



Process Evaluation of the Association of Monterey Bay Area Governments Energy Watch Local Government Partnership Program

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Table of Contents

1 EXECUTIVE SUMMARY	1
1.1 KEY FINDINGS.....	3
1.2 RECOMMENDATIONS.....	5
2 INTRODUCTION.....	7
3 RESEARCH OBJECTIVES AND METHODS	9
3.1 RESEARCH OBJECTIVES.....	9
3.2 RESEARCH METHODS	9
4 MUNICIPAL BUILDING RETROFITS	12
4.1 MUNICIPAL BUILDING RETROFITS ACTIVITIES	14
4.1.1 Municipal Building Retrofits and Retro-Commissioning.....	14
4.1.2 Training and Technical Assistance	17
4.2 PROGRESS TOWARDS GOALS.....	18
4.3 KEY SUCCESSES.....	19
4.4 CHALLENGES	20
4.5 SATISFACTION WITH PARTNER EFFORTS.....	22
4.6 REPORTED ASSISTANCE NEEDED AND IMPLEMENTATION RECOMMENDATIONS	22
5 STRATEGIC PLAN SUPPORT ACTIVITIES	23
5.1 REACH CODE SUPPORT	26
5.2 LEAD BY EXAMPLE	26
5.3 COMMUNITY PROGRAMS	26
5.3.1 Community Programs Activities	27
5.3.2 Progress Towards Goals	27
5.3.3 Key Successes	27
5.3.4 Challenges	27
5.3.5 Satisfaction with Partner Efforts.....	28
5.3.6 Reported Assistance Needed and Implementation Recommendations.....	28
6 CORE PROGRAMS COORDINATION	29
6.1 CORE PROGRAMS COORDINATION ACTIVITIES	31
6.1.1 Residential Core Programs Coordination Activities	31
6.1.2 Commercial Core Programs Coordination Activities	31
6.2 PROGRESS TOWARDS GOALS.....	32
6.3 KEY SUCCESSES.....	32
6.4 CHALLENGES	33



6.5 SATISFACTION WITH PARTNER EFFORTS.....	33
6.6 REPORTED ASSISTANCE NEEDED AND IMPLEMENTATION RECOMMENDATIONS	33
7 IMPLEMENTATION OF PAST EVALUATION RECOMMENDATIONS	34
8 KEY FINDINGS AND RECOMMENDATIONS.....	35
8.1 KEY FINDINGS.....	35
8.1.1 Innovative Approaches	37
8.2 RECOMMENDATIONS.....	38
APPENDIX A: LGP PROGRAM PROCESS EVALUATION CYCLE.....	39
APPENDIX B: LGP PROGRAM STAFF INTERVIEW GUIDE	40
APPENDIX C: RECOMMENDATIONS RESULTING FROM EVALUATION RESEARCH	51
APPENDIX D: STRATEGIC PLAN OPTION DESCRIPTIONS.....	52
APPENDIX E: FINDINGS RELEVANT TO DIRECT INSTALL ACTIVITIES.....	55

I Executive Summary

The Association of Monterey Bay Area Governments Energy Watch Local Government Partnership (AMBAG EW) is a partnership between the Association of Monterey Bay Area Governments (AMBAG)¹ and Pacific Gas and Electric Company (PG&E) that began in 2006. AMBAG EW serves the Monterey, San Benito and Santa Cruz County governments and 18 individual cities within those three counties—for a total of 21 local government jurisdictions—along with 69 school districts and special districts in those counties.² The purpose of AMBAG EW is to leverage the combined strengths of both AMBAG and PG&E to identify and implement energy efficiency projects and activities. AMBAG EW has a reputation as a successful local government partnership (LGP) and is seen as a model LGP by PG&E staff and other LGPs.

AMBAG EW is designed to improve energy efficiency within its program territory through a variety of activities, including:

- **Municipal Facility Retrofit and Retro-Commissioning** – identifying, financing and implementing energy improvements at municipal, county, special district and school district facilities.
- **California Strategic Plan Support** – supporting the California Long Term Energy Efficiency Strategic Plan (Strategic Plan), including helping local governments create Energy Action Plans (EAPs) that include benchmarking of facilities.
- **Core Programs Coordination** – providing targeted outreach and technical assistance to small and medium businesses while linking them to PG&E's Core Program offerings.³

The 2013-2014 Energy Efficiency Program Implementation Plan (PIP) for PG&E⁴ includes additional information on the 2015-2016 planned activities for AMBAG EW. AMBAG EW is a resource LGP program, meaning that it sets electric and gas savings goals each year.

This process evaluation formally covers the 2015 and 2016 program years. However, because this is the first evaluation since 2013, and because the objectives of this evaluation

¹ AMBAG is a Joint Powers Authority consisting of Monterey, San Benito and Santa Cruz Counties and the 18 cities in those three counties. AMBAG is a federally designated Metropolitan Planning Organization (MPO) and Council of Governments (COG).

² A special district is a special-purpose governmental unit that exists separately from a general purpose local government. They may cover a specific resource such as water.

³ Core Programs refer to large energy efficiency programs in the PG&E program portfolio, including residential, commercial and third party programs.

⁴ Pacific Gas and Electric Company. *2013-2014 Energy Efficiency Portfolio Local Program Implementation Plan Government Partnerships Master*. 2013. The PG&E 2013-2014 Program Implementation Plan (PIP) is the most current applicable PIP available for AMBAG EW.

differ from the 2013 report,⁵ the evaluation also points out important activities from 2010 to 2014 that the evaluation team discussed with AMBAG EW staff⁶ and identified in reviewing program documentation.

The evaluation team interviewed the following staff via phone interview or web-survey for this research:

- One AMBAG staff member;
- Two PG&E staff members;
- Representatives (n=2) from two different cities;
- Representatives (n=3) from two school districts; and
- Representatives (n=3) from one county.

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

⁵ Evergreen Economics. *Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs*. 2013. Prepared for Southern California Edison Company, Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas & Electric Company and the California Public Utilities Commission. http://www.calmac.org/publications/LINA_report_-_Volume_1_-_final.pdf

⁶ In the remainder of this document, 'AMBAG staff' refers to staff at AMBAG who work to support the AMBAG EW, and 'PG&E staff' refers to staff at PG&E who work to support AMBAG EW. When other staff from either organization are referenced, their roles will be explicitly described in the text.

Table 1: Process Evaluation Objectives and Assessment

Objective	Assessment
1. Provide documentation of AMBAG EW's suite of activities at the time of the evaluation.	Based on three interviews with four staff members from AMBAG, PG&E and a school district, web surveys from seven local government and school district staff members, and a review of program documentation, the evaluation identified and documented AMBAG EW activities. (Sections 4 - 6)
2. Document how AMBAG EW has adopted and implemented LGP-specific recommendations from the previous process evaluation, if any.	There were no previous process evaluation recommendations. (Section 7)
3. Identify whether AMBAG EW is currently being implemented according to its logic model/change theory.	AMBAG EW partners successfully implemented the partnership according to the underlying program logic/change theory as described in the Program Implementation Plan. (Sections 4 - 6)
4. Document AMBAG EW's successes and challenges.	The evaluation found that AMBAG EW has been very successful, consistently meeting its goals. (Sections 4 - 6)
5. Assess partner satisfaction within AMBAG EW.	AMBAG EW partners were highly satisfied with their partners in AMBAG EW across all activities. (Sections 4 - 6)
6. Identify whether AMBAG EW is on track to meet California Public Utilities Commission (CPUC)-approved program objectives.	AMBAG EW met its 2015 and 2016 kWh savings objectives. (Sections 4 - 6)
7. Provide recommendations regarding design and/or implementation of AMBAG EW.	The evaluation team identified key findings, successes and challenges, and developed actionable recommendations to improve the design and implementation of AMBAG EW. (Section 8)

1.1 Key Findings

We summarize the key 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

- AMBAG EW has encouraged local government staff to complete energy efficiency projects in municipal buildings. In 2016, local governments completed a total of 14 energy efficiency projects across multiple facility locations with assistance from AMBAG EW.

- AMBAG EW has worked closely with Ecology Action, the Third Party Direct Install Program implementer in the region, to achieve energy savings and has consistently met or exceeded annual kWh savings goals set by PG&E. In 2015, AMBAG EW claimed electric savings that were almost double their target goal and exceeded electric savings goals by almost 1 percent in 2016.
- AMBAG EW has assisted a total of 55 schools and school districts in moving energy efficiency projects forward, helping them to access Proposition 39 funding by working with Ecology Action to create a customized request for proposals process that fits the funding requirements.⁷ According to the AMBAG staff member interviewed, staff supporting the AMBAG EW identify energy efficiency opportunities via audits, engage staff and senior leadership, prepare an energy expenditure plan, and develop any technical documents required to apply for project funding.
- AMBAG EW has been successful in improving energy efficiency in wastewater treatment plants in the cities of Watsonville, Soledad, Scotts Valley and Hollister.
- AMBAG and PG&E staff work together to hold training sessions in the region on updates to Title 24 building codes and building operator certification.

Strategic Plan Support Activities

- AMBAG EW participates in one of the four Strategic Plan Support activities: Lead by Example.⁸ In 2015, through the Lead by Example activity area in support of the Strategic Plan, AMBAG EW completed first drafts of greenhouse gas emissions calculations for all 21 city and county jurisdictions.
- AMBAG staff reported having been involved in the process to influence code update initiatives by writing to the California Energy Commission to support exemptions to certain restrictions on lighting installations.
- While AMBAG EW is not currently active in the Reach Code Support activity area, AMBAG staff participate in regional green building committees to share information with other organizations working to improve the energy efficiency of their building stock. The AMBAG staff member noted that in the more rural areas of AMBAG territory, the focus is more on meeting existing codes as opposed to exceeding them.

⁷ California Proposition 39 (also known as the California Clean Energy Jobs Act) changed the corporate income tax code to put funds towards improving energy efficiency and expanding clean energy generation in schools.

⁸ The other three Strategic Plan Support activities are Reach Code Support, Code Compliance and Community Programs.

Key Challenges

Challenges faced by AMBAG EW include:

- Finding appropriate funding sources for projects given limitations related to project size;
- Monterey County's inability to utilize On-Bill Financing⁹ due to a conservative interpretation of requirements by Monterey County;
- Baseline condition requirements which make it difficult to retrofit older equipment, especially in rural areas where existing conditions are often well below code.¹⁰ The AMBAG staff interviewee also noted that it is difficult for AMBAG to take on reach code activities given that AMBAG lacks the authority to develop local codes;
- A high rate of staff turnover within local governments, and the challenges of bringing in and training new staff;
- Difficulty in acquiring complete data to update greenhouse gas inventories for local governments, as noted by both PG&E and AMBAG staff. This challenge stems from limitations that the California Public Utilities Commission (CPUC) placed on PG&E's use of data (and the other IOUs) to safeguard customer privacy. The data privacy requirement has made it difficult to track greenhouse gas inventories over time and gauge progress. AMBAG staff have engaged with both PG&E and the CPUC to find a solution that results in a more accurate estimate so that they can better track progress on greenhouse gas reduction efforts; and
- As reported by PG&E staff, a shortage of engineering staff in more rural areas of AMBAG EW's territory, which results in project delays.

1.2 Recommendations

Based on the evaluation results, we provide the following actionable recommendations for AMBAG EW:

- AMBAG EW should consider setting Reach Code Support goals in future program years in order to build on the prior successful efforts to educate local governments about existing code. This effort can be tailored to local governments in AMBAG's territory based on their understanding and enforcement of existing codes. This

⁹ The IOUs' On-Bill Financing program offers 0% financing for qualifying energy-efficient improvements that are paid through a non-residential customer's bill.

¹⁰ Assembly Bill 802 (AB 802), passed on September 11, 2015, enables the California Public Utilities Commission and utilities to provide incentives to customers who improve their buildings up to current building code and beyond. The CPUC is currently refining the rules for baseline conditions under various scenarios in compliance with AB 802, which the legislature introduced to encourage the expansion of baseline conditions in some situations to include existing conditions.

would allow local governments to move forward with reach codes based on the experience and resources they have.

- We also recommend that AMBAG EW look into extending its effort with wastewater treatment plants and engage with additional special districts including transportation, flood control and mosquito districts. This would allow AMBAG EW to expand upon its successful efforts working with wastewater treatment plants and to achieve additional energy savings.

The overarching conclusion of this evaluation is that AMBAG EW continues to be a highly advanced and successful program, with well-structured efforts across all program activity areas. It has also demonstrated success by achieving nearly double the kWh savings as compared to goals in 2015 and exceeding them by 1 percent in 2016. These savings goals are claimed by AMBAG and come from Direct Install efforts in both the small business and municipal sectors. Additional detail can be found in Appendix E. We found that AMBAG EW operates in a manner consistent with the program logic models we developed for each area in which AMBAG EW engages. Indicators of success include that:

- AMBAG EW is well regarded by local government and school district staff and continues to find new ways to assist its constituents, including accessing Proposition 39 funding for energy efficiency retrofits in the region's schools. AMBAG staff reported that \$31.7 million in Proposition 39 funding is available to the region's schools and that the schools have successfully secured or are in the process of securing over \$22 million of that available funding;
- Interview responses suggest that AMBAG EW has increased the efficiency of municipal, county and school district building stock and has encouraged businesses, school districts and local governments to adopt a variety of energy efficiency and conservation practices; and
- The AMBAG staff member reported that AMBAG EW staff have improved the quality of completed work by adding specifications to bid requests.

These efforts continue to help the Monterey Bay Area meet California's ambitious goals for reducing energy consumption and greenhouse gas output.

2 Introduction

Across California, local government partnership (LGP) programs combine the strengths of both local governments and the California investor-owned utilities (IOUs) to leverage the unique opportunities and resources of local communities to implement energy efficiency projects. The Association of Monterey Bay Area Governments Energy Watch Local Government Partnership (AMBAG EW) is a partnership between the Association of Monterey Bay Area Governments (AMBAG) and Pacific Gas and Electric Company (PG&E) that began in 2006.¹¹ The purpose of AMBAG EW is to leverage the combined strengths of both AMBAG and PG&E to identify and implement energy efficiency projects and activities with a goal of strengthening the environment and economy. AMBAG EW serves the Monterey, San Benito and Santa Cruz County governments and 18 individual cities within those three counties – for a total of 21 local government jurisdictions – along with 69 school districts and special districts in those counties.¹² AMBAG serves a 5,700 square-mile area that has approximately 770,000 residents.¹³ AMBAG EW is a resource LGP program, meaning that it sets electric and gas savings goals each year.

The main program activities in the 2015-2016 program cycle included:

- **Municipal Facility Retrofit and Retro-Commissioning** – including AMBAG's efforts to identify, finance and implement energy efficient improvements at municipal, county, special district and school district facilities.
- **California Strategic Plan Support** – supporting the California Long Term Energy Efficiency Strategic Plan (Strategic Plan), including helping local jurisdictions create Energy Action Plans (EAPs) that include benchmarking of facilities.
- **Core Programs Coordination** – providing targeted outreach and technical assistance to small and medium businesses while linking them to PG&E's Core Program¹⁴ offerings.

AMBAG has three staff members working on AMBAG EW activities. The Director of Special Projects spends 100 percent of his or her time on AMBAG EW and is supported by

¹¹ AMBAG is a Joint Powers Authority consisting of Monterey, San Benito and Santa Cruz Counties and the 18 cities in those three counties. AMBAG is a federally designated Metropolitan Planning Organization (MPO) and Council of Governments (COG).

¹² A special district is a special-purpose governmental unit that exists separately from a general purpose local government. They may cover a specific resource such as water.

¹³ State of California Department of Finance. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmarking."

<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>

¹⁴ Core Programs refer to large energy efficiency programs in the PG&E program portfolio, including residential, commercial and third party programs.



two additional staff members. These include a staff person to manage streetlights and custom projects and a liaison to schools to assist with accessing Proposition 39 funding.

PG&E has one Program Manager and one Supervisor who provide support for AMBAG EW. The Program Manager spends less one- third of his or her time on AMBAG EW. The Project Manager also oversees the PG&E Third Party Direct Install program implementer in the region, Ecology Action.

AMBAG staff and the PG&E Program Manager, along with Ecology Action, meet in person once a month and over the telephone every other week to discuss the status of projects. Additionally, the partners hold a monthly check-in call to review custom projects, which are managed by AMBAG. AMBAG staff members also work directly with additional PG&E staff members, including marketing staff and local area field staff members, to encourage participation in AMBAG EW and PG&E Core Programs.

3 Research Objectives and Methods

3.1 Research Objectives

The research objectives for this evaluation included the following:

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

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

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

3.2 Research Methods

This theory-based evaluation began with the development of a program logic model that linked AMBAG EW 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 AMBAG EW'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 AMBAG EW logic models describe the activities and immediate outputs of AMBAG EW, 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 models as guides to define specific outputs and outcomes to track 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 models.

Using the logic model for each activity area 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 local government staff members, school district staff members, and LGP implementers for multi-jurisdictional 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 AMBAG EW engages in subsequent sections: Municipal Building Retrofits (Section 4), Strategic Plan Support Activities (Section 5) and Core Programs Coordination (Section 6). Each of these sections provides a detailed description of AMBAG EW activities shown in the logic models. Note that the logic models provide graphical summaries of the main AMBAG EW 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 worked with PG&E staff members to identify the most appropriate personnel to interview from PG&E and AMBAG. In addition, Evergreen asked these staff members supporting AMBAG EW to provide appropriate interview contacts from among the local governments, school districts and special districts with whom they interact. Evergreen conducted a total of three telephone interviews (one with an AMBAG staff member, one with two PG&E staff members, and one with a school district staff

member).¹⁵ These interviews took place in December of 2016 and January of 2017.¹⁶ To reach out to additional school district and local government staff members, we conducted a web survey in February and March of 2017. A total of seven staff members responded: two staff members representing two cities, three staff members representing one county, and two staff members representing a school district.

¹⁵ In the remainder of this report, Evergreen includes this school district staff member with the findings on the web survey respondents, so that all local government and school district staff can be discussed together.

¹⁶ In the remainder of this document, 'AMBAG staff' refers to staff at AMBAG who work to support the AMBAG EW, and 'PG&E staff' refers to staff at PG&E who work to support AMBAG EW. When other staff from either organization are referenced, their roles are explicitly described in the text.

4 Municipal Building Retrofits

The Municipal Building Retrofits activity area of AMBAG EW is designed specifically to assist local governments with:

- Promoting cost-effective energy savings projects in facilities operated by cities, counties, school districts and special districts;
- Providing value-added energy planning services including benchmarking, project management assistance, and training and education of city/county officials; and
- Offering On-Bill Financing¹⁷ for retrofit projects.

Additionally, AMBAG assists school districts in accessing funding used for retrofits.¹⁸ Through all of these activities, the goal of AMBAG EW is for AMBAG and PG&E staff to work closely together to foster energy savings and to place energy efficiency projects in the context of sustainability and climate change initiatives.

As we discussed in Section 3.2, our evaluation of AMBAG EW began with development of a program logic model for each activity area in which AMBAG EW engages. These logic models serve as a guide for identifying metrics and evaluating each program activity. Figure 1 presents the logic model of AMBAG EW's Municipal Building Retrofits activities.

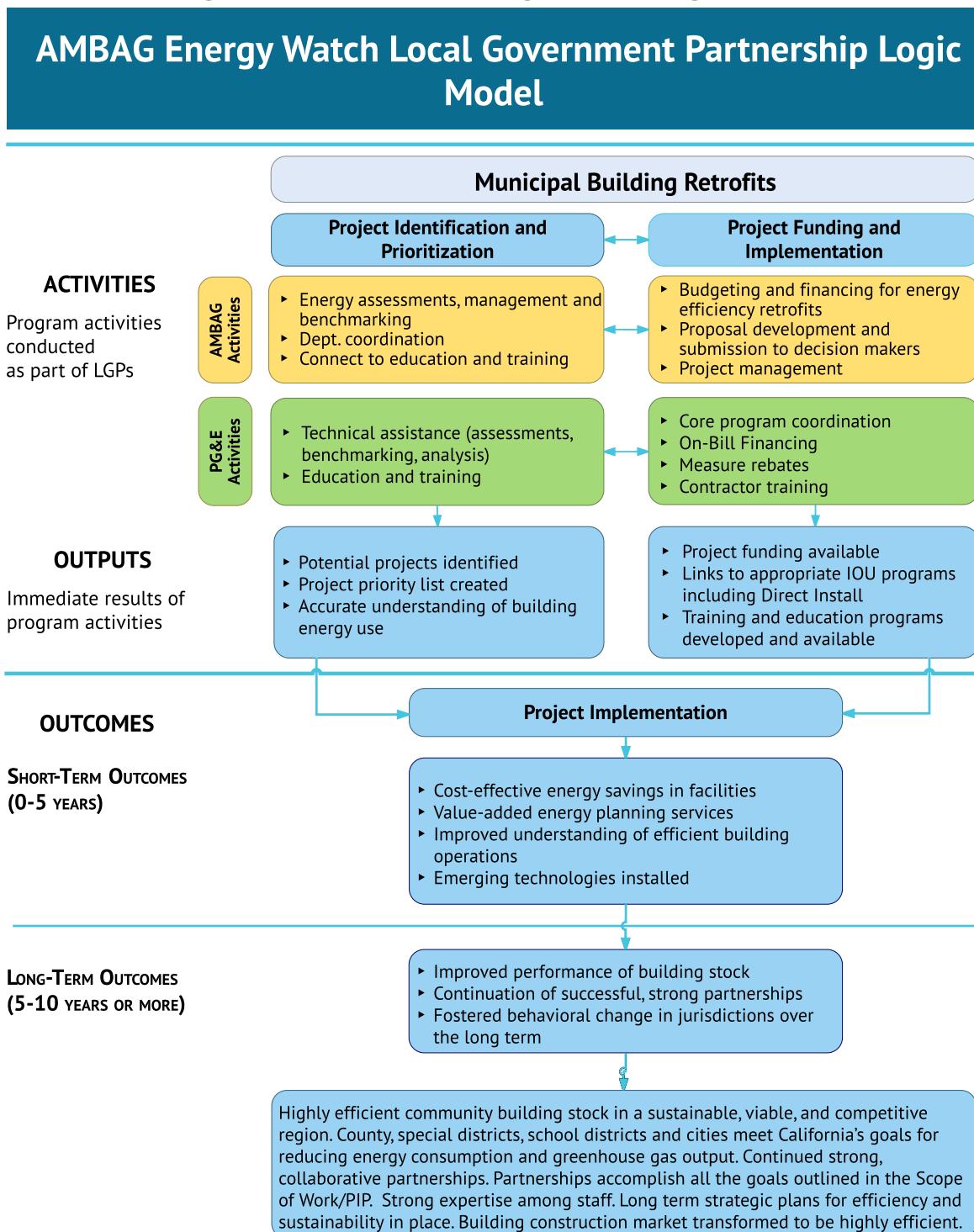
The logic model presents a high level overview of AMBAG EW's Municipal Building Retrofits activities, showing the pathways from activities to long-term outcomes, and should be read from top to bottom. Blue arrows indicate the pathways from activities to immediate outputs and then to short-term and long-term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

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

¹⁷ The IOUs' On-Bill Financing program offers 0% financing for qualifying energy-efficient improvements that are paid through a non-residential customer's bill.

¹⁸ More specifically, AMBAG helped to create a process by which schools could access funds from California Proposition 39 (also known as the California Clean Energy Jobs Act), which changed the corporate income tax code to put funds towards improving energy efficiency and expanding clean energy generation in schools.

Figure 1: Municipal Building Retrofits Logic Model



The evaluation team discussed municipal retrofits with the following staff via phone interview or web-survey:

- One AMBAG staff member;
- Two PG&E staff members;¹⁹
- Representatives (n=2) from two different cities;
- Representatives (n=3) from two school districts; and
- Representatives (n=2) from one county.

Overall, partners and participants were very satisfied with each other's efforts related to AMBAG EW municipal retrofits.

In the remainder of this section, we report on each phase of municipal retrofit activities, progress towards AMBAG EW goals, and partner satisfaction and reported needs.

4.1 Municipal Building Retrofits Activities

4.1.1 Municipal Building Retrofits and Retro-Commissioning

AMBAG staff engages with a variety of local government and school district staff to perform municipal building retrofits. Across these different types of organizations, the internal staff members we interviewed gave differing ratings with respect to the importance of energy efficiency when planning retrofits due to costs, desire for long-term savings, and prioritization of other items. These differences influence the amount of work needed to convince decision makers of the energy efficiency efforts they should undertake.

When we asked the seven web survey participants to rate the importance of energy efficiency when planning retrofits, both school district representatives gave it the highest rating possible (10 on a 0-10 point scale), and the two responding county representatives gave a neutral rating. The two city staff members ranked the importance of energy efficiency to their local governments in between the ratings by county staff and the school district staff (i.e., "7" and "10" on the 0-10 point scale). This is slightly more positive than what we heard from the AMBAG staff member during their in-depth telephone interview, who reported that on the list of budget priorities at the cities and counties AMBAG serves, energy efficiency is in the middle, with the City of Santa Cruz pointed out as an exception in that it is more motivated to engage in energy efficiency work than the other cities and counties.

On the local government level, the AMBAG staff member reported working with general service directors, finance staff and sustainability staff, where present (at two of the 21 city

¹⁹ The two PG&E respondents were part of the same interview and are counted as one total response.

and county jurisdictions). The local government staff members are typically based in their jurisdictions' Public Works Department. The staff members we talked to who work on municipal building retrofit projects represented a variety of roles including a permit reviewer, project coordinators, program managers, and a director of planning.

Municipal Project Identification and Prioritization: AMBAG staff work with local government staff to use benchmarking (through ENERGY STAR Portfolio Manager) to identify major projects (note that we include benchmarking in Figure 1 as an AMBAG activity). PG&E staff members assist with this process by setting pipeline goals based on data analytics, using customer data to understand peak demand and evaluating past participation to find opportunities. In addition to these tools, staff from local governments reported using audits (three of five web survey respondents), EMS data (three of five web survey respondents), and reviewing their monthly energy consumption bills (three of five web survey respondents). Additionally, PG&E helps with large integrated audits for certain cities including Hollister and Scotts Valley, which the AMBAG interviewee reported as being "very helpful to us." PG&E provides usage data for buildings to local governments via their Green Communities Portal.²⁰

AMBAG EW will sometimes consider projects beyond energy efficiency when identifying retrofit and retro-commissioning opportunities. The AMBAG staff member explained that it is very rare for AMBAG EW to take on a retro-commissioning project due to the small footprint of the local government buildings in its territory. AMBAG staff produce a newsletter, which is sent to AMBAG members that features energy efficiency projects as well as broader information about projects that feature energy storage or the hiring of a sustainability-focused position in one of their jurisdictions. AMBAG staff have also introduced local governments to the Sustainable Energy and Economic Development (SEED) program, which allows local governments to cooperate on solar energy purchases.²¹

After project identification, AMBAG EW will work with local governments, special districts and school districts to identify which projects will move forward. We include identification of potential projects and creation of a project priority list as outputs for PG&E and AMBAG in the Municipal Building Retrofits logic model. Local government staff reported there were occasions in which they were unable to move forward with some identified measures. Four of the five local government staff members who were able to respond about projects in this level of detail reported that exhaustion of funds was one of the reasons measures did not get installed.

²⁰ The Green Communities Portal was created in collaboration with Local Governments for Sustainability (ICLEI).

²¹ SEED works to address the up-front costs of installing solar through the use of a revolving fund.

Municipal Project Budgeting: After projects are identified, AMBAG staff will work with a local government to balance the needs of the project with budget availability and the level of technical expertise required. AMBAG staff will also look at the payback period of various combinations of measures for a project to identify opportunities for obtaining financing. Funds to complete a project can come from a variety of sources:

- Capital budgets/General fund (used by Monterey County and the City of Santa Cruz);
- Grants/loans (Used by the City of Salinas);
- On-Bill Financing (used by the cities of Hollister and Santa Cruz);
- Proposition 39 funds (used by school districts including two that we interviewed, further discussed in Appendix E); and
- Rebate programs.

The AMBAG staff member was able to give examples of how two of the local governments budget for projects. The AMBAG staff member reported that Monterey County has been able to utilize a separate line item in its budget to implement energy efficiency projects. The staff member also reported that Santa Cruz has a general services director who treats project opportunities on an opt-out basis for each department, where opting out will mean that the department will have to find space in its budget to cover savings that would have happened if they had chosen to participate. If the department rejects a project, the department is required to utilize the budget that would have been used for some other item to cover the additional operating costs that would have been saved had the energy efficiency work been completed.

We represent AMBAG's and PG&E's activities in identifying budget and funding sources, leveraging On-Bill Financing, and developing and submitting proposals in the right-hand column of Figure 1. PG&E staff recognized the high interest in On-Bill Financing and noted that PG&E staff are aware of existing limitations (such as restrictions related to the amount of the financing and the need to also confirm participation in a rebate program) that might limit its use. PG&E is currently implementing a pilot program to understand if there are ways to move beyond some of these limitations, which includes removing the requirement to utilize energy efficiency program rebates but includes a minimum project dollar amount.

Once a project is completed, savings are generally returned to the general fund. Our interviewees also reported that energy savings are reported to city councils, the Board of Supervisors, and to department managers.

Municipal Project Implementation: Once a deemed project is approved, AMBAG contacts Ecology Action for measure installation and rebate application processing. Ecology Action relies on a set of pre-qualified local subcontractors to install the measures. AMBAG EW

also supports Ecology Action's Third Party Direct Install efforts, and tracks and reports those referrals to PG&E. In a similar vein, AMBAG EW works closely with Ecology Action and local schools to implement a process that fits the requirements of the Proposition 39 funding source (Appendix E).

For custom measures such as streetlights, variable frequency drives (VFDs), pool pumps, and control systems, AMBAG EW works directly with PG&E's Custom Program to support local governments, special districts and school districts. AMBAG staff help local governments, special districts and school districts develop bids for custom measure installations, including determining the cost and specifications for required equipment. The AMBAG staff member reported that this has been very useful in ensuring competitive bids. AMBAG meets with an engineering firm biweekly to discuss custom projects. The engineering firm assists with pre-inspections to give their input on the cost estimates. Savings are submitted thorough PG&E's Energy Insights software platform, and if savings are verified, PG&E pays the incentives.

4.1.2 Training and Technical Assistance

An integral component of the AMBAG EW is the technical assistance and training services provided by PG&E. AMBAG staff work with PG&E staff to bring trainings to the region on Title 24 updates along with building operator certification trainings. We show these activities in Figure 1 for both AMBAG and PG&E under Project Identification and Prioritization, and as a PG&E activity under Project Funding and Implementation. Title 24 update courses were offered more frequently in 2014 and 2015, and slightly less frequently in 2016, as AMBAG EW shifted to focus on training related to the Greenhouse Gas Inventory Protocol. These courses may be cohosted by different local governments and are held in areas that offer an easy commute for all local governments. Some workshops may bring in experts on specific technology topics such as lighting.

In 2009, AMBAG helped to subsidize the cost for facilities staff from all 21 local government jurisdictions to attend building operator certification trainings. A benefit of this training is that all of the attendees who still hold their same positions now know each other and work together in the region, according to the AMBAG staff interviewee.

Web survey respondents reported a range of subjects in which they consider themselves to have expertise, including lighting (three of five), HVAC (two of five), controls/EMS (two of five) and current code (one of five). Four of these respondents share what they learn with other staff after trainings, suggesting that knowledge from the trainings may be disseminated more broadly beyond the attendees. Despite the positive benefits of trainings, there are some challenges to receiving energy efficiency training as reported by two of six local government and school district respondents. One county staff person reported that he or she has trouble getting support from management to attend training events, and another city staff person reported that they think multiday training is preferable to one day training.

In addition to bringing trainings to the region, AMBAG EW also engages in the process of developing Title 24 code updates. The AMBAG staff provided information in support of comments filed with the California Energy Commission regarding proposed Title 24 changes. This resulted in implementation of some of their recommendations in the code.

4.2 Progress Towards Goals

PG&E reported that AMBAG EW has consistently achieved kWh savings beyond its annual goals in 2015 and 2016. Evergreen compared savings reported to the CPUC, and reported on EEstats.cpuc.ca.gov to confirm that AMBAG met its savings goals, which are detailed further in Appendix E. These numbers only include Direct Install targets and savings that are claimed by AMBAG, which operates as a resource program. As Direct Install is outside the scope of this evaluation, we have moved the discussions of these savings to Appendix E.²²

PG&E staff credited the success in 2015 and 2016 to multiple factors:

- A two year (compared to a one year) contract with Ecology Action, allowing it to focus more on implementation rather than on reporting; and
- The length of the relationship between AMBAG EW and Ecology Action.

Both PG&E and AMBAG staff reported that success in a given year is in part due to the pipeline of projects identified in prior years. For example, AMBAG EW was able to help school districts access funding to complete projects in 2016. PG&E staff reported that the majority of these projects went through the Direct Install program, discussed in Appendix E. The AMBAG staff member reported that AMBAG EW was also able to complete streetlight work in the city of Salinas in 2015, which was responsible for 2.5 million kWh in savings that year. The AMBAG staff member acknowledged that it is the “luck of the draw” if projects close in a certain year.

AMBAG staff track progress towards savings goals internally in addition to using PG&E's Energy Insights software platform to which Ecology Action, AMBAG and PG&E all have access. Timing of savings for custom projects can be more difficult to predict given that projects take longer and may be completed in a different year than originally intended. AMBAG reports savings goals to its Board, which includes representatives from each of the 21 local governments. The AMBAG staff member reported that at these meetings, local governments may get competitive over their respective savings claims, suggesting that this competition may drive further energy saving activities. The AMBAG staff interviewee also reports to the AMBAG Energy Advisory Committee, which is a stakeholder group that provides direction on energy related activities. AMBAG EW staff also give presentations for City Councils, when requested. The school district staff member we

²² Source: EM&V plan at pda.energydataweb.com.

interviewed said that he or she “sends information out... for principals to share and help motivate the program going forward.” This same school district representative noted that the constant need to communicate about the work is the largest organizational challenge he or she faces.

4.3 Key Successes

PG&E staff and AMBAG staff agreed that the most notable success in 2015 and 2016 for AMBAG EW was related to serving school districts. We include additional detail on a new process for school projects to comply with bid requirements for Proposition 39 funding in Appendix E.

The school district staff member we spoke with noted that “Really AMBAG [EW] is a fantastic program.” In addition to citing the work of AMBAG EW, this school district representative also cited AMBAG EW’s ability to listen to school staff and understand how to best get their buy-in by discussing the longer lifetime of replacement equipment: “Custodians don’t have to change bulbs, less complaints about night lights going out, cut down on work orders and labor time in addition to the maintenance and operation budget. The other big benefit is there is ownership and pride in the energy conservation work...” These efforts have resulted in emerging technologies such as sprinkler irrigation controls being installed at schools.

PG&E staff reported that the largest success in this area has been AMBAG EW’s ability to encourage school districts to undertake energy efficiency projects, and to prioritize these over solar installations, as directed in the loading order set forth by the State of California Energy Action Plan. They believe they have done this through relationship building and by becoming a trusted advisor.

Additional key successes mentioned by interviewees include the following:

Encouraging local government staff to complete energy efficiency projects:

- The lead AMBAG EW staff member sees AMBAG’s effective communication with elected officials and local government staff as being a “catalyst” to get work completed. They are considered a “neutral third party who cares about [local government] interests.”
- PG&E staff reported that AMBAG has been able to engage with smaller local governments and make progress towards LGP program goals. Without local support from AMBAG, PG&E staff felt these smaller local governments would be less likely to be provided with support and energy efficiency expertise, given that they have fewer facilities.

Completing certain projects that had been in progress:

- Both PG&E and AMBAG staff highlighted their work on wastewater facilities in the cities of Salinas, Soledad, Hollister, Santa Cruz and Watsonville. The AMBAG interviewee reported that they have been working on completing wastewater projects in Salinas for 10 years. The AMBAG staff member sees the main reason for success in this area as being that they are “serving as an extension of staff” within the water districts. PG&E staff suggested that AMBAG EW could extend its effort with wastewater treatment plants and engage with additional special districts including transportation, flood control and mosquito districts.
- PG&E reported that through the combination of PG&E’s data analytics and AMBAG staff’s ability to encourage and explain On-Bill Financing, AMBAG EW was able to complete energy projects in Santa Cruz County on older building stock.

Improving the quality of project work and streamlining processes:

- PG&E staff reported that AMBAG’s attention to detail allowed them to redirect an installation that was started with equipment that was not originally specified and that could have put the incentive at risk.

Getting involved in the political process to influence code direction:

- AMBAG staff, representing AMBAG EW, submitted comments to the CEC on the Proposed Revisions to the California Building Energy Efficiency Standards (Title 24) in 2015.

4.4 Challenges

Despite AMBAG EW’s success, interviewees reported a number of challenges:

Finding appropriate funding sources for projects:

- Monterey County is unable to take advantage of On-Bill Financing due to its different interpretation of state law.²³ PG&E staff reported that this is due to past lawsuits that led them to a more restrictive interpretation of state law.
- Also related to financing, PG&E staff reported that some local governments cannot reach the minimum loan threshold (\$5,000) required for On-Bill Financing.

Limitations in potential upgrade opportunities due to baseline assumptions:

²³ Monterey County interprets On-Bill Financing to be set up as a loan. State law requires a two thirds vote of the people of a city or county for the local government to be able to be obligated to liabilities beyond the current fiscal year. While there are exceptions to this rule, Monterey County staff do not see any of these as valid and thus will not utilize On-Bill Financing.

- The AMBAG staff member reported that equipment that may be considered standard in one region may not be considered standard in more rural regions of AMBAG's territory. For this reason, the staff person believes that the more rural local governments are hindered by the rules requiring savings to only be counted above what standard equipment choices would be throughout the state under Title 24, rather than what would be considered standard equipment in the more rural areas. The AMBAG staff person argued that it would be more beneficial for rural areas to be able to count savings from existing baseline conditions rather than current code. Note that the CPUC is currently refining the rules for baseline conditions under various scenarios in compliance with AB 802, which the legislature introduced to encourage the expansion of baseline conditions in some situations to include existing conditions.²⁴

Adjusting to staff turnover, and staff preferences:

- The AMBAG staff member interviewed reported that the high rate of staff turnover within local governments is challenging, requiring continual efforts to build relationships and explain the benefits of energy efficiency. In addition to turnover among local government staff, AMBAG Board members may change as well; the AMBAG staff member interviewed reported that this turnover potentially delays projects up to six months as new Board members familiarize themselves with projects. One interviewee noted that new staff can be beneficial and may be more engaged in energy efficiency issues than their predecessor.
- PG&E staff reported that encouraging local governments to consider energy efficiency when they would rather install solar panels can be challenging.

Working within the limitations of school schedules:

- Project timelines vary for local governments and schools. The AMBAG interviewee reported that schools require projects to be done during the summer, which necessitates RFPs for work going out in the first quarter of the year. The AMBAG staff member reported that they closely communicate with all staff involved to make sure they appropriately schedule their efforts.

²⁴ Assembly Bill 802 (AB 802), passed on September 11, 2015, enables the California Public Utilities Commission and utilities to provide incentives to customers who improve their buildings up to current building code and beyond. The CPUC is currently refining the rules for baseline conditions under various scenarios in compliance with AB 802, which the legislature introduced to encourage the expansion of baseline conditions in some situations to include existing conditions.

4.5 Satisfaction with Partner Efforts

Staff from both AMBAG and PG&E expressed very high satisfaction with the efforts of their partners in AMBAG EW. We asked each of the interview subjects to rate his or her satisfaction with the partner organizations' participation in the Municipal Building Retrofits activity area. Both PG&E staff and AMBAG staff rated their satisfaction in this activity area as a 9 on a 0-10 point scale. PG&E staff recognized that the AMBAG staff member who assists with implementation of AMBAG EW is key to its success. This staff person has been working on this partnership since 2006 and has "deep knowledge of the CPUC and the CEC."

The local government and school district staff also had praise for AMBAG EW; of the four representatives who gave a satisfaction rating, all gave a rating of 10 on the same 0-10 point scale, with one breaking the scale and giving AMBAG EW an 11. In explaining why they gave such high ratings, local government and school district staff reported that:

- "They are exceptional at their job."
- They "are always available to provide expert information and technical assistance on current potential energy projects."
- "They are basically a key member of our school district."
- "If it was not for AMBAG [EW], it would have been a much more difficult process."
- "They bring it all together to help make all different agencies better."

Two of the four local government and school district staff members felt they could also rate PG&E's work for AMBAG EW. Both gave high ratings (9 and 10 on the 0-10 point scale).

The AMBAG EW partners were also very satisfied with each other with regards to trainings and technical assistance. The AMBAG staff member we spoke with valued the time PG&E staff and its consultants gave to discuss and assure that the local governments fully understood the implications of Title 24 updates.

4.6 Reported Assistance Needed and Implementation Recommendations

Interviewees did not report any additional assistance needed beyond what they already receive. Rather, they emphasized the things that they believe are currently important. For AMBAG staff, and for local government and school district staff, this was financing and integrated audit support.

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 or 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.

AMBAG EW officially participates in two activities in the Community Programs category: community-wide planning for energy efficiency and customized EAPs. Table 2 shows the support areas where AMBAG EW is active, using the menu categories from the Strategic Plan. In the sections below, we also include any detail that interviewees may have mentioned regarding the other Strategic Plan Support Activities that they have not formally committed to.

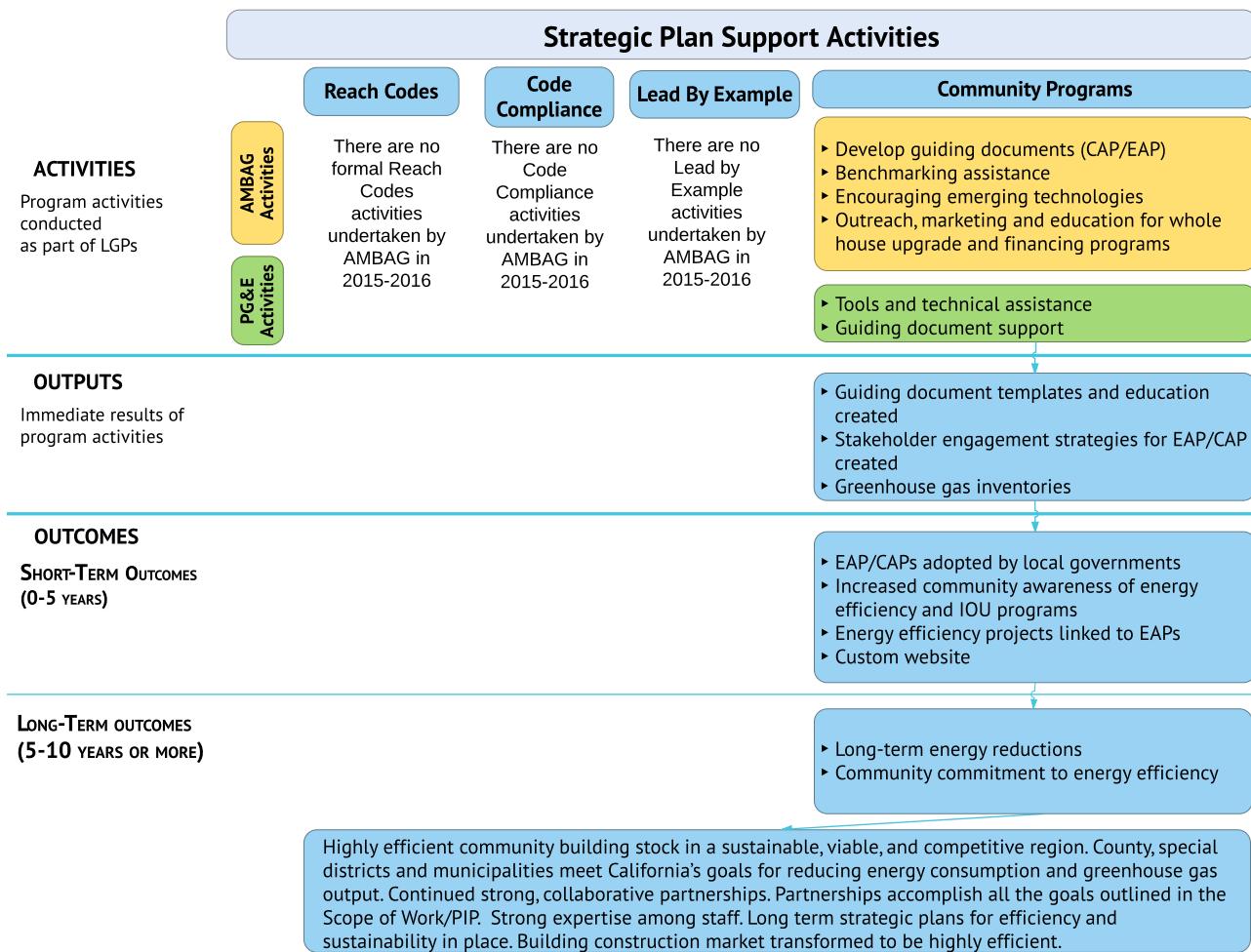
Table 2: Strategic Plan Support Activities

Goal	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	
	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	1
	4.1.3. Community-Wide Planning for EE	1
	4.1.4. Community-Wide EE Savings Analysis	

As we discussed in Section 3.2, our evaluation of AMBAG EW began with the development of a program logic model for each activity area in which AMBAG EW engages. We show the logic model of AMBAG EW's Strategic Plan Support activities in Figure 2 on the following page; the logic model presents a high level overview of AMBAG EW's Strategic Plan Support activities. As discussed previously, the logic model provides a graphical summary of the main AMBAG EW Strategic Plan Support activities and outcomes, and we have omitted some less prominent activities to simplify the diagram.

Figure 2: Strategic Plan Support Logic Model

AMBAG Energy Watch Local Government Partnership Logic Model



The evaluation team discussed Strategic Plan Activities with the following staff member via phone interview or web-survey:

- One AMBAG staff member;
- Two PG&E staff members;²⁵
- One representative from a city;
- One representative from a county.

5.1 Reach Code Support

Reach Code Support activities are designed to develop and promote local codes that exceed Title 24 requirements. While AMBAG EW is not currently active in promoting local codes greater than Title 24, AMBAG staff participates in regional green building committees to share information with other organizations working to improve the energy efficiency of their building stock. One such committee is the Santa Cruz Green Business Committee. The AMBAG EW staff member noted that in the more rural areas of AMBAG territory, the focus is more on meeting existing codes as opposed to going beyond them.

The AMBAG staff interviewee noted that it is difficult for AMBAG to take on reach code activities given that AMBAG lack the authority to develop local codes. They mentioned a group of PG&E staff members in San Ramon who work to promote reach codes. The single local government in AMBAG territory with some success in this area is the City of Santa Cruz. The AMBAG staff member credited their success with the ability of a certain staff member within the City of Santa Cruz who was driven to do this work.

5.2 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. We discuss benchmarking activities in Section 4. While Lead By Example is not a formal activity within AMBAG EW, PG&E staff noted that other LGPs look to AMBAG EW as an example of how to be a successful LGP.

5.3 Community Programs

The Community Programs activities of the Strategic Plan Support activity area include customized EAPs and community-wide planning for energy efficiency, as discussed below.

²⁵ The two PG&E respondents were part of the same interview and are counted as one total response.

5.3.1 Community Programs Activities

AMBAG EW assists its 21 city and county jurisdictions in creating energy chapters in more broad climate action plans (CAPs). We include developing guiding documents such as CAPs and EAPs and guiding document support as AMBAG and PG&E activities, respectively, in the right-hand column of the Strategic Plan Support logic model (Figure 2). The energy chapters include greenhouse gas inventories, which local governments have updated every five years since they were first developed in 2005. Local governments use these chapters to make plans to reduce greenhouse gasses and related energy use in order to help meet the State of California's ambitious goals for reducing energy consumption and greenhouse gas output.

PG&E provides funding for interns to assist AMBAG EW's efforts, and they assist with the greenhouse gas inventory data gathering process.

5.3.2 Progress Towards Goals

PG&E staff members reported that AMBAG EW has updated greenhouse gas emissions inventories in 2015 for all local governments where possible. The AMBAG staff member we spoke with noted that the original overarching goal was to meet the State's emissions reductions goals set to lower greenhouse gas emission levels in 2020 to 1990 levels, and for an 80 percent reduction from greenhouse gas emissions in 1990 by 2050. The State has since set even more aggressive targets to reduce greenhouse gas emissions to 40 percent of 1990 levels by 2030.

5.3.3 Key Successes

Both PG&E staff and AMBAG staff claimed that their key success in this area was the extent to which the local governments had engaged with AMBAG to develop EAPs and CAPs. PG&E staff attributed this to the AMBAG staff's ability to "stop at nothing" to get engagement from local government staff and called the lead staff person at AMBAG a "dedicated champion." Success in ensuring additional staff resources has allowed local government staff to dedicate more time to complete EAPs.

Local government staff who participated in the web survey also reported successes in this area. One local government staff member reported that the local government was able to engage with the public to develop their CAP. At one of the counties served by AMBAG EW, a staff person reported that the Board of Supervisors has approved a Sustainability Management staff position to oversee the implementation of the county-level CAP.

5.3.4 Challenges

Both PG&E and AMBAG staff noted challenges related to acquiring complete data to update greenhouse gas inventories for local governments. This challenge stems from limitations that the California Public Utilities Commission (CPUC) placed on PG&E's use of data (and the other IOUs) to safeguard customer privacy. The data privacy requirement

has made it difficult to track greenhouse gas inventories over time and to assess progress. AMBAG staff have engaged with both PG&E and the CPUC to find a solution that results in a more accurate estimate so that they can better track progress on greenhouse gas reduction efforts.

5.3.5 Satisfaction with Partner Efforts

This is the only area in which AMBAG staff was only moderately satisfied with PG&E. They attributed this to the data privacy constraints described in Section 5.3.4. The AMBAG staff member gave the CPUC Energy Division a slightly better satisfaction rating but still was not completely satisfied with the organization. This, too, was attributed to the data privacy constraints.

5.3.6 Reported Assistance Needed and Implementation Recommendations

No interviewees reported any new assistance needed or implementation recommendations.

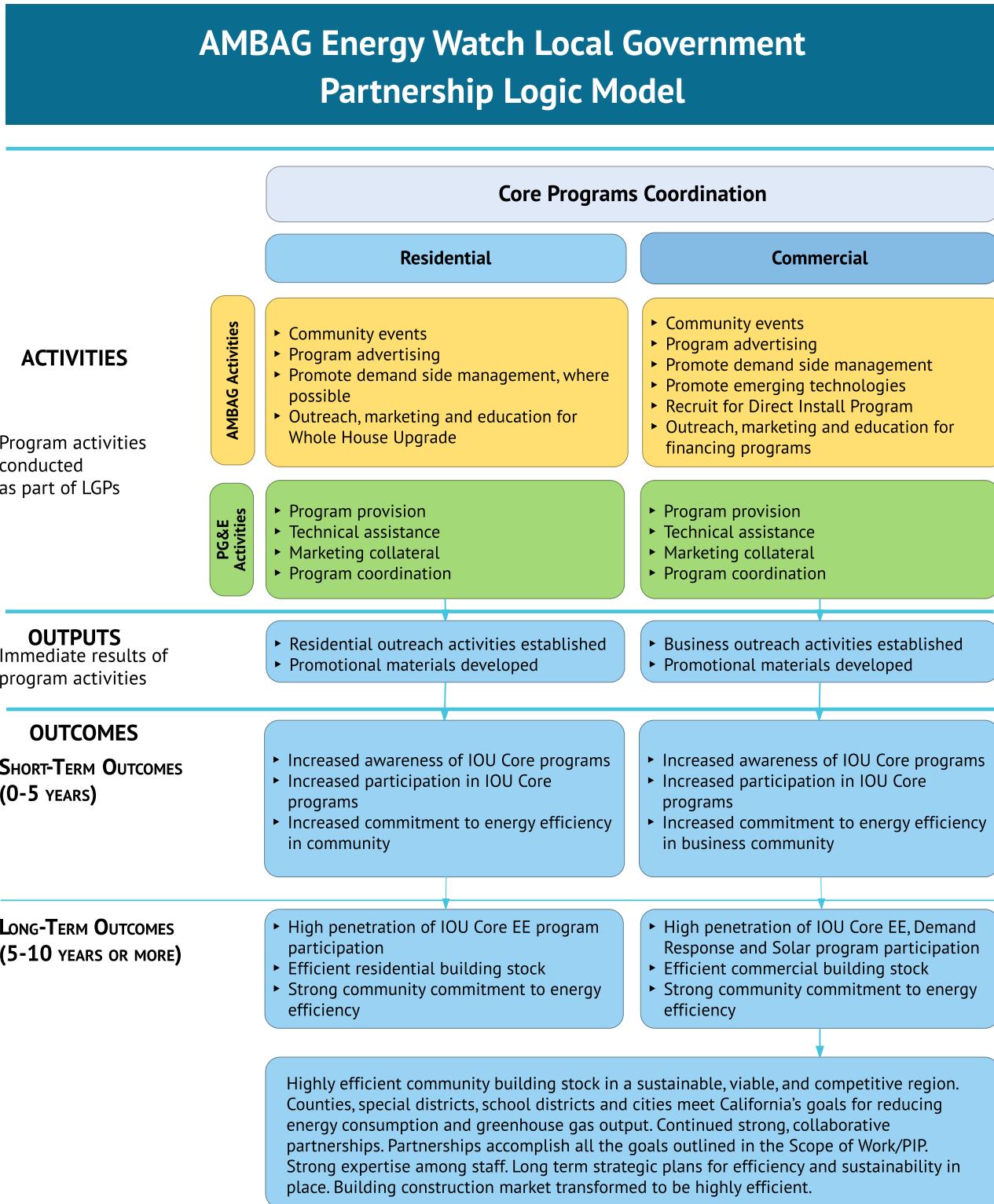
6 Core Programs Coordination

The AMBAG EW Core Programs Coordination activity area aims to promote Pacific Gas and Electric Company (PG&E) commercial and residential energy efficiency programs in local governments covered by AMBAG EW by providing targeted outreach and technical assistance to the commercial sector. Ultimately, the goal of AMBAG EW is to be the leader for energy efficiency and distributor of information regarding energy efficiency in the region.

As we discussed in Section 3.2, our evaluation of AMBAG EW began with development of a program logic model for each activity area in which AMBAG EW engages. We show the logic model of AMBAG EW's Core Programs Coordination activities in Figure 3 on the following page; the logic model presents a high level overview of AMBAG EW's Core Programs Coordination activities. As discussed previously, the logic model provides a graphical summary of the main AMBAG EW Core Programs Coordination activities and outcomes, and we have omitted some less prominent activities to simplify the diagram.

AMBAG EW Core Programs Coordination activities have generally been consistent with those shown in the logic model for the commercial sector. Based on our interviews, there has been limited activity promoting the residential programs or with conducting outreach, marketing and education for the Whole House Upgrade Plan.

Figure 3: Core Programs Coordination Logic Model



The evaluation team discussed Core Programs Coordination with the following staff via phone interview or web-survey:

- One AMBAG staff member;
- Two PG&E staff members;²⁶ and
- One representative from a school district.

6.1 Core Programs Coordination Activities

6.1.1 Residential Core Programs Coordination Activities

Residential Core Programs Coordination is not a large focus of AMBAG EW, though the AMBAG staff member reported that AMBAG EW staff share information about the Middle Income Direct Install (MIDI) Program with local governments. Other than information sharing, AMBAG EW does not do direct outreach for the MIDI Program.

6.1.2 Commercial Core Programs Coordination Activities

AMBAG EW works to connect small to medium businesses in harder to reach rural areas to its regional Direct Install program implementer, Ecology Action. The two activities for this task, discussed below, include marketing and outreach, and program coordination. We include these activities in the Commercial column of Figure 3.

Marketing and Outreach

AMBAG staff market Core Programs offerings in a number of ways:

- AMBAG EW conducts outreach to small and medium businesses (including both newspaper and mail advertisements). Ecology Action contractors follow up with in-person canvassing of the area with the most popular measures ready to install.
- AMBAG EW markets Ecology Action Direct Install offerings through the many Chamber of Commerce groups of which it is a part.
- AMBAG EW has engaged with PG&E's Emerging Technologies program staff to encourage them to further investigate grow lights given the large presence of the agriculture industry in the region.
- AMBAG EW also distributes information through a non-profit alliance to reach non-profits and shares information in newsletters that are distributed to agricultural businesses. In addition to these newsletters, AMBAG staff also attend trainings related to agriculture so that this group of customers knows that AMBAG EW is a resource.

²⁶ The two PG&E respondents were part of the same interview and are counted as one total response.

Both PG&E and AMBAG staff discussed current and future plans for targeted marketing. PG&E staff focused on their plans to use energy consumption data to direct outreach efforts in a way that avoids past program participants who do not need additional upgrades. The AMBAG staff member spoke about targeting more in terms of resources and explained that AMBAG staff believe it is more valuable to conduct target marketing combined with follow-ups to customers versus a single mass marketing effort. We discuss these efforts further in Section 6.3.

PG&E staff emphasized the importance of coordination given the many players communicating with customers in this area, including the PG&E Business Energy Solutions (BES) group, AMBAG EW and Ecology Action. PG&E staff reported that though there is currently good communication between players, it could always improve.

For custom projects, AMBAG staff are connected to PG&E's BES staff, and the BES staff may connect customers to AMBAG or vice versa. When custom projects are active, AMBAG meets with relevant BES staff on a biweekly basis. AMBAG EW is generally limited to providing program services to small and medium commercial customers, but PG&E has an exception process that will allow AMBAG to work with larger customers in certain cases such as a customer request.

Program Coordination

In order to facilitate coordination of Core Program changes, PG&E staff reported that the Core Programs staff at PG&E will distribute internal bulletins and will let other PG&E staff know who should be notified about the changes. The PG&E staff members who work on AMBAG EW are then responsible for communicating that information to AMBAG staff. They do this through conversations with AMBAG staff, and they also share information via Energy Insight, an online tool made available by PG&E which also serves as the data portal between AMBAG and PG&E. The AMBAG staff member reported that they would like to know about major program changes that PG&E is considering at a point when they are able to give input, rather than learning about them after the change is already made.

6.2 Progress Towards Goals

We discuss savings goals in Section 4.2 and in Appendix E.

6.3 Key Successes

The main success mentioned regarding Core Programs Coordination was the targeted marketing “blasts” in one area by AMBAG EW to notify hard-to-reach communities when Ecology Action contractors are visiting and ready to install measures. Through these efforts, they have been successful in installing energy-saving measures in rural businesses that are generally harder to reach.

6.4 Challenges

Interviewees noted two challenges regarding Core Programs Coordination:

- PG&E staff reported that there is a shortage of engineering staff in more rural areas of AMBAG EW's territory, which results in project delays.
- The AMBAG staff member reported that they would like to know about major program changes that PG&E is considering at a point when they are able to give input, rather than learning about them after the change is already made.

6.5 Satisfaction with Partner Efforts

PG&E and AMBAG staff both rated their satisfaction with their AMBAG EW partners in the area of Core Programs Coordination as high; however, the AMBAG staff member requested that they receive additional information about PG&E's efforts in the region, specifically the Trade Professional Alliance Program that connects professionals who sell, install or service equipment to PG&E products and programs.

6.6 Reported Assistance Needed and Implementation Recommendations

No interviewees reported any new assistance needed or implementation recommendations.

7 Implementation of Past Evaluation Recommendations

Evergreen found no relevant past evaluation recommendations for AMBAG EW.

8 Key Findings and Recommendations

8.1 Key Findings

The overarching conclusion of this evaluation is that AMBAG EW continues to be a highly advanced and very successful program, with well-structured efforts across all program activity areas. It has also demonstrated success by achieving nearly double the kWh savings as compared to goals in 2015 and exceeding them by 1 percent in 2016. These savings goals are claimed by AMBAG and come from Direct Install efforts in both the small business and municipal sectors. Additional detail can be found in Appendix E. We found that AMBAG EW operates in a manner consistent with the program logic models we developed for each area in which AMBAG EW engages. Indicators of success include that:

- AMBAG EW is well regarded by local government and school district staff and continues to find new ways to assist its constituents, including accessing Proposition 39 funding for energy efficiency retrofits in the region's schools. AMBAG staff reported that \$31.7 million in Proposition 39 funding is available to the region's schools and that they have successfully secured or are in the process of securing over \$22 million of that available funding;
- Interview responses suggest that AMBAG EW has increased the efficiency of municipal, county and school district building stock and has encouraged businesses, school districts and local governments to adopt a variety of energy efficiency and conservation practices; and
- The AMBAG staff member reported that they have improved the quality of completed work by adding specifications to bid requests.

These efforts continue to help the Monterey Bay Area meet California's ambitious goals for reducing energy consumption and greenhouse gas output.

Municipal Building Retrofits Activities

- AMBAG EW has encouraged local government staff to complete energy efficiency projects in municipal buildings. In 2016, local governments completed a total of 14 energy efficiency projects across multiple facility locations with assistance from AMBAG EW.
- AMBAG EW has worked closely with Ecology Action, the Third Party Direct Install Program implementer in the region, to achieve energy savings and has consistently met or exceeded annual kWh savings goals set by PG&E. In 2015, AMBAG EW claimed electric savings that were almost double their target goal and exceeded electric savings goals by almost 1 percent in 2016.

- AMBAG EW has assisted a total of 55 schools and school districts in moving energy efficiency projects forward, helping them to access Proposition 39 funding by working with Ecology Action to create a customized request for proposals process that fits the funding requirements.²⁷ According to the AMBAG staff member we interviewed, staff supporting the AMBAG EW identify energy efficiency opportunities via audits, engage staff and senior leadership, prepare an energy expenditure plan, and develop any technical documents required to apply for project funding.
- AMBAG EW has been successful in improving energy efficiency in wastewater treatment plants in the cities of Watsonville, Soledad, Scotts Valley and Hollister.
- AMBAG and PG&E staff work together to hold training sessions in the region on updates to Title 24 building codes and building operator certification.

Strategic Plan Support Activities

- AMBAG EW participates in one of the four Strategic Plan Support activities: Lead by Example.²⁸ In 2015, through the Lead by Example activity area in support of the Strategic Plan, AMBAG EW completed first drafts of greenhouse gas emissions calculations for all 21 city and county jurisdictions.
- AMBAG staff reported having been involved in the process to influence code update initiatives by writing to the California Energy Commission to support exemptions to certain restrictions on lighting installations.
- While AMBAG EW is not currently active in the Reach Code Support activity area, AMBAG staff participate in regional green building committees to share information with other organizations working to improve the energy efficiency of their building stock. The AMBAG staff member noted that in the more rural areas of AMBAG territory, the focus is more on meeting existing codes as opposed to exceeding them.

Key Challenges

Challenges faced by AMBAG EW include:

- Finding appropriate funding sources for projects given limitations related to project size;

²⁷ California Proposition 39 (also known as the California Clean Energy Jobs Act) changed the corporate income tax code to put funds towards improving energy efficiency and expanding clean energy generation in schools.

²⁸ The other three Strategic Plan Support activities are Reach Code Support, Code Compliance and Community Programs.

- Monterey County's inability to utilize On-Bill Financing²⁹ due to a conservative interpretation of requirements by Monterey County;
- Baseline condition requirements which make it difficult to retrofit older equipment, especially in rural areas where existing conditions are often well below code.³⁰ The AMBAG staff interviewee also noted that it is difficult for AMBAG to take on reach code activities given that AMBAG lacks the authority to develop local codes;
- A high rate of staff turnover within local governments, and the challenges of bringing in and training new staff;
- Difficulty in acquiring complete data to update greenhouse gas inventories for local governments, as noted by both PG&E and AMBAG staff. This challenge stems from limitations that the California Public Utilities Commission (CPUC) placed on PG&E's use of data (and the other IOUs) to safeguard customer privacy. The data privacy requirement has made it difficult to track greenhouse gas inventories over time and gauge progress. AMBAG staff have engaged with both PG&E and the CPUC to find a solution that results in a more accurate estimate so that they can better track progress on greenhouse gas reduction efforts; and
- As reported by PG&E staff, a shortage of engineering staff in more rural areas of AMBAG EW's territory, which results in project delays.

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 these below.³¹ Each LPG faces a unique set of challenges given the differences in program implementation strategies, local government prioritization of energy efficiency, and

²⁹ The IOUs' On-Bill Financing program offers 0% financing for qualifying energy-efficient improvements that are paid through a non-residential customer's bill.

³⁰ Assembly Bill 802 (AB 802), passed on September 11, 2015, enables the California Public Utilities Commission and utilities to provide incentives to customers who improve their buildings up to current building code and beyond. The CPUC is currently refining the rules for baseline conditions under various scenarios in compliance with AB 802, which the legislature introduced to encourage the expansion of baseline conditions in some situations to include existing conditions.

³¹ Note that this section is not meant to identify Best Practices. The difficulty of identifying LPG 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.

customer characteristics. Because of these differences, not all innovative approaches will be useful to each LGP. This section provides other LGPs an example of innovative approaches that have been effective for AMBAG EW, the potential value of which they may consider in the context of their own LGP.

Key examples of AMBAG EW's innovative practices are:

- AMBAG has worked with schools to help them access funds for energy efficiency projects and has worked with Ecology Action to create an RFP process for contractors as required by a large funding source.
- AMBAG EW conducts outreach to small and medium businesses (including via both newspaper and mail advertisements). Ecology Action contractors follow up with in-person canvassing of the area with the most popular measures ready to install.
- Santa Cruz has a general services director who treats project opportunities on an opt-out basis for each department, where opting out will mean that the department will have to find space in its budget to cover savings that would have happened if they had chosen to participate. If the department rejects a project, they are required to utilize the budget that would have been used for some other item to cover the additional operating costs that would have been saved had the energy efficiency work been completed.

8.2 Recommendations

Based on the evaluation results, Evergreen Economics provides the following actionable recommendations for AMBAG EW:

- AMBAG EW should consider setting Reach Code Support goals in future program years in order to build on the prior successful efforts to educate local governments about existing code. This effort can be tailored to local governments in AMBAG's territory based on their understanding and enforcement of existing codes. This would allow local governments to move forward with reach codes based on the experience and resources they have.
- We also recommend that AMBAG EW look into extending its effort with wastewater treatment plants and engage with additional special districts including transportation, flood control and mosquito districts. This would allow AMBAG EW to expand upon its successful efforts working with wastewater treatment plants and to achieve additional energy savings.

Appendix A: LGP Program Process Evaluation Cycle

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

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

AMBAG EW 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.³² 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

SDG&E:

- City of Chula Vista

³² 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 MULTIJURISDICTIONAL - a specific local government, or both)?

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

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

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

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

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

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

SP6. What is the current status of this activity?

- a. If COMPLETED: Did you meet your objectives? Why, why not?
- b. If NOT COMPLETED: Do you expect to meet your objectives? Why and by when? Why not?

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

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

ONLY LG STAFF GET THE FOLLOWING EXPERTISE/TRAINING QUESTIONS:

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

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

NOTE: IOU AND LG STAFF GET THE REMAINING QUESTIONS.

Core Programs Coordination

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

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

Other Activities

- O1. Are there any other LGP activities being funded through [IOU] that we have not yet discussed?
- 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].
- Why do you say that?

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

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

For both IOUs and LGs:

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

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



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

Appendix C: Recommendations Resulting from Evaluation Research

Study ID	Study Type	Study Title	Study Manager			
SCG 0218.07	Process Evaluation	Process Evaluation of the Local Government Partnership Program	SoCalGas			
Recommendation	Program or Database	Summary of Findings	Additional Supporting Information	Best Practice / Recommendation	Recommendation Recipient	
1	Local Government Partnerships Program	While AMBAG EW is not currently active in the Reach Code activity area, AMBAG staff participate in regional green building committees to share information with other organizations working to improve the energy efficiency of their building stock. The AMBAG EW staff member noted that in the more rural areas of AMBAG territory, the focus is more on meeting existing codes as opposed to going beyond them.		AMBAG EW should consider setting Reach Code Support goals in future program years in order to build on the prior successful efforts to educate local governments about existing code. This effort can be tailored to local governments in AMBAG's territory based on their understanding and enforcement of existing codes. This would allow local governments to move forward with reach codes based on the experience and resources they have.	AMBAG, PG&E	
2	Local Government Partnerships Program	AMBAG EW has been successful in improving energy efficiency in wastewater treatment plants.		We also recommend that AMBAG EW look into extending its effort with wastewater treatment plants and engage with additional special districts including transportation, flood control and mosquito districts. This would allow AMBAG EW to expand upon its successful efforts working with wastewater treatment plants and to achieve additional energy savings.	AMBAG, PG&E	

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.

Appendix E: Findings Relevant to Direct Install Activities

AMBAG EW reports savings from projects performed by Ecology Action in the region. These numbers represent savings from both Municipal Retrofit Activities and small business Direct Install efforts, and exclude any savings for custom retrofits. PG&E reported that AMBAG EW has consistently achieved savings beyond its annual goals in 2015 and 2016.

Table 3: Energy Efficiency Activity Goals

Goal Description	Target ³³	Goal Met
kWh Goal (2015)	4,660,021 kWh**	Y
Therms Goal (2015)	15,481 Therms	Y*
kWh Goal (2016)	5,621,171 kWh	Y
Therms Goal (2016)	-20,054 Therms	Y*

*Interviewee reported that this goal was met but this differs from the reported therm savings in monthly reports posted on EEstats.cpuc.ca.gov. This may be due to interactive effects from electric measures installed.

**Differs from target given by AMBAG staff: 5,206,795 kWh.

In times where AMBAG EW has exceeded its goals, PG&E may increase the Direct Install targets in AMBAG EW's region by utilizing a "flex fund" that it created to help fund additional projects in areas that are exceeding expectations.

AMBAG EW staff also worked with school districts and Ecology Action to create a process that fulfilled contracting requirements for a specific funding source.³⁴ A portion of the funding went towards energy efficiency projects at schools that were completed through the Direct Install Program implemented by Ecology Action. Some of the work done with this funding went through the custom process. According to the AMBAG staff member interviewed, staff supporting the AMBAG EW identify energy efficiency opportunities in schools via audits, engage staff and senior leadership, prepare an energy expenditure plan, and develop any technical documents required to apply for projects.

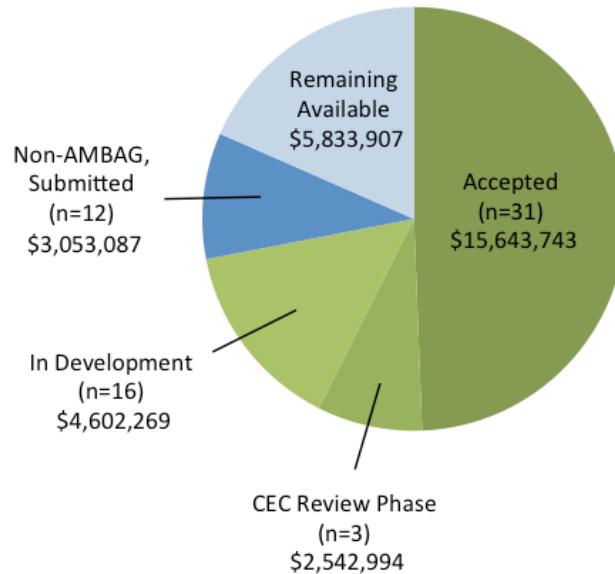
AMBAG staff reported that there is a total of \$31.7 million dollars available to schools in the area served by AMBAG EW, and that they have been working to secure over \$22 million of that funding, which is shown in the combined "Accepted," "CEC Review

³³ These targets are taken from monthly reports posted to eestats.cpuc.ca.gov.

³⁴ Proposition 39 required that requests for proposals (RFPs) must be issued for all installation work. AMBAG EW and Ecology Action created a new process for school projects to comply with these bid requirements.

Phase" and "In Development" categories in Figure 4. The number of school districts included in each category is also shown in Figure 4.

Figure 4: Proposition 39 Funding Available in Monterey Bay Area



Source: AMBAG Energy Watch Prop 39 Progress to Date (12.8.16). Excel file supplied by AMBAG staff.