizations that comprise the San Bernardino County LGP.

In the remainder of this section, we report on each phase of the Municipal Building Retrofits activities, progress towards San Bernardino County LGP goals, partner satisfaction and reported needs.

4.1 Municipal Building Retrofits Activities

4.1.1 Municipal Building Retrofits and Retro-Commissioning

The 2 million square feet of floor space in facilities managed by the San Bernardino County PMD include large, complex structures such as detention facilities, hospitals and courthouses, as well as office buildings and other facilities. In collaboration with SCE and SoCalGas, San Bernardino County engages in efforts to identify, finance and implement retrofit and retro-commissioning projects at these facilities, with a focus on an integrated demand side management approach, coupling energy efficiency with demand response opportunities. According to interviewees, the majority of projects since 2014 have been a combination of retro-commissioning, retrofit and new construction projects covering HVAC, controls, lighting and other technologies. We reflect these efforts in the Municipal Building Retrofits logic model included as Figure 1.

The San Bernardino County PMD employs ten full time project managers and one program supervisor, as well as administrative staff who oversee these efforts. Other San Bernardino County staff members are involved with San Bernardino County LGP activities including two staff members within the PMD who assist with analysis of utility bills for benchmarking and auditing purposes, several Facilities Management staff members, and staff from the Information Services Department. According to the interviewee from San Bernardino County, San Bernardino County staff have the required expertise and technical skills to effectively manage the needs of the County and to identify and manage retro-commissioning and retrofit projects, including benchmarking and auditing expertise, project management skills and procurement knowledge. SCE and

SoCalGas staff concurred with this assessment, with one SCE staff member stating that San Bernardino County PMD staff “actively look for any and all opportunities for energy efficiency, not just the low hanging fruit, and [they] are interested in engaging in training for things like HVAC maintenance to take advantage of other opportunities.”

SCE and SoCalGas provide support for energy efficiency projects conducted through the PMD by assisting with identifying, prioritizing, implementing and funding energy efficiency projects. Two individuals at SCE and two individuals at SoCalGas manage the IOU side of the San Bernardino County LGP. SCE has one account manager and one program manager providing administrative and technical support, while on the SoCalGas side, one program manager provides San Bernardino County LGP support, and a supervising manager supports this individual. In addition to these core staff, other SCE and SoCalGas program staff members and engineering staff members provide assistance as necessary depending on the type of project being implemented.

SCE, SoCalGas and San Bernardino County staff meet monthly at the San Bernardino County offices to discuss potential projects and new measures, with IOU staff providing technical support and assistance with identification of funding, appropriate measures and incentive sources. This meeting involves the SCE and SoCalGas project managers and several high level staff from San Bernardino County including staff from the PMD, the Facilities Management Division and the Information Systems Division. A San Bernardino County staff member described these meetings as round table discussions of all aspects of the San Bernardino County LGP including project identification, active projects, and coordination with other utility programs such as Savings By Design. All other interviewees corroborated this information, and all respondents described the meetings as well as the partnership in general as very collaborative and useful.

Below, we describe the process for municipal building retrofit and retro-commissioning activities as described by San Bernardino County, SCE and SoCalGas staff members.

Municipal Project Identification and Prioritization: San Bernardino County’s PMD project management staff have the primary responsibility for identification and prioritization of new municipal building retrofit and retro-commissioning projects. The project managers at San Bernardino County identify and target projects through several channels. The first channel is looking at the lifecycle of buildings and equipment and prioritizing related projects. The second channel is looking for opportunities for energy efficient upgrades that would accompany planned building improvements. And lastly, through the San Bernardino County LGP, the project managers have undertaken building audits and studies that identified cost effective energy efficient projects. In addition to these channels, the PMD also performs utility bill analysis to benchmark buildings and identify potential retrofit or retro-commissioning projects. SCE and SoCalGas provide assistance with energy audits and studies and investigate potential energy efficiency

measures including controls. As noted previously, SCE and SoCalGas staff meet monthly with San Bernardino County project managers to identify and prioritize projects.

Once San Bernardino County staff decide that a project should proceed, they, with assistance from SCE and SoCalGas, develop a scope of work that is distributed to the San Bernardino County vendor pool for a public bidding process.

During interviews with the San Bernardino County LGP staff, we asked if there have been cases where measures have been identified but not adopted in a project. San Bernardino and SoCalGas interviewees did not identify any natural gas measures that were identified and not adopted. SCE staff noted a customized controls project in 2015 that was scoped and planned for installation in 26 buildings. However, this project was delayed in the incentive processing at SCE, and ultimately cancelled because it went beyond its completion deadline. SCE staff explained that this was a significant missed opportunity.

Municipal Project Budgeting: San Bernardino County staff stated they have a strong understanding of the available incentives and financing and budgeting options to successfully implement projects. Once the vendor has scoped a project as described previously, the San Bernardino County LGP partners meet to discuss budget and financing options. Once they plan a project, there are two primary channels through which San Bernardino County provides funding. The first is funding through the general capital program, which has a \$12 million budget for countywide capital projects and building upgrades, of which energy projects can be one component. The second is a revolving fund that San Bernardino County has developed using incentives and rebate funds from prior energy efficiency projects.¹⁸ These funds are used to pursue additional energy projects at San Bernardino County only. Projects may use one or a combination of these funding sources. Utility program incentives are also used to reduce the overall costs of energy projects, and these incentive funds are returned to the revolving fund for future projects. PMD management can approve projects below \$175,000, while the San Bernardino County Board of Supervisors must approve projects over \$175,000.

Across all interviewees, project budgeting was identified as the most challenging project stage. While the San Bernardino County LGP is always looking for opportunities, it is also focused on cost reduction to ensure that the limited budget available can stretch to meet demands and opportunities. A San Bernardino County staff member explained that utility program incentives are very important in reducing the costs of a project to a point where the payback is acceptable to San Bernardino County. San Bernardino County does not have a set payback period limit, but the San Bernardino County staff member explained they look for “quick” payback projects. This staff member further explained that as the incentives dry up due to program changes and Title 24 requirements, the number of

¹⁸ The revolving fund was not created through the San Bernardino County LGP.

energy efficiency projects is likely to decrease because the energy savings alone will not be sufficient to justify the projects.

Municipal Project Implementation: Project implementation includes vendor selection, project tracking and monitoring, verification and evaluation of projects. As noted above, once San Bernardino County approves projects, contractors are selected from a pool of approved vendors via a competitive bidding process. For projects under \$45,000, the project can be bid out to the vendors on a three-bid purchase order; in other words, only three bids are required. For larger projects, a larger pool of contractors must be offered the chance to bid, and bids must go through more formal processes. For projects between \$45,000 and \$175,000, the San Bernardino County Public Bids Office issues a notification to the vendors. For projects above \$175,000, the project is sent to the San Bernardino County Board of Supervisors for approval prior to being published through the Public Bids Office. San Bernardino County has an active Job Order Contracting (JOC) program, which distributes contracting work to a pre-selected pool of certified contractors. The San Bernardino County PMD often leverages the JOC program to carry out retrofit or retro-commissioning projects. Once San Bernardino County staff provide final approval for project implementation after the budget has been sourced, the vendor begins actively working on the project. During the life of the project, San Bernardino County staff meet with SCE and SoCalGas staff monthly to review project progress.

Once a project is completed, the San Bernardino County LGP evaluates and verifies energy savings, with SCE and SoCalGas staff assisting San Bernardino County staff. The San Bernardino County LGP staff use either deemed savings methods, usually for projects involving specific measure replacement, or calculated engineering estimates to determine energy savings. The San Bernardino County LGP reports savings to the IOUs, the CPUC and the San Bernardino County Board of Supervisors. For projects that require savings estimation based on the difference between the new equipment and Title 24 code, the San Bernardino County LGP reports to the San Bernardino County Board of Supervisors both the incremental savings compared to Title 24 code and the incremental savings compared to the replaced equipment.

4.1.2 Demand Response and Emerging Technologies

As part of the Municipal Building Retrofits activities, the San Bernardino County LGP also encourages identification of opportunities to adopt demand response strategies or emerging technologies in building retrofit and retro-commissioning projects. While San Bernardino County staff have expressed interest in adopting these strategies and emerging technologies, to date these projects have not seen a lot of uptake by San Bernardino County. Interviewees from SCE and San Bernardino County identified the installation of a new controls system in 11 facilities – a Siemens Building Automation System that is connected to the County’s existing wide area network – as the only emerging technology project undertaken in San Bernardino County in 2015-2016. San Bernardino County also

participated in SCE's HVAC Optimization Program in 2015 and 2016, which has demand response components.

One SCE staff member noted that demand response is often challenging with larger municipal customers. In particular, when customers are structured in the way San Bernardino County is, with a centralized department that provides services to all other departments, it is particularly difficult to encourage adoption of demand response activities because motivation in individual departments is often low.

4.1.3 Training and Technical Assistance

In addition to project assistance, the San Bernardino County LGP, through SCE and SoCalGas, also provides training and education for San Bernardino County staff to improve their skills and capacity for energy efficiency projects. Training and education are included as SCE and SoCalGas activities in the Municipal Building Retrofits logic model. San Bernardino County staff, SCE staff and SoCalGas staff stated that PMD staff have strong expertise in all areas of energy efficiency, particularly in HVAC and lighting retrofits and building controls. All interviewees noted that in general, PMD staff have the expertise to cover the vast majority of the projects that they conduct. San Bernardino County offers monthly training for project management staff through the San Bernardino County LGP, including Title 24 training, green building training and zero net energy training, as well as equipment-specific trainings such as boiler or controls training.

San Bernardino County staff were very satisfied with the scope and quality of training provided through the San Bernardino County LGP. One San Bernardino County staff member stated, "we absolutely find these trainings useful." While the San Bernardino County staff member we spoke with could not identify any areas of training currently require, San Bernardino and IOU staff do discuss and request training frequently in San Bernardino County LGP monthly meetings.

4.2 Progress Towards Goals

The San Bernardino County LGP operates as a resource program under the SCE agreement, and as a non-resource program under the SoCalGas agreement. The LGP has set term goals that are claimed by SoCalGas Core Programs. Table 2 presents the savings goals and progress towards those goals. An 'N' in the table indicates that the San Bernardino County LGP did not meet its goals, as reported by staff we interviewed. The San Bernardino County LGP has fallen well short of meeting goals in both years.

Table 2: Municipal Building Retrofits Activity Goals

Goal Description	Target*	Goal Met (Actual Savings)
kWh Goal (2015)	927,511 kWh	N*
kWh Goal (2016)	232,466 kWh	N*
Therm Goal (2015)	40,000 Therms	N**
Therm Goal (2016)	40,000 Therms	N**

* kWh target and claimed savings reported in monthly reports at eestats.cpuc.ca.gov. Actual kWh savings of 183,090 kWh in 2015 and 103,141 kWh in 2016.

** Interviewee reported 840 therm savings in 2015 and 2016.

4.3 Key Successes

San Bernardino County, SCE and SoCalGas staff identified many notable successes resulting from the San Bernardino County LGP, both project-related as well as more general successes in engaging and promoting energy efficiency and conservation in San Bernardino County. Reported key successes included:

- While the San Bernardino County LGP has not met its goals in 2015 and 2016, staff from San Bernardino County, SCE and SoCalGas all expressed high satisfaction with the San Bernardino County LGP partner efforts in the retrofit and retro-commissioning activities. According to the interviewees from each organization, the interactions around these activities are very collaborative.
- In 2015, the San Bernardino County LGP completed several retrofit and retro-commissioning projects including five Savings By Design projects, a project for block heaters on backup generators, and HVAC optimization on 200 units throughout county facilities. In 2016, San Bernardino County completed further retro-commissioning projects including Savings By Design projects, and HVAC optimization on 150 units throughout county facilities. Projects in 2015 and 2016 achieved approximately 286,231 kWh¹⁹ and 840 therms in savings.
- The San Bernardino County LGP continues to be a critical source of funding for new projects through coordination with Core Programs and the revolving fund that San Bernardino County has developed using incentives and rebate funds from prior energy efficiency projects.

4.4 Challenges

San Bernardino County, SCE and SoCalGas staff noted a few challenges:

¹⁹ These savings numbers are reported on EEstats.cpuc.ca.gov for 2015 and 2016 combined.

- The major challenge noted by SCE, SoCalGas and San Bernardino County PMD staff we interviewed is the one-year contract structure of the LGP agreement. Specifically, the San Bernardino County LGP contract does not align with rates released by the CPUC or incentive program years, which makes planning very difficult. The contracts do include an overlap, or extension period, but the San Bernardino County Board of Supervisors will not work off an expired contract even with an extension period.
- Title 24 changes and the impact on measure eligibility in utility incentive programs have also negatively impacted existing projects at San Bernardino County. Specifically, San Bernardino County has a pipeline of projects that have been underway for up to two years, and by the time it submitted applications for some of these projects, incentives were no longer available because the measures were no longer eligible. For many projects, when the incentives were no longer available, the projects were no longer economically viable. Staff from San Bernardino County, SCE and SoCalGas all reported that Title 24 changes and the impact on measure incentive eligibility is likely to negatively impact the economic viability of San Bernardino County retrofit and retro-commissioning projects in the future as well.
- According to the San Bernardino County staff member, the challenges with Title 24 changes have led to the PMD not being able to meet the goals set by the PMD and the San Bernardino County LGP. The main reason this interviewee cited for not meeting goals was that the goals were set prior to the new Title 24 changes. This has led to San Bernardino County LGP staff drastically reducing the goals and to San Bernardino County PMD staff removing energy savings performance goals altogether as an indicator of performance. According to one interviewee, this situation could lead to problems renewing the LGP contract as it is currently structured.
- San Bernardino County and SCE staff identified the length of time that it takes for review of custom projects, as well as the level of rigidity in documentation requirements at the utility level and the CPUC, as a challenge. San Bernardino County is on a different budget cycle as the IOUs and the CPUC, with the result that delays in project approval can lead to cancellation of projects if they do not fall in the approved budget year. In addition, an SCE interviewee noted that the documentation required for incentives is often onerous and time consuming for San Bernardino County. This interviewee noted that in past LGP cycles, there was more flexibility, and the IOUs and CPUC approved custom projects fairly quickly. In some cases, it took one to two weeks for project approval, but this has stretched to up to six months, which can lead to project cancellation. If San Bernardino County proceeds without approval, it takes on the risk that the project will be declined.

4.5 Satisfaction with Partner Efforts

Staff from San Bernardino, SCE and SoCalGas expressed very high satisfaction with the participation of their partners. We asked each of the four interview subjects (one San Bernardino County staff member, two SCE staff members and one SoCalGas staff member) to rate their satisfaction with the partner organizations' participation in the Municipal Building Retrofits activity area of the program. We asked the interviewees to rate their satisfaction with their partners' participation on a 0-10 point scale. Scores ranged from 8 to 10 among the four interview subjects, indicating a high degree of satisfaction, consistent across the organizations.

Staff from all San Bernardino County LGP organizations characterized the partnership as collaborative. San Bernardino County staff explained that the partnership collaboration is "fantastic, and they are a great team" who always meet the needs of San Bernardino County. San Bernardino County staff also described the IOU staff as "our 'go to' people for information on things about energy efficiency," who are very responsive and knowledgeable. While SoCalGas and SCE staff were also generally satisfied with their partner's efforts, SoCalGas and SCE staff both noted that the monthly meetings with project managers can be challenging at times due to high turnover among project managers, sometimes leading to missed opportunities for energy projects.

4.6 Reported Assistance Needed and Implementation Recommendations

San Bernardino County staff requested assistance from SCE and SoCalGas in determining the impact of Title 24 changes on incentive programs and in identifying project opportunities that would extend beyond Title 24.

5 Strategic Plan Support Activities

There were no Strategic Plan Support activities in the 2015-2016 program cycle.

6 Core Programs Coordination

Core Programs Coordination is defined as coordination with other energy efficiency portfolio programs to reach agricultural, commercial, industrial, residential and small business customers. This is not a primary focus of the San Bernardino County LGP, and consequently, there were no Core Programs Coordination activities. While the San Bernardino County LGP has directed municipal projects through Core Programs²⁰ — primarily the Savings By Design and Direct Install programs — there is no Core Programs Coordination activity with the broader San Bernardino community, and there has not been any historically.

²⁰ Core Programs refer to large energy efficiency programs in SCE's and SoCalGas' program portfolios, including residential, commercial and third party programs.

7 Implementation of Past Evaluation Recommendations

Evergreen found no relevant past evaluation recommendations for the San Bernardino County LGP.

8 Key Findings and Recommendations

8.1 Key Findings

Since the San Bernardino County LGP started in October of 2008, it has not undergone any formal evaluations by the investor-owned utilities (IOUs) or the California Public Utilities Commission (CPUC).²¹ According to annual and quarterly reports, between 2008 and 2014, the San Bernardino County LGP was actively engaged in municipal building retrofits, strategic planning support, education and training for San Bernardino County staff and coordination with Core Programs, primarily the Savings By Design Program.²² In 2015 and 2016, the San Bernardino County LGP only engaged in Municipal Building Retrofits activities and did not engage in any Strategic Plan Support or Core Programs Coordination activities. Information collected in this evaluation indicates that the San Bernardino County LGP has conducted municipal building retrofit-related activities with some success, but has not met its energy savings goals in 2015 or 2016.

Municipal Building Retrofits Activities

- Staff from San Bernardino County, SCE and SoCalGas all expressed very high satisfaction with the San Bernardino County LGP overall, with all interviewees rating their satisfaction with their partners' participation between 8 and 10 on a 0-10 point scale, with 10 indicating the highest level of satisfaction. Interviewees all noted that overall, the San Bernardino County LGP had been successful in terms of meeting its energy savings goals since its inception in 2008 until 2014; however, the San Bernardino County LGP has faced challenges in 2015 and 2016 that have led to lower than expected savings. All partners are optimistic that they can work together to overcome these challenges and that they can meet their goals in 2017.
- Projects in 2015 and 2016 achieved approximately 286,231 kWh and 840 therms in energy savings.²³ In 2015 and 2016, the San Bernardino County LGP completed the following retrofit and retro-commissioning projects in municipal buildings:
 - Five Savings By Design projects;
 - A county-wide project for block heater replacement on backup generators;
 - HVAC optimization throughout County facilities (350 units county-wide in 2015-2016);
 - Three pump replacement projects; and

²¹ SoCalGas did not officially join the partnership until 2010.

²² Information from SCE and SoCalGas annual reports from 2008 through 2015. Accessed through <http://eestats.cpuc.ca.gov/Views/Documents.aspx>

²³ The kWh savings are from monthly reports on EEstats.cpuc.ca.gov. Therm savings are self-reported savings from interviewee.

- Lighting and controls systems projects at 11 facilities.
- The San Bernardino County LGP continues to provide a critical source of funding for new projects through coordination with Core Programs and the revolving fund that San Bernardino County has developed using incentives and rebate funds from prior energy efficiency projects.

Key Challenges

San Bernardino County, SCE and SoCalGas staff noted three challenges.

- Because the San Bernardino County LGP contract is renewed annually and the dates of the agreement do not align with the dates that rates are released by the California Public Utilities Commission (CPUC), or with incentive program years, project planning is often difficult. This one-year contract structure of the San Bernardino County LGP agreement was identified as the most significant challenge by the San Bernardino County staff member we interviewed. SCE and SoCalGas staff also noted this as a challenge. San Bernardino County LGP staff from all partner organizations are engaged in discussions to try and remedy this problem by extending the contract term, but this has not occurred to date.
- Updates to the Title 24 building code have resulted in commonly utilized measures becoming ineligible for SCE and SoCalGas energy efficiency programs, which has made it much more difficult to promote retrofit and retro-commissioning projects to municipal customers. As a result, San Bernardino County LGP staff have reduced their internal energy savings goals and removed energy savings goals altogether as an indicator of performance reported to the San Bernardino County Board of Supervisors, because the goals are unattainable. According to one interviewee, this situation could lead to problems renewing the LGP contract as it is currently structured.
- San Bernardino County and SCE staff both identified the lengthy CPUC and IOU project review period and their rigorous documentation requirements as a challenge. San Bernardino County LGP projects are required to be approved and completed within a fiscal year, and IOU and CPUC review have led to some project delays and cancellations, or to San Bernardino County undertaking projects without approval for incentives and assuming the risk of the project being rejected.

8.1.1 Innovative Approaches

One goal of this process evaluation was to identify innovative implementation practices that could be useful examples for the other LGPs, and we have highlighted one of these

below.²⁴ Each LGP faces a unique set of challenges given the differences in program implementation strategies, local government prioritization of energy efficiency, and customer characteristics. Because of these differences, not all innovative approaches will be useful to each LGP. This section allows other programs to review an innovative approach that has been useful for the San Bernardino County LGP and consider its value in the context of their own LGP.

For the San Bernardino County LGP, we have identified the following innovative approach:

- The project managers at San Bernardino County identify and target projects through several channels. The first channel is looking at the lifecycle of buildings and equipment and prioritizing related projects. The second channel is looking for opportunities for energy efficient upgrades that would accompany planned building improvements. And lastly, through the San Bernardino County LGP, the project managers have undertaken building audits and studies that identified cost effective energy efficient projects.

8.2 Recommendations

Based on the evaluation results, we provide the following actionable recommendations for the San Bernardino County LGP:

- We recommend that San Bernardino County LGP staff continue negotiations to extend the term of the agreement to be a multi-year term that better aligns with SCE and SoCalGas program cycles. This would provide greater flexibility for project identification and completion, and would remove an administrative barrier for the San Bernardino County LGP.
- We recommend that San Bernardino County, SCE and SoCalGas staff add a recurring agenda item to their monthly meetings to discuss the impact of the 2016 Title 24 changes. Specifically, San Bernardino County staff requested assistance with identifying alternative strategies, including any opportunities for other

²⁴ Note that this section is not meant to identify Best Practices. The difficulty of identifying LGP best practices is due primarily to the unique nature of each Partnership and the settings in which they operate. The IOUs can partner with local governments, governmental associations or business associations, and each has strengths and weaknesses in administering LGPs. Evergreen's past research (*Program Assessment Study: LGP Programs* - CPUC Work Order 12, July 2013) developed identifying facilitating factors to understand if there was any correlation with superior performance. The contextual-dependency of these factors made it impossible to develop any best practices recommendations that could be realistically applied to other LGPs. The same barriers exist in this study. Research Into Action also completed a separate study on LGPs (*Targeted Process Evaluation of the Local Government Partnership Program*, January 2017) and had the same difficulty in identifying best practices due to the considerable diversity in LGP/IOU approaches.

measures, to complete projects identified prior to the 2016 Title 24 changes. This will help San Bernardino County staff understand the impact of Title 24 changes better, and will help ensure that opportunities for energy efficiency projects are not missed.

- We recommend that SCE, SoCalGas, the CPUC and San Bernardino County work together in the following ways to address the issues related to the length of the custom process:
 - We recommend that SCE and SoCalGas connect San Bernardino County to future Ex-ante Working Group meetings to share their experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while agreement to establish fixed timeframes has been reached, there are still plans for further refinement. It would be useful for San Bernardino County to participate in these discussions.
 - We recommend that San Bernardino County make internal deadlines clear to both the IOUs and the CPUC during the custom review process.
 - We recommend that SCE and SoCalGas share their internal tracking of the CPUC review process with the San Bernardino County staff so that staff are aware of which projects may be delayed in the approval process longer than projects that were not selected for review by the CPUC.

Appendix A: LGP Program Process Evaluation Cycle

In order to conduct dedicated, comprehensive process evaluations for each LGP within a limited budget, the IOUs are staggering the LGP process evaluations across several years so that each LGP will be evaluated in turn. After all LGPs have been evaluated, at the end of a three to five year period, the cycle will begin again. This will allow evaluators to provide customized and specific recommendations to each LGP being evaluated.

There are over 50 LGPs in California, each of which will receive a process evaluation in the next three to five years. The number of process evaluations to be conducted in a particular year will be determined by the IOUs' annual evaluation budget and by the complexity of the LGPs being studied.

The San Bernardino County LGP is one of nine LGPs in California which Evergreen Economics is evaluating as part of the first wave of comprehensive process evaluations of the 2015-2016 LGP programs.²⁵ The IOUs selected the following LGPs to be evaluated during this first wave of studies:

PG&E:

- Association of Monterey Bay Area Governments (AMBAG)
- San Luis Obispo County (implemented with SoCalGas)
- San Mateo County
- Sierra Nevada
- Valley Innovative Energy Watch (VIEW, jointly implemented with SCE and SoCalGas)

SCE/SoCalGas:

- LA County
- Riverside County
- San Bernardino County

SDG&E:

- City of Chula Vista

²⁵ The comprehensive process evaluations of the 2015 LGP programs were commissioned by the four California investor-owned utilities (IOUs) – Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) – under contract to SoCalGas and funded by the ratepayers of California.

Appendix B: LGP Program Staff Interview Guide

Process Evaluations of the 2015 Local Government Partnerships

Interview Guide for IOU LGP Managers and LGP Implementer Staff

FINAL: November 14, 2016

Interviewee Role

Before we start, we want to remind you that your detailed feedback will be kept confidential and that we never identify specific individuals or job titles in our study reports. Due to your role in the program, however, some report findings may be attributed back to you through inference.

If you have confidential information to share, please let me know so that we may treat it appropriately. We really appreciate your candid feedback, and the information you provide could be very useful to support any improvements the IOUs may make to their LGP programs.

(IF RECORDING CONSENT GRANTED DURING RECRUITMENT):

- I'll start recording our interview now.
- AFTER RECORDING STARTED: I am here with (INTERVIEWEE). Do I have your permission to record this interview for the sole purpose of evaluating the [LGP]?
- Thank you.

RLI1. First, can you briefly summarize your main roles related to [LGP]?

RLI2. About how long have you been involved with [LGP] in this capacity? [Probe for any prior involvement within the LGP in a different capacity]

RLI3. And about what percentage of your time do you spend working on [LGP]?

RLI4. What are your other responsibilities, other than LGP related work?

RLI5. Which utility and local government staff do you primarily work with in your role with the [LGP]?

- a. Can you briefly describe the relationships?

NOTE: AT END, GET CONTACT INFO FOR POTENTIAL ADDITIONAL INTERVIEWS.

***NOTE: For any LGP activity below that the respondent cannot address, ask whom we should contact.**

“LG” denotes Local Government/Implementer staff

Municipal Building Retrofits

Let's talk about the LGP's efforts to retrofit local government buildings to be more energy efficient.

MU1. Are you the appropriate person to interview about municipal building retrofits for the LGP?

IF NOT SCHEDULE INTERVIEW WITH APPROPRIATE STAFF

MU2. (LG only): Do you work in a department that has oversight for the energy performance of municipal facilities?

MU3. What has your role been on these activities?

Please walk me through the process for identifying, budgeting, and carrying out municipal building retrofits through the LGP. Let's discuss this by stage:

MU4. [Project identification stage:] How does the LGP identify and prioritize retrofit projects?

Prompts if needed:

- a. Do they get audits (gas/electric, by whom)?
 - i. Do they do energy consumption benchmarking, from whom?
 - ii. Do they use an energy management system, or EMS (how)?
- b. Any notable successes?
 - i. Challenges?
 - ii. Do you have any suggestions for improving the project identification phase?

MU5. [Project identification stage:] Are there measures that have been identified as candidates for an energy efficiency retrofit that the local government decided not to undertake?

- a. If yes: Which measures, and why were they not replaced?
- b. FOLLOW UP: If a) the measure was a chiller or HVAC, and b) the reason was “we decided to repair it” ask: Has this measure ever been repaired in the past? How many times would you estimate?

MU6. [Budgeting stage:] How are energy efficiency retrofits typically funded?

Prompts if necessary:

- a. Is there a line item in the [city/county] budget for energy efficiency retrofits?
 - b. Is there a centralized maintenance and upgrades program, or do different departments upgrade their own facilities?
 - c. What are the [city's/county's] current budget priorities and where does energy efficiency rank on the list?
 - d. Any notable successes?
 - e. Challenges?
 - f. Suggestions for improving the budgeting or financing process?
- MU7. [Implementation stage:] Which contractors perform the retrofits, and how are they selected?
- a. Any notable successes?
 - b. Challenges?
 - c. Any suggestions for improving contractor selection?
- MU8. [Implementation stage:] How are energy savings calculated and verified?
- a. (LG only) Who do you report these savings to (e.g., city council meetings)?
 - b. (LG only) What happens to energy cost savings that are realized; which local budgets do they appear in?
 - c. Any suggestions for improvement?
- MU9. (LG only) What is the biggest organizational challenge you face when trying to get required approvals for energy efficiency retrofits?
- MU10. Has the LGP been integrating any emerging technologies in its building retrofits?
- a. What kinds of emerging technologies has the LGP installed since January 2015?
 - b. Any notable successes?
 - c. Challenges?
 - d. Suggestions for improvement?
- MU11. (LG only) Do you perform any municipal retrofit activities that are not funded by the IOUs?
- a. If YES: What are these activities, and how are they funded?

For the remainder of our discussion on municipal building retrofits, I would like you to only talk about IOU-funded activities, and not activities funded primarily through another source.

MU12. [IOU only] What does the local government partner do to facilitate building retrofits, and how does [IOU] help them?

MU13. [LG only] What does [IOU] do to facilitate building retrofits?

MU14. How often do you confer with [IOU/local partner] to do retrofit planning or discuss current issues?

MU15. What could be done to improve collaboration, if anything? (Probe on nature and frequency of information sharing)

As needed: In what areas would you like to be more informed?

MU16. What do you think are this LGP's most notable successes to date, and what are the main contributing factors to these successes?

MU17. Are there any documents we should get from you that describe any specific successes or challenges that could provide more details?

MU18. What, if anything, would you say is not going well and why? (Probe on energy use tracking, project identification, scoping, funding, implementation)

MU19. Do you recommend any changes to the way municipal retrofit projects are identified, approved, scoped, funded or implemented?

Get details on desired changes, and responsible entity.

MU20. How does the LGP track progress towards goals for municipal retrofits?

MU21. Do you track the specific types of measures that have been installed?

If YES:

a. Who could we get these data from?

MU22. What were your 2015 goals?

a. Did you meet them? Why or why not?

MU23. Are you on track to hit your 2016 goals?

a. Why or why not?

MU24. On a scale from 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how would you rate your satisfaction with [local government's/IOU's] participation?

a. Why do you say that?

MU25. What is the most important retrofit assistance you need from [IOU/local partner] going forward?

MU26. How about retro commissioning – is the LGP funding this activity for any municipal buildings?

If YES:

a. What is the biggest challenge of doing retro-commissioning projects?

MU27. Is the LGP funding any demand response activities at municipal buildings?

If YES:

a. Please tell me more about the demand response activities you’ve done since January of 2015.

b. On a scale from 0 to 10, where 0 means “not at all satisfied” and 10 means “extremely satisfied”, how would you rate your satisfaction with [local government’s/IOU’s] participation?

i. Why do you say that?

MU28. (LGs only) Do you engage in any demand response activities that are not funded through the LGP?

If YES:

a. What percentage of your demand response activities would you say is not funded through the LGP?

MU29. This next question is not limited to LGP-funded activities: How about self-generation or “distributed generation” – Has the local government done this or is it planning to do this for any municipal buildings?

If YES:

a. What types of systems [have you installed/will you install] and what is the generation capacity?

Strategic Plan Support

Now let’s talk about activities the LGP is doing in support of the California Strategic Plan.

NOTE: The question battery below will be asked for each high-level Strategic Plan Support activity except local government energy efficiency expertise and training (a separate battery follows, asked once).

These are the Strategic Plan topic introductions:

1 – Reach Codes: First, let’s talk about efforts to implement and promote local building codes stronger than Title 24. This could include reach codes, green building codes, point of sale programs, and codes to integrate demand response, energy efficiency and renewables.

2 – Code Compliance: Now let’s talk about energy code compliance. This could include redesigning local compliance activities or attending workshops, for example.

3 – Lead by Example: Now let’s talk about efforts to improve the energy efficiency of municipal buildings, beyond short-term retrofits. This could include building benchmarking or other energy tracking, sub metering, new retro-commissioning policies, an energy chapter in a broader energy or climate action plan, or new building requirements like LEED or ENERGY STAR.

4 – Community Programs: Now let’s talk about other local efforts and programs to increase energy efficiency or address climate change. These could include a customized energy or climate action plan, other local General Plan policies, greenhouse gas inventories, or detailed energy savings analyses.

SP1. Has the LGP been working in this area since January 2015?

If YES, Continue – Else skip to next Strategic Plan topic

SP2. Are you directly involved in these activities for the LGP (IF LGP IS MULTI-JURISDICTIONAL – a specific local government, or both)?

If YES, Continue. GET OTHER STAFF CONTACTS INFO AS NEEDED

IF RESPONDENT IS INVOLVED AT MULTIPLE LEVELS: OK, let’s discuss these activities first for the entire LGP, and then for your local government specifically.

NOTE TO INTERVIEWER: Cycle through the following questions twice for LG staffs that are also LGP leads/implementers.

SP3. What has your role been for these activities for the LGP/local government?

SP4. Can you please describe what the LGP/local government has been doing in this area since 2015? (Probe on process details)

SP5. And what would you say is the main objective of this Strategic Plan activity?

SP6. What is the current status of this activity?

a. If COMPLETED: Did you meet your objectives? Why, why not?

b. If NOT COMPLETED: Do you expect to meet your objectives? Why and by when? Why not?

- SP7. What do you think are this LGP's/local government's most notable successes to date, and are there any lessons to be learned from this?
- SP8. And what challenges has the LGP/local government had, if any?
- How has this been addressed or resolved?
 - Are there any lessons to be learned?
- SP9. What does the LGP/local government do to support this activity?
- SP10. (IOU only) On a scale from 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how would you rate your satisfaction with the local government's work on this activity?
- Why do you say that? (Get details by different LGs where appropriate)
- SP11. What does [IOU] do to support this activity?
- SP12. (LG only) On a scale from 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how would you rate your satisfaction with [IOU's] work on this activity?
- Why do you say that?
- SP13. (LG only) Are you knowledgeable about efforts by the Energy Division of the CPUC to support this activity?
- SP14. (LG only if SP13 = YES) Using the same 0 to 10 scale, how would you rate your satisfaction with the Energy Division's work on this activity?
- Why do you say that?
- SP15. (LG only – if implementation firm/contractor used) On a scale from 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how would you rate your satisfaction with your Partnership implementer's work on this activity?
- Why do you say that?
- SP16. For the Strategic Plan activities we've been discussing, what is the most important assistance you need from [IOU/local partner(s)] going forward?

RETURN TO NEXT STRATEGIC PLAN TOPIC ABOVE - PROCEED BELOW WHEN ALL STRATEGIC PLAN TOPICS ADDRESSED.

ONLY LG STAFF GET THE FOLLOWING EXPERTISE/TRAINING QUESTIONS:

Now we have a few questions about energy efficiency knowledge and training.

- SP17. In which energy efficiency areas would you say you and your staff have high expertise?
- SP18. In what areas do you and your staff need to strengthen your expertise?
- SP19. In what areas do you prefer to use outside, third party assistance as subject matter experts, and which experts or organizations do you use?
- SP20. How do you and other local government staff increase your knowledge about energy efficiency? For instance, do you get any formal training, attend LGP forums or get information from websites?
- SP21. Are there any barriers to getting energy efficiency training?
- SP22. (IF GETTING TRAINING) Have you been able to share any of the training or knowledge you've received with other LG staff, to increase their expertise?
- SP23. Has the LGP developed any of its own trainings or best practice documents?
- SP24. Is there any additional training you or other LGP staff want to receive?
- SP25. Has the number of staff working on the LGP changed in the past few years?
- SP26. Are there any local champions – politicians or business leaders – that are highly involved in promoting LGP activities?
 - a. IF YES: What do they do as a champion?
- SP27. What, if anything, could be done to make energy efficiency more of a priority at your LG?

NOTE: IOU AND LG STAFF GET THE REMAINING QUESTIONS.

Core Programs Coordination

- CR1. Are you the appropriate person to interview about [IOU] Core Program coordination activities for the LGP?
IF NOT, SCHEDULE INTERVIEW WITH APPROPRIATE STAFF
- CR2. What has your role been on these activities?
- CR3. What kinds of Core Program coordination do you do?
- CR4. How do you decide on which Core Programs to engage with? Then please walk me through how the LGP carries out a Core Program coordination activity.
- CR5. How does the LGP make households aware of [IOU's] Core Programs?
- CR6. Which marketing modes seem to be most and least effective?
- CR7. How does the LGP make businesses aware of [IOU's] Core Programs?

- CR8. Which marketing modes seem to be most and least effective?
- CR9. How do you track Core Programs participation resulting from LGP outreach?
- CR10. Do you recommend any changes to how the utility programs are marketed to the local community?
- CR11. [LG ONLY] How about the way the Core Programs are delivered or designed—are there unique needs or characteristics of this LGP's constituents that existing IOU residential or non-residential programs could better serve?
- CR12. [IOU only] What does the local government partner do to facilitate Core Programs participation, and how does [IOU] help them?
- CR13. [LG only] What does [IOU] do to facilitate Core Programs participation?
- CR14. How often do you confer with [IOU/local partner] to plan Core Programs coordination or discuss current issues?
- CR15. How are potential or approved IOU Core Program changes communicated between [IOU] and the local partners, and how well is this process working?
- CR16. What could be done to improve collaboration, if anything? (Probe on nature and frequency of information sharing)
 - a. As needed: In what area or areas would you like to be more informed?
- CR17. What do you think are this LGP's most notable successes to date, and what are the main contributing factors to these successes?
- CR18. What, if anything, would you say is not going well and why?
- CR19. Are there any documents we should get from you that describe any specific successes or challenges that could provide more details?
- CR20. What were your 2015 goals for energy savings or participation?
 - a. Did you meet them? Why or why not?
- CR21. Are you on track to hit your 2016 goals?
 - a. Why or why not?
- CR22. On a scale of 0 to 10 where 0 is "not at all satisfied" and 10 is "extremely satisfied", how would you rate your satisfaction with [IOU's/local partner's] support in promoting [IOU's] Core Programs?
- CR23. Why do you say that? (If needed: What specifically could [IOU/local government] be doing better? Probe on unfulfilled responsibilities.)
- CR24. What is the most important assistance you need from [IOU/local partner] going forward?

Other Activities

- O1. Are there any other LGP activities being funded through [IOU] that we have not yet discussed?
- a. If YES: What are they? Please give me a brief description of when it started, what the objective is, and the status of the activity towards meeting its objectives.

Closing

We have just a few more questions and then we're done.

- CL1. Are there any upcoming LGP events this fall or winter that might be useful for Evergreen staff to attend, to observe some LGP activities first hand?
- CL2. Are there any planned LGP implementation changes we should be aware of that we didn't discuss?

For LGs only:

- CL3. All things considered, on a scale of 0 to 10 where 0 is "not at all satisfied" and 10 is "extremely satisfied", please rate your overall satisfaction with this local government program as it is offered by [IOU].

a. Why do you say that?

NOTE TO INTERVIEWER: For jointly offered LGPs, ask about each IOU that offers it.

- CL4. On a scale of 0 to 10 where 0 is "not at all engaged" and 10 is "extremely engaged", how engaged would you say your agency or organization is when it comes to following the CPUC Energy Division's activities, such as rulemaking, stakeholder committees, workshops and seminars?

For both IOUs and LGs:

- CL5. Is there anything else you would like us to include in our report about this LGP?

We've gone through all the questions we planned to cover today - thank you very much for your time and the good information you provided.

If you would like to give the IOUs any feedback about our interview today, please contact Loan Nguyen at SoCalGas using the contact information we provided when we scheduled this interview. If you need it again we can email it to you.

Appendix C: Recommendations Resulting from Evaluation Research

Study ID	Study Type	Study Title	Study Manager		
SCG 0218.03	Process Evaluation	Process Evaluation of the Local Government Partnership Program	SoCalGas		
Recommendation	Program or Database	Summary of Findings	Additional Supporting Information	Best Practice / Recommendation	Recommendation Recipient
1	Local Government Partnerships Program	The most significant challenge identified by the San Bernardino staff member we interviewed is the one-year contract structure of the LGP agreement.		We recommend that San Bernardino County LGP staff continue negotiations to extend the term of the agreement to be a multi-year term that better aligns with SCE and SoCalGas program cycles. This would provide greater flexibility for project identification and completion, and would remove an administrative barrier for the San Bernardino County LGP.	San Bernardino County, SCE, SoCalGas
2	Local Government Partnerships Program	Staff from San Bernardino County, SCE and SoCalGas reported that Title 24 changes and the impact on which measures can be incentivized is likely to negatively impact the viability of their retrofit projects.		We recommend that San Bernardino County, SCE and SoCalGas staff add a recurring agenda item to their monthly meetings to discuss the impact of the 2016 Title 24 changes. Specifically, San Bernardino County staff requested assistance with identifying alternative strategies, including any opportunities for other measures, to complete projects identified prior to the 2016 Title 24 changes. This will help San Bernardino County staff understand the impact of Title 24 changes better, and will help ensure that opportunities for energy	San Bernardino County, SCE and SoCalGas

				efficiency projects are not missed..	
3	Local Government Partnerships Program	San Bernardino County staff identified the length of time that it takes for review of projects at the IOUs and the CPUC as a challenge. San Bernardino County LGP projects are required to be approved and completed within a fiscal year, and utility and CPUC review have led to some project delays and cancellations.		<p>We recommend that SCE, SoCalGas, the CPUC and San Bernardino County work together in the following ways to address the issues related to the length of the custom process:</p> <ul style="list-style-type: none"> • We recommend that SCE and SoCalGas connect San Bernardino County to future Ex-ante Working Group meetings to share their experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while agreement to establish fixed timeframes has been reached, there are still plans for further refinement. It would be useful for San Bernardino County to participate in these discussions. • We recommend that San Bernardino County make internal deadlines clear to both the IOUs and the CPUC during the custom review process. • We recommend that SCE and SoCalGas share their internal tracking of the CPUC review process with the San Bernardino County staff so that staff are aware of which projects may be delayed in the approval process longer than projects that were not selected for review by the CPUC. 	San Bernardino County, SCE and SoCalGas

Appendix D: Strategic Plan Option Descriptions

Goal	Strategy	Menu Option - Abbreviated Title	Menu Option- Full Text
1 - Local governments lead adoption and implementation of “reach” codes stronger than Title 24 on both mandatory and voluntary bases.	1.1 - Adopt codes, ordinances, standards, guidelines or programs that encourage or require building performance that exceeds state requirements. The focus should be on using existing models, or if there is something new and unique that it be replicable.	1.1.1. Reach Codes	1.1.1 – Adopt building energy codes more stringent than Title 24’s requirements, using cost-effectiveness studies by Climate Zone done by the utilities; adopt one or two additional tiers of increasing stringency.
		1.1.2. Green Building Code	1.1.2 – Adopt a Green Building policy for municipal development, commercial development and/or residential development.
		1.1.3. Point of Sale Program	1.1.3 – Develop/adopt point of sale programs such as a Residential or Commercial Energy Conservation Ordinance. Focus on whole building performance.
		1.1.4. IDSM Code Updates	1.1.4 – Change local codes to allow and encourage integration of energy efficiency, demand response, and on-site generation.
		1.1.5. Energy Efficiency Codes & Programs	1.1.5 – Develop and adopt programs to encourage energy efficiency such as one-stop permitting, on-line permitting, separate Zero Net Energy permit processes, density bonuses, or a recognition program.
		1.1.6. Educational Programs	1.1.6 – Develop educational programs for local elected officials, building officials, commissioners, and stakeholders to improve adoption of energy efficiency codes, ordinances, standards, guidelines and programs.
	1.2 - Implement codes, ordinances, standards, guidelines or programs that encourage building performance that exceeds state standards.	1.2.1. Stakeholder Engagement	1.2.1 – Implement any of the strategies in section 1.1 through a process involving internal and external stakeholders, etc.

Goal	Strategy	Menu Option - Abbreviated Title	Menu Option- Full Text
2 - Strong support from local governments for energy code compliance enforcement.	2.1 - Improve processes resulting in increased code compliance through education, training, and enforcement practices.	2.1.1. Code Compliance Workshop Attendance	2.1.1 – Local government staff and contract staff attend code compliance workshops offered by the California Energy Commission, utility codes & standards staff, or other local governments with strong compliance records.
		2.1.2. Code Compliance and Enforcement	2.1.2 – Redesign enforcement, compliance, plan review processes; introduce new forms and templates.
3 - Local governments lead by example with their own facilities and energy usage practices.	3.1 - Develop a program to track municipal energy usage, such as through energy management software and benchmarking of municipal facilities.	3.1.1. Local Gov't Benchmarking Policies	3.1.1 – Develop energy benchmarking policies and procedures to enable ongoing benchmarking of all local government facilities.
		3.1.2. Local Gov't 'Utility Manager' Program	3.1.2 – Set up a 'utility manager' computer program to track municipal usage. Identify need for sub-metering to plan, budget and manage bills.
	3.2 - Adopt an Energy or Climate Action Plan for municipal operations. The plan could include setting energy efficiency standards for new and existing facilities, developing a revolving loan fund for energy efficiency projects, and so on.	3.2.1. Local Gov't EAP/CAP	3.2.1 – Develop/adopt an energy chapter for City/ County climate or energy action plan.
		3.2.2. Local Gov't Building Standard	3.2.2 – Adopt a policy to require LEED, Energy Star Ratings, or other program standard for municipal facilities.
		3.2.3. Local Gov't Revolving Energy Efficiency Fund	3.2.3 – Develop policy for a revolving energy efficiency fund for City/County facilities.
		3.2.4. Local Gov't Commissioning/Retro-Commissioning Policy	3.2.4 – Develop commissioning/retro-commissioning policies for municipal facilities.
4 - Local governments lead their communities with innovative programs for energy efficiency, sustainability and climate change.	4.1 - Adopt a Climate Action Plan (CAP), Energy Action Plan (EAP) or adopt energy efficiency language into another policy document, such as a General Plan, to reduce community greenhouse gas emissions with a focus on energy efficiency.	4.1.1. Community-Wide EAP/CAP Template	4.1.1 – Develop a regional template for Climate Action Plans (CAP) or Energy Action Plans (EAP).
		4.1.2. Customized EAP/CAP	4.1.2 – Customize CAP with energy efficiency language and data.
		4.1.3. Community-Wide Planning for EE	4.1.3 – Update General Plan/Conservation Element with Climate policies. Provide energy efficiency framework and data for other people doing planning.
		4.1.4. Community-Wide EE Savings Analysis	4.1.4 – Conduct the energy efficiency savings analysis for an annual Greenhouse Gas inventory for the City/ County.
5 - Local government energy efficiency expertise becomes widespread and typical.		5. EE Expertise	5 - Local government energy efficiency expertise becomes widespread and typical.