



Process Evaluation of the Los Angeles County Local Government Partnership Program

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I Executive Summary

The Los Angeles County Local Government Partnership (the LA County LGP) is a partnership between Los Angeles County (LA County), Southern California Edison Company (SCE) and Southern California Gas Company (SoCalGas). The LA County LGP began in 2004, building on prior energy efficiency program-related efforts between the three partners dating back to 2002. The LA County LGP serves the most populous county in the United States with over 10 million residents, 88 incorporated cities and over 2,500 square miles of unincorporated area. LA County provides numerous services including law enforcement, tax collection, and public health and social services to its constituents, in addition to some municipal services (sanitation, trash collection, etc.) for both incorporated and unincorporated areas. To provide these services, LA County maintains over 200 facilities with more than 13 million square feet of floor space. The purpose of the LA County LGP is to leverage the combined strengths of LA County, SCE and SoCalGas to identify and implement energy efficiency projects and activities within LA County.

The LA County LGP is designed to improve energy efficiency within LA County through a variety of activities, including:

- **Municipal Facility Retrofit and Retro-Commissioning** – identification and implementation of energy efficiency retrofit and retro-commissioning projects at Los Angeles County facilities, energy efficiency education and best practices training, new construction and design assistance (Savings By Design), emerging technologies, integration with demand response services, coordination with funding sources, and coordination with other IOU program offerings (e.g., Core Programs, solar, water).
- **California Strategic Plan Support** – supporting the California Long Term Energy Efficiency Strategic Plan (Strategic Plan), including adoption and implementation of building or new construction codes, and developing methods for benchmarking and tracking energy use at County facilities.

The 2013-2014 Energy Efficiency Program Implementation Plans (PIPs) for SCE and SoCalGas¹ include additional information on the 2015-2016 planned activities for the LA County LGP.

¹ 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.

The LA County LGP structure differs between the two IOUs, SCE and SoCalGas. Under SCE, the LA County LGP is classified as a resource government partnership program, meaning that the program directly claims energy savings. Under SoCalGas, the LA County LGP is classified as a non-resource program, meaning the partnership does not claim savings directly, but rather funnels projects to Core Programs that claim the energy savings.² In each case, the primary focus of the LA County LGP is continued identification and implementation of energy efficiency retrofit and retro-commissioning projects at LA County facilities.³

The remainder of this report presents the results of the LA County LGP process evaluation, and Evergreen focused this evaluation on program activities completed in 2015 through 2016. As this is the first evaluation conducted on the LA County LGP since 2009, we also highlight additional activities from the 2010-2014 period as needed to provide additional program context.

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

² While the LA 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 LA County LGP does not engage in this activity area.

³ Southern California Edison Company. *Customer Energy Efficiency And Solar Division Program Implementation Plans. Exhibit 4C – Local Programs*. 2013–2014.

Table 1: Process Evaluation Objectives

Objective	Assessment
1. Provide documentation of the LA County LGP's suite of activities at the time of the evaluation.	Through interviews with partnership staff, and program documentation review, the evaluation identified and documented LA County LGP activities. (Sections 4 - 5)
2. Document how the LA County LGP has adopted and implemented LGP-specific recommendations from the previous process evaluation.	The evaluation team reviewed the prior program evaluation and confirmed the LA County LGP had no prior evaluation recommendations. (Section 7)
3. Identify whether the LA County LGP is currently being implemented according to its logic model/change theory.	The LA County LGP partners have successfully implemented the partnership according to the underlying program logic/change theory as described in the Program Implementation Plans.
4. Document the LA County LGP's successes and challenges.	The evaluation found that the LA County LGP had met all goals for the 2015-2016 program cycle. (Sections 4 - 5)
5. Assess partner satisfaction within the LA County LGP.	LA County LGP partners were very satisfied with their partners' participation in the LA County LGP. (Sections 4 - 5)
6. Identify whether programs are on track to meet their CPUC-approved program objectives.	The LA County LGP met its 2015 and 2016 objectives. (Sections 4 - 5)
7. Provide recommendations regarding design and/or implementation of the LA County LGP.	The evaluation team identified key findings, successes and challenges, and developed actionable recommendations to improve the design and implementation of the LA County LGP. (Section 8)

1.1 Key Findings

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

Municipal Building Retrofits Activities

- In 2015 and 2016, the LA County LGP engaged in retro-commissioning projects at five detention facilities that were particularly notable due to their energy savings. One project in particular, at the Los Padrinos Juvenile Hall and Courthouse, achieved savings of over 1 million kWh and over 81,000 therms.
- In 2016, the LA County LGP engaged in a total of eight retro-commissioning projects, primarily focused on HVAC systems and controls, with an estimated

combined gas savings of between 120,000 and 130,000 therms (including the Los Padrinos project).

- The LA County LGP revolving loan fund, established in April 2012, continues to provide a stable and important source of funding for new projects.
- The LA County LGP has helped improve engagement with multiple city departments and motivated them to independently investigate new energy efficiency opportunities.
- The LA County LGP has helped raise awareness and commitment to energy efficiency among the LA County Board of Supervisors. One LA County staff member⁴ noted that the Board of Supervisors understands the value of energy efficiency and is very supportive of energy projects and sustainability, in part due to the LA County LGP.

Strategic Plan Support Activities – Lead by Example

- The LA County LGP helped facilitate the dissemination of a utility manager system or Enterprise Energy Management Information Systems (EEMIS) for participating municipalities within Los Angeles County. The activity took place between 2013 and 2015, ending in April of 2015. Under this activity, LA County staff worked with their EEMIS implementer to expand the system so other local governments could use it. This included modifying and hosting EEMIS to allow other entities access, facilitating the installation of EEMIS at other local governments and providing training and consulting support to local governments. According to LA County staff, the activity was very successful and met all goals.

Key Challenges

LA County, SCE and SoCalGas staff noted that the Municipal Building Retrofits activity area of the LA County LGP is working very well, but did share three challenges:

- Energy management—including management of energy efficiency projects—for LA County facilities falls under the purview of the Energy Management Division (EMD) of Los Angeles County.⁵ EMD's budget is discretionary, and as a result,

⁴ In the remainder of this document, 'LA County staff' refers to staff at Los Angeles County that work to support the LGP, and 'SCE staff' and 'SoCalGas staff' refers to staff at SCE and SoCalGas respectively that work to support the LA County LGP. When other staff from these organizations are referenced, their roles are explicitly described in the text.

⁵ Since 2009, EMD has been housed in the County Office of Sustainability within the Internal Services Department (ISD) of Los Angeles County. Between 2003 and 2009, EMD was housed in the Facilities Operations Service within the Internal Services Department. EMD was established by the LA County Board of Supervisors in 2002.

EMD relies on grants and incentive programs, including the revolving loan fund that is funded through incentive payments, to fund projects. This makes budgeting a challenge.

- Staff from LA County, SCE and SoCalGas reported that Title 24 building code updates and the impact on which measures can be incentivized is likely to negatively impact the viability of their retrofit projects.
- LA County staff identified the length of time that it takes for review of custom projects at the IOUs and the CPUC as a challenge. This has led to delayed projects or to LA County moving ahead with projects without prior approval and assuming the risk of the project being denied.⁶ LA County requires that the LA County LGP complete projects within a fiscal year of LA County project approval. While there have not been any project cancellations, LA County staff explained that uncertainty about project review timelines is challenging for project planning. LA County staff participated in Ex-ante Working Group meetings to help improve the custom project approval process.

1.2 Recommendations

Based on the evaluation results, we recommend that SCE, SoCalGas, the CPUC and LA County work together in the following ways to address the issues related to the length of the custom process.

- We recommend LA County continue to participate in future Ex-ante Working Group meetings to share experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while an agreement to established fixed timeframes has been reached, there are still plans for further refinement. It would be useful for LA County to continue to participate in these discussions.
- We recommend that LA 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 LA 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.

Historically, evaluations have found that the LA County LGP works very well; all partners “indicated that this is a successful, collaborative undertaking with good results, in terms of

⁶ Custom project approval is inherently lengthier than deemed project approval and is a commonly mentioned challenge across IOU programs in the non-residential sectors.

both savings and in the satisfaction of program partners and participants”.⁷ Evidence collected in this evaluation indicates that the LA County LGP continues to be a highly motivated and very successful program and is operating in a manner consistent with the program logic model.

Indicators of success include that:

- The LA County LGP has met or exceeded its goals, in some cases substantially (exceeding kWh savings goals by over 50 percent in 2016 and by nearly 60 percent in 2015), each year of its operation.
- The LA County LGP partners all expressed high levels of satisfaction with the other partner staff.
- LA County staff stated that the partnership has enhanced the commitment of LA County administrators, including the Board of Supervisors, to energy efficiency and conservation.

This evaluation finds that the LA County LGP is a highly collaborative partnership, with SCE, SoCalGas and LA County staff having high levels of energy efficiency expertise. The efforts of the LA County LGP continue to help LA County meet California’s ambitious goals for reducing energy consumption and greenhouse gas emissions.

⁷ PA Consulting Group, *Summary Report: Process Evaluation of the 2006–2008 Local Government and Institutional Partnership Programs – Final Report*, 2009.

2 Introduction

Across California, local government partnership (LGP) programs combine the strengths of both local governments and the IOUs to leverage the unique opportunities and resources of local communities to implement energy efficiency projects. The Los Angeles County Local Government Partnership (the LA County LGP), a partnership between Los Angeles County (LA County), Southern California Edison Company (SCE) and Southern California Gas Company (SoCalGas), has existed since 2004. The LA County LGP serves the most populous county in the United States with over ten million residents, 88 incorporated cities and over 2,500 square miles of unincorporated area. LA County provides numerous services including law enforcement, tax collection, and public health and social services to its constituents, in addition to some municipal services (sanitation, trash collection, etc.) for both incorporated and unincorporated areas. To provide these services, LA County maintains over 200 facilities with more than 13 million square feet of floor space.

Energy management, including management of energy efficiency projects, for these facilities falls under the purview of the Energy Management Division (EMD) of Los Angeles County.⁸ EMD has several responsibilities related to energy management including oversight of energy-efficiency projects for the 38 county departments, which incorporates the majority of LA County LGP activities. EMD presently employs four full time staff members to administer and execute the LA County LGP's activities: one department lead who spends approximately 50 percent time on LA County LGP-related activities and three project managers who spend 100 percent of their time on LA County LGP-related activities. Other LA County staff members are involved with LA County LGP activities including Department of Regional Planning staff members who administer the LA County Community Climate Action Plan (CAP) and assist with one Strategic Plan Support – Lead by Example activity.

Through the LA County LGP, SCE and SoCalGas provide support for energy efficiency projects conducted through EMD by assisting with identifying projects and strategies to reach the 38 different county departments that EMD serves. On the SCE side, one account manager and one program manager provide this support, while on the SoCalGas side, one program manager provides support for the LA County LGP. In addition to these core staff members, other SCE and SoCalGas program staff members provide assistance as necessary depending on the type of projects being implemented.

⁸ Since 2009, EMD has been housed in the County Office of Sustainability within the Internal Services Department (ISD) of Los Angeles County. Between 2003 and 2009, EMD was housed in the Facilities Operations Service within the Internal Services Department. EMD was established by the LA County Board of Supervisors in 2002.

The LA County LGP structure differs between the two IOUs, SCE and SoCalGas. Under SCE, the LA County LGP is classified as a resource government partnership program, meaning that the program directly claims energy savings. Under SoCalGas, the LA County LGP is classified as a non-resource program, meaning the partnership does not claim savings directly, but rather funnels projects to Core Programs that claim the energy savings.⁹ In each case, the primary focus of the LA County LGP is continued identification and implementation of energy efficiency retrofit and retro-commissioning projects at LA County facilities.¹⁰

The most recent evaluation found that the LA County LGP works very well; all partners “indicated that this is a successful, collaborative undertaking with good results, in terms of both savings and in the satisfaction of program partners and participants”.¹¹ Notable successes from the previous evaluation included production of training manuals, training of facility operators and implementation of LA County's Enterprise Energy Management Information System (EEMIS).

Until 2015, LA County and SCE were considered to be in an Institutional Partnership. In 2015, the partnership between SCE and LA County was moved to SCE's LGP program. The LA County partnership does not follow the SCE Energy Leader model of other SCE LGPs. SCE's Energy Leader LGPs conduct activities to engage the broader community and offer tiered incentives based on past achievements.¹² The LA County LGP has been under the Local Government Partnership framework for SoCalGas since its inception in 2004.

In 2015 and 2016, the LA County LGP primarily focused on retrofit and retro-commissioning activities under the Municipal Building Retrofits activities. In addition to the main focus of retrofit and retro-commissioning activities, the partnership also looked for opportunities in the following areas:

- **Energy Efficiency Education and Best Practices Development and Training** – The LA County LGP organizes education and training for facility and maintenance personnel. Limited education and training has taken place, specifically training for

⁹ While the LA 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 LA County LGP does not engage in this activity area.

¹⁰ Southern California Edison Company. *Customer Energy Efficiency And Solar Division Program Implementation Plans. Exhibit 4C – Local Programs*. 2013–2014.

¹¹ PA Consulting Group, *Summary Report: Process Evaluation of the 2006–2008 Local Government and Institutional Partnership Programs – Final Report*, 2009.

¹² Research Into Action. *Targeted Process Evaluation of the Local Government Partnership Program*. 2016.

LA County staff on the importance and value of energy efficiency and on Title 24 code changes.

- **Identifying Emerging Technology Opportunities** – The LA County LGP partners work together to identify potential opportunities to facilitate the installation of emerging technologies in LA County facilities, and, where applicable, provide incentives and technical aid for installing these technologies. While LA County is open to adoption of emerging technologies, to date it has not had any emerging technologies projects, according to interviewees.
- **Coordination with Other IOU Programs** – The partnership 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 agriculture, water efficiency and green building programs. The LA County LGP has engaged with other programs, including self-generation incentive and green building programs.

The LA County LGP also looked for opportunities to engage in the Strategic Plan Support and Core Programs Coordination activity areas as appropriate. To date, it has engaged in one Strategic Plan Support activity under the Lead By Example subgroup. The LA County LGP has not engaged in any Core Programs Coordination activities.

3 Research Objectives and Methods

3.1 Research Objectives

The research objectives for this evaluation included the following:

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

Please note that the evaluation did not include the following:

- Recommendations on the IOU-specific program models under which the LA County LGP operates;
- Comparative or best practice research between the LA County LGP and other LGPs, since only a limited number of LGPs will be evaluated each year; or
- Feasibility assessment of activities the LA 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 LA 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 LA 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 LA County LGP logic model describes the activities and immediate outputs of the LA County LGP in each main activity area, as well as the expected outcomes of these activities and the pathways through which these will be achieved over time. The evaluation team used the logic model as a guide to define specific outputs and outcomes to determine progress along the path from activities to outputs and then short-term and long-term outcomes. 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).

We include a logic model for each activity area in which the LA County LGP engages in subsequent sections: Municipal Building Retrofits (Section 4) and Strategic Plan Support Activities (Section 5). Please note that the primary focus of the LA County LGP is municipal building retrofits and retro-commissioning, which includes municipal building projects directed to IOU Core Programs. Core Programs Coordination, defined as coordination with other energy efficiency portfolio programs to reach agricultural, commercial, industrial, residential and small business customers, is not a primary focus of this partnership.

These sections provide a detailed description of LA County LGP activities shown in the logic models. Note that the logic models provide a graphical summary of the main LA

County LGP activities and outcomes, and we have omitted some less prominent activities to simplify the diagrams.

After Evergreen identified the data collection methods that would help us assess progress towards goals, we coordinated with SCE, SoCalGas and LA County staff to identify the most appropriate personnel to interview. For the LA County LGP, Evergreen completed several evaluation activities including program planning document review, progress report review, and comprehensive in-depth interviews with two SCE staff members, one SoCalGas staff member, and two LA County staff members. These interviews took place in December of 2016 and in January of 2017, with follow up interviews in March and April of 2017.

4 Municipal Building Retrofits

The Municipal Building Retrofits activity area is the primary focus of the LA County LGP, and is designed to provide assistance to 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.

Ultimately, through these activities and a strong, collaborative relationship among LA County, SCE and SoCalGas, the LA County LGP aims to improve the overall efficiency of local government building stock, continuing LA County's advancement towards meeting the goals of its Climate Action Plan¹³ and helping LA County meet California's ambitious goals for reducing energy consumption and greenhouse gas emissions.

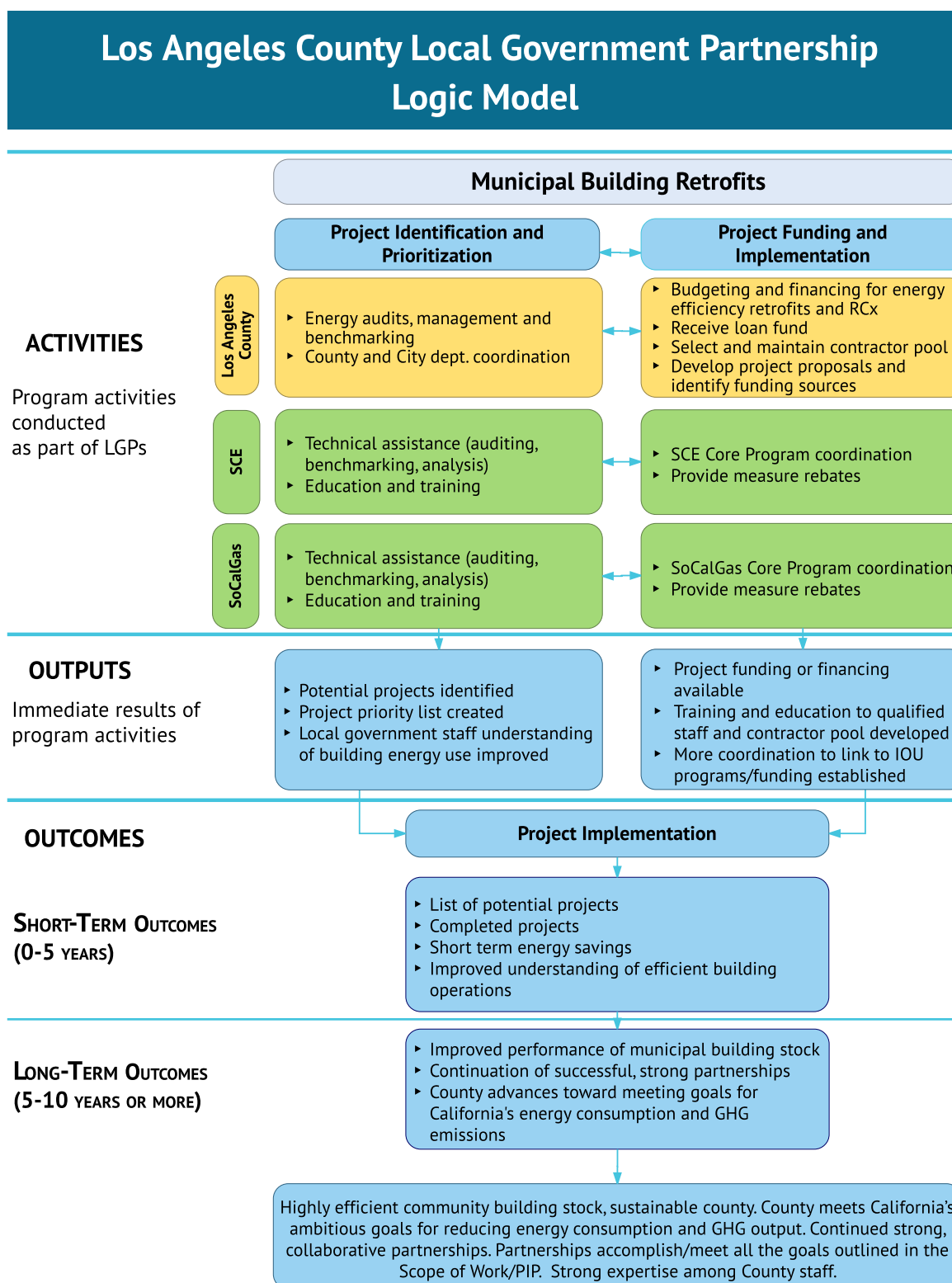
As we discussed in Section 3.2, our evaluation of the LA County LGP began with development of a program logic model for each activity area in which the LA County LGP engages, to serve as a guide to define specific outputs and outcomes for evaluating each section. We show the logic model of the LA County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

The logic model presents a high level overview of the LA 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 described in the last row of the model. Note that the logic model provides a graphical summary of the main LA County LGP Municipal Building Retrofits activities and outcomes, and we have omitted some less prominent activities to simplify the diagram. The LA County LGP Municipal Building Retrofits activities have generally been consistent with those shown in the logic model.

¹³ This was done prior to moving to the LGP model, outside of LGP Strategic Plan Support activities.

Figure 1: Municipal Building Retrofits Logic Model



To determine the success of the Municipal Building Retrofits activities, the evaluation team spoke with two LA County staff members, two SCE staff members and one SoCalGas staff member. Overall, the interviewees from these organizations characterized the LA County LGP's retrofit and retro-commissioning activities as being highly collaborative and providing valuable assistance to LA County in trying to improve the efficiency of the County's building stock. The partners hold formal meetings every two weeks that last approximately three hours, and are in regular communication regarding specific projects as needed. All interviewees were highly satisfied with the communication and collaboration among all organizations that comprise the LA County LGP.

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

4.1 Municipal Building Retrofits Activities

4.1.1 Municipal Building Retrofits and Retro-Commissioning

The more than 200 institutional and government facilities managed by the LA County Energy Management Division (EMD) include large, complex structures such as detention facilities, hospitals and courthouses as well as office buildings and other facilities. With assistance from SCE and SoCalGas, LA 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 LA County LGP funded projects since 2014 have been retro-commissioning projects with retrofit projects being less common.

LA County employs three full time project managers and one program supervisor to oversee these efforts. According to all interviewees from LA County, SCE and SoCalGas, LA County staff have strong expertise and technical skills required for identifying and managing retro-commissioning and retrofit projects, including benchmarking and auditing expertise as well as project oversight and procurement knowledge. SCE and SoCalGas staff explained that the LA County EMD team knows “all the buildings intimately and have been working in the roles for a number of years, so they have strong understanding of the portfolio”.

SCE and SoCalGas staff meet every two weeks with the LA County project managers to discuss potential projects and new measures, with IOU staff providing technical support and assistance with identification of funding, appropriate measures and incentive sources. Staff from all LA County LGP organizations characterized the meetings as highly collaborative, and important to the overall success of the partnership.

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

Municipal Project Identification and Prioritization: LA County's EMD staff support the LA County LGP have the primary responsibility for identification and prioritization of new municipal building retrofit or retro-commissioning projects, as reflected in the logic model included in this report as Figure 1. In the past, LA County has performed comprehensive energy audits across all county buildings with assistance from the LA County LGP. These audits, together with energy benchmarking through an Enterprise Energy Management System (EEMS) and regular review of utility bills, form the basis of the LA County project identification process. During meetings that take place every-other-week, the SCE and SoCalGas program managers provide input into projects identified by LA County staff and identify potential new measures or incentive pathways that the projects could utilize. Projects are prioritized based first on critical need at the building level followed by the potential for energy savings based on benchmarking data. These project identification and prioritization efforts are reflected in the outputs row of Figure 1 as an expected outcome of a successful partnership.

Once LA County staff decide that a project should proceed, they, with assistance from SCE and SoCalGas when required, develop a scope of work and a request for bids that are distributed to the LA County vendor pool. LA County requires that EMD select the lowest bidding qualified vendor to perform the project. The selected vendor first engages in a planning and investigation phase of the project, during which it scopes the project and assesses the building using an EQUEST model.¹⁴ The EQUEST model provides recommendations for appropriate measures or activities to improve building efficiency. Based on the EQUEST model, the LA County LGP project manager from EMD works closely with the vendor and SCE and SoCalGas staff to identify and select the most appropriate measures based on the measure viability and availability of incentives. The EQUEST models and project scope are provided to SCE and SoCalGas so that each IOU can review the project for incentive eligibility. The CPUC also selects a portion of projects for compliance review. For these selected projects, LA County staff also provide the EQUEST models and scope to the CPUC Energy Division for approval.

During interviews with LA County staff, we asked if there have been cases where measures have been identified but not adopted in a project. LA County staff noted that this does occur from time to time when identified measures have payback periods that are too long. The only specific measure that was mentioned by interviewees were Direct

¹⁴ EQUEST is a building energy simulation tool developed by the US Department of Energy. <http://www.doe2.com/equest/>

Digital Control (DDC) systems that were considered for some facilities but determined to be more costly than leaving existing control systems in place.

Municipal Project Budgeting: LA County staff 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 LA County LGP partners meet to discuss budget and financing options. Typically, projects use a combination of these funding sources. First, SCE and SoCalGas staff and LA County staff meet to identify which measures are eligible for incentive assistance. Once this is factored into the project cost, LA County staff investigate the availability of internal or other outside funding sources. The LA County LGP has various funding sources available, primarily:

- Discretionary funds from the LA County budget approved by the Board of Supervisors;
- Grants and other utility incentive programs; and
- Project funding from specific departments.

LA County staff members explained that funding from the LA County budget is the first avenue investigated for a typical project. EMD is not included as a line item in the LA County budget; rather, funds are provided on a discretionary basis depending on available budget and need. LA County staff members stated that the Board of Supervisors is very supportive of energy efficiency, renewables and sustainability, and is aware of the importance of the services provided by EMD. However, funding for energy efficiency projects directly competes with essential services, meaning the Board of Supervisors cannot always allocate funding to the energy efficiency projects that EMD presents to the Board of Supervisors. In these cases, LA County staff may look for grants or alternative funding opportunities from other utility incentive programs, or seek project funding from specific departments. Funding from specific departments is an avenue that LA County tries not to access, because departments already pay to support EMD and are often unable to provide additional project funding.

In addition to these funding sources, EMD has, over several years, created a revolving fund that is replenished with project utility incentives. In order for projects to utilize the revolving fund, they must qualify for utility incentives and, until March 2017, have a maximum four-year payback period. LA County staff use a simple formula to calculate the payback period, simply dividing the total cost of the project by the annual energy savings. In a follow up interview conducted in March of 2017, LA County staff updated the evaluation team that the payback period for fund approval has been extended to 15 years.

Municipal Project Implementation: Project implementation includes vendor selection, project tracking and monitoring, verification and evaluation of projects. One of the desired outcomes of the Municipal Building Retrofits activity area (as shown in the logic model) is

the creation of a qualified staff and contractor pool. As noted above, once LA County approves projects, contractors are selected from a pool of approved vendors via a competitive bidding process, with projects awarded to the approved vendor with the lowest bid. Once LA County staff provides 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, LA County staff meet with SCE and SoCalGas staff every two weeks to review project progress. LA County has developed a formal, structured review process for which vendors provide progress reports at specific stages of the projects. These reports are reviewed by the LA County LGP to ensure that progress is adequate and appropriate. Each stage includes a decision point where the LA County LGP decides if the project will continue or not. A project may be discontinued if it is significantly behind schedule or if there are technical difficulties that render the project no longer feasible.

Once a project is completed, the LA County LGP verifies energy savings. For retrofit projects that involve specific measure replacement, the LA County LGP typically relies on engineering assessments to calculate savings. For more complex building system or retro-commissioning projects, savings are calculated using the vendor EQUEST models before and after the project. Quality control and verification is performed through the IOUs, which review the EQUEST models and perform additional analysis as required.

4.1.2 Demand Response and Emerging Technologies

As part of the Municipal Building Retrofits activities, the LA County LGP also encourages identification of opportunities to adopt demand response strategies or emerging technologies in building retrofit and retro-commissioning projects. While LA County has expressed interest in adopting these strategies and emerging technologies, to date these have not seen a lot of uptake by LA County. One SCE staff member noted that demand response is often challenging with larger municipal customers. In particular, when customers are structured in the way LA 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.

Similarly, while LA County is open to adoption of emerging technologies, to date it has not had any emerging technology projects, according to interviewees. One SCE interviewee noted that originally, the broader LGP program was conceptualized with emerging technologies in mind, and the local partners were enthusiastic about this possibility. However, because emerging technologies require additional vetting and validation through pilot programs, there have been fewer opportunities than they initially expected, and no emerging technologies have been implemented.

4.1.3 Energy Efficiency Education and Training

In addition to project assistance, the LA County LGP, through SCE and SoCalGas, also provides training and education for staff involved in energy efficiency projects throughout

Los Angeles County to improve their skills and capacity for energy efficiency initiatives. We include Education and Training in the Activities section for SCE and SoCalGas in Figure 1. LA County staff, SCE staff and SoCalGas staff stated that EMD 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, EMD staff have the expertise to cover the vast majority of their projects. LA County staff continue to participate in training offered by SCE and SoCalGas, including Title 24 training, green building training and zero net energy training, as well as equipment specific trainings such as boiler or controls training.

LA County staff were very satisfied with the scope and quality of training provided through the LA County LGP. One LA County staff member stated, “we do all the training available through SCE and SoCalGas, and find that the training is great and extremely helpful”. This staff member also noted that a lot of the training meets the staff’s continuing education credit requirements, which is also very helpful for them and motivates staff to attend.

4.2 Progress Towards Goals

The LA County LGP operates as a resource program under the SCE agreement, and as a non-resource program under the SoCalGas agreement. The LA County LGP sets specific goals for both electric and gas savings as detailed in Table 2. The LA County LGP has met its goals consistently for several years, exceeding its target in 2015 and 2016. A “Y” in the table indicates that the LA County LGP met its goals, as reported by staff we interviewed.

Table 2: Municipal Building Retrofits Activity Goals

Goal Description	Target	Goal Met
2015 kWh Goal	2.1 million KWh	Y*
2016 kWh Goal	1.3 million KWh	Y*
2015 Therms Goal	25,000 Therms	Y
2016 Therms Goal	25,000 Therms	Y

* According to monthly reports available on eestats.cpuc.ca.gov, 2015 kWh savings totaled 3,398,868 kWh and 2016 kWh savings totaled 2,094,946 kWh.

4.3 Key Successes

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

- Staff from LA County, SCE and SoCalGas all expressed very high satisfaction with the LA County LGP. Interviewees all noted that overall, the LA County LGP has been highly successful. In particular, each interviewee noted that year over year, LA County has met or exceeded its goals, in some cases substantially. An LA County staff member noted that the LA County LGP has been highly contributory to the broader LGP program and has helped sustain positive savings for the program as a whole.
- In 2015 and 2016, the LA County LGP has engaged in retro-commissioning projects at five detention facilities, which have generated substantial energy savings. One project in particular, at the Los Padrinos Juvenile Hall and Courthouse that provides chilled water and hot water to space condition the campus, achieved savings of over 1 million kWh and over 81,000 therms.
- In 2016, LA County engaged in eight retro-commissioning projects with estimated gas savings of between 120,000 and 130,000 therms.
- The LA County revolving loan fund, established in 2012, continues to provide a stable and important source of funding for new projects.
- The LA County LGP has helped improve engagement with Los Angeles County departments and has motivated them to independently investigate new energy efficiency opportunities by demonstrating the opportunity for savings and providing support to identify and assess projects. One LA County staff member noted that they have seen individual county departments approach them with specific projects and funding, which has not typically occurred in the past.
- The LA County LGP has helped raise awareness and commitment to energy efficiency at the Los Angeles County Board of Supervisors by highlighting the benefits of energy efficiency projects. One staff member noted that the Board of Supervisors understands the value of energy efficiency and is very supportive of energy projects and sustainability; the LA County LGP is one reason for this.

4.4 Challenges

LA County, SCE and SoCalGas staff noted that the Municipal Building Retrofits activity area of the LA County LGP is working very well, but did share a few challenges:

- The major challenge noted among all interviewees was project budgeting. Due to EMD being a discretionary department within Los Angeles County, EMD relies on grants and incentive programs to fund projects.
- Staff from LA 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.
- LA County and SCE staff stated that the length of time that it takes for review of custom projects at the IOU level and the CPUC presents a significant challenge to

the LA County LGP implementing projects. SCE staff reported that the documentation required for custom projects can be rigid and onerous. Because local governments like LA County have greater constraints on procurement, contracting and funding than private businesses, the higher demand on resources and increased time required to fulfill the documentation and review requirements can lead to delays and added cost of projects. Interviewees noted some specific challenges with the project review process:

- LA County LGP staff reported that IOU and CPUC project review of custom projects often takes considerable time, leading to delayed projects.¹⁵ Staff from SCE and LA County that support the LA County LGP noted there is considerable frustration concerning these reviews and the time they can add to projects. Interviewees noted that projects that had been approved at the County level with contracted vendors have taken as long as six months for review, which has either led to projects being delayed or to LA County undertaking the project with the risk that the IOU or CPUC will deny the project. While these interview subjects acknowledge the responsibilities of the IOUs and the CPUC to ensure projects are in the best interest of ratepayers, they would like the CPUC and IOUs to develop a more streamlined approach to evaluating and verifying energy savings. LA County staff participated in Ex-ante Working Group meetings to help improve the custom project approval process.
- An LA County LGP staff member expressed frustration that the permitted length of time for review has changed several times. This interviewee reported that the review period has been changed from 30 days to 60 days, and at times up to 90 days. The interviewee did not have insight into where the changes were originating, but explained that this was a significant challenge to planning and implementing projects.

4.5 Satisfaction with Partner Efforts

Staff members from all partner organizations – LA County, SCE and SoCalGas – expressed very high satisfaction with the efforts of their partners. All interviewees characterized the LA County LGP as very successful with useful, and open collaboration. We asked each of the five interview subjects (two LA County staff members, 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. All interview subjects rated their satisfaction for this element as a 10 out of 10 on a 0-10 point scale.

¹⁵ Custom project approval is inherently lengthier than deemed project approval and is a commonly mentioned challenge across IOU programs in the non-residential sectors.

4.6 Reported Assistance Needed and Implementation Recommendations

LA County did not identify any areas of required assistance, or implementation recommendations.

5 Strategic Plan Support Activities

The Strategic Plan Support area of the LGP program includes activities that support and advance the vision set forth in the California Long Term Energy Efficiency Strategic Plan. These activities include:

- **Reach Code Support** – efforts to implement and promote local building codes stronger than Title 24 including reach codes and green building codes.
- **Code Compliance** – efforts to improve adherence to codes and standards including government staff training and certification programs for inspectors and contractors.
- **Lead by Example** – efforts to improve the energy efficiency of municipal buildings beyond short-term retrofits.
- **Community Programs** – local efforts and programs to increase energy efficiency and address climate change.

The LA County LGP only participates in the Lead by Example activity area by promoting and providing training for tools to track building energy performance and benchmarking to local cities. These activities have seen varying engagement from local cities. In general, LA County staff characterized the activity as successful.

The LA County LGP has only been considered part of the SCE LGP Program model since 2015 and currently does not engage in LGP activities beyond Municipal Building Retrofits.¹⁶ LA County, SCE and SoCalGas staff are continually discussing opportunities to engage in Strategic Plan Support activities; however, to date there has been limited engagement, with the only activity being in the Lead by Example area. Table 3 shows the support area where the LA County LGP is active within the Lead by Example area, using the menu categories from the Strategic Plan.

¹⁶ The LA County LGP has been structured as a Local Government Partnership for SoCalGas since its inception in 2004.

Table 3: Strategic Plan Support Activities

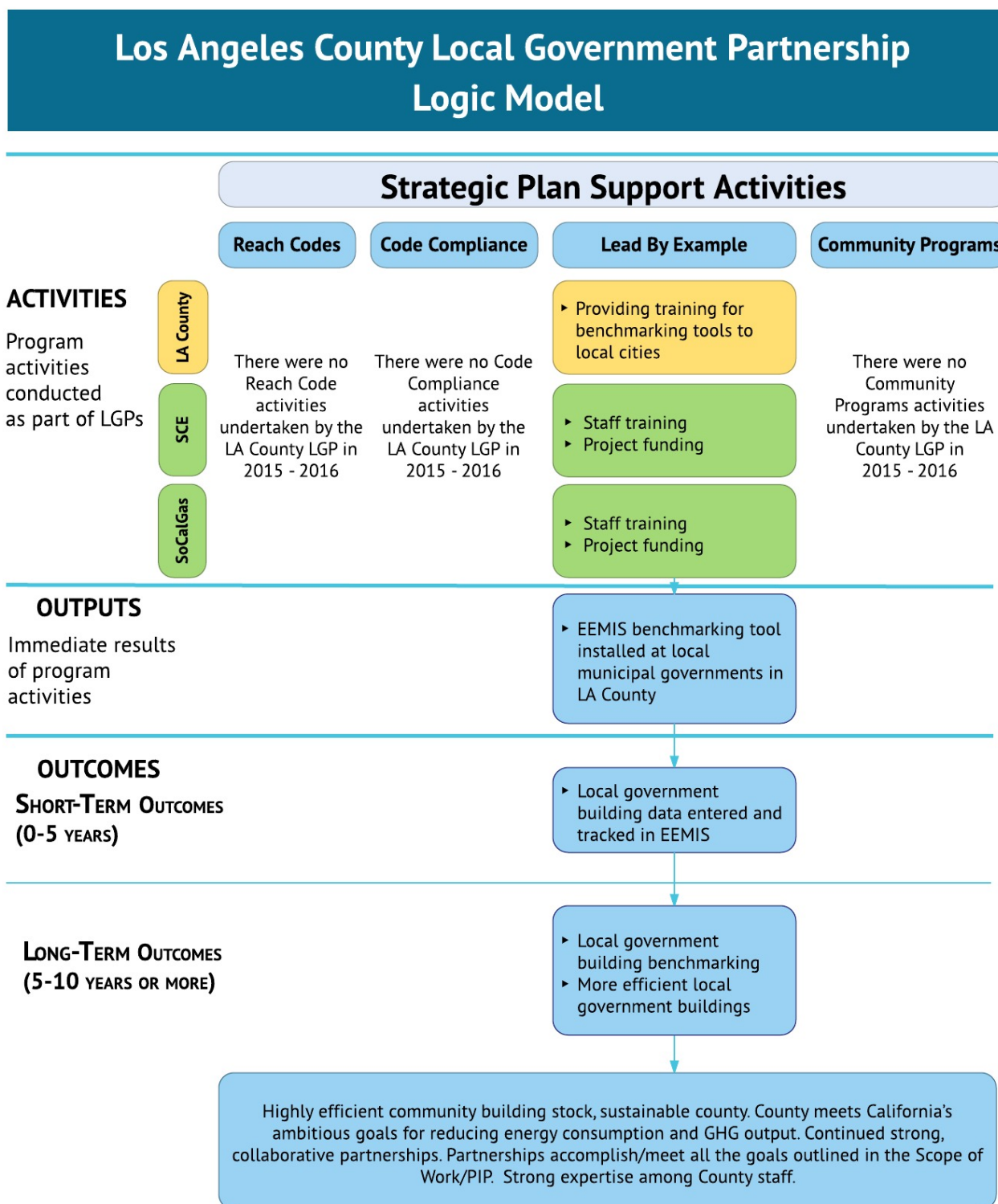
Activity Area	Menu Option - Abbreviated Title	# of Activities
1 - Reach Code Support	1.1.1. Reach Codes	
	1.1.2. Green Building Code	
	1.1.3. Point of Sale Program	
	1.1.4. IDSM Code Updates	
	1.1.5. Energy Efficiency Codes & Programs	
	1.1.6. Educational Programs	
2 - Code Compliance	2.1.1. Code Compliance Workshop Attendance	
	2.1.2. Code Compliance and Enforcement	
3 - Lead by Example	3.1.1. Local Gov't Benchmarking Policies	
	3.1.2. Local Gov't 'Utility Manager' Program	1
	3.2.1. Local Gov't EAP/CAP	
	3.2.2. Local Gov't Building Standard	
	3.2.3. Local Gov't Revolving Energy Efficiency Fund	
	3.2.4. Local Gov't Commissioning/Retro-Commissioning Policy	
4 - Community Programs	4.1.1. Community-Wide EAP/CAP Template	
	4.1.2. Customized EAP/CAP	
	4.1.3. Community-Wide Planning for EE	
	4.1.4. Community-Wide EE Savings Analysis	

As we discussed in Section 3.2, our evaluation of the LA County LGP began with development of a program logic model for each activity area in which the LA County LGP engages, to serve as a guide to define specific outputs and outcomes to evaluate progress along the path from activities to outputs and then long-term outcomes. We show the logic model of the LA County LGP's Strategic Plan Support activities in Figure 2 on the following page.

The logic model presents a high level overview of the LA County LGP's Strategic Plan Support 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 LA County LGP Strategic Plan Support activities have generally been consistent with those shown in the logic model.

Figure 2: Strategic Plan Support Activities Logic Model



We interviewed two staff members that were knowledgeable about the recent Lead By Example Strategic Plan Support activity that ended in 2015.

5.1 Lead by Example

Lead by Example includes efforts to improve the energy efficiency of municipal buildings beyond short-term retrofits, including 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. The goal of the Lead by Example activity area is to enable LGPs like the LA County LGP to become regional energy champions that can help participating local governments prioritize and implement energy efficiency projects and build internal energy expertise.

5.1.1 Lead By Example Activities

The LA County LGP helped facilitate the establishment of a utility manager system or Enterprise Energy Management Information Systems (EEMIS) for participating municipalities within Los Angeles County. The activity took place between 2013 and 2015, ending in April of 2015, and is reflected in the Strategic Plan Support activity area logic model (Figure 2). Under this activity, LA County staff worked with their EEMIS implementer to expand the system so other local governments could use it. This included modifying and hosting EEMIS to allow other entities access, facilitating the installation of EEMIS at other local governments and providing training and consulting support to local governments.

5.1.2 Progress Towards Goals

The LA County LGP completed this activity in April of 2015, expanding EEMIS to over 50 local governments. According to LA County staff, the Strategic Plan Support activity area was very successful and met all goals.

5.1.3 Key Successes

The LA County LGP successfully completed the Strategic Plan Support activity area with all goals met.

5.1.4 Challenges

The VIEW LGP partners did not note any significant challenges with this Strategic Plan Support activity area.

5.1.5 Satisfaction with Partner Efforts

Only one interviewee, from LA County ISD, was comfortable providing a response to this question, as others had not had significant involvement in the activity. The interviewee was highly satisfied with the participation of the other partners in this activity, giving a score of 9 on a 0-10 point scale.

5.1.6 Reported Assistance Needed and Implementation Recommendations

As the Strategic Plan Support activity area activity is completed, there are no assistance requirements or implementation recommendations.

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 LA County LGP and consequently, there were no Core Programs Coordination activities beyond municipal retrofits discussed in Section 4.

7 Implementation of Past Evaluation Recommendations

There are no prior evaluation recommendations for the LA County LGP.

8 Key Findings and Recommendations

The results of our evaluation research strongly indicate that the LA County LGP continues to be a highly motivated and very successful program. The LA County LGP has met or exceeded its goals, in some cases substantially, each year of its operation. Staff from LA County, SCE and SoCalGas all expressed very high satisfaction with the LA County LGP.

The LA County LGP structure differs between the two IOUs, SCE and SoCalGas. Under SCE, the LA County LGP is classified as a resource government partnership program, meaning that the program directly claims energy savings. Under SoCalGas, the LA County LGP is classified as a non-resource program, meaning the partnership does not claim savings directly, but rather funnels projects to Core Programs that claim the energy savings.¹⁷ In each case, the primary focus of the LA County LGP is continued identification and implementation of energy efficiency retrofit and retro-commissioning projects at LA County facilities.¹⁸

8.1 Key Findings

The overarching conclusion of this evaluation is that the LA County LGP continues to be highly successful. To identify key findings related to the LA County LGP's performance, Evergreen reviewed progress towards the short-term and long-term outcomes for the Municipal Building Retrofits and the Strategic Plan Support activity areas as detailed in the program logic models (Section 4 and Section 5).

Municipal Building Retrofits Activities

- In 2015 and 2016, the LA County LGP engaged in retro-commissioning projects at five detention facilities that were particularly notable due to their energy savings. One project in particular, at the Los Padrinos Juvenile Hall and Courthouse, achieved savings of over 1 million kWh and over 81,000 therms.
- In 2016, the LA County LGP engaged in a total of eight retro-commissioning projects, primarily focused on HVAC systems and controls, with an estimated combined gas savings of between 120,000 and 130,000 therms (including the Los Padrinos project).

¹⁷ While the LA 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 LA County LGP does not engage in this activity area.

¹⁸ Southern California Edison Company. *Customer Energy Efficiency And Solar Division Program Implementation Plans. Exhibit 4C – Local Programs*. 2013–2014.

- The LA County LGP revolving loan fund, established in April 2012, continues to provide a stable and important source of funding for new projects.
- The LA County LGP has helped improve engagement with multiple city departments and motivated them to independently investigate new energy efficiency opportunities.
- The LA County LGP has helped raise awareness and commitment to energy efficiency among the LA County Board of Supervisors. One LA County staff member noted that the Board of Supervisors understands the value of energy efficiency and is very supportive of energy projects and sustainability, in part due to the LA County LGP.

Strategic Plan Support Activities – Lead by Example

- The LA County LGP helped facilitate the dissemination of a utility manager system or Enterprise Energy Management Information Systems (EEMIS) for participating municipalities within Los Angeles County. The activity took place between 2013 and 2015, ending in April of 2015. Under this activity, LA County staff worked with their EEMIS implementer to expand the system so other local governments could use it. This included modifying and hosting EEMIS to allow other entities access, facilitating the installation of EEMIS at other local governments and providing training and consulting support to local governments. According to LA County staff, the activity was very successful and met all goals.

Key Challenges

LA County, SCE and SoCalGas staff noted that the Municipal Building Retrofits activity area of the LA County LGP is working very well, but did share three challenges:

- Energy management—including management of energy efficiency projects—for LA County facilities falls under the purview of the Energy Management Division (EMD) of Los Angeles County. EMD's budget is discretionary, and as a result, EMD relies on grants and incentive programs, including the revolving loan fund that is funded through incentive payments, to fund projects. This makes budgeting a challenge.
- Staff from LA 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.
- LA County staff identified the length of time that it takes for review of custom projects at the IOUs and the CPUC as a challenge that has led to delayed projects

or to LA County moving ahead with projects without prior approval and assuming the risk of the project being denied.¹⁹ LA County requires that the LA County LGP complete projects within a fiscal year of LA County project approval. While there have not been any project cancellations, LA County staff explained that uncertainty about project review timelines is challenging for project planning. LA County staff participated in Ex-ante Working Group meetings to help improve the custom project approval process.

¹⁹ Custom project approval is inherently lengthier than deemed project approval and is a commonly mentioned challenge across IOU programs in the non-residential sectors.

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 two of these below.²⁰ 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 provides other LGPs examples of innovative aspects that have been effective for the LA County LGP, the potential value of which they may consider in the context of their own LGP.

Some key examples of the LA County LGP's innovative practices are:

- LA County invested in a comprehensive EEMIS system which the LA County LGP expanded through a Strategic Plan Support activity [that ended in April 2015] to over 50 municipalities in Los Angeles County.²¹ LA County staff performs energy benchmarking through EEMIS, which forms the basis of the LA County project identification process. This approach helps LA County staff and the LA County LGP to cost effectively identify potential candidates for energy efficiency projects.
- The LA County LGP has a revolving fund for energy efficiency projects with a 15 year payback period requirement – longer than most revolving funds – allowing investment in longer term, deeper, energy efficiency projects. The 15 year payback criterion was established in March 2017 and replaced the previous four-year payback limit.

8.2 Recommendations

Based on the evaluation results, we recommend that SCE, SoCalGas, the CPUC and LA County work together in the following ways to address the issues related to the length of the custom process.

²⁰ 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.

²¹ LA County funds were used for the EEMIS system at the County level, and the expansion to municipalities was funded by ratepayers.

- We recommend LA County continue to participate in future Ex-ante Working Group meetings to share experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while an agreement to established fixed timeframes has been reached, there are still plans for further refinement. It would be useful for LA County to continue to participate in these discussions.
- We recommend that LA 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 LA 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 California investor-owned utilities (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 LA 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.²² 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:

- Los Angeles County
- Riverside County
- San Bernardino County

San Diego Gas & Electric Company:

- City of Chula Vista

²² 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 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?
- a. How has this been addressed or resolved?
 - b. 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?
- a. 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?
- a. 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?
- a. 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?
- a. 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 Lguyen 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 0218.02	Process Evaluation	Process Evaluation of the Los Angeles County Local Government Partnership Program	SoCalGas		
Recommendation	Program or Database	Summary of Findings	Additional Supporting Information	Best Practice / Recommendation	Recommendation Recipient
I	Local Government Partnerships Program	LA County staff identified the length of time that it takes for review of custom projects at the IOUs and the CPUC as a challenge that has led to delayed projects or to LA County moving ahead with projects without prior approval and assuming the risk of the project being denied. LA County requires that the LA County LGP complete projects within a fiscal year of LA County project approval. While there have not been any project cancellations, LA County staff explained that uncertainty about project review timelines is challenging for project planning. ²³		Based on the evaluation results, we recommend that SCE, SoCalGas, the CPUC and LA County work together in the following ways to address the issues related to the length of the custom process: <ul style="list-style-type: none"> • We recommend LA County continue to participate in future Ex-ante Working Group meetings to share experience and provide inputs as it relates to Task 6. Task 6 aims to compile suggestions to streamline the custom review process and while 	LA County, SCE and SoCalGas

²³ Custom project approval is inherently lengthier than deemed project approval and is a commonly mentioned challenge across IOU programs in the non-residential sectors.

				<p>an agreement to established fixed timeframes has been reached, there are still plans for further refinement. It would be useful for LA County to continue to participate in these discussions.</p> <ul style="list-style-type: none"> • We recommend that LA 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 LA 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. 	
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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.