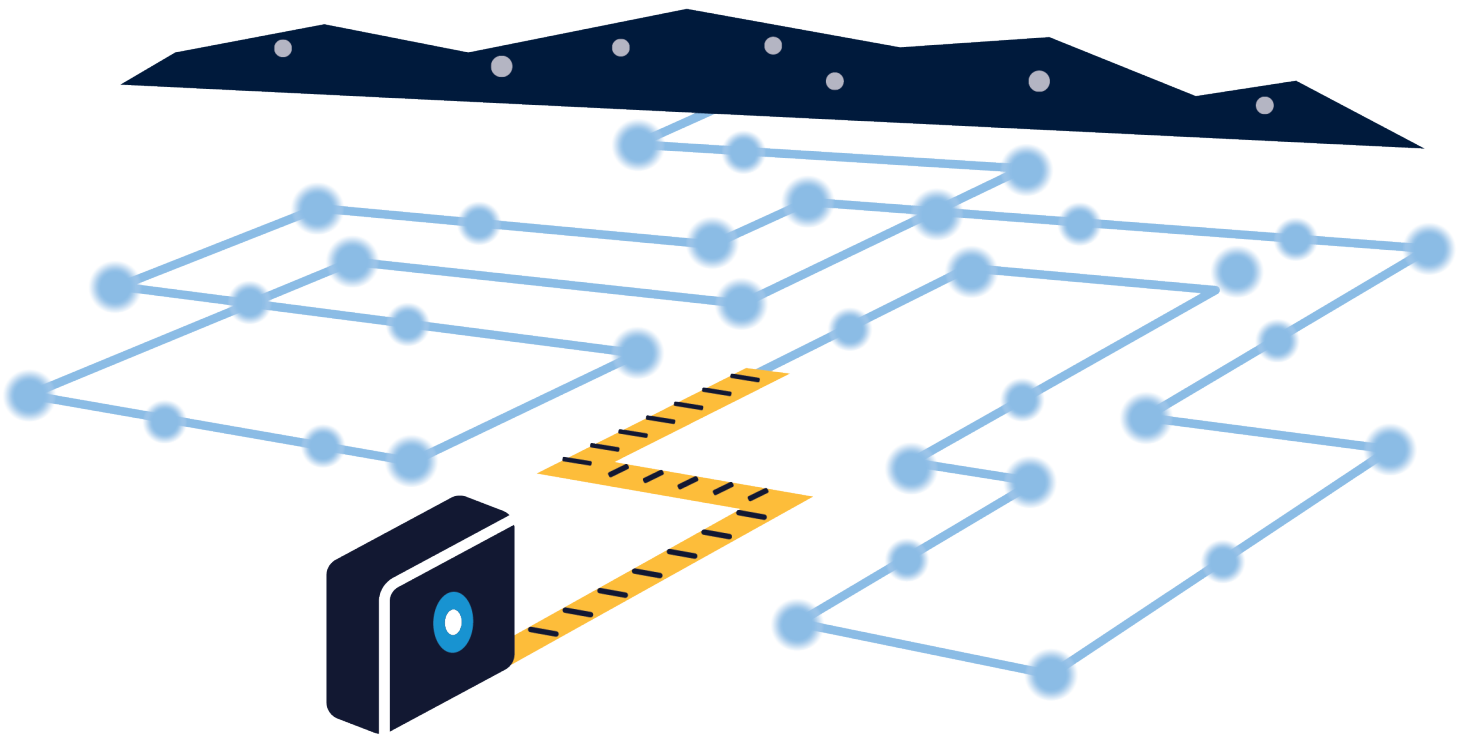




Assessment of Local Government Partnerships

CPUC Contract Group B: Deliverable 22A Year 3 Study



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Executive Summary

The Opinion Dynamics evaluation team, with Tierra Resource Consultants as its sub-contractor, is pleased to present to the California Public Utilities Commission (CPUC) this Year 3 Assessment of Local Government Partnerships (LGPs). LGPs, are funded by the Investor-Owned Utilities (IOUs) and organized at the local government level, provide offerings that help local governments, and their constituents promote and install energy efficiency (EE) upgrades in public, commercial, and residential facilities. Each LGP is made up of one or more city governments, county agencies, and/or other regional governing and coordinating bodies known as member or partner governments. The local government or third-party organization that holds the contract with the utility for LGP administration is often referred to as the implementing partner. A single city or county, a council of governments, a Joint Powers Authority (JPA), a private company, or other type of association can serve as an implementing partner.

LGP Overview and Study Purpose

The main objectives of this evaluation are to (1) continue the three-year assessment of LGP non-resource¹ data tracking and reporting processes for program years 2018, 2019, and where available 2020 and 2021; (2) examine each IOU's development of LGP programs and their alignment with the segmentation and metrics requirements of D.21-05-031²; and (3) assess how budget allocations align with revised LGP business models and policy priorities.

The evaluation team's research occurred amid the transition of many LGP programs to third-party implementation contracts and the closing of many other LGP programs whose activities will generally be addressed by new public sector programs performing similar activities to previous LGP programs. Accordingly, this LGP study identifies various issues and successes of the previous LGP model so that the new iteration of third-party LGP and public sector programs can adopt best practices and lessons learned over the last twenty years of LGP programs that will improve the evaluability and effectiveness of their future market support or equity activities.

Overview of Evaluation Approach

The evaluation team employed several methods to conduct this evaluation, including document review, analysis of primary and secondary data provided by the IOUs, and in-depth interviews. First, we submitted data requests to the IOUs to acquire non-resource and resource activity datasets, data collection protocols, and supporting program materials for program years 2018, 2019, and where available 2020 and 2021. We next conducted a data tracking and reporting assessment of the data received from the IOUs' LGPs to determine if the IOUs and their LGPs had made changes to address previous third-party evaluator recommendations and pre-existing CPUC requirements.

We subsequently examined materials documenting the IOU's plans to achieve the policy goals articulated in D.21-05-031. These efforts included reviewing the California Energy Efficiency Coordinating Committee

¹ The CPUC defines a non-resource program as one that is not directly responsible for attributed energy savings but that supports the EE portfolio through activities, such as marketing or improved access to training and education. This study broadens the focus from non-resource programs to non-resource activities since oftentimes PAs engage in discrete actions, as opposed to formally defined programs, that are meant to promote participation in their resource offerings. These activities, in and of themselves, do not directly produce energy savings, but do contribute to better outcomes and energy savings in resource programs.

² Decision 21-05-031 directs program administrators to segment their portfolios based on the primary program purpose of resource acquisition, market support, or equity.

(CAEECC) Market Support and Equity Working Groups' meetings and final reports; the IOUs' most recent Biennial Budget Advice Letters (BBALs); the IOUs' business plan filings; and associated files provided by the IOUs regarding their market segmentation and metrics development for LGPs and other public sector programs.

The evaluation team also completed a funding analysis of approved budgets for program years 2017 through 2021, and also budget filings under review for program years 2022 through 2024, to define how funding has shifted across locally focused programs³, which are defined here as IOU-administered LGP programs, Regional Energy Networks (RENs)- and Community Choice Aggregators (CCAs) administered programs. This analysis, along with additional county level data, allowed the team to define new market support and equity metrics that may help track the effectiveness of locally focused programs and prioritize funding.

The evaluation team supplemented these activities and analyses with two distinct rounds of in-depth interviews. We conducted the first round of interviews with Pacific Gas and Electric (PG&E), Southern California Gas Company (SCG), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E). During the second round, we conducted interviews with LGP program implementers active as of mid-2022. These interviews covered changes to program design resulting from the ongoing transition to third-party implementation; historical and current data handling and reporting processes for non-resource and resource data; the selection of segmentation categories and metrics for LGP and new public sector programs replacing retired LGP programs; and historic budget allocation trends and implications. In-depth interview guides that were approved by the CPUC's Energy Division staff are provided for reference in Appendix A.

Evaluation Findings and Recommendations

This section outlines findings and recommendations that came out of the research. Note that not all findings have an associated recommendation.

- **Finding #1:** Based on the non-resource data tracking and reporting assessment of select LGPs' non-resource activity data, the evaluation team saw improvements in the quality and completeness of the non-resource program data provided by the IOUs compared to the Year 1 and 2 studies, with many of the datasets containing fields mergeable with CPUC resource databases (e.g., contact name, address, phone number, email). The organization of the data was also improved, with the IOUs primarily providing the non-resource data via Excel workbooks rather than text documents (e.g., PDFs). However, the quantity of data provided continued to be quite low compared to the wide range of non-resource activities these LGPs conduct. The evaluation team finds the current non-resource tracking data does not fully reflect the full range of services and value being delivered by these programs.
- **Recommendation:** The evaluation team reiterates our previous recommendation from the Year 2 study, which is even more important now that all PAs', including IOUs', non-resource data will be more heavily scrutinized through the new market support and equity metrics and targets. The transition away from the old model of LGPs and into new third-party implemented public sector programs should be leveraged to improve non-resource data collection protocols and reporting. Newly selected public sector implementers, especially those running market support and equity

³ Throughout this report, we refer to the collective group of LGP, REN, and CCA programs as "locally focused programs" because a portion of their value proposition is predicated on knowledge of local market conditions and the ability to deliver program offerings that are better suited to the needs of constituents defined within some geographic or governmental subdivision. Examples of geographic or governmental subdivisions include counties, cities, districts, and regional councils of government (COGS).

programs, should adopt processes that facilitate the collection of non-resource participant information including, at a minimum, tracking customer names, phone numbers, email addresses, service addresses, dates of participation in the non-resource activity, and type of non-resource activity participated in (e.g., audit, technical assistance, benchmarking, etc.). We also recommend the collection of any associated customer IDs used by the IOUs in their data-tracking systems. As data quality and completeness improve, evaluators can more fully capture the attributable energy savings from non-resource activities. Analysis of this sort will go far to demonstrate to the CPUC the benefits of formerly non-resource activities and is necessary for tracking market support and equity targets in an evaluable way. Additionally, we recommend designing data systems to track market support and equity participants over a multi-year time frame to better understand how ongoing engagement with LGPs drives program participation. This is especially important in the public sector, as these projects typically take longer to install than similar projects in the commercial sector.

- **Finding #2:** In the beginning of 2021, PG&E completed custom dashboards within their IOU-centric and standardized Customer Relationship Management (CRM) platform, Energy Insight, for each LGP as well as a cumulative dashboard to show the portion of resource acquisition from leads developed and nurtured from LGP support and activities PG&E's LGPs are now required to report leads from their non-resource activities into their Energy Insight database. The recently built dashboard is capable of tracking how much resource acquisition activity is coming from leads that were developed and nurtured from LGPs non-resource activities. This is in addition to the LGP implementing partner's independent systems. Although a limited set of PG&E LGPs had non-resource data for us to assess in this study, the evaluation team expects these significant and standardized improvements to data collection and reporting will be able to be captured in any future assessments of PG&E non-resource data. The evaluation team is pleased to report that these new systematic changes appear to make significant progress on many of our Year 2 study recommendations, including (1) recommending the IOUs leverage the transition to third-party implementation to improve non-resource data collection protocols and reporting, (2) improving data quality and completeness, and (3) designing data systems to track non-resource participants over a multi-year timeframe to better understand how ongoing engagement with LGPs drives program participation.
- **Recommendation:** PG&E should continue to refine their Energy Insight platform and the data collection protocols they have put in place. Once they have been able to collect a full year or two of data within the system, an evaluation of their process and data tracking should be conducted to distill insights for non-LGP public sector programs as well as other IOUs' market support and equity programs. In the meantime, other IOUs with public sector non-resource programs should pursue the development of similar platforms and protocols to improve the accuracy of matching non-resource and resource databases, as well as tracking key performance indicators.
- **Finding #3:** The majority of the LGP portfolio has consolidated into new regional programs that serve all types of public agencies and cover the entirety of each IOU's service territory, except for PG&E's revamped portfolio of third-party LGP programs. Based on the evaluation team's IOU interviews, the leading reasons for these changes were the difficulty of meeting cost-effectiveness thresholds and the desire to refresh the LGP model, which had seen minimal change since its inception in the early 2000s. This portfolio of new public sector programs replacing the old model of LGPs consists of a blend of resource acquisition, market support, and equity segmented programs. PG&E and SCG's LGP and LGP-like programs are designated as market support, while SCE and SDG&E's LGP-like programs are designated as resource acquisition. SCE also has proposed a Public Equity Program designated as an equity offering. This regional structure does not require local governments to be under contract with

a specific LGP in order to participate in program offerings that target the public sector. This is a departure from the standard LGP program offerings operating since 2006, such as the PG&E's Energy Watch or SCE's Energy Leader programs that required a local government to sign up with a specific program. The intent of this 'open' regional design is to eliminate barriers, such as administrative costs and potential limitations imposed by needing to comply with a standard program design that doesn't fit local needs.

- **Recommendation:** We agree that the new regional programs should increase participation by local governments in EE, including jurisdictions that never participated in the previous LGP programs. However, we also recommend that these new regional programs ensure that their regional offerings do not inadvertently dilute activities that build and maintain trust with local governments, but which do not directly or immediately lead to EE projects. As our interviews with implementing partners found that these types of services, such as offering easily accessible EE technical and planning support specific to the local community, go a long way in establishing the credibility of the program as one that local governments can rely on, which overtime creates a natural project pipeline for new EE project opportunities.

- **Finding #4:** The evaluation team finds the IOUs have done a good job laying out their initial segmentation strategies and metrics in their business plan filings for their LGP and LGP-like programs. Additionally, during in-depth interviews each of IOUs discussed their ongoing efforts to update and strengthen their data collection protocols and practices to ensure they can capture the required baselines to set segmentation metric targets and report on their resource acquisition, market support and equity metrics by 2024. PG&E has established a set of standardized key performance indicators across their partnerships, but each individual LGP has different targets based on their community's unique needs. Since SCE's Local Public Sector Program and SDG&E's Local Government Customers Program will be resource acquisition programs, they are heavily leveraging their existing resource data collection and tracking processes for these programs, which are more advanced than previous LGP non-resource data tracking given their frequent use in reporting. SCG staff reported that the development of their segmentation metrics revealed the degree to which their LGP tracking varied across their implementers and are now actively working to standardize tracking across their Regional Energy Pathways program managers, to ensure they are accurately capturing the full span of market support activities.

- **Recommendation:** SCG's Regional Energy Pathways program, as well as any other future public sector market support or equity program administrators should consider collaborating with PG&E and mimicking their key performance indicator data collection practices and reporting dashboard. Key features of PG&E's Energy Insight that should be considered for adoption by other program administrators include the capability to request utility data for customers directly through Energy Insight, the ability to chat directly with the technical reviewer of a potential project, and the provision of a detailed log of past and active projects, including active project records and financing records, which can be reviewed in real time. Program administrators must also pair these improved dashboard capabilities with requirements for implementing partners to at a minimum enter leads from market support activities, as this enables the tracking of leads from initial market support activity through to installation.

- **Finding #5:** Based on our interviews with implementing partners throughout the last three LGP studies, it has become apparent that the commercial programs, which historically served municipalities, were unable to fully serve their unique needs. There is a gap in coverage for these customers due to a variety of reasons including, but not limited to:

- Extended contracting processes, including longer timeframes for completion of inspections and verification, that result in longer EE project time horizons.
 - Understaffed municipalities lack the capacity to engage in the process of identifying the right EE measures, programs and rebates within their agency's capital planning cycle.
 - Higher price points in the municipal sector than the commercial sector due to prevailing wage requirements, union contracts, public procurement process requiring larger contracts resulting in the grouping of multiple measures, and additional oversight and transaction costs.
 - Travel distances between rural municipalities and EE implementers, which reduces access by often requiring the municipality to group multiple site visits and/or projects to make it cost-effective for the implementer.
- **Finding #6:** Based on our in-depth interviews with implementing partners, the evaluation team identified several best practices and lessons learned that are broadly applicable to both LGPs as well as other public sector programs, including:
- The value of LGPs goes far beyond channeling non-resource customers into resource acquisition programs and this value is not always captured in the data. The primary value proposition is having someone knowledgeable about the EE portfolio, who works at or with a public agency and help them navigate the complex and often siloed energy marketplace as well as helping them overcome the many unique problems that emerge along the path to project completion.
 - The key to successfully converting projects in the public sector is taking a long-term perspective. Projects originate from the time spent building and maintaining relationships with public agencies. Credibility with public agencies is the currency LGPs use to convince these agencies to pursue EE opportunities.
 - Although the CPUC definition of hard-to-reach (HTR) does not currently apply to the public sector, counties that meet the hard-to-reach geography criteria⁴ face significant barriers to getting municipal projects completed. In these rural areas it takes more effort to identify the right trade professionals and third-party implementers for each project. It is not uncommon for the initial meetings to go well but end in the contractor backing out a few steps into the process because of logistical challenges. It often falls on the LGP to find the right match between a municipal project and trade professional capable and willing to perform the audit or upgrade. The LGP must also assemble a compelling value proposition for both parties to make the project work.
 - Local governments are increasingly looking for fuel substitution measures to help them hit their climate targets. This has led to the Government and K-12 resource acquisition program being popular for municipalities, especially their direct install gas water heater replacement option. Expanding the menu of fuel substitution options is a highly requested feature of the program by LGPs.
- **Finding #7:** Our funding analysis of locally focused programs shows that residents and businesses in counties with warmer climate zones pay more in public purpose program funds (PPP) than constituents in cooler climate zones primarily because they use more energy and air conditioning as confirmed by

⁴ Areas other than the United States Office of Management and Budget Combined Statistical Areas of the San Francisco Bay Area, the Greater Los Angeles Area and the Greater Sacramento Area or the Office of Management and Budget metropolitan statistical areas of San Diego County. CPUC Resolution G-3497.

California's 2019 residential appliance saturation study. For example, our analysis shows that in recent years Fresno County has 2,026 annual cooling degree days (CDD) and residents in that county pay roughly \$58 per capita in PPP funds for residential electricity usage. In contrast, Monterey County has 519 CDD annually and residents there pay roughly \$32 per capita in public purpose funds for residential electricity use during this same timeframe.

Most of California's warmer counties are located in the Central Valley and these counties also tend to have higher poverty rates. For example, 46.3% of households in Fresno County, located in the Central Valley, are eligible for California's Alternative Rate for Energy (CARE), compared to 35.5% of Monterey County households, a coastal county. How PPP funds are remitted to these counties may be a useful indicator of how these funds are addressing equity issues. Consider that direct installation programs often target low-income residents or hard to reach businesses, and energy savings and PPP funds paid for direct installation labor costs can be determined from data in the California Energy Data and Reporting System (CEDARS). Our analysis of annual data shows that, on average, in recent years Fresno County had per capita gross first year electricity savings of 8.73 kWh through direct installation programs, and PPP funds paid \$6.65 per capita for direct install labor cost. This is in contrast with Monterey County where direct installation programs realized gross first year savings of 1.76 kWh while \$1.69 in per capita funding from PPPs was paid for direct install labor cost. This example indicates that a higher poverty area is engaging in more direct installation activity, and that PPP funds are being received to cover additional labor costs.

Energy use in these hotter counties will also grow more rapidly over time because of climate change, potentially widening the difference in energy use for HVAC and the economics of how PPP funds are collected and remitted. Continuing our previous example, according to Cal-Adapt, Fresno County will increase from 2,026 CDD in 2020 to 2,503 CDD in 2050, an addition of 477 CDD. In contrast, Monterey County will increase from 519 CDD in 2020 to 752 CDD in 2050, an addition of 233 CDD or roughly 49% of the increase forecasted for Fresno. Examples of funding metrics that might be useful for tracking progress on equity and market support issues include:

- The number of households eligible for CARE compared to average public purpose funds paid per household by residential customers.
- Climate change indicators, such as changes in cooling degree days (CDD) or heating degree days (HDD), at the regional, county or city level, compared to HVAC installation savings and end user rebate payment reported in CEDARS.
- County (or zip code) level analysis of direct install labor costs paid compared to poverty metrics found in CalEnviroScreen (CES) such as average poverty rates or average of housing burden.
- Annual budgets for locally focused programs compared to CARE eligibility or CES poverty measurements occurring within a program's service territory.

LGP Overview and Study Purpose

Local Government Partnership Background

Since 2002, local governments have been contracted under the CA IOUs to provide a mixture of resource and non-resource EE efforts. Historically, LGPs have leveraged their unique relationships with constituents and municipal facilities to drive EE upgrades. LGPs were initially tasked with transforming California’s local governments into “leaders in using energy efficiency to reduce energy use and global warming emissions both in their own facilities and throughout their communities.”⁵ Accordingly, each LGP program has developed its own set of goals and offerings tailored to meet local or regional needs.

Each LGP is made up of one or more city governments, county agencies, and/or other regional governing and coordinating bodies known as member (partner) governments. The local government or third-party organization that holds the contract with the IOU for LGP administration is often referred to as the Implementing Partner.⁶ This implementing partner can be a single city or county, a council of governments, JPA, a private company, or another type of association. This implementing partner typically manages administrative aspects of the partnership, including, but not limited to, serving as the main point of contact with the IOU(s), setting LGP goals, managing budgets, arranging recurring meetings with the member governments, and maintaining tracking databases. They also conduct a variety of activities in coordination with IOU program managers and their local government members. Historically, the core activities typically undertaken by LGPs can be categorized as follows:

- **Municipal retrofits.** Meeting regularly with local partner staff—either one-on-one or in groups—to discuss their pipeline of municipal facility projects, provide technical assistance, influence the decision-making process to install more efficient equipment, and hand-off the project to the most appropriate IOU program (which may be an LGP program if it has a resource component) for project approval, equipment purchases, and incentive payments.
- **Strategic planning.** Working with member local governments to define their energy goals, as well as identify gaps, and provide funding as needed to support accomplishing the related tasks. Common examples of strategic planning activities include Energy/Climate Action Planning, benchmarking, greenhouse gas inventories, and hosting trainings on energy related topics.
- **Core program coordination.** Assisting and outreaching to LGP customers to promote IOU energy efficiency programs. Common examples include residential and commercial audits, direct installs, and marketing of core programs at community events.

At the close of 2017, approximately 54 LGPs were implemented through collaborations between government entities and one or more CA IOUs.⁷ Most of these operated under common program design templates, including Energy Leader (SCE), Energy Watch (PG&E), and Partnerships (SDG&E). These partnerships were originally designed to carry out four pillars of activities: (1) target hard-to-reach (HTR) businesses with direct

⁵ CPUC, California Long Term Energy Efficiency Strategic Plan, September 2008, p. 89.

⁶ Some IOUs use different terminology for this role. For instance, PG&E calls these organizations Lead Local Partners. Though the terminology may change, the role is the same across IOUs.

⁷ This count is based on the December 2017 IOU monthly reports uploaded to the California Energy Efficiency Statistics (EESTATS) website. This estimate accounts for the fact that some LGPs are administered by multiple IOUs (and thus have multiple EESTATS line items). This estimate also includes incubator/pilot funds (e.g. Emerging Cities and the Local Government Energy Action Resource Program). It excludes some line items that are statewide or cross-LGP resources (e.g., funding for the Statewide Energy Efficiency Collaborative or Strategic Energy Resources).

install programs; (2) target energy efficiency retrofits of local government buildings; (3) promote utility core programs; and (4) support qualified energy efficiency activities included in the California Energy Efficiency Strategic Plan (Strategic Plan).

The approach to this sector has changed since 2017 and new LGP program designs with revised priorities are being rolled out across the IOUs on various timelines as part of the transition to new third-party contracts.⁸ Additionally, this transition is the result of the IOUs seeking to improve the cost-effectiveness of their portfolios and improve program efficiencies by consolidating programs. These new LGP program designs have been detailed in the IOUs' business plans and BBALs, and confirmed by the evaluation team's discussions with IOUs, LGP lead implementing partners, and Energy Division staff. Changes include but are not limited to the following:

- A portfolio-wide decrease in funding allocation for LGPs from approximately \$73M in 2017 to \$13M in 2021.
 - These budget cuts have especially impacted the activities formally designated as Strategic Plan activities.
- A renewed focus on public sector activities while residential and commercial (including direct install) activities are generally shifting to separate third-party solicitation processes.
- PG&E has now fully transitioned to a new iteration of LGPs, which includes switching them to non-resource programs.
- SCE has closed or will close the last of their LGPs this year, and while they will no longer have LGP programs, they are in the process of launching a third party–implemented resource acquisition public sector program which is currently waiting on advice letter approval.
- SCG is also in the process of closing their LGP programs and effectively replacing them with a single third party–implemented regional public sector market support program.
- SDG&E's LGP contracts recently ended, and SDG&E is now in the process of their public sector third-party solicitations.

These changes are due, in part, to D.18-05-041, which directs the IOUs throughout several Ordering Paragraphs to complete the following actions:⁹

- Improve cost-effectiveness and meet local government needs with respect to data sharing and contract terms that align with local government budgeting, legal, and other constraints.
- Quantify co-benefits and local economic benefits of LGPs in HTR segments and disadvantaged communities (DAC).¹⁰

⁸ D.15-10-028

⁹ D.18-05-041, Ordering Paragraph 30, page 188.

¹⁰ IOU managed studies are used to identify co-benefits and non-energy impacts that are unique to LGPs, including disadvantaged and hard-to-reach communities. The research conducted for this assessment is an Energy Division managed evaluation and does not include an objective to identify and evaluate co-benefits and non-energy impacts although the evaluation team previously as part of the Year 2 evaluation weighted in on elements of the work conducted by the IOU study.

- Support local governments' efforts to increase local capacity to conduct energy efficiency activities.

Most recently, on May 20, 2021, Decision 21-05-031 "Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process" was issued to address a number of policy issues that have been pending in the proceeding for the past year, including the impact of the COVID-19 pandemic, potential and goal setting, and changes to the rolling portfolio and budget approval process as proposed by the California Energy Efficiency Coordinating Committee (CAEECC) process working group. Decision 21-05-031 is directly relevant to LGPs and new public sector programs because it directs PAs to use a new approach for segmenting their portfolios based on each program's primary purpose among the following classifications:

- **Resource acquisition:** Programs with a primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems.
- **Market support:** Programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building government partnerships, or moving beneficial technologies towards greater cost effectiveness.
- **Equity:** Programs with a primary purpose of providing energy efficiency to HTR or underserved customers and DACs in advancement of CPUC's Environmental and Social Justice (ESJ) Action Plan. Improving access to energy efficiency for ESJ communities may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2 and 5 in the ESJ Action Plan.

In addition, the decision directs all PAs to develop metrics and criteria for evaluating progress of market support and equity programs, in the absence of strict cost-effectiveness limitations.

Key Research Questions

The study objectives for this Year 3 assessment were to (1) continue the three-year assessment of LGP non-resource data tracking and reporting processes for program years 2018, 2019, and where available 2020 and 2021; (2) examine each IOU's development of LGP programs in alignment with the segmentation and metrics requirements of Decision 21-05-031; and (3) assess how budget allocations align with revised LGP business models and policy priorities. The key research questions addressed by this study are below:

- What are the PAs' existing and emerging LGP data collection practices and protocols, particularly involving non-resource activities?
 - What types of data systems (e.g., MS Access, MS Excel, customer relationship management systems [CRMs], etc.) are in place for tracking non-resource activities?
 - How are non-resource activity tracking databases currently being used? Are they being leveraged to channel customers into rebate programs?
- How can PAs and implementing partners improve the evaluability of non-resource activities?
- What changes to LGP program design are occurring because of the transition to third-party implementation as well as the segmentation and metrics directives found in Decision 21-05-031?
- How has funding for locally focused programs, defined here as LGP, CCA, and REN programs, evolved over time, and how does current and planned LGP spending relate to the new Potential and Goals Metric and Portfolio Segmentation?

Unlike the Year 1 and Year 2 assessments, Year 3 will not produce estimates of savings attributable to LGP non-resource activities but will assess how LGPs active in 2021 and beyond will be able to achieve policy goals articulated in the recently Proposed Decision, and how their approach to data collection and tracking will differ from programs evaluated in Year 1 and Year 2.

Research Tasks

For this Year 3 assessment of LGPs, the evaluation team conducted the research tasks listed in Table 1 below to address the key research questions presented in Section 2.2.

Table 1. Research Tasks for Third-Year Assessment of LGPs Study

Evaluation Tasks	Description
Data Request	Submitted a data request to PG&E, SCE, SCG, and SDG&E to acquire any available non-resource and resource activity tracking data including participant names, contact information, and dates of participation; any documentation of tracking data collection protocols, tools and practices for non-resource and resource activities; examples of or access to review CRMs; plans or documents detailing future or current LGP changes; any available program implementation plans, program theory logic models, and/or annual reports to provide context to the evaluation team on the types of activities conducted from 2018–2021
Materials/Data Review	Reviewed responses to understand each IOU and LGP’s data tracking and reporting mechanisms.
Data Tracking and Reporting Assessment	Analyzed the resource and non-resource tracking data provided by PG&E, SCE, SCG, and SDG&E’s LGPs to determine the robustness of their data collection activities and whether their data collection practices have improved over time.
In-Depth Interviews with IOU and LGP Implementing Partner Staff	Conducted in-depth interviews with IOU and available implementing partner staff to understand their non-resource activities, how their data collection and tracking has changed over time, as well as how the LGP programs will comply with the new segmentation and statewide metrics from Decision 21-05-031.
Assessment of LGP Segmentation Strategies and Metrics	Examined how each IOU plans to align their LGP programs and public sector programs replacing LGPs with the segmentation and metrics requirements of Decision 21-05-031. This assessment included IOU staff interviews as well as a review of all recently submitted business plans.
Funding Analysis	Examined funding trends and various community metrics related to locally focused programs to identify new market support and equity metrics.

Data Tracking and Reporting Assessment

On behalf of the evaluation team, the Energy Division submitted data requests to PG&E, SCE, SCG, and SDG&E on May 21, 2021. The evaluation team met with IOU staff to clarify questions as necessary and received all responses by June 15, 2021. These data requests were extensive and asked for a wide range of documents, databases, and other program records including:

- Applicable program staff names and contact information to set up in-depth interviews to learn about each LGP's unique program design as well as their non-resource and resource activities;
- Program materials including marketing brochures, program- and project-level budget documents, scopes of work, final reports from LGP activities, and materials used to inform customers about non-resource activities and resource program offerings;
- All internal resource and non-resource program databases with fields that allow records to merge to the CPUC program database of claimable energy efficiency savings. Ideally, these program databases would include, at a minimum, the following fields: customer name, address, phone number, email address, type of non-resource activity in which customer participated, date of participation, utility customer account ID, electric and gas service account IDs, premise ID, and/or other unique identifiers that allow for merging;
- Information on the more granular activities claimed in the LGPs' Annual Reports, as well as the LGPs' Semi-Annual Strategic Plan Report workbooks;
- Documentation and accomplishments related to non-resource activities, including but not limited to, technical assessments, energy audits, marketing and outreach, educational trainings and workshops, as well as examples of social media engagement; and
- Documents detailing data collection protocols and practices.

When SDG&E staff received the data request, they immediately informed the evaluation team that it would be very difficult to provide 2018–2021 non-resource tracking data for its LGPs as most had already closed. After discussion with CPUC staff, the evaluation team decided to exclude SDG&E programs from having to provide non-resource data and instead focused our non-resource tracking assessment on the other IOUs' LGPs. All other IOUs were able to deliver responses to the data request, including providing at least some LGP non-resource tracking datasets.

The following subsections contain the results of the evaluation team's assessment of each IOU's LGP non-resource data. This includes an analysis of the robustness of their data collection activities and identifies areas for further refinement of data collection practices and protocols that can inform the next set of LGPs and public sector programs, which are expected to launch in the coming years.

PG&E LGP Data Tracking

Table 2 lists the PG&E LGPs that could provide non-resource activity related data in response to the evaluation team's data request. Three out of eight PG&E LGPs had non-resource tracking data from 2018-2021 available for the evaluation team to review. However, one of the five PG&E LGPs that was unable to provide non-resource tracking data was a new program implementer that launched in 2020 and as such was not expected to have any available non-resource data.

Table 2. Availability of PG&E LGP Non-Resource Tracking Data

LGP	Availability of Non-Resource Tracking Data
Central California Energy Watch	✓
Central Coast Leaders in Energy Action Program	Not Available – New Program Launched in 2020
Energy Access SF	✓
Marin Energy Watch Partnership	Not Available – No Tracking Data
Redwood Coast Energy Watch	Not Available – No Tracking Data
San Mateo Energy Watch Program	✓
Sierra Nevada Energy Watch	Not Available – No Tracking Data
Sonoma Public Energy	Not Available – No Tracking Data

Shortly before we issued the data request for this report, PG&E launched a standardized data collection and CRM system in their Energy Insight database. PG&E’s LGPs are now required to add leads from their non-resource activities into the Energy Insight database. PG&E has also recently built a dashboard capable of tracking how much resource acquisition is coming from leads developed and nurtured from LGPs market support activities. This is in addition to any of the LGP implementing partner’s own systems. Although a limited set of PG&E LGPs had non-resource data for us to assess in this study, the evaluation team expects these significant and standardized improvements to data collection and reporting will enable more non-resource data to be collected and evaluated in any future assessments of PG&E non-resource data. The evaluation team is pleased to report that these new systematic changes appear to satisfy many of the Year 2 study recommendations, including (1) recommending the IOUs leverage the transition to third-party implementation to improve non-resource data collection protocols and reporting, (2) improving data quality and completeness, and (3) designing data systems to track non-resource participants over a multi-year time frame to better understand how ongoing engagement with LGPs drives program participation.

The following subsections detail the evaluation team’s assessment of data completeness, quality, and mergeability with resource data for the PG&E LGPs with any available non-resource tracking data. These programs include the Central California Energy Watch, Energy Access San Francisco, and the San Mateo Energy Watch Program.

Central California Energy Watch Tracking Data

The Central California Energy Watch is a non-resource program offering under the PG&E Public Sector portfolio. The Central California Energy Watch is designed to develop energy savings opportunities in public sector infrastructure, develop and deliver project leads to PG&E’s resource acquisition programs and develop short-, mid- and long-term energy efficiency project pipelines. The program launched on July 1, 2020 and is implemented by the San Joaquin Valley Clean Energy Organization (SJVCEO).

Table 3 lists the Central California Energy Watch non-resource activity databases received in response to the data request, along with a description of the activities based on the evaluation team’s review of the various program materials provided. Unlike other PG&E LGPs, the SJVCEO was able to provide tracking data for 2018–2019 marketing and educational events attended and/or hosted during their previous contract cycle in addition to some non-resource data collected in late 2020 and early 2021. This enabled the evaluation team to compare the non-resource data tracking of the previous contract cycle with the new contract cycle. The primary difference between these datasets is that the 2018–2019 dataset presents counts of events attended and marketing materials distributed, while the 2020–2021 dataset provides staff contact information for the municipalities they have enrolled in the program.

Table 3. Central California Energy Watch Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served/Attendees
2018–2019 Marketing and Education Events	Attendance at various community and county employee events to provide marketing materials and information on PG&E offerings including California Alternate Rates for Energy (CARE), Medical Baseline, Energy Savings Assistance Program (ESAP), EE saving tips, and power safety power shutoffs. Target audiences for these events included senior citizens, young families, and county employees.	Senior Citizens: 325 Young Families: 590 County Employees: 4100 Total: 5015
2020–2021 Central California Energy Watch Public Sector Enrollees	Central California Energy Watch has enrolled city and county agencies into its new program offerings, which include non-resource activities such as rolling participation in energy benchmarking for all accounts, energy readiness reports, infrastructure inventory, as well as outreach and education activities.	6

Table 4 shows that the evaluation team found the 2020–2021 data to be mergeable with CPUC program data, while the 2018–2019 data was not mergeable. The table also shows that the evaluation team found most non-resource tracking data fields to be sufficiently populated and of good quality both in the 2018–2019 data and the latest 2021 data. This transition from tracking event and attendance counts to tracking the contact information of enrolled municipal staff means that future evaluations should be better able to trace LGP non-resource participants to completed resource projects. Although this 2020–2021 data is limited, it represents an incremental improvement in non-resource data collection and tracking for LGPs compared to the Year 1 and Year 2 LGP assessments previously completed by the evaluation team. It also reflects the efforts of PG&E staff to incorporate data collection and reporting recommendations provided in the Year 1 and Year 2 studies.

Table 4. Central California Energy Watch Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2019 Marketing and Education Events			
Event Partner	✓	✓	Not in CPUC Database
Event Name	✓	✓	Not in CPUC Database
Date	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Location	✓	✓	Not in CPUC Database
Target Audience	✓	✓	Not in CPUC Database
Attendance Count	✓	✓	Not in CPUC Database
Types of Program Materials	✓	✓	Not in CPUC Database
2020–2021 Central California Energy Watch Public Sector Enrollees			
Customer Name	✓	✓	✓
Primary Contact (Staff Name and Title)	✓	✓	✓
Address	✓	✓	✓
Phone	✓	✓	✓
Email	✓	✓	✓

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
Type of Activity	✓	✓	Not in CPUC Database
Date of Participation	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and it is possible to merge program data with CPUC program data using the fields marked.

Energy Access San Francisco Tracking Data

Energy Access San Francisco (Energy Access SF) is an LGP between PG&E and the City and County of San Francisco, Department of the Environment (SFE). Energy Access SF’s purpose is to support energy-saving opportunities for HTR and DAC customers as well as build capacity to help save energy community-wide. SFE chose to focus on serving HTR and DAC customers because San Francisco’s municipal buildings are served by San Francisco’s Public Power Utility, Hetch Hetchy Power, making this sector ineligible for PG&E program funding.

SFE’s 2020 implementation plan describes their objective to reach HTR and DAC customers through a streamlined five-step approach:

- Use advanced metering infrastructure (AMI) data analytics to target customers with high energy savings opportunities.
- Use Radiant Labs’, a energy efficiency program solutions provider, Zero Cities Targeting Tool (ZCTT), and publicly available data such as permitting data, to determine propensity to act on EE opportunities
- Use SFE’s brand-recognition and community trust for marketing EE programs and conduct outreach to potential customers.
- Conduct recruitment, in-person whenever possible, to the top 50% of single-family and HTR small-midsize business (SMB) customers.
- Refer customers to the best third party, PG&E or BayREN Program that matches the customers unique needs.

Table 5 describes the single non-resource database the evaluation team received from Energy Access SF via the PG&E LGP data request.

Table 5. Energy Access San Francisco Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served
2021 Energy Access San Francisco Single Family Outreach	Customers are contacted via personalized mailers and email messages that include the City and Department logos. SFE’s Outreach Team reinforces information from the energy reports and mailers and directly enrolls prospects into the best-fit program. Energy coaches conduct on-site assessments to identify and document a full spectrum of EE savings opportunities, make program referrals, and explore financing options.	50

The results of the evaluation team’s assessment of Energy Access SF’s single-family outreach data are summarized in Table 6 below. Although the database provided to the evaluation team did not include any phone numbers, email addresses, or customer names, Energy Access SF’s implementation plan specifically mentions obtaining contact information including names, addresses, emails, and telephone numbers from PG&E prior to conducting their outreach. Based on our interview with Energy Access SF staff, we believe this data may be made available in future evaluations. As shown in Table 6, the evaluation team finds most non-resource tracking data fields to be sufficiently populated and of good enough quality for future assessments to merge the non-resource data with CPUC program data and trace LGP non-resource participants to completed resource projects.

Table 6. Energy Access San Francisco Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2021 Energy Access San Francisco Single Family Outreach			
Account Name (Address)	✓		✓
Subject	✓	✓	Not in CPUC Database
Physical Street	✓	✓	✓
Physical City	✓	✓	✓
Physical Zip/Postal Code	✓	✓	✓
Supervisor District	✓	✓	Not in CPUC Database
Industry	No Data – Not Applicable	✓	Not in CPUC Database
Outreach Campaign: Outreach Campaign Name	✓	✓	Not in CPUC Database
Date/Time Closed	No Data	✓	Not in CPUC Database
Date/Time Opened	✓	✓	Not in CPUC Database
Status	✓	✓	Not in CPUC Database
Customer Type	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

San Mateo Energy Watch Tracking Data

The San Mateo County Energy Watch Program is a non-resource LGP program serving the public and commercial market sectors across the geographic territory of San Mateo County. They assist public agencies, K–12 public schools, and small, HTR businesses with accessing EE programs, trade professional options, and financing opportunities. They also provide coordination, outreach, referrals, and educational resources to help community members pursue EE projects, as well as assist cities in meeting greenhouse gas (GHG) reduction goals by developing annual community inventories and hosting a monthly working group to support EE and other measures in climate action planning.

Table 7 details the data available from the single San Mateo Energy Watch non-resource database the evaluation team received in response to the data request.

Table 7. San Mateo Energy Watch Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served
2019–2021 Customer Referrals	Commercial and public sector referrals generated through San Mateo Energy Watch market support activities.	Commercial Customers: 10 Municipal Customers: 5 Total: 15

As shown in Table 8, the evaluation team found the non-resource tracking data fields to be sufficiently populated and of good quality. We found the majority of key contact information (i.e., name, phone number, and address) was collected, with the exception of key staff name and email address, which should be incorporated into the tracking database to improve mergeability with CPUC program data.

Table 8. San Mateo Energy Watch Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
Customer Referrals			
Date of Referral	✓	✓	Not in CPUC Database
Business Type	✓	✓	Not in CPUC Database
Facility (Name)	✓	✓	✓
Phone	✓	✓	✓
Address	✓	✓	✓
Notes	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

SCE LGP Data Tracking

SCE stated in its response to the data request that “SCE does not track customer level information from LGP non-resource activities.” Despite this assertion, five out of 15 SCE LGPs had non-resource tracking data from 2018–2021 available for the evaluation team to review. Table 9 lists the SCE LGPs and identifies those that provided data related to non-resource activities in response to the evaluation team’s data request. As detailed in SCE’s most recent business plan filing and confirmed in the evaluation team’s interview with SCE staff, all of SCE’s LGP programs have been closed in anticipation of the launch of their new third-party public sector

resource acquisition program in the second half of 2022. Although it will not be possible to apply the findings and recommendations resulting from this assessment of SCE LGP tracking data to these closed programs, the evaluation team encourages SCE, as well as any future implementer of a market support program or a resource acquisition program conducting any significant amount of non-resource activities, to incorporate learnings from this assessment.

Table 9. Availability of SCE LGP Non-Resource Tracking Data

LGP	Availability of Non-Resource Tracking Data
City of Long Beach Partnership	Not Available – No Tracking Data
County of Los Angeles Energy Efficiency Partnership	Not Available – No Tracking Data
County of Riverside Energy Efficiency Partnership	Not Available – No Tracking Data
County of San Bernadino Energy Efficiency Partnership	Not Available – No Tracking Data
Desert Cities Energy Leader Partnership	Not Available – No Tracking Data
Eastern Sierra Energy Leader Partnership	Not Available – No Tracking Data
Gateway Cities Energy Leader Partnership	✓
High Desert Regional Energy Leader Partnership	✓
Kern County Energy Leader Partnership	Not Available – No Tracking Data
North Orange County Cities Partnership	✓
San Bernadino Association of Governments	Not Available – No Tracking Data
San Gabriel Valley Energy Partnership	✓
San Joaquin Valley Energy Leader Partnership	✓
South Santa Barbara County Energy Leader Partnership	Not Available – No Tracking Data
Western Riverside Energy Leader Partnership	Not Available – No Tracking Data

The following subsections detail the evaluation team’s assessment of data completeness, quality, and mergeability of resource data for the SCE LGPs with available non-resource tracking data. The programs assessed include the Gateway Cities Energy Leader Partnership, the High Desert Regional Energy Leader Partnership, the North Orange County Cities Partnership, the San Gabriel Valley Energy Partnership, and the San Joaquin Valley Energy Leader Partnership.

Gateway Cities Energy Leader Partnership Tracking Data

The Gateway Cities Energy Partnership Program was a local government partnership including the Cities of South Gate, Norwalk, Downey, Lakewood, and Lynwood. The partnership worked to raise EE awareness, promoted long-term energy reduction goals within municipal building stock, and coordinated with partner cities to cross-promote utility residential and business programs. The partnership also completed targeted retrofit and retro-commissioning projects in municipal facilities and provided education, technical assistance, retro-commissioning services, design consultation, energy analysis of new construction and renovation project plans, identification of demand reduction projects, and energy conservation measure alternatives.

Table 10 describes the single non-resource database the evaluation team received from Gateway Cities Energy Leader Partnership via the SCE LGP data request.

Table 10. Gateway Cities Energy Leader Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Events/Retrofits
2018–2019 Resource and Non-Resource Activities	A mixture of municipal retrofits and non-resource activities including community events, targeted marketing, and education initiatives.	Non-Resource Events: 12 Municipal Retrofits: 15

The results of the evaluation team’s review of Gateway Cities Energy Leader Partnership data are summarized in Table 11. The tracking data includes a mixture of resource activities (i.e., municipal retrofits) and non-resource activities. The evaluation team found the data to be sufficient in completeness and quality for most fields except for utility customer account number, electric, and premise ID. As the evaluation team noted in the Year 1 and Year 2 studies, these excluded fields are often difficult to collect from non-resource activities and while not necessary for non-resource data collection, they can greatly improve the mergeability of non-resource data with CPUC program data. The evaluation team also found the Gateway Cities Energy Leader Partnership’s non-resource data did not contain attendee contact information for their marketing and education events but did provide contact info for the event partner. They also provided contact info for all municipal retrofits. We continue to recommend that LGPs and future public sector programs conducting marketing, education, training and outreach activities collect essential contact information such as name, address, phone number, and email for all attendees.

Table 11. Gateway Cities Energy Leader Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2019 Resource and Non-Resource Activities			
Customer Name	✓	✓	✓
Address	✓	✓	✓
Phone Number	✓	✓	✓
NR/R Activity	✓	✓	Not in CPUC Database
Date of Participation	✓	✓	✓
Utility Customer Account	No Data	✓	Not in CPUC Database
Electric SA	No Data	✓	✓
Premise ID	Not Complete	Inconsistent Format	✓
Additional Identifier	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

High Desert Regional Energy Leader Partnership Tracking Data

The High Desert Regional (HDR) Energy Leader Partnership is an LGP that served five local governments within San Bernardino County including the Cities of Adelanto, Barstow, Hesperia, and Victorville, and the Town of Apple Valley. Implemented by the SJVCEO, the HDR Partnership identified opportunities to improve EE in municipalities, offered customized incentives for municipal projects, and conducted EE trainings.

Table 12 details the only HDR Energy Leader Partnership non-resource database the evaluation team received in response to the data request.

Table 12. High Desert Regional Energy Leader Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served/Attendees
2018–2019 Marketing and Education Events	Attendance at various community and county employee events to provide marketing materials and information on PG&E offerings including CARE, Medical Baseline, ESAP, time of use rates, and power safety power shutoffs. The target audience for these events was young families.	505

Table 13 details the evaluation team’s assessment of the HDR Energy Leader Partnership’s marketing and education event database. The structure of this database is representative of many datasets the evaluation team has reviewed over this three-year evaluation. It includes a detailed accounting of the non-resource activities conducted by the LGP and the base nature of those activities, but does not include participant contact information. Non-resource data collected using this methodology may be helpful for tracking key performance indicators but will restrict future assessments from conducting participant surveys to understand customer experience as well as prevent channeling analyses that attempt to trace non-resource participants to completed resource projects. The evaluation team continues to recommend LGPs and future public sector programs conducting non-resource activities incorporate the tracking customer contact information whenever possible.

Table 13. High Desert Regional Energy Leader Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2019 High Desert Marketing and Education Events			
Event Partner	✓	✓	Not in CPUC Database
Event Name	✓	✓	Not in CPUC Database
Date	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Location Title	✓	✓	Not in CPUC Database
Target Audience	✓	✓	Not in CPUC Database
Attendance Count	✓	✓	Not in CPUC Database
Program Materials	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

North Orange County Cities Partnership Tracking Data

The North Orange County Cities Energy Leader Partnership was a local government partnership implemented by The Energy Coalition (TEC) and comprised of the Cities of Brea, Buena Park, Fullerton, La Habra, La Palma, Orange, Placentia, and Yorba Linda. Partnership activities focused on implementing EE projects in municipal

facilities, promoting EE in the community, establishing energy savings goals for energy retrofit of city-owned facilities, and identifying EE project scopes.

The evaluation team received a single North Orange County Cities Partnership non-resource tracking database from the data request response. Table 14 describes the activities detailed in the dataset.

Table 14. North Orange County Cities Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Attendees
2018–2019 Community Outreach Events Tracker	Event booths and presentations/support to municipal councils.	30,150

Table 15 describes the North Orange County Cities Partnership’s non-resource activity database reviewed by the evaluation team. In line with the recommendations found in the previously discussed LGPs, the evaluation team recommends consistent tracking of name, email address, and phone number for event attendees as well as address locations whenever possible. The evaluation team found the fields for select events were incomplete. These fields, particularly the education materials and EE starter kits, appeared to be important program performance indicators that would be useful in assessing progress towards program goals. The evaluation team also found inconsistent data quality for event locations and contact person, with some records not providing specific addresses or email/phone number for the listed contact person. We recommend future LGPs and public sector programs choose a limited set of non-resource activity tracking data fields based on their key program metrics, and standardize their data collection protocols to ensure data completeness and quality.

Table 15. North Orange County Cities Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2019 Community Outreach Events Tracker			
Month	✓	✓	Not in CPUC Database
Estimated Date	✓	✓	Not in CPUC Database
Category	✓	✓	Not in CPUC Database
City	✓	✓	Not in CPUC Database
Event Title	✓	✓	Not in CPUC Database
Event Location or Address	✓	Inconsistent Format	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Expected Attendance	✓	✓	Not in CPUC Database
Notes	Not Complete	✓	Not in CPUC Database
TEC Staff	Not Complete	✓	Not in CPUC Database
UP Assistance	✓	✓	Not in CPUC Database
Contact Person	Not Complete	Inconsistent Format	Not in CPUC Database
Cost	Not Complete	✓	Not in CPUC Database
Event Description	✓	✓	Not in CPUC Database
Education Materials	Not Complete	✓	Not in CPUC Database

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
Energy Efficiency Starter Kits	Not Complete	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

San Gabriel Valley Energy Partnership Tracking Data

The San Gabriel Valley Energy Leader Partnership was implemented by the San Gabriel Valley Council of Governments. The partnership identified opportunities for improving EE in the 29 cities of the San Gabriel Valley, offered customized incentives for municipal projects, and conducted EE training and outreach events to drive participation in SCE's core customized and deemed EE programs.

Table 16 lists the only San Gabriel Valley Energy Partnership non-resource activity database received in response to the data request, along with a description of the various activities recorded in the dataset.

Table 16. San Gabriel Valley Energy Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served
2018–2019 EASY Assessments & Go Green Participants	EASY Assessments are free energy assessments for residential households, that help identify opportunities to reduce energy usage and costs. EASY Assessments (Energy Assessment Screening for Your Home) include information about local rebates and incentives offered as well as a customized report with home efficiency project recommendations.	56

Table 17 shows the results of the evaluation team’s review of San Gabriel Valley Energy Partnership’s non-resource data. Although Table 17 indicates phone numbers and email address were not provided for all customers served, the partnership provided an impressive number of phone numbers (91%) and emails (80%) for non-resource participants. The partnership also provided customer names and addresses for all non-resource participants. Accordingly, the evaluation team found the San Gabriel Valley Energy Partnership non-resource data comprehensive and of high quality. Their inclusion of each customer’s date of participation is especially valuable for future assessments that may try to link non-resource participants with completed resource projects. Specifically, it will enable future evaluators to distinguish if a completed project was completed after participation in a non-resource project. The incorporation of this field into non-resource tracking data was a recommendation in the Year 2 LGP study.

Table 17. San Gabriel Valley Energy Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2019 EASY Assessments & Go Green Participants			
Customer Name	✓	✓	✓
Address	✓	✓	✓
Phone Number	Not Complete	✓	✓
Email Address	Not Complete	✓	✓
Type of Non-Resource Activity	✓	✓	Not in CPUC Database
Date of Participation	✓	✓	✓

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

San Joaquin Valley Energy Leader Partnership Tracking Data

The San Joaquin Valley Energy Leader Partnership, also known as the Valley Innovative Energy Watch (VIEW) Partnership, was an LGP between PG&E, SCE, SoCalGas, and local governments in Kings and Tulare Counties including the Cities of Avenal, Corcoran, Hanford, Lemoore, Dinuba, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake. Implemented by SJVCEO, the VIEW Partnership identified opportunities for improved EE in municipalities, offered customized incentives for municipal projects, conducted EE trainings, as well as hosted and participated in outreach events to drive participation in core EE programs.

The evaluation team received a single San Joaquin Valley Energy Leader Partnership non-resource tracking database from the data request response. Table 18 describes the activities detailed in the dataset.

Table 18. San Joaquin Valley Energy Leader Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Attendees
VIEW Marketing and Education Events	Attendance at various community and county employee events to provide marketing materials and information on PG&E offerings including CARE, Medical Baseline, ESAP, time-of-use rates, and power safety power shutoffs. Target audiences for these events included senior citizens, young families, and county employees.	Senior Citizens: 475 Young Families: 2215 County Employees: 4200 Total: 6890

Table 19 shows the results of the evaluation team’s review of the San Joaquin Valley Energy Leader Partnership’s non-resource activity. The evaluation team found the marketing and education events tracking data was well completed and of high quality. In line with recommendations for the previously discussed LGPs, the evaluation team recommends consistent tracking of name, email address, and phone number for event attendees as well as address locations for non-resource activities such as on-site audits, and site-specific analyses. Additionally, many large scale marketing and outreach events such as those listed in this tracking data are not necessarily direct counts of people who received marketing materials, but rather estimates of event-wide attendance. The evaluation team expects the actual number of customers engaged through these types of events to be a percentage of the recorded number of attendees. If these non-resource metrics are

going to be used by the next iteration of LGPs and public sector programs, the evaluation team recommends IOUs and implementing partners consider tracking more granular metrics such as the number of flyers handed out at the event, to get a more accurate estimate of customers engaged by the activity.

Table 19. San Joaquin Valley Energy Leader Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
VIEW Marketing and Education Events			
Event Partner	✓	✓	Not in CPUC Database
Event Name	✓	✓	Not in CPUC Database
Date	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Location	✓	✓	Not in CPUC Database
Target Audience	✓	✓	Not in CPUC Database
Attendance Count	✓	✓	Not in CPUC Database
Types of Program Materials	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

SCG LGP Data Tracking

Table 20 lists the SCG LGPs that were able to provide non-resource activity related data in response to the evaluation team’s data request. Five out of six SCG LGPs had non-resource tracking data from 2018–2021 available for the evaluation team to review. As detailed in SCG’s most recent business plan filing and confirmed in the evaluation team’s interview with SCG staff, all SCG’s LGP programs have been closed in anticipation of the launch of their new regional third-party public-sector market support program in the second half of 2022. Although it will not be possible to apply the findings and recommendations resulting from this assessment of SCG LGP tracking data to the closed programs, the evaluation team encourages SCG and the future implementer of this new public sector program to incorporate learnings from this assessment just as PG&E was able to apply the Year 2 study findings and recommendations into their new third-party LGP programs.

Table 20. Availability of SCG LGP Non-Resource Tracking Data

LGP	Availability of Non-Resource Tracking Data
Orange County Cities Partnership	✓
San Bernadino Regional Partnership	✓
San Luis Obispo County Partnership	Not Available – No Tracking Data
South Bay Cities Partnership	✓
San Joaquin Valley Partnership	✓
West Side Cities Partnership	✓

The following subsections detail the evaluation team’s assessment of data completeness, quality, and mergeability with resource data for the SCG LGPs with available non-resource tracking data. These programs include the Orange County Cities Partnership, the San Bernadino Regional Partnership, South Bay Cities Partnership, the San Joaquin Valley Partnership, and the West Side Cities Partnership.

Orange County Cities Partnership Tracking Data

The North Orange County Cities (NOCC) Energy Partnership was an LGP focused on achieving energy savings and behavior change in residential, non-residential, and municipal sectors. The NOCC Energy Partnership was implemented by TEC and served the eight cities of Brea, Buena Park, Fullerton, La Habra, La Palma, Orange, Placentia, and Yorba Linda. The partnership worked to discuss energy projects with city partners through various meetings and promoted and coordinated participation in the direct install program. They also provided program collateral for partner cities to share with residents at outreach events; distributed LGP email blasts for partner education and training and facilitated bi-annual partnership meetings and city check-in calls with partner cities. NOCC had annual therm savings targets that were achieved through municipal EE projects.

Table 21 details the only Orange County Cities Partnership non-resource database the evaluation team received in response to the data request.

Table 21. Orange County Cities Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Attendees
2018-2019 Partnership Meeting Attendance	Invited attendees and attendance list. Also included agenda and status on progress towards next energy leader level (municipal savings and other IDSM criteria achieved and needed to advance to the next level)	77

Table 22 provides the evaluation team’s assessment of the Orange County Cities Partnership’s non-resource data. Our review found that the 2018 sign-in sheets had perfect records in terms of the data quality and completeness of the participant names, email addresses and phone numbers but 2019 sign-in sheets did not include fields for attendee email and phone number. All tracking data provided in response to the data request were text files (i.e., PDF documents) detailing the meeting agenda, attendance, and key performance indicators being tracked.

Table 22. Orange County Cities Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018-2019 Partnership Meeting Attendance			
Name	✓	PDF Format	✓
Organization	✓	PDF Format & Inconsistent	✓
Email	Not Complete	PDF Format	✓
Telephone	Not Complete	PDF Format	✓

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

San Bernadino Regional Partnership Tracking Data

The San Bernardino Regional Energy Partnership (SBREP) supported 13 cities within the San Bernardino Valley and Morongo Valley portions of the San Bernadino Coalition of Governments region. Participating cities included Chino, Chino Hills, Colton, Fontana, Highland, Montclair, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland and Yucca Valley. The primary objectives for the partnership included promoting integrated EE through identifying and assisting in the coordination of opportunities for cost-effective implementation of natural gas technologies. The partnership also coordinated community outreach and training efforts to educate consumers and promote programs in addition to identifying and offering financial packages that bundled practical utility incentives, with various monetary incentives aimed at improving the participation of residents, businesses, and local government agencies.

Table 23 lists the San Bernadino Regional Partnership non-resource activity databases received in response to the data request, along with a description of the activities recorded in each dataset.

Table 23. San Bernadino Regional Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served/Events
2018 Building Operator Certification (BOC) Training List of Attendees	Building Operator Certification (BOC) for energy efficiency city staff representatives.	24
2018–2019 San Bernardino Regional Energy Partnership Holiday Exchange Participants	LED lighting exchange and energy efficiency Kits distributed in Chino Hills, Fontana, Montclair, Rancho Cucamonga, Rialto, and Upland.	166
2018–2020 San Bernardino Regional Energy Partnership Events and Activities	Events, quarterly calls, monthly calls, one on one meetings, benchmarking, core program coordination, trainings.	22
2019 CARE and Energy Saving Assistance Program (ESAP) Application Distribution	List of SBREP Cities receiving SoCalGas brochures.	522

As shown in Table 24, the San Bernadino Regional Partnership provided multiple non-resource tracking databases including two complete and high-quality datasets containing customer contact information mergeable with CPUC program data. The partnership also provided a comprehensive list of events, trainings, and recurring meetings with participating municipalities as well as a list of municipalities they provided with CARE and Energy Saving Assistance Program brochures. The evaluation team found the quality and amount of non-resource activity data to be a fair improvement relative to LGP program data assessed in the Year 1 and Year 2 studies. Evaluation team recommendations include that future LGPs and public sector market support programs collect, at a minimum, this amount and quality of non-resource data to ensure they receive full credit for their non-resource activities. This data collection should include gathering key customer contact information (i.e., name, email, phone, and address if applicable) for any large initiatives, or events as well as a detailed list of activities performed throughout the year.

Table 24. San Bernadino Regional Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018 BOC List of Attendees			
First Name	✓	✓	✓
Last Name	✓	✓	✓
Job Title	Not Complete	✓	Not in CPUC Database
Company/Municipality	✓	✓	✓
Email Address	✓	✓	✓
Supervisor's First and Last Name	Not Complete	✓	✓
Supervisor's Phone Number	Not Complete	✓	✓
Supervisor's Email Address	Not Complete	✓	✓
Partnership	✓	✓	Not in CPUC Database
Notes	✓	✓	Not in CPUC Database
2018–2019 SBREP Holiday Exchange Participants			
Name (First, Last)	✓	✓	✓
Address (Street, City, Zip)	✓	✓	✓
Number of Lights	✓	✓	Not in CPUC Database
EE Kits (Yes/No)	✓	✓	Not in CPUC Database
2018–2020 San Bernardino Regional Energy Partnership (SBREP) Events and Activities			
Type of Activity	✓	✓	Not in CPUC Database
Name	✓	✓	Not in CPUC Database
Date	✓	✓	Not in CPUC Database
Notes	✓	✓	Not in CPUC Database
2019 CARE and Energy Saving Assistance Program (ESAP) Application Distribution			
Date of Distribution	✓	PDF Format	Not in CPUC Database
City	✓	PDF Format	Not in CPUC Database
Address	✓	PDF Format	Not in CPUC Database
Number of Brochures	✓	PDF Format	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

South Bay Cities Partnership Tracking Data

The South Bay Cities Energy Efficiency Partnership, implemented by the South Bay Cities Council of Governments (SBCCOG), provided integrated technical and financial assistance to help South Bay member cities effectively lead their communities to increase EE, reduce GHG emissions, increase renewable energy use, protect air quality, and ensure their communities are more livable, sustainable, and resilient. The program provided a performance-based opportunity from core programs and incentives for member cities to increase EE in local government facilities and their communities.

Table 25 lists the South Bay Cities Partnership non-resource activity databases received in response to the data request, along with descriptions of the activities contained in each dataset.

Table 25. South Bay Cities Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Customers Served/Attendees
2018 Energy Management Working Group Attendance Sheet	Meetings with enrolled municipalities to share PA program updates and discuss energy efficiency project planning and implementation.	10
2019–2020 Outreach Events Workshops	A list of various outreach events and workshops hosted and/or attended by partnership staff.	153
2020–2021 Virtual Events Workshops	A list of various virtual events and workshops hosted and/or attended by partnership staff.	63

Table 26 details the evaluation team’s assessment of the South Bay Cities Partnership’s non-resource tracking data. Most of their datasets cataloged the various physical and virtual events hosted or attended by partnership staff. The evaluation team was unable to discern the nature of most events listed as there was no description field provided in these datasets. The evaluation team recommends future LGPs and public sector market support programs include brief descriptions in their event tracking database. The partnership also provided a text file of high quality and completeness, fully capturing the key contacts from their Energy Management Working Group. As the evaluation team mentioned in the Year 1 and Year 2 reports, text files make it very difficult for evaluators to use reported contact information to assess non-resource activities. The evaluation team continues to recommend text files are only used supplementally and that data, especially contact information, is provided in an Excel or other workbook format.

Table 26. South Bay Cities Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018 EMWG Attendance Sheet			
Name	✓	PDF Format	✓
Title	Not Complete	PDF Format	Not in CPUC Database
Company	✓	PDF Format	✓
Phone	✓	PDF Format	✓
Email	✓	PDF Format	✓
2019–2020 Outreach Events Workshops			
Day of Event	✓	✓	Not in CPUC Database
"Date of Event"	✓	✓	Not in CPUC Database
2018 Event Description	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Location	✓	✓	Not in CPUC Database
Location Address	✓	✓	Not in CPUC Database
City	✓	✓	Not in CPUC Database
Zip	✓	✓	Not in CPUC Database

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2020–2021 Virtual Events Workshops			
Date	✓	✓	Not in CPUC Database
Name of Event	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Location	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

San Joaquin Valley Partnership Tracking Data

The Valley Innovative Energy Watch (VIEW) was an LGP supporting the local governments in Kings and Tulare counties including the city of Hanford, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake. Implemented by SJVCEO, the VIEW Partnership identified opportunities for improved EE in municipalities, offered customized incentives for municipal projects, conducted EE trainings, hosted and participated in outreach events to drive participation in core utility programs, and supported the California Strategic Plan.

The evaluation team received two San Joaquin Valley Partnership non-resource tracking databases in response to the data request. Table 27 describes the activities detailed in these datasets.

Table 27. San Joaquin Valley Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Attendees/Events
2018 CenCal Workshop Registration List	Attendee registration and attendance list for CenCal workshop.	53
2018–2020 Activities and Events	A list of various marketing, education and outreach events hosted and/or attended by partnership staff.	38

The results of the evaluation team’s review of San Joaquin Valley Partnership non-resource data are summarized in Table 28. Although the data completeness of the workshop participants was strong, the data was provided via text documents. As stated previously, text files make it very difficult for evaluators to use reported contact information to assess non-resource activities. The evaluation team also recommends the addition of phone number to non-resource data collection protocols for workshops and events where attendee contact information is collected as having multiple key IDs (i.e., name, phone, email, address, utility account ID) improves the linking of non-resource participants to resource participants. The activities and events dataset did not contain attendee contact info, but did provide useful descriptions and counts of the materials provided at each event. The evaluation team continues to recommend attendee contact information is collected from non-resource activities, whenever possible.

Table 28. San Joaquin Valley Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018 CenCal Workshop Registration List			
Initials	✓	PDF Format	Not in CPUC Database
Name	✓	PDF Format	✓
Local Government Partnership	✓	PDF Format	Not in CPUC Database
Organization	✓	PDF Format	✓
Title	✓	PDF Format	Not in CPUC Database
Email	✓	PDF Format	✓
2018–2020 Activities and Events			
Customer Name	✓	✓	Not in CPUC Database
Address	✓	✓	Not in CPUC Database
Phone	No Data	✓	Not in CPUC Database
Email	No Data	✓	Not in CPUC Database
Type of NR Activity	✓	✓	Not in CPUC Database
PPT in Folder	Not Complete	✓	Not in CPUC Database
Date of Participation	✓	✓	Not in CPUC Database
Event Time	✓	✓	Not in CPUC Database
Event Location	✓	✓	Not in CPUC Database
Target Audience	✓	✓	Not in CPUC Database
Attendance Count	✓	✓	Not in CPUC Database
Program Materials	✓	✓	Not in CPUC Database
Utility Customer Account ID	No Data	✓	Not in CPUC Database
Electric SAID	No Data	✓	Not in CPUC Database
Gas SAID	No Data	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

West Side Cities Partnership Tracking Data

The West Side Cities Partnership was an LGP focused on achieving energy savings and behavior change in residential, commercial, and municipal sectors. The partnership served the City of Beverly Hills, Culver City, Malibu, Santa Clarita, Santa Monica, West Hollywood, and TEC. In addition, the partnership had annual therm savings targets that were achieved through municipal EE projects. The partnership discussed and tracked progress of energy projects with city partners through various meetings. The partnership developed a SCG program toolkit to house resources and information to inform partner cities, chamber of commerce staff, and community stakeholders of programs that can support their residents and businesses. They also provided program collateral to partner cities to share during outreach events, as well as distributed partnership email blasts for partner education and training. The partnership facilitated bi-annual meetings, check-in calls with

the cities, and worked with peer implementers to host several webinars focused on therm savings opportunities for agency facilities.

Table 29 details the five unique West Side Cities Partnership non-resource databases the evaluation team received in response to the data request.

Table 29. West Side Cities Partnership Non-Resource Activity Tracking Data Descriptions

Non-Resource Activity Tracking Data	Description	# of Attendees/Events
2018–2021 West Side Event Tracker	A mixture of non-resource activities including community events, targeted marketing, and education initiatives.	21,856
2018 Santa Clarita Earth Arbor Day Energy Efficiency Starter Kits	EE Starter Kit Pledges provided at the Santa Clarita Earth Arbor Day.	47
2018 Santa Clarita Lunch n Learn Sign-in Sheet	Meeting with municipal staff to discuss to identify and develop energy efficiency projects.	23
2019 Energy Efficiency Resources for Residents During COVID-19 - Attendee List	Promotion of SoCalGas partnership resources and programs.	20
2019 Energy Efficiency Resources for Businesses During COVID-19 - Attendee List	Promotion of SoCalGas partnership resources and programs.	33

Table 30 provides the results of the evaluation teams’ review of the West Side Cities Partnership’s non-resource activity databases received in response to the data request. The partnership provided the most non-resource tracking databases out of the LGPs in this study. As was common with many of the LGPs assessed in this study, the databases provided included a mixture of high-level event tracking including descriptions of the events hosted or attended, as well as a sign-in and attendance sheets from select engagements. The evaluation team recommends future LGPs and public sector market support programs minimize storing data in physical text files and continue to expand non-resource data collection to include key customer contact information including name, phone number, email address, as well as the more difficult to collect address and utility account ID when applicable.

Table 30. West Side Cities Partnership Non-Resource Data Review Summary

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
2018–2021 West Side Event Tracker			
Month	✓	✓	Not in CPUC Database
Date	✓	✓	Not in CPUC Database
Category	✓	✓	Not in CPUC Database
City	✓	✓	Not in CPUC Database
Event Title	✓	✓	Not in CPUC Database
Intended Audience	✓	✓	Not in CPUC Database
Location or Address	✓	✓	Not in CPUC Database
Time	✓	✓	Not in CPUC Database
Expected Attendance	Not Complete	✓	Not in CPUC Database

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
Actual Attendance	Not Complete	✓	Not in CPUC Database
TEC Staff	Not Complete	✓	Not in CPUC Database
UP Assistance	Not Complete	✓	Not in CPUC Database
Contact Person	Not Complete	✓	Not in CPUC Database
Cost	Not Complete	✓	Not in CPUC Database
Event Description	Not Complete	✓	Not in CPUC Database
Education Materials	✓	✓	Not in CPUC Database
EE Starter Kits	✓	✓	Not in CPUC Database
Give Aways	✓	✓	Not in CPUC Database
Brochure Distribution	Not Complete	✓	Not in CPUC Database
Notes	✓	✓	Not in CPUC Database
2018 Energy Efficiency Starter Kit Pledge			
Name	✓	PDF Format	✓
Address	✓	PDF Format	✓
City	✓	PDF Format	✓
Phone	✓	PDF Format	✓
Email	✓	PDF Format	✓
Account Number	Not Complete	PDF Format	✓
2018 Santa Clarita Lunch n Learn Sign-in Sheet			
Name	✓	PDF Format	✓
Division	✓	PDF Format	Not in CPUC Database
Title	✓	PDF Format	Not in CPUC Database
2019 Energy Efficiency Resources for Residents During COVID-19 - Attendee List			
Name	✓	✓	✓
Email Address	✓	✓	✓
Job Title	✓	✓	Not in CPUC Database
Company Name	✓	✓	✓
Address1	Not Complete	✓	✓
Address2	No Data	✓	✓
City	✓	✓	✓
State	Not Complete	✓	✓
ZIP	Not Complete	✓	✓
Country/Region	Not Complete	✓	Not in CPUC Database
Phone number	Not Complete	✓	✓
Fax number	No Data	✓	Not in CPUC Database
Accepted	✓	✓	Not in CPUC Database
Rejected	No Data	✓	Not in CPUC Database
When registered	✓	✓	Not in CPUC Database
2019 Energy Efficiency Resources for Businesses During COVID-19 - Attendee List			
Name	✓	✓	✓

Non-Resource Activity Tracking Data Fields	Data Completeness ^a	Data Quality ^b	Mergeable with Resource Data ^c
Email Address	✓	✓	✓
Job Title	✓	✓	Not in CPUC Database
Company Name	✓	✓	✓
Address1	Not Complete	✓	✓
Address2	Not Complete	✓	✓
City	Not Complete	✓	✓
State	Not Complete	✓	✓
ZIP	Not Complete	✓	✓
Country/Region	Not Complete	✓	Not in CPUC Database
Phone number	Not Complete	✓	✓
Fax number	No Data	✓	Not in CPUC Database
Accepted	✓	✓	Not in CPUC Database
Rejected	No Data	✓	Not in CPUC Database
When registered	✓	✓	Not in CPUC Database

^a A check (✓) indicates the data field is populated sufficiently for each participant record in the dataset.

^b Refers to the quality of data in each field (e.g., standardized format across all records, spelling, consistency in entries within each field, etc.). A check (✓) indicates the data is of generally good quality for each participant record in the dataset.

^c A check (✓) indicates there is a similar field in the CPUC program database and that it is possible to merge program data with CPUC program data using the fields marked.

Segmentation Assessment

In recent years, program administrators have been increasingly challenged to maintain cost-effective portfolios that simultaneously meet various policy objectives. During in-depth interviews, implementing partners have consistently reported that much of the “low-hanging fruit,” such as indoor and outdoor lighting that has been used to offset less cost-effective measures is no longer eligible to be claimed as savings. Consequently, PAs have had to identify more cost-effective energy saving measures and scale back or eliminate programs that provide indirect energy savings but further many of the CPUC’s important policy goals. LGP programs have been especially impacted by these portfolio modifications as illustrated by their shrinking budgets and the consolidation of these programs across all IOUs.

On May 26th, 2021, the CPUC’s Decision 21-05-031 acknowledged these challenges, stating, “The traditional definition of resource programs, or programs which deliver energy efficiency savings, neglects the nuance that certain programs that deliver some energy savings have other primary objectives, such as supporting equity goals or long-term market success. These programs serve an important function, but because of their high costs, tend to weigh down portfolio-level cost effectiveness calculations.”¹¹ In an effort to “reduce the conflict between cost effectiveness and other equally or more important policy objectives,” Decision 21-05-031 adopted a new approach to segmenting EE portfolios into programs with the primary purposes of resource acquisition, market support, or equity. The Decision defines these segments in the following language:

- **Resource acquisition:** Programs with a primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems. Short-term is defined as during the approved budget period for the portfolio, which will be discussed further later in this decision. This segment should make up the bulk of savings to achieve total system benefit (TSB) goals.
- **Market support:** Programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness.
- **Equity:** Programs with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of CPUC’s ESJ Action Plan. Improving access to energy efficiency for ESJ communities may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2 and 5 in the ESJ Action Plan.¹²

Decision 21-05-031 requires all PAs to assign each EE program to one of these three segments for the purpose of portfolio reporting and tracking. IOU budget allocations to market support and equity programs will be capped at 30% of total budgets but will no longer be limited by the total resource cost (TRC) test. In the absence of strict cost-effectiveness limitations, the CPUC directed PAs to develop metrics and criteria for evaluating the progress of their market support and equity programs as well as to utilize the CAEECC to develop and vet metrics for these types of programs. The CPUC will evaluate the PA’s segmentation metrics in the 2024–2027 energy portfolio applications when deciding whether to approve the portfolio proposals.

In light of Decision 21-05-031, Energy Division staff asked the evaluation team to explore how the PAs plan to segment their LGP programs and track these new segmentation metrics. Additionally, the evaluation team

¹¹ CPUC D. 21-05-031, Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process, Page 11. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF>.

¹² CPUC D. 21-05-031, Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process, Page 14. <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF>.

was asked to recommend best practices for establishing and collecting metrics the Energy Division should consider when evaluating the LGPs on the segmentation metrics. The CPUC recognizes that each PA may be pursuing a different path to comply with the Decision, but also desires an evaluation-oriented perspective regarding the types of tracking and performance information it has directed the PAs to collect and report. This may go towards supporting Energy Division-sponsored retrospective evaluation efforts for future program years.

The evaluation team conducted in-depth interviews with staff from each PA to ascertain their perspectives and insight into how they plan to approach segmenting their LGP (and the public sector programs replacing LGPs) as well as setting segmentation metrics. As part of this process, the evaluation team also reviewed their recent 2022–2023 EE BBALs and 2024–2031 portfolio plan applications, which include their initial segmentation strategies. Based on these tasks, the following subsections provide an

- Overview of public sector segmentation strategies and metrics the IOUs have articulated to date,
- Assessment of the evaluability of these segmentation strategies and metrics for supporting CPUC-sponsored retrospective evaluation efforts, and
- Recommendations regarding best practices for establishing and collecting segmentation metrics.

Segmentation Strategies and Metrics

PG&E Segmentation

In its business plan application, PG&E identifies its primary market support segment goal as identical to the CPUC’s overarching segment objective of “supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness.”¹³ In the application, PG&E commits to pursuing the market support segment sub-objectives recommended by the CAEECC Market Support Metrics Working Group (MSMWG).¹⁴ Additionally, PG&E announces in its BBAL and business plan application that the eight LGP programs awarded third-party solicitations in 2020 are being assigned to the market support segment because their activities directly support the “demand”¹⁵ and “partnership”¹⁶ market support segment sub-objectives.¹⁷ They also note that many of the LGP programs have equity components embedded in their program design and based on the in-depth interviews conducted by evaluation team, these equity components are often reflected in the key performance indicators reported to PG&E.

Table 31 summarizes the PG&E segment-level metrics applicable to its LGP programs, as described in Table 3A-1 of PG&E’s business plan application. PG&E notes the methodology for calculating the metrics has not

¹³ D.21-05-031, p. 14.

¹⁴ The MSMWG was formed in 2021 to answer numerous questions related to the creation of metrics, including establishing sub-objectives for the segment and developing segment-level metrics applicable to each sub-objective. There were 16 organizations represented in the MSMWG including representatives from the IOUs, RENs, California Efficiency + Demand Management Council (CEDMC), Public Advocate’s Office at the CPUC (Cal Advocates), and others drawn primarily from CAEECC’s membership.

¹⁵ The MSMWG defined the demand sub-objective as “Build, enable, and maintain demand for energy efficient products, and services in all sectors and industries to ensure interest in, knowledge of benefits of, or awareness of how to obtain energy efficiency products and/or services.”

¹⁶ The MSMWG defined the partnership sub-objective as “Build, enable, and maintain partnerships with consumers, governments, advocates, contractors, suppliers, manufacturers, community-based organizations and/or other entities to obtain delivery and/or funding efficiencies for energy efficiency products, and/or services and added value for partners.”

¹⁷ MSMWG Final Report (10.6.21), Section 3: Primary Objectives and Sub-Objectives, pp. 13–14.

been established, and they intend to establish targets for segment metrics following the collection of the first two program years of data (or when a baseline has been set using reasonable proxy data). This principle for setting targets was one of two options proposed by the MSMWG. PG&E also states in their business plan that they intend to collaborate with the other PAs and stakeholders to develop an agreed-upon methodology for these metrics. Once established, PG&E plans to calculate the metrics with existing data or set up processes to collect the data necessary to set baselines and targets.

Table 31 PG&E Segment-Level Metrics for the Demand and Partnership Market Support Segment Sub-Objectives

Partnership Segment-Level Metrics	Demand Segment-Level Metrics
Number of EE customers/market actors reached through partner networks and partner communications channels	Number increase/decrease of inquiries and/or requests for information on EE products and services through relevant market support (MS) programs
Assessed value of the partnership by partners	% increase/decrease of inquiries and/or requests for information on EE products and services through relevant MS programs
% of partners that have taken action supporting EE	Number increase/decrease of customers receiving information, education, or outreach on EE projects, products, and services through relevant MS programs
Number of partners by type and purpose	% increase/decrease of customers receiving information, education, or outreach on energy efficiency projects, products, and services through relevant MS programs
Dollar value of non-ratepayer in kind funds/contributions utilized via partnerships	Survey to IOU Customers % of customer sample aware of EE product/service % of customer sample that is knowledgeable of EE product/service's benefits % of customer sample that is interested in obtaining an EE product/service % of customer sample that has taken action towards obtaining EE product/service % of customers who have obtained EE products/services

Table 32 details the program-level metrics each LGP proposed in their business plan filing. Sufficient data were available for them to propose targets, which are based primarily upon historical data or existing targets. During in-depth interviews with the evaluation team, PG&E staff explained these program-level metrics vary among LGPs because each has tailored their activities, priorities, and key performance indicators to their specific community's needs.

Table 32. PG&E LGP Market Support Program-Level Metrics and Targets

PG&E LGP	Number of active contacts per year	Number of active contacts converted into EE opportunities, installations, or retrofits per year	Number of benchmarking, GHG inventories and/or energy audit reports completed that led to EE installations per year
Central California Energy Watch	100	20	10
Central Coast Leaders in Energy Action	10	2	10
Energy Access SF	1000	50	25

PG&E LGP	Number of active contacts per year	Number of active contacts converted into EE opportunities, installations, or retrofits per year	Number of benchmarking, GHG inventories and/or energy audit reports completed that led to EE installations per year
Marin Energy Watch Partnership	5	3	4
Redwood Coast Energy Watch	300	150	150
San Mateo County Energy Watch	150	20	10
Sierra Nevada Energy Watch	70	8	18
Sonoma Public Energy	3	3	4

SCE Segmentation

SCE has shut down its LGPs to prepare for the entry of a single third-party implementer to run its forthcoming public sector resource acquisition program, the Local Public Sector program. This Local Public Sector program will serve a broader range of public sector customers than the LGP programs, including local governments, federal governments, special districts, tribal governments (non-residential only), public and private K-12 schools, private universities, private colleges, and trade schools. At the time of writing, SCE staff had contracted a vendor, but the final implementation plan for the program is contingent on the outcome of the recently submitted advice letter.

SCE staff revealed during in-depth interviews that portfolio segmentation had not been announced yet when they started the solicitation process for the Local Public Sector Program. The solicitation was initially set up to procure a resource program that could include non-resource activities to the extent that the third-party implementer could support them cost-effectively. SCE’s decision to replace its LGPs with a single public sector resource acquisition program was influenced by the realization that many of their partnerships—but not all—were not manifesting enough savings to justify the non-resource costs given the increasing difficulty of meeting cost-effectiveness standards. Over the last several years, SCE has been consolidating many of the partnerships together to continue providing the same services more cost-effectively while ensuring they remained tailored enough to still be a valuable resource to their communities. Consequently, there is not currently a market support program earmarked for the public sector. SCE staff indicated there are many market support programs they implement, such as workforce, education and training (e.g., SCE training centers) and the emerging technologies program, which have been utilized quite heavily by public sector customers and will continue to provide market support services.

Although there will not be a public sector-specific market support program, SCE is proposing the introduction of a new Public Equity program that will focus on implementing direct installation strategies designed to deliver energy savings to equity-targeted customers and to help them manage their energy use. However, SCE’s proposal is contingent upon the approval of their application. The current definition of hard-to-reach, which is specific to the residential and commercial sectors and does not include any criteria to categorize the public sector as hard-to-reach, may be an obstacle to approval of the Public Equity program. Interviews with implementing partners throughout all three LGP studies, have revealed a gap in coverage for municipal customers due to a variety of reasons including, but not limited to:

- Extended contracting processes, including longer timeframes for completion of inspections and verification, that results in longer EE project time horizons.

- Understaffed municipalities lacking the capacity to identify the right EE measures, programs and rebates within their agency's capital planning cycle.
- Higher price points than the commercial sector due to prevailing wage requirements, union contracts, public procurement process requiring larger contracts (resulting in the grouping of multiple measures), and additional oversight and transaction costs
- Travel distance between rural municipalities and EE implementers reduces access by often requiring the municipality to group multiple site visits and/or projects to make it cost-effective for the implementer.

Similar findings were found by the underserved working group, which concluded that “more rural counties are less likely to participate and those that do participate have lower investments and energy savings compared to more urban counties.”¹⁸ Expanding the definition of HTR to include municipalities that meet the existing HTR geographic criteria would incentivize resource acquisition implementers to focus on HTR public sector customers because of the increased cost-effectiveness adjustments. This would be a strong first step in beginning to fill the existing gap in public sector service.

Table 33 below summarizes the SCE portfolio wide equity metrics and indicators, which are based on the recommendations by the CAEECC working group. Table 34 details the public sector specific metrics. Both sets of metrics and indicators would be applicable to the new Public Equity program if approved. As part of the filing, the Public Equity program tentatively set the following 2024–2027 metrics:

- 6,120 equity-targeted public facilities and equipment or community projects served
- 2.8 GWh
- -3,681 Therms
- \$0.92 million TSB

Similar to PG&E, SCE estimates will be updated in the September 2023 true up advice letter after completion of solicitations.

¹⁸ UC Santa Barbara, Participation Gap Analysis Among Energy Efficiency Programs in California's Public Sector –DRAFT Report, July 2021. Page 3.

Table 33. SCE Portfolio Level Equity Metrics, Indicators and Targets

Metric/Indicator	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
Metric A7 Total number of contractors/workers implementing Equity segment programs	Contractors/ Workers	N/A	N/A	N/A	N/A
Indicator A8 Total percent of contractors and/or workers who are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity segment programs	Contractors/ Workers	N/A	N/A	N/A	N/A
Indicator A9 Total percent of companies/non-profits who are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., Black, Indigenous, and People of Color (BIPOC)-owned) with contracts to implement Equity segment programs	Companies	N/A	N/A	N/A	N/A
Metric B1 Expected first year bill savings in total \$ for equity targeted program participants	Dollars	N/A	N/A	N/A	N/A
Indicator B2 GHG reductions (tons) Equity All	Lifecycle GHG reductions (tons) Net	903	1,050	1,091	1,223
Indicator B2.1 GHG reductions (tons) Equity DAC	Lifecycle GHG reductions (tons) Net	N/A	N/A	N/A	N/A

Metric/Indicator	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
Indicator B2.2 GHG reductions (tons) Equity HTR	Lifecycle GHG reductions (tons) Net	N/A	N/A	N/A	N/A
Indicator B2.3 GHG reductions (tons) Equity Underserved	Lifecycle GHG reductions (tons) Net	N/A	N/A	N/A	N/A
Indicator B3 Total kWh savings Equity All	Lifecycle ex-ante kWh net	8,304,097	8,548,901	8,805,158	9,069,070
Indicator B3.1 Total kWh savings Equity DAC	Lifecycle ex-ante kWh net	N/A	N/A	N/A	N/A
Indicator B3.2 Total kWh savings Equity HTR	Lifecycle ex-ante kWh net	N/A	N/A	N/A	N/A
Indicator B3.3 Total kWh savings Equity Underserved	Lifecycle ex-ante kWh net	N/A	N/A	N/A	N/A
Indicator B4 Total kW savings Equity All	Lifecycle ex-ante kW net	2,901	2,986	3,076	3,168
Indicator B4.1 Total kW savings Equity DAC	Lifecycle ex-ante kW net	N/A	N/A	N/A	N/A
Indicator B4.2 Total kW savings Equity HTR	Lifecycle ex-ante kW net	N/A	N/A	N/A	N/A
Indicator B4.3 Total kW savings Equity Underserved	Lifecycle ex-ante kW net	N/A	N/A	N/A	N/A
Indicator B5 Total Therm savings Equity All	Lifecycle ex-ante Therm net	23,686	24,395	25,126	25,881
Indicator B5.1 Total Therm savings Equity DAC	Lifecycle ex-ante Therm net	N/A	N/A	N/A	N/A
Indicator B5.2 Total Therm savings Equity HTR	Lifecycle ex-ante Therm net	N/A	N/A	N/A	N/A

Metric/Indicator	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
Indicator B5.3 Total Therm savings Equity Underserved	Lifecycle ex-ante Therm net	N/A	N/A	N/A	N/A
Indicator B6 Community engagement activities during program design and to identify community needs and solutions	Counts	N/A	N/A	N/A	N/A
Indicator B7 Community engagement activities during program implementation	Counts	N/A	N/A	N/A	N/A
Indicator B8 Community engagement activities during program assessment	Counts	N/A	N/A	N/A	N/A
Indicator C1 Energy and climate benefits (monetized within TSB)	Dollars	\$2,963,824	\$3,111,886	\$3,324,733	\$3,546,259
Indicator C1.1 Health in “counts of participants receiving this benefit” until we can monetize.	Counts	N/A	N/A	N/A	N/A
Indicator C1.2 Comfort in “counts of participants receiving this benefit” until we can monetize.	Counts	N/A	N/A	N/A	N/A
Indicator C1.3 Safety in “counts of participants receiving this benefit” until we can monetize.	Counts	N/A	N/A	N/A	N/A
Indicator C1.4 Economic or other “non-energy benefits” (as proposed by the PAs or program) in dollars or “counts	Counts	N/A	N/A	N/A	N/A

Metric/Indicator	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
of participants receiving this benefit” until we can monetize.					

Table 34. SCE Public Sector Equity Metrics and Indicators

Metric/Indicator	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
Metric A.4 Total number of equity-targeted public facilities and equipment or community projects served by the Equity programs	All Participant Projects	1,460	1,510	1,550	1600
Indicator A.4.1 Equity – market support (ex: education, information, training, technical support, etc.)	Market Support Target Participant Projects	1,460	1,510	1,550	1600
Indicator A.4.2 Equity – resource acquisition (ex: energy saving action, etc.)	Resource Acquisition Target Participant Projects	N/A	N/A	N/A	N/A

SCG Segmentation

SCG is updating its public sector partnering approaches by closing LGP programs and replacing them with a new Regional Energy Pathways program. This new program is broader than the LGP model, covering all public sector customers and serving the entire SCG service territory. During the in-depth interviews, SCG staff noted the LGP model only accounted for half of the public sector population, because a lot of cities and counties were not involved in an LGP contract. The objective of the Regional Energy Pathways program is to engage with a wide range of public sector customers, identify their needs and opportunities, and connect them with various available programs including in-house SoCalGas programs, third-party resource acquisition programs (e.g., direct install), the upcoming large public sector program, and even REN programs if they have funding that can address a customer’s particular needs. The SCG implementation model is unique in that it will be implemented by SCG resources, which have extensive experience supporting public sector customers, but will also leverage regional ambassadors to identify challenges, engage customers and implement regional plans. SCG staff indicated in interviews that this approach will differ from the LGP model in that they will be procuring multiple local organizations in an area, particularly in rural regions or areas that have not previously been served by an LGP, to aid SCG’s regional program manager. These ambassadors will reduce unnecessary costs such as having to drive a couple hundred miles to visit a single customer, as well as enable SCG to tap into the ambassador’s knowledge of unique regional challenges. SCG staff stated this new approach will allow them to work directly with public sector customers and better understand their challenges, enabling SCG to better assist them in achieving their energy and climate goals.

SCG staff indicated during our interview that their organization was very active in the CAEECC working groups and at arriving at their recommended segmentation metrics. The new Regional Energy Pathways program is designated as a market support program and will track the metrics shown in Table 35 which originated from the CAEECC market support working group and were presented in Attachment A in Exhibit 3 of SCG’s business plan filing. SCG currently plans to develop targets for the metrics later, based on data collected over the 2022 and 2023 program years.

Table 35. SCG Market Support Metrics and Indicators

Metric/Indicator #	Description	Unit of Measure
Metric MS-1.1	Number and % increase/decrease of inquiries and/or requests for information on EE products and services through relevant MS programs	Percentage/Count
Metric MS-1.2	Number and % increase/decrease of customers receiving information, education, or outreach on EE projects, products, and services through relevant MS programs	Percentage /Count
Metric MS-1.3	% of customer sample aware of EE product/service (awareness)	Percentage
Metric MS-1.4	% of customer sample that is knowledgeable of EE product/service’s benefits (knowledge)	Percentage
Metric MS-1.5	% of customer sample that is interested in obtaining an EE product/service (attitude)	Percentage
Metric MS-1.6	% of customer sample that has taken action towards obtaining EE product/service (behavior a)	Percentage
Metric MS-1.7	% of customers that have obtained EE products/services (behavior b)	Percentage
Metric MS-2.1	Number of Contractors (that serve in PA service territory) with knowledge and training from relevant MS programs to provide quality installations that optimize EE	Count

Metric/Indicator #	Description	Unit of Measure
Metric MS-2.2	% of market actors aware of energy-efficient products and/or services that can be supplied to customers (awareness)	Percentage
Metric MS-2.3	% of market actors knowledgeable of energy-efficient products and/or services that can be supplied to customers (knowledge)	Percentage
Metric MS-2.4	% of market actors that are interested in supplying energy-efficient products and/or services to customers (attitude)	Percentage
Metric MS-2.5	% of market actors that have supplied energy-efficient products and/or services to customers (behavior)	Percentage
Metric MS-2.6	% of market actors aware of what is required to perform/ensure quality installation of energy-efficient products and/or services that optimizes EE savings (awareness)	Percentage
Metric MS-2.7	% of market actors knowledgeable of how to perform to perform/ensure quality installation of energy-efficient products and/or services that optimizes Eesavings (knowledge)	Percentage
Metric MS-2.8	% of market actors that are interested in performing/ensuring quality installation of energy-efficient products and/or services that optimizes EE savings (attitude)	Percentage
Metric MS-2.9	% of market actors that have performed/ensured quality installation of energy-efficient products and/or services that optimizes EE savings (behavior)	Percentage
Metric MS-3.1	Number of EE customers/market actors reached through partner networks and partner communications channels	Count
Metric MS-3.2	Assessed value of the partnership by partners	Unknown
Metric MS-3.3	% of partners that have taken action supporting EE	Percentage
Indicator MS-3.4	Number of partners by type and purpose	Count
Indicator MS-3.5	Dollar value of non-ratepayer in kind funds/contributions utilized via partnerships	Dollars
Metric MS-4.1	Number of new, validated technologies recommended to the California Technical Forum	Count
Metric MS-4.2	Number of market support projects (outside of ETP) that validate the technical performance, market and market barrier knowledge, and/or effective program interventions of an emerging/under-utilized or existing energy-efficient technology	Count
Metric MS-4.3	Cost-effectiveness of a technology prior to market support programs relative to cost effectiveness of a technology after intervention by the market support programs (% change in cost effectiveness)	CE
Metric MS-4.4	Percent market penetration of emerging/under-utilized or existing EE products or services	Percentage
Metric MS-4.5	Percent market participant aware of emerging/under-utilized or existing EE products or services	Percentage
Metric MS-4.6	Aggregated confidence level in performance verification by product, project, and service (for relevant programs)	Percentage
Indicator MS-4.7	Number of providers for performance verification services	Count
Metric MS-5.1	Participant data, e.g., credit score, census tract income, CalEnviroScreen Scores of areas served, zip code	Misc.

Metric/Indicator #	Description	Unit of Measure
Metric MS-5.2	Comparisons between market-rate capital vs. capital accessed via EE programs, (e.g., interest rate, monthly payment)	Misc.
Metric MS-5.3	Total projects completed/measures installed and dollar value of consolidated projects	Count
Metric MS-5.4	Ratio of ratepayer funds allocated to private capital leveraged	Ratio
Metric MS-5.5	Differential of cost defrayed from customers (e.g., difference between comparable market rate products and program products).	Dollars
Metric MS-5.6	% of market participants aware of capital access opportunities for investments in energy-efficient projects, products, and/or services (awareness)	Percentage
Metric MS-5.7	% of market participants knowledgeable about capital access opportunities for investments in energy-efficient projects, products, and/or services (knowledge)	Percentage
Metric MS-5.8	% of market participants interested in leveraging capital access opportunities for investments in energy-efficient projects, products, and/or services (attitude)	Percentage
Metric MS-5.9	% of market participants that were unable to take action due to access to capital or affordability of energy-efficient projects, products, or services (behavior)	Percentage

SCG staff stated they are still finalizing their metrics; however, some metrics will be similar to those used in past LGP programs. They noted this process has highlighted their need for better tracking of activities that were historically implemented by the LGP implementers. SCG staff also commented that the findings and recommendations from the Year 1 and Year 2 studies remain very relevant. The development of the segmentation metrics revealed the degree to which LGP tracking varied across implementers. It is important to standardize tracking among their Regional Energy Pathways program managers to ensure the full span of market support activities are captured accurately and conversions from market support activities to resource acquisition can be tracked. SCG is actively trying to identify which market support activities and data points are most appropriate to track now to enable them to connect the dots between these activities and a clear action, such as a rebate, taken after their engagement.

SDG&E Segmentation

SDG&E is closing its local government partnerships and is currently mid-solicitation for a third-party resource acquisition program, the Local Government Customers Program, that will cover all local government agencies within their territory. This new local government program will not be offering climate or energy action planning support, which was a previous centerpiece of SDG&E’s LGP programs, but they do anticipate the program will offer select non-resource activities, such as benchmarking and audits.

Like SCE, SDG&E reported they were already mid-transition when Decision 21-05-031 directed the PAs to segment their portfolio among resource acquisition, market support, and equity programs. By the time the Decision was approved, SDG&E was very close to filing their 2022–2023 BBAL, which included the new Local Government Customers program. Consequentially, SDG&E didn’t have the ability to consider shifting to a Market Support or Equity program solicitation due to the timing of the decision.

Most of the data they will be collecting is in line with their resource acquisition metrics. Their public sector specific resource acquisition metrics are shown in Table 36. As part of this transition from the previous LGP model to a local government resource acquisition program, SDG&E will standardize the new program with

many of the same data tracking tools used for their existing resource acquisition programs. SDG&E staff also mentioned they are considering evaluating their third-party implementer on select non-resource-based key performance indicators and metrics. The specifics of these indicators and metrics cannot be disclosed at this time due to the solicitation process.

In 2022 and 2023, SDG&E will be trying to look at the standard kW, kWh, therm, and TRC goals, as well as the correlation of how these metrics translate into the new TSB metric. These bridge years prior to 2024, when the resource acquisition programs begin to be evaluated on TSB, are going to be used to track how the program will perform under the new metric. Additionally, and more importantly, SDG&E will examine the program's achievements (e.g., how well they are able to serve the local governments) during the bridge years. Although SDG&E hopes to keep the program classified as resource acquisition, they also expressed they have no qualms about moving it, should it prove to not effectively serve the needs of local governments there.

Table 36. SDG&E Public Sector Resource Acquisition Metrics and Targets

Metric #	Description	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kW gross	3,834	3,806	4,171	4,464
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kW net	2,728	2,452	2,789	2,894
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kWh gross	24,587,219	26,375,669	21,504,801	24,765,897
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kWh net	17,716,663	16,341,110	13,599,832	15,392,739
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual Therm gross	350,191	1,078,819	1,303,390	1,309,266
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual Therm net	233,861	670,683	781,392	783,608
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kW gross	50,874	42,468	45,142	48,046
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kW net	35,966	27,495	30,498	31,427

Metric #	Description	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kWh gross	326,213,770	294,279,626	232,769,446	14,235,163
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kWh net	233,565,860	183,224,882	148,737,522	8,516,310
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante Therm gross	5,231,484	12,505,777	14,103,603	10,831,991
S1: Energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante Therm net	3,461,678	7,858,541	8,458,379	1,298
GHG	Greenhouse gasses (MT CO2eq) based on net lifecycle kWh and Therms savings, reported on an annual basis, incorporating average fuel/technology mix	Metric Tons of CO ₂ equivalent	3,671	5,472	5,875	6,326
D3: Depth of interventions per building	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net kW	7.56%	6.98%	6.29%	7.75%
D3: Depth of interventions per building	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net kWh	73608.44%	75541.10%	59511.49%	77704.76%
D3: Depth of interventions per building	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net Therms	768.42%	4511.54%	5398.75%	5922.04%
D5: Depth of interventions: Per square foot	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Annual net kW	0.00	0.00	0.00	0.00
D5: Depth of interventions: Per square foot	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Annual net kWh	0.03	0.03	0.03	0.03

Metric #	Description	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
D5: Depth of interventions: Per square foot	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Annual net Therms	0.00	0.00	0.00	0.00
W1: Water	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Annual net kW	N/A	N/A	N/A	N/A
W1: Water	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Annual net kWh	N/A	N/A	N/A	N/A
W1: Water	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Annual net Therms	N/A	N/A	N/A	N/A
P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Percent of Public Sector accounts participating in programs	Percentage	1.15%	1.19%	1.23%	1.28%
P2: Penetration of energy efficiency programs in terms of square feet of eligible population	Percent of estimated floorplan area (i.e., ft2) of all Public Sector buildings participating in building projects— estimate within +/-15% of sector-wide building area, +/-5% of project building area	Percentage	1.15%	1.19%	1.23%	1.28%
W1: Water	Percent of Public Sector water/wastewater flow (i.e., annual average Million Gallons per Day) enrolled in non-building water/wastewater programs— estimate within +/-20% of flow through eligible facilities (treatment facilities pumping stations), +/-10% of flow through project facilities	Percentage	N/A	N/A	N/A	N/A

Metric #	Description	Unit of Measure	2024 Target	2025 Target	2026 Target	2027 Target
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost (\$/kW)	292	304	211	234
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost (\$/kWh)	0.04	0.05	0.04	0.04
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost (\$/therm)	0.77	0.73	0.68	0.68
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost (\$/kW)	352	397	298	323
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost (\$/kWh)	0.05	0.06	0.06	0.06
LC: Cost per unit saved	Levelized cost of EE per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost (\$/therm)	0.93	0.95	0.96	0.94
F2: Investment in EE	Total program-backed financing distributed to Public Sector customers requiring repayment (i.e., loans, OBF)	Dollar	N/A	N/A	N/A	N/A
B3: Public Sector Benchmarking Penetration Calendar Year	Percent of Public Sector buildings with current benchmark	Percentage	N/A	N/A	N/A	N/A
EI4: Energy intensity per public sector building	Average energy use intensity of all Public Sector buildings	Btu	42	42	42	42
B4: Public Sector Square Foot Benchmarking Penetration in Calendar Year	Percent of floorplan area of all Public Sector buildings with current benchmark	Percentage	N/A	N/A	N/A	N/A

Evaluability of Segmentation Strategies and Metrics

The majority of the LGP portfolio has consolidated into new regional programs that serve all types of public agencies and cover the entirety of each IOU’s service territory, with the exception of PG&E’s revamped portfolio of third-party LGP programs. Based on the evaluation team’s IOU interviews, the leading reasons for these updates and consolidations were the difficulty of meeting cost-effectiveness thresholds and the desire to refresh the LGP model, which has had little change since its inception. As shown in Table 37, this portfolio of new public sector programs replacing the old model of LGPs consists of a blend of resource acquisition, market support, and equity segmented programs.

Table 37. Segmentation of LGP and LGP-Like Programs

IOU	LGP/LGP-Like Program	Resource Acquisition	Market Support	Equity
PG&E	Central California Energy Watch		✓	
	Central Coast Leaders in Energy Action		✓	
	Energy Access SF		✓	
	Marin Energy Watch Partnership		✓	
	Redwood Coast Energy Watch		✓	
	San Mateo County Energy Watch		✓	
	Sierra Nevada Energy Watch		✓	
	Sonoma Public Energy		✓	
SCE	Local Public Sector Program	✓		
	Public Equity Program			✓
SCG	Regional Energy Network		✓	
SDG&E	Local Government Customers Program	✓		

The evaluation team recognizes that Decision 21-05-031 placed the onus on the IOUs to segment their programs in accordance with their primary purpose and that the CAEECC market support and equity working groups “did not address all definitions or methodologies for the metrics so PAs should pursue the most cost-efficient and feasible approaches to this collecting data.”¹⁹ Based on the segmentation tasks of this study, the evaluation team found the IOUs have done a good job laying out their initial segmentation strategies and metrics in their business plan filings for their LGP and LGP-like programs. Additionally, all IOUs appear to be taking the necessary steps to reshape data collection protocols and practices to ensure they capture the required baselines to set segmentation metric targets and report on their resource acquisition, market support and equity metrics by 2024. Highlights of these steps include the following:

- PG&E has established a set of standardized key performance indicators across their partnerships, but each individual LGP has different targets based on their community’s unique needs. Although at the time of our interview with PG&E staff they had not yet started tracking market support metrics, the LGP implementing partners have been reporting their key performance indicators within their contracts monthly and PG&E staff have built a new dashboard, which they have been using to track these indicators at a very granular level over time. The evaluation team determined PG&E is very well

¹⁹ CAEECC Equity Metrics Working Group and Market Support Working Group Final Reports. Principle #2: Guidelines to Setting Metrics.

positioned to incorporate the segmentation metrics into this dashboard, creating a robust tracking and reporting system that will be highly useful for any future evaluations.

- SCG staff informed the evaluation team that the development of the segmentation metrics revealed the degree to which LGP tracking varied across implementers and the need to standardize tracking their efforts in the field across their Regional Energy Pathways program managers, to ensure they are accurately capturing the full span of market support activities. SCG is actively working to improve their data collection to meet the market support metric reporting requirements.
- SCE's Local Public Sector Program and SDG&E's Local Government Customers Program will be resource acquisition programs and heavily leverage their existing resource data collection and tracking processes, which are significantly more advanced than previous LGP non-resource data tracking given their frequent use in reporting.

The evaluation team also recommends that SCG as well as any future public sector market support or equity programs consider collaborating with PG&E and mimicking their key performance indicator data collection practices and reporting dashboard. In SCG's case, they need to continue rolling up data collected from their program ambassadors and regional program managers, similar to how PG&E is does so with data across its LGP implementing partners.

In future years the LGP and LGP-like programs listed in Table 37 should be measurable and assessable by third-party evaluators. Any segmentation metric evaluation efforts starting in 2022 or 2023 would likely be limited to an assessment of what data the respective IOUs have been able to collect since their filings. Once the IOUs have had the chance to finish collecting baseline data in 2022 and 2023, a full evaluability assessment of their baselines and ongoing data collection protocols will be feasible and should be conducted.

Lessons Learned from Implementing Partners

A central research task of this Year 3 study was conducting in-depth interviews with IOU and available implementing partner staff to understand their non-resource activities, how their data collection and tracking has changed over time, as well as how the LGP programs will comply with the new segmentation and statewide metrics from Decision 21-05-031. Unfortunately, due to the timing of this study no implementing partners from SCE, SCG or SDG&E were able to participate as their new programs were still in various phases of third-party solicitations and contracting. Therefore, the evaluation team sought to interview as many of PG&E's implementing partners as possible. Thanks to support from PG&E staff, the evaluation team was able to complete interviews with seven out of eight of their existing implementing partners.

The following subsections document the efforts of three LGPs to support the State's goals for achieving statewide carbon neutrality goals by leveraging their reputation as a trusted local resource for energy management to provide streamlined services to their public sector customers. The aim of this section is to illustrate the value of LGPs beyond what has been observable in tracking data, while identifying best practices and lessons learned that are broadly applicable to both other LGPs as well as other public sector programs. Key best practices and lessons learned include:

- The value of LGPs goes far beyond channeling non-resource customers into resource acquisition programs and this value isn't always captured in the data. The real value proposition is having someone knowledgeable about the EE portfolio, who can sit on the side of the public agency and help them navigate the complex and often siloed energy marketplace as well as helping them overcome the many unique problems that emerge along the path to project completion.
- The key to successfully converting projects in the public sector is taking a long-term perspective. Projects originate from the time spent building and maintaining relationships with public agencies. Credibility is the currency LGPs use to convince municipalities to pursue EE opportunities.
- Although the CPUC definition of hard-to-reach does not currently apply to the public sector, counties that meet the hard-to-reach geography criteria present significant barriers to getting municipal projects completed. In these rural areas it takes more effort to identify the right trade professionals and third-party implementers for each project. It's not uncommon for the initial meetings to go well, but end with the contractor backing out a few steps into the process. It often falls on the LGP to find the right match between a municipal project and trade professional and assemble a compelling value proposition for both parties to make the project work.
- Local governments are increasingly looking for fuel substitution measures to help them hit their climate targets. This has led to the popularity of the Government and K-12 resource acquisition program for municipalities, especially their direct install gas water heater replacement option. Expanding the menu of fuel substitution options is a highly requested feature of the program by LGPs.
- Select LGPs have been slowly refining their non-resource data collection systems and practices. A couple of LGPs have built out robust and expensive CRMs, typically by leveraging funding outside of LGP budgets because the associated costs would consume much of their budgets. There is still untapped value to be gained from a broader rollout of IOU-centric, standardized CRMs, and contractual data collection protocols for non-resource/market support activities. PG&E is taking meaningful steps in this direction, and their data collection protocols should be replicated in other public sector programs, and potentially even other market support and equity programs, if these programs are to be properly evaluated on their metrics, targets and key performance indicators.

Catalytic Nudging: Getting Municipalities Over the Hump

The Marin Energy Watch Partnership (MEWP) has worked with public agencies since 2004 on their municipal EE goals and their Climate Action Plans (CAPs). Over the years, they have worked with all 12 Marin jurisdictions to update the energy sections of their CAPs to ensure they are pursuing the most impactful goals and measures and to provide consistency across all jurisdictions. This can lead to increased collaboration and leveraging of programs and funding. For the most recent CAP updates, energy-related measures include the pursuit of EE and electrification measures in municipal facilities.

When implementer Willdan's Government and K-12 program launched the Heat Pump Water Heater (HPWH) initiative,²⁰ MEWP reached out directly to the city sustainability and maintenance staff, with whom they have cultivated relationships via past projects and the CAP development, to share the offer with them. Each contact received a customized email that reminded them of their electrification CAP measures and provided examples of facilities that might be eligible for the program based on a facility inventory that MEWP has built during its history.

Staff at the Marin County Community Development Agency that implements MEWP, knew through their ongoing work building relationships with the local governments, that every one of them had an electrification measure for their municipal buildings in their CAP. The launch of the Government and K-12 program was the intersection of preparation and opportunity. Marin County Community Development Agency staff reached out to all members of their sustainability planning and public works staff to show them how this new program could help them accomplish measures identified in their climate action plan for the lowest price point possible.

Given the trust that MEWP has built up over the years, the reference to their own CAPs, and the strength of the offer, the program has received a strong response. Seven of the twelve local governments are now in some phase of participation with the Government and K-12 program. This effort illustrates that the true value LGPs provide is having someone knowledgeable about the EE portfolio who can sit on the side of the public agency and provide guidance on the right questions to ask, and help creatively solve roadblocks as they emerge, LGPs are experts of "catalytic nudging". When a barrier starts to come up with a public agency, the LGP's role is to help the agency overcome it. Unfortunately, that value add is difficult to document.

Trade Professional Matching

The Sierra Nevada Energy Watch (SNEW) program serves 14 counties including Alpine, Amador, Butte, Calaveras, El Dorado, Lassen, Mariposa, Nevada, Placer, Plumas, Sierra, Sutter, Tuolumne, and Yuba counties. This represents more than 20% of PG&E's total territory, as well as the cities, K-12 schools, and special districts within those counties. Nine of the 14 counties, meet the HTR geographic definition. SNEW's biggest challenge is getting adequate access to EE offerings despite this wide rural territory. If SNEW cannot batch together enough projects, then their public sector and small business customers will not be adequately addressed.

A major component of this challenge is the constant struggle to source good trade professionals in the area. SNEW has had some underperforming trade professionals, and resultingly had to do significant damage control to not lose faith from their customers. According to staff at the Sierra Business Council (SBC) which runs the partnership, it is common for SNEW to have a good initial virtual meeting with a trade professional from PG&E's comprehensive list, but after they run through the audit process there is this reality check that it

²⁰ Willdan's Government and K-12 program is a program for public facilities, that has introduced a direct install gas water heater replacement with a 30-100 gallon heat pump water heater.

isn't worth it and the value proposition is not enough for them to complete the work. This is not limited to PG&E's list of trade professionals; it has also occurred with the Government and K-12 program which SBC praised as a program with staff that is very good at what they do.

SBC staff also told the evaluation team that customers, especially public agencies, are under capacity and that they just want to have one meeting, and have things proceed as efficient as possible. SBC is at risk of losing credibility with their clients, the public agencies, if they keep scheduling them with different trade professionals, who initially are open to working with the public agency, but then withdraws because it turns out the numbers don't work for them. SBC staff's solution has been to try to build processes to better vet the trade professionals they recommend and the projects they channel to PG&E's trade professionals and third-party resource acquisition programs like the Government and K-12 program. PG&E has a very comprehensive trade professional list, but they cannot recommend any of them or give SNEW any tips on who to use so they have been working their way through the list, vetting it for their specific territory.

SNEW has meetings with each trade professional to see who will serve their region, who serve both SMBs and public agencies, and identify the types of projects they can complete. They now have a collection of notes from their meetings with these trade professionals, and a spreadsheet to track all the trade professionals that appeared ideal for their region. Now when a customer comes to SNEW, they can look at what the customer's program needs are and if they match with the Government and K-12 program or another third-party program where they can be referred. If the customer is not a good fit for any of those programs, then SNEW will look at their internally curated list of trade professionals to see who is a good match for the customer. On the backend, SNEW then tries to batch three to five facilities together to improve the value proposition for the trade professional or third-party implementer to make the drive. SNEW has also heard similar issues from other LGPs with HTR geographic territories, so they have been making it a point to share their list of vetted trade professionals with other LGP implementing partners to see if they will also be a good fit for their service territories.

Recommending Energy Insight

The Central Coast Leaders in Energy Action Program (CC-LEAP) is a relatively new LGP that offers public agencies in Santa Barbara County and San Luis Obispo County a suite of customizable EE market support services. CC-LEAP is implemented by TEC, which has a long history of successfully implementing public sector programs. Before running CC-LEAP, TEC ran multiple LGP programs including the West Side Energy Partnership and the North Orange County Cities partnerships.

While running these previous programs TEC spearheaded a useful data tracking system; their staff would collect the unique project numbers from SCE and SCG to track actual conversion from non-resource activities to a resource program. If they were missing a unique project ID, TEC would manually follow up with the utilities and sometimes even the customer. This is exactly the type of high-quality non-resource tracking data that the evaluation team has been encouraging since the Year 1 LGP study. TEC's initial plan was to use a data collection system and methodology at CC-LEAP similar to what they have successfully used in the past; however, PG&E provides its LGPs with an IOU-centric, standardized CRM platform, Energy Insight, where implementing partners are required to enter leads, at minimum.

In the beginning of 2021, PG&E's program manager completed custom dashboards within Energy Insight for each LGP as well as a cumulative dashboard to show the portion of resource acquisition from leads developed and nurtured from LGP support and activities. PG&E tags leads within the system to indicate if a lead source is an LGP local government partnership. Resultantly, PG&E is now able to track leads from market support

through installation. Energy Insight is modeled off a dashboard the Redwood Coast Energy Watch developed and was highly recommended to be adopted more widely by the evaluation team in the Year 2 study.

Currently, each LGP is only required to report certain data through Energy Insight, such as project leads. Many LGPs have their own tracking systems and based on our interviews, it appears there are varying degrees of usage of the Energy Insight across the LGPs. The CC-LEAP program is a prime example. TEC staff praised Energy Insight, reporting the platform is significantly better than what they have seen and used in past programs. Specifically, TEC staff highlighted time savings achieved by requesting utility data for customers directly through Energy Insight and the ability to chat directly with the technical reviewer of a potential project. Additionally, it provides a detailed log of past and active projects, including active project records and financing records, which can be reviewed both by PG&E and CC-LEAP staff in real time.

“I think PG&E having the Energy Insight platform is really, really valuable. it provides direct access to the folks that are managing the handoff to the resource acquisition program. They even have a chatter feature that lets you chat with the technical reviewer directly. Rebecca and I have both worked on programs across various territories. And I would say that the energy insight platform is really user friendly. And I'm really glad that we have it. It makes it straight forward to get projects in and submit them.” - Rachel Pennington, TEC Program Manager

Funding Analysis

Background

LGPs have been contracted through California's IOUs for decades to provide a mixture of resource and non-resource EE initiatives. The sector began to expand in the early 2000s with programs such as SCE's Local Government Initiative Program in 2002,²¹ and SDG&E's Local Government Energy Efficiency (LGEE) program in 2004.²² During the 2006 to 2008 program funding cycle, the sector expanded to include 52 programs across the state with a three-year budget of \$214M (\$71M annually).

In 2008, local governments became one of nine market segments defined in California's Strategic Plan.²³ The overarching vision for local governments within the Strategic Plan was that "By 2020, California's local governments will be leaders in using energy efficiency to reduce energy use and global warming emissions both in their own facilities and throughout their communities." The Strategic Plan provided a menu of actions that allowed each local government to define goals and offerings tailored to the needs of its local community predicated on energy-related authorities and opportunities inherent in local governments. Beginning around 2009, the LGPs became the main Strategic Plan implementation mechanism for local governments and LGP program designs were refined, and funding was directed to implement Strategic Plan goals.

Historically, most LGPs have been defined at the subregional level, such as individual, or collections of, city or county governments though a few programs span larger territories, such as programs operated by councils of governments (COGs). LGPs remain the only significant EE subregional program structures even after the formation of CCAs in 2010 and RENs in 2013.

CCAs began operating in California in May 2010 when Marin County launched Marin Clean Energy (MCE). MCE is defined through a joint power agreement comprised of 34 cities and unincorporated areas located in 4 counties, including Contra Costa, Napa, Marin and Solano. As of June 2022, there are 20 CCAs operating throughout California, all of which are designated as load-serving entities for resource planning purposes.

In 2013, California's first REN, BayREN, was formed to advance a variety of EE goals, including Strategic Plan initiatives and legislative priorities such as AB32²⁴ and SB350²⁵. As of June 2022, there are three RENs operating in California and while the goals and objectives vary, the policy directives underlying the formation of RENs remain consistent, including:²⁶

- RENs should undertake programs the IOUs cannot or do not intend to do.
- RENs should target HTR populations.
- RENs should design programs with the potential to be scaled to larger geographic areas.

As implied in the name, RENs generally serve larger geographic areas. For example, BayREN defines itself as "a network of local governments partnering to promote resource efficiency at the regional level, focusing on

²¹ CALMAC Study ID SCE0232.01

²² CALMAC Study ID SDR0002.01; CPUC

²³ California Long Term Energy Efficiency Strategic Plan. California Public Utilities Commission September 2008

²⁴ AB-32 California Global Warming Solutions Act of 2006.

²⁵ SB-350 Clean Energy and Pollution Reduction Act of 2015.

²⁶ Regional Energy Networks Value & Effectiveness Study, July 28, 2015

energy, water and greenhouse gas reduction.”²⁷ Throughout this section of the report, we refer to the collective group of LGP, REN, and CCA programs as locally focused programs because their value proposition is generally predicated on knowledge of local market conditions and the ability to deliver program offerings that are better suited to local needs. Table 38 provides a comparison of selected attributes of locally focused programs.

Table 38. Locally Focused Program Characteristics

Structure	Geographically Defined by Cities and/or Counties?	Load Serving Entity?	EE Programs Rely on Public Purpose Program Funds?	EE Programs Use Other Funding Sources?
LGP	Yes	No	Yes	No
REN	Yes	No	Yes	Yes
CCA	Yes	Yes	Optional	Yes

Funding Trends for Locally Focused Programs

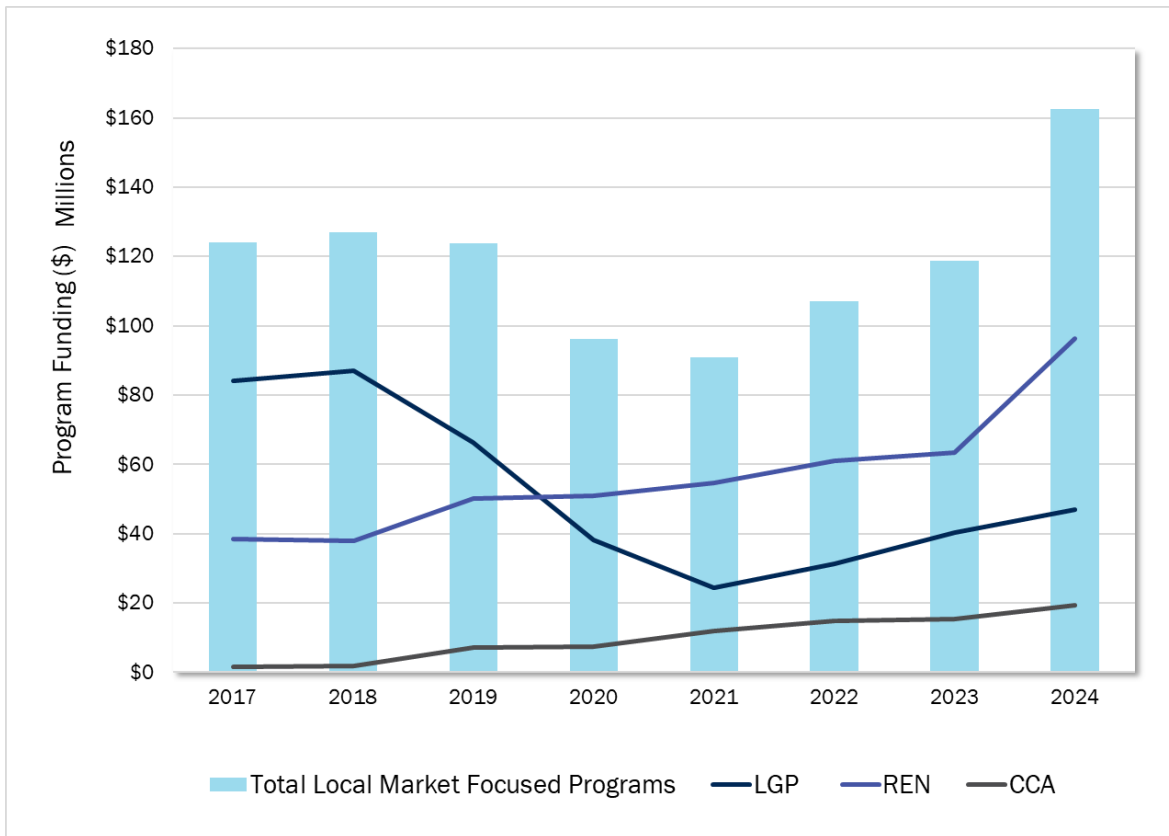
Over time, the amount and allocation of funding for locally focused programs changed as RENs began to demonstrate more capability to deliver regional value and CCAs began to deploy programs using public purpose program (PPP) funds under the auspices of the CPUC. Figure 1 shows the shifts in funding over time based on a review of the BBALs filed by all program administrators as of April 2022.²⁸ This figure also shows the reduction in funding for LGPs, declining by about 75% between 2018 and 2020, with a slight increase in funding forecast starting in 2021 through our analysis horizon of 2024.

This shift in funding largely reflects Decision 19-12-021. The Decision noted trends related to the proliferation of CCAs, as well as challenges for all PAs putting together cost-effective portfolios, and also identified the increasing geographic overlap between CCAs, LGPs, and RENs.

²⁷ <https://www.bayren.org/about>. Accessed June 15 2022.

²⁸ Available at <https://cedars.sound-data.com/filings/list/>, accessed April 2022. This included an analysis of approved budget for program years 2017 through 2021, and budgets under review for program years 2022 through 2024,

Figure 1. Locally Focused Program Funding Trends



Decision 19-12-021 clarified the shifting program priorities and raised issues regarding the role of LGPs going forward, including:

- Most parties commenting on Decision 19-12-021 argued, “RENs are actually increasingly appropriate, or more necessary, because of the evolving nature of the energy efficiency and energy landscape generally in California. They also point out that only a small number of CCAs have offered energy efficiency programs so far. In addition, LGPs are being reduced in budget, and in some cases eliminated altogether. Thus, these parties emphasize the increasing importance of RENs.”²⁹
- The Decision states that “We [the CPUC] also agree with the numerous parties who pointed out in their comments that the importance of RENs may increase as budgets and roles for LGPs are shrinking within the utility portfolios for multiple reasons. Meanwhile, we remain optimistic that there is a unique and appropriate role for local government entities in the oversight and delivery of energy efficiency programs. That role is distinct from utilities, CCAs, or third parties. The particular areas of unique capacities local governments may bring in the delivery of energy efficiency include, but may not be limited to, public sector buildings, issues surrounding building code compliance, and treating or delivering energy efficiency services to hard-to-reach customers.”³⁰

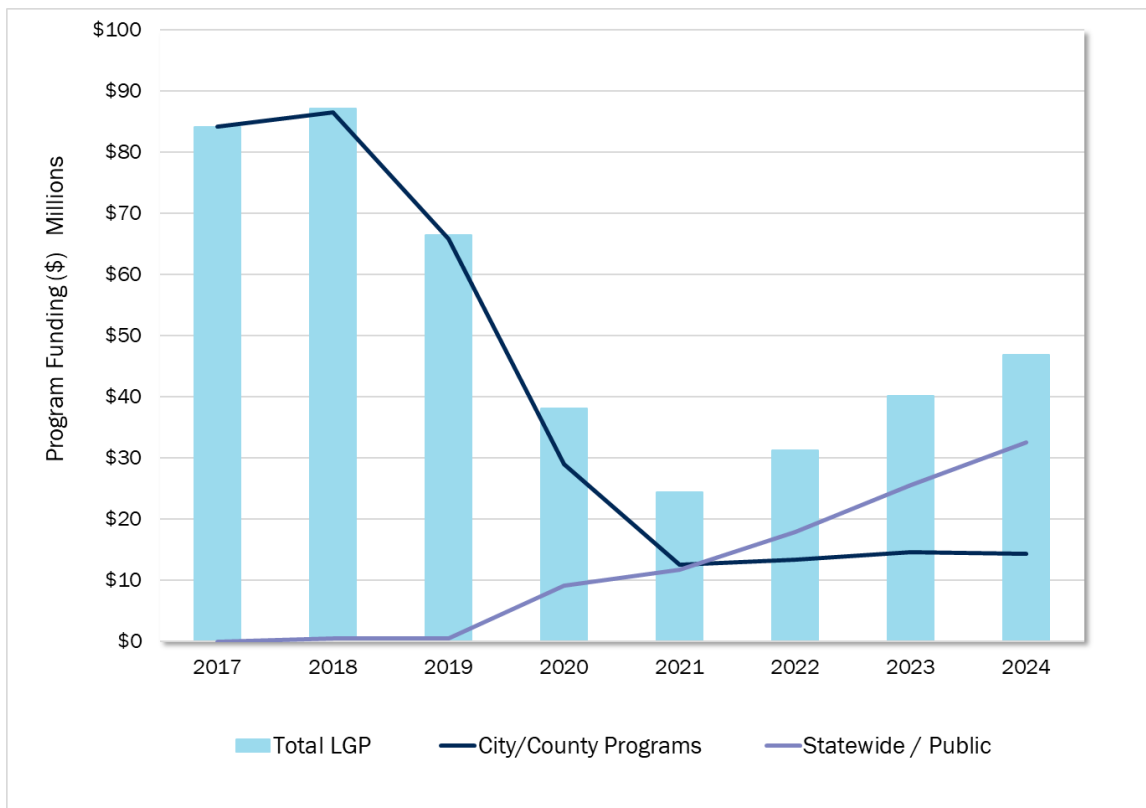
²⁹ D.19-12-021, page 9.

³⁰ D.19-12-021, page 18.

- Finally, Ordering Paragraph 4 states: “The Commission should make special provision for the role of local governments in the energy efficiency landscape either through RENs or LGPs, as appropriate and desired by individual local government entities.”³¹

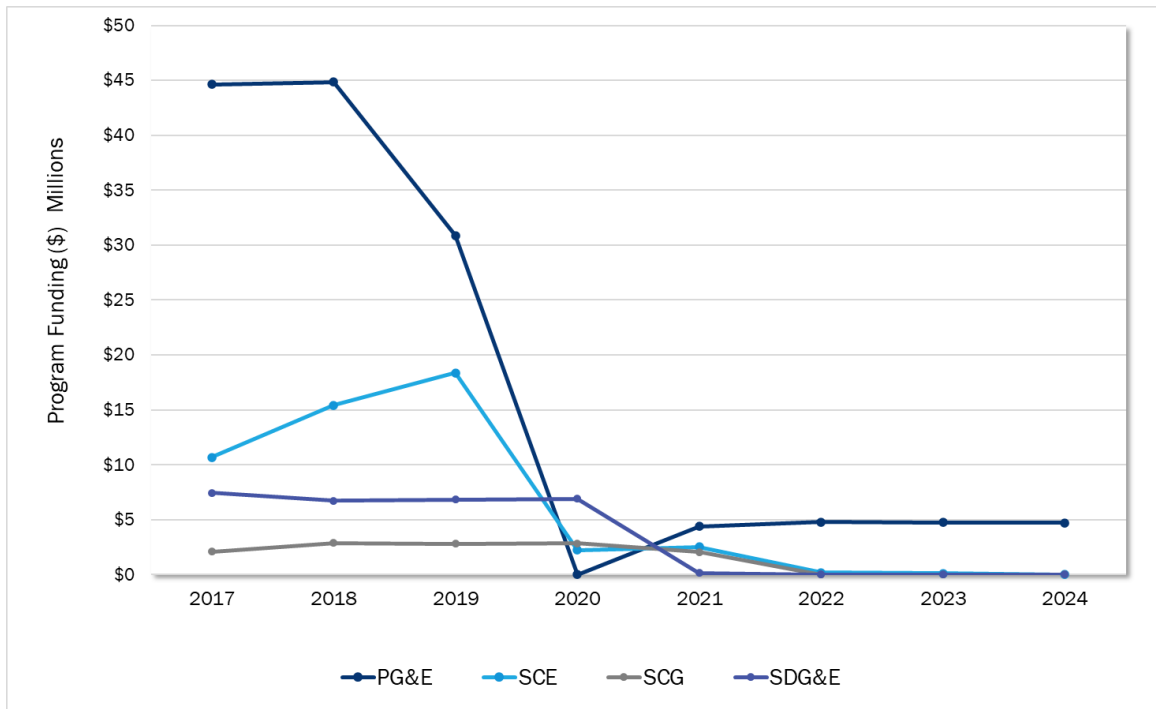
Programs targeting specific local governments will continue to operate but are moving away from programs that contract individual cities or counties such as PG&E’s Energy Watch or SCE’s Energy Leader programs. Going forward most LGP funding will be open to public facilities in general, not based on LGPs designed around specific cities or counties. Figure 2 highlights the shift away from programs serving cities or counties towards public sector–type programs. Among the IOUs, only PG&E will continue to implement LGPs defined by political subdivisions, as shown in Figure 3.

Figure 2. Funding by LGP Service Area



³¹ D.19-12-021, Ordering paragraph 4, page 84.

Figure 3. LGP Funding for Programs Defined by Political Subdivision



Locally focused programs have always included market support and equity initiatives; however, shifts in LGP funding away from contracts with cities and counties might result in gaps for both demographics and geographies being served. For example, an analysis of savings reported in CEDARS for 2016 and 2017 as reported in the year 1 LGP non-resource evaluation³² shows that direct installation projects accounted for over 91% of ex-ante savings claimed by the Fresno Energy Watch program³³, considerably higher than other LGPs. We attribute this high level of direct installation delivery, in part, to significant community engagement through the Central Valley Business Energy Tune-up program being heavily promoted by City staff during this time. The risks that may result from the loss of direct city engagement provided by LGPs during earlier program cycles are expressed in Finding 6 from the Year 1 study³⁴ that found:

Local governments are complex organizations and LGPs currently provide a coordinating role to make sure that program implementers are presented across multiple local government functions and internal operations. During our in-depth interviews, Implementing Partners expressed concern that if LGPs are defunded, there will be no internal coordinating entity and local government staff could be inundated with outreach from a large number of independent implementers and programs.

IPs also expressed concern that implementers generally pursue their own business interests and not necessarily the interests of the community. Additionally, there will be no entity that pre-screens vendor offerings or helps coordinate internal outreach across LG departments or community constituents, such as low income or hard-to-reach markets.

³² Assessment of Local Government Partnerships Final Report CPUC Contract Group B: Deliverable 22 Year 1 Study

³³ Analysis of direct install savings data for PG&E Fresno Energy Watch (kWh) provided in Table 36, page 138.

³⁴ Assessment of Local Government Partnerships Final Report CPUC Contract Group B: Deliverable 22 Year 1 Study, page 7 and page 6

A second concern expressed by some LGPs was that third-party implementers will not adequately engage small and rural cities due to the limited number or size of projects available and their distance from major metropolitan areas.

Given the emphasis Decision 21-05-031 placed on new metrics for measuring benefits across the EE portfolio's equity and market support programs, this report suggests potential metrics to measure the equitable distribution of locally focused program funding, whether they are individual LGP, CCA, or REN programs or any combination of these.

County Characteristics

Methodology

To develop metrics to gauge the potential impact from changes in funding across locally focused programs, we employed publicly available data sources to profile various equity, energy, and economic characteristics at the county level. In general, PG&E, SDG&E, CCA, and REN programs are organized by county and provide for a clean analysis, while SCE programs are less often defined by county lines. Sources used include:³⁵

- **CARE Eligibility: % of Households (HHs).** This value, derived from the annual CARE compliance filing³⁶, is the percentage of households eligible to participate in CARE at the county level. This is generally consistent with CES values but may be useful in defining LGP activities regarding low-income programs, such as participation in Energy Savings Assistance (ESA) direct installation programs, which is based on CARE program eligibility.
- **Cooling Degree Days (2020).** Cooling Degree Days (CDD) for 2020 provides the 30-year average CDDs from 1991–2020.
- **Cooling Degree Days (2050).** Cooling Degree Days (CDD) for 2050 provides the 30-year projected average CDDs from 2021–2050.
- **Per Capita Electric PPP Funds Paid.** This is an estimate of PPP funds derived from a county, based on CPUC estimates of countywide energy consumption and PPP revenue as defined in the AB67³⁷ annual report to California's legislators on the sources and use of PPP funds. This may serve as a metric indicating how successful LGPs are at helping constituents access PPPs for project use; for example, by comparing project counts or savings values at the program/portfolio level against constituent funds paid into the program.
- **Total Per Capita Locally Focused Program Funding (2022).** This is a summary of per capita funding available to deliver EE, net of non-LGP (i.e., deemed or custom) programs, based on:
 - LGP budgets,
 - REN budgets where RENs overlap with LGP coverage areas, and

³⁵ Estimated values for these metrics are provided in 9. Appendix B. County Characteristics.

³⁶ Compliance Filing of Pacific Gas and Electric Company (U 39-M), on Behalf Of Itself, Southern California Gas Company (U 904-G), San Diego Gas and Electric Company (U 902-M), and Southern California Edison Company (U 338-E), Regarding Annual Estimates of CARE Eligible Customers and Related Information.

³⁷ "Public Purpose Programs (PPPs) include Energy Efficiency, Energy Savings Assistance, and California Alternative Rates for Energy (CARE) among other programs like the Schools Energy Efficiency Program (SEEP), created pursuant AB 841." 2021 California Electric and Gas Utility Costs Report: AB 67 Annual Report to the Governor and Legislature, page 7.

- CCA budgets where RENs overlap with LGP coverage areas.
- **Change in Local Program Funding (2018 vs. 2022).** This is the change in locally focused program delivery funding between program year 2018 and program year 2022.
- **CES 4.0 Average of Poverty Percentile.** This value indicates the average county CES 4.0 poverty score based on census tracts data for each county. Higher CES values indicate increasing economic burden and will be used to assess program efforts to address HTR activities. This metric is used for program selection and may also be used to direct specific low-income or HTR research initiatives.
- **Median Annual Household Income (2020 dollars).** This is the estimate of median household income and may be useful to assess how successfully cities and counties are driving sustainability where income is a barrier to action.
- **Average Credit Score (FICO).** This metric provides a summary of the individual credit rating for county and city residents, based on FICO scores. This is an overall indication of the financial health of the underlying community and may be useful to assess how successfully LGPs are driving individuals to use of loans for sustainability projects, including OBF or CAETFA credit-based products such as REEL.

Table 39 through Table 41 list the LGPs receiving funding through 2022 and the corresponding average CARE eligibility of the territories they serve. Table 41, which lists PG&E funded LGPs, shows a variety of CARE eligibility across the programs due to program activity across several counties. Alternatively, Table 39, which provides CARE eligibility for SCE funded LGPs shows less variety of eligibility across the programs because SCE’s LGPs are heavily concentrated in Los Angeles County. SDG&E’s LGPs are all located within San Diego County where CARE eligibility is 28.7%.

Table 39. SCE LGPs – CARE % Households Eligible at the County Level

SCE	Average CARE Eligibility - % Households
City of Long Beach	35.2%
Gateway Cities	35.2%
North Orange County Cities	35.2%
San Gabriel Valley Energy Leader Partnership	35.2%
South Bay Energy Leader Partnership	35.2%
West Side Community Energy Leader Partnership	35.2%
Orange County Cities Energy Leader Partnership	26.1%
Ventura County Energy Leader Partnership	25.4%

Table 40. SCG LGPs – CARE % Households Eligible at the County Level

SCG	Average CARE Eligibility - % Households
San Bernadino Regional Partnership Program	40.7%
San Joaquin Valley Partnership	40.1%
South Bay Cities Partnership	35.2%
West Side Cities	35.2%
San Luis Obispo County Partnership	29.4%
Orange County Cities Partnership	26.1%

Table 41. PG&E LGPs - CARE % Households Eligible at the County Level

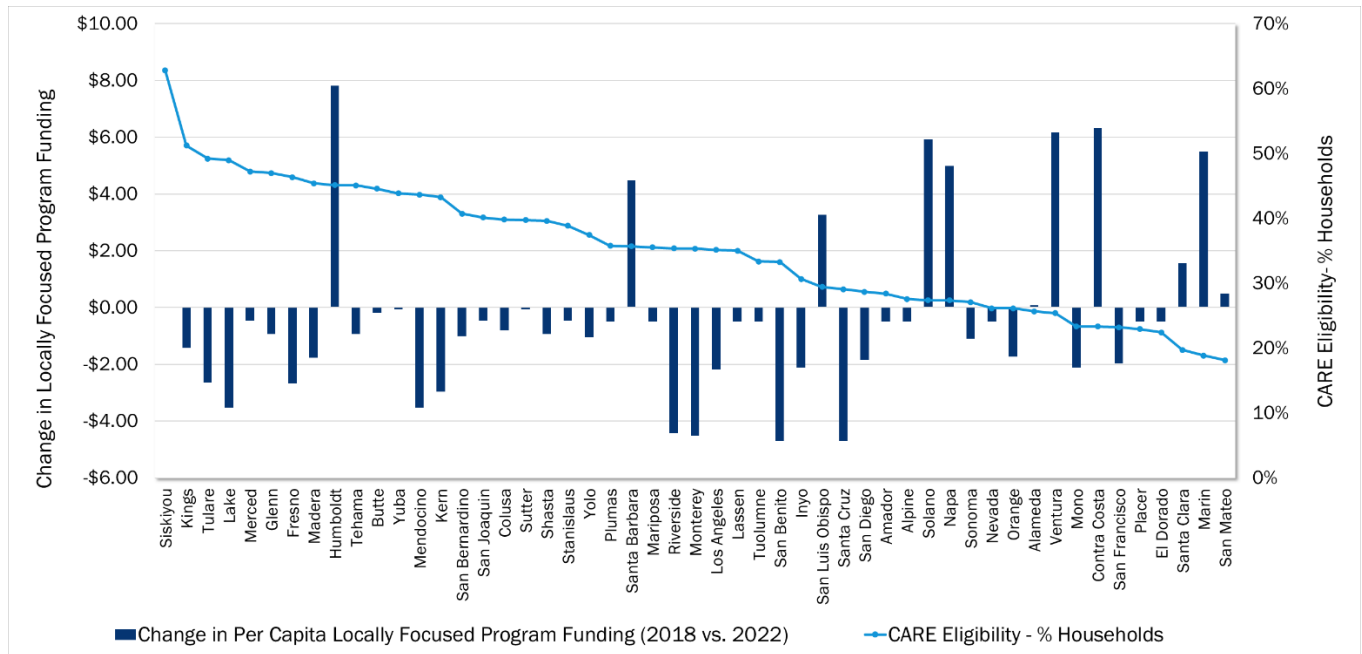
PG&E	Average CARE Eligibility - % Households
Redwood Local Government Partnership	45.1%
Central California Local Government Partnership	44.1%
Central Coast Local Government Partnership	32.6%
Sierra Local Government Partnership	29.7%
Sonoma Local Government Partnership	27.1%
San Francisco Local Government Partnership	23.2%
Marin Local Government Partnership	18.9%
San Mateo Local Government Partnership	18.1%

Local Program Delivery Funding and Economic Metrics

Based on the analysis of program funding referenced in Figure 1, the evaluation team determined per capita funding for locally focused programs by dividing the combined LGP, CCA, or REN budgets in 2022 by the populations of primary electric IOU customers being served. This ranged from a low of \$0 per capita for Yolo, Siskiyou, and other counties that do not have LGP, CCA, or REN coverage, to a statewide high funding level of \$12.09 for Marin County, which has access to programs operated by Marin Clean Energy, BayREN, and the Marin Local Government Partnership. Figure 4 provides additional analysis on funding trends defined in Figure 1 and reveals the largest decreases in funding for locally focused programs between 2018 and 2022 has occurred in counties with high CARE eligibility.

As the portfolio shifts away from programs targeting specific cities or counties towards public sector-type programs open to any city or county, additional metrics might be useful to determine the value these statewide and public programs are bringing to communities, including those with lower average income rates or cities and counties located in more rural locations where EE service providers can be scarce.

Figure 4. Change in Local Program Delivery Per Capita Funding and CARE Eligibility (% Households)



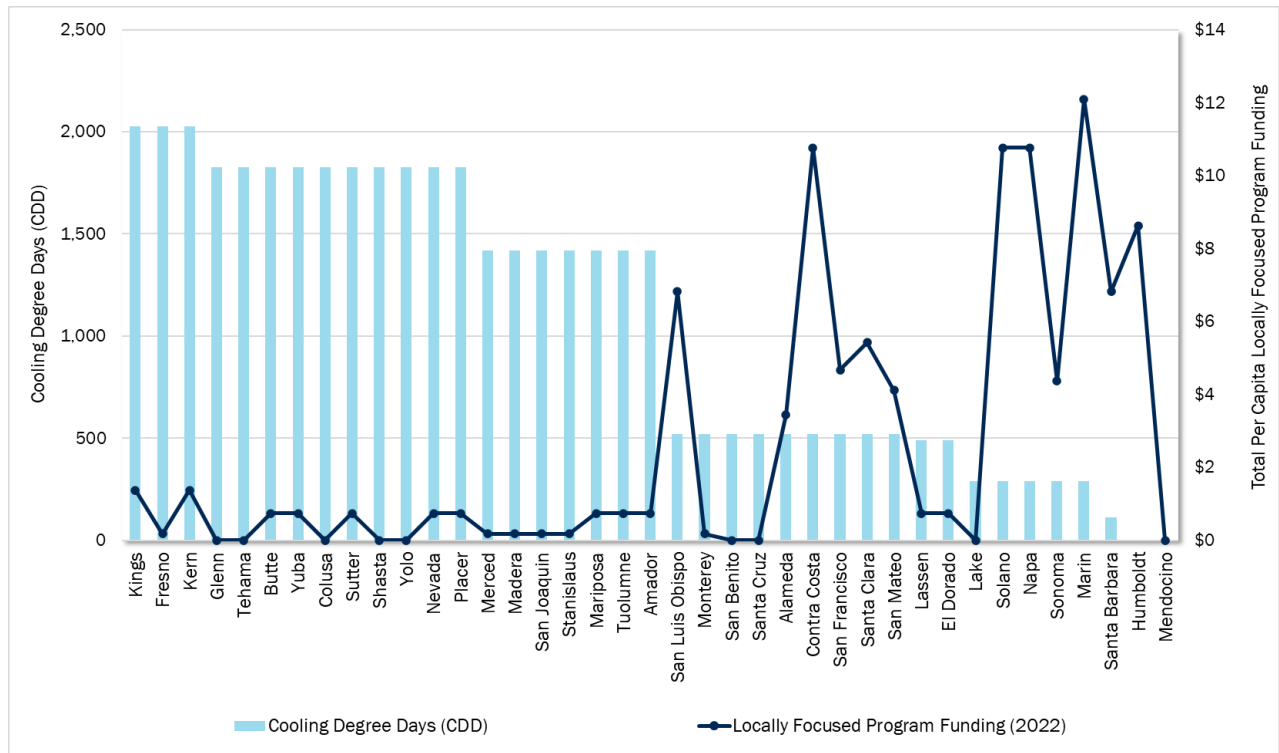
While per capita funding is a high-level estimate and may not recognize all program funding perspectives, such as internal program funding allocations, it can be useful for assessing the distribution of funds at the county and regional level. For example, Figure 5 shows the relationship between county level per capita funding for locally focused programs against the average CDDs in 2020 for counties served by PG&E.³⁸ This comparison shows lower levels of per capita funding for locally focused programs in counties with hotter climates, indicating funding may not align with areas of the state with high energy use for air conditioning, such as hot/dry climate zones 12, 8, 9, and 7. While there is likely no single reason that explains variations in funding from one region to another, these hot climate areas tend to be more rural, and companies focusing on developing and delivering DER innovations often cluster in larger population areas, such as the energy efficiency and green building firms located up and down located in Oakland’s “Negawatt Alley”.³⁹ It is likely that funding will flow to areas that have more capacity to deliver programs. Differing regional views on energy efficiency may also contribute. For example, as discussed at Finding 6, the CAEECC underserved working group concluded that “more rural counties are less likely to participate and those that do participate have lower investments and energy savings compared to more urban counties.”⁴⁰

³⁸ Projected changes in Annual Cooling Degree Days using a base temperature of 65 °F under a Medium Emissions (RCP 4.5) Scenario. From [Cooling Degree Days and Heating Degree Days \(cal-adapt.org\)](#), Accessed April 2022

³⁹ [041312-GreenOakland.indd \(oaklandnet.com\)](#)

⁴⁰Page 69.

Figure 5. Relationship Between Cooling Degree Days and Per Capita Local Program Funding (Counties served by PG&E)

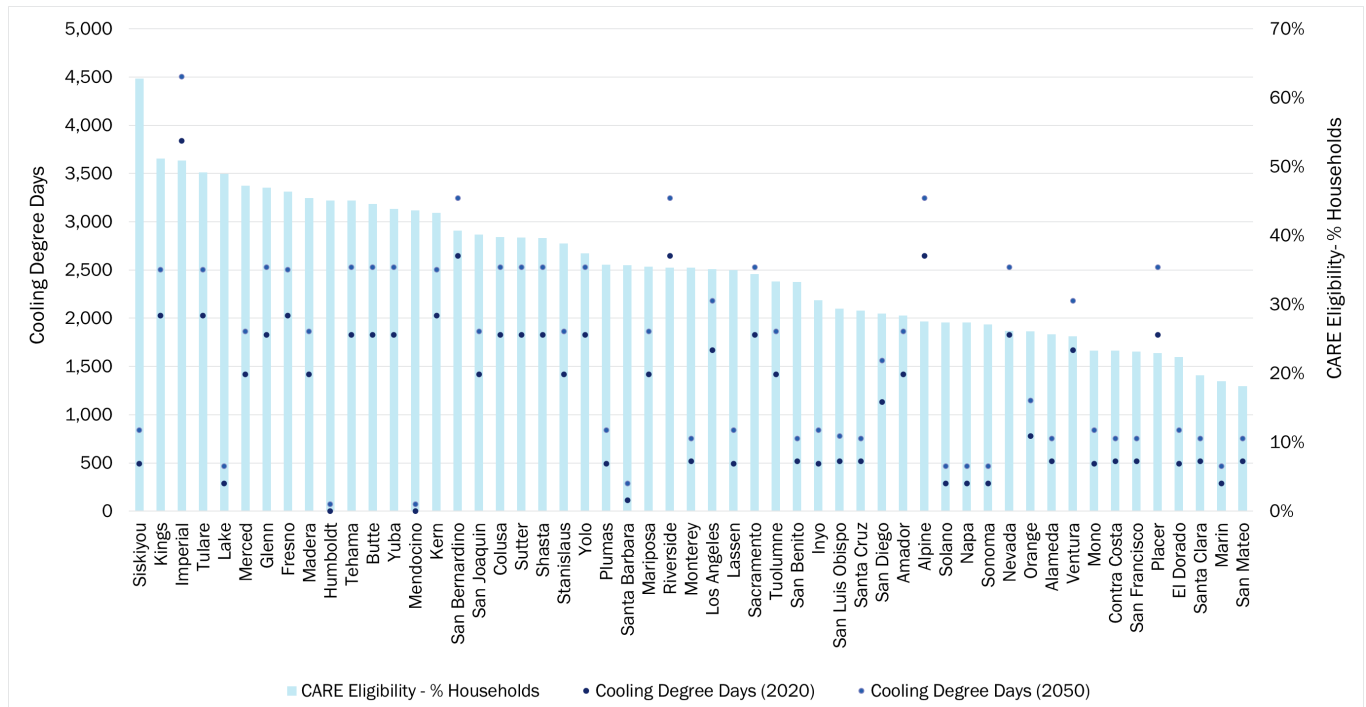


This potential misalignment may be exacerbated in coming years as climate changes result in additional air conditioning use. Figure 6 also compares CDDs in 2020 and 2050 to county level CARE eligibility and shows that by 2050 all California counties will have more CDDs due to climate changes. Table 42 summarizes this data and shows counties with an incidence of CARE-eligible households at 35% or greater, have greater risk of increased cooling demand compared to counties with lower incidence of CARE eligibility. Figure 6 also compares CDD in 2020 and 2050 to county-level CARE eligibility.

Table 42. Change in Cooling Degree Days by CARE Eligibility Cohort

Household CARE Eligibility Cohort	CDD (2020)	CDD (2050)	Increase
35% or Greater Eligibility	1,484	1,964	480
Less than 35% Eligibility	889	1,246	357

Figure 6. Cooling Degree Days 2020 vs. 2050



In addition to per capita funds for LGPs, the evaluation team also estimated electricity-related PPP funds paid by county residents. This provides a perspective on how much PPP funding is flowing out of a community through non-bypassable charges⁴¹ versus how much is flowing into a community in local program funding. The estimate of PPPs flowing out was developed by estimating the IOU-only electricity sales (kWh) at the county level multiplied by the average residential and nonresidential PPP rates as published in IOU tariffs as of May 2022. The PPP rates used, presented in Table 43, assume CCA and direct access customers are paying non-bypassable public purpose funds and that other load serving entities, such as POU customers, are not.

Table 43. PPP Rate Estimates by Utility

Utility	PPP Rate
PG&E	\$0.01898
SCE	\$0.01838
SDG&E	\$0.01917

Based on this analysis, Figure 7 shows our estimate of public purpose funds paid by each county compared to CDDs, affirming residents and businesses in hotter climates (i.e., higher CDDs) pay higher public purpose funds than counties located in cooler areas. Similar to Figure 5, this metric might be useful in assessing the allocation of funding as related to changing energy usage patterns related to climate change. The metrics

⁴¹ Non-Bypassable Charges means those charges on the electric bill defined in an electric company’s tariffs that apply to a customer regardless of whether they net-meter or not.

defined in the preceding analysis at Figure 5 showing lower levels of per capita funding for local market programs in counties with hotter climates, combined with the analysis at Figure 7 affirming the residents and businesses in hotter climates pay higher public purpose funds than do counties located in cooler areas implies that locally focused programs may be underfunded in areas with higher poverty and greater economic and health risks related to climate change. Table 44 summarizes various funding and climate change impact metrics by county level CARE cohorts.

Figure 7. Cooling Degree Days and Electric PPP Funds Paid

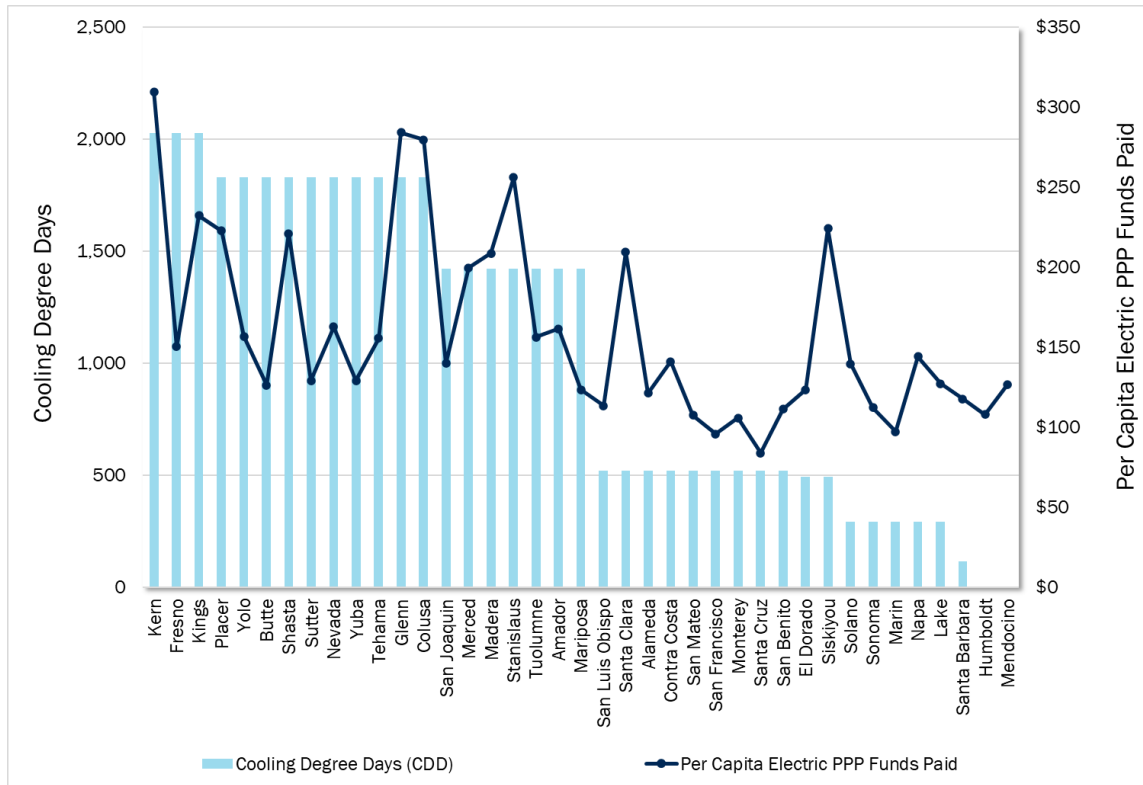


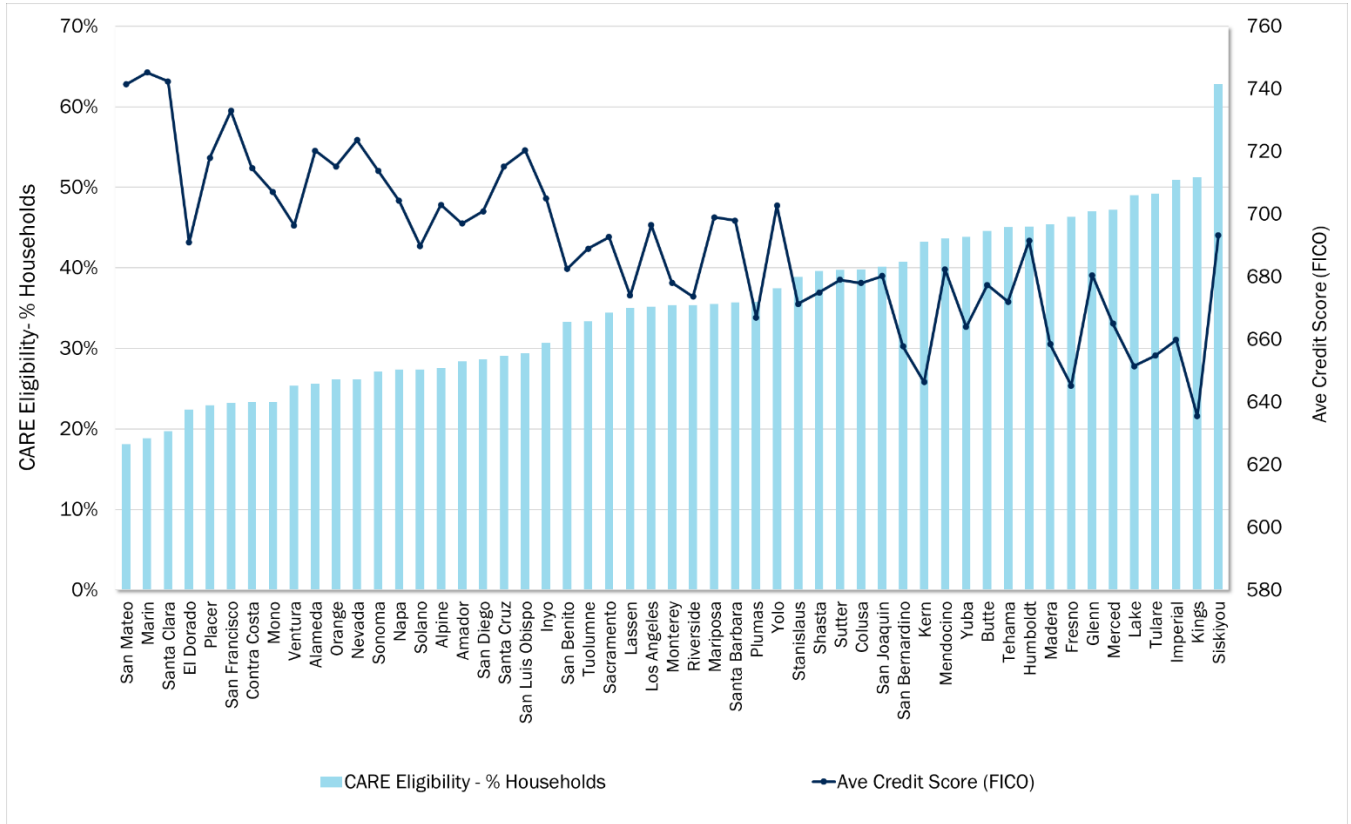
Table 44. Funding and Climate Change Impact Metrics by CARE Cohort

Household CARE Eligibility Cohort	Average Per Capita Public Purpose Funds Paid	Average Per Capita Locally Focused Program Funding	CDD (2020)	CDD (2050)	Increase in CDD
35% or Greater Eligibility	\$169	\$1.90	1,484	1,964	480
Less than 35% Eligibility	\$135	\$3.23	889	1,246	357

The CAEECC Equity Working Group came to a consensus on the metric to assess energy/cost savings in targeted populations: the expected first-year bill savings in total dollars for equity-targeted participants. Their consensus indicators included direct GHG, total kWh savings, total therm savings, and total kW savings from equity segment programs.

While the evaluation team was not able to review savings from equity segment programs due to the recent nature of this decision, the team did review various financial metrics that might be useful in assessing equity programs. Figure 8 compares average county consumer credit scores (FICO) to CARE eligibility, also indicating some correlation, as expected. This metric would be useful to assess the potential for FICO-based financing solutions, such as CAEATFA’s GoGreen Home program⁴² or PACE loans compared to alternatives that may not be FICO-based, such as some Pay as You Save structures, or the potential need for credit support programs, such as loan loss reserves initiatives, at the jurisdictional level.

Figure 8. Average CARE Eligibility and FICO Scores at the County Level



⁴² [CAEATFA REEL Contractor Information](#)

Findings and Recommendations

This section outlines findings and recommendations that came out of the research. Note that not all findings have an associated recommendation.

- **Finding #1:** Based on the non-resource data tracking and reporting assessment of select LGPs' non-resource activity data, the evaluation team saw improvements in the quality and completeness of the non-resource program data provided by the IOUs compared to the Year 1 and 2 studies, with many of the datasets containing fields mergeable with CPUC resource databases (e.g., contact name, address, phone number, email). The organization of the data was also improved, with the IOUs primarily providing the non-resource data via Excel workbooks rather than text documents (e.g., PDFs). However, the quantity of data provided continued to be quite low compared to the wide range of non-resource activities these LGPs conduct. The evaluation team finds the current non-resource tracking data does not fully reflect the full range of services and value being delivered by these programs.
- **Recommendation:** The evaluation team reiterates our previous recommendation from the Year 2 study, which is even more important now that all PAs', including IOUs', non-resource data will be more heavily scrutinized through the new market support and equity metrics and targets. The transition away from the old model of LGPs and into new third-party implemented public sector programs should be leveraged to improve non-resource data collection protocols and reporting. Newly selected public sector implementers, especially those running market support and equity programs, should adopt processes that facilitate the collection of non-resource participant information including, at a minimum, tracking customer names, phone numbers, email addresses, service addresses, dates of participation in the non-resource activity, and type of non-resource activity participated in (e.g., audit, technical assistance, benchmarking, etc.). We also recommend the collection of any associated customer IDs used by the IOUs in their data-tracking systems. As data quality and completeness improve, evaluators can more fully capture the attributable energy savings from non-resource activities. Analysis of this sort will go far to demonstrate to the CPUC the benefits of formerly non-resource activities and is necessary for tracking market support and equity targets in an evaluable way. Additionally, we recommend designing data systems to track market support and equity participants over a multi-year time frame to better understand how ongoing engagement with LGPs drives program participation. This is especially important in the public sector, as these projects typically take longer to install than similar projects in the commercial sector.
- **Finding #2:** In the beginning of 2021, PG&E completed custom dashboards within their IOU-centric and standardized Customer Relationship Management (CRM) platform, Energy Insight, for each LGP as well as a cumulative dashboard to show the portion of resource acquisition from leads developed and nurtured from LGP support and activities PG&E's LGPs are now required to report leads from their non-resource activities into their Energy Insight database. The recently built dashboard is capable of tracking how much resource acquisition activity is coming from leads that were developed and nurtured from LGPs non-resource activities. This is in addition to the LGP implementing partner's independent systems. Although a limited set of PG&E LGPs had non-resource data for us to assess in this study, the evaluation team expects these significant and standardized improvements to data collection and reporting will be able to be captured in any future assessments of PG&E non-resource data. The evaluation team is pleased to report that these new systematic changes appear to make significant progress on many of our Year 2 study recommendations, including (1) recommending the IOUs leverage the transition to third-party implementation to improve non-resource data collection protocols and reporting, (2) improving data quality and completeness, and (3) designing data systems

to track non-resource participants over a multi-year timeframe to better understand how ongoing engagement with LGPs drives program participation.

- **Recommendation:** PG&E should continue to refine their Energy Insight platform and the data collection protocols they have put in place. Once they have been able to collect a full year or two of data within the system, an evaluation of their process and data tracking should be conducted to distill insights for non-LGP public sector programs as well as other IOUs' market support and equity programs. In the meantime, other IOUs with public sector non-resource programs should pursue the development of similar platforms and protocols to improve the accuracy of matching non-resource and resource databases, as well as tracking key performance indicators.
- **Finding #3:** The majority of the LGP portfolio has consolidated into new regional programs that serve all types of public agencies and cover the entirety of each IOU's service territory, except for PG&E's revamped portfolio of third-party LGP programs. Based on the evaluation team's IOU interviews, the leading reasons for these changes were the difficulty of meeting cost-effectiveness thresholds and the desire to refresh the LGP model, which had seen minimal change since its inception in the early 2000s. This portfolio of new public sector programs replacing the old model of LGPs consists of a blend of resource acquisition, market support, and equity segmented programs. PG&E and SCG's LGP and LGP-like programs are designated as market support, while SCE and SDG&E's LGP-like programs are designated as resource acquisition. SCE also has proposed a Public Equity Program designated as an equity offering. This regional structure does not require local governments to be under contract with a specific LGP in order to participate in program offerings that target the public sector. This is a departure from the standard LGP program offerings operating since 2006, such as the PG&E's Energy Watch or SCE's Energy Leader programs that required a local government to sign up with a specific program. The intent of this 'open' regional design is to eliminate barriers, such as administrative costs and potential limitations imposed by needing to comply with a standard program design that doesn't fit local needs.
 - **Recommendation:** We agree that the new regional programs should increase participation by local governments in EE, including jurisdictions that never participated in the previous LGP programs. However, we also recommend that these new regional programs ensure that their regional offerings do not inadvertently dilute activities that build and maintain trust with local governments, but which do not directly or immediately lead to EE projects. As our interviews with implementing partners found that these types of services, such as offering easily accessible EE technical and planning support specific to the local community, go a long way in establishing the credibility of the program as one that local governments can rely on, which overtime creates a natural project pipeline for new EE project opportunities.
- **Finding #4:** The evaluation team finds the IOUs have done a good job laying out their initial segmentation strategies and metrics in their business plan filings for their LGP and LGP-like programs. Additionally, during in-depth interviews each of IOUs discussed their ongoing efforts to update and strengthen their data collection protocols and practices to ensure they can capture the required baselines to set segmentation metric targets and report on their resource acquisition, market support and equity metrics by 2024. PG&E has established a set of standardized key performance indicators across their partnerships, but each individual LGP has different targets based on their community's unique needs. Since SCE's Local Public Sector Program and SDG&E's Local Government Customers Program will be resource acquisition programs, they are heavily leveraging their existing resource data collection and tracking processes for these programs, which are more advanced than previous LGP non-resource data tracking given their frequent use in reporting. SCG staff reported that the development of their segmentation metrics revealed the degree to which their LGP tracking varied

across their implementers and are now actively working to standardize tracking across their Regional Energy Pathways program managers, to ensure they are accurately capturing the full span of market support activities.

- **Recommendation:** SCG's Regional Energy Pathways program, as well as any other future public sector market support or equity program administrators should consider collaborating with PG&E and mimicking their key performance indicator data collection practices and reporting dashboard. Key features of PG&E's Energy Insight that should be considered for adoption by other program administrators include the capability to request utility data for customers directly through Energy Insight, the ability to chat directly with the technical reviewer of a potential project, and the provision of a detailed log of past and active projects, including active project records and financing records, which can be reviewed in real time. Program administrators must also pair these improved dashboard capabilities with requirements for implementing partners to at a minimum enter leads from market support activities, as this enables the tracking of leads from initial market support activity through to installation.

- **Finding #5:** Based on our interviews with implementing partners throughout the last three LGP studies, it has become apparent that the commercial programs, which historically served municipalities, were unable to fully serve their unique needs. There is a gap in coverage for these customers due to a variety of reasons including, but not limited to:
 - Extended contracting processes, including longer timeframes for completion of inspections and verification, that result in longer EE project time horizons.
 - Understaffed municipalities lack the capacity to engage in the process of identifying the right EE measures, programs and rebates within their agency's capital planning cycle.
 - Higher price points in the municipal sector than the commercial sector due to prevailing wage requirements, union contracts, public procurement process requiring larger contracts resulting in the grouping of multiple measures, and additional oversight and transaction costs.
 - Travel distances between rural municipalities and EE implementers, which reduces access by often requiring the municipality to group multiple site visits and/or projects to make it cost-effective for the implementer.

- **Finding #6:** Based on our in-depth interviews with implementing partners, the evaluation team identified several best practices and lessons learned that are broadly applicable to both LGPs as well as other public sector programs, including:
 - The value of LGPs goes far beyond channeling non-resource customers into resource acquisition programs and this value is not always captured in the data. The primary value proposition is having someone knowledgeable about the EE portfolio, who works at or with a public agency and help them navigate the complex and often siloed energy marketplace as well as helping them overcome the many unique problems that emerge along the path to project completion.
 - The key to successfully converting projects in the public sector is taking a long-term perspective. Projects originate from the time spent building and maintaining relationships with public agencies. Credibility with public agencies is the currency LGPs use to convince these agencies to pursue EE opportunities.

- Although the CPUC definition of hard-to-reach (HTR) does not currently apply to the public sector, counties that meet the hard-to-reach geography criteria⁴³ face significant barriers to getting municipal projects completed. In these rural areas it takes more effort to identify the right trade professionals and third-party implementers for each project. It is not uncommon for the initial meetings to go well but end in the contractor backing out a few steps into the process because of logistical challenges. It often falls on the LGP to find the right match between a municipal project and trade professional capable and willing to perform the audit or upgrade. The LGP must also assemble a compelling value proposition for both parties to make the project work.
- Local governments are increasingly looking for fuel substitution measures to help them hit their climate targets. This has led to the Government and K-12 resource acquisition program being popular for municipalities, especially their direct install gas water heater replacement option. Expanding the menu of fuel substitution options is a highly requested feature of the program by LGPs.
- **Finding #7:** Our funding analysis of locally focused programs shows that residents and businesses in counties with warmer climate zones pay more in public purpose program funds (PPP) than constituents in cooler climate zones primarily because they use more energy and air conditioning as confirmed by California's 2019 residential appliance saturation study. For example, our analysis shows that in recent years Fresno County has 2,026 annual cooling degree days (CDD) and residents in that county pay roughly \$58 per capita in PPP funds for residential electricity usage. In contrast, Monterey County has 519 CDD annually and residents there pay roughly \$32 per capita in public purpose funds for residential electricity use during this same timeframe.

Most of California's warmer counties are located in the Central Valley and these counties also tend to have higher poverty rates. For example, 46.3% of households in Fresno County, located in the Central Valley, are eligible for California's Alternative Rate for Energy (CARE), compared to 35.5% of Monterey County households, a coastal county. How PPP funds are remitted to these counties may be a useful indicator of how these funds are addressing equity issues. Consider that direct installation programs often target low-income residents or hard to reach businesses, and energy savings and PPP funds paid for direct installation labor costs can be determined from data in the California Energy Data and Reporting System (CEDARS). Our analysis of annual data shows that, on average, in recent years Fresno County had per capita gross first year electricity savings of 8.73 kWh through direct installation programs, and PPP funds paid \$6.65 per capita for direct install labor cost. This is in contrast with Monterey County where direct installation programs realized gross first year savings of 1.76 kWh while \$1.69 in per capita funding from PPPs was paid for direct install labor cost. This example indicates that a higher poverty area is engaging in more direct installation activity, and that PPP funds are being received to cover additional labor costs.

Energy use in these hotter counties will also grow more rapidly over time because of climate change, potentially widening the difference in energy use for HVAC and the economics of how PPP funds are collected and remitted. Continuing our previous example, according to Cal-Adapt, Fresno County will increase from 2,026 CDD in 2020 to 2,503 CDD in 2050, an addition of 477 CDD. In contrast, Monterey County will increase from 519 CDD in 2020 to 752 CDD in 2050, an addition of 233 CDD or roughly 49% of the increase forecasted for Fresno. Examples of funding metrics that might be useful for tracking progress on equity and market support issues include:

⁴³ Areas other than the United States Office of Management and Budget Combined Statistical Areas of the San Francisco Bay Area, the Greater Los Angeles Area and the Greater Sacramento Area or the Office of Management and Budget metropolitan statistical areas of San Diego County. CPUC Resolution G-3497.

- The number of households eligible for CARE compared to average public purpose funds paid per household by residential customers.
- Climate change indicators, such as changes in cooling degree days (CDD) or heating degree days (HDD), at the regional, county or city level, compared to HVAC installation savings and end user rebate payment reported in CEDARS.
- County (or zip code) level analysis of direct install labor costs paid compared to poverty metrics found in CalEnviroScreen (CES) such as average poverty rates or average of housing burden.
- Annual budgets for locally focused programs compared to CARE eligibility or CES poverty measurements occurring within a program's service territory.

Appendix A. In-Depth Interview Guide

California Public Utilities Commission Energy Efficiency

Program Oversight and Evaluation of the Group B Sectors

Deliverable 22A – Local Government Partnership In-Depth Interview Guide

Introduction

1. Given the recent and ongoing changes to the LGP structure, can you please provide us with an overview of current and planned LGP offerings (including those that serve all segments) compared to previous years.
 - a Under these new program designs, how are your LGPs delivering energy savings? How are they channeling customers into energy efficiency programs (both your IOUs as well as other PAs' offerings)?

Portfolio Structure and Segmentation

2. Decision 21-05-031 calls for collecting data to report on the new single metric called the “Total System Benefit (TSB), which is an expression, in dollar terms, of the lifecycle energy, capacity, and GHG benefits, expressed on an annual basis.”
 - a What changes are you making (if any) to ensure appropriate tracking, calculation and reporting of TSB?
 - b How have you, if at all, made internal adjustments to account for the change to TSB? What was this process for this transition?

Decision 21-05-031 also calls for a new approach to segmenting energy efficiency program portfolios into programs whose primary purposes are:

Resource acquisition: Programs with a primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems

Market support: Programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building government partnerships, or moving beneficial technologies towards greater cost effectiveness

Equity: Programs with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission’s Environmental and Social Justice Action (ESJ) Plan. Improving access to energy efficiency for ESJ communities may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2 and 5 in the ESJ Action Plan.

While PA programs may serve multiple purposes in more than one segment, ultimately a program must be assigned to only one segment.

3. Decision 21-05-031 allows up to 30% of the IOU’s portfolio budget to be allocated for Market Support and Equity. How do you envision your portfolio of LGPs will allocate this amount for Market Support and Equity?
 - a **[If No]** What % of overall portfolio budget will be allocated for the segments?
4. What leads you to solicit the LGP programs this way? What was your experience developing your proposed segmentation?
5. What considerations or trade-offs need to be considered in doing so?
6. What drawbacks or benefits do you find arise from the need to assign programs to a single segment?

7. What recommendations do you have for improving the program segmentation process?
8. Please tell us about the LGPs' primary activities that will be contributing to each of the three segments.
 - a. For instance, do you plan to make changes to how you pursue energy efficiency and demand savings?
 - b. What are the main activities you intend to pursue to demonstrate and quantify market support?
 - c. What are the main activities you intend to pursue to demonstrate and quantify your efforts to address equity?
9. What are the formal metrics you will be using to track your contributions toward the official CPUC goals and CAEECC-recommended metrics in each of these categories?
10. What **other** metrics have you identified to measure your programs' contributions toward the official CPUC goals and CAEECC-recommended metrics in each of these segments?

Data Handling and Reporting

1. We are interested in understanding how your IOU, LGPs and your implementing partners handle customer information and other relevant resource and non-resource data. Please help us to understand your data collection efforts and the steps that you take to ensure you are properly capturing and reporting on these metrics.
 - a. How has 3rd party implementation changed or how do you anticipate it changing these efforts?
2. Please describe your systems for tracking, storing, and managing customer information, such as CRM systems, spreadsheets, email, social media, and other marketing and communication systems, etc.
 - a. Please describe your data collection processes including relevant forms, databases, software programs, hardware and other tools that are used.
 - b. Please describe your data handling protocols.
 - c. Please describe your data storage systems.
 - d. Please describe and enumerate the organizations, groups, and individuals accessing this database.
 - e. Please describe methods used to flag or track errors in the data.
 - f. Please describe your data security systems and practices.
 - g. How might these things be improved?
 - h. How do you envision the CRM to be used to support the following segments? **[Ask question for segment type defined in question 3.]**
 - i. Market support: Do you plan to use the CRM to track educating customers, training contractors, building government partnerships, or moving beneficial technologies towards greater cost effectiveness?
 - ii. Equity: How would the CRM be used to track hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission's Environmental and Social Justice Action Plan?
3. In the past LGPs have driven resource acquisition primarily through non-resource activity such as MEO initiatives.
 - a. Our view is that data collection on these MEO initiatives was limited only to collecting information on who participated in events but did not typically include follow-up to confirm who had gone on to participate in resource activities. Do you agree with this general assessment?
 - i. **[If No]** can you provide examples of how non-resource participants were engaged after an MEO event to track resource program participation. Was this activity recorded in CRM?
 - b. Do you envision that a CRM will allow LGPs to better track Resource, Market Support and Equity impacts?
 - i. **[If no]** Why? **[If yes]** How?

4. Do you use the same or different systems for tracking different types of customers, programs or activities? If not, please describe.
5. Do you use the same or different systems for tracking trade allies and other third-party entities who are interacting with your programs and customers? If not please describe.
6. Please describe your third-party program implementers' data handling, tracking, and transfer practices with customers, trade allies and any other external third parties.
 - a. Please describe your data collection processes including relevant forms, databases, software programs, hardware and other tools that are used. [Probe for what document is to be collected.]
 - b. Please describe your data handling protocols.
 - c. Please describe your data storage systems.
 - d. Please describe and enumerate the organizations, groups, and individuals accessing this database.
 - e. Please describe methods used to flag or track errors in the data.
 - f. Please describe your data security systems and practices.
 - g. How might these things be improved?
7. Please describe the data handling, tracking, and transfer practices between your IOU and your program implementers.
 - a. Please describe your data handling protocols.
 - b. Please describe your data transfer protocols including timing and frequency.
 - c. Please describe your data storage systems.
 - d. Please describe your data security systems and practices.
 - e. How might these things be improved?
8. Please describe the data handling, tracking, and transfer practices between your IOU and other PAs.
 - a. Please describe your data handling protocols.
 - b. Please describe your data transfer protocols including timing and frequency.
 - c. Please describe your data storage systems.
 - d. Please describe your data security systems and practices.
 - e. How might these things be improved?
9. Please describe the data handling, tracking, and transfer practices between your IOU and the CPUC.
 - a. Please describe your data handling protocols.
 - b. Please describe your data transfer protocols including timing and frequency.
 - c. Please describe your data storage systems.
 - d. Please describe your data security systems and practices.
 - e. How might these things be improved?

Budget Allocation - Equity

1. CAEECC has defined various metrics for Equity reporting and we'd like to get your views on how these might be tracked and reported.
2. Are there other equity metrics you think are important for LGPs?
 - a. [If yes] How do you plan to collect, track and report these metrics? How do you plan to show the Commission that these equity metrics add value?
3. Per capita funding is a metric that can be used to assess the allocation of funds from an equity perspective, such as per student funding for schools, mortgage investments or community level capital flows and capital gaps. We'd like your views on the use of this metric to assess equity for the allocation of energy efficiency funding for LGPs:
 - a. Are you currently using this as a metric for allocating funding?
 - b. Why is it or is not an effective metric?

- c. How might it be refined?
 - d. How might it be viewed in conjunction with other metrics defined in question 22?
4. When looking at funding for programs that are community focused, such as LGPs, should an assessment of total equity funding (including \$ per capita) consider additional adjustments and/or perspectives? For instance, total PPP funds paid by a community, number of ESA and/or CARE recipients, etc.

Appendix B. County Metrics Table

Table 45. County Characteristics

County	Electric Utility	CARE Eligibility - % HHs	\$ Direct Install Labor / # of CARE HHs	Cooling Degree Days (CDD) (2020)	Cooling Degree Days (CDD) (2050)	Per Capita Electric PPP Funds Paid	Total Per Capita Electricity Delivery Funding (2022)	Change in Local Program Funding (2018 vs. 2022)	CES 4.0 Avg. of Poverty Percentile	Median Annual Household Income (2020 dollars)	Ave Credit Score FICO	% Res Total Gross Savings From HVAC (kWh)	% of Res HVAC Savings as Direct Install (%)
Alameda	PG&E	25.7%	\$9.05	519	752	\$121	\$3.45	\$0.07	33.3	\$121,828	720	72%	95%
Alpine	PG&E	27.6%	N/A	2,649	3,248	N/A ⁴⁴	\$0.74	-\$0.50	67.4	\$66,726	703	N/A	N/A
Amador	PG&E	28.4%	\$36.54	1,420	1,866	\$161	\$0.74	-\$0.50	41.0	\$64,124	697	383%	100%
Butte	PG&E	44.6%	\$22.46	1,827	2,532	\$126	\$0.74	-\$0.20	63.2	\$58,735	677	396%	98%
Colusa	PG&E	39.8%	\$9.20	1,827	2,532	\$279	\$0.00	-\$0.81	63.8	\$59,046	678	141%	0%
Contra Costa	PG&E	23.3%	\$14.75	519	752	\$141	\$10.77	\$6.34	32.5	\$115,179	715	107%	61%
El Dorado	PG&E	22.4%	\$21.43	491	841	\$123	\$0.74	-\$0.50	33.0	\$98,693	691	125%	90%
Fresno	PG&E	46.3%	\$45.06	2,026	2,503	\$150	\$0.18	-\$2.68	68.4	\$55,441	645	665%	41%
Glenn	PG&E	47.0%	\$4.94	1,827	2,532	\$284	\$0.00	-\$0.94	73.8	\$52,565	681	82%	85%
Humboldt	PG&E	45.1%	\$5.22	2	72	\$108	\$8.62	\$7.81	69.8	\$53,087	692	70%	N/A
Inyo	SCE	30.6%	\$7.74	491	841	\$159	\$1.20	-\$2.11	48.5	\$60,135	705	42%	N/A
Kern	PG&E	43.3%	\$24.94	2,026	2,503	\$309	\$1.38	-\$2.97	69.6	\$53,388	646	276%	44%
Kings	PG&E	51.2%	\$30.17	2,026	2,503	\$232	\$1.38	-\$1.43	62.1	\$48,375	636	177%	57%
Lake	PG&E	49.0%	\$8.13	290	468	\$127	\$0.00	-\$3.53	67.8	\$47,676	652	143%	N/A
Lassen	PG&E	35.0%	\$3.75	491	841	N/A ⁴⁵	\$0.74	-\$0.50	57.2	\$56,724	674	15%	N/A
Los Angeles	SCE	35.2%	\$11.75	1,669	2,180	\$127	\$1.22	-\$2.19	55.9	\$79,098	697	128%	70%

⁴⁴ A few challenges arose while characterizing the distribution of budget allocations across counties. Imperial and Sacramento Counties have been excluded as electricity for these counties is primarily served by Publicly Owned Utilities. Additionally, select counties with small populations—specifically Alpine, Plumas, and Lassen—were excluded due to difficulties profiling the distributions of funds and defining per capita metrics.

⁴⁵ Ibid

County	Electric Utility	CARE Eligibility - % HHs	\$ Direct Install Labor / # of CARE HHs	Cooling Degree Days (CDD) (2020)	Cooling Degree Days (CDD) (2050)	Per Capita Electric PPP Funds Paid	Total Per Capita Electricity Delivery Funding (2022)	Change in Local Program Funding (2018 vs. 2022)	CES 4.0 Avg. of Poverty Percentile	Median Annual Household Income (2020 dollars)	Ave Credit Score FICO	% Res Total Gross Savings From HVAC (kWh)	% of Res HVAC Savings as Direct Install (%)
Madera	PG&E	45.4%	\$57.02	1,420	1,866	\$208	\$0.18	-\$1.76	68.8	\$49,126	659	770%	22%
Marin	PG&E	18.9%	\$39.82	290	468	\$97	\$12.09	\$5.50	24.6	\$225,076	745	186%	100%
Mariposa	PG&E	35.5%	\$17.78	1,420	1,866	\$123	\$0.74	-\$0.50	64.2	\$53,611	699	243%	100%
Mendocino	PG&E	43.6%	\$5.04	2	72	\$127	\$0.00	-\$3.53	67.9	\$54,626	682	71%	100%
Merced	PG&E	47.2%	\$41.75	1,420	1,866	\$199	\$0.18	-\$0.47	74.0	\$46,832	665	638%	39%
Mono	SCE	23.3%	\$30.21	491	841	\$221	\$1.20	-\$2.11	52.3	\$64,003	707	169%	N/A
Monterey	PG&E	35.4%	\$11.90	519	752	\$106	\$0.18	-\$4.52	56.6	\$69,724	678	114%	100%
Napa	PG&E	27.4%	\$39.11	290	468	\$144	\$10.77	\$4.99	36.7	\$105,011	704	300%	100%
Nevada	PG&E	26.2%	\$26.14	1,827	2,532	\$163	\$0.74	-\$0.50	46.1	\$78,754	724	353%	100%
Orange	SCE	26.1%	\$27.19	781	1,150	\$90	\$1.20	-\$1.73	41.1	\$98,014	715	154%	59%
Placer	PG&E	22.9%	\$31.81	1,827	2,532	\$223	\$0.74	-\$0.50	28.7	\$100,352	718	256%	85%
Plumas	PG&E	35.8%	\$0.04	491	841	NA ⁴⁶	\$0.74	-\$0.50	50.9	\$56,666	667	37%	N/A
Riverside	SCE	35.4%	\$22.49	2,649	3,248	\$100	\$1.20	-\$4.43	54.8	\$57,406	674	189%	79%
San Benito	PG&E	33.3%	\$18.59	519	752	\$111	\$0.00	-\$4.70	44.6	\$74,493	683	134%	100%
San Bernardino	SCE	40.7%	\$16.73	2,649	3,248	\$107	\$1.20	-\$1.00	59.8	\$54,797	658	181%	59%
San Diego	SDG&E	28.7%	\$41.54	1,130	1,561	\$102	\$0.00	-\$1.85	45.1	\$86,161	701	331%	72%
San Francisco	PG&E	23.2%	\$2.80	519	752	\$96	\$4.67	-\$1.97	33.8	\$192,616	733	21%	100%
San Joaquin	PG&E	40.1%	\$57.40	1,420	1,866	\$140	\$0.18	-\$0.47	57.6	\$61,466	680	712%	19%
San Luis Obispo	PG&E	29.4%	\$11.73	520	778	\$113	\$6.81	\$3.27	43.8	\$79,626	720	79%	100%

⁴⁶ Ibid

County	Electric Utility	CARE Eligibility - % HHs	\$ Direct Install Labor / # of CARE HHs	Cooling Degree Days (CDD) (2020)	Cooling Degree Days (CDD) (2050)	Per Capita Electric PPP Funds Paid	Total Per Capita Electricity Delivery Funding (2022)	Change in Local Program Funding (2018 vs. 2022)	CES 4.0 Avg. of Poverty Percentile	Median Annual Household Income (2020 dollars)	Ave Credit Score FICO	% Res Total Gross Savings From HVAC (kWh)	% of Res HVAC Savings as Direct Install (%)
San Mateo	PG&E	18.1%	\$13.00	519	752	\$107	\$4.11	\$0.49	25.0	\$233,255	741	61%	0%
Santa Barbara	PG&E	35.7%	\$10.86	113	287	\$117	\$6.81	\$4.47	53.0	\$93,822	698	43%	72%
Santa Clara	PG&E	19.7%	\$17.01	519	752	\$209	\$5.42	\$1.57	27.4	\$191,996	742	163%	100%
Santa Cruz	PG&E	29.1%	\$13.32	519	752	\$84	\$0.00	-\$4.70	49.0	\$97,716	715	100%	N/A
Shasta	PG&E	39.6%	\$7.51	1,827	2,532	\$221	\$0.00	-\$0.94	60.5	\$58,102	675	253%	100%
Siskiyou	PG&E	62.8%	#N/A	491	841	\$224	\$0.00	\$0.00	69.9	\$49,599	693	#N/A	N/A
Solano	PG&E	27.4%	\$18.05	290	468	\$140	\$10.77	\$5.92	39.2	\$69,207	690	168%	77%
Sonoma	PG&E	27.1%	\$22.94	290	468	\$112	\$4.37	-\$1.11	39.1	\$87,388	714	193%	100%
Stanislaus	PG&E	38.9%	\$4.36	1,420	1,866	\$256	\$0.18	-\$0.47	62.9	\$56,954	671	484%	100%
Sutter	PG&E	39.7%	\$26.29	1,827	2,532	\$129	\$0.74	-\$0.07	63.6	\$55,479	679	363%	73%
Tehama	PG&E	45.1%	\$15.78	1,827	2,532	\$155	\$0.00	-\$0.94	74.7	\$52,963	672	280%	99%
Tulare	SCE	49.2%	\$5.26	2,026	2,503	\$142	\$1.38	-\$2.63	77.1	\$47,742	655	63%	41%
Tuolumne	PG&E	33.4%	\$19.11	1,420	1,866	\$156	\$0.74	-\$0.50	46.4	\$63,583	689	247%	100%
Ventura	SCE	25.4%	\$20.19	1,669	2,180	\$95	\$7.39	\$6.17	39.0	\$88,416	696	133%	54%
Yolo	PG&E	37.5%	\$36.93	1,827	2,532	\$157	\$0.00	-\$1.05	57.6	\$78,442	703	350%	74%
Yuba	PG&E	43.8%	\$20.71	1,827	2,532	\$129	\$0.74	-\$0.07	57.1	\$44,664	664	287%	71%

Appendix C. Responses to Public Comments

Comment #	Commenter	Page in Report	Comment/Feedback	Response
1	SDG&E	Overarching	<p>Would the studies recommendations for market and equity support programs, specifically the recommendations to data collections, be for LGP's only or would it extend to any other customer sectors?</p>	<p>This study's recommendations for market support and equity programs, specifically the recommendations to data collections, are most applicable to LGPs and non-LGP public sector programs. However, based on the evaluation team's experience evaluating REN programs, the collection of key non-resource participant information (e.g., customer names, phone numbers, email addresses, service addresses, and dates of participation) is equally important for evaluating non-resource participant data for non-public sector programs. Therefore, the evaluation team would encourage other market support and equity programs serving other customer sectors to consider collecting this data from participants where possible.</p>

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