Howdy Partner! Lessons Learned from an Assessment of Local Government Partnerships

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ABSTRACT

Due to their unique capabilities, Local Government Partnerships (LGPs) can play a significant role to accelerate societal energy efficiency uptake. In 2012 the California Public Utilities Commission (CPUC) and four largest energy Investor-Owned Utilities (IOUs) sponsored multiple evaluations of California's nonresidential energy efficiency programs, and one study was tasked with researching why and under what conditions some LGPs are more successful, and to begin to document best practices (and key challenges) pertaining to LGPs administration and implementation to inform future LGP design and selection. The evaluation consisted of in-depth study of 22 LGPs, out of 65 LGPs delivered by California's four largest IOUs during the study period. In-depth, structured interviews were conducted with numerous utility and local government program managers, third party implementers and specialized contractors combined with literature and secondary data reviews. The research helped to identify LGP factors that have facilitated success, including strategies that leverage IOU and local government strengths, address less mutable local government characteristics, and supportive implementation design features. Overall, the comprehensive research developed over 50 detailed recommendations for LGP planners and implementers to consider, based on "facilitating factors" that appear to support higher LGP performance. This paper describes issues related to measuring LGPs "success," some of the key factors and challenges that lead to or hinder LGP achievements and provides recommendations for LGP design and administration.

Introduction

Since their introduction in the 2004-2005 program cycle, LGPs have attempted to leverage the unique capabilities and resources of local governments and the Investor-Owned Utilities (IOUs) through teaming to help reach the state's energy goals, as expressed in California's Energy Action Plan, the Governor's Green Building Action Plan, the Assembly Bill 32-pursuant Climate Change Scoping Plan and California's Long-Term Energy Efficiency Strategic Plan (Strategic Plan). Specifically, local governments have regulatory power to improve the efficiency of new and existing construction, potential to reduce greenhouse gas (GHG) and energy usage within their public buildings and facilities, and unique communications channels to influence constituents' energy-related attitudes and knowledge. The IOUs, in turn, can contribute significant expertise (e.g., optimal measures), information (e.g., customer energy consumption), resources and administrative capabilities in partnering to achieve shared energy goals. The success of these partnerships is not assured, however, and critically depends on exploiting key synergies and capabilities each party can bring to bear.

In 2012 the California Public Utilities Commission (CPUC) and IOUs sponsored multiple evaluations of California's nonresidential energy efficiency programs, and one study was tasked with researching why and under what conditions some LGPs are more successful, and to begin to document best practices (and key challenges) pertaining to LGPs administration and implementation to inform future LGP design and selection. While best practices have been developed for many program types (e.g., education, lighting), a comprehensive set of best practices reflecting the unique attributes of LGPs does not yet exist.

This paper presents high-level evaluation results from a sample of Local Government Partnerships (LGPs) implemented in California. As the evaluation results have not yet been published and are currently in final draft form, LGP identifiers have been omitted from this paper.

California Context

Since California's LGPs operate in a range of settings, with different political dispositions, socio-demographics and financial resources. Likewise there is wide variety in local energy expertise, staff infrastructure and motivation to meet energy and climate change goals, providing a rich and varied experience from which research can identify best practices for success.

One commonality among California's LGPs is that their activities (residential and nonresidential) are generally prescribed by the state's Strategic Plan for energy efficiency. The Strategic Plan envisions that by 2020, California's local governments will be leaders in using energy efficiency to reduce energy use and GHG emissions both in their own facilities and throughout their communities. Goals for local governments, as defined in the Strategic Plan, are to:

- 1. Lead adoption and implementation of reach (building) codes stronger than Title 24 (i.e., standard code);
- 2. Lend strong support for code compliance enforcement (ideally halving non-compliance by 2012 and halving that again by 2016);
- 3. Lead by example with their facilities and energy use practices;
- 4. Lead their communities with innovative programs for energy efficiency, sustainability and climate change (e.g., develop Climate or Energy Action Plans); and
- 5. Develop energy efficiency expertise such that it becomes widespread and typical.

Each LGP selects goals and strategies from the Strategic Plan and utilizes these markers to track and report progress to their respective IOUs once every six months in a Menu Update. Each Menu Update lists goals, milestones achieved, timelines, budgets (sometimes) and more for each LGP and for each utility. Each subsequent update also builds on the last in order to track program changes over the course of the program cycle. This iterative process encourages steady progress on a local level to support statewide goals.

LGP program activities are considered to be either "resource," when energy savings may be claimed (e.g., from building retrofits), or "non-resource," which do not lead to energy savings that can be claimed (e.g., from standard code enforcement). Moreover, there are two general types of "resource" savings: those that are claimed by the LGP itself (direct) and those that derive from LGP referrals to utility "core" or third-party programs, which are claimed by the core or third-party program (indirect). The four large IOU's have elected to implement different LGP models with different combinations of resource and non-resource elements.

The program model used by San Diego Gas &Electric (SDG&E) and SoCalGas (the Sempra Utilities) is considered "non-resource" because the LGP programs do not claim any savings; all savings achieved through retrofits are claimed by the standard core programs. It also includes non-resource activities (e.g., Energy Action Plan (EAP) development) that do not lead to claimable energy savings. The primary role of Sempra's LGPs is to lay the groundwork for projects via outreach and education, facilities benchmarking and audits. Most SoCalGas LGPs focus on savings from municipal retrofits first, before outreach or coordination is conducted for other core programs. SDG&E's LGPs try to create awareness and spread knowledge of energy efficiency, design local energy efficiency programs, inform target markets, reduce environmental impacts and provide referrals to core programs.

The general model used by Pacific Gas & Electric (PG&E) is considered to be "resource" even though it includes both resource and non-resource elements (e.g., codes development, EAPs). PG&E's

LGPs claim savings from both municipal and commercial retrofits. Notably, PG&E's LGPs are expected to coordinate direct install projects with a broad range of separate, direct install programs implemented by third-party contractors (e.g., focusing on hospitality, wineries, etc.). The third-party contractors typically claim the savings from direct install projects.

Southern California Edison's (SCE) unique Energy Leader model is "resource", and savings from municipal retrofits are claimed by the LGPs, while SCE's core programs claim savings from LGP-inspired commercial projects. Overall, SCE's LGPs focus on promoting longer-term efficiency and building institutional capacity, as opposed to short-term, broad-based resource acquisition. SCE mandates that its LGPs develop an EAP, and encourages all its partners to create a broader Climate Action Plan (CAP). Notably, each city participating in an LGP attains ratings/tiers for distinct activities, starting with the "Value" tier and potentially progressing through three higher tiers of recognition - "Silver," "Gold," and "Platinum." For example, for the Energy Efficiency rating, cities must obtain five percent energy savings in the municipal sector - relative to a 2004 baseline – in order to move up from the Silver to Gold tier, where they would now be targeting 10 percent savings and also receive higher project incentives.

Within these different LGP models, some California LGPs operate in areas that have a relatively long legacy of energy efficiency initiatives and leadership, where local goals are well aligned with the state's strategic goals. Other LGPs operate in areas with little energy efficiency history, and/or where it is more challenging to align interests. Lastly, some LGPs operate within one city, while others are implemented at the county or regional level by a council of governments (COGs), the county, a nonprofit organization (e.g., regional energy authority/Joint Powers Authority (JPA)) or a business organization (e.g., chamber of commerce).

Evaluation Goals and Methods

Following were some of the primary goals of our research:

- 1. Characterize LGP attributes and performance (relative to LGP-specific activities/goals), and identify relatively high and low-performers;
- 2. Conduct research to understand why some LGPs appear to outperform others;
- 3. Develop key findings and lessons learned (e.g., facilitating factors, limiting factors/challenges/barriers) based on the research;
- 4. Identify potential best practices. While best practices have been developed for many program types (e.g., audits, residential education, HVAC programs), a comprehensive set of best practices that pertain to LGPs and organizational partnering does not yet exist, although the California Statewide Local Government Best Practices Coordinator has made substantial progress developing best practice case studies and disseminating these to local governments. A goal of our research was to identify a more comprehensive set of potential best practices and facilitating factors that are consistent with higher performing LGPs to inform future LGP design and selection.
- 5. Develop recommendations pertaining to LGP design, implementation and administration.

After developing an initial characterization of the 65 LGPs delivered by the IOUs, the evaluation proceeded with in-depth study of 22 unique LGPs. The final evaluation sample reflects input from the IOUs, CPUC, Statewide Local Government Energy Efficiency Best Practices Coordinator, and the Evergreen Team's independent review. Overall, the sampled LGPs were selected to reflect a broad range of organizational structures, and include county/regional partnerships, single city partnerships (large and small), informal groups of cities, COGs, JPA partners, and LGPs that received ARRA funding. Some sampled partnerships are newer, some more established, and some have benefitted from very engaged

partner staff. The evaluation sample was not selected to be statistically representative of the population of LGPs, however, and thus the findings and recommendations offered in this paper could be strengthened with additional research.

In-depth, structured interviews were conducted with numerous utility and local government program managers, third party implementers and specialized contractors. Notably, the interview guide was designed to solicit both specific and more open-ended feedback that the team felt would best address the uniqueness of LGP activities and operations. Key topics covered in the interviews included:

- Local government LGP staffing levels, organization and past experience
- LGP management practices and effectiveness (e.g., city/utility planning and coordination, tracking and reporting)
- Development of highly efficient building codes, and enforcement of existing codes
- Development of Climate or Energy Action Plans
- Buildings benchmarking (Government and Commercial)
- Retrofits practices (Government and Commercial)
- Funding sources utilized and/or developed (e.g., specialized loans, revolving energy funds)
- Regional collaboration and resources utilized (e.g., local universities)
- Local factors that help/hinder progress (e.g., political leadership, city departmental collaboration/isolation, attitudes towards climate change, types of local businesses)
- Suggested success metrics for LGPs

The evaluation also had a significant secondary research component. Our team reviewed biannual Strategic Plan Menu Updates (which indicate each partnership's progress on selected Strategic Plan items), prior LGP program studies, program implementation plans, quarterly and annual reports, summaries of program tracking data provided by Itron, IOU and CPUC regulatory filings and other related resources and documents.

Evaluation Challenges

Budget and schedule constraints prevented us from interviewing everyone we would have liked. We allocated three interviews per LGP on average (some received more), although some LGPs comprise 10 or more cities and counties, making it difficult to develop a complete understanding of individual city/county progress for some LGPs. Another challenge was isolating local government activities strictly related to the LGP program. Local governments often use a variety of funding sources and resources to promote LGP and separate local initiatives and it was sometimes difficult for respondents to differentiate activities and funding sources.

What is "Success"?

One key issue the evaluation team wrestled with is: "How should LGP success be measured beyond short-term energy savings?" particularly when LGPs attempt to prioritize what can be competing goals of cost-effective energy savings and other Strategic Plan support (e.g., community energy education, codes development, staff training on energy efficiency). Besides short-term cost-effectiveness (itself difficult to measure) there are few common metrics that individual LGPs can use to measure success.

For our main research areas we developed some preliminary, simplified classifications of LGPs that aided our analysis, although variations in LGP structures made it difficult to create ratings that can apply to all (i.e., individual city LGPs are much simpler to classify than a group of cities or a regional LGP). For example, the final municipal retrofit classifications were:

- "Foundational" = LGPs that have made some progress towards retrofitting its municipal buildings, have developed a plan and are beginning to implement it.
- "Advanced" = LGPs where many or almost all local government buildings have been retrofitted, benchmarking/audits have been done for future retrofits and a plan (and funding) is in place and being implemented for future retrofits.

Table 1 illustrates how some LGPs were classified on their municipal retrofits activities based on information obtained from interviews and/or supplementary documentation.

Table 1. Example LGP Classifications – Municipal Retrofits

LGP (Type)	Stage of Development	Supporting Evidence
LGP A (City)	Advanced	 Muni retrofits required by Climate Mitigation Action Plan; 90 percent of buildings were retrofitted with ARRA money; 100 percent of buildings are getting full audits; and Long history of benchmarking and auditing muni buildings
LGP B (County)	Foundational	 County CAP is done; Low-cost direct installs have been used in most facilities through third-party contractor; Some buildings have been audited; and No other retrofits planned in short term. Individual cities have limited funding and staff time to complete additional, larger projects
LGP C (Joint Powers Authority)	Foundational	 CAPs in development and not approved yet; Cities have no funding for retrofits. Finding more muni projects not a priority for cities; Cities have struggled to finish ARRA projects with constrained staffs; and Little benchmarking occurring
LGP D (Council of Governments)	Advanced	 Each city did a GHG Baseline and CAP in 2005 and doing a current update; Intern benchmarking all but smallest muni buildings; will use it to identify energy efficiency retrofit opportunities and educate cities on their largest buildings; Are training elected officials, senior management and facility staff to do ongoing benchmarking; and Many retrofits done; routinely bundle long and short-term payback measures for comprehensive projects; Utility staff skilled at funding projects through programs

Initially we developed single progress classifications for each LGP *as a whole*, however we quickly realized these singular ratings were masking important differences regarding the specific activities LGPs were succeeding at or not, and were not flexible enough for future adjustments to reflect marked progress or lapses in specific areas. Our subsequent classification schemes included three to five

ratings per activity, with multiple levels of "foundational", however it was difficult to agree on firm criteria for the multiple intermediate ratings, and due to the small sample size we ultimately settled on only two to three "coarse" but less debatable classifications, as illustrated above. Our intent, however, was to develop an initial framework that future evaluations could consider, refine, and use to integrate new findings over time. Table 2 illustrates how different LGPs could compare across multiple categories.

Table 2. Example Summary of Initial LGP Classifications for Strategic Plan Elements

LGP	Reach Codes	Standard Code Compliance	Municipal Retrofits	Community- wide Programs	Local Energy Efficiency Infrastructure	
LGP A	No Activity	Activity	Foundational	Foundational	Foundational	
LGP B	Foundational	Activity	Advanced	Foundational	Advanced	
LGP C	Advanced	Activity	Advanced	Advanced	Advanced	

Data Limitations

For the IOUs and sectors where the LGPs claim savings, we were able to develop some basic achievements statistics based on limited, high-level data available to the evaluators. No customer-level data, which could help to measure services to hard-to-reach customer segments (e.g., non-English speaking businesses) was available.

Table 3. Municipal Savings in LGPs Sample by Level of Advancement - Utility A

Level of Advancement (Number in Sample)	Total Muni Savings (kWh)	Muni Sites Served	Savings per Site (kWh)	
Foundational (7)	8,190,893	187	43,802	
Advanced (2)	2,770,310	36	76,953	
Total	10,961,203	223	49,153	

Table 4. Municipal Savings in LGPs Sample by Level of Advancement and Measure Type - Utility A

Level of	vel of T8 or CFL		Other Lighting		HVAC		Refrigeration		Other	
Advancement	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%
Foundational (7)	987,138	36%	488,498	18%	1,133,580	41%	4,836	0%	156,258	6%
Advanced (2)	976,519	12%	6,663,231	81%	287,479	4%	44,398	1%	219,265	3%
Total	1,963,657	18%	7,151,730	65%	1,421,059	13%	49,234	0%	375,523	3%

It is difficult to make conclusive statements about data like these. While the "advanced" LGPs show higher levels of savings attainment, better performing LGPs are presumably given higher goals over time. For PG&E, we lacked LGP-specific quantitative savings goals for the municipal and commercial sectors (savings goals are aggregated, across all LGPs, into a single Master Program Implementation Plan (PIP)). In addition, we had no LGP-specific baselines against which to measure

¹ The data source for Tables 2 and 3 is Evergreen Economics tabulations of LGP program savings data by customer segment and program for 2010 through 2011, provided in summary format by Itron.

savings progress, such as a measure of recent or past municipal energy consumption, or the population of commercial buildings that could potentially complete retrofits.

In this respect, the SCE Energy Leader model provides more explicit goals and performance criteria for some LGP activities. Individual cities within each Energy Leader partnership attain different ratings/tiers, starting with the "Value" tier and potentially progressing through three higher tiers of recognition - "Silver," "Gold," and "Platinum" - based on the partner's achievements relative to a current program cycle baseline in:

- Energy efficiency (primarily via municipal building retrofits);
- Demand Response program participation; and
- Community outreach (e.g., education at outreach events, public process for CAP/ EAP development activities).

For example, in the municipal sector, cities must actually obtain five percent energy savings - relative to a current program cycle baseline – in order to move up from the Silver to Gold tier, where they would now be targeting 10 percent savings. As local cities achieve higher tier levels, the incentives received from SCE per kWh saved increase as well.

Compared to the other IOUs, the SCE Energy Leader model is uniquely designed to incentivize municipal retrofits in individual cities, measure progress against well-designed local baselines and achieve increasing energy savings over time. However, data limitations *at the LGP level*, for all of the IOUs, prevented us from making rigorous *statewide* comparisons.

In particular, Sempra's overall nonresource design made it difficult to attribute LGP activities to energy savings outcomes, to help demonstrate the value of the LGPs. While some LGPs have established savings goals for themselves, Sempra does not require progress tracking, this is not done systematically across LGPs and no formal savings goals are included in the LGP PIPs.² While some Sempra LGP program managers prefer this operational flexibility, which allows them to have a long-term focus on the partnership by emphasizing robust outreach and education, some also noted that they have difficulty in effectively tracking and comparing LGP progress.

As noted previously, updates on nonresource tasks elected by local governments are provided biannually through the Strategic Plan Menu Updates. As part of our evaluation, we combined qualitative interview findings with comparisons of goals and achievements as documented in the Menu Updates to develop a fuller understanding of why some LGPs were more successful in attaining their nonresource goals.

Overarching Key Findings

Due to the wide variation in the LGPs' detailed activities, local settings, organizational structures, and the aforementioned data limitations our research findings were not robust enough to support the identification of definitive best practices.³ Instead we identified factors (characteristics or practices) that we believe facilitate higher performance ("facilitating factors"). Many of the factors

³ In particular, not having detailed energy savings goals/potential data made it difficult to objectively assess progress. That said, interviewees for each LGP had a good, high-level understanding of projects potential and accomplishments, we did not receive widely divergent "progress reports" for the same LGPs and we are confident that reported successes and challenges are generally accurate.

² Upon request, SDG&E and SoCalGas can identify municipal project savings since this is a distinct core program directly influenced by the LGPs. It is much more difficult, however, to link commercial and residential projects back to the LGPs that inspired them. We did not attempt to do this, since previous evaluations have noted that Sempra's information technology systems do not consistently link capital projects and energy savings to promotional efforts/programs.

associated with superior results cited by respondents were very context-dependent, rendering the relevant sample size for most findings much smaller than the original sample size of 22.

That said, the most advanced LGPs in our study sample typically have built a foundation of energy efficiency infrastructure (staffing, staff training, programs, funding) and use utility resources along with other internal and external resources – sampled LGPs that had made the most progress towards Strategic Plan goals use IOU resources for maximum impact. Successful local governments (i.e., those that received the highest ratings across most/all categories) usually have dedicated staff and departments that routinely deal with energy usage and energy efficiency. While LGPs that conduct a broad array of activities have often made the most progress towards Strategic Plan goals, we did not find that that is because of "synergies" of doing multiple activities. Instead, we believe that LGPs that are doing broad work well are indicative of a solid energy efficiency foundation, where political, knowledge and financial barriers have been overcome, sufficient internal resources exist and external resources are harnessed routinely. Such LGPs in our sample usually have made energy efficiency and sustainability a priority and have motivated staff and elected officials who are compelled to see results (typically because the constituency is asking for sustainability). Some of the specific factors correlated with broad LGP success are:

- Lead and support staff that can dedicate a good portion of their time to LGP activities, and are not completely consumed by other government duties;
- Staff that have developed a deep institutional understanding of energy efficiency and CAP issues over time, have an effective network, and understand the processes and nuances involved in program management and implementation;
- An adopted CAP or EAP, which often drives progress in other areas (reach code development, benchmarking, retrofits), and is typically an indicator that the local government is motivated and has a sufficient foundation of energy efficiency and/or sustainability efforts.

These factors suggest that LGPs that have a longer history and continuity of partnership staff are most inclined to make future progress towards retrofits, code development, city energy plans, etc., and to a certain extent this is true. We did find cases, however, where newly established LGPs were able to make rapid progress in one or more areas, because highly trained and motivated local staff were available to lead LGP efforts, and cases where long-established LGPs had plateaued or regressed in some areas, for a variety of reasons (e.g., additional responsibilities for experienced LGP staff, computer systems migrations, local resistance to new, aggressive climate action plans, etc.).⁴

Local governments new to energy efficiency and sustainability or in smaller cities typically have a long road to travel in building the necessary foundation to achieve multiple LGP goals. This issue is currently exacerbated due to staff and resource shortages associated with the state's budget crisis. Local governments that lack infrastructure usually deal with energy and related climate change issues in a piecemeal fashion, with facility managers trying to lead the charge in a partnership, though they often lack the authority and reach to generate substantial results. While utilities can provide critical technical support and resources, it may not be realistic to expect broad progress within all local governments in the near- or mid-term, as LGPs in our sample that had made the most progress had typically been in place two or more program cycles. Instead, goals for only one or two targeted areas in the first program cycle are more practical, and demonstrated early success can potentially leverage greater local government funding in subsequent planning cycles. LGPs that lack their own energy efficiency infrastructure can instead utilize third party or regional energy efficiency implementation infrastructure, at least in the near-term.

⁴ It was not within the study scope to systematically track LGP progress over multiple program cycles (e.g., since 2004). That said, some interviewees were able to provide valuable historical context, and the evaluators had also assessed some the LGPs in prior program cycles.

Our research revealed that the type of LGP implementer does not matter critically – we found successful LGP efforts among individual cities, COGs, port districts, JPA's and business organizations (e.g., Chambers of Commerce), although implementers tend to gravitate toward constituents they are most familiar with (e.g., member businesses, cities municipal facilities staff) and may prioritize some LGP activities over others. Among individual cities, mid-sized cities may be particularly well suited for LGPs. At this size the city has enough funding and staffing to achieve various LGP initiatives, but government is also sufficiently small so that staff working with LGP staff are relatively accessible and less likely to be overwhelmed by larger city responsibilities and inter-departmental protocols. Over time, LGP implementation becomes less difficult and more institutionalized. At one of the most successful LGPs in our sample, each city department has a dedicated energy efficiency component, there is a strong dedicated staff person who drives projects forward (and supportive elected officials).

Importantly, because LGPs have been so varied, it is difficult to draw definitive conclusions about their effectiveness. Experience has shown that LGPs may be successful at all or most of the activities they perform, only a subset or none at all, and this can change over time. Some key factors seem to include the nature of past accomplishments (i.e., the presence or absence of a track record to build upon), recent staffing or resource changes or key additions/losses of technical expertise. As described previously, we initially attempted to develop a single LGP rating scheme and quickly learned that local government conditions and priorities are often too fluid to make a singular scheme practical or useful. Nevertheless, we do believe that enough experience has been examined to offer some practical recommendations.

Recommendations for LGP Design and Administration

The research produced several recommendations to improve future LGPs implementation, and readers should refer to the (pending) final report for more detailed suggestions on how to recruit retrofit candidates, how to develop an Energy Action Plan, etc.⁵ In this section we focus on a limited set of higher-level administrative and organizational factors that can potentially improve multiple LGP program activities.

- 1. Develop Metrics for Participation and Engagement We believe that it would be useful to develop, track and report broader metrics of LGP success to motivate LGP progress. Regulators and utilities should consider developing metrics for measuring LGP participation and engagement, such as:
 - Number of cities within the region/county that have become engaged (e.g., appropriate contact has been identified and is participating in regular meetings);
 - The extent to which the partner has exerted its unique authority in the partnership (during the LGP selection process, a template could be filled out for each LGP lead agency or implementer that documents its strengths and weaknesses, which could include the reach of its authority);
 - The degree to which the LGP utilizes additional funding and financing sources such as ARRA, local revolving loan funds, state energy loans, and/or utility on-bill financing; and
 - Number of cities within a region/county that have initiated energy efficiency projects with LGP assistance.

⁵ In the full report, these recommendations are referred to as "suggestions" and include the LGPs/context in which they were observed, and/or the source of the suggestion.

- 2. Implement Strong Tracking and Reporting Utilities should have or develop systems to reliably link LGP project referrals to core and third-party programs to measure outcomes and impacts, and motivate LGPs' indirect savings claims activities. This has been a recommendation in prior California LGP program evaluations (Summit Blue, 2010), and other utilities across the country struggle with this issue also.
- 3. Provide foundational, "umbrella" services to incite LGP activity Utilities can assist local governments with the most limited resources by providing specialized services upon which they can build. PG&E's Green Communities Program is a good example of external resources being provided to LGPs. Specifically, this program provides funding, training and energy usage data to local governments to help them complete GHG inventories and Climate Action Plans (CAPs). Similarly, after local partners provide SCE with lists of municipal facilities (existing and planned) as a partnership requirement), dedicated SCE staff identify and qualify specific projects through technical audits and reviews, and provide a formal list of feasible, prioritized projects to each LGP. They also help to complete the rebate applications as projects are completed.
- 4. Clearly distinguish LGP from other energy conservation/generation activities to provide useful assistance and manage expectations Regulators should clarify the extent to which utilities are constrained from using LGP staff and resources to link local government partners to broader integrated demand side management (IDSM) resources. Some local governments want to engage with a partnership when they learn of other utility resources they can obtain, such as solar rebates. By being willing to link local governments to additional resources, the utility fulfills the vision of the partnership and increases IDSM activity. In California we observed inconsistency among the IOUs in interpreting when and how LGP program managers can dedicate time to linking local governments with resources beyond energy efficiency and demand response programs, which can contribute to local partner frustration and delay activity prioritization.
- 5. Set realistic, short-term goals for LGPs that lack energy efficiency staff expertise This could be informed by a standard template that is filled out when new LGPs are developed or are updated each program cycle to identify local partner experience, strengths, weaknesses and constraints (e.g., other governmental duties). In the current difficult economic climate public agency organization and staffing are frequently changing, and LGP goals may need to change accordingly.
- 6. Start new LGPs with a narrow scope of sectors and/or activities and clear resource direction LGPs that lack energy efficiency experience may benefit from prescribed approaches such as SCE's Energy Leader model, and/or close oversight during the planning stage regarding what activities they should initially focus on to make quick progress. Depending on local government staff resources and strategic partners (e.g., Chambers of Commerce), the LGP might choose to focus on commercial or residential retrofits, but not both. Importantly, they should also be directly guided to resources that already exist (e.g., California statewide LGP program resources the Best Practices website, peer to peer forums, local climate change organizations, university resources, etc.) that they should leverage instead of starting the "from scratch."
- 7. Leverage utility account managers Utilities should ensure high involvement of account representatives (government and commercial sector) in LGP programs to help achieve municipal and commercial retrofits, since they are able and often motivated by bonus incentives to link partners with additional utility resources, such as renewable energy program rebates outside the LGP program.

- 8. Develop regional versus city-level energy efficiency infrastructure (as appropriate) –Regulators and utilities should consider whether every individual city should create its own energy efficiency program implementation infrastructure, given the current economic climate and its impact on local government staffing.⁶ A regional approach for geographic areas that lack energy efficiency expertise (or have high risk of reducing staff) may be more realistic, efficient and effective at least in the near and mid-term. This regional leadership could come from a COG, a recognized "leader city" with staff capacity (and financial incentives) to assist local peer cities or a new regional energy efficiency organization.
- 9. Facilitate formalized, peer information sharing of resources across local governments In California the Statewide Energy Efficiency Collaborative (SEEC) facilitates peer sharing of resources across local governments, which has been helpful to disseminate the lessons learned and resources developed by more advanced local governments to those that lack energy expertise and resources. At the regional level, SDG&E hosts regular quarterly meetings for all LGP partners and utility program managers to share implementation experiences, challenges and successful approaches. LGPs with deep experience or unique characteristics (e.g., a small, confined service territory) may be encouraged to pilot new activities (e.g., business district energy challenges, energy monitoring equipment through local libraries) before they are integrated into other LGPs. Utilities should facilitate the sharing of project templates, non-proprietary databases and technical resources among LGP partners.
- 10. Require coordination and share savings where LGPs overlap with separate, supplemental programs delivered by third-party contractors Specialized firms that focus on the largest projects in their assigned sectors often cannot provide comprehensive projects to customers, and may have little incentive to coordinate and follow up with LGPs and other contractors to fill gaps (e.g., specific measures and sectors they cannot serve). In addition, these firms often focus their efforts on the more urbanized (i.e., cost effective) areas of LGPs and expend their budgets, and therefore service to hard to reach customers can suffer. Program planners and contracting staff should develop mechanisms to deliver comprehensive audits to customers, so that all recommended measures are tracked in one place and comprehensive projects can be developed.

Recommendations for Future Evaluations

As described previously, we developed some preliminary classifications of LGPs that aided our analysis. These groupings could serve as a starting point for more formal and/or detailed classifications to support future program design and implementation, development of best practices, regulatory oversight and program evaluation. Moreover, in lieu of detailed program-specific evaluations, these classifications could help to provide tailored resources to LGPs depending on their unique needs, advantages and barriers. Since there are so many LGPs across California, trying to assist and evaluate each one in the same manner is problematic, and classifying them by two or three key drivers of variation may be an effective improvement. In California, the CPUC and IOUs could consider building from the classifications used in this study to differentiate LGP programs by existing energy efficiency infrastructure (staff expertise, local programs), recent progress towards Strategic Plan goals, ability to

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⁶ One of our interviewees, who leads the LGP efforts at a very successful mid-sized city, believed that the "optimal" city size might be about 250,000 residents. At this size cities often have enough funding and staffing to complete multiple LGP activities, but local government is sufficiently small so that staff coordinating with LGP staff are fairly accessible and less likely to be overwhelmed by larger city responsibilities and inter-departmental protocols.

tap financial resources and structure (implementation type and geography) and use the classifications to aid in program planning and oversight.

Due to data constraints we had difficulty validating the self-reported information in in-depth interviews. Ideally, future evaluations of LGPs will have more comprehensive, detailed projects data at their disposal to better place interview findings into context.

Lastly, future evaluators should consider implementing more formal surveys (instead of in-depth interviews) probing on a large list of facilitating factors and key challenges identified in our research. The California Best Practices Coordinator conducts annual surveys of LGPs to inventory activities and accomplishments (and selective case studies are subsequently developed to flesh out best practices), and evaluators in California and elsewhere could replicate this approach.

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