

Proceeding: A.22-03-XXX

Exhibit No.: BAYREN-01

Date: March 4, 2022

Witnesses: Berg, Jennifer

Barba, Nancy

Jacoby, Ryan

BAYREN

STRATEGIC BUSINESS PLAN 2024-2031

TESTIMONY

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

CHAPTER 1. BAYREN’S VISION FOR ENERGY EFFICIENCY IN CALIFORNIA: 2024-2031 (J. BERG)..... 8

I. Desired Outcomes of Portfolio (J. Berg) 19

A. Overview of BayREN Program Administration 20

B. Scope of RENs in the Energy Efficiency Landscape (J. BERG)..... 22

II. Description of Service Territory (J. Berg) 24

III. BayREN’s Energy Efficiency Strategy (J. Berg; N. Barba) 24

A. Savings Forecasting and Quantification Methods 24

C. Market Intervention and Energy Efficiency Adoption Strategies 25

D. New Strategies for Spurring Innovation..... 25

E. Low Global Warming Potential (Low-GWP) Refrigerant Strategy .. 26

F. Portfolio Management Strategies 27

G. Coordination with Other Program Administrators 47

H. Evaluation, Measurement and Verification (EM&V) 49

IV. Alignment with Legislative and CPUC Requirements and Relevant Action Plans..... 50

CHAPTER 2. ANNUAL PORTFOLIO BUDGETS (J. BERG; R. JACOBY)..... 56

I. Savings 58

II. Cost Effectiveness 61

III. Total System Benefit Forecasts (N. Barba) 64

IV. Fiscal Agent (J. Berg)..... 65

CHAPTER 3. RECOMMENDATIONS FOR NEW OR MODIFIED ENERGY EFFICIENCY POLICY (J. BERG)..... 66

I. BayREN Recommends “De-Siloing” Energy Efficiency..... 66

II. BayREN Recommends Revisions to Data Rules to Better Address Energy Efficiency Issues..... 66

III. BayREN Recommends Revisions to the Custom Review Process as Changes Have Had Negative Impacts on Customers 68

IV. BayREN Recommends Procedural Changes to Ensure Program Administrators Have Sufficient Time to Adapt to Commission Revisions..... 70

Appendix A BayREN Strategic Plan 2025

EXECUTIVE SUMMARY

1
2 In this Business Plan, the Bay Area Regional Energy Network (BayREN) proposes
3 programs and strategies that are designed to support equitably achieving California’s climate and
4 energy goals. The Business Plan (Plan) is informed by BayREN’s experience as a Program
5 Administrator (PA) since 2013 and feedback from a multitude of stakeholders that were engaged
6 in preparation for the development of the Plan. At its foundation, the Plan is guided by California’s
7 goals of doubling energy efficiency (EE) in existing buildings by 2030,¹ reducing emissions from
8 existing buildings at least 40 percent below 1990 levels by 2030,² achieving 100 percent renewable
9 and zero-carbon retail electricity,³ and becoming entirely carbon neutral by 2045.⁴ The Plan is also
10 guided by the state’s increased focus⁵ on identifying and addressing barriers to advancing EE and
11 decarbonization in low-income and disadvantaged communities, as well as the California Public
12 Utilities Commission’s (CPUC) most recent Environmental and Social Justice Action Plan⁶

¹ The Clean Energy and Pollution Reduction Act (SB 350) established new energy efficiency and renewable energy targets to support California’s goal of reducing greenhouse gas emissions 40% below 1990 levels by 2030.

² Assembly Bill 3232 requires the California Energy Commission (CEC) to prepare a Building Decarbonization Assessment, in consultation with the California Public Utilities Commission (CPUC), California Air Resources Board (CARB) and the California Independent System Operator. This report assesses the potential for California to reduce greenhouse gasses from buildings by 40% below 1990 levels by 2030.

³ Senate Bill 100 established a landmark policy requiring renewable and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers by 2045.

⁴ In September 2018, former Governor Jerry Brown issued Executive Order B-55-18 to achieve carbon neutrality statewide by no later than 2045.

⁵ See e.g. SB 350 and SB 1477.

⁶ CPUC Environmental & Social Justice Action Plan, Version 2.0 Draft (ESJ Action Plan), available at <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>.

1 update. Finally, the Plan incorporates BayREN’s strategic vision: “By 2025, BayREN’s
2 organization, resources, and programs will evolve to more intentionally integrate equity, while
3 filling gaps and addressing barriers to energy efficiency and electrification, as an essential part of
4 meeting state climate and energy goals.”⁷

5 BayREN is uniquely positioned to support local action to meet California’s goals because
6 our organizational structure ensures that our programs reflect the complex needs of the Bay Area’s
7 nine counties and 109 cities, encompassing the fourth largest metropolitan area in the country that
8 is racially, linguistically, and socio-economically diverse. Additionally, our connection to both the
9 Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission
10 (MTC) enables us to help inform regional planning and leverage other local resources to identify
11 and support the myriad partnership, collaboration, and technological and policy innovation
12 opportunities within the Bay Area. Our continued collaboration with our seven Bay Area
13 Community Choice Aggregators (CCAs) ensures that each is informed of ongoing programs,
14 potential overlap, and opportunities to layer resources to achieve more comprehensive building
15 upgrades. This regional structure also ensures that BayREN is directly connected to, and learning
16 from, local government and community-based stakeholders throughout the region.⁸

⁷ Appendix A, BayREN Strategic Plan at 10, available at <https://mtcdrive.app.box.com/s/z58fxddzg6rdqnuo951lv9heskqu7lug>. In 2021, BayREN conducted an extensive strategic planning process that occurred alongside the development of the Plan and aligns with the Commission guidance and portfolio segmentation discussed in D.21-05-031.

⁸ BayREN held a series of 15 meetings and listening sessions with different stakeholder groups as part of the development of the Plan. Feedback and suggestions for the role that BayREN can play in the region as well as suggestions for how BayREN can help address identified barriers to implementing EE and building decarbonization were offered. As is practicable, BayREN has incorporated this feedback into the proposed programs and strategies. A more detailed summary

1 Since its inception, BayREN has been addressing the three areas indicated by D.12-11-015
2 in the formation and implementation of programs: activities that other PAs do not intend to
3 undertake, pilot activities, and activities serving hard-to-reach customers.⁹ The Regional Energy
4 Network (REN) programs and organization have been an important complement to the investor-
5 owned utility (IOU) programs and have demonstrated what a mission-driven entity can do to
6 address some of the most challenging barriers in EE. The Commission’s requirement that RENs
7 fill gaps, address hard-to-reach audiences, and provide programs that other PAs cannot or will not
8 provide, is essential to ensuring that all Californians have access to affordable EE solutions. In this
9 Plan, the proposed programs and strategies comply with these criteria with an increased focus on
10 equity and market support offerings, as envisioned by the CPUC,¹⁰ and with a regional lens by
11 targeting populations that speak languages other than English, populations in disadvantaged
12 communities and households, businesses and workers that struggle economically and are therefore
13 less likely to take EE actions.

14 The Plan includes four new programs designed to address quickly evolving energy and
15 equity goals and climate policy trends at the local and state level. The new BayREN Climate
16 Careers program is a Workforce Education and Training (WE&T)¹¹ equity program that seeks to
17 fill gaps in the market and respond directly to the need to both grow the residential EE and
18 electrification workforce as well as to provide high road jobs for low-income youth and support

is provided in the Portfolio Application (BayREN Exhibit 02). During the Business Plan period, BayREN will continue to engage stakeholders on a regular basis.

⁹ D12-11-015 at 17.

¹⁰ D.21-05-031 at 23: “RENs by their nature and primary purpose, are more likely to have a greater share of their portfolio devoted to market support and/or equity programs.”

¹¹ This is a new sector for BayREN.

1 local economic development. The new BayREN Refrigerant Replacement program, part of the
2 Commercial sector, also an equity program, will remove harmful Global Warming Potential
3 (GWP) refrigerants from small and medium businesses (SMB) by providing more affordable and
4 more easily available options for food-service establishments to maintain, retrofit, or replace their
5 refrigeration systems to reduce both refrigerant leakage and energy use. The program will also
6 improve the economic viability of SMBs, who have been severely impacted by COVID-19, by
7 reducing their energy bills and equipment maintenance costs.

8 Two new Public Sector programs - the Integrated Energy Services program and the
9 Targeted Decarbonization Services program - will expand BayREN's current offerings to ensure
10 that local government staff have the support and technical assistance they need to develop effective
11 local policies to help meet both local and state energy and emission reduction goals and better
12 prepare communities for climate impacts with a focus on their most vulnerable populations. This
13 type of support is critical for under-resourced local governments and will enable local jurisdictions
14 to benefit from BayREN's regional reach and expertise by creating platforms for exchanging
15 knowledge and providing high-quality, consistent, no-cost technical assistance across the Bay Area
16 region.

17 BayREN will continue its six existing programs - Codes and Standards, Home+ (Single
18 Family), Bay Area Multifamily Building Enhancements Program, Green Labeling, BayREN
19 Business and Water Upgrades \$ave - with slight modifications, to better align with CPUC, state,
20 and regional goals, and the new portfolio segmentation objectives.

21 BayREN is focused on meaningful action to address the climate crisis and reducing
22 emissions related to energy to support local jurisdictions, residents, and businesses in meeting
23 statewide climate goals. As such, each program in the Market Support and Equity segments is

1 intended to contribute to energy savings and/or greenhouse gas (GHG) emission reductions in
2 either the short or long-term. The BayREN Business program, the only Resource Acquisition
3 segment program, will deliver cost-effective energy savings. Two residential programs, Bay Area
4 Multifamily Building Enhancements Program (BAMBE) and Home+, while focused primarily on
5 equity goals, will also directly contribute to energy savings, as will the Targeted Decarbonization
6 program within the Public Sector. The other five BayREN programs will indirectly support energy
7 savings and/or GHG reductions.

8 BayREN’s focus on equity within its Portfolio Strategies (PS), as listed below, is consistent
9 with the new CPUC-directed portfolio segments, the CPUC’s ESJ Action Plan, and the BayREN
10 Strategic Plan:

11 **PS 1.** Activate and engage key stakeholders and environmental and social justice (ESJ)
12 communities in the development and delivery of programs.

13 **PS 2.** Address systemic barriers to EE and electrification, especially for, and in
14 collaboration with, those who disproportionately face energy burdens and climate
15 impacts, and are underrepresented in policy and decision-making.

16 **PS 3.** Provide technical assistance, access to resources, and actionable data to improve
17 decision making, resulting in more comprehensive building upgrades and long-term
18 energy savings.

19 **PS 4.** Provide targeted and relevant training and support to improve effectiveness and build
20 capacity.

21 **PS 5.** Enhance the design and delivery of incentives and financing to remove barriers and
22 ensure more customers can upgrade their buildings and produce energy savings.

1 **PS 6.** Develop innovative, equitable, regional-scaled offerings that enable customers to
2 layer EE with other climate-based funding and resource programs to address the
3 climate crisis.

4 As programs evolve over the Plan period and as state and regional policy priorities continue
5 to shift, these Portfolio Strategies will be continuously reexamined to ensure they remain
6 consistent with BayREN’s portfolio goals.

7 BayREN’s distribution of budget between portfolio segments reflects the following
8 evolutions in our programming: 1) a greater focus on equity,¹² 2) increased support for local
9 governments based on local needs, and 3) timely response to quickly evolving Bay Area and state
10 policy trends and goals regarding building electrification and climate resilience. These
11 enhancements in our approach and program offerings reflect our commitment to engaging with
12 and listening to our stakeholders and effectively partnering with other regional agencies and the
13 seven Bay Area CCAs to efficiently leverage resources and best serve the local governments,
14 businesses, and residents in our 109 Bay Area cities and nine counties.

15 For the first four years of the Plan, the budget request for existing programs is largely
16 consistent with our approved Bi-Annual Energy Efficiency Program and Portfolio Budget Request
17 (BBAL) for program years 2022 and 2023. Our four-year budget for existing programs reflects an
18 increase of seven percent (\$1.8 million) starting in 2024 due primarily to increased incentive
19 funding for the Multifamily and Green Labeling programs based on an increasingly strong uptake

¹² Over 60% of BayREN’s portfolio for the first four years of the Business Plan period is proposed in the equity segment.

1 in these programs. The Plan’s additional budget increase is tied to four proposed new programs in
2 two new portfolio sectors.

3 For the second four-year period, a two percent escalation factor is applied to the entire
4 portfolio. The modest increase represents a reasonable price escalation assumption to account for
5 anticipated increases in labor and materials costs consistent with inflation and the labor agreements
6 and policies of the BayREN member government agencies.

7 One of the strengths of BayREN is its collaborative relationship with the other PAs in our
8 territory, Pacific Gas & Electric (PG&E) and Marin Clean Energy (MCE), along with other CCAs
9 and local governments, that results in more holistic and impactful offerings for our shared
10 customers. While there are formal requirements that govern elements of BayREN’s coordination
11 with PG&E and MCE, BayREN also coordinates with the six CCAs that launched after BayREN
12 was formed. This emphasis on regional collaboration and coordination is central to BayREN
13 strategy, operations, outreach, and program design. At its core, BayREN’s Plan provides a
14 roadmap for BayREN to continue filling gaps in the EE market by providing innovative and
15 impactful programs that serve the unmet needs of the region.

1 programs are not projected to achieve energy efficiency and GHG reductions that are on a path to
2 meet 2030 targets. More aggressive efficiency and decarbonization is needed from programs and
3 the private market to get on track to meet 2030 goals.”¹⁶ Within this context, BayREN proposes
4 to continue existing successful programs, adapt them to focus on equitable decarbonization of
5 existing buildings and ensuring demand flexibility and grid benefits. BayREN further proposes
6 two new equity programs: BayREN Refrigerant Replacement Program (BRRR) that will remove
7 Global Warming Potential (GWP) refrigerants from small and medium businesses (SMBs), and
8 Climate Careers, that will build the EE workforce by targeting youth from low-income
9 communities and set them on a path to earning family-sustaining wages. BayREN is also proposing
10 a new Public Sector, with two programs—Integrated Energy Services and Targeted
11 Decarbonization Services—that will enable local governments to reach energy goals for their
12 facilities, support the development of energy efficient Community Resilience Centers (CRCs), and
13 demonstrate successful approaches for EE and building decarbonization. These new programs will
14 fill gaps in the market and demonstrate the value of BayREN as a local government collaborative
15 that helps meet the state’s climate goals by designing and implementing programs that overcome
16 existing barriers to accelerate the widespread uptake of EE actions.

17 BayREN is one of four RENs in California and is a local government coalition of nine Bay
18 Area counties supporting over 100 cities and their communities to equitably achieve California’s
19 climate and energy goals. BayREN’s regional local government-led structure is unique and ensures
20 that our actions are driven by local, community preferences. BayREN prioritizes meaningful
21 engagement with target audiences, community partners, and other regional agencies in order to

¹⁶ Draft Integrated Energy Policy Report (IEPR) Volume 1, CEC dated Dec 7, 2021 at 2.
Available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241361>.

1 ensure that we can effectively fill gaps and not duplicate, serve hard-to-reach customers, and pilot
2 innovative solutions¹⁷ that are equitable and leverage existing resources.

3 BayREN’s organizational structure is a key strength as it enables us to provide regional
4 guidance, consistency in programming, and leadership that reflects the complex needs of all nine
5 Bay Area counties. BayREN provides services across jurisdictions that municipal-only programs
6 cannot achieve. As a regional resource, BayREN also provides the Bay Area’s smaller counties
7 with capacity building and resources to offer programs they otherwise would not be able to
8 implement on their own. BayREN’s program offerings—including rebates, financing, and
9 technical assistance—are uniform throughout the nine counties, making participation easy and
10 consistent for contractors who work across counties, and for property owners who own properties
11 in more than one county. By uniting and coordinating multiple efforts at a regional level and
12 delivering integrated solutions, BayREN helps California meet its aggressive energy and climate
13 goals.

¹⁷ In first approving Regional Energy Networks (RENs) as Program Administrators of ratepayer funds, the Commission directed that REN program proposals should be approved if they meet one of the three criteria: activities that utilities cannot or do not intend to undertake; pilot activities that utilities cannot or do not intend to undertake, and where there is potential for scalability to a broader geographic reach, if successful; and pilot activities in hard to reach markets, whether or not there is a current utility program overlap. CPUC Decision (D) 12-11-015, COL #13, at 118. These criteria were reaffirmed in D.16-08-019 COL #5, at 98-99 and were expanded with the addition that RENs should also fill gaps in CCA portfolios. D.19-12-021, COL #8, at 84.

1 The role of the Association of Bay Area Governments (ABAG)¹⁸ and the Metropolitan
2 Transportation Commission¹⁹ (MTC) strengthens the regional impact of BayREN by leveraging
3 the resources and capacity of these regional agencies and improving program integration resulting
4 in better quality services for Bay Area governments and residents.²⁰ For example, BayREN Codes
5 and Standards staff are working closely with ABAG and MTC staff to develop model language on
6 the importance of addressing energy in local Housing Elements for Bay Area local governments.
7 This type of innovative policy support is critical not only for under-resourced jurisdictions but also
8 ensures that all local governments benefit from regional expertise and capacity. This regional
9 coordination also ensures that BayREN’s model policies, goals, and actions take into account other
10 regional plans and goals which helps support consistency across jurisdictions. Similarly, when
11 designing the resources offered in our new Public Sector programs, BayREN staff coordinated
12 with ABAG and MTC planners to identify additional state funding opportunities²¹ to support non-

¹⁸ ABAG is the Program Administrator of BayREN. ABAG is the regional planning agency and council of governments for the nine counties and 101 cities in the San Francisco Bay Area. ABAG was formed in 1961 to address land use issues from a regional perspective. ABAG’s mission is to strengthen cooperation and collaboration across local governments to build healthier, stronger communities. ABAG’s Executive Board, composed of elected officials, makes operating decisions, authorizes expenditures and recommends policy. On July 1, 2017 ABAG underwent a staff consolidation with the MTC. ABAG shares many of the same planning goals and initiatives with MTC. ABAG and MTC will be used interchangeably throughout the Business Plan and Portfolio Application.

¹⁹ MTC is the transportation planning, financing and coordinating agency for the Bay Area. MTC and ABAG work together on housing, transportation, and other issues impacting the region.

²⁰ The Bay Area Air Quality Management District (BAAQMD), ABAG and MTC’s sister agency, is also meaningful with this regional strength. BAAQMD resources have been leveraged by BayREN - both in technical expertise time and additional funding for programs - that have allowed for more holistic program offerings.

²¹ Potential funding sources include the California Earthquake Authority’s seismic soft story retrofit grants, FEMA BRIC grants to support microgrids and new funding to support the development of Community Resilience Centers (CRCs) from the California Office of Planning and Research through the Strategic Growth Council.

1 energy related upgrades for existing affordable housing and Community Resilience Centers.
2 BayREN will continue to collaborate with our regional partners to help local governments navigate
3 and access siloed funding and programs to achieve local climate goals.

4 BayREN staff were also directly involved in the development of the most recent Bay Area
5 Sustainable Communities Strategy,²² Plan Bay Area 2050, jointly adopted by ABAG and MTC in
6 October of 2021.²³ Plan Bay Area 2050 connects the elements of housing, the economy,
7 transportation and the environment through 35 strategies that will make the Bay Area more
8 equitable for all residents and more resilient in the face of unexpected challenges. Plan Bay Area
9 2050 includes two environmental strategies focused on financing holistic upgrades to existing
10 residential, commercial, and public buildings to meet energy, seismic, wildfire, and water
11 standards. These strategies aim to both increase community resilience and enable carbon neutrality
12 throughout the Bay Area’s existing building stock. BayREN, in collaboration with ABAG and
13 MTC, will assist with the implementation of these strategies through our new and existing
14 programs which provide the necessary financial, technical, and policy support required to meet
15 these regional goals.

16 BayREN’s regional structure also provides the ability to convene and partner with various
17 stakeholders such as the seven Bay Area Community Choice Aggregators (CCAs)²⁴ to ensure that

²² The Sustainable Communities and Climate Protections Act (SB 375) requires regional metropolitan planning organizations in California to develop Sustainable Communities Strategies (SCS), or long-range plans, which align transportation, housing, and land use decisions toward achieving GHG emissions reduction targets set by the California Air Resources Board (CARB).

²³ <https://www.planbayarea.org/finalplan2050>

²⁴ The CCAs in the Bay Area are: Marin Clean Energy (MCE), East Bay Community Energy (EBCE), Peninsula Clean Energy (PCE), San Jose Clean Energy (SJCE), Silicon Valley Clean Energy (SVCE), CleanPowerSF, and Sonoma Clean Power (SCP).

1 each is informed of ongoing programs, potential overlap, and opportunities to leverage resources.
2 As discussed and exemplified in more detail in the Portfolio Application (BayREN Exhibit 02),
3 BayREN’s close collaboration with CCAs has allowed for more holistic program offerings to
4 shared customers and has enabled participants of our Multifamily Program, for example, to layer
5 incentives for electric vehicle (EV) charging stations with BayREN EE incentives to achieve
6 greater benefits for residents and property managers. Another example is Sunshine Gardens in
7 Santa Clara County that received \$33,000 in rebates for EE upgrades through BayREN and is now
8 working with its CCA, SVCE, to install EV charging stations on-site, and is receiving additional
9 technical assistance to explore fully electrifying in-unit HVAC and water heating through
10 BayREN’s Clean Heating Pathway program²⁵.

11 To identify opportunities for continued coordination, BayREN convened program staff
12 from each of the Bay Area CCAs to provide a forum for ongoing information sharing and
13 collaboration. BayREN will continue to convene this CCA advisory group on a quarterly basis to
14 identify partnership opportunities and ensure that local governments and Bay Area residents can
15 leverage all the energy and efficiency resources available to advance Bay Area climate goals.
16 Specifically, this group will identify challenges and barriers to program uptake for our common
17 target audiences and work to develop new strategies to improve both marketing and outreach and
18 program design to make it easier for businesses, residents, and local governments to layer
19 resources to achieve local goals.

²⁵ https://www.bayren.org/sites/default/files/202112/Sunshine%20Gardens%20Case%20Study%20FINAL_digital.pdf

1 This regional structure also ensures that BayREN is directly connected to, and learning
2 from, local government and community-based stakeholders throughout the region. To help inform
3 the Business Plan, BayREN engaged multiple stakeholders in 2021 through a series of 15 meetings
4 and listening sessions. As part of this effort, BayREN staff attended local sustainability
5 coordination meetings in multiple counties where local government staff and community partners
6 provided insight on specific priorities and barriers to advancing equity, EE and building
7 electrification. Stakeholders provided feedback and suggestions for the various roles that BayREN
8 can play to support their efforts and identified their key needs to address barriers to implementing
9 EE and building decarbonization in the Bay Area. The findings are summarized below:

10 **Finding 1: There is a need for regional leadership, guidance, and advocacy to address**
11 **common challenges.**

12 Stakeholders noted that BayREN has the potential to use its regional scale to directly
13 address common challenges that local governments and CCAs are not well positioned to solve on
14 their own. Participants suggested that BayREN should convene diverse Bay Area stakeholders and
15 lead conversations to understand what specific EE and building decarbonization challenges should
16 be addressed at the regional, local, or state level. These discussions should help identify ideal roles
17 for local governments and other stakeholders to reduce duplication, leverage scarce resources, and
18 expedite action. In alignment with PS 2, PS 4, and PS 6, BayREN has developed a new workforce
19 program, Climate Careers, in partnership with local community-based organizations, to address
20 regional workforce challenges that impact each of the 109 jurisdictions we serve.

21 **Finding 2: Building strategic partnerships to develop a more holistic approach will**
22 **improve outcomes and advance equity.**

1 Strategic partnerships could enable BayREN programs to become part of a more holistic
2 approach to building decarbonization that is focused on improving community health and
3 resilience, and mitigating the risks associated with ongoing climate related stressors like wildfire
4 and extreme heat. Stakeholders called out the need to layer and leverage multiple funding sources
5 in order to advance equity and meet the needs of underserved populations. Stakeholders suggested
6 that BayREN consider partnering with community-based organizations, CCAs, and regional
7 agencies to scale impact, improve outcomes, and create a seamless and positive experience for the
8 most vulnerable and hard to reach communities. Strategic partnerships to advance equity are
9 addressed throughout the Plan, and specifically in PS 1, PS 2, and PS 6. These strategies guide
10 work to expand partnerships with community-based organizations through both our BAMBE and
11 Home+ programs.

12 **Finding 3: BayREN programs and resources should align with community needs and**
13 **priorities – cost is not the only barrier to address.**

14 BayREN resources and programs need to be designed to address specific barriers beyond
15 cost for our target audiences. Much of the building stock that is most in need of EE upgrades is
16 also in need of environmental remediation which can severely limit BayREN’s ability to serve the
17 populations who live and work in these buildings. Stakeholders noted that if basic needs for
18 healthy, comfortable, and affordable housing are not met first, EE and electrification will continue
19 to not be a top priority for underserved and hard-to-reach communities. If these basic needs can be
20 addressed through strategic partnerships, then BayREN can focus on increasing awareness of the
21 benefits of efficiency and electrification and implementing strategies to address workforce, supply
22 chain, permitting, and cost barriers. Community needs are addressed in PS 1, PS 2, PS 4, and PS
23 6 and are reflected in the design of the new Public Sector and Workforce, Education and Training

1 programs. The feedback from stakeholders has informed this Plan, particularly regarding
 2 decarbonization initiatives.

3 BayREN’s six Portfolio Strategies align with both the goals of each sector/program and
 4 with the Portfolio Segmentation. This is illustrated in the following table.

5 **Table 1. Summary of Portfolio Strategies by Segment***

	Resource Acquisition	Codes and Standards	Market Support	Equity
PS 1. Activate and engage key stakeholders and ESJ communities in the development and delivery of programs.		✓		✓
PS 2. Address systemic barriers to EE and electrification, especially for, and in collaboration with, those who disproportionately face energy burdens, climate impacts, and are underrepresented in policy and decision-making.	(✓)			✓
PS 3. Provide technical assistance, access to resources, and actionable data to improve decision making, resulting in building upgrades and long-term energy savings.	(✓)	✓	✓	
PS 4. Provide targeted and relevant training and support to improve effectiveness and build capacity.		✓	✓	(✓)
PS 5. Enhance the design and delivery of incentives and financing to remove barriers and ensure more customers can upgrade their buildings and produce energy savings.	✓			(✓)
PS 6. Develop innovative, equitable, regional-scaled offerings that enable customers to layer energy efficiency with other climate-based funding and resource programs to address the climate crisis.			✓	

*A “✓” in parenthesis (✓) indicates a secondary strategy for the segment that is not discussed or prioritized in this chapter but is referenced in the sector specific sections. Only the primary strategies - shown by ✓ - for the segment are discussed herein.

1 The Portfolio Strategies align with the goals of each sector and program and proposed
2 metrics will measure the portfolio and program performance. The Portfolio Strategies also reflect
3 BayREN’s vision and seamlessly integrate throughout BayREN’s recently adopted Strategic Plan
4 which outlines the mission, vision, definition of equity, and four overarching, near-term goals that
5 guide organizational planning.

6 **Mission:** BayREN is a local government coalition of the nine Bay Area counties supporting
7 communities to equitably achieve California’s climate and energy goals.

8 **Vision:** By 2025, BayREN’s organization, resources and programs will evolve to integrate
9 equity more intentionally, while filling gaps and addressing barriers to energy efficiency
10 and electrification, as an essential part of meeting state climate and energy goals.²⁶

11 **Equity Definition:** For BayREN, equity means addressing systemic barriers to energy
12 efficiency and electrification, especially for, and in collaboration with, equity priority

²⁶ Appendix A, BayREN Strategic Plan at 10.

1 communities²⁷ and those who disproportionately face energy burdens, climate impacts, and
2 are underrepresented in policy and decision-making.²⁸

3 The BayREN 2025 Strategic Plan provides a path forward for the organization over the
4 next five years with a focus on building a robust foundation for growth and innovation—not only
5 for BayREN as an organization, but also for the communities we serve. This Strategic Plan
6 explores how the organization, and its resources, services, and programs, will meet future needs
7 for the nine Bay Area counties and BayREN member agencies. The Strategic Plan is an action-
8 oriented plan with clear metrics, actions, and steps to achieve the organization’s objectives,
9 including a framework for programs to evolve to meet bigger goals related to equity and market
10 transformation. This planning process has occurred alongside the development of this Plan,
11 allowing the organization to take a holistic view of where it will be in five years and how it will
12 meet those goals. Moreover, taken together with the equity definition provided in the D.21-05-
13 031, this aligns with the recognition that there is not “a one-size-fits-all definition of what
14 encompasses a potential ESJ community.”²⁹

²⁷ In 2021, ABAG and MTC replaced the term “Communities of Concern” with “Equity Priority Communities”, as the former generated negative connotations and was perceived as demeaning. These communities are determined based on census tracts, and eight demographic factors including race and income. ABAG and MTC use this framework for regional planning and programming. For the Business Plan and the Portfolio Application, BayREN is using “ESJ communities” rather than Equity Priority Communities to better align with the CPUC guidance provided in D.21-05-031. There is clear overlap and similarities with the definitions of ESJ communities and Equity Priority Communities.

²⁸ Appendix A, BayREN Strategic Plan at 7.

²⁹ CPUC Environmental & Social Justice Action Plan, Version 2.0 Draft (ESJ Action Plan), at 19.

1 Central to this effort is the understanding that achieving equity is not a simple task to be
2 completed at a specific point in time, but is a long-term process requiring the organization to
3 practice and continually improve. The measures of success guide the organization to describe and
4 track desired outcomes for each of the four equity levers and across four stages of equity impact.
5 The four stages help to focus the organization on what can be achieved and prioritized now, as
6 well as the future conditions it seeks to achieve. For BayREN this provides a spectrum of change
7 that will be proactively pursued over time.

8 I. DESIRED OUTCOMES OF PORTFOLIO (J. BERG)

9 The authorization of RENs emphasizes filling gaps, scaling pilots, and serving hard-to-
10 reach communities. Each of the BayREN Portfolio Strategies support these outcomes, with a
11 particular emphasis on the unique populations in our service area. The following recurring themes
12 appear across each portfolio segment and program sector. First, the local government perspective
13 will shape the program design, delivery and policy development related to each sector. Local
14 government relationships and coordination will enhance ratepayer funding by leveraging programs
15 outside of CPUC activities. Local workforce offerings will be tailored to the uniquely hard-to-
16 reach and disadvantaged communities in the BayREN service area. Second, a major focus in
17 program offerings, and budget allocation, will be dedicated to underrepresented households,
18 businesses, and youth from communities that align with the CPUC’s ESJ Action Plan. A particular
19 emphasis is given to coordinating equity across all programs by building the capacity of youth in
20 ESJ communities, contractors, building code officials, and local governments. By combining the
21 two overarching strategies of using the local government perspective and focusing on equity,
22 BayREN proposes to increase the awareness and adoption of EE, electrification, and demand
23 flexibility interventions—which cumulatively support California decarbonization goals.

1 **A. Overview of BayREN Program Administration**

2 RENS are PAs of EE programs. RENS do not implement programs of IOUs, rather, RENS
3 have their own portfolio of EE programs.

4 RENS began as a regional pilot concept in D. 12-05-015, which invited local governments
5 to submit Program Implementation Plans (PIPs) for the 2013-2014 program years.³⁰ In D.12-11-
6 015, the CPUC approved the first two RENS for the 2013-2014 program years: BayREN and the
7 Southern California Regional Energy Network (SoCalREN).³¹ This Decision made clear that
8 RENS are PAs, not third-party programs or local government partnerships (LGPs) of IOUs.³² D.14-
9 10-046 continued funding BayREN and SoCalREN as pilots for program year 2015.³³ When the
10 CPUC provided guidance for initial EE rolling portfolio business filings in D.16-08-019, the
11 CPUC maintained the status of RENS as pilots.³⁴ D.18-05-041 continued the approach of allowing
12 RENS to be PAs and adopted the Business Plans for years 2018-2025 of three RENS: BayREN,
13 SoCalREN, and the Tri-County Regional Energy Network (3C-REN).³⁵

14 In D.19-12-021, the CPUC provided additional guidance regarding the treatment of RENS
15 as PAs. In particular, the CPUC solidified the role of RENS in the EE administrator space: “RENS

³⁰ D.12-05-015 at 404.

³¹ Southern California Regional Energy Network and Bay Area Regional Energy Network. D.12-11-015.

³² “[T]he key aspect of the REN proposals that sets them apart from third party programs or other local government partnerships (LGPs) is the selection process itself. Instead of being a part of a utility portfolio, along with the LGPs, and the third-party programs, the RENS are distinguished by their selection process, which is handled by the Commission instead of by the utilities.” D.12-11-015 at 8.

³³ D.14-10-046 at 161.

³⁴ D.16-08-019 at 2.

³⁵ D.18-05-041 at 2.

1 have now been in existence since late 2012. As such, they are a reality within the landscape of the
2 Commission’s energy efficiency policy. Thus, we see no further purpose served by applying the
3 label of ‘pilot’ to them.”³⁶ This decision also imposed additional requirements on new RENs.³⁷ As
4 an already-existing REN, these additional requirements are not applicable to BayREN.

5 BayREN has a proven track record as a PA of EE funds since 2013. BayREN’s nationally
6 recognized³⁸ Multifamily program highlights BayREN’s unique role to serve hard-to-reach and
7 underserved communities and multifamily property types, including deed restricted and naturally
8 occurring affordable small properties. To date, 587 properties (with a total of 45,524 units) have
9 been retrofitted, resulting in significant energy savings as well as other benefits including reduced
10 utility bills for tenants, many of whom are low-income. The success of the program has attracted
11 new partners and opportunities such as the Bay Area Healthy Home Initiative, that are working
12 together to leverage expertise and resources in a way that prioritizes the benefit of people
13 struggling with asthma, and/or living close to sources of significant transportation-related air
14 pollution. By working together, the partnership is able to provide a more robust, one-stop-shop
15 approach to managing asthma triggers that includes measures ranging from mattress covers and

³⁶ D.19-12-021 at 17.

³⁷ “Any new REN will be required to demonstrate unique value in achieving state goals, represent more than one local government entity, to coordinate with existing program administrators in their geographic area prior to filing their business plan, to vet their proposal with stakeholders through the California Energy Efficiency Coordinating Committee (CAEECC), and to explain their REN governance structure in their business plan filing.” D.19-12-021 at 2.

³⁸ ACEEE recognized this program in 2019 with the Exemplary Program Award, calling out the program model’s success in part due to the use of local government trusted messengers to increase participation, and the program’s simplicity and concierge-like service tailored to each property's specific needs and priorities. The report is viewable at:
<https://www.aceee.org/sites/default/files/publications/researchreports/u1901.pdf>

1 greener cleaning products, to envelope improvement and electrification. Since 2019, BayREN has
2 also partnered with Rising Sun Center for Opportunity to increase access to programs for
3 communities that have been historically underserved. Rising Sun recruits young adults from low-
4 income communities, non-native English speakers, and youth that are disconnected from school
5 and employment, and offers meaningful training and green employment pathways. Participants
6 join the program as Energy Specialists who provide Green House Call services that help local
7 communities install no-cost energy and water conservation measures. To date, over 100 youth have
8 been trained and 5,790 homes have been served.

9 **B. Scope of RENs in the Energy Efficiency Landscape (J. BERG)**

10 A key element that differentiates RENs as PAs compared to IOU or CCA PAs is that RENs
11 are constrained in which programs they are allowed to offer. This limited role has been applied
12 since RENs were first authorized in 2012.³⁹ In D.19-12-021, the CPUC updated and clarified the
13 limited role of RENs and the criteria that the Commission would use to evaluate whether to
14 approve new or renewed REN Business Plans:

15 RENs must show new or unique value to the CPUC's energy, climate,
16 and/or equity goals, specifically:

- 17 ● Activities that utilities or CCA PAs cannot or do not intend to undertake.
- 18 ● Pilot activities where there is no current utility or CCA program offering,
19 and where there is potential for scalability to a broader geographic reach, if
20 successful.

³⁹ D.12-11-015 at 17.

- 1 • Activities serving hard-to-reach markets, whether or not there is another
2 utility or CCA program that may overlap.⁴⁰

3 This limited role, however, is not unimportant. The CPUC has consistently acknowledged
4 the importance of the role of REN’s within the EE landscape. In D.19-12-021, the CPUC
5 “agree[d]... that the importance of RENs may increase as budgets and roles for LGPs are shrinking
6 within the utility portfolios for multiple reasons...The particular areas of unique capacities local
7 governments may bring in the delivery of energy efficiency include, but may not be limited to,
8 public sector buildings, issues surrounding building code compliance, and treating or delivering
9 energy efficiency services to hard-to-reach customers.”⁴¹

10 Consistent with this decision, the BayREN portfolio proposes to fill gaps in meeting SB
11 100 and SB 350 goals with an emphasis on accelerating decarbonization and equitable service
12 offerings. These efforts are interwoven throughout the portfolio, as evidenced by BayREN’s
13 success:

- 14 1. Developing training for both building officials and contractors on the proper
15 installation of Heat Pump Water Heaters (HPWH);
16 2. In partnership with the statewide TECH initiative, piloting activities to speed up
17 the permitting process for electrification technologies; and
18 3. Collaborating with Bay Area CCAs to layer incentives for HPWHs.

⁴⁰ D.19-12-021 at 32. Where there is overlap of programs, the Commission has advised a REN to “target the hardest-to-reach customers for activities that overlap or are significantly similar to the IOU’s.” D.18-05-041 at 100.

⁴¹ D.19-12-021 at 18.

1 **II. DESCRIPTION OF SERVICE TERRITORY (J. BERG)**

2 The BayREN territory comprises the nine-county San Francisco Bay Area⁴² and is a small
3 part of the PG&E territory. However, the service area includes a diverse set of climate zones (CZs)
4 from moderate coastal zones (CZ3) to inland zones (CZ12) that require large thermal space
5 conditioning loads. In a recent E3 study⁴³, the San Francisco CZ3 was shown to have low air
6 conditioning loads, which makes the cost effectiveness, as well as customer bill impacts less
7 favorable than hotter/colder zones. BayREN aims to address this by tailoring the residential
8 programs to right-size comprehensive solutions (e.g., recommend demand flexible appliances, heat
9 pumps, as well as envelope measures) to increase thermal comfort, while minimizing grid impacts
10 and customer bills. In tandem with this EE approach, BayREN proposes to complement technical
11 assistance with marketing and outreach for distributed energy resources (DER) strategies that
12 further move buildings to zero net carbon, and toward a higher degree of demand flexibility to
13 support the evolving grid reliability needs through solar, storage, and intelligent load control.

14 **III. BAYREN’S ENERGY EFFICIENCY STRATEGY (J. BERG; N. BARBA)**

15 **A. Savings Forecasting and Quantification Methods**

16 BayREN’s portfolio includes several programs with quantifiable energy savings:

- 17 ● **BayREN Business:** A Commercial Sector program targeting small and medium-
18 sized businesses (SMB)
- 19 ● **Home+:** Residential Sector program for moderate-income single-family
20 households

⁴² BayREN/ABAG’s county membership includes: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties and cities.

⁴³ https://www.ethree.com/wpcontent/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf

- 1 • **BAMBE:** A Residential Sector program for small (<100 unit), owner-occupied
2 multifamily buildings.

3 BayREN proposes a strategy that uses a diverse mix of new and existing methods for
4 forecasting and quantifying savings from its 2024-2027 portfolio, such as normalized metered
5 energy consumption (NMEC), energy modeling, and measure packages derived from the eTRM.

6 **C. Market Intervention and Energy Efficiency Adoption Strategies**

7 As described in the Portfolio Plan, BayREN proposes a suite of downstream programs that
8 include both incentives and direct install intervention strategies. The target market participants are
9 primarily disadvantaged, low-income, youth populations, small and medium businesses, as well
10 as public sector agencies. Delivery methods include customer facing programs administered by
11 BayREN staff, with a portion implemented by internal staff, and a portion implemented by
12 competitive third-party contracts. Energy efficiency adoption strategies include marketing,
13 education and outreach, technical assistance, customer and practitioner incentives, as well as
14 market support activities for technical training and capacity building among identified
15 stakeholders.

16 **D. New Strategies for Spurring Innovation**

17 BayREN has incorporated a range of strategies in its Plan to support the deployment of
18 emerging technologies and to spur innovation. First, BayREN proposes to integrate alignment with
19 the CEC's Demand Flexible Appliance Standards into its residential and Codes and Standards
20 programs. Second, BayREN has incorporated workforce development that is needed to deploy the
21 new generation of smart, efficient and controllable appliances necessary to expand the EE market
22 to the degree characterized in the CEC IEPR report to put us on the right trajectory to GHG
23 reduction. Devices which are not only efficient, but also have Wi-Fi, Bluetooth, IEEE 2030.5, as

1 well as Thread and Matter protocols all support the Department of Energy Grid-Interactive
2 Efficient Buildings (GEB) Roadmap.⁴⁴ This requires workforce development for existing and
3 incoming workers to understand, specify, configure and commission such technologies. It also
4 requires local government permitting staff to understand the new CEC standards around such
5 appliances. BayREN has targeted these strategies - both in workforce development and technology
6 deployment -at disadvantaged communities, offering them workforce development opportunities
7 and energy saving opportunities that provide a low-cost, high impact way to save energy and
8 experience higher degrees of thermal comfort.

9 **E. Low Global Warming Potential (Low-GWP) Refrigerant Strategy**

10 BayREN is proposing a new program within the Commercial Sector, the BayREN
11 Refrigerant Replacement Program (BRRR).⁴⁵ The goals of the program are two-fold: to remove
12 harmful GWP refrigerants from small and medium businesses, and to increase the affordability
13 and availability for food-service establishments to maintain, retrofit or replace refrigeration
14 systems to ensure reduced leakages, unnecessary costs, and reduced GHGs. The BRRR program
15 seeks to replace high-GWP refrigerants with moderate and low-GWP refrigerants while optimizing
16 performance of each refrigeration system, via tune-ups, improved maintenance, and component
17 replacement. Even though each individual system is small, in aggregate their refrigerant leaks have
18 an outsized impact on GHG emissions.⁴⁶ The BRRR program provides direct-install refrigeration
19 services to food service SMBs.

⁴⁴ <https://gebroadmap.lbl.gov/A%20National%20Roadmap%20for%20GEBs%20-%20Final.pdf>

⁴⁵ This program is discussed in detail in the BayREN Exhibit 02, in the Commercial Chapter.

⁴⁶ See May 2021 CPUC study on low-GWP refrigerants, viewable at:
<https://pda.energydataweb.com/#!/documents/2506/view>

1 The BRRR program will also help build the market for moderate GWP refrigerants and
2 low-GWP natural refrigeration systems. In addition to alignment with California climate policy,
3 the program will also improve the economic viability of SMBs by reducing their utility and
4 maintenance costs and reducing the incidence of repair/replacement of equipment and associated
5 lost product by more proactively maintaining refrigeration equipment.

6 **F. Portfolio Management Strategies**

7 ***1. Segmentation Strategy***

8 D.21-05-031 directed PAs to further segment their portfolios based on the primary program
9 purpose, into the following three segments defined as follows:

10 **Resource Acquisition:** Programs with a primary purpose of, and short-term
11 ability to, deliver cost-effective avoided cost benefits to the electricity and natural
12 gas systems. Short-term is defined as during the approved budget period for the
13 portfolio, which will be discussed further later in this decision. This segment should
14 make up the bulk of savings to achieve TSB goals.

15 **Market Support:** Programs with a primary objective of supporting the
16 long-term success of the energy efficiency market by educating customers, training
17 contractors, building partnerships, or moving beneficial technologies towards
18 greater cost effectiveness.

19 **Equity:** Programs with a primary purpose of providing EE to hard-to-reach
20 or underserved customers and disadvantaged communities in advancement of the
21 CPUC’s ESJ Action Plan; Improving access to EE for ESJ communities, as defined
22 in the ESJ Action Plan, may provide corollary benefits such as increased comfort

1 and safety, improved indoor air quality, and more affordable utility bills, consistent
2 with Goals 1, 2, and 5 in the ESJ Action Plan.⁴⁷

3 D.21-05-031 further noted that Codes and Standards (C&S) programs remain distinct from
4 these categories. While IOUs and CCAs have a 30% cap on their total market support and equity
5 programs, RENS have been exempted from this limit. As noted by the CPUC, “[t]he budget amount
6 devoted to the market support and equity programs will be limited to 30% of the total budgets,
7 except in the case of the Regional Energy Network program administrators, who will not be subject
8 to these limits because of the different nature of their portfolios.”⁴⁸ Specifically, “[t]he RENS are
9 exempted from this requirement because of the nature of their portfolios, which is already different
10 from the other program administrators. RENS, by their nature and primary purposes, are more
11 likely to have a greater share of their portfolio devoted to market support and/or equity programs.
12 Therefore, those portions of their budgets will not be subjected to an up-front limitation.”⁴⁹

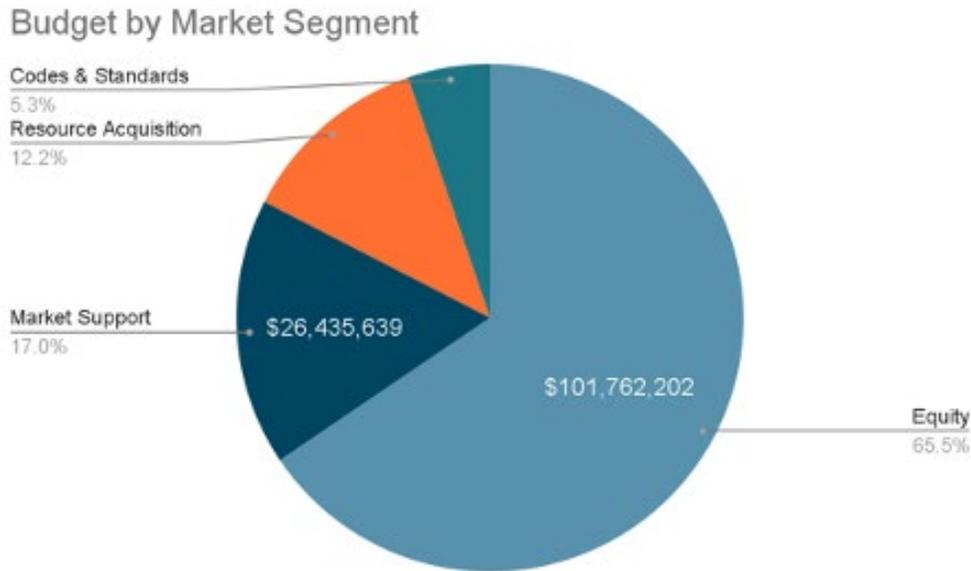
13 In the first four years of the Business Plan—and as detailed in the Portfolio Application —
14 over 65% of the portfolio segmentation and budget is proposed as Equity (3 sectors/4 programs),
15 approximately 17.5% as Market Support (3 sectors/4 programs), 12.2% as Resource Acquisition
16 (one program), and 5.2% as Codes and Standards. This is consistent with the CPUC’s stated
17 expectations for REN PAs. While BayREN will closely monitor program performance during the
18 business plan period and modify the programs as necessary, the portfolio segment breakdown is
19 anticipated to remain the same as shown in the figure below.

⁴⁷ D.21-05-031 at 14-15.

⁴⁸ D.21-05-031 at 2.

⁴⁹ D.21-05-031 at 23.

1 **Figure 1. Budget by Market Segment**



2

3 **2. Sector Strategy**

4 In the Portfolio Application (BayREN Exhibit 02), each sector has a stated vision that is
5 summarized below.

6 **a. Commercial**

7 The context for the Commercial Sector strategy is summarized in the stated sector vision
8 detailed in the Portfolio Application⁵⁰: enable decision-makers for SMBs to increase engagement
9 in EE behaviors, upgrades, and equipment maintenance as a matter of regular practice.

10 BayREN Commercial Sector programs—BayREN Business and the BayREN Refrigerant
11 Replacement program—are designed to overcome long-standing and pandemic-related challenges
12 SMBs face, and to promote comprehensive, market-based solutions, deep energy and GHG
13 emission reductions, and long-term energy and maintenance goals. The programs have diversified

⁵⁰ See Exhibit 02 at 51.

1 strategies that recognize that the SMB market is diverse and there is no one-size-fits all solution.
2 Particular focus will be on hard-to-reach businesses, businesses located in disadvantaged
3 communities, and otherwise underserved businesses.

4 BayREN’s commercial sector strategy builds upon the following BayREN Portfolio
5 Strategies:

6 **PS 1.** Activate and engage key stakeholders and ESJ Communities in the development
7 and delivery of programs.

8 **PS 2.** Address systemic barriers to EE and electrification, especially for, and in
9 collaboration, with those who disproportionately face energy burdens, climate
10 impacts, and are underrepresented in policy and decision-making.

11 **PS 5.** Enhance the design and delivery of incentives and financing to remove barriers and
12 ensure more customers can upgrade their buildings and produce energy savings
13 with a focus on ESJ communities.

14 **PS 6.** Develop innovative, equitable, regional-scaled offerings that enable customers to
15 layer EE with other climate-based funding and resource programs to address the
16 climate crisis.

17 **b. Cross-Cutting**

18 **Water Upgrades Saves**

1 The context for the WE&T sector strategy is summarized in the stated program vision for
2 the WE&T program⁵²: establish a viable and robust career pathway for youth, particularly those
3 in ESJ communities, in EE and climate work.

4 As a workforce program focusing on youth in low-income communities, BayREN’s
5 Climate Careers program has established a scalable pathway to grow cross-cutting and equity
6 programs in the region. The program is also leveraging connections to amplify BayREN funding,
7 by working with local partners to support the development of the Bay Area High Road Training
8 Partnership (HRTP)⁵³ for the emerging residential building decarbonization industry. HRTP aims
9 to create a collaborative structure to ensure that the industry and workforce are prepared to meet
10 demand while prioritizing equity, job quality, and job access. Led by Rising Sun Center for
11 Opportunity and Inclusive Economics, learnings from the Bay Area HRTP effort will inform the
12 BayREN Climate Careers program and ensure that the program incorporates best practices and
13 leverages new private sector and labor partnerships developed through the HRTP.

14 BayREN’s WE&T sector strategy builds upon the following BayREN Portfolio Strategies:

15 **PS 1.** Activate and engage key stakeholders and ESJ communities in the development
16 and delivery of programs.

17 **PS 2.** Address systemic barriers to EE and electrification, especially for, and in
18 collaboration with, those who disproportionately face energy burdens, climate
19 impacts, and are underrepresented in policy and decision-making.

⁵² Exhibit 02 at 99.

⁵³ <https://risingsunopp.org/wp-content/uploads/Rising-Sun-HRTP-Press-Release.pdf>

1 **e. Public**

2 The context for the Public Sector strategy is summarized in the stated sector vision⁵⁵: local
3 governments will be able to reach their energy goals, including reducing energy use and global
4 warming emissions, for their own facilities and Community Resilience Centers (CRCs) and
5 demonstrate successful approaches that could be applied to other sectors.

6 BayREN’s Integrated Energy Services Program and Targeted Decarbonization Services
7 Program address gaps and needs in the Public Sector that are not being fully met through other
8 programs. Public agency staff have limited time, resources, and budgets to analyze, design, and
9 construct projects outside of routine capital improvements, let alone navigate complicated
10 technology assessments and incentive processes. Although there are programs available in the Bay
11 Area, local government staff find it difficult to identify those which can best assist them with
12 desired projects. In addition, most programs are limited in scope, while local governments have a
13 wide variety of goals that could all affect the energy systems of their facilities. Furthermore, local
14 government staff have a need for information about decarbonization technologies, as well as
15 strategies to address the higher upfront costs of many of these types of equipment. The suite of
16 services under the Integrated Energy Services program and Targeted Decarbonization Services
17 program addresses these gaps.

18 BayREN’s public sector strategy builds upon the following BayREN Portfolio Strategies:

19 **PS 3.** Provide technical assistance, access to resources, and actionable data to improve
20 decision making, resulting in building upgrades and long-term energy savings.

⁵⁵ Exhibit 02 at 112.

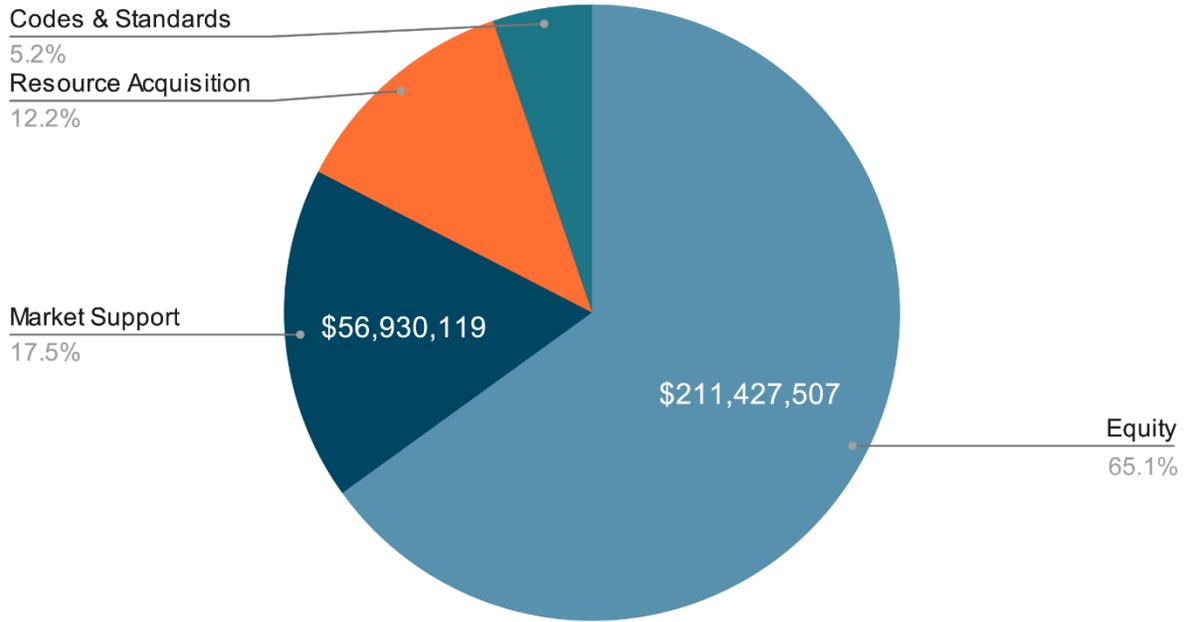
1 ensuring that all Californians have access to affordable EE solutions. Again in D.21-05-031, the
2 CPUC acknowledged that REN PAs have different considerations given the types of programs that
3 they have been directed to offer. The foundational language from the CPUC regarding RENs
4 informs the types of programs that BayREN seeks to provide and provides some direction to the
5 distribution of budget among the segments.

6 BayREN's distribution of budget between the segments reflects the following evolutions
7 in our programming, 1) a greater focus on equity, 2) increased support for local governments based
8 on local needs, and 3) timely response to quickly evolving Bay Area and state policy trends and
9 goals regarding building electrification and climate resilience. These improvements in our
10 approach and program offerings reflect our commitment to engaging with and listening to our
11 stakeholders and effectively partnering with other regional agencies and our seven Bay Area CCAs
12 to leverage resources and best serve the local governments, businesses, and residents in our 109
13 Bay Area cities and nine counties.

14 The budget request for existing programs is largely consistent with our approved Bi-
15 Annual Energy Efficiency Program and Portfolio Budget Request (BBAL) for program years 2022
16 and 2023. Our four-year budget for continuing programs reflects an increase of seven percent (\$1.8
17 million) starting in 2024 due primarily to increased incentive funding for the Multifamily and
18 Green Labeling programs that are experiencing continued and increased uptake. Our portfolio
19 application also proposes the inclusion of two new sectors and four new programs - totaling \$9.1
20 million in 2024 - all proposed in either the Market Support or Equity segments. The eight-year
21 budget allocation also reflects a significant increase in focus on advancing equity through EE and
22 building decarbonization with over 65% of our eight-year program budget committed to equity
23 programs.

1 **Figure 2. Budget by Portfolio Segment (2024-2031)**

2024-2031 Budget by Portfolio Segment



2

3 **Table 2. Proposed Program Segmentation and Budgets**

BayREN Program	Market Segment	REN Activity			Existing or New	Portfolio Plan Budget 2024-2027	Strategic Plan Budget 2024-2031
		Gap Filling	Pilot	HTR			
Resource Acquisition							
BayREN Business	Commercial	✓		✓	Existing	\$18,952,573	\$39,726,102
Market Support							
Green Labeling	Residential	✓	✓		Existing	\$7,385,951	\$15,424,618
Integrated Energy Services (IES)	Public	✓			New	\$4,228,707	\$8,760,637

Targeted Decarbonization Resources (TDS)	Public	✓			New	\$6,386,843	\$15,079,827
Water Upgrades Save	Cross-cutting	✓	✓	✓	Existing	\$8,434,138	\$17,665,037
Equity							
Single Family (Home+)	Residential	✓		✓	Existing	\$35,272,751	\$72,642,901
Bay Area Multifamily Building Enhancements (BAMBE)	Residential	✓	✓	✓	Existing	\$35,177,735	\$72,447,287
BayREN Refrigerant Replacement (BRRR)	Commercial	✓		✓	New	\$18,499,160	\$38,801,416
Climate Careers	Cross-cutting	✓			New	\$12,812,556	\$27,535,903
Codes and Standards							
Codes and Standards	Cross-cutting	✓		✓	Existing	\$8,155,157	\$16,968,637
Total							
10 Programs	4 Market Segments				6 Existing 4 New	\$155,305,571	\$325,052,365

1

1 **Table 3. Proposed Program Budget by Sector (including EM&V)**

Budget	2024	2025	2026	2027	Portfolio Plan Budget 2024-2027	Strategic Plan Budget 2024-2031
Program Budgets by Sector						
Residential	\$19,254,406	\$19,391,731	\$19,523,892	\$19,666,408	\$77,836,437	\$160,514,806
Commercial	\$8,332,751	\$9,643,750	\$9,704,682	\$9,770,550	\$37,451,733	\$78,527,518
Public	\$2,107,341	\$2,475,793	\$2,886,653	\$3,145,763	\$10,615,550	\$23,840,464
Cross-Cutting	\$6,883,074	\$7,410,232	\$7,512,203	\$7,794,342	\$29,401,851	\$62,169,578
Subtotal	\$36,577,572	\$38,723,506	\$39,627,430	\$40,377,063	\$155,305,571	\$325,052,365
Evaluation, Measurement and Verification (EM&V)						
BayREN	\$419,118	\$443,707	\$454,064	\$462,654	\$1,779,543	\$3,724,558
CPUC	\$1,104,947	\$1,169,773	\$1,197,079	\$1,219,724	\$4,691,523	\$9,819,291
Subtotal	\$1,524,065	\$1,613,480	\$1,651,143	\$1,682,378	\$6,471,066	\$13,543,849
Total Budget (Including EM&V)						
Total	\$38,101,637	\$40,336,986	\$41,278,573	\$42,059,441	\$161,776,637	\$338,596,214

2

1 **Table 4. Budget Distribution across Sectors and Segments**

Market Segment	Resource Acquisition	Market Support	Equity	Codes and Standards	Total 8 Year Budget Allocation*
Residential Sector		<i>Green Labeling</i> \$15,424,618	<i>Single Family</i> \$72,642,901 <i>BAMBE</i> \$72,447,287		\$160,514,806 (50%)
Commercial Sector	<i>BayREN Business</i> \$39,726,102		<i>BayREN Refrigerant Replacement</i> \$38,801,416		\$78,527,518 (24%)
Public Sector		<i>Integrated Energy Services</i> \$8,760,637 <i>Targeted Decarbonization Resources</i> \$15,079,827			\$23,840,464 (7%)
Cross-Cutting Sector		<i>Water Upgrades Save</i> \$17,665,037	<i>Climate Careers</i> \$27,535,903	<i>Codes and Standards</i> \$16,968,637	\$62,169,578 (19%)
Total*	\$39,726,102 (12%)	\$56,930,119 (18%)	\$211,427,507 (65.1%)	\$16,968,637 (5%)	\$325,052,365
*Figures are rounded to the nearest dollar and may not sum exactly to the total. Exact figures are provided in Exhibit 03, Appendix C.					

2

3 BayREN’s distribution of budget between the segments is also based on a desire to support
 4 deeper energy savings and GHG reductions which requires breaking down barriers and filling gaps
 5 for individuals and businesses who have historically not been able to or willing to participate in
 6 utility EE programs. While some efforts have been made by utilities to reach these historically
 7 underserved populations and overcome these barriers, continued pressure on the IOUs to improve

1 cost-effectiveness and meet increased annual kWh savings goals has meant more emphasis on
2 targeted markets that have abundant and scalable cost-effective savings potential, and less
3 emphasis on hard-to-reach markets with significant savings opportunities, markets in which
4 potential participants have limited ability to cost share, and markets in which the savings
5 opportunities are smaller per customer. Barriers in hard-to-reach markets include a range of
6 persistent challenges such as lack of capacity, lack of information, lack of access to programs,
7 inequitable program design, affordability, and linguistic isolation to name a few. The breakdown
8 of the BayREN portfolio with all but one program being in the Market Support or Equity segment
9 reflects the emphasis on providing EE services to these traditionally hard-to-reach markets.

10 **a. Greater Focus on Equity**

11 In 2021, BayREN commenced an extensive strategic planning process that readily aligns
12 with the guidance for the new Business Plans as well as the Portfolio Segmentation. Overlaying
13 the future planning is the vision: “By 2025, BayREN’s organization, resources and programs will
14 evolve to more intentionally integrate equity, while filling gaps and addressing barriers to energy
15 efficiency and electrification, as an essential part of meeting state climate and energy goals.”⁵⁷

16 While “equity” programs have been defined in D.21-05-031 and the objectives and metrics
17 were further refined by the CAEECC working group, BayREN has its own additive definition. For
18 BayREN, equity means addressing systemic barriers to EE and electrification, especially for, and
19 in collaboration with, equity priority communities and those who disproportionately face energy
20 burdens, climate impacts, and are underrepresented in policy and decision-making.⁵⁸ Thus, even

⁵⁷ Appendix A, BayREN Strategic Plan at 7.

⁵⁸ Appendix A, BayREN Strategic Plan at 9.

1 for programs that are not deemed to be in the equity segment, BayREN’s equity principles will be
2 incorporated into the program design and outreach strategies.

3 **b. Increased Support for Local Governments Based**
4 **on Local Needs**

5 BayREN programs have evolved to adapt to the markets and customers that they serve
6 which, by CPUC directive, are difficult to serve. From an increased focus on hard-to-reach and
7 disadvantaged communities, to responsiveness to COVID-19 pandemic impacts, programs have
8 evolved to best assist local communities. These challenges, combined with ever growing
9 responsibilities to reduce GHG emissions and build community resilience to climate impacts, make
10 it increasingly difficult for local governments to be proactive, let alone respond, to diverse
11 community needs. BayREN plays a critical role as a regional provider of EE programs and
12 resources for local governments. BayREN’s Codes & Standards program will continue to provide
13 free resources and support, technical assistance, and policy guidance, while our new Public Sector
14 programs will focus on expanding these resources to help meet local energy and resilience goals.

15 BayREN engaged multiple stakeholders in 2021 to gather input to inform our Plan
16 strategies and program design. Through a series of approximately 15 meetings and listening
17 sessions, BayREN gathered input on key barriers to implementing EE and advancing building
18 decarbonization across building types and jurisdictions. These discussions also covered issues such
19 as how to advance community health, equity, and resilience through energy upgrades and focused
20 on how BayREN could work at the intersection of energy and these issues to leverage other
21 existing programs and support specific local goals.

22 Stakeholders provided valuable input on the various roles that BayREN can play to support
23 their efforts and outlined key needs to address barriers to implementing EE and building

1 accomplished through the Integrated Energy Services Program that offers the Energy Concierge
2 and Energy Roadmapping for municipal buildings, and the Targeted Decarbonization Services
3 program which seek to expand demand for high-impact integrated building upgrades and to
4 support market development for decarbonization equipment and technologies through
5 demonstrations of successful decarbonization projects. This type of support is critical for under-
6 resourced local governments and enables local jurisdictions to benefit from BayREN’s regional
7 reach and expertise by creating platforms for knowledge exchange and providing quality,
8 consistent, no-cost technical assistance across the Bay Area.

9 The new BayREN Workforce Education and Training program is an equity program that
10 seeks to fill gaps in the market and respond directly to the need to both grow the residential EE
11 and electrification workforce and to provide high roads jobs for low-income youth in order to meet
12 statewide energy goals and support local economic development. BayREN developed Climate
13 Careers, a workforce development program that focuses on training and employing youth from
14 low-income households to provide residential EE services, learn and practice foundational career
15 skills, and provide paid experience in and exposure to clean economy careers.

16 Finally, the new BayREN Refrigerant Replacement program (BRRR), also an equity
17 program, seeks to reduce high Global Warming Potential and Ozone Depletion Potential
18 refrigerants, a state priority. BRRR will serve the Bay Area’s food service sector exclusively,
19 performing refrigerant change outs for small restaurants, bars, grocery and convenience stores, and
20 food-storage warehouses. Also, BRRR will integrate as-needed repairs to refrigeration systems to
21 prevent future refrigerant leaks and optimize performance. In addition to aligning with California
22 climate policy, the program will also improve the economic viability of SMBs, one of the sectors
23 hardest hit by the impacts of the ongoing COVID-19 pandemic, by reducing their utility and

1 maintenance costs and reducing the incidence of energy repair/replacement of equipment and
2 associated lost product by more proactively maintaining refrigeration equipment.

3 BayREN is focused on meaningful action to address the climate crisis, and reducing
4 emissions related to energy to support local jurisdictions, residents, and businesses in meeting
5 statewide climate goals. As such, each program in the Market Support and Equity segments is
6 intended to contribute to energy savings (or GHG emission reductions) in either the short or long-
7 term. While the BayREN Business program is the portfolio’s sole Resource Acquisition program
8 and will deliver cost-effective savings, the BAMBE and Home+ programs, both equity programs,
9 will also directly contribute energy savings, as will the Targeted Decarbonization Services
10 program projects within the Public Sector. BayREN's other five programs will also indirectly
11 support energy savings and/or GHG emission reductions.

12 ***4. Portfolio Coordination***

13 One of the strengths of BayREN is its collaborative relationship with the other PAs, CCAs,
14 and local governments in our territory, that result in more holistic and impactful offerings for our
15 shared customers.⁶² While there are formal requirements that govern some elements of BayREN’s
16 coordination with PG&E and MCE, BayREN also coordinates with the six CCAs that launched
17 after BayREN was formed. BayREN’s emphasis on working together has evolved and is now
18 central to BayREN strategy, operations, outreach, and program design. As discussed below,
19 BayREN has existing partnerships and engagements, but will also form new collaborations with

⁶² This is consistent with the CPUC’s view of RENs: “RENs also have the unique opportunity to be able to leverage not only multiple local government entities into a single program delivery channel, but they also may be able to utilize funding from multiple sources to deliver more comprehensive and holistic funding from multiple sources to deliver more comprehensive and holistic programs, especially for hard-to-reach customers.” D. 19-12-021 at 8.

1 other stakeholder groups to gather input, find promising new opportunities for positive joint
2 impacts, and minimize customer confusion.

3 **G. Coordination with Other Program Administrators**

4 BayREN’s role is distinct from CCAs, IOUs, and third-party implementers, and reflects
5 the unique capabilities we bring as local governments to the delivery of EE.⁶³ Each PA in the
6 BayREN territory complements each other’s portfolio, encourages innovation, and ensures that all
7 ratepayers are served. This is consistent with CPUC policy that “[a]s long as program
8 administrators and implementers are addressing different aspects of the energy efficiency
9 marketplace, and/or coordinating their efforts in the same geographic area, some overlap may be
10 fine or even positive, especially if the individual entities coordinate their offerings and their
11 outreach to customers.”⁶⁴ Indeed, when the RENs were first approved, the CPUC acknowledged
12 that “[a]ll consumers will be well served if there is close coordination and cooperation between
13 the RENs and the utilities to ensure seamless program offerings and avoid customer confusion.”⁶⁵

14 In approving PG&E and BayREN’s Energy Efficiency Business Plans for 2018-2025, the
15 CPUC directed the IOUs and RENs to file annual Joint Cooperation Memos (JCMs) to help ensure
16 the proposed activities complement and not duplicate each other, and that the RENs otherwise
17 comply with D.12-11-015.⁶⁶ Since 2019, BayREN and PG&E have submitted an annual JCM that
18 describes EE programs the PAs’ anticipate offering in the nine Bay Area counties (the shared
19 service area), how the proposed activities will be complementary, and details how BayREN’s

⁶³ D.19-12-021 at 18.

⁶⁴ D.19-12-021 at 25.

⁶⁵ D.12-11-015 at 9.

⁶⁶ D. 18-05-041, COL # 47 at 178.

1 proposed activities comply with the criteria for REN activities.⁶⁷ Commencing in 2020, BayREN
2 has filed an annual JCM with MCE.⁶⁸

3 While JCMs are required, BayREN has used the negotiations as a process to work with the
4 other PAs to ensure not only that we are not duplicating activities but also that our collective efforts
5 are best serving our shared residents, businesses, and institutions.

6 In addition to engagement for the development of the JCM, BayREN program managers
7 have regular meetings – typically once a month - with their counterparts at PG&E and MCE.
8 Program updates are provided to ensure there are no duplicative efforts. BayREN’s Energy
9 Advisor service strives to find a program that is the best fit for the caller/customer and therefore
10 provides a significant number of referrals to non-BayREN programs. Similarly, if a PA has plans
11 to do a mailer or new advertising campaign, the PA communicates with their counterparts in
12 advance so that the Energy Advisor, contractors, and program staff are aware and can refer callers
13 accordingly. These regular meetings not only ensure that there is no duplication of activities but
14 have also resulted in identifying new opportunities for joint PA collaborations. For example, after
15 hearing about the BAMBE program through a county mailer and then subsequently attending a
16 webinar, an owner of an eight-unit property in Marin County expressed interest in participating in
17 the program. The property primarily serves low to moderate income tenants. While working with
18 the property owner, BayREN staff learned that two of the units had participants that used Housing
19 Choice Vouchers (Section 8), making the units qualified for the MCE LIFT program. With the

⁶⁷ D.12-11-015 at 17.

⁶⁸ In D.19-12-02, the requirement for RENs to negotiate JCMs with program administrators with shared territory was expanded to include CCAs. See COL #7 and #8 at 84. MCE is the only CCA in BayREN’s territory that is a Program Administrator.

1 combined programs, a more expansive scope of work was completed including in-unit measures,
2 resulting in greater energy savings that reduced utility bills by one-third, and resulted in tenants
3 benefiting from greater comfort and better indoor air quality.

4 Another example is in Codes & Standards. BayREN’s program provides training and
5 resources that meet building department staff where they are and recognize the constraints they
6 operate under. PG&E’s (and the Statewide Codes and Standards) Energy Code Ace provides
7 excellent in-depth training and resources, and BayREN does not try to duplicate these. Instead,
8 BayREN complements these by providing shorter, more focused materials and training for those
9 who may need a refresher or who simply don’t have the time for an in-depth training. BayREN
10 and Energy Code Ace have also partnered to develop and provide training on specialized topics
11 that are of particular interest to Bay Area building departments.⁶⁹

12 The regular coordination with PG&E and MCE helps to ensure the goal of more holistic
13 programs and a greater reach to Bay Area markets.

14 **H. Evaluation, Measurement and Verification (EM&V)**

15 BayREN’s evaluation efforts will focus on the following four areas:

- 16 1. **Process Evaluations** to examine how to improve programs and the participant experience.
- 17 2. **Evaluability Studies** to ensure that the programs are collecting data to support future
18 impact studies and/or metrics.

⁶⁹ While not in a shared territory, BayREN also collaborates with 3C-REN and provides them with curriculum for their Codes and Standards program. As beneficiaries of ratepayer funds, BayREN and 3C-REN have regular meetings and ensure that there is no “reinventing the wheel” especially for training.

- 1 3. **Market Studies** to understand gaps in the market, understand how to better serve target
2 audiences or new services, and develop baselines for newer program offerings.
- 3 4. **Ad Hoc** to support BayREN with smaller efforts including assistance on CPUC evaluation
4 efforts or other quick turnaround research.

5 **IV. ALIGNMENT WITH LEGISLATIVE AND CPUC REQUIREMENTS**
6 **AND RELEVANT ACTION PLANS**

7 ***1. Demonstrated Alignment of Business Plan Strategies and***
8 ***Outcomes with Legislative and CPUC Requirements***

9 At its foundation, BayREN’s eight-year Plan is guided by the state legislative goals of
10 doubling EE in existing buildings by 2030, reducing emissions from existing buildings at least 40
11 percent below 1990 levels by 2030, achieving 100 percent renewable and zero-carbon retail
12 electricity, and becoming entirely carbon neutral by 2045. BayREN’s Plan is also guided by the
13 state’s increased focus on identifying and addressing barriers to advancing EE and decarbonization
14 in low-income and disadvantaged communities, as well as the CPUC’s most recent ESJ Action
15 Plan Update.

16 BayREN has been addressing CPUC regulatory requirements in the three areas indicated
17 by D.12-11-015 in the formation and implementation of programs. The REN programs and
18 organization have been an important complement to the IOU programs and have demonstrated
19 what a mission-driven entity can do to address some of the most challenging barriers in EE. The
20 REN’s requirement to fill gaps, address hard-to-reach audiences, and provide programs that other
21 PAs will not, is essential to ensuring that all Californians have access to affordable EE solutions.
22 In this Plan, the proposed programs and strategies comply with these criteria with an increased
23 focus on market support and equity offerings, as envisioned by the CPUC, with a regional lens by
24 targeting populations that speak languages other than English, populations in disadvantaged

1 communities, and homes, businesses, and workers that struggle economically and are less likely
2 to take EE actions.

3 Consistent with the focus on equity—encompassed within the proposed portfolio
4 segmentation—are the BayREN’s Portfolio Strategies (PS):

5 **PS 1.** Activate and engage key stakeholders and ESJ communities in the development
6 and delivery of programs.

7 **PS 2.** Address systemic barriers to EE and electrification, especially for, and in
8 collaboration with, those who disproportionately face energy burdens, climate
9 impacts, and are underrepresented in policy and decision-making.

10 **PS 3.** Provide technical assistance, access to resources, and actionable data to improve
11 decision making, resulting in building upgrades and long-term energy savings.

12 **PS 4.** Provide targeted and relevant training and support to improve effectiveness and
13 build capacity.

14 **PS 5.** Enhance the design and delivery of incentives and financing to remove barriers and
15 ensure more customers can upgrade their buildings and produce energy savings.

16 **PS 6.** Develop innovative, equitable, regional-scaled offerings that enable customers to
17 layer EE with other climate-based funding and resource programs to address the
18 climate crisis.

19 Across all BayREN programs, the intent is to support and advance both state legislative
20 mandates as well as deliver programs that meet CPUC regulatory requirements—all while
21 providing unique value to our local constituents.

1 **2. Portfolio Design and Budget Alignment with Action Plans**

2 **a. Environmental and Social Justice Action Plan**

3 BayREN is proposing two new sectors and four new programs designed to address quickly
4 evolving energy and equity goals and climate policy trends at the local and state level. The new
5 BayREN Workforce Education and Training program (Climate Careers) is an equity program that
6 seeks to fill gaps in the market and respond directly to the need to both grow the residential EE
7 and electrification workforce and to provide high roads jobs for low-income youth in order to meet
8 statewide energy goals and support local economic development. This program is in direct
9 alignment with ESJ Revised Goal 7 as it promotes high road career paths and economic
10 opportunities for ESJ Communities.⁷⁰ The new BayREN Refrigerant Replacement program, also
11 an equity program, will remove harmful GWP refrigerants from SMBs, and increase the
12 affordability and availability for food-service establishments to maintain, retrofit, or replace
13 refrigerant systems to ensure reduced leakages and unnecessary costs.⁷¹ The program will also
14 improve the economic viability of SMBs, who have been severely impacted by COVID-19, by
15 reducing their utility and maintenance costs.

16 **b. Greenhouse Gas Reduction**

17 The California Energy Commission’s 2021 Integrated Energy Policy Report (IEPR)
18 Update finds that:

⁷⁰ See CPUC Environmental & Social Justice Action Plan, Version 2.0 Draft (ESJ Action Plan), at 19.

⁷¹ The program is also in alignment with the ESJ Action Plan Goals 2 and 3, as it will improve public health and climate resiliency by removing harmful GHG emitting equipment.

1 Residential and commercial buildings account for about 24 percent of GHG
2 emissions when including fuel used in buildings such as electricity and gas for
3 heating, cooling, lighting, and cooking and emissions from refrigerants used in
4 those sectors (Figure ES-1). Similarly, the industrial sector accounts for about 24
5 percent of statewide GHG emissions (when including emissions from electricity as
6 well as other fuels and refrigeration). Collectively, energy (including electricity)
7 and refrigeration use in buildings and industrial and agricultural processes
8 contribute about 50 percent of statewide emissions. *Proactive decarbonization of
9 these sectors is critical to meet midcentury climate goals.*⁷²

10 Further, AB 3232 calls on the Energy Commission to, by 2021, develop an assessment of
11 the feasibility of reducing the greenhouse gas emissions of California’s buildings 40 percent below
12 1990 levels by 2030, working in consultation with the CPUC and other state agencies.

13 Consistent with these calls to action, BayREN is focused on meaningful action to address
14 the climate crisis, and reducing emissions related to energy to support local jurisdictions, residents,
15 and businesses in meeting statewide climate goals. As such, each program in the market support
16 and equity areas is intended to contribute to energy savings (or GHG emission reductions) in either
17 the short or long-term. The BayREN Business program, the only Resource Acquisition program,
18 will deliver cost-effective savings. Two residential programs, BAMBE and Home+, while focused
19 primarily on equity populations, will also directly contribute energy savings, as will the Targeted

⁷² Final 2021 Integrated Energy Policy Report (IEPR), Volume I: Building Decarbonization, dated February 2022, at 1 (emphasis added). Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241361>

1 Decarbonization projects within the Public Sector. The other five programs will indirectly support
2 energy savings and/or GHG emission reductions.

3 **c. Reliability**

4 BayREN anticipates funneling customers to existing and future demand response
5 programs, the Market Access Program, and providing technical assistance to all customers served.
6 Particularly for Public Agencies, our program offerings will address the critical nature of public
7 agency facilities, the public benefit and safety roles they serve, and the interventions needed to
8 support grid reliability, as well as operations of public facilities during grid emergency conditions.
9 If authorized, BayREN will include program strategies that result in grid reliability that are
10 otherwise only addressed in proceedings outside of R.13-11-005. As discussed in Chapter 3,
11 BayREN recommends de-siloing energy efficiency to allow for greater integration with the Small
12 Generation Incentive Program (SGIP), electric vehicle (EV) programs, demand response (DR)
13 programs, and any other offerings that help meet the state GHG objectives.

14 **d. Integrated Resources Planning**

15 Although the Integrated Resources Planning (IRP) proceedings are ongoing (see R.20-05-
16 003) and there are efforts to determine whether the IRP informs the EE portfolio or vice versa,
17 BayREN intends to contribute its EE resources to California’s larger energy management
18 objectives. Strategic coordination of the BayREN EE portfolio with numerous other proceedings
19 is critical to achieving state goals of decarbonization and doubling of EE, while ensuring reliable,
20 and affordable clean energy. In fact, a Next10 report identified that California will reach its 2030
21 and 2050 goals in 2063 and 2111, respectively. At the same time, a UCLA study⁷³ found that less

⁷³ Chuang, Y, Delmas, M. UCLA. Effectiveness of Energy Efficiency Programs.” Jan 28, 2018

1 than 10% of households participated in California ratepayer programs. Under the current
2 delineation of ratepayer funding, only EE services can be offered through this Business Plan
3 application. However, as a recommendation, any customer that a PA “touches” should have the
4 opportunity and resources to receive technical assistance to the extent that they can decarbonize
5 their energy use. While BayREN does not recommend fully administering DER programs, it is
6 recommended that PAs should be able to promote and assist customers to pursue SGIP, EV, DR
7 and any other offerings that help meet the state GHG objectives. Additional strategies include
8 examining the relationship between the Demand Response proceeding, and the Decarbonization
9 proceeding so that customers, and even PAs are better positioned to offer aggregated demand
10 flexibility for resource adequacy, local capacity, and economic/market dispatch for summer
11 reliability.

1 **CHAPTER 2. ANNUAL PORTFOLIO BUDGETS (J. BERG; R. JACOBY; N. BARBA)**

2 BayREN’s distribution of budget between the segments reflects the following evolutions
3 in our programming: 1) a greater focus on equity, 2) increased support for local governments based
4 on local needs, and 3) timely response to quickly evolving Bay Area and state policy trends and
5 goals regarding building electrification and climate resilience. These improvements in our
6 approach and program offerings reflect our commitment to engaging with and listening to our
7 stakeholders and effectively partnering with other regional agencies and our seven Bay Area CCAs
8 to leverage resources and best serve the local governments, businesses, and residents in our 109
9 Bay Area cities and nine counties.

10 The budget request for existing programs is largely consistent with our approved BBAL
11 for program years 2022 and 2023 and our eight-year Business Plan budget reflects stable but
12 relatively modest increases in incentive funding for the Single Family, Multifamily, and Green
13 Labeling programs due to the continued and increased uptake in these programs. BayREN’s
14 approved BBAL includes an approximate \$26 million budget for program year 2023, and over the
15 eight-year Business Plan period, the average annual budget for the existing six programs is \$29
16 million, an increase of 13%. Our portfolio application also proposes the inclusion of two new
17 Sectors and four new programs - totaling \$9.1 million in 2024 and rising to \$12.4 million in 2031
18 - each of which is proposed in either the Market Support or Equity segments. The proposed
19 program activities reflect a significant increase in focus on advancing equity through EE and
20 building decarbonization with more than 65% of our eight-year Business Plan program budget
21 committed to equity programs.

1 **Table 5. Annual Portfolio Budgets**

	Residential	Commercial	Public	Cross-Cutting	Codes & Standards	Portfolio Budget (w/o EMV)
2024	\$19,254,406	\$8,332,751	\$2,107,341	\$4,898,120	\$1,984,954	\$36,577,572
2025	\$19,391,731	\$9,643,750	\$2,475,793	\$5,204,041	\$2,008,191	\$38,723,506
2026	\$19,523,892	\$9,704,682	\$2,886,653	\$5,446,622	\$2,065,581	\$39,627,430
2027	\$19,666,408	\$9,770,550	\$3,145,763	\$5,697,911	\$2,096,431	\$40,377,063
2024-2027 Portfolio Application	\$77,836,437	\$37,451,733	\$10,615,550	\$21,246,694	\$8,155,157	\$155,305,571
2028	\$20,059,736	\$9,965,961	\$3,208,678	\$5,811,869	\$2,138,360	\$41,184,604
2029	\$20,460,931	\$10,165,280	\$3,272,852	\$5,928,107	\$2,181,127	\$42,008,296
2030	\$20,870,150	\$10,368,586	\$3,338,309	\$6,046,669	\$2,224,749	\$42,848,462
2031	\$21,287,552	\$10,575,958	\$3,405,075	\$6,167,602	\$2,269,244	\$43,705,432
2024-2031 Business Plan	\$160,514,806	\$78,527,518	\$23,840,464	\$45,200,941	\$16,968,637	\$325,052,365

2

3 For years 2028-2031, a two percent escalation factor is applied annually commencing in
 4 the 2027 program year budget. The relatively modest increase is intended to represent a reasonable
 5 but stable escalation to account for increases in labor and materials costs. This rate is supported by
 6 the fact that the majority of BayREN member agencies have labor agreements or policies that
 7 allow for a cost-of-living adjustment in the range of two to three percent annually. (For a more
 8 detailed discussion about the portfolio budget, see the above section on portfolio management
 9 strategies driving distribution of budgets among sectors and segments.)

1

I. SAVINGS

2 **Table 6. Forecasted Energy Savings (2024-2026)**

Sector	PY 2024 Forecast Energy Savings (Net)					PY 2025 Forecast Energy Savings (Net)					PY 2026 Forecast Energy Savings (Net)				
	kWh	kW	therms	First Year Net Elec CO _{2e}	First Year Net Gas CO _{2e}	kWh	kW	therms	First Year Net Elec CO _{2e}	First Year Net Gas CO _{2e}	kWh	kW	therms	First Year Net Elec CO _{2e}	First Year Net Gas CO _{2e}
Residential	6,316,410	226	114,534.92	(167)	2,121	6,414,084	229	110,912.91	(200)	2,127	6,460,890	229	106,093.25	(199)	2,112
Commercial	5,572,463	719	124,421.94	815	728	6,113,250	789	136,496.65	738	799	5,791,913	747	129,321.82	847	757
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3

1 **Table 7. Forecasted Energy Savings (2027-2029)**

Sector	PY 2027 Forecast Energy Savings (Net)					PY 2028 Forecast Energy Savings (Net)					PY 2029 Forecast Energy Savings (Net)				
	kWh	kW	therms	First Year Net Elec CO ₂ e	First Year Net Gas CO ₂ e	kWh	kW	therms	First Year Net Elec CO ₂ e	First Year Net Gas CO ₂ e	kWh	kW	therms	First Year Net Elec CO ₂ e	First Year Net Gas CO ₂ e
Residential	6,554,997	236	108,308.90	(206)	2,150	6,745,371	246	111,871.20	(227)	2,217	6,942,528	256	115,574.22	(227)	2,287
Commercial	5,400,038	697	120,572.04	791	705	5,180,588	668	115,672.16	842	677	4,937,625	637	110,247.29	863	645
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2

1 **Table 8. Forecasted Energy Savings (2030-2031)**

Sector	PY 2030 Forecast Energy Savings (Net)					PY 2031 Forecast Energy Savings (Net)				
	kWh	kW	therms	First Year Net Elec CO ₂ e	First Year Net Gas CO ₂ e	kWh	kW	therms	First Year Net Elec CO ₂ e	First Year Net Gas CO ₂ e
Residential	7,146,746	266	119,424.62	(273)	2,359	7,358,398	280	123,429.76	(303)	2,434
Commercial	4,773,038	616	106,572.38	648	623	4,631,963	598	103,422.46	698	605
Public	0	0	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0	0	0

2

1 **II. COST EFFECTIVENESS**

2 Due to the RENs’ unique and limited role as CPUC-authorized PAs, the CPUC has not
3 imposed the same minimum cost effectiveness threshold on RENs as it has imposed on IOU and
4 CCA PAs. As the CPUC found in D.18-05-041:

5 [W]e do not find it reasonable to impose a minimum cost-effectiveness
6 threshold for REN proposals. As we have maintained in the past, the more limited
7 scope of activities we authorize RENs to undertake, which results in a much lower
8 ability to diversify their portfolios (relative to the IOUs), argues against holding
9 them to a particular cost-effectiveness standard.⁷⁴

10 The Commission reiterated this position in D.19-12-021:

11 We approved the existing REN portfolios recently, in D.18-05-041, and at
12 that time reaffirmed that we do not wish to set a specific cost-effectiveness
13 threshold for RENs. This is both because the size of the REN portfolios is smaller,
14 and because the RENs are inherently designed to take on filling gaps in the other
15 larger portfolios or serving the needs of hard-to-reach customer segments/markets
16 that will be naturally less cost-effective to serve. None of this reasoning has
17 changed, and therefore, we continue to decline to set a cost-effectiveness threshold
18 for new or existing RENs now.”⁷⁵

19 This approach was further re-affirmed in D.21-05-031 with regards to Resource
20 Acquisition programs, “requir[ing] that all program administrators with energy efficiency resource

⁷⁴ D.18-05-041 at 95.

⁷⁵ D.19-12-021 at 37.

1 acquisition programs, excluding RENS whose portfolios have different rules, to show that the
2 resource acquisition segment of their portfolio, with all resource acquisition programs' costs and
3 benefits combined together, is cost-effective on an *ex ante* basis, with a TRC ratio of at least 1.0
4 or greater.”⁷⁶ With regard to market support and equity programs, the CPUC stated that “all
5 program administrators, including the RENS, should focus on developing metrics and criteria for
6 evaluating the progress of those market support and equity programs, in the absence of strict cost-
7 effectiveness limitations.”⁷⁷

8 Instead of evaluating RENS on a minimum cost effectiveness threshold, the CPUC has
9 historically evaluated each REN programs' ability to: provide value (or the promise of value), meet
10 their designated targets, and track, and hopefully improve upon, their cost-effectiveness.⁷⁸ The
11 CPUC has further “encourage[d] RENS to manage their programs with an eye toward long-term
12 cost-effectiveness, just as we encourage the other program administrators to do.”⁷⁹

⁷⁶ D.21-05-031 at 22.

⁷⁷ D.21-05-031 at 23.

⁷⁸ D.18-05-041 at 95. “To be clear, we remain interested in seeing RENS provide value (or the promise of value), and this serves as a key criterion against which we evaluate their proposals and will assess their performance going forward, particularly in tracking business plan metrics and assessing PA’s progress in meeting their designated targets. We decline to consider the proposed Benefits Evaluation Framework, as we prefer to use the same cost-effectiveness methodology for all PAs even if we do not hold the RENS to a particular standard. We also remain interested in seeing improving TRC estimates over the long run, therefore we retain our requirement for RENS to include cost-effectiveness statements in their ABALs.”

⁷⁹ D.19-12-021 at 37.

1 REN administrative costs have had a “soft cap” of 10% and are also subject to a “soft cap”
 2 of 6% for administrative and outreach costs.⁸⁰ D.21-05-031 maintained the same administration
 3 cost and marketing and outreach cost rules.⁸¹

4 BayREN’s forecasted portfolio Total Resource Cost (TRC) and forecasted Portfolio
 5 Administrator Cost (PAC) are detailed in the table below.

6 **Table 9. Forecasted TRC and PAC (2024-2027)**

	PY 2024		PY 2025		PY 2026		PY 2027	
Sector	Forecast TRC	Forecast PAC						
Residential	0.14	0.13	0.15	0.14	0.15	0.14	0.16	0.15
Commercial	0.48	0.57	0.47	0.55	0.47	0.55	0.47	0.54
Public	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0

7

⁸⁰ D.12-11-015 at 15. “First, there is a hard administrative cost cap of 10% and a soft marketing and outreach cost cap of 6% imposed by D.09-09-047. The 10% administrative limit is also a soft cap for LGPs. For these purposes, RENs and MEA are more like LGPs—we will not apply hard caps on these expenses at this time, though we encourage RENs and MEA to keep administrative and marketing costs down as low as possible.”

⁸¹ D.21-05-031 at 33. “Administration costs should continue to be capped at ten percent of the program administrator’s portfolio; all other budget caps or targets, including for direct-implementation, non-incentive costs and marketing and outreach costs, should remain unchanged.”

1 **Table 10. Forecasted TRC (2028-2031)**

	PY 2028		PY 2029		PY 2030		PY 2031	
Sector	Forecast TRC	Forecast PAC						
Residential	0.17	0.16	0.18	0.17	0.18	0.18	0.19	0.19
Commercial	0.46	0.53	0.46	0.52	0.46	0.52	0.46	0.51
Public	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0

2

3 **III. TOTAL SYSTEM BENEFIT FORECASTS (N. BARBA)**

4 BayREN’s forecasted portfolio Total System Benefits (TSB) are detailed in the table below.

5 **Table 11. Forecasted TSB (2024-2031)**

Sector	Forecasted Portfolio Total System Benefits (TSB)							
	PY 2024	PY 2025	PY 2026	PY 2027	PY 2028	PY 2029	PY 2030	PY 2031
Residential	1,964,605	2,015,901	2,041,532	2,193,635	2,368,899	2,551,391	2,747,077	2,953,264
Commercial	4,723,456	5,350,679	5,324,273	5,241,225	5,282,282	5,286,234	5,346,343	5,427,850
Public	0	0	0	0	0	0	0	0
WE&T	0	0	0	0	0	0	0	0
Codes and Standards	0	0	0	0	0	0	0	0

6

1 **IV. FISCAL AGENT (J. BERG)**

2 Where the CPUC has authorized funding for RENs, the Commission relies upon IOUs “as
3 fiscal managers to disperse funds to RENs.”⁸² Specifically, “[w]ith respect to RENs, the CPUC
4 acts “as a regulatory body, overseeing utility expenditures of ratepayer funds. We ‘rely on the
5 utilities as fiscal managers to disperse funds to RENs and conduct general management and
6 monitoring activities in compliance with Commission directives. Thus, the RENs will, by
7 necessity, have a contractual relationship with a utility or, in some cases, several utilities.”⁸³

8 BayREN continues to have a strong working relationship with PG&E in its role as fiscal
9 manager. BayREN asks the CPUC to continue to authorize PG&E to act as fiscal manager for
10 BayREN, consistent with CPUC precedent, and to continue to allow flexibility in the fiscal agent
11 role, consistent with D.19-12-021.⁸⁴

⁸² D.12-11-015 at 8.

⁸³ D.14-10-046 at 128.

⁸⁴ D.19-12-021 at 43. “On the topic of PG&E’s suggestions to allow more flexibility in the utilities’ fiscal agent role for RENs, we agree that there should be flexibility in payment terms and timing, as long as both parties agree. Thus, we explicitly authorize the utility fiscal agent and a REN to depart from the specific requirements of D.12-11-015 and D.14-10-046, as long as the REN and the utility mutually agree. If they cannot mutually agree, then one party should bring a petition to modify prior decisions to the Commission, to modify the terms, if necessary.”

1 **CHAPTER 3. RECOMMENDATIONS FOR NEW OR MODIFIED ENERGY**
2 **EFFICIENCY POLICY (J. BERG)**

3 **I. BAYREN RECOMMENDS “DE-SILOING” ENERGY EFFICIENCY**

4 Strategic coordination of the BayREN EE portfolio with numerous other proceedings is
5 critical to achieving state goals of decarbonization and doubling of EE—while ensuring reliable
6 and affordable clean energy. In fact, a Next10 report identified that California will reach its 2030
7 and 2050 goals in 2063 and 2111, respectively.⁸⁵ At the same time, a UCLA study⁸⁶ found that
8 less than 10% of households participated in California ratepayer programs. Under the current
9 delineation of ratepayer funding, only EE services can be offered through this Business Plan
10 application. However, as a recommendation, any customer that a PA "touches" should have the
11 opportunity and resources to receive technical assistance to the extent that they can decarbonize
12 their energy use. While BayREN does not recommend fully administering DER programs, it is
13 recommended that PAs should be able to promote and assist customers to pursue SGIP, EV, DR
14 and any other offerings that help meet the state GHG objectives. Additional strategies include
15 examining the relationship between the Demand Response proceeding (R.13-09-011), and the
16 Building Decarbonization proceeding (R.19-01-011) so that customers, and even PAs are better
17 positioned to offer aggregated demand flexibility for resource adequacy, local capacity, and
18 economic/market dispatch for summer reliability.

19 **II. BAYREN RECOMMENDS REVISIONS TO DATA RULES TO**
20 **BETTER ADDRESS ENERGY EFFICIENCY ISSUES**

21 BayREN also suggests that additional transparency and data interoperability be shared with
22 non-IOU PAs for customer targeting and market segmentation. This includes non-disclosure

⁸⁵ <https://greeninnovationindex.org/2021-edition/carbon-economy/>

⁸⁶ Chuang, Y, Delmas, M. UCLA. Effectiveness of Energy Efficiency Programs.” Jan 28, 2018

1 agreements between non-IOU PAs and IOUs to conduct market characterizations, as well as
2 additional data sharing between the Potential and Goals Study team and PAs.

3 Another data related issue that BayREN recommends be addressed in new policy or
4 rulemaking relates to data privacy limitations associated with EE program participation data in
5 that the same rules are applied as the aggregation rules that were originally developed to protect
6 customer account level energy usage data. To date, guidance on precisely how these rules should
7 specifically be applied to EE program data is lacking.

8 There are many compelling reasons to collect and analyze EE program participation data
9 including exploring the spatial and temporal patterns of a program's uptake relative to the timing
10 and scope of its availability, distribution of program uptake relative to income and other
11 characteristics, and the possibility of performing *ex-post* investigations of program's efficacy,
12 where contemporaneous account-level usage data is available.

13 Currently, in order to publicly share analyses which are based upon account level energy
14 usage data, the 2014 CPUC aggregation rule has two components and is commonly referred to as
15 "15/15". The first "15", refers to the requirement that the group of accounts upon which the
16 analysis has been based must contain at least 15 customers. The second "15", holds that no
17 individual account within this group should comprise more than 15% of the group's total reported
18 consumption. This rule was enacted to protect *customer consumption data*. If one is seeking to
19 make a public map of total annual energy use that is based upon customer level usage data, all the
20 reported geographies depicted in that map must abide by this 15/15 rule. Data for any geographies
21 which violate it, must either be masked or aggregated with other adjacent territories until such
22 point that the rule's stipulations are met.

1 For EE program participation data, two concerns arise with the current 15/15 rule:

2 1. The first half of the rule, which refers to the minimum customer count threshold,
3 is ambiguous because it does not specify whether the requirement for a minimum of 15
4 customers applies just to the EE program participants contained within a reporting group,
5 or to the total number of customers in that reporting group.

6 2. The second half of the aggregation rule, which refers to the consumption fraction
7 minimum threshold, has no relevance because no consumption information is involved.

8 Thus, the 15/15 rule provides inadequate guidance in this use case. Given the value of
9 participation data to track a program's progress, better target, etc. this is an issue of relevance in
10 this proceeding.

11 **III. BAYREN RECOMMENDS REVISIONS TO THE CUSTOM REVIEW**
12 **PROCESS AS CHANGES HAVE HAD NEGATIVE IMPACTS ON**
13 **CUSTOMERS**

14 By design, the RENs are required to support gaps in the market not otherwise served by
15 IOU programs. With the new portfolio segmentation, many BayREN programs are being proposed
16 as equity programs, including the BayREN Multifamily program. This program targets
17 populations, building types, and energy savings opportunities that have historically been
18 underserved. In order to offer a program unique from the IOUs, capturing the hardest to reach
19 properties within the multifamily sector and address the split incentives issue, BayREN has a
20 whole-building performance-based program design.⁸⁷ Commencing in 2020, the program was

⁸⁷ If a potential project is interested in using measures, they are referred to direct install programs offered by other implementers.

1 subject to the CPUC Custom Review process that has had a negative impact on the customer
2 because it does not align with project review and reservation timelines, and many of the
3 requirements are not applicable to or are difficult to satisfy by the multifamily properties served
4 by this program (i.e. small, resident owner, affordable). When notified that a project has been
5 flagged for Custom Review, they have been in the scope of work development for months and they
6 are then notified that they must wait for several weeks to many months, to get started. Enrollment
7 is sensitive for customers to determine the level of certainty and lock in prices with contractors.
8 The delays in being able to inform a property owner that they can move forward with a project
9 have resulted in many projects dropping out of the pipeline.

10 The Custom Review process has certain requirements that are not reasonable for
11 multifamily properties, particularly those serving small and affordable properties like the BayREN
12 Multifamily program. Specifically, ROI is not a driver for multifamily customer participation
13 because of split incentives and drivers for participation are more about total construction cost vs.
14 rebate amount, improved comfort and property value enhancement, environmental ethic/carbon
15 savings, and availability of technical assistance to navigate scope and program compliance.
16 Further, electrification measures are not meeting the Custom Review payback requirement. For
17 example, the Statewide Fuel Substitution Work Papers have negative payback, which indicates
18 that this challenge is not unique to the BayREN Multifamily program.

19 Within the market served by BayREN, there are substantial measure opportunities where a
20 workpaper or deemed measure does not apply. Currently, roughly 50% of program measures are
21 custom because there is no workpaper or the workpaper is overly prescriptive and does not apply
22 to either the base case (existing condition), or measure case specific to a Multifamily building.
23 Deemed measures only exist for common measure types that have a moderate to high TRC and

1 they are primarily developed by IOUs to serve common opportunities and applications; as a result
2 they leave behind multifamily properties, underserved populations, and unaddressed energy
3 savings opportunities. Additionally, deemed measures have both deemed costs and deemed
4 savings. The deemed costs are often significantly lower than the actual full measure cost (material,
5 labor, and ancillary). By focusing only on marginal deemed costs, the program is unable to develop
6 meaningful incentives to help these underserved property types and populations pursue energy
7 upgrades.

8 BayREN requests that the CPUC exempt equity and/or multifamily programs from the
9 CPUC Custom Review Process since it creates a barrier to program participation. For BayREN to
10 continue to offer this successful whole-building program with the option to combine measure
11 opportunities between common areas and in-units, an exemption is requested so that projects are
12 not held up by a Custom Review Process in the middle of project enrollment, as this leads to many
13 projects falling out of the pipeline.

14 **IV. BAYREN RECOMMENDS PROCEDURAL CHANGES TO ENSURE**
15 **PROGRAM ADMINISTRATORS HAVE SUFFICIENT TIME TO**
16 **ADAPT TO COMMISSION REVISIONS**

17 Finally, BayREN recommends that the CPUC establish timelines for when PAs have to
18 submit Advice Letters or other compliance filings that rely on CPUC technical tools, such as the
19 Cost Effectiveness Tool (CET) in the California Energy Data and Reporting System (CEDARS).
20 In 2021, the CET was provided to PAs with updated values from the 2021 Avoided Cost Calculator
21 less than five months before the filing date of the Portfolio Application. Also, after the BBALs
22 were submitted for program years 2022 and 2023, PAs were notified that there were errors in the
23 CET calculations, requiring a supplemental BBAL, at the same time PAs were completing their
24 Business Plans and Portfolio Applications.

1 BayREN recommends that all technical tools necessary for Advice Letters or other
2 compliance filings be finalized by the CPUC’s Energy Division staff 90 days prior to the
3 submission date or 120 days prior to future Portfolio Application deadlines. This would
4 acknowledge that errors may occur and would also provide sufficient time for PAs to incorporate
5 any necessary fixes into their planning documents.

BAYREN

Local Governments Empowering Our Communities

2025 Strategic Plan

October 2021



Table of Contents



Overview of BayREN Program Offerings.....	4
Strategic Plan Purpose & Process	5
Embedding Equity into BayREN	6
Equity Framework.....	7
Equity Considerations	8
Equity Discussion Guide.....	9
2025 Strategic Plan Framework	10
Goal 1: Responsive Organization	11
Goal 1: Responsive Organization	12
Goal 2: Address Programmatic Inequities + Barriers	13
Goal 3: Activate + Empower Counties	15
Goal 4: Leverage Regional Scale.....	17
Key Milestones	19
Acknowledgments	20

About BayREN

The Bay Area Regional Energy Network (BayREN) is a collaboration of the nine counties that make up the San Francisco Bay Area. BayREN provides regional-scale energy efficiency programs, services, and resources. BayREN is funded by utility ratepayer funds through the CPUC, as well as other sources, drawing on the expertise, knowledge, and proven track record of Bay Area local governments. BayREN is a highly effective and trusted group of local governments that deliver targeted, integrated, and regional-scale climate solutions, focused on energy, water, and resilience.

As illustrated in the adjacent graphic, BayREN provides three main areas of expertise and services:

1. **Promoting Healthy and Energy Efficient Buildings** for single family and multifamily residents and for small- medium commercial property owners;
2. **Building Capacity** for local governments to increase their impact with training, mentoring, and a range of resources throughout the nine Bay Area counties;
3. **Reducing Carbon Emissions** by catalyzing regional activities and connecting them to existing initiatives.

New initiatives and programs in the next 1-3 years include:

- Improve housing affordability by focusing on middle income, hard-to-reach markets and reducing carrying/operating costs for homeowners and renters
- Expand services and support to small/medium commercial business owners, including non-English speaking and other undeserved audiences
- Offer more resources and programs for the public sector workforce to support local climate action



- Empower and enhance the capacity of local governments to advance climate and energy goals
- Create regional resources and tools that can directly impact and support local needs, including meeting greenhouse gas (GHG) targets in Climate Action Plans
- Tailor programs to support resilience and seismic retrofits as well as improve health
- Expand workforce development and support with a focus on young adults from equity priority communities.

Overview of BayREN Program Offerings

Single Family Homeowners

BayREN's Home+ program helps single family homeowners save energy, increase the comfort and safety of their home, and receive rebates. A Home Energy Advisor works with homeowners to prioritize cost-effective improvements and provides rebates for installing energy efficient upgrades in their home. The Green Labeling program helps promote the resale of more efficient, comfortable, and healthier homes by assessing a home's envelope and major energy systems.

Multifamily

BayREN offers a multifamily building financing and upgrade program assisting building owners in improving their properties, with the priority being affordable properties. Multifamily property owners receive a free energy audit and are eligible for rebates for energy upgrades to their buildings. The program provides technical assistance with planning and financing energy and water saving improvements. This program focuses on renters and middle income families, and improving housing affordability.

Codes & Standards

BayREN assists local governments to evaluate and improve compliance with the Energy Code and to develop options for accelerating energy efficiency. This includes providing no-cost training to building departments, funding demonstration projects, hosting quarterly regional innovation forums, and assisting Bay Area communities in developing reach codes.

Commercial

BayREN has two programs designed to work with the schedule, budget, and needs of small and medium businesses. First, the BayREN Pay-for-Performance Program offers rebates, technical assistance, and other financial resources to reduce utility costs and improve the quality of buildings and businesses. Second, the BayREN Microloan Program offers interest-free loans to help make energy efficiency upgrades more affordable. The commercial program also works to support small businesses with COVID-19 related enhancements, marketing, and community outreach support. These BayREN programs target small, non-English speaking businesses in Equity Priority Communities.

Water Bill Savings

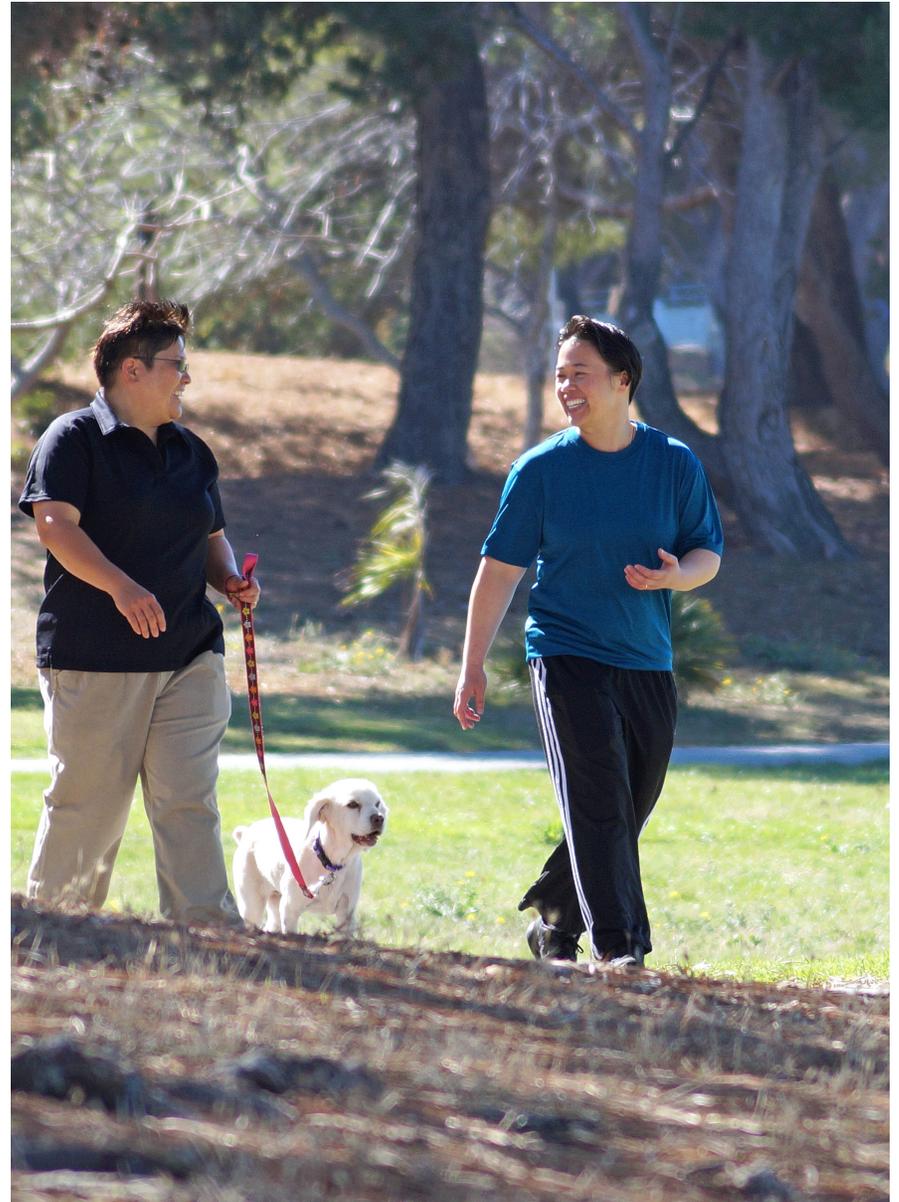
Water Upgrades \$ave is an innovative on-bill financing program for home improvements related to conservation and energy efficiency for municipal water utilities and their customers. Select municipal water utility customers can install water conservation improvements with no up-front cost — using an on-bill charge that is significantly lower than the estimated savings. Local governments provide residents and businesses an enhanced and inclusive pathway to meet code requirements and reduce their utility bills.

Strategic Plan Purpose & Process

The BayREN 2025 Strategic Plan provides a path forward for the organization over the next 5 years with a focus on building a robust foundation for growth and innovation. This Strategic Plan explores how the organization and its resources, services, and programs will meet future needs for the nine Bay Area counties and BayREN members. The Strategic Plan is an action-oriented plan with clear metrics, actions, and steps to achieve the organization's objectives, including a framework for programs to evolve to meet bigger goals related to equity and market transformation. This planning process has occurred alongside the development of the BayREN Business Plan, allowing the organization to take a holistic view of where it be in 5 years and how it will meet those goals.

Process

The strategic planning process took place from February to September 2021 and was led by a Strategic Planning Committee. This Committee was comprised of BayREN Program and County leads, BayREN leadership, and facilitated by BluePoint Planning. This group began the process by evaluating BayREN's strengths, weaknesses, and opportunities and discussing its role in the region. The next step was to develop a five year Strategic Framework with a new vision and goals. After developing the Strategic Framework, the Committee worked on creating strategies and tactics to achieve the identified goals, as well as prioritizing the strategies. Concurrently, an Equity Framework and Equity Discussion Guide were developed to support the organization's focus on equity. These tools helped frame all of the strategies, goals, and tactics with equity in mind. In addition to the Committee meetings, progress and drafts were shared with the Coordinating Committee at three meetings.



Embedding Equity into BayREN

The BayREN Equity Framework was established as a tactical guide to develop, embed, and measure the organization's equity goals based on the organization's equity readiness and ability to impact core issues. Specifically, the framework articulates what equity means in the context of the organization's every day work and sets clear targets across a variety of desired equity outcomes.

The Equity Framework should be used in concert with the goals of the strategic plan to ensure there is a deliberate alignment between the direction BayREN is moving in and the desired equity outcomes it is seeking to achieve.

The Equity Framework is composed of four main elements:

- **An organizational equity definition**
- **Guiding equity principles**
- **Operational levers**
- **Phased equity measures of success**

To complement this Framework, an Equity Discussion Guide was created to operationalize equity in BayREN programs.

Summaries of these components follow.

Guiding Equity Principles

These three principles guide BayREN's approach to equity and guided the development of the 2025 Strategic Plan:

Targeted Impact: Accountability and emphasis on the needs of equity priority communities

Collective Action: Work in partnership, fill gaps, and influence where real impact can be made

Guided by Clear Outcomes: Honor service to priority communities by identifying realistic opportunities

Levers

Levers are the operational areas for BayREN to embed equity into its work and seek to move the organization toward clear outcomes both internally and externally. The levers are:

People: Staff, Coordinating Circle, Members, Partners, Consultants

Processes: Including but not limited to the organization's decision making, governance, engagement, and evaluation

Programs: Including the design, implementation, and budgeting

Policies: Contracting, hiring, human resources, marketing, etc.

Equity Framework

BayREN Equity Definition

For BayREN, equity means addressing systemic barriers to energy efficiency and electrification, especially for, and in collaboration with, equity priority communities and those who disproportionately face energy burdens, climate impacts, and are underrepresented in policy and decision-making.

Equity Measures of Success

Central to this effort, is the understanding that achieving equity is not a simple task to be completed at a specific point in time, but a long-term process requiring the organization to practice and continually improve. The measures of success guides the organization to describe and track clear desired outcomes for each of the four levers and across four stages of equity impact. The four stages help to focus the organization on what can be achieved and prioritized now, as well as the future conditions it seeks to achieve. For BayREN this provides a spectrum of change that will be proactively pursued over time.

Current Areas for Focus

ASSESSMENT AND PROACTIVE AWARENESS

- Invest in team/department growth
- Focus on naming challenges & opportunities
- Invest in research, relationships, and outlining the “baseline”

INCLUSIVE ACCESS

- Invest in organizational change
- Focus on participation, building trust & relationships, and developing shared understandings with partners and community

Future Focus

CULTURE SHIFT

- Invest in regional efforts (programmatic/institutional)
- Seek to restructure and shift the organization toward prioritizing communities as documented practice in key operations and public work

POWER SHIFT

- Invest in regional change (structural)
- Shift systemic and regional practice and set the organization up to maintain its long-term internal changes and public impacts

Equity Considerations

Target Audiences

The BayREN target equity audiences are determined by MTC and the CPUC Environmental Social Justice (ESJ) Action Plan. The term “equity priority communities” is the preferred term for the targeted audiences and includes audiences identified by MTC as well as those included in the CPUC’s ESJ Plan. These two groups are complementary with the CPUC definition offering a broader energy-oriented.

CPUC’s Environmental and Social Justice Communities include:

- Predominantly communities of color or low-income
- Underrepresented in the policy setting or decision-making process
- Subject to a disproportionate impact from one or more environmental hazards
- Likely to experience disparate implementation of environmental regulations and socioeconomic investments in their communities

On the ground this includes, but is not limited to:

- People of color
- Low-income populations
- People with limited English proficiency
- Rent-burdened households
- People with disabilities

MTC Equity Priority Communities

Demographic Factor	Mean of Tract-Level Shares	Standard Deviation (SD)	.5 SD <i>PBA2050</i> Threshold (High EPC)	1 SD (Higher EPC)	1.5 SD (Highest EPC)
People of Color	58%	24%	70%	82%	94%
Low-Income (<200% Federal Poverty Level-FPL)	21%	14%	28%	35%	42%
Limited English Proficiency	8%	8%	12%	16%	20%
Zero-Vehicle Household	9%	12%	15%	21%	27%
Seniors 75 Years and Over	6%	5%	8%	11%	14%
People with Disability	10%	5%	12%	15%	18%
Single Parent Families	13%	9%	18%	22%	26%
Rent-Burdened	10%	8%	14%	18%	22%

Equity Discussion Guide

The Equity Discussion Guide is designed around a set of questions for six equity consideration areas. The guide can be used and enhanced by program leads and BayREN staff as they develop programs and build a greater based on knowledge about what is successful in achieving equity goals.

The following equity considerations are the foundation for any BayREN equity-centered program. Additional considerations can and should be added as data and experience informs program design. The considerations are described below:

1. **Accessibility:** Removes systemic barriers to program offerings through intentional, relevant, and inclusive program design and outreach.
2. **Accountability:** A system put in place that allows equity priority communities, local government staff, and others to ensure equity work is being monitored and propelled forward.
3. **Affordability:** The extent to which a program service is accessible given its cost and the amount that a customer can pay.
4. **Just Transition:** The shift from an extractive economy to a regenerative economy that helps workers transition to a clean energy economy with high roads jobs - that is, jobs that lift up workers, use natural resources and human capital more efficiently, and foster equity, justice, and democracy for all people.
5. **Community Vibrance:** Aspects of the community that make it connected, resilient, healthy, and inspiring. Community vibrance can position a jurisdiction to thrive.
6. **Health:** A state of good physical, mental, and social well-being and not merely the absence of disease or infirmity.



2025 Strategic Plan Framework

BayREN Mission

BayREN is a local government coalition of the nine Bay Area counties supporting communities to equitably achieve California’s climate and energy goals.

2025 Vision

By 2025, BayREN’s organization, resources and programs will evolve to more intentionally integrate equity, while filling gaps and addressing barriers to energy efficiency and electrification, as an essential part of meeting State climate and energy goals.

Goals

GOAL 1: RESPONSIVE ORGANIZATION

Transform BayREN into a more responsive organization that embraces equity, is open to varied perspectives, and continually evaluates and improves upon itself to fulfill our potential.

GOAL 2: ADDRESS PROGRAMMATIC INEQUITIES AND BARRIERS

Evolve BayREN’s programs to address programmatic inequities and barriers to energy services in order to create opportunities, remove barriers, and fill policy gaps to transform the market and serve targeted audiences.

GOAL 3: COUNTY RESOURCES AND SUPPORT

Provide resources for county representatives to fully support BayREN programs that align with local jurisdictions’ priorities and goals.

GOAL 4: LEVERAGE REGIONAL SCALE

Leverage BayREN’s regional reach and partnerships to establish streamlined scalable and innovative solutions to influence market demand, policy and decision making to meet climate action goals.

Goal 1: Responsive Organization

Transform BayREN into a more responsive organization that embraces equity, is open to varied perspectives, and continually evaluates and improves upon itself to fulfill our potential.

Objective: Ensure that BayREN can meet its potential through proactively capturing opportunities and supporting innovation.

Strategies

- 1.1 Develop the procedures and policies to systematically diversify the BayREN organization where possible.**
 - 1.1.1 Adjust procurement process and policies to attract, hire, and retain consultants that are representative of the Bay Area population.
 - 1.1.2 Build and maintain partnerships with organizations and individuals representing diverse backgrounds and life experiences to inform BayREN's equity goals.
 - 1.1.3 Support county members efforts in diversification by sharing information, training opportunities, and best practices.
 - 1.1.4 Establish standard language for contracting to support increased diversity using best practices.
- 1.2 Establish an ongoing process to better understand and respond to partners and stakeholder needs and to fill service gaps.**
 - 1.2.1 Foster meaningful relationships, trust, and collaboration with county leaders and representatives.
 - 1.2.2 Maintain ongoing dialogues and coordination with other program administrators including PG&E and CCAs.
 - 1.2.3 Identify and reach out to decision-makers, community partners, and other stakeholders to gather feedback and information about their needs.
- 1.3 Evaluate and refine the BayREN decision-making and governance process to improve its ability to respond quickly to and solve problems, innovate, and take advantage of opportunities.**
 - 1.3.1 Assess the effectiveness of the holacracy model to meet the growing and changing needs of BayREN.
 - 1.3.2 Identify alternatives and opportunities to evolve the governance model, as necessary.
 - 1.3.3 Engage the Coordinating Circle in evaluating and discussing how BayREN can be more responsive and effective as an organization.
- 1.4 Identify and develop specific initiatives and opportunities focused on equity and organizational diversity within and beyond energy efficiency.**
 - 1.4.1 Incorporate equity discussions as a regular element of the Coordinating Circle Agenda and other organizational coordination efforts.
 - 1.4.2 Explore funding opportunities and grants that can support equity engagement, research, and program development.
 - 1.4.3 Determine at least one equity initiative annually for the organization to pursue to meet equity goals.

Goal 1: Responsive Organization

Success Factors

- Measured progress in the diversity of consultants
- Increased number of partnerships with community organizations representing diverse populations, other relevant public and private sector stakeholders
- Identification and implementation of non-CPUC funded programs and initiatives
- Measured increase in funding focused on equity and energy efficiency
- Infrastructure established for equity priority community stakeholders to advise on and participate in budget and program decisions and initiatives



Goal 2: Address Programmatic Inequities + Barriers

Evolve BayREN's programs to address programmatic inequities and barriers to energy services in order to create opportunities, remove barriers, and fill policy gaps to transform the market and serve targeted audiences.

Objective: Increase the ability of BayREN's programs to meet equity goals and to be as effective and relevant as possible.

Strategies

2.1 Establish a long-term approach to incorporating equity into programs and services.

2.1.1 Identify opportunities using the Equity Discussion Guide to determine how, where, and what programs should be refined to meet its equity goals in 2024-2031 Business Plan.

2.1.2 Evaluate changes to new or existing program models that go beyond traditional rebate and incentive structures.

2.2 Ensure programs are relevant to target audiences, effective, and meet BayREN's goals and objectives.

2.2.1 Establish a robust and regular program review feedback process for program leads to evaluate that programs are meeting the intended objectives and metrics, and pivot to new models if needed.

2.2.2 Assess what metrics, if any, are needed beyond CPUC requirements, to track and evaluate program performance.

2.2.3 Ensure program accountability by designing and implementing a data capture process to track metrics against clear goals developed by each program, and regularly report to the Coordinating Circle, counties, and stakeholders.

2.2.4 Host annual, at a minimum, discussions with the Coordinating Circle to capture and identify potential new programs or updated innovative program elements.

2.3 Create an ongoing process and funding mechanism to develop relationships and build trust with community-based organizations (CBOs), community leadership organizations, and the regional community.

2.3.1 Actively engage and learn how to better understand, integrate, and serve equity priority community needs.

2.3.2 When appropriate, contract with community-based organizations to carry out implementation and outreach activities in order to better help BayREN reach target audiences.

Goal 2: Address Programmatic Inequities + Barriers

Success Factors

- Effective process to co-create and continually improve programs in collaboration with community-based organizations, including allocated funding to CBOs for involvement
- Utilization of the Equity Discussion Guide
- Number and increase of programs in the equity segment
- Funds invested in equity priority communities
- Number of small/medium Businesses served
- Number of middle-income residents participating in programs
- Number and diversity of contractors participating
- Number of small and under-resourced jurisdictions able to access Codes & Standards services

Note that additional metrics will be established by the CPUC and the CAEECC Equity Working Group which may replace some or all of these.



Goal 3: Activate + Empower Counties

Provide resources for county representatives to fully support BayREN programs that align with local jurisdictions' priorities and goals.

Objective: Optimize the engagement of the counties to help BayREN better utilize funding and meet its potential.

Strategies

3.1 Work with counties on an annual basis to ensure clarity of local goals, alignment with BayREN programs, and active engagement in program promotion.

- 3.1.1 Conduct annual coordination meetings with each county representative and county staff to set and define goals.
- 3.1.2 Encourage program leads and county leads to coordinate on how effectively program budgets are used to achieve local objectives, and make refinements as needed.
- 3.1.3 Provide ongoing support and capacity building resources to help county representatives meet goals and expectations.

3.2 Encourage more robust local jurisdiction and community-based organization involvement in program promotion.

- 3.2.1 Establish funding and policies to enable CBOs and cities to directly promote BayREN programs.
- 3.2.2 Provide marketing and communications tools and templates for use by CBOs and cities to promote BayREN programs.

3.2.3 Work with counties to define and determine where and who should be targeted as an equity priority community.

3.3 Convene cross-jurisdictional meetings to discuss and review BayREN initiatives, strategies, and program priorities.

3.3.1 Identify opportunities that require cross-jurisdictional engagement to help prioritize engagement.

Goal 3: Activate + Empower Counties

Success Factors

- Jurisdictions and CBOs actively promoting and engaging with BayREN and programs
- Percentage of outreach activities (or funds) to equity priority communities by county
- Resources and tools available and used by jurisdictions
- Capacity building for smaller, less resourced jurisdictions
- Number of cross-county partnerships to leverage resources and expertise



Goal 4: Leverage Regional Scale

Leverage BayREN's regional reach and power to establish streamlined, scalable, and innovative solutions to influence market demand, policy, and decision-making to meet California's climate action goals.

Objective: Establish regional-scale initiatives that promote and advance BayREN's mission and goals and distinguish it from other program administrators.

Strategies

4.1 Identify pilots and target initiatives that will benefit from multi-sector collaboration.

- 4.1.1 Establish a protocol for proposing and approving a new pilot program or initiatives.
- 4.1.2 Create a dedicated funding stream for pilots and targeted initiatives.
- 4.1.3 Establish an assessment process to determine if and when a pilot can be scaled to a regional or statewide program.
- 4.1.4 Develop, fund, and test innovative policies or non-CPUC funded programs locally, and then work to advocate adoption of them regionally and statewide, as appropriate.

4.2 Build coalitions and partnerships to enable greater regional impact and influence, with innovative funding opportunities.

- 4.2.1 Engage with the public and private sectors, CCAs, non-profits, and community-based organizations to identify partners for initiatives.
- 4.2.2 Develop initiative descriptions, details, and information to enable efficient and effective grant applications and to capture funding opportunities.
- 4.2.3 Identify and track potential grants and funding sources to use for initiatives.

4.2.4 Participate in and lead regional and state advocacy activities for BayREN goals.

4.2.5 Evaluate, develop, and support the adoption of relevant model ordinances, policies, and/or regulations that will accelerate energy and water efficiency, GHG reduction, and the transition to all-electric buildings.

4.2.6 Evaluate and implement regional initiatives designed to streamline program participation and engagement.

4.3 Expand regional and statewide brand awareness of BayREN service, capabilities, and impact.

4.3.1 Continue to build stakeholder awareness and engagement of BayREN as a program administrator.

4.3.2 Evaluate benefits and opportunities for growing marketing efforts to constituents and the general public.

Goal 4: Leverage Regional Scale

Success Factors

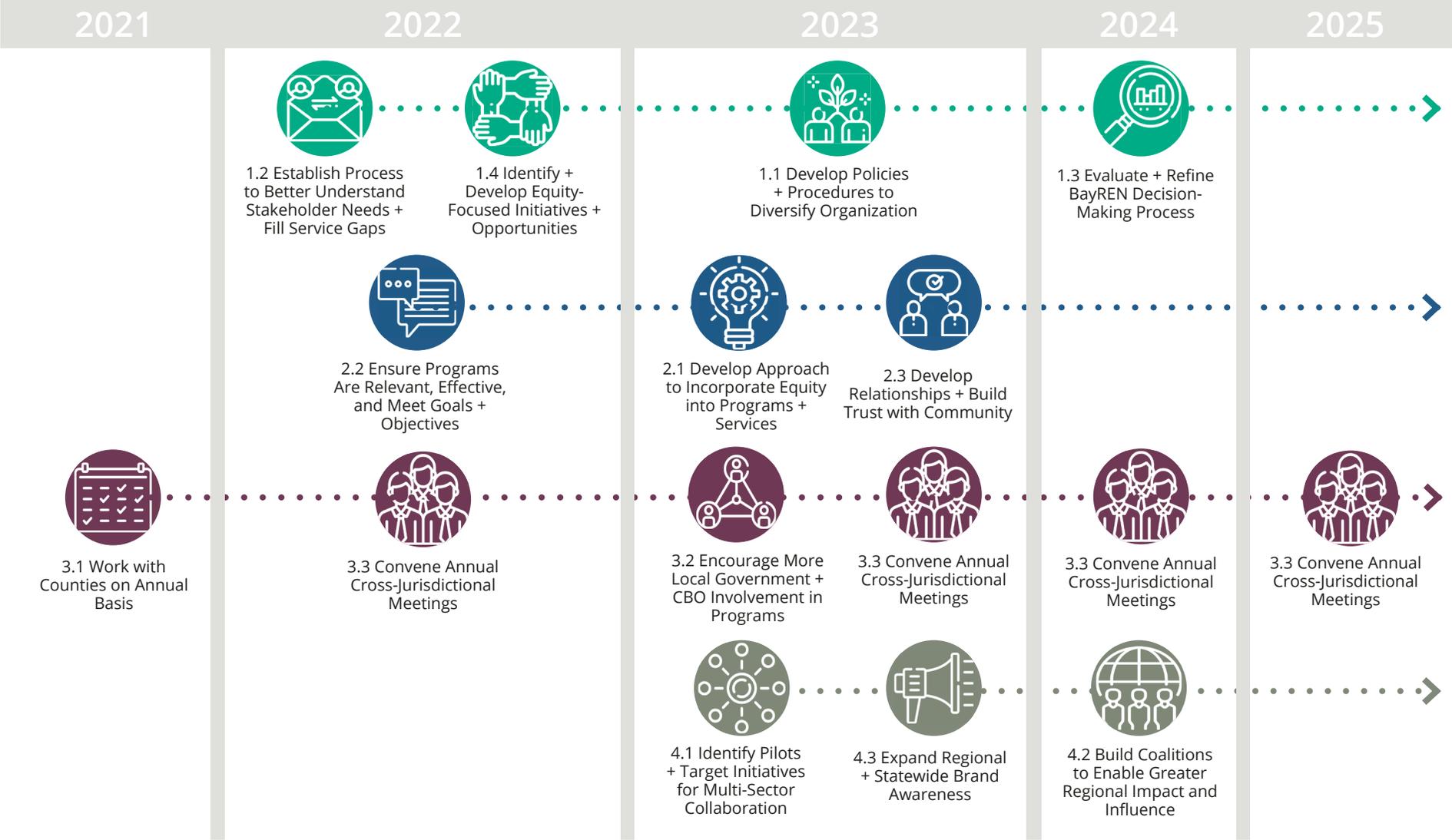
- Number of innovative pilot programs/efforts to test new solutions
- New regional programs launched that scale pilot programs based on lessons learned
- Number of multi-party coordinated support efforts for key legislation, codes, and other policies at regional, state, and federal level
- Number of multi-jurisdictional initiatives and partnerships with other regional and local agencies including CCAs, MTC, BAAQMD, et. al.
- Number of regional policy and partnership activities focused on areas outside of energy and water efficiency and electrification that help to advance equity and state climate goals



Key Milestones

The following Milestones chart illustrates the key strategic tasks by year, organized by goal.

■ Goal 1
 ■ Goal 2
 ■ Goal 3
 ■ Goal 4
 ➔ Ongoing



Acknowledgments

BayREN Representatives

Jennifer Berg, BayREN
Administrator

Demian Hardman, County Lead:
Contra Costa County

Deborah Elliott, County Lead:
Napa County

Susan Wright, County Lead: San
Mateo County

J.Paul Harrington, County Lead:
Solano County

Karen Kristiansson, Program
Lead: Codes & Standards

Emily Alvarez, Program Lead:
Green Labeling

Jeffery Liang, Program Lead:
Single Family

Candis Mary-Dauphin, County
Lead: Alameda County,

Program Lead: Multifamily

Dana Armanino, County Lead:
Marin County

Lowell Chu, County Lead: San
Francisco County,

Program Lead: Business

Tonya Veitch, County Lead: Santa
Clara County

Tanya Narath, County Lead:
Sonoma County

Chris Cone, Program Lead: Water
Upgrades \$ave



Strategic Planning Committee

Emily Alvarez, Alameda County

Deborah Elliott, Napa County

J.Paul Harrington, Solano County

Tanya Narath, Sonoma County

Susan Wright, San Mateo County

Aleka Seville, BayREN Regional
Coordinator

BluePoint Planning, Strategy and
Planning Consultant

BDS Planning, Equity Consultant



Local Governments Empowering Our Communities

BayREN

375 Beale Street, 7th Floor

San Francisco, CA 94105-2066

www.bayren.org