

**2023 JOINT COOPERATION MEMO**

**PACIFIC GAS AND ELECTRIC COMPANY**

**BAY AREA REGIONAL ENERGY NETWORK**

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## **A. Overview**

The 2023 Joint Cooperation Memo (JCM) between Pacific Gas and Electric Company (PG&E) and the Bay Area Regional Energy Network (BayREN) includes the following information:

- 1) An overview of programs the two energy efficiency program administrators (PAs) intend to offer in overlapping areas<sup>1</sup>
- 2) An overview of coordination approach between the two PAs
- 3) A description of how BayREN's anticipated offerings satisfy the criteria for REN activities in California Public Utilities Commission (CPUC or Commission) Decision (D.) 12-11-015 and reaffirmed in D.19-12-021.<sup>2</sup>

This JCM covers energy efficiency program activity and collaboration in program year 2023.

BayREN and PG&E policy and program staff plan to meet on a monthly basis to ensure that cooperation, coordination, and the best service to joint territory ratepayers is realized. Meetings may include discussions on customer choice, marketing, policy, and double dipping prevention. BayREN and PG&E have jointly determined a schedule for 2023. Monthly meetings occur for each set of programs: Residential, WE&T, Commercial, and Codes & Standards. BayREN and PG&E will continue to cross-promote each other's programs as appropriate.

It is important to note that 2022 is a year of transition for the PG&E portfolio. Statewide program solicitations are still ongoing, and there continue to be unknowns about programs that will launch in 2022 and into 2023. PG&E is committed to communicating with BayREN to provide regular updates on program decisions whenever feasible in order to ensure no program overlap and enhance the customer experience.

### **This JCM is structured as follows:**

- 1) **BayREN Program Summary:** A description of each program BayREN will administer in 2023, by sector. Since there is no comparable PG&E program to the Water Upgrades \$ave program, details about this offering are listed in Appendix B only.
- 2) **PG&E Program Summary and BayREN Program Distinction:** Comparable or Equivalent PG&E Program that summarizes how the anticipated BayREN program is distinct from the anticipated PG&E program(s).
- 3) **Coordination Protocol Between Programs:** Coordination protocol between BayREN and PG&E.

<sup>1</sup> Please note that this memo includes preliminary budget forecasts for 2022 that are highly variable and will be finalized in the 2022 Annual Budget Advice Letter.

<sup>2</sup> D.12-11-015, p. 17.

- 4) **D.12-11-015 Compliance:** Identifies how the BayREN program satisfies the criteria for REN activities established in D.12-11-015.
- 5) **Data Sharing Protocol**
- 6) **Appendices:**
  - a. Appendix A: Summary of REN compliance with D.12-11-015 for all planned programs
  - b. Appendix B: List all programs BayREN currently anticipates offering in 2022, including information on draft budgets and measure eligibility.
  - c. Appendix C: List all similar programs PG&E currently anticipates offering in 2022, including information on draft budgets and measure eligibility.

## **B. Residential – Single Family (BayREN08)**

### **a. Summary of Program Differentiation**

BayREN's Home+ program, while available to all single family residents, is targeted to hard to serve households defined as those with a moderate income and/or where a language other than English is spoken.<sup>3</sup> Moderate income was previously defined as households as those with an annual income of \$48,000-\$125,000 per household, regardless of household size and county. To more accurately account for these factors and avoid duplication with income qualified programs<sup>4</sup>, we have redefined moderate income as households who do not qualify for income qualified weatherization programs up to the moderate-income level per household by county designated by the California Department of Housing and Community Development<sup>5</sup>. A second aspect of underserved communities are households that primarily speak a language other than English. Historically, these communities have been underserved by rebate programs.

Moderate income households in the Bay Area are above the eligibility requirements for the Energy Savings Assistance (ESA) program and often do not receive information about potential energy savings measures in their primary language. Because of this, this population is consistently underrepresented in ratepayer energy efficiency programs in BayREN territory and across the state.<sup>6</sup> The BayREN Single Family Moderate Income Market Characterization Study, completed in September 2018, identified key barriers to participation for the target market including financial barriers, low energy costs and

<sup>3</sup> Defined as dwellings with less than five units and annual household income between \$48,000 to \$125,000. As provided in BayREN's Business Plan, this market segment is chronically underserved with energy efficiency programs.

<sup>4</sup> California Department of Community Services and Development, Low Income Home Energy Assistance Program Income Eligibility, <https://www.csd.ca.gov/Pages/LIHEAP-Income-Eligibility.aspx>

<sup>5</sup> California Department of Housing and Community Development Income Limits, <https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income-limits-2021.pdf>

<sup>6</sup> M. Frank and S. Nowak, "Who's Participating and Who's Not? The Unintended Consequences of Untargeted Programs", American Council for an Energy-Efficient Economy, 2016.

expected savings, and renter status if applicable. The Home+ program offers solutions to customers to overcome these barriers.

The key objective of the Home+ program is to meet the hard to serve customers where they are and to offer incremental and affordable energy efficiency measures that are complimentary to measures available through current mainstream program offerings. An important program element continues to be utilizing the Home Energy Advisors. This service is essentially a call center that customers can access to speak with an Energy Advisor. The Advisors assist both homeowners and renters and maintain a long-term relationship with the customers after they have assisted with the initial contact in an effort to see the customer through a full energy-efficiency journey. Energy Advisors also refer customers to complementary programs offered by utilities, Community Choice Aggregator (CCA) programs, Energy Watch and other implementers; the Advisors also help customers understand their financing options. Additionally, the Energy Advisors assist Home+ Participating Contractors with understanding program requirements and when needed, help mediate issues that may arise with the customer and contractor.

In 2023, BayREN's program will continue to use an engaged Home Energy Advisor<sup>7</sup> to walk customers step-by-step through the process and to direct them to a Participating Contractors<sup>8</sup> to deliver energy savings to households. BayREN will continue to develop relationships with organizations and media who serve non-English speaking communities through in language webinars, printed collateral and information dissemination through trusted messengers as a means to reach this sector.

The Home+ program offers a menu of eligible measures including four fuel substitution measures; heat pump water heaters, heat pump heating and cooling, heat pump clothes dryers and induction cooktop/ranges. Customers can choose a single measure to upgrade, but they are encouraged to undertake multiple measures. These measures must be installed by a Home+ Participating Contractor, a group that is key to the program.

To further address financial concerns facing moderate income households, BayREN is considering offering an additional rebate for certain measures for this population. The exact amounts and income qualification verification methods have yet to be determined but will be coordinated with the low-income qualified weatherization programs to facilitate referrals between programs. The anticipated launch date is July 2022.

BayREN's contractor training is designed and in coordination with the Workforce Education and Training (WE&T) activities offered through the PG&E WE&T program, to ensure that efforts are not duplicated. BayREN also offers its contractors program

<sup>7</sup> Please note that PG&E also has a service called Energy Advisor but it is unrelated to the BayREN offering.

<sup>8</sup> A Participating Contractor has successfully completed the BayREN two day training, has submitted all required paperwork and has been onboarded into the program.

related trainings and one-on-one trainings on an as needed basis. Following COVID-19 restrictions in 2020, BayREN developed an online portal of trainings to keep Participating Contractors engaged and to increase their technical knowledge. This platform will continue to be available to contractors in 2023.

BayREN is also planning to offer trainings in languages other than English and recruit more multi-lingual contractors to serve more communities. Additionally, the program will continue to offer an enrollment bonus for small/disadvantaged contractors as well as those who offer service in a language other than English to expand the ability of the program to serve these communities. BayREN has also started to engage with job training centers and workforce development agencies to address the need of our participating contractors to increase their capacity and create a career pipeline for participants of these programs.

The BayREN WE&T program will also partner with local nonprofit organization, Rising Sun Center for Opportunity (Rising Sun), to bring the Climate Careers program to low-income youth throughout the greater Bay Area. The Climate Careers program is a unique earn and learn program that trains and employs young people to provide residential energy efficiency services while upskilling, and better preparing them for their future world of work.

One of the outreach channels for the Home+ program is an online self-evaluation tool available to customers. Customers are asked basic questions about their home's characteristics and energy using equipment. Completion of the survey qualifies respondents to receive an energy savings kit which may include: LED lamps, faucet aerators and Tier II advanced power strips depending on the customer's responses. The other primary outreach channel for the program is through Green House Calls, implemented by Rising Sun Center for Opportunity, that are targeted to households made up primarily of seniors and non-English speakers. Green House Calls involve a program representative performing a visual audit of an interested customer's home and installing some of the energy savings kit measures. Both channels direct customers to the broader Home+ program offerings, including the Home Energy Advisor service.

The BayREN Regional Heat Pump Water Heater (midstream) Program, funded by a grant from the Bay Area Air Quality Management District until June 2021, will continue to operate under the BayREN Single Family program through 2023. The engagement with manufacturers and distributors and the administration of the rebates provided by CCAs will continue in 2023 and potentially expanded with more CCAs joining in the effort.

Like all BayREN programs, outreach in 2023 will continue to be done primarily by local governments. This also allows for the seamless layering of other climate programs and activities including those offered by individual cities, counties and CCA programs. With more local government entities offering new fuel substitution rebates such as Redwood City and Albany and complementary programs developed by several of the CCAs such as moderate income programs and on-bill financing, BayREN will continue to leverage

and integrate those programs into one cohesive message based on the audience as they launch.

## **b. Summary of Program Differentiation**

PG&E's ESA Program provides energy efficiency services to income qualifying customers in single family homes, multi-family buildings, and mobile homes in the Bay Area. The objective of the ESA program is to reduce energy usage, while also increasing the health, comfort, and safety of participants. Households with income at or below 200% of the federal poverty line qualify. This income requirement is distinct from BayREN's Home+ program, which is not income qualified.

PG&E's current single-family residential offerings that serve moderate and market rate customers in the Bay Area are:

- 1) Pay for Performance (P4P) Programs
- 2) Home Energy Checkup
- 3) WatterSaver

These are the offerings expected to be available in 2023, and there may be changes pending program needs and results of the ongoing 3<sup>rd</sup> Party solicitations.

### **1) Pay for Performance (P4P) Programs**

PG&E offers one third-party P4P programs in the Bay Area called HomeIntel (implemented by Home Energy Analytics). The Program offers free energy audits, education, and advisor services to residential customers throughout the Bay Area.

### **2) Home Energy Checkup**

PG&E offers an online Home Energy Check-up to all its residential customers (single family and multi-family). It is an online questionnaire that customers answer to better understand their energy usage. Customers who fill out the questionnaire are also provided with energy savings tips and recommendations. Customers do not receive any rebates through this service.

### **3) WatterSaver**

The goal of WatterSaver is to shift 2 MW of demand out of peak period by 2025. Participants who enroll in WatterSaver can optimize their energy use and save money by connecting their water heaters, via internet or cellular, to the program. Customer enrollment will focus on low income and public housing residential customers located in DACs. WatterSaver automatically takes advantage of lower electricity rates, heating water at less expensive off-peak times of the day. Participants will also receive a \$50 gift card for enrolling plus an additional \$5 gift card for each month of active

participation. Enrolled customers will help increase electric grid reliability and support increased renewable energy generation like solar and wind power by shifting energy use to off-peak times.

**Table 1: Summary of Similar BayREN and PG&E Single-Family Programs**

BayREN		Current PG&E Programs under BayREN Territory		
Program Name	BayREN Home+	Pay for Performance Program (PGE_Res_001b)	WatterSaver	Home Energy Checkup (PGE_Res_002a)
<b>Eligible Measures</b>	Duct sealing, attic and wall insulation, HVAC equipment upgrades, Smart thermostats, gas storage water heaters and heat pump water heaters, heat pump clothes dryers, induction cooktop/ranges, LED lamps, water faucet aerators, low flow showerheads and Tier II power strips. Single measure upgrades allowed.	Online energy audit, detailed energy reports	Control of electric resistance and heat pump water heaters to shift water heater energy consumption outside of peak period.	Home Energy Checkup (HEC) is a behavior based platform. Behavior related energy saving recommendations/ tips are provided to the customer based on how they complete the checkup.
<b>Incentive</b>	Bonus incentives are offered to downsizing equipment, combining shell and HVAC measures, building air sealing and CAS testing. Potential increased incentive levels for moderate income households.	Free concierge energy assessment	\$50 enrollment gift card, \$5/month gift card for active participation to be paid out quarterly	N/A
<b>Savings Claim Type</b>	Savings will be deemed per measure based in CPUC approved work papers.	Savings Claims use Normalized Metered Energy Consumption (NMEC) methodology.	No official claimed savings, as the focus is load shifting	Workpaper outlines the methodology for computing savings for this program.
<b>2023 Budget</b>	\$9,794,946	Home Intel: \$1,906,631	\$6.4M (2021-2025 budget)	\$1,024,045.68 -

BayREN		Current PG&E Programs under BayREN Territory		
<b>Target Customer</b>	Moderate-income households (owners and/or renters) <sup>9</sup> , non-native English speaking households.	<b>Home Intel:</b> High AC users, High baseload in all PG&E territory.	All PG&E service territory.	All PG&E service territory.
<b>Target Implementer</b>	Specialty contractors	Behavioral and Operational focused; whole-home, retrofit experience	Individual Customer	Individual Customer
<b>Resource/Non-Resource</b>	Resource	Resource	Non-Resource	Resource

Finally, PG&E plans to launch a to-be-determined solicitation for a new residential equity program. PG&E has not defined the scope of the program but has identified market needs for building decarbonization support for low-middle income residential customers (who are not ESA-eligible) and for customers who reside in manufactured/mobile homes. PG&E will coordinate with BayREN and plans to focus the residential equity program outside of the Bay Area.

**c. Coordination Protocol between Programs**

The BayREN Home Energy Advisor will continue to direct customers to PG&E who are interested in a PG&E program and/or if they are a better fit for their programs. PG&E will continue to direct customers to BayREN Home+ program when it seems like the best fit for the customer.

BayREN and PG&E’s single-family residential teams will continue to hold standing monthly check in calls. Ad-hoc meetings will also be scheduled to accommodate the need to resolve any urgent issues that might arise. Standing agenda items include program updates, uptake, challenges, contractor issues, data sharing, double dip processes, and marketing campaign plans.

BayREN and PG&E senior management teams will be included in regular check-ins on a quarterly basis (at minimum) to discuss ongoing collaboration and coordination.

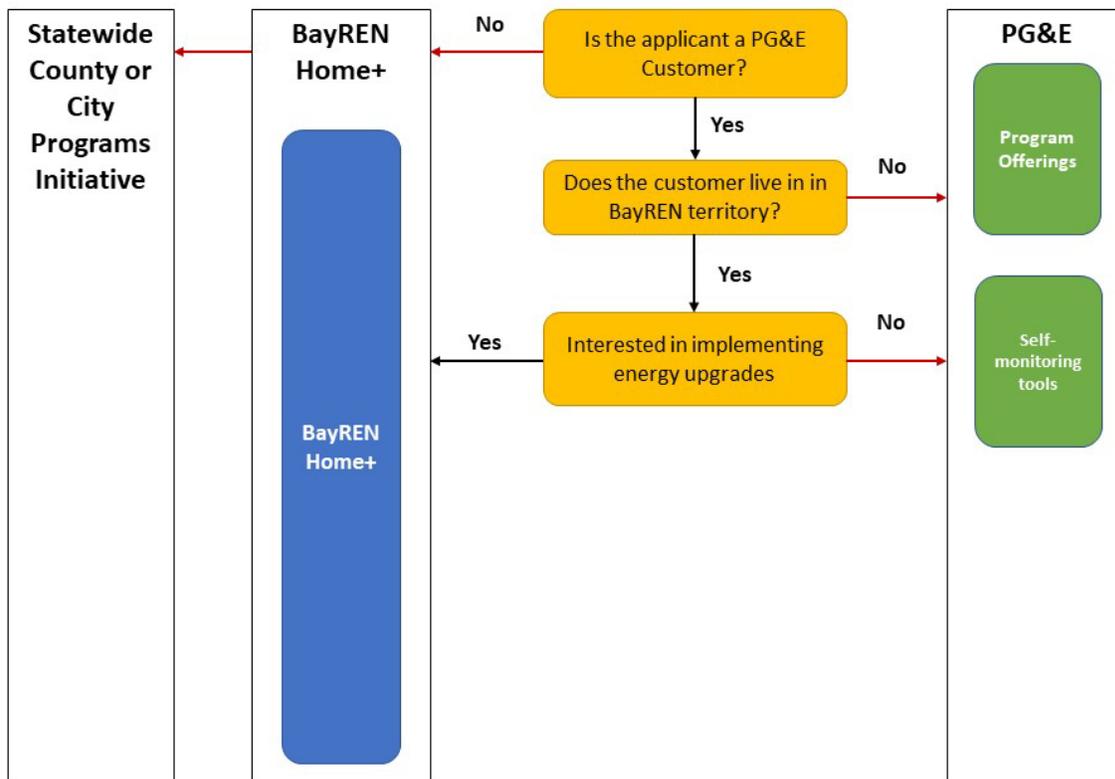
**d. Coordination Between SW Program(s)**

The Statewide Plug Load and Appliance Program is expected to launch by the end of 2022. This program is led by SDG&E and may require an additional layer of coordination. PG&E will share details with BayREN as soon as they are available and

will adjust its program as needed. BayREN and PG&E’s Residential Program Managers will conduct regularly scheduled check-in calls to cover statewide program coordination. Figure 1 below provides an overview of the coordination protocol between BayREN and PG&E single-family programs.

BayREN’s residential program offering is not a statewide program. The Home+ program was designed with maximum involvement of contractors, including offering trainings on workforce and installation standards (in conjunction with and coordination with PG&E’s Workforce Education and Training activities when available) and professional development.

**Figure 1: Coordination Protocol between Single Family Programs**



**e. D.12-11-015 Compliance**

The following table describes in further detail how BayREN’s Home+ program satisfies the REN criteria in D.12-11-015.

**Table 2: BayREN Home+ Program's Compliance with D.12-11-015**

REN Criteria	BayREN Compliance
1. Activities IOU cannot or does not intend to undertake	34% of Bay Area single family owners/renters comprise the defined moderate-income market. They do not qualify for ESA or other programs available to income qualified low earning households. PG&E offers downstream, direct install measures for low-moderate income customers, but these are distinct from Home+ because Home+ is not direct install, but rather the measures must be installed by a Home+ participating contractor. PG&E will work with BayREN to determine if the offer that is developed in the BayREN region should be expanded to serve other customers.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	Not applicable
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	The definition in D.18-05-041 precludes most Bay Area properties from being considered hard-to-reach. Therefore, BayREN and PG&E programs that are open to all single family properties cannot be considered hard-to-reach in the Bay Area.

### **C. Residential – Green Labeling (BayREN 1003)**

#### **a. Summary of Program Differentiation**

BayREN’s Green Labeling focuses on two main activities: energy efficiency trainings for real estate professionals and promotion and support for the Home Energy Score (HES) as a simple home evaluation tool. BayREN offers an incentive for voluntary completion of scores (i.e. if not mandated by a local government, such as the City of Berkeley). PG&E does not offer HES. This BayREN offering provides other ancillary elements (e.g. follow up by an Energy Advisor), to enhance the outcomes and lead generation to an appropriate program.

PG&E’s WE&T Program does provide some energy efficiency trainings targeted at real estate professionals, and PG&E’s trainings are scheduled in coordination with BayREN to ensure there is no duplication.

**Table 3: Summary of Similar BayREN and PG&E Home Energy Score Activities**

	BayREN	PG&E
<b>Program Name</b>	Green Labeling	Workforce, Education, and Training (WE&T)
<b>Eligible Measures</b>	N/A	N/A
<b>Estimated 2022 Budget</b>	\$1,258,500	\$65,000 <sup>10</sup>
<b>Target Audience in 2022</b>	<ul style="list-style-type: none"> <li>• <u>Home Energy Score</u>: Bay Area Single-family homeowners with support through contractors, raters, home inspectors</li> <li>• <u>Real Estate Trainings</u>: realtors, appraisers, lenders, and underwriters. For new and shorter training offerings, specifically targeting real estate professionals who have already gone through a BayREN training.</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Home Energy Score</u>: N/A</li> <li>• <u>Real Estate Trainings</u>: Realtors and appraisers</li> </ul>
<b>Resource or Non Resource</b>	Non-Resource	Non-Resource

**b. Summary of BayREN Program Objectives**

Green labeling is a critical component of a comprehensive approach to achieve greater energy efficiency in California’s homes, in accordance with Assembly Bill 758.

BayREN’s Green Labeling program provides the following services:

- Promotes HES as a lead generation opportunity for energy upgrades and is a low-cost home label.
- Supports jurisdictions that may elect to adopt a mandatory ordinance based on HES.
- Offers a HES incentive for scores generated in the Bay Area, except where they are required by a jurisdiction.
- Sponsors training and certification for real estate agents, home appraisers, and lenders/underwriters in the nine-county Bay Area.
- Builds partnerships with local real estate professionals and associations of realtors to utilize and promote BayREN programs to clients.

**c. Comparable and/or Equivalent PG&E Program**

PG&E does not offer the HES. While PG&E does offer some trainings for real estate professionals, they are distinct from those offered by BayREN. Below is a sample of the trainings being planned or considered by each entity based on the 2022 program year.

<sup>10</sup> This is an estimated proportion of the WE&T program budget, which would be used specifically for real estate trainings in 2023.

**Table 4: BayREN and PG&E Potential Trainings for 2023**

BayREN	PG&E
National Association of REALTORS (NAR) - Green Designation	
National Association of Real Estate Brokers (NAREB) Realtists Trainings	
Certified Green Lending Professional (CGLP)	
Accredited Green Appraiser	Electrification for ADU Webinar (for architects, designers, builders, HVAC contractors, home performance contractors (and some homeowners who are taking a DIY approach)) which may also be of interest to realtors and appraisers.
Real Estate Professional Marketing (RPM)	National Association of Realtors (NAR) Green Designation (jointly in partnership with BayREN)
Electrification for Real Estate Professionals (EFR)What is an All Electric Home?	Green Multiple Listing Services (MLS)
Healthy Housing Principles for Real Estate Professionals (HHP)	Assembling the Project Team for Home Energy Efficiency Upgrades
All About ADUs	Financing Home Energy Efficiency Projects
BayREN County Reps Webinar: Outreach to Real Estate Professionals	

**d. Coordination Protocol Between Programs**

Since PG&E does not offer HES, there is no formal coordination protocol. However, PG&E does refer customers interested in a HES to BayREN.

BayREN and PG&E have coordinated on real estate sector engagement since 2013. Green Labeling/WE&T coordination is part of PG&E and BayREN's monthly Residential Programs coordination call. BayREN and PG&E representatives have also facilitated and participated in statewide real estate sector strategy conversations, including a statewide Green Real Estate Working Group comprised of representatives of utility companies, local governments, and green building and energy efficiency program implementers. BayREN and PG&E have coordinated on real estate trainings and will work together to ensure there are no duplicative offerings in the shared territory. t.

Both BayREN and PG&E launched new classes aimed at real estate professionals in 2021 and observed each other’s classes to understand the content being taught and to ensure there is no duplication in offerings (specifically the classes on real estate marketing and electrification). PG&E’s classes are targeted at a broad range of real estate professionals within their territory, while BayREN’s are primarily marketed to Realtors who previously attended the National Association of Realtors ( NAR) Green Designation training to further enhance these partnerships. In 2023, BayREN and PG&E will continue to coordinate by scheduling trainings at different times of the program year, marketing to different groups, and clarifying the titles and class descriptions to clearly delineate the content and audience for trainings.

While COVID-19 restrictions continue and trainings are conducted virtually thereby reaching a broader audience, PG&E and BayREN may elect to jointly offer select trainings. In those instances, coordination would occur at the outreach level with BayREN marketing the class in the Bay Area counties and claiming those attendees and PG&E would market and claim attendees outside of BayREN’s territory. There will be a standing agenda item on the PG&E and BayREN residential program coordination calls on real estate efforts and parties will share their respective training schedules as they are available to ensure there is no duplication of efforts.

**e. Coordination Between SW program (s) – N/A**

**f. D.12-11-015 Compliance**

The following table describes in further detail how BayREN’s proposed Green Labeling program satisfies the REN criteria in D.12-11-015.

**Table 5: BayREN Green Labeling Program's Compliance with D.12-11-015**

REN Criteria	BayREN Compliance
<p><b>1. Activities IOU cannot or does not intend to undertake</b></p>	<ul style="list-style-type: none"> <li>• BayREN offers Home Energy Score through open-market assessors in the nine-county Bay Area. This supports jurisdictions that may be interested in passing energy assessment and disclosure ordinances, similar to the City of Berkeley.</li> <li>• PG&amp;E does not offer Home Energy Score.</li> <li>• BayREN’s real estate classes are different classes than those offered in the PG&amp;E WE&amp;T program.</li> </ul>
<p><b>2. Pilot activities where there is no IOU program offering and where there is potential for scalability</b></p>	<p>Home Energy Score is a scalable program, which is offered nationally by the US Department of Energy. BayREN began offering Home Energy Score as a pilot activity in 2016, when there was no utility program supporting it in California. BayREN also did a Home Energy Score pilot to support the City of Berkeley’s adoption of a reach code for existing buildings.</p>

REN Criteria	BayREN Compliance
3.Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	N/A

## **D. Residential – Multifamily (BayREN02)**

### **a. Summary of Program Differentiation**

BayREN and PG&E both offer multifamily programs in the Bay Area, and through monthly coordination calls and cross referrals through the Single Point of Contact (SPOC), program administrators will work together to minimize duplication and direct participants to the program that meets their needs. While BayREN’s energy efficiency rebate program can serve any multifamily project in the Bay Area interested in bundling measures, populations for which it has been difficult to obtain savings are prioritized.

BayREN also launched a decarbonization pathway in 2020, which serves multifamily projects with scopes of work that include electrification measures. PG&E’s Energy Savings Assistance Common Area Measures (ESA CAM) program is specifically for deed-restricted, multifamily buildings. To qualify, the property must be deed-restricted and the owner must certify that at least 65 percent of the tenant households meet the ESA income guidelines. Energy efficiency services provided differ by need and are limited to the communal areas, or common energy systems, of the residential building(s) or property. This program can be combined with the ESA in-unit program.

PG&E’s Multifamily Energy Savings Program (MESP) is a third-party implemented program by TRC Solutions to serve multifamily properties of units five or greater within PG&E’s service territory. The Program is designed to encourage these installations by offsetting the incremental cost of higher efficiency equipment. A key distinction between MESP and BAMBE program design is that customers can participate in any number of measures in the MESP offering. PG&E’s Multifamily Energy Savings program is a measure-based program that offers deemed, customer, and direct install upgrade pathways for customers.

In 2021, PG&E launched the Statewide Residential New Construction programs as California Energy Smart Homes (CESH), with a Mixed-Fuel (MF) and All-Electric (AE) pathway. Both pathways serve single-family residential, duplexes, low-rise multifamily (three or fewer stories), and alterations projects; CESH-AE also serves projects that include additions and accessory dwelling units (ADUs). CESH provides residential new construction and alterations customers with incentives to adopt advanced energy measures and transition to all-electric construction, supporting California’s focus on building electrification to meet its climate objectives.

BayREN will continue to coordinate with the SPOC to refer eligible projects to ESA CAM, send eligible single measure projects to the Multifamily Energy Savings Program,

2-4 unit low-rise multifamily projects to CESH, and on providing On-Bill Financing (OBF) services to the multifamily sector.

BayREN also provides a Loan Referral Service (LRS) that directs property owners to appropriate sources of financing including to private sector financing products and PG&E's OBF program (described below).

**Table 6: Summary of Similar BayREN and PG&E Multifamily Programs**

BayREN		PG&E		
Program Name	Bay Area Multifamily Building Enhancement (BAMBE)	Multifamily Energy Savings Program (MESP) (PGE_Res_003)	California Energy Smart Homes (Mixed-Fuel, All Electric) (PGE_SW_NC_Res_mixed, PGE_SW_NC_Res_electric)	Energy Savings Assistance – Common Area Measures (ESA CAM)
Eligible Measures	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures, targeting 15-20% savings.	Deemed measures include: Energy Star Room ACs, Smart Thermostat, Heat Pump Water Heaters, High-efficiency furnace variable speed motor, Ductless Minisplit HP Fuel Substitution SEER 15-18, High-Performance Circulator Pump, Domestic Hot Water (DHW) Loop Controllers, Gas/Electric low Flow Showerhead - Gas or Electric, Thermostatic shower spout with low flow showerhead, Efficient Commercial Pool and Spa Heater, Variable Speed Drives (VSD) on pool pumps, Outdoor Pool Cover. Custom measures include lighting, boilers, HVAC equipment,  Custom measures include Lighting, HVAC, Boilers	HVAC, DHW (heat pump), and appliance measures, with emphases on gas replacement and removal. <sup>11</sup>	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures
Estimated 2023 Budget <sup>12</sup>	\$6,901,930	\$ 4,016,414	Mixed-Fuel: \$2,671,344 All Electric: \$7,123,593	\$30,000,000 <sup>13</sup>
Target Audience	Bay Area multifamily property owners requiring a higher level of program assistance, populations in which it has been	Multifamily property owners across the PG&E service territory	Statewide, covering PG&E, SCE, SCG, and SDG&E service territories. Includes: Serves single family, duplex, low-rise multifamily, and alterations/additions subsectors.	Deed-restricted multifamily property owners where at least 65% of residents meet ESA low-income criteria

<sup>11</sup> PG&E expects the list of eligible measures to change in 2023 with the updated Title 24 code requirements. PG&E will keep BayREN updated on program changes as the program evolves.

<sup>12</sup> The 2023 budget listed for the California Energy Smart Homes (Mixed-Fuel, All Electric) programs is a Statewide budget; PG&E, SCE, SCG, and SDG&E contribute funds proportionate to their respective service territories.

<sup>13</sup> The ESA CAM budget request is addressed in CPUC Application 19-11-003 and is currently pending for 2022.

BayREN		PG&E		
	harder to obtain savings, and owners pursuing gas-to-electric upgrades.			
<b>Resource/Non Resource</b>	Resource	Resource	Non-Resource (Market Support)	Resource

### **b. Summary of BayREN Program Objectives**

The Bay Area Multifamily Building Enhancement (BAMBE) program offers multifamily property owners a flat per-unit incentive to undertake multiple energy efficiency measures that achieve 15% energy savings on average. BAMBE is accessible to property owners that are interested in pursuing multiple measures and/or do not have the interest or ability to do a comprehensive audit and retrofit. The program supplies no-cost technical assistance (TA) to guide the property owner through the process from initial interest to project completion and quality assurance of the installed measures. BAMBE developed and uses a simplified, lower cost assessment tool called EnergyPro Lite (EPL) to determine which measures meet the minimum energy savings requirement.

BAMBE also offers the Clean Heating Pathway (CHP), designed for properties that wish to demonstrate climate leadership by deeply reducing the carbon emissions from energy use in their buildings. CHP participants receive incentive adders for switching from gas fueled space heating, water heating and cooking appliances to cleaner, highly efficient electric alternatives.

### **c. Comparable and/or Equivalent PG&E Multifamily Program**

#### **Multifamily Energy Savings Program (MESP)**

PG&E's Multifamily Energy Savings Program (MESP) is a third-party implemented program by TRC Solutions to serve multifamily properties of units five or greater within PG&E's service territory. MESP is designed to encourage these installations by offsetting the incremental cost of higher efficiency equipment. MESP is a measure-based program that offers energy efficiency upgrades to multifamily buildings through deemed and custom projects as well as a direct install delivery channel.

A key distinction between MESP and BAMBE program design is that customers can participate in any number of measures in the MESP offering MESP aims to serve multifamily customers, inclusive of smaller properties and underserved regions that will most benefit from property upgrades. MESP will be working with SPOC on customer referrals for customers best suited or income qualified for other programs like BAMBE. Both BAMBE and MESP are committed to referring customers to SPOC that may be better suited and qualified for each other's programs based on customer need.

#### **California Energy-Smart Homes (All Electric)**

The California Energy-Smart Homes All-Electric Residential Program (CESH-AE) supports a high-level approach to achieving California's advanced energy efficiency policy goals through 2025 by engaging with builders and developers to recruit potential projects and convince them to build all-electric. The program is available to customers in the PG&E, SCE, and SDG&E territories. The all-electric program offering serves five residential sub-sectors: Single family and duplexes, multifamily low-rise (three or fewer stories), manufactured housing, accessory dwelling unit (ADUs,) and addition/alteration (A&A, additions greater than 700 square feet).

The program influences the decision and ease the transition to adopt all-electric new construction practices by educating potential participants and stakeholders on the features of all-electric homes, enrolling projects, emphasizing the installation of advanced energy efficiency measures, and facilitating future opportunities through non-incentivized, prerequisite measures that position homes to install high-impact demand response technologies more easily in the future.

### **California Energy-Smart Homes (Mixed-Fuel)**

The California Energy-Smart Homes Mixed-Fuel Residential Program (CESH-MF) supports a high-level approach to achieving California's advanced energy efficiency policy goals through 2025 by engaging with builders and developers to recruit potential new construction projects that are unable to make the switch to all-electric, and alteration projects that are only able to partially convert to all-electric. The program is available to customers in the PG&E, SCE, SoCalGas, and SDG&E territories. The mixed-fuel program offering serves three residential subsectors: Single family and duplex, multifamily low-rise (three or fewer stories), and alterations.

The program influences the decision and eases the transition to adopt advanced energy measures and facilitates future opportunities through non-incentivized, pre-requisite measures that position homes to transition to all-electric and install demand response technologies more easily in the future. To accomplish this, the program educates potential participants and stakeholders on the features of mixed-fuel and electric-ready homes; enrolls projects; emphasizes the installation of advanced energy efficiency measures; and facilitates future opportunities through non-incentivized, prerequisite measures that position homes to install electric equipment and appliances, as well as high-impact demand response technologies more easily in the future.

### **Energy Savings Assistance – Common Area Measures**

Energy Savings Assistance – Common Areas Measures (ESA-CAM) offers deed-restricted multifamily property owners no-cost energy upgrades across multiple energy efficiency measures. ESA-CAM is accessible to property owners of qualifying deed restricted multifamily properties. ESA-CAM supplies no-cost technical assistance (TA) to guide the property owner through the process from initial interest to project completion and quality assurance of the installed measures. Projects that enter the BAMBE pipeline determined income-eligible with appropriate measures for the ESA-CAM program will be referred to PG&E.

### **On-Bill Financing**

The OBF program provides qualified PG&E customers 0% interest loans for energy efficiency retrofits; loans are repaid on PG&E bills. Projects can receive this financing without participating in an incentive program. Projects in the BAMBE pipeline interested in OBF will be screened by BayREN and referred to the PG&E SPOC for assistance with the OBF application process.

#### **d. Coordination Protocol Between Programs**

PG&E and BayREN implementation teams closely coordinate program design and customer referral to minimize duplication and optimize the customer experience and ratepayer resources:

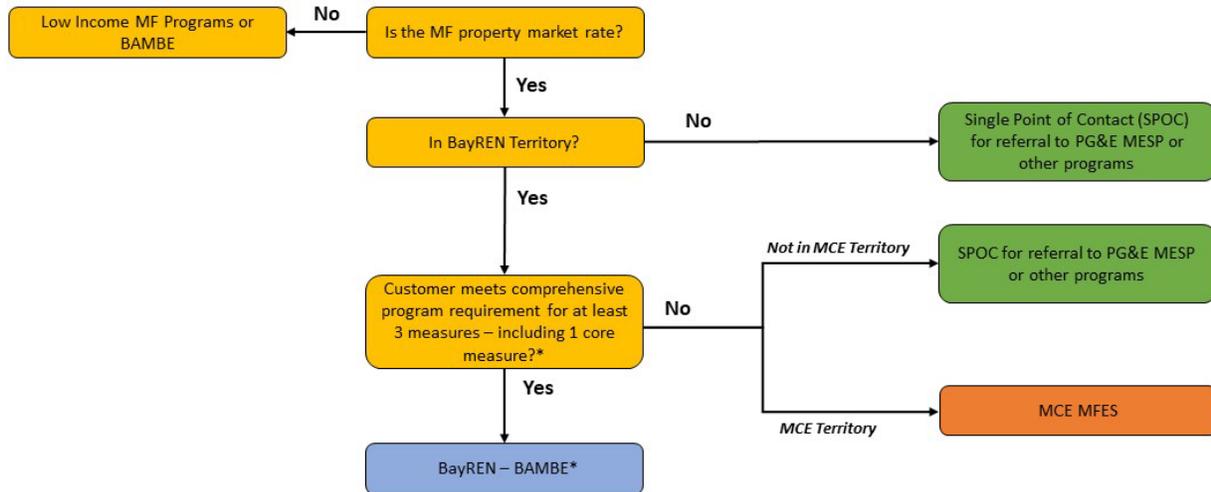
- Monthly Coordination calls between BAMBE, CESH, and MESP: BayREN and PG&E are committed to continue regular coordination on program design and delivery. Monthly calls between BAMBE program leads, PG&E, and TRC occur to work through program developments and improve on the customer experience. Through the monthly coordination, CESH, MESP, and BAMBE teams will keep each other apprised of outreach/marketing plans, discuss SPOC referrals, and develop a process to do double dip checks on program participants.
  
- Customer referral: The PG&E SPOC and the BayREN technical assistance provider use a decision-making tree (below), that defines when a project is a best fit for each program. The teams have agreed-upon referral protocols to make hand-offs seamless and to minimize loss of participant engagement. The tree is revisited each year.
  - CESH, MESP, and BAMBE have agreed that customers who cannot participate in a minimum number of measures through BAMBE will be referred to SPOC so that they can then be referred to CESH, MESP, or a better suited program that meets customer needs and requirements. Conversely, CESH and MESP will refer customers to SPOC for BAMBE or other program participation in cases where projects do not meet program cost-effectiveness requirements.
  - BAMBE will refer low-rise multifamily (2-4 units) to CESH, as CESH covers the gap between single-family and larger multifamily projects.
  - PG&E and BAMBE will also explore opportunities for incentive layering between programs to maximize project savings.
  
- Financial offerings: Financing resources from PG&E and BayREN will be open to both BAMBE and SPOC participants. PG&E's On-Bill Financing and BayREN Multifamily Financing programs will accept and review both PG&E and BayREN projects.

Figure 2 provides an overview of the coordination protocol between PG&E and BayREN multifamily programs. The figure includes how both PAs will coordinate with MCE<sup>14</sup> multi-family offerings. The decision tree can be used to provide direction if a customer needs assistance finding a program that supports their needs. PG&E/BayREN referrals will take place through the SPOC. As PG&E's MESP and CESH programs evolve and mature in the market, the coordination will evolve. PG&E and BayREN will work with the SPOC such that customers can be referred to programs that are best suited for their

<sup>14</sup>MCE's territory overlaps with both BayREN and PG&E in Marin, Napa, Contra Costa and Solano counties.

needs. Projects in shared PG&E/BayREN territory that have multiple measures and meet IOU cost effectiveness requirements will remain with the program that initiated the project.

**Figure 2: Coordination Protocol for Multi-Family Programs**



\*BayREN offers a Clean Heating Pathway for electrification measures that is being leveraged with CCA and municipal utility funding. Decarbonization activities will be coordinated.

**e. D.12-11-015 Compliance**

The following table describes in further detail how BayREN’s Multifamily program satisfies the REN criteria in D.12-11-015.

**Table 7: BayREN Multifamily Program’s Compliance with D.12-11-015**

REN Criteria	BayREN Compliance
1. Activities IOU cannot or does not intend to undertake	BayREN is focused on serving multifamily owners that have more comprehensive scopes of work and need more personal attention and assistance to participate in energy efficiency programs.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	Through the BAMBE Clean Heating Pathway, BayREN is focusing on pairing decarbonization and standard energy efficiency measures for multifamily buildings in a way that maximizes the effectiveness of electrification technology..

REN Criteria	BayREN Compliance
<b>3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap</b>	The definition in D.18-05-31 precludes almost all Bay Area properties from being considered hard-to-reach. Therefore, BayREN and PG&E programs that are open to all multifamily properties cannot be considered hard-to-reach in the Bay Area.

## **E. Commercial (BayREN06)**

### **a. Summary of Program Differentiation**

The BayREN Small and Medium Commercial Buildings (SMCB) program consists of the BayREN Business subprogram. BayREN Business (formerly referred to as BayREN Commercial P4P) is a normalized metered energy consumption (NMEC) program. Due to the economic impacts from the pandemic, BayREN Business re-launched in January 2021, using a single implementer model. In January 2022, BayREN Business began a transition to using multiple implementers on Recurve’s Demand FLEXMarket (FLEXMarket). Through the FLEXMarket, BayREN Business will work with multiple aggregators to deliver whole building energy efficiency solutions focusing on properties under 50,000 square feet (sf) or with energy use of less than 500,000 kWh or less than 25,000 therms annually. BayREN Business uses data-driven targeting to identify customers in this category and provide comprehensive technical assistance and bundled measure packages that will be attractive to those customers. BayREN Business will focus on providing energy efficiency rebates and technical assistance to the following sectors: retail, professional offices, restaurants, gyms/multi-use buildings, and grocery/corner stores.

The key differentiators for the BayREN Business program from PG&E’s offerings include: a specific focus on small, medium and hard-to-reach businesses (under 50,000 sq ft or with energy use of less than 500,000 kWh or less than 25,000 therms annually), predictive energy model based targeting; and an incentive structure that provides quarterly incentives based on metered savings in compliance with Commission-approved NMEC methods.

Coordination with PG&E, as well as any regional SMB and third-party implementers, will be incorporated into the implementation plan to reduce any possible customer confusion and avoid double-dipping if a customer was previously served (although this is unlikely due to BayREN’s targeting focus). Table 8 provides a summary of 2022 BayREN and PG&E programs that will continue in 2023.

**Table 8: Summary of Similar BayREN and PG&E Small and Medium Commercial Buildings Programs**

	BayREN	PG&E
<b>Program Name</b>	BayREN Business	<ul style="list-style-type: none"> <li>Commercial Deemed</li> <li>Commercial Calculated</li> <li>CoolSave Grocery Comprehensive Retrofit and Commissioning</li> <li>Advanced Energy Program for High Tech and Biotech</li> <li>Healthcare Energy Fitness Initiative</li> <li>SmartLabs Program - Energy and Ventilation</li> <li>NetOne Program - Comprehensive Commercial</li> <li>Micro/Small Equity Program Placeholder (TBD)</li> <li>RAPIDS Wastewater Program (Public Sector)</li> <li>Government &amp; K-12 Schools Program (Public Sector)</li> </ul>
<b>Eligible Measures</b>	<ul style="list-style-type: none"> <li>Advanced Metering Systems; Boiler Plant Improvements</li> <li>Energy Management Control Systems;</li> <li>Building Envelope Modifications;</li> <li>Electric Motors and Drives; Energy/Utility Distribution Systems;</li> <li>Energy Related Process Improvements;</li> <li>Lighting Improvements;</li> <li>HVAC maintenance and replacement;</li> <li>Air Ionization Systems (to reduce build up at fan coils)</li> <li>Appliance and Plug-Load Reductions;</li> <li>Refrigeration &amp; Food Service Equipment;</li> <li>Water and Sewer Conservation Systems</li> </ul>	<ul style="list-style-type: none"> <li>Chilled water, hot water, and steam distribution systems</li> <li>Chiller and boiler plant improvements</li> <li>Lighting improvements</li> <li>Refrigeration equipment</li> <li>HVAC maintenance and replacement</li> <li>Food service equipment</li> <li>Pump controls, upgrades</li> </ul>
<b>Estimated 2023 Budget</b>	\$3,464,297	\$ 26,234,301
<b>Target Audience</b>	Business and Property Owners and Managers of small and medium commercial buildings in the Bay Area with more than 50% of its floor-space used for non-residential activities, up to 50,000 sq-ft, <500,000 kWh, and <250,000 Therms, and their contractors	<ul style="list-style-type: none"> <li>Regional SMB for small and medium customers &gt;50,000 sq-ft</li> <li>Hospitality/Hotels, chains</li> <li>Groceries all sizes, focused on refrigeration.</li> <li>Healthcare facilities all sizes</li> <li>Commercial and institutional laboratories and high tech</li> <li>Commercial real estate and retail all sizes</li> <li>Local government facilities and publicly funded K-12 and charter schools</li> </ul>

BayREN		PG&E
		<ul style="list-style-type: none"> <li>Commercial real estate and retail all sizes</li> <li>Deemed and calculated programs have no size or segment restrictions</li> <li>Non-state government funded wastewater facilities</li> </ul>
Resource/Non-Resource	Resource	Resource

### b. Summary of BayREN Program Objectives

**Energy Savings** - BayREN Business will continue to provide energy-efficiency technical assistance and easy-to-understand incentives to serve micro, small and medium (less than 50,000 sf or with energy use of less than 500,000 kWh or less than 25,000 therms annually) Bay Area commercial buildings, and the business tenants within. Micro and small businesses will have access to program referrals to other utility and CCA energy efficiency programs, as well as Mission Asset Fund’s suite of small business loans. By working with the BayREN Business program’s aggregators and the BayREN Building Performance Advisor<sup>15</sup>, business and property owners and managers will receive technical assistance that will focus on bundling cost-effective measures.

**Financial Assistance** - As a direct response to the COVID-19 pandemic aftermath, BayREN Business will focus its resources on reducing the energy burden of SMBs in the sectors most affected, including restaurants, retailers, health and beauty, and schools.

**Program Referral** – BayREN Business recognizes that not all SMBs are ideal candidates for a NMEC program experience. For instance, to be eligible for BayREN Business, the potential program participant’s energy consumption baseline must be stable. An unstable baseline could adversely impact energy savings performance in the future. Therefore, instead of NMCE, such businesses would be best served by direct-install or point-of-sale rebate programs. As such, BayREN Business acting through its BayREN Building Performance Advisor will provide referrals to complimentary energy efficiency and financing programs (e.g. PG&E’s new third-party offerings) to the benefit of the customers. Program referrals serve to help other utility and CCA programs achieve the five percent small commercial penetration target established in D.18-05-041.<sup>16</sup>

**Secured Access to Data** - Beyond those objectives, BayREN Business endeavors to develop a consistent data policy to support not only the BayREN Business program, but

<sup>15</sup> The BayREN Building Advisor is a neutral, third-party advisor that provides technical assistance and program referrals – including programs of other program administrators – to small, medium and hard-to-reach businesses.

<sup>16</sup> D.18-05-041, p. 28.

also PG&E's portfolio of future NMEC programs. Together, the parties lay the foundations of data processes that will ultimately benefit other utilities, RENs, third-party program implementers and the ratepayers.

PG&E and BayREN will continue to work together to find opportunities to improve data sharing process and resolve any challenges.

### **c. Comparable and/or Equivalent PG&E Program**

PG&E programs which serve small and medium customers are described below.

#### **CoolSave Grocery Retrofit & Commissioning Program**

CoolSave targets medium to large size grocery and retail chains with grocery segments with a primary focus on improving refrigeration and refrigeration controls using a site specific NMEC approach. HVAC and lighting controls and capital projects are also considered on a limited basis.

#### **Healthcare Energy Fitness Initiative**

The Healthcare Energy Fitness Initiative program targets medical facilities primarily for medium and large customers but considers smaller facilities in these customers' portfolios. This is a building controls centric program which seeks to optimize all building systems but also considers, product-based capital projects in lighting, HVAC, and refrigeration. This program primarily uses the customized project process.

#### **SmartLabs Program**

The SmartLabs program focuses on medium to large commercial and institutional laboratories with an emphasis on advanced control of ventilation and HVAC systems. This program focuses on an NMEC approach but will consider capital projects on a limited basis for lighting and refrigeration measures.

#### **Advanced Energy Program for High Tech and Biotechnology**

The Advanced Energy Program targets medium to large high tech and bio tech facilities but will consider smaller facilities in these customers' portfolios. This is a building controls centric program with HVAC systems as its primary technology focus. This program primarily uses the customized project process.

#### **NetOne Commercial Program**

The NetOne commercial program is designed to serve customers of all sizes with all technologies in the commercial real estate market and retail. Utilizing all project submission channels, this program offers lighting, HVAC, and refrigeration measures. For the second half of 2021 this program will offer comprehensive EE options for customers not served by other sector specific programs.

#### **RAPIDS Wastewater Program**

The RAPIDS wastewater program targets medium to large public and private sector wastewater treatment and collection system utilizing a customized project process. The program focuses on system control strategies as well as pump and water heating

optimization. Late in 2022, this program will cease soliciting new projects with the launch of a Statewide wastewater program. The RAPIDS program will continue working to obtain commitments for projects already proposed and to complete committed projects through 2023.

### **Government and K-12 Schools Program**

The Government and K-12 Schools program is a comprehensive program which serves customers of all sizes with all EE technology paths. Targeted measures include HVAC and controls upgrades, lighting and controls improvements, refrigeration strategies, and food service measures.

### **Commercial Deemed Incentives Program**

The Commercial Deemed Incentives (Deemed) program offers prescriptive rebates directly to customers, vendors, or distributors for the installation or sale of energy-efficient equipment. The subprogram offers a broad array of measures across technology segments including HVAC, refrigeration, backup generators for eligible customers, and water heating. This program is offered to all customer segments and sizes.

### **Commercial Calculated Program**

The Calculated program provides financial incentives for non-residential customers to install new equipment or systems that exceed applicable code and/or industry standards in existing buildings. PG&E's Calculated program includes both customized incentives (formerly "Customized Retrofit") and RCx offerings. RCx represents an important element of PG&E's EE toolkit by reducing energy usage and optimizing the efficiency of mechanical equipment, lighting, and control systems to current standards in existing facilities. To these ends, PG&E offers financial and technical assistance for customers to undertake RCx projects and implement measures that improve facility operations.

PG&E launched a meter-based incentive channel as a subprogram of this calculated incentive program. The subprogram will initially be focused on sites that are at least 50,000 sq-ft and will incorporate site-specific NMEC-based performance incentives for capital retrofits, retro-commissioning, and behavioral and operational bundled projects.

### **Micro/Small Equity Program Placeholder (TBD)**

While the final design and execution of this program is not fully defined, this program criteria intends to reach customers not typically served by any other programs. Currently in solicitation and scheduled to launch in Q4 2022 this program will likely include multiple technologies of low or no cost measures and may or may not be focused within the region shared by BayREN and PG&E. Once the location, implementer, and program design are awarded, we will apply appropriate coordination efforts which mirror other programs, in place.

#### **d. Coordination Protocol Between Programs**

Using the referral tree in Figure 3, the Building Performance Advisor will make appropriate program referrals after obtaining preliminary site information. The BayREN

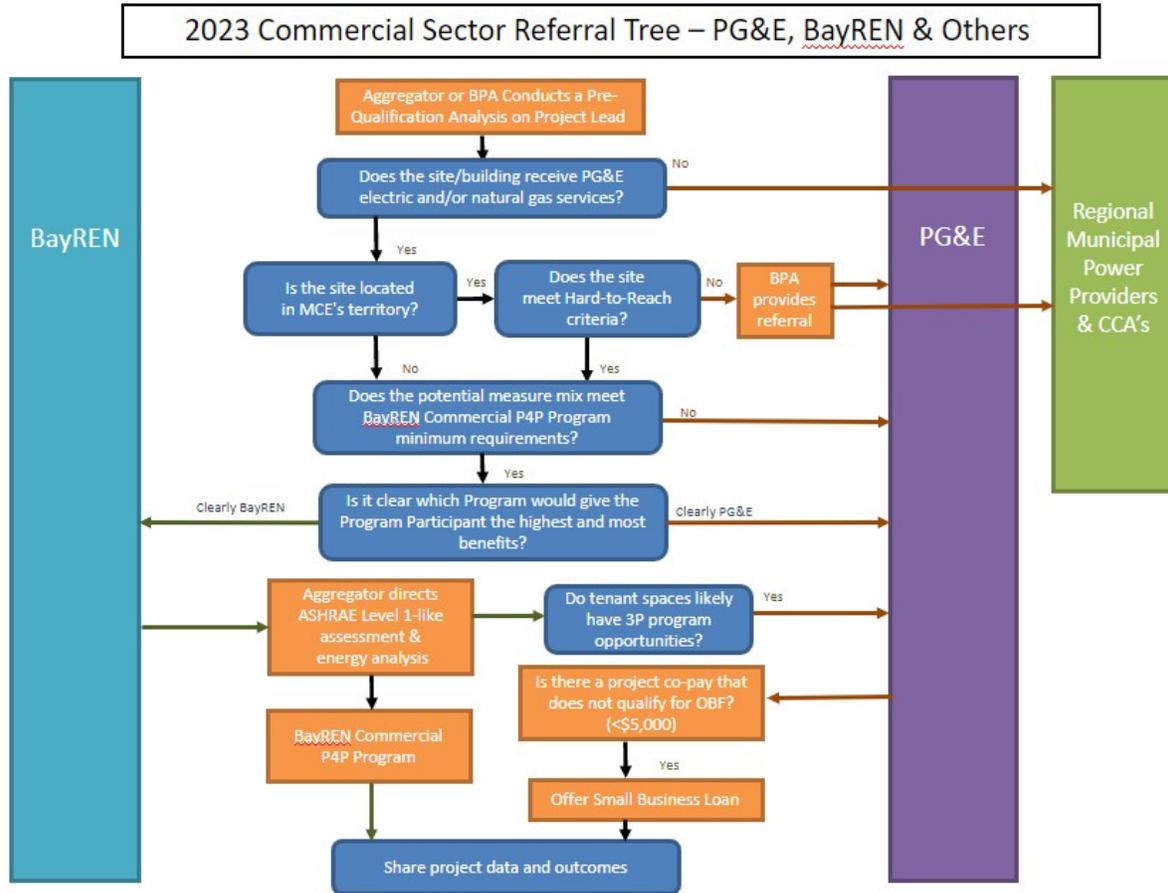
and PG&E program teams will conduct regularly scheduled monthly check-in calls with regular agenda items that include notice of marketing campaigns, continued coordination, double-dipping concerns, discussion of any issues impacting the programs, and to learn about updates of other programs (i.e. financing) that could benefit SMCB energy efficiency projects.

BayREN's SMCB program may leverage existing PG&E programs when it is beneficial to the customer. As such, a coordinated process will be developed to avoid double-dipping. The BayREN and PG&E program managers plan to hold a monthly call to review any BayREN projects that are leveraging PG&E incentives to ensure that the customer is not paid twice for the savings resulting from a particular measure. Once the SMCB program is operational, a formal double dipping review process will be established.

**e. Coordination Between SW Program(s)**

The Statewide Programs include the Food Service Point of Sale, Commercial Water Heating, Lighting, Wastewater and Commercial HVAC subprograms. BayREN and PG&E's Program Managers will conduct regularly scheduled check-in calls as described in Section (d) above.

**Figure 3: Coordination Protocol for Commercial Programs**



**f. D.12-11-015 Compliance**

Table 9 describes in further detail how BayREN’s Small and Medium Commercial Buildings program satisfies the REN criteria in D.12-11-015.

**Table 9: BayREN Small and Medium Commercial Buildings Program's Compliance with D.12-11-015**

REN Criteria	BayREN Compliance
1. Activities IOU cannot or does not intend to undertake	Not applicable

<p><b>2. Pilot activities where there is no IOU program offering and where there is potential for scalability</b></p>	<p>BayREN provides more technical assistance, is specifically targeted to SMBs under 50,000 sq-ft or with energy use of less than 500,000 kWh or less than 25,000 therms annually.</p> <p>The subprogram has the potential for scalability by heavily leveraging local and regional resources (e.g. downstream and midstream programs, OBF, microloan).</p>
<p><b>3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap</b></p>	<p>The BayREN Business programs are designed to harvest sizable amounts of energy savings cost-effectively in the SMB sector, many of which will be HTR. For example, strip mall lessees and individual lessees in small and medium-sized office parks and mid-rises are often HTR-eligible.</p>

## **F. Codes and Standards (BayREN03)**

### **a. Summary of Program Differentiation**

BayREN and PG&E Codes and Standards programs address similar audiences – local government building departments and others involved with the building code – but from different approaches, ensuring comprehensive program offering and services. As the statewide lead for Codes and Standards, PG&E develops resources, templates, and technical studies that are comprehensive, effective and useful across the state. PG&E also conducts state building energy code advocacy at the state-level. BayREN bridges the gap between local governments and the state, working from the bottom up to coordinate directly with Building Departments in the Bay Area and to customize training, templates and approaches to codes and standards. PG&E and BayREN will continue to work together to ensure a well-coordinated set of offerings.

**Table 10: Summary of Similar BayREN and PG&E Codes and Standards Programs**

	<b>BayREN</b>	<b>PG&amp;E</b>
<b>Program Name</b>	Codes and Standards	<ul style="list-style-type: none"> <li>• Compliance Improvement (PGE21053)</li> <li>• Reach Codes (PGE21054)</li> <li>• State Building Codes Advocacy (PGE_SW_CSA_Bldg)</li> </ul>
<b>Eligible Measures</b>	N/A	N/A
<b>Estimated Budget</b>	\$1,799,350	<ul style="list-style-type: none"> <li>• Compliance Improvement: \$ 5,297,606</li> <li>• Reach Codes: \$2,074,846</li> <li>• State Building Codes Advocacy: \$2,735,280</li> </ul>

<b>Target Audience</b>	Bay Area local government staff and officials including building department staff, planners, sustainability coordinators, and elected officials, and others involved in code compliance such as applicants and contractors.	<ul style="list-style-type: none"> <li>• The compliance improvement supply chain, including manufacturers, distributors, retailers, architects, builders, designers, energy consultants, contractors, plans examiners, building inspectors, building officials, planners, etc.</li> <li>• National, statewide, and local entities engaged in building codes, appliance standards, or reach codes.</li> </ul>
<b>Resource/Non-Resource</b>	Non-Resource	Resource and Non-Resource <sup>17</sup>

**b. Summary of BayREN Program Objectives**

BayREN’s Codes and Standards Program is focused on supporting Bay Area local governments relative to codes and policies concerning energy efficiency, with three general program areas: energy code compliance tools and services; specialized and focused trainings and workshops; and stakeholder engagement and policy development.

In terms of compliance tools and services, BayREN works with Bay Area local governments to provide tools and approaches to assist them with code compliance, focusing on the most common project types, as well as those where local governments can have the most influence, such as municipal buildings. BayREN often customizes its tools and services for specific jurisdictions.

BayREN provides specialized and focused trainings and workshops to complement those offered by PG&E. BayREN also hosts regional forums for local government staff, building professionals, energy consultants and policy makers on important energy issues that allow for the sharing of perspectives and best practices.

Finally, BayREN provides regional coordination on energy efficiency policy and assists jurisdictions that are interested in reach codes and/or other energy efficiency policy development, adoption, implementation, and impact tracking. BayREN also facilitates engagement between local governments and the California Energy Commission (CEC) on code development efforts, including ensuring that local government staff are aware of proposed code development proposals and that their concerns about enforceability are considered. BayREN collaborates with other regional agencies on energy efficiency policy and activities, including the Bay Area Air Quality Management District and the Bay Area Regional Collaborative.

**c. Comparable and/or Equivalent PG&E Program – Codes and Standards**

<sup>17</sup> The State Building Codes Advocacy program is a resource program, while the Compliance Improvement and Reach Codes subprograms are non-resource programs.

PG&E and BayREN both have programs that work towards energy code compliance improvement, code enhancements, and reach codes adoption and implementation.

### **Compliance Improvement**

PG&E's Compliance Improvement subprogram targets actors within the compliance improvement supply chain to maintain robust statewide compliance with building codes and appliance standards. Compliance Improvement program needs are determined through a performance-based solutions approach to identify training, tools, resources and outreach necessary to narrow the gap between actual and desired performance. Multiple training modalities are used to maximize student participation. A consistent curriculum is developed and delivered statewide by a team of subject matter experts.

### **Reach Codes**

PG&E's Reach Codes subprogram provides technical support to local governments that wish to adopt ordinances that exceed statewide Title 24 minimum energy efficiency requirements. Local energy ordinances must be cost-effective to be legally enforceable but preparing the supporting documentation can present an insurmountable obstacle for many jurisdictions. IOU activities include analysis of cost-effective ordinance options, providing technical support to local government staff, and assistance completing the required CEC application and approval process. Additionally, the Reach Codes subprogram may provide technical support to facilitate ordinance implementation, including training for staff, or resources such as applicant handouts.

### **State Building Code Advocacy**

The State Building Code Advocacy program targets improvements to California's Building Energy Efficiency Standards (Title 24, Part 6) that are updated by the California Energy Commission on a triennial cycle. The subprogram also supports CALGreen (Title 24, Part 11) updates and in ratings organizations as necessary. PG&E advocates for new or more stringent regulations by: a) conducting research and analysis to assess cost effectiveness, technical feasibility, market availability for building code measures, and compliance ability for proposed regulations within the scope of a rulemaking, b) developing code enhancement proposals, and c) participating in public proceedings. PG&E is the lead for this Statewide C&S program.

#### **d. Coordination Protocol Between Programs**

To identify opportunities for collaboration and to ensure activities are complementary and non-duplicative, the BayREN and PG&E Codes and Standards teams have monthly coordination calls to discuss ongoing and planned activities and plan to meet in person annually if public health and safety guidance allows for in person meetings. To ensure there is no overlap of compliance improvement or reach code activities, additional coordination protocols have been developed (see Figure 4 below).

**Figure 4: Coordination Protocol for Codes and Standards Programs**

<b>BayREN</b> <u><b>Local, Focused</b></u>		<b>PG&amp;E</b> <u><b>Statewide, Comprehensive</b></u>
<ul style="list-style-type: none"> <li>Regional and local demonstration projects, such as eTools</li> <li>Work with local governments to encourage code compliance</li> <li>Resources such as permit guides and other resources not offered by PG&amp;E</li> <li>Focused trainings on common projects, often customized</li> <li>Quarterly regional Forums to share best practices and new ideas</li> </ul>	<p><b><i>Compliance Improvement and Trainings &amp; Workshops</i></b></p>	<ul style="list-style-type: none"> <li>Dynamic tools such as Virtual Compliance Assistant, Reference Ace, Navigator Ace, Image Ace &amp; Product Finder</li> <li>Outreach campaigns to improve compliance with Title 24, Part 6 &amp; Title 20</li> <li>Support for CEA exam</li> <li>Resources such as trigger sheets, fact sheets, application guides, and other resources not offered by BayREN</li> <li>Comprehensive T24 Standards Essentials courses, Code &amp; Coffee modeling demonstrations, instructional videos and public workshops</li> </ul>
<ul style="list-style-type: none"> <li>Facilitates regional reach code and energy efficiency policy efforts</li> <li>Assists local governments in setting priorities, coordinating with state agencies, and tracking results</li> </ul>	<p><b><i>Local Government Ordinances &amp; Policy Supports</i></b></p>	<ul style="list-style-type: none"> <li>Develops cost effectiveness studies and other technical resources</li> <li>Provides technical assistance to local governments upon request</li> <li>Houses studies, policy development tools, and resources on <a href="http://localenergycodes.com">localenergycodes.com</a></li> </ul>
<ul style="list-style-type: none"> <li>Engage with local governments to provide local input to state relative to codes, and to share information from state level about code development process back to local governments</li> </ul>	<p><b><i>Code Update Advocacy</i></b></p>	<ul style="list-style-type: none"> <li>Lead development of code enhancement proposals</li> <li>Lead advocacy activities; support public workshops and hearings</li> <li>Support post-adoption work on manuals and software advancements</li> </ul>

**i. Compliance Improvement**

Each PA’s website is kept current with training opportunities and other relevant activities. For new compliance improvement tools, resources or training, BayREN and PG&E will discuss the ideas during the regular coordination calls to identify any potential overlap and determine if there are opportunities for collaboration. The PAs will provide, within two weeks from the date of the communication, drafts of compliance improvement resources to each other for comment and consideration. Each program administrator will assist in marketing and outreach efforts of the others’ activities by providing information about such activities as appropriate at events, on webpages, or through email channels.

ii. **Reach Codes**

BayREN and PG&E will continue to work together to increase and improve reach code adoption and implementation within the Bay Area and will discuss approaches and progress during regular coordination meetings. PG&E will continue to maintain a local energy codes website which houses completed cost effectiveness studies, reach codes adoption tracking map and list, model language, a policy development tool and impact estimator, and other resources that any local government may download and use to support a local ordinance. BayREN's website provides educational materials and information related to reach codes and energy policies, policy tools and calculators, and links to relevant resources for local government staff. PG&E and BayREN will incorporate links to each other's websites as appropriate.

PG&E, in coordination with other IOUs, will continue to lead reach code cost-effectiveness studies for Bay Area jurisdictions, individually and on a regional level. BayREN will continue to lead outreach among local governments and will refer local governments to PG&E for technical support. PG&E will contact the requesting local government within one week to establish a mutually acceptable schedule and will inform BayREN of the schedule if PG&E intends to carry out a study. If PG&E does not conduct the study, BayREN will respond to the request. During monthly coordination calls, BayREN and PG&E will provide updates on studies that are planned and in progress.

e. **Coordination between SW program(s) –**

PG&E will coordinate with the statewide codes and standards program as appropriate and will work with BayREN to implement opportunities to reduce ratepayer resource use by working together to address a need. This may take the form of a division of labor, or collaboration, as in the case of a co-sponsored forum or other event.

f. **D.12-11-015 Compliance**

The following table describes in further detail how BayREN's Codes and Standards program satisfies the REN criteria in D.12-11-015.

**Table 11: BayREN Codes and Standards Program's Compliance with D.12-11-015**

REN Criteria	BayREN Compliance
<p><b>1. Activities IOU cannot or does not intend to undertake</b></p>	<ul style="list-style-type: none"> <li>• BayREN’s Codes and Standards activities are designed by local governments.</li> <li>• BayREN’s compliance tools and services, and trainings and workshops all fill gaps and support PG&amp;E’s compliance improvement activities. While PG&amp;E prepares comprehensive tools, BayREN focuses on key areas of interest to local governments.</li> <li>• BayREN’s reach codes activities focus on regional outreach include outreach and coordination. PG&amp;E’s activities focus on cost effectiveness and other technical support.</li> <li>• BayRENs stakeholder engagement and policy development activities are undertaken with a regional perspective and directed by the Bay Area local governments such that they do not overlap with PG&amp;E’s activities.</li> </ul>
<p><b>2. Pilot activities where there is no IOU program offering and where there is potential for scalability</b></p>	<ul style="list-style-type: none"> <li>• BayREN pilots activities within the Bay Area which could potentially be duplicated in other regions (as has been done with 3C-REN) or scaled to the state level.</li> <li>• BayREN’s compliance tools and services, and trainings and workshops all fill gaps and support PG&amp;E’s compliance improvement activities. While PG&amp;E prepares comprehensive tools, BayREN focuses on key areas of interest to local governments.</li> <li>• Additionally, BayREN conducts various demonstration projects, such as with its eTools, that do not duplicate existing PG&amp;E tools or resources, or those in development. These tools are being used in a limited number of local jurisdictions, in order to test them and determine whether they can be scaled for use throughout the region or in other parts of California.</li> </ul>
<p><b>3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap</b></p>	<p>Not applicable</p>

## **G. Data Sharing Protocol**

PG&E has data governance and protection obligations for sharing any customer data. Before sharing data double-dip check purposes or to support a BayREN program, the following data security and privacy protocols need to be completed:

- The party seeking customer data is in contract with BayREN or with the lead contractor for a BayREN program.
- The party seeking data has signed the PG&E-BayREN Non-disclosure Agreement (NDA).
- The party seeking data has completed PG&E's Third-Party Security Review (TSR) and TSR renewals where applicable.

**APPENDIX A: SUMMARY OF BAYREN PROGRAM COMPLIANCE WITH D.12-11-015**

Check D.12-11-015 Threshold Criteria that apply for each program	Comparable PG&E Program if applicable	Comparable Statewide IOU Program	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
BayREN BAMBE (Multifamily) (BayREN02)	Multifamily Energy Savings Program (PGE_Res_003)		<b>XX</b>	<b>XX</b>	
BayREN Commercial (BayREN06)	<ul style="list-style-type: none"> <li>• Commercial Calculated (PGE21011)</li> <li>• Commercial Deemed (PGE21012)</li> <li>• Government &amp; K-12 (PGE_Pub_009)</li> <li>• SmartLabs (PGE_Com_002)</li> <li>• CoolSave Grocery (PGE_Com_001)</li> <li>• RAPIDS Wastewater (PGE_Pub_010)</li> <li>• NetOne Comm Comprehensive (PGE_Com_003)</li> <li>• SmartLabs Comm (PGE_Com_004)</li> <li>• Advance Energy Program HT/BT (PGE_Com_005)</li> </ul>			<b>XX</b>	<b>XX</b>
BayREN Codes and Standards (BayREN03)	<ul style="list-style-type: none"> <li>• Compliance Improvement (PGE21053)</li> <li>• Reach Codes (PGE21054)</li> </ul>	State Building Codes Advocacy (PGE_SW_CSA_Bldg)	<b>XX</b>	<b>XX</b>	

**APPENDIX B: BAYREN’S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2023**

<b>REN Program Unique ID</b>	<b>Sector</b>	<b>Annual Budget</b>	<b>Eligible Measures</b>
<b>BayREN Single Family (BayREN08)</b>	Residential	\$9,794,946	Duct sealing, attic and wall insulation, HVAC equipment upgrades, Smart thermostats, gas storage water heaters and heat pump water heaters, heat pump clothes dryers, induction cooktop/ranges, LED lamps, water faucet aerators, low flow showerheads and Tier II power strips. Single measure upgrades allowed.
<b>BayREN Green Labeling (BayREN07)</b>	Residential	\$1,238,500	N/A
<b>BayREN BAMBE (Multifamily) (BayREN02)</b>	Residential	\$6,901,930	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures, targeting 15-20% savings.
<b>BayREN Commercial (BayREN06)</b>	Commercial	\$3,464,297	Advanced Metering Systems; Boiler Plant Improvements; EMCS; Building Envelope Modifications; Chilled Water, Hot Water, and Steam Distribution Systems; Chiller Plant Improvements; Electrical Peak Shaving/Load Shifting; Electric Motors and Drives; Energy/Utility Distribution Systems; Energy Related Process Improvements; Lighting Improvements; HVAC maintenance and replacement; Appliance and Plug-Load Reductions; Refrigeration & Food Service Equipment; Water and Sewer Conservation Systems
<b>BayREN Codes and Standards (BayREN03)</b>	Cross Cutting	\$1,799,350	N/A
<b>BayREN Water Energy Nexus (BayREN04)</b>	Cross Cutting	\$1,304,500	Water efficiency upgrades that also deliver energy savings (site and embedded) through the water-energy nexus. Measures are “eligible” to be included as part of a program participant’s on-bill charge. Measures are not limited to energy efficiency eligible measures (EEEMs). Measures are not eligible for BayREN Energy Efficiency Portfolio rebates. IOU rate-payer funds are not used to underwrite or directly finance measure installation. Eligible measures will include, but may not be limited to: <ul style="list-style-type: none"> <li>• A 1.06 gallon per flush or better toilet with a Maximum Performance (MAP) rating of 600 grams or more.</li> <li>• A high efficiency (typically 1.5 gallon per minute) showerhead.</li> <li>• A 1.0 gallon per minute bathroom faucet aerator.</li> <li>• A 1.5 gallon per minute kitchen faucet aerator.</li> <li>• Turf removal and irrigation system improvements to prepare sites for drought tolerant landscaping.</li> </ul>

## **APPENDIX C: PG&E'S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2023**

For information on PG&E's portfolio of programs, please see *Pacific Gas and Electric Company's 2021 Energy Efficiency Annual Report*.<sup>18</sup> More information on PG&E's EE programs, including budgets and Implementation Plans, can also be found on the California Energy Data and Reporting System (CEDARS) website.<sup>19</sup>

<sup>18</sup> Energy Efficiency Annual Reports for 2020 will be available on the CPUC's Energy Efficiency Reporting webpage at <https://www.cpuc.ca.gov/general.aspx?id=6442468251>.

<sup>19</sup> To access this information, please go to <https://cedars.sound-data.com> and then select "Programs."