

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 4551G/6224E
As of July 26, 2021

Subject: BayREN and PG&E Annual Joint Cooperation Memorandum for Energy Efficiency Programs for Program Year 2022

Division Assigned: Energy

Date Filed: 06-15-2021

Date to Calendar: 06-21-2021

Authorizing Documents: D1805041

Disposition:	Accepted
Effective Date:	07-15-2021

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

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AL Certificate Contact Information:

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PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
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- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
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The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Bay Area Regional Energy Network (BayREN) ID#941; PG&E

Utility type:

☒ ELC ☒ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Jennifer Berg

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E-mail: jberg@bayareametro.gov

E-mail Disposition Notice to: jberg@bayareametro.gov

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

June 15, 2021

Advice Letter (AL) #: BayREN 17-E; PG&E 4551-G/6224-E

Tier Designation: 2

Subject of AL: BayREN and PG&E Annual Joint Cooperation Memorandum for Energy Efficiency Programs for Program Year 2022

Keywords (choose from CPUC listing): Compliance; Energy Efficiency

AL Type: ☐ Monthly ☐ Quarterly ☒ Annual ☐ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: Decision 18-05-041, Ordering Paragraph 38

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? ☐ Yes ☒ No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☒ No

Requested effective date:

No. of tariff sheets: Effective Date: 7-15-21; Tariff Sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

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Title: Energy Programs Manager
Utility Name: BayREN (Association of Bay Area Governments)
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Name: Erik Jacobson, c/o Meagan Lawson
Title: Director, Regulatory Relations
Utility Name: PG&E
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Clear Form

ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtailable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	



June 15, 2021

California Public Utilities Commission
Energy Division
Attention: Tariff Unit
505 Van Ness Ave., 4th Floor
San Francisco, CA 94102-3298

BayREN Advice Letter 17-E
(BayREN ID #941)
PG&E Advice Letter 4551-G/6224-E
(Pacific Gas and Electric Company ID U 39 M)

Subject: BayREN and PG&E's Joint Cooperation Memo in Compliance with D.18-05-041, Ordering Paragraph 38 for Program Year 2022

The Association of Bay Area Governments, on behalf of the San Francisco Bay Area Regional Energy Network (BayREN), hereby submits the 2022 Joint Cooperation Memo (JCM) with Pacific Gas and Electric Company (PG&E).

Tier Designation

This Advice Letter (AL) has a Tier 2 designation, as provided in Decision Addressing Energy Efficiency Business Plans, Decision (D.) 18-05-041, Ordering Paragraph (OP) 38. The JCM is attached as Attachment A.

Effective Date

Pursuant to General Order 96-B, BayREN and PG&E respectfully request that this Tier 2 AL become effective 30 days from the filing, or on July 15, 2021.

Background

D.18-05-041 approved PG&E's and BayREN's Energy Efficiency Business Plans for 2018-2025 and also directed the Investor Owned Utilities and Regional Energy Networks in overlapping service territories, to file annual JCMs to provide assurance

that their Business Plans are implemented pursuant to D.12-11-015 and D.16-08-019 and that the REN programs are in compliance with the program directives articulated in D.12-11-015 and D.16-08-019¹. The JCM describes energy efficiency programs that PG&E and BayREN anticipate offering in the nine Bay Area counties (their shared service area) in 2022, and discusses how the proposed activities will not be duplicative.² The JCM also details how BayREN's proposed activities comply with the criteria for REN activities first articulated in D.12-11-015.³ BayREN and PG&E anticipate that there may be changes to programs in light of requirement that all program administrators file Portfolio Applications on February 15, 2022, as directed by D.21-05-031, but commit to continuing to work together to ensure that the programs are not duplicative.

Protests

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than July 6, 2021, which is 20 days after the date of this submittal.

Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102
Facsimile: (415) 703-2200
Email: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to via both E-mail or U.S. mail at the address shown below on the same date it is mailed or delivered to the Commission:

¹ D. 12-11-015, p 17; D.16-08-019, pp 11-12.

² D.18-05-041, Finding of Fact 55.

³ D.12-11-015, p17.

For BayREN:

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Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.13-11-005. Address changes to the General Order 96-B service list should be directed to Jennifer K. Berg at jberg@bayareametro.gov or by calling 415-820-7947.

ASSOCIATION OF BAY AREA GOVERNMENTS

A handwritten signature in black ink that reads "Jennifer Berg". The signature is written in a cursive, flowing style.

Jennifer K. Berg
Assistant Director – Energy Programs

Attachment: BayREN-PG&E Joint Cooperation Memo for PY 2022
cc: Service List A.17-01-013 and R.13-11-005

ATTACHMENT A

2022 JOINT COOPERATION MEMO PACIFIC GAS AND ELECTRIC COMPANY BAY AREA REGIONAL ENERGY NETWORK

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A. Overview

The 2022 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 areas¹
- 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.19-12-021.²

This JCM covers energy efficiency program activity and collaboration in program year 2022.

BayREN and PG&E policy and program staff have committed to continue meeting on a monthly basis to ensure that cooperation, coordination, and the best service to joint territory ratepayers is realized. Meetings include discussions on Customer Choice, marketing, policy, and double dipping prevention. BayREN and PG&E have jointly determined a schedule for 2022. 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 2021 is a year of transition for the PG&E portfolio. Throughout 2020, PG&E worked to outsource 25% of its portfolio to 25% third-party implementers by June 2020, and 40% of the portfolio to third-party implementers by December 2020. As a result, many programs ramped down and closed in 2020, while many new third-party implemented programs began launching in 2021. Solicitations are still ongoing, and there continue to be many unknowns about programs that will launch in late 2021 and into 2022. PG&E is committed to communicating with BayREN to provide regular updates on program decisions whenever feasible in order to ensure no 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 2022, 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.

¹ 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.

² D.12-11-015, p. 17.

- 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.
- 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 anticipate offering in 2022, including information on draft budgets and measure eligibility.
 - c. Appendix C: List all similar programs PG&E currently anticipate 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.³ Moderate income households in the Bay Area are ineligible for Energy Savings Assistance (ESA) programs 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.⁴ 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 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

³ 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.

⁴ 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.

Advisors also refer customers to complementary programs offered by utilities, Community Choice Energy (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 2022, BayREN's program will continue to use an engaged Home Energy Advisor⁵ to walk customers step-by-step through the process and to direct them to a Participating Contractors⁶ 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.

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 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 2022.

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.

⁵ Please note that PG&E also has a service called Energy Advisor but it is unrelated to the BayREN offering.

⁶ A Participating Contractor has successfully completed the BayREN two day training, has submitted all required paperwork and has been onboarded into the program.

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 2022. The engagement with manufacturers and distributors and the administration of the rebates provided by CCAs will continue in 2022 and potentially expanded with more CCAs joining in the effort.

Like all BayREN programs, outreach in 2022 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 Electrify Marin, Electrify San Jose and complementary programs developed by several of the CCAs, we will continue to leverage and integrate those programs into one cohesive message based on the audience as they launch.

b. PG&E Program Summary and BayREN Program Distinction

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) Pilot
- 2) Plug Load and Appliances
- 3) Home Energy Checkup.

These were the offerings in 2020, and there may be changes pending the results of the ongoing 3rd Party solicitations.

1) Pay for Performance (P4P) Programs

PG&E offers two third-party P4P programs in the Bay Area:

1. Home Intel (implemented by Home Energy Analytics): Offers free energy audits, education, and advisor services throughout Bay Area.
2. Home Energy Rewards Program (implemented by Franklin Energy): Offers free energy audits, education, advisor services, and a light touch measure kit. Additional measures are offered at a discount. In the BayREN territory, this program is only available in Contra Costa County, and is not available in the other eight counties.

Both P4P programs provide online energy audits, home energy reports, and education services. Home Energy Rewards also offers high performance air

conditioning systems, smart thermostats, high efficiency furnaces, LED lighting, low flow showerheads and faucet aerators, Tier 2 smart power-strips, duct sealing, attic insulation and building leakage reduction.

2) Plug Load and Appliances

PG&E has a stand-alone deemed smart thermostat rebate and heat pump water heater rebate to all residential customers in PG&E territory (single-family and multi-family) through its Plug Load and Appliances program (also called the Residential Energy Efficiency Program (REEP)). Customers can receive a rebate by documenting proof of purchase and meeting standard eligibility criteria, consistent with workpaper requirements. Smart thermostat is also an eligible measure in BayREN's Home+ menu of measures; however, to receive the rebate, eligible customers must install the smart thermostat through a participating contractor and otherwise participate in Home+.

3) Home Energy Checkup

PG&E offers an online Home Energy Check-up to all its residential customers (single family and multi-family), which is an online questionnaire that customers can 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.

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 Programs	PLA/REEP	Home Energy Checkup
Eligible Measures	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 and home energy reports, high performance air conditioning systems, smart thermostats, high efficiency furnaces, LED lighting (A-lamps, BR/R/MR/PAR lamps, globes and candelabras), low flow showerheads and faucet aerators, tier 2 smart power-strips, duct sealing, attic insulation and building leakage reduction.	2021 Offering: Smart Thermostats, Heat Pump Water Heaters. 2022 offering may be different. PG&E will adjust its eligible measures based on developments in the launch of the statewide PLA program in early 2022.	Home Energy Checkup (HEC) is a behavior based platform and does not contain specific measures. Behavior recommendations/tips are provided to the customer based on how they complete the checkup.
Incentive	Bonus incentives are offered to downsizing equipment, combining shell and HVAC measures, building air sealing and CAS testing.	Incentives vary by subprogram, however, generally align with expected savings detected at the meter.	2021: Smart Thermostat – standalone \$50 rebate for qualified models and up to \$120 when customers enroll or are already participating in a Time of Use Rate); Heat Pump Water Heater - \$300.	N/A

BayREN		Current PG&E Programs under BayREN Territory		
Savings Claim Type	Savings will be deemed per measure based in CPUC approved work papers.	Savings Claims use Normalized Metered Energy Consumption (NMEC) methodology.	Savings claims will be deemed per measure based in CPUC approved work papers.	Workpaper outlines the methodology for computing savings for this program.
Estimated 2022 Budget ⁷	\$9,404,243	\$4,835,316	\$954,279 ⁸	\$2,231,250
Target Customer	Moderate-income households (owners and/or renters) ⁹ , non-native English speaking households.	Home Intel: High AC users, High baseload in all PG&E territory. Home Energy Rewards: High AC users, high baseload in Contra Costa, San Joaquin (potential to expand).	All PG&E service territory.	All PG&E service territory.
Target Implementer	Specialty contractors	Behavioral and Operational focused; whole-home, retrofit experience	Individual Customer	Individual Customer
Resource/Non-Resource	Resource	Resource	Resource	Resource

In addition to these Programs, PG&E intends to launch a new heat pump water heater (HPWH) midstream research program in 2021. This program will research the current barriers to HPWH installation, develop processes to overcome these barriers, and test a midstream inducement strategy for the installation of qualified HPWHs. The program will coordinate with the mid-stream BayREN Heat Pump Water Heater program to ensure market and messaging consistency.¹⁰

⁷ The budgets provided herein are estimates. Final budgets will be provided in the 2022 Annual Budget Advice Letter.

⁸ The current estimate for 2022 is based on PG&E's PLA/REEP program budget for 2021. The 2022 budget for the Statewide PLA program is currently unknown.

¹⁰ Note that BayREN's program is not CPUC funded, so any potential overlap is permissible.

Finally, PG&E intends to launch a behind-the-meter thermal energy storage program called WatterSaver to provide incentives to customers who enroll electric water heaters to lower evening peak demand. This program will coordinate with BayREN's Home+ program and promote the opportunity to participating electric water heating customers.

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.

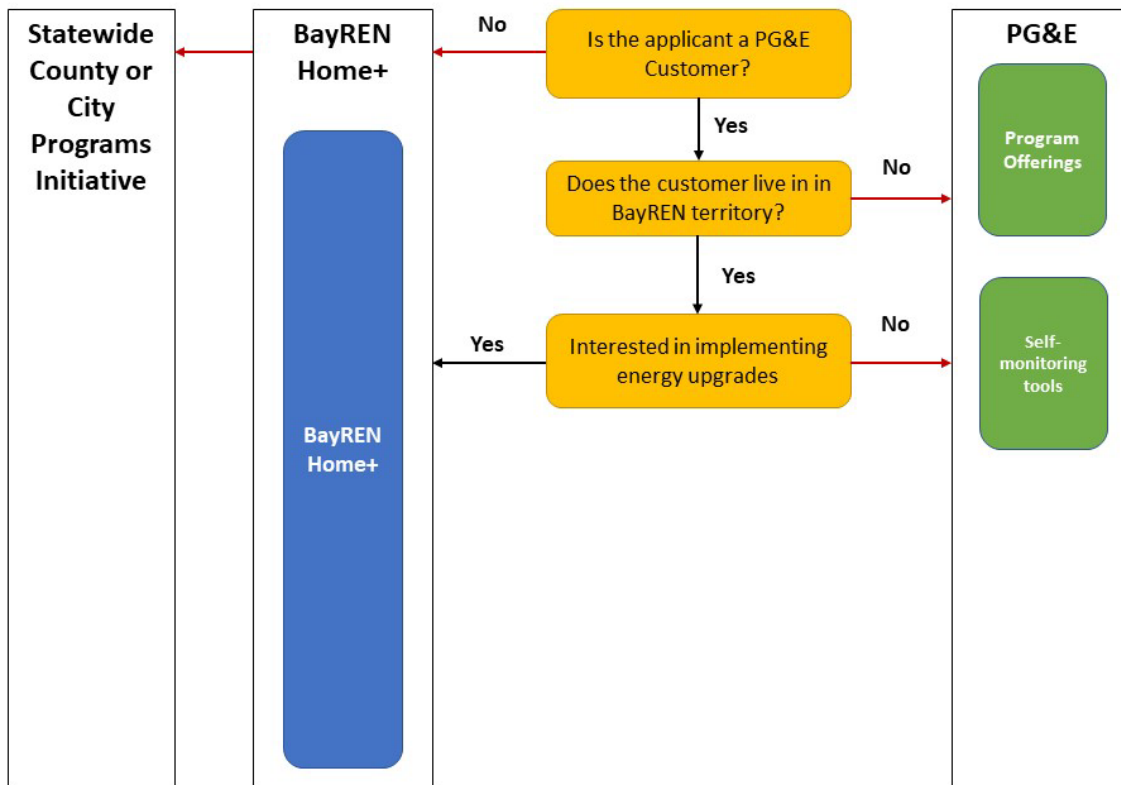
BayREN and PG&E senior management teams will be included in regular check-ins – at a minimum - on a quarterly basis to discuss ongoing collaboration and coordination.

d. Coordination Between SW Program(s)

The Statewide Plug Load and Appliance Program will launch in Q3/Q4 of 2021. 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 monthly 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 the 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.

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 is 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, but 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
Program Name	Green Labeling	Workforce, Education, and Training (WE&T)
Eligible Measures	N/A	N/A
Estimated 2022 Budget	\$1,013,500	\$45,000 ¹¹
Target Audience in 2022	• <u>Home Energy Score</u>: Bay Area Single-family homeowners with support through contractors, raters, home inspectors • <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.	• <u>Home Energy Score</u>: N/A • <u>Real Estate Trainings</u>: Realtors and appraisers
Resource or Non Resource	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.
- Build partnerships with local real estate professionals 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 typically distinct from those offered by BayREN. Below is a

¹¹ This is an estimated proportion of the WE&T program budget, which would be used specifically for real estate trainings in 2022.

sample of the trainings being planned or considered by each entity based on the 2021 program year.

Table 4: BayREN and PG&E Potential Trainings for 2022

BayREN	PG&E
National Association of REALTORS (NAR) - Green Designation	Carbon Free Homes: Features, Benefits, Valuation
NAR Green Designation or Certified Green Real Estate Professional (CGREP) for National Association of Real Estate Brokers (NAREB) Realtists	Solar PV: Technology and Valuation
Certified Green Lending Professional (CGLP)	Selling High Performance Homes: How Realtors Earn Stellar Referrals While Boosting Profits
Accredited Green Appraiser	Electrification for ADU Webinar Series (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)	NAR Green Designation (jointly in partnership with BayREN)
Electrification for Real Estate Professionals (EFR)	Green Multiple Listing Services (MLS)
Healthy Housing Principles for Real Estate Professionals (HHP)	
All About ADUs	
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 check-in 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. Both BayREN and PG&E are piloting new classes aimed at real estate professionals in 2021 and will observe each other's classes to understand the content being taught. 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 NAR Green Designation training to further enhance these partnerships. In 2022, BayREN and PG&E will continue to coordinate by scheduling trainings at different times of the program year, marketing to different groups, and/or offering different training topics.

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 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. 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
1. Activities IOU cannot or does not intend to undertake	- 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. - PG&E does not offer Home Energy Score. - BayREN's real estate classes are different classes than those offered in the PG&E WE&T program.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	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.
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	N/A

C. 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. The DI component offers multifamily properties low-cost/no-cost measures. Participation in the DI track may serve as a springboard to a property participating in a deemed or custom upgrade projects. 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.

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 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)	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, Direct Install measures include: Low flow and thermostatic showerheads and sink/lavatory aerators, Smart Thermostats, Hot water pipe Insulation Refrigerators and freezers, high efficiency furnaces Common area Energy Star clothes washers Custom measures include Lighting, HVAC, Boilers	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures
Estimated 2022 Budget ¹²	\$6,900,000	\$3,882,555	\$30,000,000 ¹³
Target Audience	Bay Area multifamily property owners requiring a higher level of program assistance, populations in which it has been harder to obtain savings, and owners pursuing gas-to-electric upgrades.	Multifamily property owners across the PG&E service territory	Deed-restricted multifamily property owners where at least 65% of residents meet ESA low-income criteria
Resource/Non Resource	Resource	Resource	Resource

¹² The budgets provided herein are estimates. Final 2022 budgets for EE programs will be provided in the 2022 Annual Budget Advice Letter.

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

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. Summary of PG&E's MESP Program Objectives

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. 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. The DI component offers multifamily properties low-cost/no-cost measures. Participation in the DI track may serve as a springboard to a property participating in a deemed or custom upgrade projects. 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.

TRC began MESP ramp up activities after CPUC approval of the contract in October 2020, following the completion of the first wave of PG&E's third-party, multi-sector solicitations. 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.

d. Comparable and/or Equivalent PG&E Multifamily Program

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.

e. Coordination Protocol Between Programs

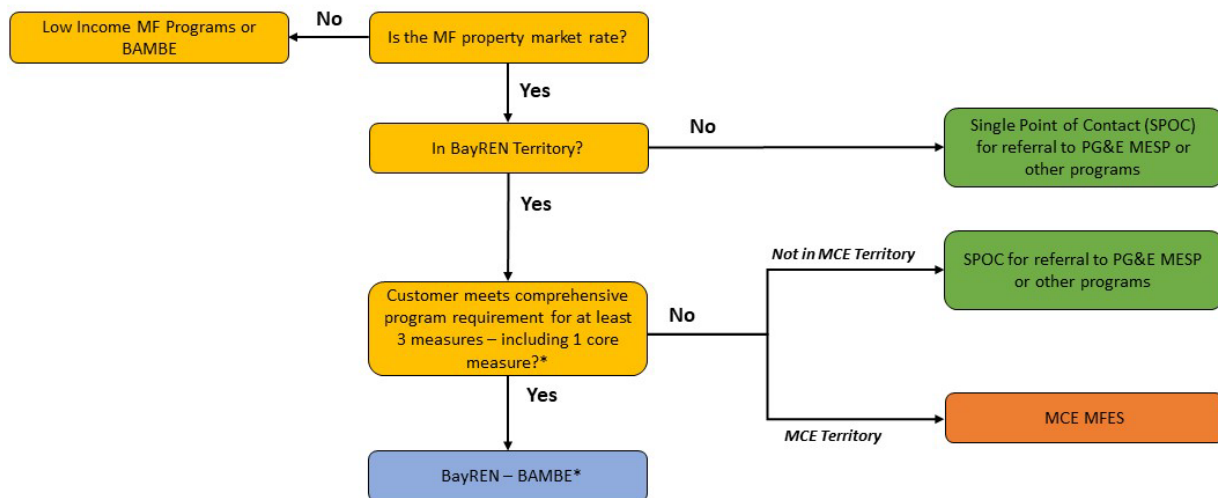
PG&E and BayREN implementation teams closely coordinate program design and customer referral to minimize duplication and optimize the customer experience and ratepayer resources:

- Monthly Coordination calls between BAMBE 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, 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.
 - 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 MESP or a better suited program that meets customer needs and requirements. Conversely, MESP will refer customers to SPOC for BAMBE or other program participation in cases where projects do not meet program cost-effectiveness requirements.
- 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 MCE¹⁴ 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 evolves and matures 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 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.

f. 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.

g. 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.

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

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	BayREN is focusing on decarbonization of multifamily building operations through the BAMBE Clean Heating Pathway. If the pathway is successful, program components have the potential to scale the volume of gas-to-electric upgrades. BayREN developed and piloted the use of EnergyPro Lite, a simplified lower-cost assessment tool for estimating energy savings. With grant funding from the California Energy Commission, this tool is being scaled up for other programs to use.
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	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.

D. Commercial (BayREN06)

a. Summary of Program Differentiation

The BayREN Small and Medium Commercial Buildings (SMCB) program has two (2) subprograms: BayREN Business and BayREN Microloan. 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. BayREN Business works with its program implementer to deliver whole building energy efficiency solutions focusing on properties under 50,000 square feet (sq-sf). BayREN Business uses data-driven targeting to identify customers in this category and provide comprehensive technical assistance, bundled measure packages, and financing options, such as the BayREN Microloan, 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 business and medium businesses (under 50,000 sq ft), predictive energy model based targeting; the non-OBF financing options; and an incentive structure that provides upfront incentives based on modeled savings estimates followed by incentives for 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 5 provides a summary of 2021 BayREN and PG&E programs that will continue in 2022.

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

BayREN		PG&E
Program Name	BayREN Business	• Commercial Deemed • Commercial Calculated • CoolSave Grocery Comprehensive Retrofit and Commissioning • Advanced Energy Program for High Tech and Biotech • Healthcare Energy Fitness Initiative • SmartLabs Program - Energy and Ventilation • NetOne Program - Comprehensive Commercial
Eligible Measures	• Advanced Metering Systems; Boiler Plant Improvements • Energy Management Control Systems; • Building Envelope Modifications; • Electric Motors and Drives; Energy/Utility Distribution Systems; • Energy Related Process Improvements; • Lighting Improvements; • HVAC maintenance and replacement; • Air Ionization Systems (to reduce build up at fan coils) • Appliance and Plug-Load Reductions; • Refrigeration & Food Service Equipment; • Water and Sewer Conservation Systems	• Chilled water, hot water, and steam distribution systems • Chiller and boiler plant improvements • Lighting improvements • Refrigeration equipment • HVAC maintenance and replacement • Food service equipment

	BayREN	PG&E
Estimated 2022 Budget ¹⁵	\$3,692,226	\$17,091,832
Target Audience	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-kW Demand, and <250,000 Therms, and their contractors	• Regional SMB for small and medium customers >50,000 sq-ft • Hospitality/Hotels, chains • Groceries all sizes, focused on refrigeration. • Healthcare facilities all sizes • Commercial and institutional laboratories and high tech • Commercial real estate and retail all sizes • Local government facilities and publicly funded K-12 and charter schools • Commercial real estate and retail all sizes • Deemed and calculated programs have no size or segment restrictions
Resource/Non-Resource	Resource	Resource

b. Summary of BayREN Program Objectives

Energy Savings - BayREN Business will continue to provide energy-efficiency technical assistance, easy-to-understand incentives, and the BayREN Microloan to serve micro, small and medium (less than 50,000 sf) 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, which are eligible to use the BayREN Microloan program. By working with the BayREN Business program implementer, business and property owners and managers will receive technical assistance that will focus in bundling cost-effective measures.

Financial Assistance - As a direct response to the COVID-19 pandemic aftermath, BayREN Business and BayREN Microloan programs will focus its resources in reducing the energy burden of SMBs in the sectors most affected, including restaurants, retailers, health and beauty, and schools. The Microloan offering, in partnership with Mission Asset Fund, provides SMBs with a 0% interest microloan (up to \$2,500) to help cover the cost of the improvement.

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-

¹⁵ The budgets provided are estimates based on the 2021 ABAL program budgets. The final 2022 budgets will be provided in the 2022 Annual Budget Advice Letter.

install or point-of-sale rebate programs. As such, BayREN Business 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.18-05-041.¹⁶

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 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.

i. 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.

ii. 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.

iii. 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.

iv. 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

¹⁶ D.18-05-041, p. 28.

controls centric program with HVAC systems as its primary technology focus. This program primarily uses the customized project process.

v. 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.

vi. 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.

vii. 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.

viii. 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 lighting, HVAC, food service, refrigeration, and water heating. This program is offered to all customer segments and sizes.

ix. Commercial Calculated Program

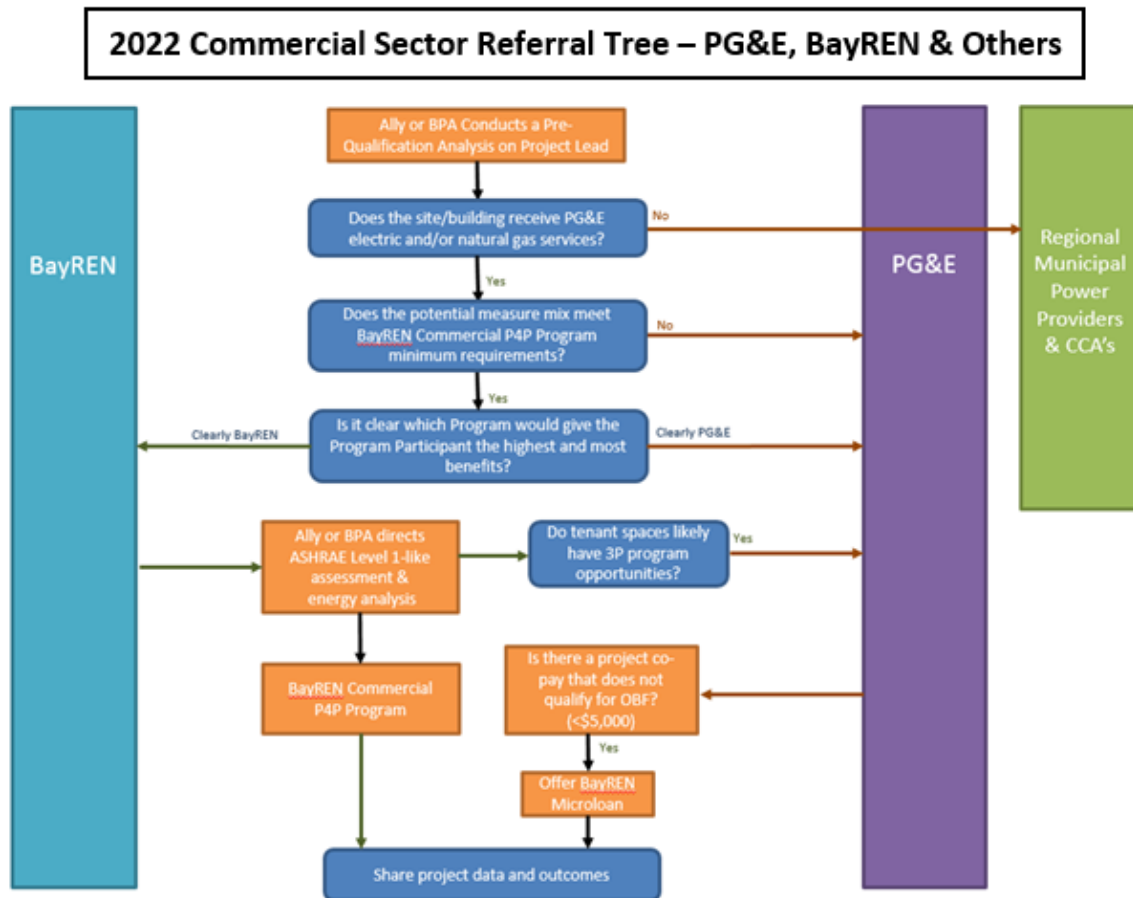
The Calculated program provides financial incentives for non-residential customers to install new equipment or systems that exceed applicable code and/or industry standards in existing buildings. PG&E's Calculated program includes both customized incentives (formerly "Customized Retrofit") and RCx offerings. 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.

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.

Figure 3: Coordination Protocol for Commercial Programs



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.

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
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	BayREN provides more technical assistance, is specifically targeted to SMBs under 50,000 sq-ft and would be the only currently active program that combines both upfront incentives and backend NMEC incentives to develop a comprehensive project for the SMB sector. The subprogram has the potential for scalability by heavily leveraging local and regional resources (e.g. downstream and midstream programs, OBF, microloan).
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	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. The Microloan program is specifically targeted to help the region's DI and downstream programs reduce the barrier in micro businesses, many are eligible under the modified definition of HTR, per D.18-05-041.

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

BayREN		PG&E
Program Name	Codes and Standards	- Compliance Improvement - Reach Codes - Building Codes Advocacy
Eligible Measures	N/A	N/A
Estimated Budget	\$1,973,650	- Compliance Improvement: \$4,738,265 - Reach Codes: \$1,750,001 - Statewide Building Codes Advocacy: \$2,735,280
Target Audience	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.	- The compliance improvement supply chain, including manufacturers, distributors, retailers, architects, builders, designers, energy consultants, contractors, plans examiners, building inspectors, building officials, planners, etc. - National, statewide, and local entities engaged in building codes, appliance standards, or reach codes.
Resource/Non-Resource	Non-Resource	Resource and Non-Resource ¹⁷

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

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

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

PG&E's Codes and Standards program includes seven subprograms:

1. State Building Codes Advocacy (Statewide Program)
2. State Appliance Codes Advocacy (Statewide Program)
3. National Codes and Standards Advocacy (Statewide Program)
4. Compliance Improvement
5. Reach Codes
6. Planning and Coordination
7. Code Readiness

PG&E and BayREN both have programs that work towards compliance improvement, reach codes adoption, and building codes development.

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.

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.

The State Building Energy Codes Advocacy subprogram 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 intervenes, but to a lesser extent, in CALGreen (Title 24, Part 11) 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.

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

BayREN <u>Local, Focused</u>		PG&E <u>Statewide, Comprehensive</u>
- Regional and local demonstration projects, such as eTools - Work with local governments to encourage code compliance - Resources such as permit guides and other resources not offered by PG&E - Focused trainings on common projects, often customized - Quarterly regional Forums to share best practices and new ideas	<i>Compliance Improvement and Trainings & Workshops</i>	- Dynamic tools such as Virtual Compliance Assistant, Reference Ace, Navigator Ace, Image Ace & Product Finder - Outreach campaigns to improve compliance with Title 24, Part 6 & Title 20 - Support for CEA exam - Resources such as trigger sheets, fact sheets, application guides, and other resources not offered by BayREN - Comprehensive T24 Standards Essentials courses, Code & Coffee modeling demonstrations, instructional videos and public workshops
- Facilitates regional reach code and energy efficiency policy efforts - Assists local governments in setting priorities, coordinating with state agencies, and tracking results	<i>Local Government Ordinances & Policy Supports</i>	- Develops cost effectiveness studies and other technical resources - Provides technical assistance to local governments upon request - Houses studies and resources on localenergycodes.com and quantifies results
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	<i>Code Development</i>	- Conduct research and lead development of case studies - Lead other advocacy and support public workshops and hearings - Support post-adoption work on manuals and software advancement

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, model language, and other resources that any local government may download and use to support a local ordinance. BayREN's website will continue to provide links to this resource. BayREN will continue to direct local governments to this resource as appropriate, and BayREN's website will also provide educational material and links to relevant resources for local government staff.

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
1. Activities IOU cannot or does not intend to undertake	• BayREN's Codes and Standards activities are designed by local governments. • BayREN's compliance tools and services, and trainings and workshops all fill gaps and support PG&E's compliance improvement activities. While PG&E prepares comprehensive tools, BayREN focuses on key areas of interest to local governments. • BayREN's reach codes activities focus on regional outreach include outreach and coordination. PG&E's activities focus on cost effectiveness and other technical support. • BayREN's 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&E's activities.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	• 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. • BayREN's compliance tools and services, and trainings and workshops all fill gaps and support PG&E's compliance improvement activities. While PG&E prepares comprehensive tools, BayREN focuses on key areas of interest to local governments. • Additionally, BayREN conducts various demonstration projects, such as with its eTools, that do not duplicate existing PG&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.
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	Not applicable

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	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)	XX	XX	
BayREN Commercial (BayREN06)	- Commercial Calculated (PGE21011) - Commercial Deemed (PGE21012) - Government & K-12 (PGE_Pub_009) - SmartLabs (PGE_Com_002) - CoolSave Grocery (PGE_Com_001) - RAPIDS Wastewater (PGE_Pub_010) - NetOne Comm Comprehensive (PGE_Com_003) - SmartLabs Comm (PGE_Com_004) - Advance Energy Program HT/BT (PGE_Com_005)		XX	XX
BayREN Codes and Standards (BayREN03)	- Building Codes Advocacy (PGE21051) - Compliance Improvement (PGE21053) - Reach Codes (PGE21054)	XX	XX	

APPENDIX B: BAYREN'S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2022

REN Program Unique ID	Sector	Annual Budget ¹⁸	Eligible Measures
BayREN Single Family (BayREN08)	Residential	\$8,861,979	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.
BayREN Green Labeling (BayREN07)	Residential	\$1,013,500	N/A
BayREN BAMBE (Multifamily) (BayREN02)	Residential	\$6,690,000	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures, targeting 15-20% savings.
BayREN Commercial (BayREN06)	Commercial	\$3,692,226	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
BayREN Codes and Standards (BayREN03)	Cross Cutting	\$1,973,6500	N/A
BayREN Water Energy Nexus (BayREN04)	Cross Cutting	\$1,150,300	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: • A 1.06 gallon per flush or better toilet with a Maximum Performance (MAP) rating of 600 grams or more. • A high efficiency (typically 1.5 gallon per minute) showerhead. • A 1.0 gallon per minute bathroom faucet aerator. • A 1.5 gallon per minute kitchen faucet aerator. • Turf removal and irrigation system improvements to prepare sites for drought tolerant landscaping.

¹⁸ BayREN's Annual Budget is based on the 2021 ABAL and serves as an estimate for 2022 budgets. The 2022 budgets will not be finalized until the 2022 ABAL is submitted in September 2021.

APPENDIX C: PG&E'S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2022

For information on PG&E's portfolio of programs, please see *Pacific Gas and Electric Company's 2020 Energy Efficiency Annual Report*.¹⁹ 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.²⁰

¹⁹ 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>.

²⁰ To access this information, please go to <https://cedars.sound-data.com> and then select "Programs."

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP Energy
Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie
Green Power Institute
Hanna & Morton
ICF
IGS Energy
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Semptra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy