

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



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 4260G/5851E
As of July 21, 2020

Subject: BayREN and PG&E's 2020 Joint Cooperation Memo in Compliance with Decision 18-05-041, Ordering Paragraph 38

Division Assigned: Energy

Date Filed: 06-15-2020

Date to Calendar:

Authorizing Documents: None

Disposition:	Accepted
Effective Date:	07-15-2020

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Erik Jacobson

415-973-3582

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
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

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.: BayREN (ID #941)

Utility type:

☒ ELC ☒ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Jennifer K. Berg

Phone #: (415) 820-7947

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)

Advice Letter (AL) #: 14-E

Tier Designation: 2

Subject of AL: BayREN and PG&E's 2020 Joint Cooperation Memo in Compliance with Decision 18-05-041, Ordering Paragraph 38.

Keywords (choose from CPUC listing):

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

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

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: 7/15/20

No. of tariff sheets: N/A

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:

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

Name: Jennifer K. Berg
Title: Energy Programs Manager
Utility Name: BayREN
Address: MTC - 375 Beale Street, 7th Floor
City: San Francisco State: California
Telephone (xxx) xxx-xxxx: (415) 820-7947
Facsimile (xxx) xxx-xxxx:
Email: jberg@bayareametro.gov

Name: Erik Jacobson, c/o Meagan Lawson
Title: Director, Regulatory Relations
Utility Name: PG&E
Address: 77 Beale Street, Mail Code B13U
City: San Francisco State: California
Telephone (xxx) xxx-xxxx: 415-973-2093
Facsimile (xxx) xxx-xxxx: 415-973-3583
Email: PGETariffs@pge.com

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, 2020

Advice Letter 14-E

(BayREN ID #941)

(Pacific Gas and Electric Company ID U 39 M)

California Public Utilities Commission

Subject: BayREN and PG&E's 2021 Joint Cooperation Memo in Compliance with D.18-05-041, Ordering Paragraph 38

The Association of Bay Area Governments, on behalf of the San Francisco Bay Area Regional Energy Network (BayREN), hereby submits the 2021 Joint Cooperation Memo (JCM) with Pacific Gas and Electric Company (PG&E) by Tier 2 advice letter (AL) in compliance with the Decision Addressing Energy Efficiency Business Plans, Decision (D.) 18-05-041 (see Attachment A).¹

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 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.16-08-019². The JCM, provided as Attachment A, describes energy efficiency programs that PG&E and BayREN anticipate offering in the nine Bay Area counties (their shared service area) in 2021 and discusses how the proposed activities will complement each other.³ The JCM also details how BayREN's proposed activities comply with the criteria for REN activities required in D.12-11-015.⁴

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, 2020, which is 20 days after the date of this submittal.

Protests must be submitted to:

¹ D.18-05-041, Ordering Paragraph (OP) 38.

² D. 12-11-015, p 17; D.16-08-019, pp 11-12.

³ D.18-05-041, Finding of Fact 55.

⁴ D.12-11-015, p17.

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:

For BayREN:

Jennifer K. Berg
Assistant Director - Energy Programs
Metropolitan Transportation Commission
375 Beale Street, 7th Floor
San Francisco, CA 94105
Email: JBerg@bayareametro.gov

For PG&E:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Effective Date

BayREN requests that this Tier 2 advice filing become effective on regular notice, July 15, 2020, which is 30 calendar days from the date of this filing.

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

Attachments

cc: Service List A.17-01-013 and R.13-11-005

ATTACHMENT A

2021 JOINT COOPERATION MEMO PACIFIC GAS AND ELECTRIC COMPANY BAY AREA REGIONAL ENERGY NETWORK

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A. Overview

The 2021 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.) 12-11-015.²

This JCM is structured as follows:

- 1) **BayREN Program Summary:** A description of each program BayREN will administer in 2021, by sector. As there are no comparable PG&E offerings to BayREN's Green Labeling and Water Upgrade \$aves programs, there is no description provided in this JCM. All BayREN programs are listed in Appendix B.
- 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 in D.12-11-015
- 5) **Appendices:**
 - a. Appendix A: Summary of REN compliance with D.12-11-015 for all planned programs
 - b. Appendix B: List all similar programs BayREN currently anticipate offering in 2021, including information on draft budgets and measure eligibility.
 - c. Appendix C: List all similar programs PG&E currently anticipate offering in 2021, including information on draft budgets and measure eligibility.

BayREN and PG&E policy and program staff have committed to meeting on a quarterly basis to ensure that cooperation, coordination, and the best service to joint territory ratepayers is realized. Meetings will include discussions on Customer Choice, marketing, policy, and double dipping prevention. BayREN and PG&E have jointly determined a schedule for 2021.

¹ Please note that this memo includes preliminary budget forecasts for 2021 that are highly variable and will be finalized in the 2021 Annual Budget Advice Letter.

² D.12-11-015, p. 17.

It is important to note that 2020 is a year of transition for the PG&E portfolio. PG&E is working 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 will be ramping down in 2020 and there are many unknowns about the programs that will be onboarded through solicitations by the end of 2020. 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 journey.

B. Residential – Single Family (BayREN08)

a. Summary of Program Differentiation

BayREN's Home+ program launched in 2019 and will continue to offer services to customers in 2021. While the program will be available to all Bay Area single family residents, it is designed to primarily serve moderate income single family households³ in the nine Bay Area counties.

The key objective of the Home+ program is to fill the gap to meet the moderate-income customer 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 and local government staff outreach, to get the customer on an incremental path, phasing in new measures as they are feasible and educating the customer along the way.

BayREN's Home+ program targets this underserved market in the Bay Area that is ineligible for PG&E's Energy Savings Assistance (ESA) but also unable to make efficiency upgrades without considerable assistance. BayREN's program will use an engaged Home Energy Advisor⁴ to walk customers step-by-step through the process and local Participating Contractors⁵ to deliver energy savings to households. The Home+ program targets Bay Area moderate income single family homeowners and renters, a population that is consistently underrepresented in ratepayer energy efficiency programs in BayREN territory and across the state.⁶ 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.

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

⁵ A Participating Contractor has successfully completed the BayREN two day training, has submitted all required paperwork and has been onboarded into the program.

⁶ 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.

The Home+ program offers a menu of eligible measures for the customer to choose from. 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 Home+ program. BayREN coordinates with the Workforce Education and Training activities, offered through the PG&E Energy Centers, 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. A particular focus will be on specialty contractors. BayREN will help to expand their services to full building performance and/or partner with other firms to achieve a better business model that supports deeper whole house upgrades.

One of the outreach channels for the Home+ program is an online self-evaluation tool available to customers. The tool asks customers basic questions about their home's characteristics and energy using equipment and qualifies them 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 outreach channel for the program is through Green House Calls, which are offered to targeted households in eight⁷ of the nine Bay Area counties; primarily senior households and households where English is not the primary language. 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 which guides them step-by-step through Home+ program participation.

An integral part of the implementation of the Home+ program is the Home Energy Advisor service. 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 order to see the customer through a full energy-efficiency journey. Energy Advisors also refer customers to complementary programs offered by utilities, Community Choice Energy programs, Energy Watch offerings and other organizations, and help customers understand their financing options. The Energy Advisors also assist Home+ Participating Contractors with understanding program requirements and when needed, help mediate issues that may arise with the customer and contractor. (Please see coordination section below)

As of March 1, 2020, the Home+ program is offering rebates for four fuel substitution measures; heat pump water heaters, heat pump heating and cooling, heat pump clothes dryers and induction cooktop/ranges. The first two measures were offered only for pre-existing electric systems in the last program year and will now be eligible for gas to electric replacement completed by a Home+ Participating Contractor per existing protocols. The latter two are new measures that are eligible for gas to electric

⁷ Not offered in Alameda County since this same program is provided through the East Bay Energy Watch/Local Government Partnership.

replacements and require the consumer to complete rebate paperwork via an online portal. These measures will continue to be offered in 2021.

The BayREN Single Family program works closely with the BayREN Regional Heat Pump Water Heater Program, funded by a grant from the Bay Area Air Quality Management District, which has a mid-stream focus. This program collaborates with heat pump water heater distributors and vendors to offer rebates directly to contractors. These activities will continue in 2021.

Like all BayREN programs, outreach in 2021 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 Community Choice Aggregation (CCA) programs. With more local government entities offering new fuel substitution rebates such as Electrify Marin, Electrify San Jose and complementary programs developed at several of the CCAs, we will 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 Energy Savings Assistance (ESA) Program provides energy efficiency services to income qualifying homeowners and renters 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 listed below. It is important to note that these are the current offerings in 2020, and there may be changes pending the results of the ongoing 3rd Party solicitations.

- 1) Pay for Performance (P4P) Pilot
- 2) Plug Load and Appliances
- 3) Home Energy Checkup

1) Pay for Performance (P4P) Pilot

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

1. Home Intel (implemented by Home Energy Analytics): HomeIntel provides an in-depth analysis of a participant's home energy use, and customized recommendations via monthly energy efficiency progress reports. Energy Coaches are available to participants to dive deeper into monthly reports.
2. Home Energy Rewards provides an in-depth analysis of a participant's home energy use, customized recommendations and a free energy

savings kit (LEDs and water saving devices). Participants have access to discounted energy efficient products, as well as an online platform to discuss energy savings opportunities with energy coaches. Ultimately, HER can lead to a full home energy retrofit including new HVAC equipment, insulation, ducts, weather stripping and air sealing.

3. Comfortable Home Rebate Program (CHRP) (implemented by Franklin Energy): provides deep retrofit solutions aimed at reducing energy usage and improving comfort through a combination of Shell and HVAC measures. Bay Area participants are required to install a minimum of (5) measures including a High Performance HVAC unit, 2 building shell measures and 1 HVAC measure.

2) Plug Load and Appliances

PG&E also offers 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 have to 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 Pilot	PLA/REEP	Home Energy Checkup
Eligible Measures	Duct sealing, attic and wall insulation, HVAC equipment upgrades, Smart thermostats, gas storage water	3 programs: Online energy audit and home energy reports, high performance air conditioning systems, smart	Smart Thermostats, and Heat Pump Water Heaters	Home Energy Checkup (HEC) is a behavior based platform and does not contain specific measures. Behavior recommendations/tips

	BayREN	Current PG&E Programs under BayREN Territory		
Program Name	BayREN Home+	Pay for Performance Pilot	PLA/REEP	Home Energy Checkup
	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.	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.		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.	Smart Thermostat - \$50; Heat Pump Water Heater - \$300	N/A
Savings Claim Type	Savings will be deemed per measure based in CPUC approved work papers	Savings Claims are Normalized Metered Energy Consumption (NMEC) methodologies	Savings will be deemed per measure based in CPUC approved work papers	Savings to be determined based on current study.
Estimated 2020 Budget ⁸	\$8,831,180	\$4,835,316	\$5,549,380	\$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	All PG&E service territory	All PG&E service territory

⁸ The budgets provided herein are estimates. Final budgets will be provided in the 2021 Annual Budget Advice Letter.

	BayREN	Current PG&E Programs under BayREN Territory		
Program Name	BayREN Home+	Pay for Performance Pilot	PLA/REEP	Home Energy Checkup
		Costa, San Joaquin (potential to expand)3 programs CHRP: High AC users, high baseload. PG&E Territory, including Bay Area		
Target Implementer	Specialty contractors	Behavioral and Operational focused; whole-home, deep 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 incentive in 2020. This program will leverage newly adopted fuel substitution workpapers and offer incentives when contractors and distributors sell and install qualified HPWHs to PG&E gas or electric customers. The program will coordinate with the mid-stream BayREN Heat Pump Water Heater program on co-marketing to ensure market consistency, but will exclude Bay Area customers so as not to overlap with this program.¹⁰

Finally, PG&E will be launching a behind-the-meter thermal storage program called WatterSaver to provide incentives to customers who enroll 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.

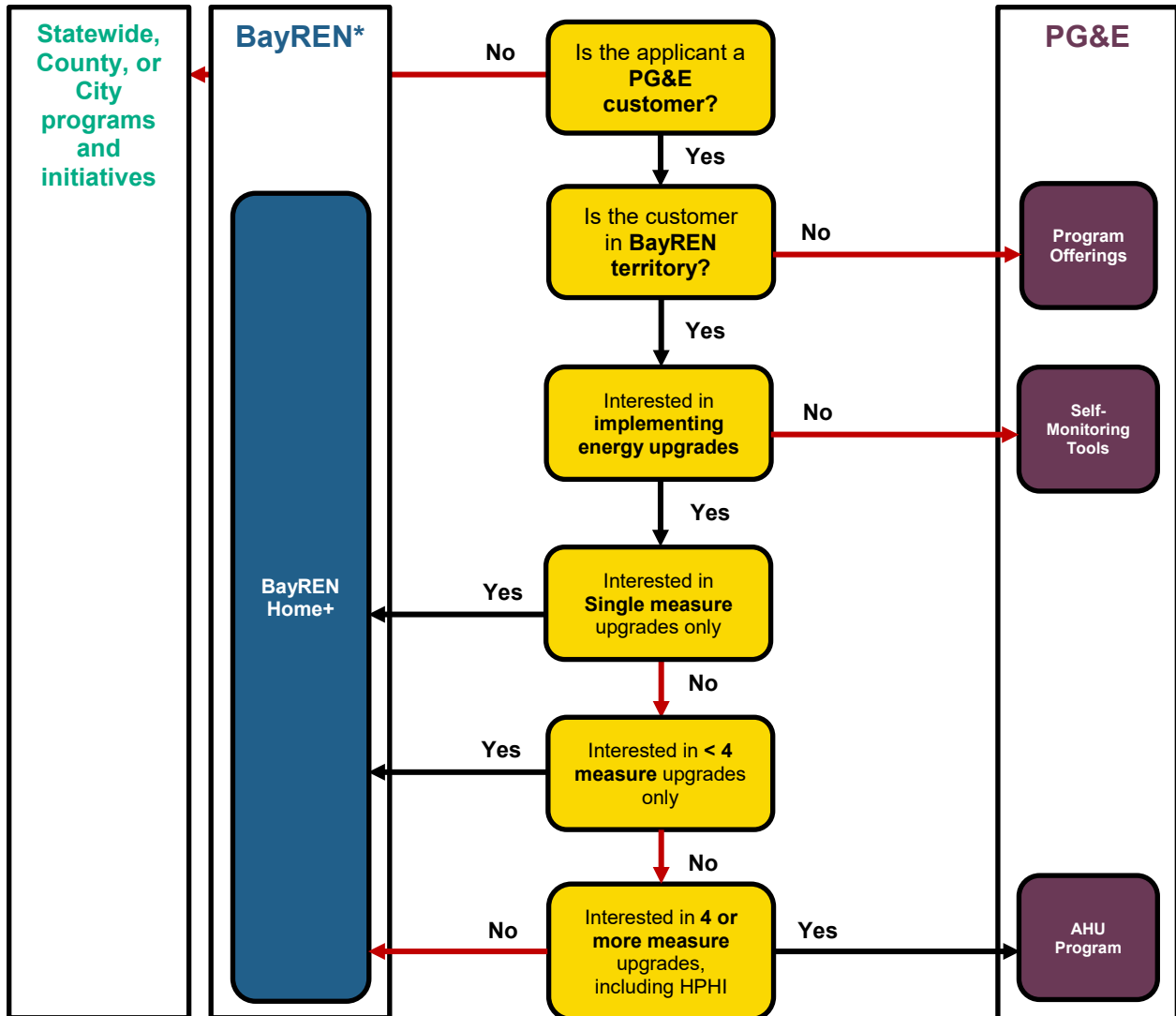
c. Coordination Protocol between Programs

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.

The BayREN Home Energy Advisor will continue to direct customers to PG&E who are interested in a whole-home energy retrofit or otherwise may fit the criteria for PG&E's CHR program. PG&E also refers customers to BayREN who do not qualify for CHR. Please see Figure 1 below for an overview of the coordination protocol between BayREN and PG&E single-family programs.

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

Figure 1: Coordination Protocol for Single-Family Programs



NOTE: (1) BayREN Energy Advisors will remain a resource for customer questions, regardless of the program they participate in. (2) BayREN Energy Advisors will direct customers to Home Energy Score, described in the sections below, to support the BayREN customer journey and in-home assessment offerings. (3) Energy Advisors will continue to support customers through the renewable or non-EE measure process in order to develop a long-term customer relationship and ensure program completion based on available program offerings.

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 transfer, double dip processes, and marketing campaign plans.

BayREN and PG&E senior management teams will continue to meet – at a minimum - on a quarterly basis to discuss ongoing collaboration and coordination.

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 Workforce Education and Training activities when available) and professional development.

d. 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 it is distinct from Home+ because it 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 – Multifamily (BayREN02)

a. Summary of Program Differentiation

BayREN and PG&E both offer multifamily programs in the Bay Area; however, they target different segments. BayREN's energy efficiency rebate program can serve any multifamily project in the Bay Area, prioritizing populations for which it has been difficult to obtain savings. BayREN also launched a decarbonization pathway in 2020, which serves multifamily projects with scopes of work that include electrification measures. PG&E's ESA CAM focuses on very low-income housing. BayREN will continue to refer eligible projects to ESA CAM, and will continue to coordinate with the Single Point of Contact (SPOC) on providing On-Bill Financing (OBF) services to the multifamily sector.

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

Table 3: Summary of Similar BayREN and PG&E Multifamily Programs

	BayREN	PG&E	
Program Name	Bay Area Multifamily Building Enhancement (BAMBE)	Energy Savings Assistance – Common Area Measures (ESA CAM)	Multifamily Upgrade Program
Eligible Measures	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures, targeting 15-20% savings.	Envelope, HVAC, DHW, lighting, and appliance measures – requires multiple measures	Envelope, HVAC, DHW, lighting, appliances, and cold-water measures – requires multiple measures, targeting >20% savings
Estimated 2021 Budget ¹¹	\$6,690,000	\$23,000,000	\$2,267,000
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.	Deed-restricted multifamily property owners where at least 65% of residents meet ESA low-income criteria	Multifamily property owners interested in deep scopes of work and engaged with a third-party rater in PG&E's territory.
Resource/ Non-Resource	Resource	Resource	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 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

¹¹ The budgets provided herein are estimates. Final 2021 budgets will be provided in the Annual Budget Advice Letter.

cost assessment tool called EnergyPro Lite (EPL) to determine which measures meet the minimum energy savings requirement.

BAMBE also offers an option, the Clean Heating Pathway (CHP), which is designed for properties that wish to demonstrate climate leadership by deeply reducing the carbon emissions from energy use in their buildings. CHP participants will 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

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

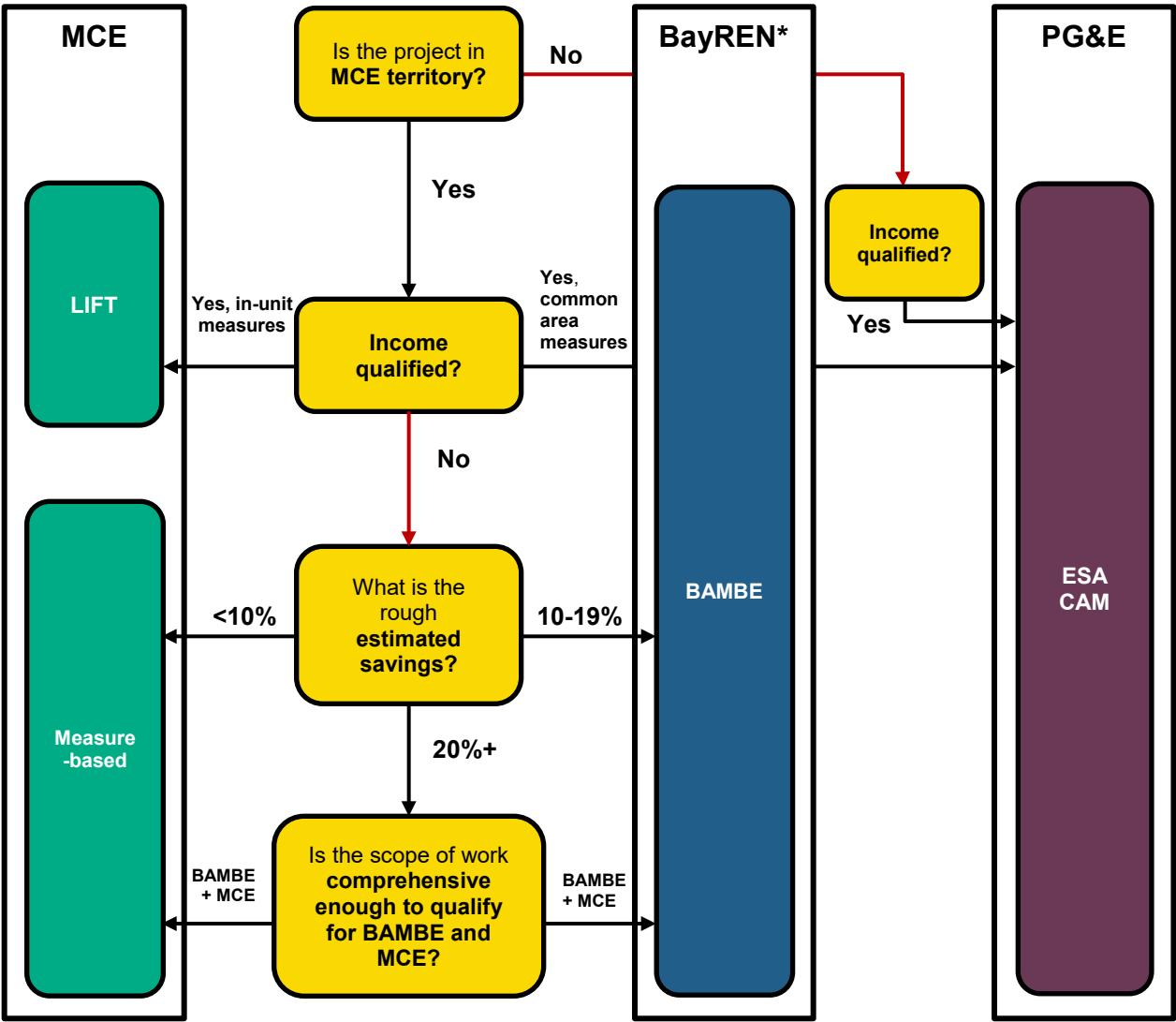
PG&E and BayREN implementation teams closely coordinate program design and customer referral to minimize duplication and optimize the customer experience and ratepayer resources:

- Customer referral: The PG&E SPOC and the BayREN technical assistance provider use a decision-making tree (below), revisited annually, 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.
- 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 1 provides an overview of the coordination protocol between PG&E and BayREN programs, which includes how both PAs will coordinate with Marin Clean Energy's (MCE)¹² multi-family offerings.

Figure 1: Coordination Protocol for Multi-Family Programs
Coordination Between SW program (s)—N/A

2021 Multifamily EE and LI Program Referral Tree – MCE/BayREN/PG&E



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

¹² MCE's territory overlap with both BayREN and PG&E includes Marin, Napa, Contra Costa and Solano counties.

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 4: 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 smaller 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 is a normalized metered energy consumption (NMEC) program. Soft-launched in January, 2020, BayREN Business works with its program implementer to deliver whole building energy efficiency solutions focusing on properties under 50,000 square feet (sf). BayREN Business will use 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.

The key differentiators for the BayREN Business program include the following: a specific focus on small business (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 up by incentives for metered savings in compliance with Commission-approved NMEC methods.

PG&E continues to administer several programs that serve SMB customers, including Regional SMB programs, the Hospitality, Healthcare, and Energy Smart Grocer programs, the Statewide Commercial HVAC program, Deemed, and Custom programs. However, none of these programs currently utilize the Lawrence Berkeley National Laboratory (LBNL) building model to target customers, nor do they offer incentives for savings delivered at the meter. PG&E's finance offering include OBF both with and without incentives. OBF without incentives measures savings at the meter.

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. PG&E is currently finalizing contracts for new third-party implemented programs. It is anticipated that new SMB offerings will be available in mid- to late-2020, although the exact date is still to be determined. Once new SMB program implementers are under contract, this JCM may be updated to reflect the offerings.

Table 5: Summary of Similar BayREN and PG&E Small and Medium Commercial Buildings Programs

	BayREN	PG&E
Program Name	BayREN Business	• Hospitality • Healthcare • Energy Smart Grocer • Commercial HVAC • Commercial Deemed • Commercial Calculated
Eligible Measures	• Advanced Metering Systems; Boiler Plant Improvements • EMCS; • Building Envelope Modifications; • Electric Motors and Drives; Energy/Utility Distribution Systems; • Energy Related Process Improvements; • Lighting Improvements; • HVAC maintenance and replacement;	• 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
	• Air Ionization Systems (to reduce build up at fan coils) • Appliance and Plug-Load Reductions; • Refrigeration & Food Service Equipment; • Water and Sewer Conservation Systems	
Estimated 2021 Budget ¹³	\$2,772,000	
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 • Medium grocers, with multiplex refrigeration systems. • Healthcare facilities • Commercial HVAC • 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 deploy 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 easy-to-access technical assistance that will specialize in bundling cost-effective measures.

As a direct response to the health emergency of 2020, 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.

Program Referral – BayREN Business recognizes that not all SMBs are ideal candidates for a NMEC program experience. As such, BayREN Business endeavors to

¹³ The budgets provided are estimates based on the 2020 ABAL program budgets. The final 2021 budgets will be provided in the 2021 Annual Budget Advice Letter.

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 serves to help other utility and CCA programs achieve the five percent small commercial penetration target in D.18-05-041.¹⁴

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.

Currently, continuous access to customer energy consumption data currently requires customer opt-in permission via the Share My Data (SMD) platform, on a per customer basis. Therefore, BayREN Business commits to work in partnership with PG&E to improve the platform's ability to scale to support new NMEC programs and the thousands of utility meters associated with their projects.

PG&E will work with BayREN to find opportunities to enhance data sharing and resolve challenges. Access to bulk data is preferable over individual SMD data-streams because:

1. SMD is an additional step in the customer journey. The opt-in requirement is over and above the customer's decision to participate in the program, representing another hurdle in the journey.
2. SMD makes the program administrator and implementer vulnerable to customer whims. Customers can revoke SMD permissions at any time even after receiving the full program benefits. As a result, the program implementer and administrator are with no way to quantify energy savings, and are at risk of losing claimable savings.
3. SMD limits program measurement and verification plan to a "participant-only" NMEC analysis. Other measurement and verification options, such as a comparison group analysis. A comparison group is a group constructed after participants have been enrolled in a program, to compare energy consumption changes from program participants against non-participants with otherwise similar usage characteristics. Such an analysis is not possible with data sourced the SMD platform, and must be supported by bulk data.

A comparison group analysis is especially relevant because of the current health emergency. Collectively, the forced closures represent a giant non-routine event, atypical to the energy usage of SMBs. Essentially, these closures corrupted the energy use baseline, thereby making "participant-only" analysis inaccurate, even

¹⁴ D.18-05-041, p. 28.

impossible. For example, in a participant-only, site-specific NMEC program, one has nothing to measure against because the usage is zero. In a participant-only, normalization NMEC program, there exists a huge hole in the baseline energy usage so it's impossible to accurately compare the participant's performance before and post energy efficiency intervention.

Therefore, by jointly developing a process for access to bulk data benefits BayREN, PG&E and third-party implementers with current and future NMEC programs. That is, by laying the ground-work now for access to bulk, future programs will benefit. Furthermore, BayREN's success is PG&E's success. D.12-11-015 established that the investor owned utilities will receive attribution towards their portfolio goals for energy savings delivered by the RENs. While the Commission has declined to impose cost-effectiveness criteria on the RENs, nevertheless, BayREN Business shares PG&E's intent to maximize program cost-effectiveness; access to bulk data will effectuate our shared intention.

c. Comparable and/or Equivalent PG&E Program

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

i. Hospitality Program

PG&E's Hospitality program offers a comprehensive list of energy efficiency measures and services to hospitality customers including those that have ten or more locations within PG&E's territory. The subprogram offers both custom and deemed measures and assists customers with EE projects from start to finish.

ii. Energy Smart Grocer Program

The Energy Smart Grocer program provides comprehensive energy efficiency services for medium to large grocery stores and supermarkets and those with multi-plex refrigeration systems. The subprogram provides comprehensive energy audits, long-term energy planning, and support for the implementation of efficiency measures.

iii. Healthcare Energy Efficiency Program

The Healthcare Energy Efficiency Program (HEEP) provides hospital facilities (medical office buildings and acute care facilities) a wide range of support services to address barriers to EE. HEEP delivers electric and gas savings through retrofits (deemed and calculated) and Retrocommissioning (RCx) services.

iv. 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.

v. 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.

vi. Commercial HVAC Program

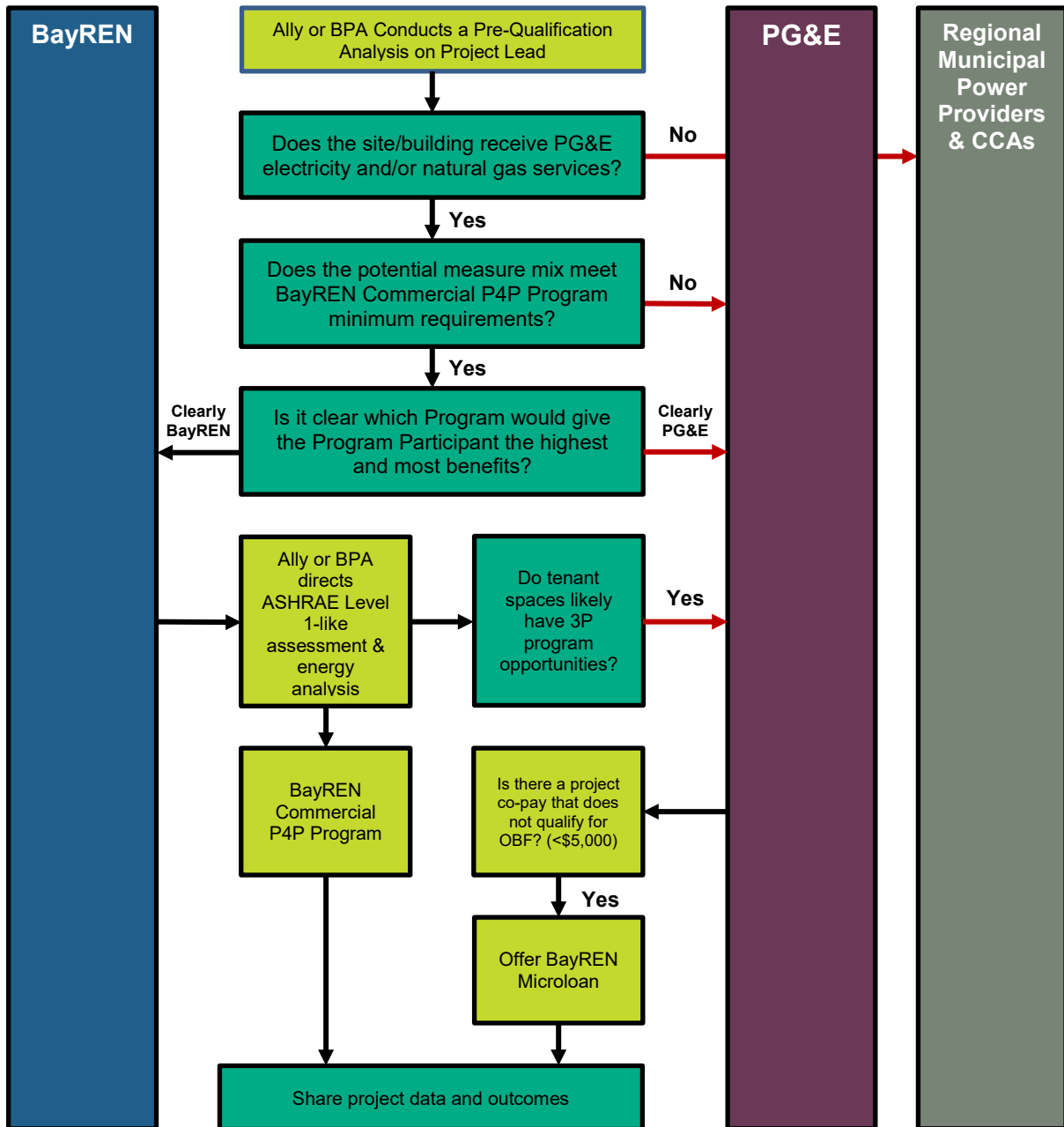
The commercial HVAC subprogram comprises three elements that enable market transformation, direct energy savings, and demand reductions: upstream HVAC equipment incentives, commercial quality installation, and midstream commercial quality maintenance (C-QM).

d. Coordination Protocol Between Programs

Using the referral tree in Figure 2, 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 check-in calls to allow for 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 2: Coordination Protocol for Commercial Programs

2020 Commercial Sector Referral Tree – PG&E, BayREN & Others



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 Commercial Deemed Incentive, Calculated, 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 6 describes in further detail how BayREN's Small and Medium Commercial Buildings program satisfies the REN criteria in D.12-11-015.

Table 6: 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 computer-modeling 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 7: 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	\$1,849,047	• Compliance Improvement: \$4,773,560 • Reach Codes: \$2,233,059 • Building Codes Advocacy: \$3,177,168
Target Audience	Bay Area local government staff and officials including building officials, 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, 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 ¹⁵

¹⁵ The State Building Codes Advocacy subprogram is a resource program, while the Compliance Improvement and Reach Codes subprograms are non-resource programs.

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

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

1. State Building Energy Codes Advocacy
2. State Appliance Standards Advocacy
3. National Codes and Standards Advocacy
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.

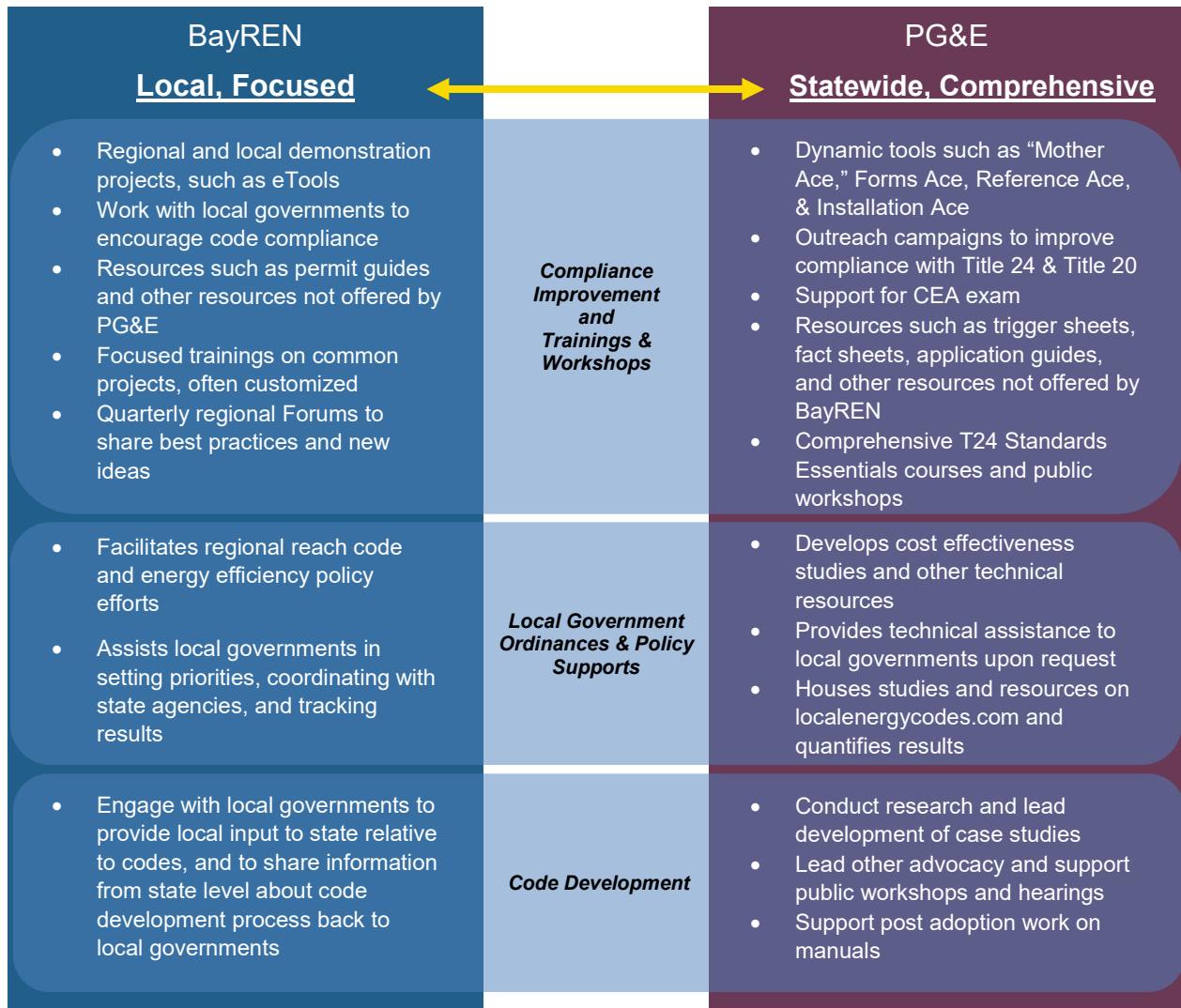
PG&E's Reach Codes subprogram provides technical support to local governments that wish to adopt ordinances that exceed statewide Title 24 minimum energy efficiency requirements. Local energy ordinances must be cost-effective to be legally enforceable, but preparing the supporting documentation can present 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 intend to meet in person twice per year. To ensure there is no overlap of compliance improvement or reach code activities, additional coordination protocols have been developed (see Figure 3 below).

Figure 3: Coordination Protocol for Codes and Standards Programs



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. 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 8: 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 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

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 Upgrade Program (PGE21003)	✓	✓	
BayREN Commercial (BayREN06)	• Commercial Calculated (PGE21011) • Commercial Deemed (PGE21012) • Commercial HVAC (PGE21015) • East Bay (PGE211009) • Marin (PGE211013) • Napa (PGE211015) • San Mateo (PGE211019) • Sonoma (PGE211022) • Silicon Valley (PGE211023) • San Francisco (PGE211024) • Solano (PGE211029) • Energy Smart Grocer (PGE21018) • Healthcare (PGE210123) • Hospitality (PGE210143)		✓	✓
BayREN Codes and Standards (BayREN03)	• Building Codes Advocacy (PGE21051) • Compliance Improvement (PGE21053) • Reach Codes (PGE21054)	✓	✓	

APPENDIX B: BAYREN'S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2021

REN Program Unique ID	Sector	Annual Budget ¹⁶	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	\$1,153,500	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	\$3,409,536	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	\$1,516,700	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 participants 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

¹⁶ BayREN's Annual Budget is based on the 2020 ABAL and serves as an estimate for 2021 budgets. The 2021 budgets will not be finalized until the 2021 ABAL is submitted in 2020.

APPENDIX C: PG&E'S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2021

IOU Program Unique ID	Sector	Annual Budget ¹⁷	Eligible Measures
Multifamily Upgrade Program (PGE21003)	Residential	\$4,651,855.86	Envelope, HVAC, DHW, lighting, appliances, and cold-water measures – requires multiple measures, targeting >20% savings
Residential Energy Advisor (PGE21001)	Residential	\$17,028,201	The Residential Energy Advisor subprogram uses behavioral outreach initiatives and interactive tools, including the Home Energy Report (HER), Home Energy Checkup (HEC), and PG&E Marketplace, to engage customers and encourage participation in innovative energy initiatives. The suite of products and services enable customers to understand and manage their energy use, and where appropriate, be guided to other energy solutions. The HER shows customers how their energy usage changes over time and how their usage compares with similar homes in their area. The HEC is a self-guided online assessment that helps customers understand where they use energy in their homes, providing energy-saving tips and suggestions based on their specific situations, and generates a simple checklist plan saved on a customer's PG&E Your Account website to track their progress as they complete the items on their plan.
Pay for Performance Pilot (PGE210010)	Residential	\$4,835,315.88	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.
Residential Energy Fitness Program (PGE21002)	Residential	\$6,529,041.97	Energy education, smart thermostat, smart power strips, HVAC tune-up, duct test & seal, lighting, and water saver measures.
Residential Energy Efficiency (PGE21002)	Residential	\$5,549,379.59	Electric Heat-Pump Water Heaters Smart Thermostats
Residential New Construction (PGE21005)	Residential	\$3,849,277.24	Advanced Envelope Measures
California New Homes Multifamily (PGE21007)	Residential	\$2,347,289.77	Windows, water heating, insulation, space heating and cooling equipment, solar water heating.
Enhance Time Delay Relay (PGE21008)	Residential	\$872,821.71	Multifamily space heating and cooling, HVAC tune ups, smart thermostats, blower motor replacement, fan delay.
Direct Install for Manufactured and Mobile Homes (PGE21009)	Residential	\$813,165.44	Assessment, education, faucet aerators, low flow showerheads, refrigerant charge adjustment, brushless blower motor retrofit, efficient fan control switch, smart thermostat, duct test and seal, and duct replacement.

¹⁷ PG&E's Annual Budget is based on the 2020 ABAL and serves as an estimate for 2021 budgets. The 2021 budgets will not be finalized until the 2021 ABAL is submitted in September 2020.

APPENDIX C: PG&E’S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2021 (CONTINUED)

IOU Program Unique ID	Sector	Annual Budget ¹⁷	Eligible Measures
Energy Savings Assistance (PGE ESA)	Residential	\$185,123,470	Measures Include: Enhanced Energy education, refrigerator, water heater, insulation, weatherproofing, LEDs, caulking, low-flow shower heads.
Commercial Calculated (PGE21011)	Commercial	\$23,262,758	Various including Lighting, Refrigeration, HVAC, etc. ¹⁸
Commercial Deemed (PGE21012)	Commercial	\$19,367,904	Various Lighting, Refrigeration, HVAC, Food Service, Water Heating, etc. ¹⁹
Commercial HVAC (PGE21015)	Commercial	\$10,626,958	HVAC
East Bay (PGE211009)	Commercial	\$6,129,105	Lighting, Refrigeration, HVAC controls
Marin (PGE211013)	Commercial	\$1,271,550	Lighting, Refrigeration, HVAC controls
Napa (PGE211015)	Commercial	\$557,007	Lighting, Refrigeration, HVAC controls
San Mateo (PGE211019)	Commercial	\$2,279,756	Lighting, Refrigeration, HVAC controls
Sonoma (PGE211022)	Commercial	\$3,762,183	Lighting, Refrigeration, HVAC controls
Silicon Valley (PGE211023)	Commercial	\$1,756,500	Lighting, Refrigeration, HVAC controls
San Francisco (PGE211024)	Commercial	\$6,315,049	Lighting, Refrigeration, HVAC controls
Solano (PGE211029)	Commercial	\$1,480,725	Lighting, Refrigeration, HVAC controls
Energy Smart Grocer (PGE21018)	Commercial	\$6,672,373	Lighting, Refrigeration, HVAC, Food service

¹⁸ A detailed description of eligibility and project requirements can be found on PG&E’s website under “Custom Retrofit.”

¹⁹ A detailed description of eligibility and project requirements can be found on PG&E’s website under “Product Rebates.”

APPENDIX C: PG&E’S PORTFOLIO SUMMARY OF PROGRAMS OFFERED FOR 2021 (CONTINUED)

IOU Program Unique ID	Sector	Annual Budget ¹⁷	Eligible Measures
Healthcare (PGE210123)	Commercial	\$2,244,672	Lighting, Refrigeration, HVAC
Hospitality (PGE210143)	Commercial	\$12,626,882	Lighting, Refrigeration, HVAC, Food service
Building Codes Advocacy (PGE21051)	Cross Cutting	\$4,331,109	N/A
Compliance Improvement (PGE21053)	Cross Cutting	\$4,044,129	N/A
Reach Codes (PGE21054)	Cross Cutting	\$604,747	N/A

For more information on PG&E’s portfolio of programs, please see *Pacific Gas and Electric Company’s 2019 Energy Efficiency Annual Report*.²⁰ More information on PG&E’s EE programs can also be found on the California Energy Data and Reporting System (CEDARS) website.²¹

²⁰ To access the annual report, please go to <http://eestats.cpuc.ca.gov/Views/Documents.aspx>. Select “Annual” under “Report Categories,” then “PGE” under “Utility.” The file is titled “PGE.AnnualNarrative.2019.2.pdf.”

²¹ 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	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Redwood Coast Energy Authority
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	Regulatory & Cogeneration Service, Inc.
	Energy Management Service	SCD Energy Solutions
Alta Power Group, LLC	Engineers and Scientists of California	
Anderson & Poole		
Atlas ReFuel	GenOn Energy, Inc.	SCE
BART	Goodin, MacBride, Squeri, Schlotz & Ritchie	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Green Power Institute	SPURR
California Cotton Ginners & Growers Assn	Hanna & Morton	San Francisco Water Power and Sewer
California Energy Commission	ICF	Seattle City Light
California Public Utilities Commission	IGS Energy	Sempra Utilities
California State Association of Counties	International Power Technology	Southern California Edison Company
Calpine	Intestate Gas Services, Inc.	Southern California Gas Company
	Kelly Group	Spark Energy
Cameron-Daniel, P.C.	Ken Bohn Consulting	Sun Light & Power
Casner, Steve	Keyes & Fox LLP	Sunshine Design
Cenergy Power	Leviton Manufacturing Co., Inc.	Tecogen, Inc.
Center for Biological Diversity		TerraVerde Renewable Partners
		Tiger Natural Gas, Inc.
Chevron Pipeline and Power	Los Angeles County Integrated	TransCanada
City of Palo Alto	Waste Management Task Force	Troutman Sanders LLP
	MRW & Associates	Utility Cost Management
	Manatt Phelps Phillips	Utility Power Solutions
City of San Jose	Marin Energy Authority	Water and Energy Consulting Wellhead
Clean Power Research	McKenzie & Associates	Electric Company
Coast Economic Consulting		Western Manufactured Housing
Commercial Energy	Modesto Irrigation District	Communities Association (WMA)
Crossborder Energy	NLine Energy, Inc.	Yep Energy
Crown Road Energy, LLC	NRG Solar	
Davis Wright Tremaine LLP		
Day Carter Murphy	Office of Ratepayer Advocates	
	OnGrid Solar	
Dept of General Services	Pacific Gas and Electric Company	
Don Pickett & Associates, Inc.	Peninsula Clean Energy	
Douglass & Liddell		