Application: 22-03-xxx
(CPUC #940)
Exhibit #: 1
Date: March 4, 2022
Witness(es): Various

FILED
03/04/22
04:59 PM
A2203011

SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK

SOCALREN 2024-2031 STRATEGIC BUSINESS PLAN

ENERGY EFFICIENCY 2024-2031 PORTFOLIO PLAN

PREPARED TESTIMONY

EXHIBIT 1

SoCalREN

SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK
ENERGY EFFICIENCY 2024-2031 PORTFOLIO PLAN
PREPARED TESTIMONY

TABLE OF CONTENTS

Chapter	Title	Witness
Exhibit 1	**SOCALREN 2024-2031 STRATEGIC BUSINESS PLAN**	
1	INTRODUCTION AND EXECUTIVE SUMMARY	
2	SOCALREN'S ENERGY EFFICIENCY VISION FOR CALIFORNIA, 2024-2031	Minh Le
3	SOCALREN'S ENERGY EFFICIENCY STRATEGIES	Lujuana Medina
4	SOCALREN'S SEGMENTATION STRATEGIES	Lujuana Medina
5	SOCALREN'S SECTOR STRATEGIES	Lujuana Medina
6	SOCALREN'S 8-YEAR PORTFOLIO BUDGET	Minh Le
7	SOCALREN'S STRATEGIC 8-YEAR PORTFOLIO UNIQUE VALUE METRICS	Lujuana Medina
8	SOCALREN'S PORTFOLIO COORDINATION	Lujuana Medina
9	SOCALREN'S EVALUATION, MEASUREMENT AND VERIFICATION (EM&V) PLANS	Lujuana Medina
10	POLICY RECOMMENDATIONS	Lujuana Medina
Appendix A	SOCALREN UNIQUE VALUE METRICS	Lujuana Medina
Appendix B	SUMMARY LIST OF POLICY CHANGES	Lujuana Medina
Appendix C	STATEMENTS OF QUALIFICATIONS	Minh Le Lujuana Medina
Appendix D	COMPLIANCE CHECKLIST	

SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK
ENERGY EFFICIENCY 2024-2031 PORTFOLIO PLAN
PREPARED TESTIMONY

TABLE OF CONTENTS

Chapter	Title	Witness
Exhibit 2	**SOCALREN 2024-2027 PORTFOLIO PLAN**	
1	FOUR-YEAR PORTFOLIO SUMMARY	Minh Le
2	FORECAST METHODOLOGY	Minh Le
3	PORTFOLIO SEGMENTATION STRATEGY	Lujuana Medina
4	PORTFOLIO MARKET SECTOR STRATEGIES	Lujuana Medina
5	PORTFOLIO STRATEGIES	Lujuana Medina
6	PORTFOLIO MANAGEMENT	Lujuana Medina
7	EVALUATION, MEASUREMENT, AND VERIFICATION	Lujuana Medina
8	PORTFOLIO COSTS AND COMMITTED FUNDS	Lujuana Medina
Appendix A	SOCALREN'S ENERGY EFFICIENCY 2024-2027 CEDARS FILING SUBMISSION RECEIPTS AND LINKS	Lujuana Medina
Appendix B	COMPLIANCE CHECKLIST	
Exhibit 3	**SOCALREN'S RESPONSES, PURSUANT TO ENERGY DIVISION TEMPLATE**	
1	SOCALREN'S ENERGY EFFICIENCY 2024-2031 APPLICATION TABLES, PURSUANT TO ENERGY DIVISION TEMPLATE	Lujuana Medina

SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK
ENERGY EFFICIENCY 2024-2031 PORTFOLIO PLAN
PREPARED TESTIMONY

TABLE OF CONTENTS

Chapter	Title	Witness
2	SOCALREN'S ENERGY EFFICIENCY 2024-2027 SUPPLEMENTAL BUDGET NARRATIVE INFORMATION, PURSUANT TO ENERGY DIVISION TEMPLATE	Lujuana Medina
Exhibit 4	**SOCALREN ENERGY EFFICIENCY 2024-2027 IMPLEMENTATION PLANS**	Lujuana Medina

SoCalREN

SoCalREN 2024–2031 STRATEGIC BUSINESS PLAN

CONTENTS

+ 1. Introduction and Executive Summary 5
+ 2. SoCalREN's Energy Efficiency Vision for California, 2024–2031 7
  - SoCalREN's Strategic Portfolio Vision 8
  - SoCalREN Meeting CPUC REN Goals 8
  - SoCalREN's Core Principles 10
  - SoCalREN Eight-Year Outcomes 11
+ 3. SoCalREN's Energy Efficiency Strategies 19
  - New Forecasting and Quantification Methods 19
  - Incorporation of Low-GWP Refrigerants 19
  - Marketplace Innovation 20
  - Market Intervention and EE Adoption Strategies 22
  - Alignment with Legislative and CPUC Requirements and Relevant Action Plans 22
  - Prioritizing Climate Action and Delivering Impact 27
  - Emphasis on Equity 27
  - Building Energy Capacity and Economic Resilience 28
+ 4. SoCalREN's Segmentation Strategies 30
  - Resource Acquisition 31
  - Budget Allocation 32
  - Market Support Programs 33
  - Budget Allocation 35
  - Equity 35
  - Budget Allocation 37

+ 5. SoCalREN's Sector Strategies 38
Public Sector 8-Year Strategic Plan 38
Agriculture Sector 8-Year Strategic Plan 43
Commercial Sector 8-Year Strategic Plan 47
Residential Sector 8-Year Strategic Plan 50
WE&T 8-Year Strategic Plan 53
Finance 8-Year Strategic Plan 56
Codes & Standards 8-Year Strategic Plan 59
+ 6. SoCalREN's 8-Year Portfolio Budget 62
Annual Portfolio Budget 62
Budget by Market Segment 63
Budget by Sector 63
Total System Benefit by Sector 65
Energy Savings 66
Cost-Effectiveness 66
+ 7. SoCalREN Strategic 8-Year Portfolio Unique Value Metrics 67
+ 8. SoCalREN Portfolio Coordination 70
IOU and IOU Third Party Coordination 70
Regional Partnership Coordination 71
REN Coordination 72
CCA Coordination 72
+ 9. SoCalREN's Evaluation, Measurement and Verification (EM&V) Plans 73
+ 10. Policy Recommendations 75
+ Appendix A. Socalren Unique Value Metrics 78
+ Appendix B. Summary List Of Policy Changes 79
+ Appendix C. Statements Of Qualifications 80
+ Appendix D. Compliance Checklist 84

Figures

Figure 1. SoCalREN's Unique Value Propositions and Gap Filling Activities 9
Figure 2. SoCalREN Service Territory 16
Figure 3. SoCalREN Communities Classified as DAC, Rural, or Low-Income 16
Figure 4. SoCalREN's Climate Action Impacts 27
Figure 5. SoCalREN Portfolio 29

Figure 6. SoCalREN 2024-2031 Budget Distribution by Segment 63
Figure 7. SoCalREN Forecasted 2024-2031 TSB ($) vs. Portfolio and Resource Acquisition Budgets 65
Figure 8. SoCalREN Resource Acquisition Portfolio TRC Forecast 66
Figure 9. SoCalREN territory supported by Regional Partners 71

Tables

Table 1. Percentage of Population Within a DAC, Rural, or Very Low-Income Community by County 17
Table 2. SoCalREN Alignment with CPUC ESJ Action Plan Goals 23
Table 3. SoCalREN Supporting State Policy Goals 24
Table 4. SoCalREN Resource Acquisition Goals, Strategies, and Outcomes 31
Table 5. Resource Acquisition Budget by Sector 33
Table 6. SoCalREN Market Support Goals, Strategies, and Outcomes 33
Table 7. Market Support Budget by Sector 35
Table 8. SoCalREN Equity Goals, Strategies, and Outcomes 36
Table 9. Equity Budget by Sector 37
Table 10. Public Sector Goals, Strategies, and Outcomes 40
Table 11. Public Sector 8-Year Budget by Segment 42
Table 12. IOU Agriculture Sector Summary 44
Table 13. Agriculture Sector Goals, Strategies, and Outcomes 45
Table 14. SoCalREN 2024-2031 Agriculture Budget 46
Table 15. Commercial Sector Goals, Strategies, and Outcomes 48
Table 16. Commercial Sector 8-Year Budget by Segment 49
Table 17. Residential Sector Goals, Strategies, and Outcomes 51
Table 18. Residential Sector 8-Year Budget 52
Table 19. WE&T Sector Goals, Strategies, and Outcomes 54
Table 20. WE&T Sector 8-Year Budget 55
Table 21. Finance Cross-Cutting Goals, Strategies, and Outcomes 57
Table 22. Finance Sector 8-Year Budget 58
Table 23. Codes & Standards Goals, Strategies, and Outcomes 59
Table 24. Codes & Standards 8-Year Budget 61
Table 25. SoCalREN Annual Budget Request 2024–2031 62
Table 26. Budget Distribution by Segment 63
Table 27. Budget Distribution by Sector 64
Table 28. SoCalREN Forecasted 2024-2031 Sector and Portfolio-Level Total System Benefits ($) 65
Table 29. Project Energy Savings Over 8-Year Portfolio Cycle 66
Table 30. Portfolio Metrics by Sector 69
Table 31. Distribution of SoCalREN 2024-2031 EM&V Budget by Partner IOU 74

1. INTRODUCTION AND EXECUTIVE SUMMARY

The Southern California Regional Energy Network (SoCalREN) envisions a Southern California in which communities are actively shaping a safe, secure, resilient, and affordable clean energy future. SoCalREN strengthens California's capacity to achieve its ambitious decarbonization goals through a portfolio of programs framed by its core values to deliver energy and climate impacts, build energy capacity and economic resilience, and expand energy efficiency (EE) access and benefits to underserved and hard-to-reach communities.

SoCalREN presents its EE Portfolio for 2024 through 2031, which embraces California's 2030 goals of doubling EE and reducing greenhouse gas (GHG) emissions by 40 percent in existing buildings, as well as California's 2045 goals of achieving 100 percent renewable and zero-carbon retail electricity and becoming entirely carbon neutral.

SoCalREN's Business Plan (Plan) is guided by the state's high priority focus on identifying and addressing barriers to advancing EE and decarbonization actions in low-income and disadvantaged communities as exemplified by the California Public Utilities Commission (CPUC's) Environmental and Social Justice Action Plan (ESJAP). From its inception, SoCalREN has been successfully fulfilling its purpose as outlined in D.12-11-015 that in the formation and implementation of programs it engages in activities that fill gaps, address hard-to-reach audiences, and provide programs that other Program Administrators (PAs) cannot or will not provide.

Regional Energy Network (REN) programs have proven to be a critically important complement to investor-owned utility (IOU) programs and demonstrate what mission-driven local governments can do to overcome challenging and vexing EE barriers to support clean energy communities.

In serving a diverse and vast territory, SoCalREN looks to reach every community with a focus on those most in need. These communities and customers are often ignored or are ineligible for many existing and emerging IOU EE programs since they cost more to serve and deliver fewer savings for each individual program intervention. Collectively, however, their overall EE savings potential

is immense. SoCalREN is committed to ensuring that these communities and customers are not left behind in California's drive to a cleaner energy future. SoCalREN's proposed Portfolio invests significantly in programs and services to meet the unique needs of these communities.

SoCalREN's Plan builds on its experience as a successful PA over the past decade. The SoCalREN relies on its direct connection to and collaboration with local governments and community-based stakeholders throughout the Southern California region to guide and inform its program design and implementation. SoCalREN has also built strong partnerships with regionally focused organizations in order to more effectively engage with and meet the needs of diverse communities within the region.

SoCalREN continues to innovate. As in past years, SoCalREN will continue to pursue and secure additional non-ratepayer funding from various sources to enhance and augment services within programs and propel deeper and faster decarbonization actions within the region. A significant opportunity is funding through the Federal Infrastructure and Jobs Act which will provide resources to tackle the climate crisis, advance environmental justice, and invest in communities that have too often been left behind. Federal funding flowing to the states and local governments will provide opportunities for public agencies to make investments in their facilities and communities. Now more than ever, SoCalREN can help leverage those resources and help guide public agencies to make sound investments in EE and resilient clean energy communities.

Within this Plan, SoCalREN is requesting $565.4 million over the 8-year period 2024-2031. This funding will enable SoCalREN to continue and enhance the delivery of services within its existing Public, Residential, Workforce, Education and Training (WE&T), and Financing Sectors and supports needed new services for the Commercial, Agriculture, and Codes and Standards (C&S) Sectors to focus on important EE outcomes not addressed by IOU programs.

SoCalREN's proposed budget request reflects a balanced portfolio that aligns with its core values and with the CPUC's objectives for RENs to serve hard-to-reach customers and fill gaps. The eight-year budget allocates 32 percent of its resources to the Equity segment, 29 percent to the Market Support segment, 36 percent to Resource Acquisition, 1 percent to Codes and Standards, and 1 percent to Evaluation, Measurement and Verification.

SoCalREN's comprehensive and diverse portfolio of proposed programs and services follows the guidance of the CPUC to ensure disadvantaged communities are not left behind in the transformation to our clean energy future and significantly contributes to reaching California's ambitious energy, climate, and decarbonization goals.

SoCalREN's Business Plan is presented following the Energy Division template with some additions in compliance with D.21-05-031. A table has been included in Appendix x to map out where the template has been incorporated into this Business Plan.

2. SoCalREN'S ENERGY EFFICIENCY VISION FOR CALIFORNIA, 2024–2031

The California Public Utilities Commission (CPUC) has long recognized the need for a more comprehensive, integrated model for energy efficiency (EE) and has identified new mechanisms to help achieve the state's EE and climate goals.

In 2012, the CPUC authorized the formation of Regional Energy Networks (RENs). This authority recognized the value of public agency leadership to meet local needs and priorities while pooling energy management resources. In addition, the CPUC acknowledged local governments are likely better positioned to administer EE programs for public agencies, serving as innovators to guide others. Subsequently, the CPUC has reaffirmed the value of public agency leadership to meet local needs and priorities in its most recent decision, D.19-12-021, which adopted the updated frameworks of RENs. The CPUC acknowledged the distinct value of RENs and the unique capacities local governments may bring in the delivery of energy efficiency.[1]

The mission of SoCalREN is to ensure equitable access to the technical and financial support required to lead public agencies and communities they serve on the pathway to a clean, reliable, and affordable energy future.

The Southern California Regional Energy Network's (SoCalREN's) portfolio delivers strategies motivating customers to broadly adopt more comprehensive EE approaches. These comprehensive EE strategies are essential for California to meet its aggressive energy and climate action goals. Accordingly, the portfolio is guided by California's goals of doubling EE and reducing GHG emissions by 40% in existing buildings by 2030

[1] D.12-11-015, pg. 17

and becoming entirely carbon neutral by 2045. The portfolio is also guided by the state's increased focus on identifying and addressing barriers to advancing EE and decarbonization in low-income and disadvantaged communities, including the CPUC's Environmental and Social Justice Action Plan (ESJAP). Simultaneously, California has experienced significant grid reliability issues resulting from wildfires, extreme heat, and more frequent critical grid load events. The SoCalREN, by connecting, coordinating, and implementing multiple portfolio efforts at a regional level to deliver integrated energy solutions, is helping California to meet these various challenges and achieve its energy, climate, and equity goals.

SoCalREN's Strategic Portfolio Vision

SoCalREN envisions a future in which communities are actively shaping a safe, secure, resilient, and affordable clean energy future. SoCalREN's eight-year portfolio fulfills this vision by offering an array of solutions that align with the state's energy and climate action goals for overcoming barriers, engaging and motivating program participants, and driving clean energy community actions. SoCalREN harnesses the collective action of communities to save energy, reduce GHGs, and move forward on the pathway to our decarbonized future.

SoCalREN's eight-year Business Plan continues its important focus on the influential public sector market to drive carbon reductions that emphasize equity and resiliency through key intervention strategies and cross-cutting support within the communities left behind by other EE programs. SoCalREN's portfolio also includes multi-sector programs and strategies that will provide residential, agricultural, small commercial business owners, disadvantaged youth, and contractors with the expertise, resources, and support they need to create a safe, secure, resilient, and decarbonized energy future.

SoCalREN Meeting CPUC REN Goals

Since its launch in 2013, SoCalREN has successfully met the criteria set forth by the CPUC for RENs. In D.12-11-015 and reasserted in D.19-21-021, the CPUC directed the RENs to deliver programs and activities that met a threshold of criteria:

1. Activities that utilities or Community Choice Aggregators (CCAs) cannot or do not intend to undertake.
2. Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
3. Pilot activities in hard-to-reach markets, whether or not there is a current utility or CCA program that may overlap.

The SoCalREN portfolio is administered by Los Angeles County. To effectively meet the diverse needs of the region, the SoCalREN structure also includes an overarching Advisory Committee and Regional Partners. The Advisory Committee is made up of representatives from 14 local governments and local government organizations across SoCalREN territory. The role of the Advisory Committee is to guide, collaborate and be an advocate to enhance the presence of SoCalREN within their communities. SoCalREN Regional Partners include established regional groups that support customized engagement and messaging within their geographic region of influence. The goal of Regional Partners is to expand SoCalREN program reach and leverage long-standing, trusted partners to encourage participation among the under-resourced

communities they represent. As a result, Regional Partners and Advisory Committee members help to expand the reach and impacts of the SoCalREN.

As a peer driven-organization where public agencies learn from one another, SoCalREN brings special expertise and relationships with customers that IOU administrators do not possess. SoCalREN successfully complements and supplements the activities of other program administrators offering EE services within the same territory. In addition, SoCalREN is able to add significant depth and value to its service offerings not only by using CPUC ratepayer funds, but also by leveraging non-ratepayer funds from entities such as the CEC, the Department of Energy (DOE), and publicly owned utilities. SoCalREN's business plan anticipates increased future opportunities to leverage funds from these and other non-ratepayer sources.

In D.19-12-021, which adopted the updated frameworks of Regional Energy Networks, the Commission acknowledged the distinct value of RENs and the unique capacities local governments may bring in the delivery of energy efficiency. In addition to this acknowledgment, the decision also requested that:

"RENs must state their desired outcome from activities that fill gaps of other program administrators. The RENs shall also propose savings goals and metrics associated with their unique value, as well as a methodology for measuring progress toward their metrics, in their business plans and ABALs."

In this Business Plan, SoCalREN outlines it unique value propositions and its gap filling activities. Figure 1 below illustrates at high level not only meeting the original authority afforded to RENs in D.12-11-015 but also the Commission guidance on the strategic and unique value proposition SoCalREN has prioritized to offer.

Figure 1. SoCalREN's Unique Value Propositions and Gap Filling Activities

SoCalREN's portfolio delivers energy and climate impacts, builds energy capacity and economic resilience, and expands access to energy efficiency benefits.

Core Values/Goals	Portfolio Objectives and Outcomes	Segment	Outcomes
DELIVER ENERGY AND CLIMATE IMPACTS	Supporting activities with trackable energy savings and GHG reductions within the SoCalREN service area that contribute to local and state climate or sustainability goals. Increased energy and GHG reductions	RESOURCE ACQUISITION	Increased energy and GHG reductions.
BUILD ENERGY CAPACITY & ECONOMIC RESILIENCE	Building long-term knowledge and skills for public agencies, contractors, and transition age youth through WE&T that leads to energy competency, policies or other infrastructure and helping local communities build long-lasting, strong, and self-sufficient economies.	MARKET SUPPORT	Increased energy capacity, competency, and economic resilience.
EXPAND ACCESS TO EE BENEFITS	Expanding access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities. Underserved communities gain increased access to EE benefits.	EQUITY	Underserved communities gain increased access to EE benefits.

SoCalREN's Core Principles

To address its unique value and to ensure that the long-term portfolio maximizes ratepayer benefits, SoCalREN leverages the following guiding principles when delivering its energy efficiency strategies.

- **Principle #1: Address SoCalREN core values**

  SoCalREN describes its core values as: delivering energy and climate impacts, building energy capacity and economic resilience, and expanding access to EE benefits within the communities served.

- **Principle #2: Balanced portfolio across segments**

  In order to balance the portfolio, SoCalREN developed strategies focused on addressing the objectives of the segmentations as defined by the CPUC in D.21-05-031 which include resource acquisition, market support, and equity. SoCalREN takes this balanced approach to effectively deliver on its vision and goals.

- **Principle #3: Continuous and authentic community engagement**

  In order to develop trusted and lasting relationships with customers, SoCalREN recognizes the need to establish an understanding of their unique communities through authentic community engagement working with Regional Partners.

- **Principle #4: Coordination among offerings**

  SoCalREN's programs are designed to fill gaps and not duplicate, while complementing existing offerings. By coordinating among programs in its own portfolio as well as with other PAs, SoCalREN is able to avoid any duplication of customer offerings.

- **Principle #5: Regional Reach**

  Ensure all programs are available to and penetrate the entire SoCalREN territory.

SoCalREN Eight-Year Outcomes

In alignment with SoCalREN's core values and overarching portfolio objectives, the SoCalREN Business Plan portfolio-level outcomes will be realized over the eight-year portfolio at the sector-level as described below. Each outcome is associated with unique metrics and indicators to quantify progress of the segment's success as outlined in the subsequent strategic eight-year portfolio metrics section.

Agriculture Sector

In alignment with SoCalREN's core values, the Agriculture sector programs are designed to achieve the following outcomes:

- **Increased energy and GHG reductions for small and medium, rural, and underserved Ag customers ("Ag Customers").** SoCalREN's Ag sector resource and equity programs support activities with trackable energy savings and GHG reductions that contribute to local and state or climate goals. Comprehensive retrofit and targeted direct install offerings offered by SoCalREN overcome common barriers to participation, so participants receive the benefits of reduced energy consumption and carbon emissions.

  Over the eight-year period, SoCalREN will reduce energy usage of Ag customers by an average of 20% or more.

- **Increased energy capacity, competency, and economic resilience within Ag Customers.** SoCalREN's Ag sector programs will build long-term knowledge and skills that lead to energy competency, and energy management practices that will help rural, disadvantaged, small and medium agriculture customers establish sustainable energy practices. Program offerings help to build trust with Ag customers and increase knowledge about their business' energy consumption, access to funding sources, and other programs to facilitate energy actions (e.g., Workforce Education and Training, etc.).

  By 2031, over 20% of small and medium Ag customers participating in SoCalREN programs will report interest in continuing sustainable energy practices.

Codes and Standards Cross-Cutting Sector

SoCalREN's codes and standards (C&S) program envisions a future in which the C&S community effectively delivers the critically important co-benefits of proper and correct permitting and compliance at a scale needed to achieve the state's energy goals for new and existing construction.

- **Increased energy and GHG reductions across communities.** SoCalREN's C&S sector program supports activities that will yield energy savings and GHG reductions that contribute to the achievement of local and state climate goals. Energy and GHG savings will result from better compliance with energy code requirements, increased energy awareness, reduced energy use in new and existing buildings, and greater number of high energy performance buildings.

  By 2031, all participating agencies will have adopted advanced energy codes, standards, and/or policies.

- **Increased energy capacity, competency, and economic resilience within C&S stakeholders.** SoCalREN will build local government capacity for the development, adoption and implementation of model policies and programs that improve the energy efficiency of existing buildings and zero net energy (ZNE) building energy policies and codes for new construction and existing buildings. Local governments can also be provided technical resources and assistance that allow them to become leaders in the adoption of new codes, standards, and policies that go beyond statewide requirements and promote deeper EE, decarbonization and ZNE efforts.

  By 2031, all participating agencies will see an increase in code compliance and permit closeout by 15%, demonstrating the agencies increased capacity to support their communities.

Commercial Sector

Over the next eight years the commercial sector will face multiple macroeconomic challenges including but not limited to inflation, supply chain issues and rise energy costs. This along with the fact that the commercial sector consists of a large and diverse customer base that requires a range of products to address their energy needs. Despite this need and those economic challenges, unique offerings and programs have and may continue to diminish over the next eight years that specially address the commercial sector EE needs. SoCalREN can support the often overlooked commercial segments such as the small and medium business customers, with a focus on those classified as hard-to-reach business customers. SoCalREN is well positioned and eager to reduce the drop-off in offerings to the cost-effective challenged customer segments and deliver valuable outcomes that align with SoCalREN's core values and directives.

- **Increased energy and GHG reductions for SMBs.** SoCalREN's commercial sector resource and equity programs support activities with trackable energy savings and GHG reductions that contribute to local and state or climate goals. Targeted direct install offerings offered by SoCalREN overcome common barriers to participation, so participants receive the benefits of reduced energy consumption and carbon emissions.

  Over the eight-year period, SoCalREN will reduce energy usage of enrolled SMBs by an average of 20% or more.

- **Increased energy capacity, competency, and economic resilience within SMBs.** SoCalREN's commercial sector programs will build long-term knowledge and skills that lead to energy competency, and energy management practices that will help small and medium businesses (SMBs) establish sustainable energy practices. Program offerings help to build trust with SMBs and increase knowledge about their business' energy consumption, and access funding sources and other programs to facilitate energy actions.

  By 2031, over 85% of SMBs participating in SoCalREN programs will report interest in continuing sustainable energy practices.

- **HTR businesses gain increased access to EE benefits.** All SoCalREN's commercial sector programs will focus on providing access to unique EE programs and services that enhance carbon reduction opportunities and other environmental outcomes in underserved communities supporting the advancement of the CPUC's Environmental and Social Justice Action Plan.

  Over the four-year period, SoCalREN will target over 65% of cumulative benefits being received by a HTR business.

Finance Cross-Cutting Sector

Financing tools are becoming increasingly important to the success of EE programs. The California Public Utility Commission (CPUC) already mandates that investor-owned utilities (IOUs) implement financing. SoCalREN embraces the growing role of EE financing by building on and complementing the success of existing programs and services to deliver the below outcomes.

- **Increased energy and GHG reductions across the territory.** SoCalREN's cross-cutting finance programs support activities that yield trackable energy savings and GHG reductions and contribute to local and state or climate goals. Financing programs offered by SoCalREN motivate customers to tackle projects sooner and receive the benefits of reduced energy consumption and carbon emissions. These programs will provide bridge funding to fill the gap between other financing product repayment like incentives and On-Bill financing so customers can pursue projects without delay.
- **Underserved communities gain increased access to EE benefits.** SoCalREN's finance programs target hard to reach and underserved communities, supporting the advancement of the CPUC's Environmental and Social Justice Action Plan. These offerings enable them to benefit from energy savings, carbon reductions, and other environmental and health outcomes by overcoming one of the most common barriers to completing EE projects – project funding.
- **Increased energy capacity, competency, and economic resilience.** SoCalREN's finance programs will build long-term knowledge and skills about both the lifecycle benefits of low-cost financing options and project cost savings through deliverables, workshops, and meetings that lead to continued interest and motivation to complete EE projects.

Public Sector

With a continued focus on Public agencies as drivers for change in the EE market. SoCalREN will utilize public agencies to lead their communities to a clean energy future and set the foundation of community resilience by creating cost savings through clean, reliable energy projects that benefit the local economy and inspire local action. SoCalREN's public sector strategies will unleash this potential to lead by example and drive carbon reductions by maximizing opportunities and motivating customers to adopt more comprehensive EE approaches that are characterized by deeper, longer-lasting savings.

- **Increased energy and GHG reductions across the public sector.** SoCalREN's public sector programs support activities that lead to trackable energy savings that are claimable by SoCalREN's resource programs as well as third-party programs. The SoCalREN programs are designed to fill market gaps and motivate agencies to tackle projects sooner, delivering GHG emission reductions that contribute to local and state climate goals.

  By 2031, the public sector will deliver over 280 GWh in annual energy savings.

- **Underserved communities gain increased access to EE benefits.** SoCalREN's public sector equity programs are specifically focused on providing access to unique EE programs and services that lead to carbon reduction opportunities and other beneficial environmental and health outcomes in underserved communities supporting the advancement of the CPUC's Environmental and Social Justice Action Plan. Public agencies serving disadvantaged communities

(DAC), low-income, and rural communities receive the support needed to overcome barriers to completing EE projects through SoCalREN's comprehensive services thus increasing the air quality and reducing sector utility operating costs which can then be re-invested into the community.

Over the next 8-year period, SoCalREN will deliver services to 70% of its enrolled agencies that serve underserved communities.

- **Build energy capacity and economic resilience.** SoCalREN's public sector market support programs will build long-term knowledge and skills that lead to energy competency, policies, or other infrastructure that will help public agencies build long-lasting, strong, and self-sufficient economies by supporting projects and investment into their communities. Program offerings help agencies overcome staffing and resource constraints, increase knowledge about their facilities' energy consumption, and access funding sources to facilitate energy actions.

  Over the eight-year period, 100% of active participants will receive learning and training opportunities to increase their energy knowledge and skills.

Residential Sector

SoCalREN recognizes that the residential sector plays a key role towards California's energy efficiency, grid resiliency, and decarbonization goals with approximately half of the region's residents living in multifamily buildings, and most of these categorized as either Hard-to-Reach or located in Disadvantaged Communities. Without an enhanced focus on underserved, hard-to-reach, and disadvantaged communities these customers will be further left behind as advances in the state's energy infrastructure are realized into 2030 and beyond. The proposed 8-year outcome for the residential sector is:

- **Increased energy and GHG reductions across the public sector.** SoCalREN's Residential sector programs support activities that lead to trackable energy savings that are claimable by SoCalREN's resource programs as well as third-party programs. The SoCalREN programs are designed to fill market gaps and motivate property owners tackle projects sooner, delivering GHG emission reductions that contribute to local and state climate goals.

  By 2027, the multifamily sector will deliver over 81 GWh in trackable annual energy savings.

- **Increased energy capacity, competency, and economic resilience within Multifamily properties, their residents, community members (residential customers) and contractors who serve programs.** SoCalREN's residential sector programs (multifamily and k4k) will build long-term knowledge and skills that lead to energy competency, and energy management practices that will residential customers, their families and property owners establish sustainable energy practices. Program offerings will help to build trust with MF property owners, their residents, schools, students, and contractors while increasing knowledge about their energy consumption, and access funding sources and other programs to facilitate energy actions.

  By 2031, over 75% of Multifamily Property, residential customers and participating contractors participating in SoCalREN programs will report interest in continuing sustainable energy practices.

- **HTR Multifamily Properties and their residents gain increased access to EE benefits.** All SoCalREN's multifamily sector programs will focus on providing access to unique EE programs and services that enhance carbon reduction opportunities and other environmental outcomes in underserved communities supporting the advancement of the CPUC's Environmental and Social Justice Action Plan.

  Over the eight-year period, SoCalREN will target over 85% of cumulative benefits being received by a HTR Multifamily properties.

- **Increased innovation to the sector** by leveraging non-IOU funding sources to improve HTR and DAC access to DERs through the integration of EV charging infrastructure, and self-generation opportunities into program offerings.

WE&T Cross-Cutting Sector

SoCalREN's WE&T program will help the IOUs meet their goal of doubling energy efficiency (EE) savings by 2031 while increasing the diversity of the utility/EE sector, by overcoming the barriers/challenges connecting workers and contractors from DAC to EE training, jobs, and business opportunities. SCR WE&T will specifically organize the Southern California workforce education and training and small business eco-systems to meet the technical demands of the IOUs, including energy savings, demand response, GHG emissions reductions, clean energy generation, and other clean energy community strategies. Industry-defined basic and advanced skills training will be standardized to provide DACs with career pathways and contractor capacities in such areas as: 1) construction/EE retrofits, 2) energy professional certifications, and 3) sales/customer service, with a focus on IDSM marketing.

- **Increased energy capacity, competency, and economic resilience for Small Businesses Contractors.** SoCalREN's WE&T sector programs will build long-term knowledge and skills that lead to energy competency, and energy management practices that will help small and medium contractor businesses establish sustainable energy practices and helping them obtaining EE project work. Program offerings will help to create a more robust hiring and contractor training, hiring and contractor network within DACs.

  By 2031, over 60% of Contractors participating in SoCalREN WE&T programs will report obtainment of project bids or be listed as active contractors within IOU or NON-IOU PA programs.

- **Disadvantaged workers and WMDVBEs gain increased access to EE benefits.** All SoCalREN's WE&T programs will focus on developing a multi-entry and multi-pathway education and training curricula into the EE sector for disadvantaged workers, minorities, women and veterans. The WE&T sector programs will also seek to establish a specialized Clean Energy WE&T Hub - both an on-line and a physical 'marketplace' and clearinghouse within workforce and small business development agencies throughout the SoCalREN region so that the workforce and contracting industry has direct connections to EE projects and jobs. All these actions will serve for the advancement of the CPUC's Environmental and Social Justice Action Plan.

  Over the eight-year period, SoCalREN will target over 90% of cumulative benefits being received by a disadvantaged workforce and WMDVBE businesses.

SoCalREN Service Territory

The SoCalREN service territory includes any region served by Southern California Edison (SCE) or SoCalGas. The resulting territory supported by SoCalREN is a geographically, socially, and economically diverse area encompassing 13 counties, as shown in Figure 2. This territory includes most California climate zones from coastal, desert, and mountainous regions. Several regions are serviced by only SCE or SoCalGas, where SoCalREN adjusts services to serve the single-fuel. The opportunity for EE is vast in SoCalREN territory. Still, the region faces equity and program access challenges requiring diverse targeted strategies to provide value across the entire territory.

Figure 2. SoCalREN Service Territory

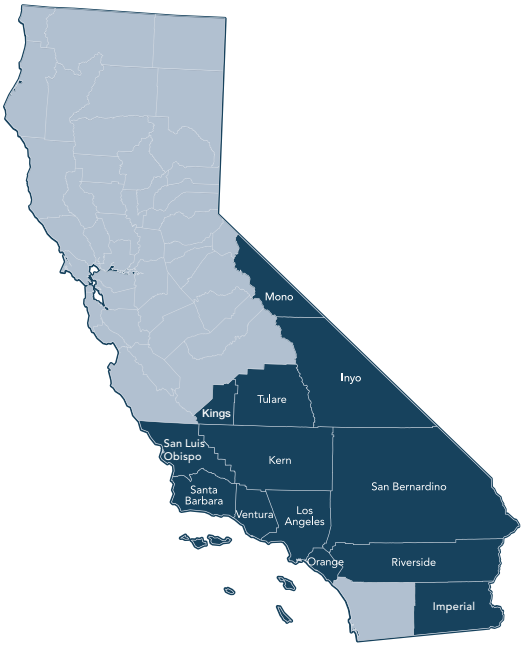
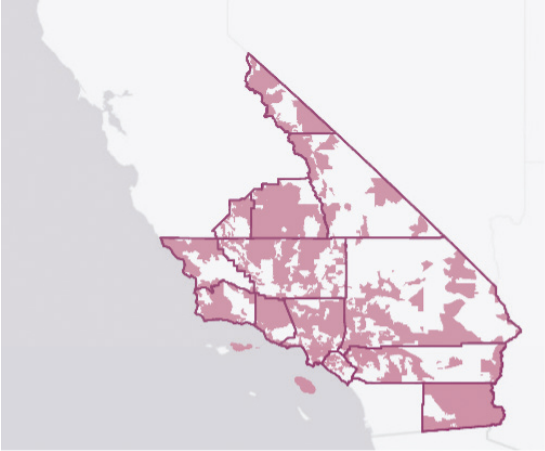


Figure 3. SoCalREN Communities Classified as DAC, Rural, or Low-Income



The SoCalREN region is home to more than 20 million people with more than 50 percent living in Disadvantaged Communities (DACs). In addition, very low-income and rural communities are constrained for basic resources and access. All these communities are disproportionately burdened and face amplified barriers to EE adoption.

Table 1. Percentage of Population Within a DAC, Rural, or Very Low-Income Community by County

County	Eligible Population[2]	DAC Population[3]	Rural Population[4]	Very Low-Income Population[5]
Imperial	164,648	76%	57%	46%
Inyo	14,574	0%	100%	0%
Kern	836,404	72%	32%	38%
Kings	141,645	100%	100%	0%
Los Angeles	9,964,639	65%	7%	31%
Mono	8,127	0%	100%	0%
Orange	3,103,190	45%	0%	23%
Riverside	2,307,548	53%	11%	28%
San Bernardino	1,996,622	73%	14%	27%
San Luis Obispo	236,542	0%	51%	27%
Santa Barbara	440,584	0%	22%	26%
Tulare	392,745	78%	67%	24%
Ventura	843,645	21%	18%	34%
Total	**20,450,913**	**58%**	**12%**	**29%**

In advancement of the ESJAP, the SoCalREN looks to target these communities with equity-focused strategies and by focusing on customer groups that are underserved through the IOU portfolios and are in need of additional support.

- **Multifamily housing:** There are 7.3 million homes in SoCalREN territory. Multifamily dwellings comprise approximately one-third of the total housing stock, which equals just under 2.4 million units. Approximately 90 percent of multifamily structures are low-rise buildings, three stories and under.
- **Public agencies:** There are over 700 public agencies within SoCalREN territory, consisting of cities, counties, tribes, school districts, and special districts. Most of these public agencies are categorized as hard-to-reach based on the geographic criteria approved in Resolution G-3497 and updated in D.18-05-041. Of the over 200 agencies currently enrolled in the SoCalREN,

[2] From 2017 Census Estimate

[3] Within 25% most disadvantaged according to CalEnvironscreen 3.0

[4] Rural-Urban Commuting Area (RUCA) codes #2-#10

[5] As classified by the CA Department of Housing and Community Development

over 72% have rural, very low-income, or DAC communities. Public agencies also need specialized support to meet climate and resilience goals for their community. Their EE needs are diverse, with a wide variety of facility types and significant energy use consumed by non-building assets, such as pumping stations, outdoor lighting, or electric vehicle charging. Over half of the public sector electricity service accounts are tied to non-building assets.

- **Small businesses:** There are more than 850,000 commercial businesses in the counties served by SoCalREN. Nearly 90 percent of businesses have fewer than ten employees, with 77 percent employing less than five people. Most of these customers lease their business space and are thus further impacted by split incentive barriers.
- **Small and medium agriculture customers:** SoCalREN includes approximately 16,000 individual agriculture customers responsible for 25 percent of all food consumed in the United States and are a key part of California's economy. Nearly 70 percent of farms in the region are under 50 acres, and only 10 percent are larger than 500 acres. Many of these farms are considered Socially Disadvantaged under the Farmer Equity Act of 2017. The majority of SoCalREN's agricultural base is in the San Joaquin Valley, including Tulare, Kern, and Kings counties. Other counties with a large agricultural customer base are Riverside and Ventura counties.

The diverse mix of this region requires a variety of program interventions to address the unique energy needs of the population. SoCalREN's Business Plan includes various sector-based approaches to address much of the community—including DAC and HTR customers—which are underserved by existing energy efficiency programs. SoCalREN's services complement and supplement IOU programs by filling gaps in the IOUs' portfolio to better serve these underserved customers and address long-standing ESJ issues. SoCalREN is dedicated to ensuring that members of these communities are not left behind in the accelerating transformation of California's energy future.

3. SoCalREN'S ENERGY EFFICIENCY STRATEGIES

New Forecasting and Quantification Methods

SoCalREN is seeking to build upon successes from current incentive and savings strategies such as targeted incentives and NMEC calculations with feedback to increase savings and lower costs for implementers and participants. Specific strategies include updating and reviving workpapers that were allowed to expire (creating gaps in the market) as PAs focused on other measures, collaborating with stakeholders and sponsoring new workpapers, and refining savings estimates for projects based on similar projects going through the Public Sector NMEC program. SoCalREN is also considering expanding the use of NMEC calculations beyond the Public Sector NMEC program in order to capture savings not achievable through other avenues.

Incorporation of Low-GWP Refrigerants

While new equipment using R-22 were banned in 2010 under EPA's SNAP program, R-22 can still be present within existing equipment. With the proposed phase out of HFC based refrigerants, SoCalREN will consider taking a more active role in accelerating the adoption of low-GWP alternatives through the strategies listed below:

- SoCalREN's Commercial Food Desert Energy Efficiency Equity Program will incorporate refrigerator replacement that will utilize verified equipment lists where each unit will contain low-GWP refrigerants.
- Through refrigeration and HVAC measures, SoCalREN may consider including metrics specific to refrigerant management and low-GWP refrigerant. Metrics such as pounds of high-GWP refrigerant reclaimed and pounds of low-GWP refrigerant retrofits.
- Offer low-GWP deemed measures listed below that have potential for high volume adoption through resource-based program and develop measure packages for these measures. These measures may also provide energy savings.

- Offer custom measures for low-GWP measures where the incentives could be based on life cycle avoided GHG emissions. Life cycle emissions savings include savings from annual refrigerant leakage and end of life refrigerant leakage of a low-GWP refrigerant compared to a high-GWP alternative. End of life refrigerant leakage is a significant portion of the life cycle leakage. Some potential custom measures are:
  - Low-GWP or natural refrigerants for industrial process (new)
  - Low-GWP or natural refrigerants for industrial process (existing)
  - Refrigerant leak detection through smart sensors and repair. Either with existing or low-GWP refrigerants, refrigerant leak detection and repair is a best practice which reduces the GWP emissions from leakages and improves the operating efficiency of the system.

Since the alternative refrigerants have flammability or other safety issues, it is important that workforce get trained on properly installing and managing the new refrigerants. Further, the pre-existing refrigerant, which has high-GWP should be properly reclaimed. SoCalREN will consider developing workforce education and training (WE&T) targeting the new skill set requirements.

Marketplace Innovation

As a non-IOU PA, SoCalREN has demonstrated that its portfolio can adapt to changing market conditions and innovate quickly through its service offerings. SoCalREN's Business Plan includes all successful and valuable activities from its current portfolio and also incorporates new innovations and cost efficiencies. SoCalREN's BP comprises an eight-year plan to merge and balance innovation with performance and allow nimbler and more cost-effective administration of EE programs. The SoCalREN's strategic vision and Unique Values Proposition along with Guidance from D.21-05-031 have all been used to shape the sector focuses, segmentation strategies, and budgets in the BP. Once approved, this comprehensive framework will guide the deployment of the portfolio, to both meet the goals described above and support California's aggressive climate goals.

SoCalREN recognizes that continued innovation is necessary to meet the ever-changing energy, economic, and social landscape. This includes seeking to leverage other partners and funding sources to support more holistic solutions that promote decarbonization. Strategies that SoCalREN deploys to provide additional value to its communities include:

- **Leveraging outside funding that can be integrated into SoCalREN program offerings.** Previous examples include CEC funding for DER technical assistance alongside EE services, and CEC funding that provided seed funding for the Revolving Loan fund. SoCalREN has also coordinated with electric municipal utilities to provide supplemental funding for EE technical assistance in locations serviced by SCG and not SCE.

- **Support communities in applying for grant funding to offset the capital costs of energy projects.** SoCalREN has proven experience in identifying and supporting public agencies and partners in applying for outside funding. A significant current opportunity is funding through the Federal Infrastructure and Jobs Act which will provide resources to tackle the climate crisis, advance environmental justice, and invest in communities that have too often been left behind. Federal funding flowing to the states and local governments will provide opportunities for public agencies to make investments in their facilities and communities. Now, more than ever, SoCalREN can help leverage those resources and help guide public agencies to make sound investments in EE and resilient communities.

- **Coordination with Regional Partners to design innovative solutions that meet the unique needs of their communities.** The SoCalREN has successfully onboarded several Regional Partners to tailor program messaging and engagement practices that has resulted in increased local participation in SoCalREN program offerings and expanded SoCalREN's reach throughout the territory. To expand on this success, SoCalREN has also engaged Regional Partners to propose unique initiatives that can be tested within their regions. This successful approach will continue in the proposed BP through a stand-alone program designed to accommodate new innovative proposals from Regional Partners during the 8-year plan period.
- **Adopting processes to align with multiple customer procurement models.** SoCalREN services are designed to be customized to meet the needs of individual customers. When working with public agencies, SoCalREN has benefited by collaborating with organizations such as NAESCO to understand how EE programs can be successfully delivered through Energy Service Contracts and how SoCalREN services can be more effectively adapted to these design-build procurement models.
- **Presenting a strong business case for holistic decarbonization projects.** SoCalREN will bring to bear the information, technical assistance and resources needed to present a strong business case to customers for comprehensive energy efficiency and clean energy solutions and build a greater level of confidence for their decisions to implement energy projects.
- **Collaboration and coordination among SoCalREN implementers to support cross-sector support and efficient service delivery.** SoCalREN will continue its practice of open and robust collaboration among SoCalREN implementers, and also with the other PAs' implementers, to promote innovations and synergies that can improve and enhance portfolio-wide impacts across segments and sectors.

In addition, to facilitate escalation toward greater cost effectiveness, SoCalREN has proposed to expand certain strategies which it has found successful and terminate strategies that no longer meet market needs and failed to gain effective results. In addition, the SoCalREN is working to identify and incorporate approaches that will amplify success through performance-based structures, improved cost economy, greater measurability, and tracking of diverse metrics and deliverables, e.g.:

- Strategic performance assessments of all existing programs to identify and integrate performance-driven adjustments and corrections
- Enhanced competitive procurement, e.g., Requests for Abstracts, pay-for-performance, and multi-implementer programs to increase competition
- Advanced market, building, and consumer analytics to develop focus-and-target investments in marketing, education, and outreach
- Potential for leveraging of other funding and programs
- Routine performance monitoring, target-tracking, and rapid-response deployment of design corrections and adjustments
- Enhanced coordination with the incumbent Utilities, CCAs and RENs

Pursuant to the Commission's direction, these and other planned actions will serve as key operational, functional, and assessment drivers in SoCalREN achieving the goals outlined in its Business Plan. In aggregate, SoCalREN's approach is to pivot its portfolio toward optimization of energy savings, comparable cost efficiency and effectiveness, while delivering on market support and equity goals to magnify and expand the value delivered to customers from the investment of ratepayer funds.

Market Intervention and EE Adoption Strategies

SoCalREN offers a variety of market intervention strategies for different sectors through a portfolio of downstream programs that drive energy efficiency (EE) adoption. These strategies have been developed based on our current and past experience working with our existing sectors and have been expanded to also encompass the agricultural and commercial sectors.

The key to driving EE adoption starts with developing trusted and effective connections with targeted customer groups through our program implementers, regional partners, key stakeholders, and other program partners. SoCalREN's programs tailor messaging and enroll customers in programs through these direct interactions as delivery channels. Our programs offer a full range of intervention strategies designed to meet the unique needs of public agencies, schools, multifamily property owners, rural farmers, small and medium sized business owners, and disadvantaged workers and contractors. For example, small equity-focused customers and facilities may receive high-value direct install as a key intervention, while other targeted customer groups may receive energy analysis, technical support, EE/distributed energy resources (DER) education, financial analysis, incentives and loans, procurement support, and/or construction support. Services are discussed with targeted customers at each stage of the process to determine the appropriate level of support and manage costs. To encourage and continue long-term investment into EE and general capacity building, all customers receive educational resources that explain the benefits of EE and encourage additional actions, such as ongoing operational energy management opportunities.

Alignment with Legislative and CPUC Requirements and Relevant Action Plans

SoCalREN's Objectives aligning with CPUC's Environmental and Social Justice Action Plan

To continue demonstrating its commitment to advancing the state's equity goals by serving underserved communities, each SoCalREN sector contains at least one business plan objective that is tied to one of the CPUC's Environmental and Social Justice Action Plan (ESJAP) Goals.

The ESJAP includes nine overarching goals to ensure agency-wide collaboration, accountability, and forward movement in meeting ESJ principles. The goals include:

1. Consistently integrate equity and access considerations throughout CPUC proceedings and other efforts.
2. Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.

3. Strive to improve access to high-quality water, communications, and transportation services for ESJ communities.
4. Increase climate resiliency in ESJ communities.
5. Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs.
6. Enhance enforcement to ensure safety and consumer protection for ESJ communities.
7. Promote economic and workforce development opportunities in ESJ communities.
8. Improve training and staff development related to ESJ issues within the CPUC's jurisdiction.
9. Monitor the CPUC's ESJ efforts to evaluate how they are achieving their objectives.

Table 2. SoCalREN Alignment with CPUC ESJ Action Plan Goals

SoCalREN Sector	Sector Objective Example	Representative ESJAP Goal
Agriculture	Achieve environmental benefits: water savings, improved workplace conditions, GHG reductions, etc.	#2, #3, #7
Codes & Standards	Coordinate with public agencies, particularly those that are underserved, and external C&S stakeholders to adopt, implement, and enforce advanced energy codes, standards, and policies that pave the way for improved building performance and ZNE new construction.	#1, #3, #9
Commercial	Stimulate local leadership in energy efficiency and climate action for small and medium hard-to-reach businesses operating in EJ communities.	#4, #7
Finance	Stimulate and increase overall participation in SoCalREN programs and accelerate project development and implementation, with a focus on underserved customers.	#2, #7
Public	Ensure public agency critical facilities, particularly in underserved communities, are energy resilient and equipped to maintain essential community services during planned and unplanned power outages.	#2, #4
Residential	Offer comprehensive DER solutions to multifamily properties to significantly reduce GHG emissions	#2
Workforce Education & Training	Involve direct engagement of the EE/RE industry and employers (e.g., building trade unions, USGBC, major contractors, public agencies) in program design and implementation to create a more robust hiring and contractor training, hiring and contractor network within DACs.	#7

SoCalREN Supporting State Policy Goals

The following table identifies the important regulatory and legislative policies that helped contribute to the development of SoCalREN's 2024-2031 EE Business Plan portfolio.

Table 3. SoCalREN Supporting State Policy Goals

Policy: CPUC Guidance Decision (D.12-11-015) for Regional Energy Networks

Guidance:

- Conduct activities that utilities or CCA program administrators cannot or do not intend to undertake.
- Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
- Pilot activities in hard-to-reach markets, whether or not there is a current utility or CCA program that may overlap.

Alignment with SoCalREN:

The proposed SoCalREN Business Plan and program portfolio is in full compliance with CPUC Guidance for RENs in D.12-11-015.

Policy: California Long-Term Energy Efficiency Strategic Plan (CLTEESP)

Guidance:

- Local governments (LG) lead by example in their facilities.
- LGs lead their communities with innovative energy efficiency programs.
- LGs lead adoption of higher energy efficiency standards or 'reach' codes.
- LGs lead energy code compliance enforcement.

Alignment with SoCalREN:

As a local government managed entity that to date has attracted the participation of over 200 public agencies in its service territory, the SoCalREN is a preeminent example of local government energy efficiency leadership within California. The proposed SoCalREN Business Plan will continue and significantly expand the role that Southern California local governments play in successful energy efficiency program implementation and innovation for their communities.

Policy: AB 758 Existing Buildings Energy Efficiency Action Plan (Action Plan)

Guidance:

- Lays out a 10-year roadmap to mobilize market forces and transform California's existing building stock into high performing and energy-efficient buildings.
- Establishes requirements for providing energy assessments, benchmarking, energy ratings, cost effective energy improvements, financing options, public outreach and education and workforce training.

Alignment with SoCalREN:

With its focus on multi-sector building stock assessments, upgrades, and workforce alignment to achieve higher energy performance, the SoCalREN Business Plan will implement a diverse set of programs that in aggregate address all of the areas directed by AB 758.

Policy: AB 802

Guidance:

- Mandates use of metered data for measurement of impacts from energy efficiency program interventions.
- Offers a very relevant framework to implement building benchmarking and labeling ordinances that accurately reflect what building operators and tenants see on their energy bills.
- Program Administrators can receive credit for energy savings from, and provide incentives and support for, EE projects that help customers meet current energy code requirements where previously, Program Administrators could only count the energy savings for projects where the improvements exceeded code requirements.

Alignment with SoCalREN:

The SoCalREN's NMEC program for public agency buildings was created as a direct response to the mandates and authorizations contained in AB 802.

Policy: AB 350 Clean Energy and Pollution Reduction Act

Guidance:

- Mandates a 50% renewable energy content in the state's overall electricity mix and a doubling of energy efficiency goals for existing buildings by 2030.
- Addresses barriers for low-income customers to EE and weatherization, especially in disadvantaged communities.
- Requires local governments to participate in efficiency program implementation.

Alignment with SoCalREN:

The SoCalREN portfolio prioritizes services to disadvantaged communities and participation by local governments in program implementation as core values.

Policy: SB 375 Sustainable Communities and Climate Protection Act

Guidance:

- Requires local governments to implement long-term integrated planning of land use and transportation.
- Drives critical public agency initiatives such as the Southern California Regional Transportation Plan and Sustainable Communities Strategy to reduce per capita GHG emissions in the Southern California Association of Governments region 8% by 2020, 18% by 2035 and 21% by 2040 against the 2005 baseline year.

Alignment with SoCalREN:

The proposed programs of the SoCalREN will result in significant GHG emissions reductions in Southern California that will have their most significant positive impact within disadvantaged communities.

Policy: SB 32

Guidance:

- Modification of the California Global Warming Solutions Act of 2006 that require the state to cut greenhouse gas (GHG) emissions to 40 percent below 1990 levels by 2030.

Alignment with SoCalREN:

The proposed programs of the SoCalREN will result in significant GHG emissions reductions in Southern California that will have their most significant positive impact within disadvantaged communities.

Policy: SB 100 The 100 Percent Clean Energy Act of 2018

Guidance:

- Sets a 2045 goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources—those such as solar and wind energy that do not emit climate-altering greenhouse gases.
- Requires the Energy Commission, Public Utilities Commission and Air Resources Board to use programs under existing laws to achieve 100 percent clean electricity.
- Updates the state's Renewables Portfolio Standard to ensure that by 2030 at least 60 percent of California's electricity is renewable.

Alignment with SoCalREN:

The SoCalREN Business Plan is predicated on achieving reductions in energy use, a greater use of clean energy sources, and more pervasive decarbonization actions within Southern California.

Policy: Governor's Emergency Proclamation (July 30, 2021)

Guidance:

- Ensure that California has a safe and reliable electricity supply to reduce strain on the energy infrastructure, and to ensure increased clean energy capacity by adding new energy efficiency programs or measures that target peak and net peak hours and integrating demand response or conservation actions with energy efficiency program actions or investments.
- CPUC is requested to exercise its powers to expedite Commission actions, to the maximum extent necessary, to meet the purposes and directives of this proclamation, including by expanding and expediting approval of demand response programs and storage and clean energy projects.

Alignment with SoCalREN:

The SoCalREN Business Plan portfolio includes new program initiatives for the public sector which have been designed and are proposed in direct response to meeting the urgent needs articulated in the Governor's emergency proclamation. The Water & Wastewater and Underserved schools Strategic Energy Management programs take a short and long-term view on reducing peak demand for schools and water and wastewater facilities through measures and education.

Prioritizing Climate Action and Delivering Impact

Since its inception, SoCalREN has prioritized achieving aggressive savings goals in an effort to accomplish quantifiable climate action and community impacts. Since 2012, SoCalREN has achieved over 120 GWh and over 334,000 therms in annual savings. This is equivalent to 33,727 tons of GHG reductions or removing 7,335 fossil fuel cars from the road. SoCalREN's programs, strategies, and services also contribute significant cost-savings to its overlapping PA (SCE and SCG) resource programs, improving their cost-effectiveness by providing program participants with comprehensive project support, particularly within its public sector portfolio. To date, SoCalREN has channeled over 89 million kWh in first-year gross annual savings to SCE and over 147,000 therms in first-year gross annual savings to SoCalGas. SoCalREN's public sector 2020 performance is demonstrative of its support to the success of other PA portfolios.

Figure 4. SoCalREN's Climate Action Impacts

120+
GWh Savings

334,000+
Therms Savings

GHG emissions from **7,335 cars** and avoiding **33,727 metric tons** of CO_2.

However, these accomplishments only touch the surface of the potential that can be achieved by SoCalREN. With the new Business Plan SoCalREN will expand and amplify these accomplishments within by implementing long term strategies with trackable energy savings and GHG reductions that greatly contribute to local and state climate or sustainability goals.

Emphasis on Equity

A primary objective of the SoCalREN portfolio is to meet the needs of hard-to-reach markets and disadvantaged and vulnerable communities. As a Program Administrator managed by a local government, the SoCalREN has an inherent duty to serve hard-to-reach markets and disadvantaged communities (DACs). Regional government PAs are well-suited to address hard-to-reach markets and DACs through deployment of independent yet parallel programs, initiatives, and actions specifically developed to respond to underserved constituents. As a result, the SoCalREN can cross-cut energy efficiency programs onto several pre-existing government frameworks specifically designed for underserved and DAC communities. The SoCalREN has structured its Business Plan strategies to be administratively cost-efficient with a focus on regional government capacities and systems already in-place to address hard-to-reach markets, disadvantaged and vulnerable communities. SoCalREN seeks to address equity concerns by:

- Improving opportunity, and environmental outcomes by enhancing access to energy resources for disadvantaged, rural, and underserved/vulnerable communities
- Leveraging public agencies as ambassadors for EE in under-resourced, HTR communities
- Emphasizing the delivery of programs and services in communities that have been subjected to disproportionate impacts from one or more environmental hazards, socio-economic burdens, or both

- Funneling public investment to positively impact customers and contractors in historically marginalized groups
- Focusing program recruitment, training, and education to benefit diverse youth and contractors

Building Energy Capacity and Economic Resilience

SoCalREN's core value to build energy capacity and economic resilience aligns with the CPUC's market support segment; associated SoCalREN services delivered to participants support the long-term success of the energy efficiency market through education, training, and partnerships. Building energy capacity knowledge and skills across public agencies, businesses, contractors, and transitional age youth leads to energy competency, policies, or other infrastructure that yield long term economic benefits. Since SoCalREN launched its program offerings in 2013, building capacity has been a central focus of its portfolio design.

SoCalREN's public sector portfolio will continue to provide public agencies with the tools and resources to implement short-term beneficial energy actions, set long-term goals to create ongoing energy bill savings, facilitate reinvestment into their communities, and spur local jobs. The residential programs will increase energy awareness and guide contractors and customers to engage in energy efficiency which in turn feeds the green economy. WE&T programs will provide critical job skills to disadvantaged workers and youth that will build the local workforce. Commercial programs will engage with business owners to educate them about energy-conscious business practices and increase awareness of the relationship between EE, business operations, and sustainable long-term growth for small and medium businesses

SoCalREN believes it is imperative that through building energy expertise and capacity, communities can build long-lasting, strong, self-sufficient economies that not only persist despite climate impacts but flourish as a result of its clean energy investments. SoCalREN will continue to ensure that energy capacity and economic resilience persists by implementing the following over the long-term:

- Assisting communities to withstand economic shocks through EE savings, workforce development, and financing to help build stronger local communities;
- Develop EE and DER deployment roadmap to strengthen the resilience of critical community infrastructure;
- Create a foundation for sustained smart energy management by fostering both management and staff's knowledge, ability, and willingness to integrate strategic energy decisions into their workflow;
- Help customers navigate rapidly changing landscape to develop and adopt advance energy codes and achieve decarbonized buildings and communities;
- Create systematic improvements along the entire permitting process to improve energy code compliance, including staff training for advanced energy codes;
- Feeding the green economy through energy savings and capital for EE improvements;
- Building a robust and diverse EE workforce through strategic partnerships that drive growth in local, diverse communities;
- Driving investment in EE improvements with low-interest financing offerings;
- Educating and increasing awareness regarding EE programs and technology;

- Utilizing marketing, education, training, mentoring, and partnerships helps to increase EE awareness and program familiarity, empowering participants to take full advantage of SoCalREN programs;
- Educating agencies and contractors to create a culture of energy competency;
- Increasing awareness and guiding contractors and customers in leveraging EE programs;
- Developing pathways for high school students and opportunity youth to pursue careers in EE, and;
- Educating customers and contractors about smart EE investment strategies to maximize return on investment (ROI).

Figure 5. SoCalREN Portfolio

Resource Acquisition

Deliver Energy & Climate Impacts

A C F P R

- Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings.
- Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported service.

P

- Channeled energy and GHG reductions (claimable by IOUs) due to SoCalREN's guided and supported services.

Market Support

Build Energy Capacity & Economic Resilience

A C P

- Increased awareness and knowledge of energy efficient measures, products or services.
- Reduction in barriers to participation through program coordination support.

A C F P R

- Access to capital for green energy and energy saving projects.

A R W

- Contractors better equipped to enable energy efficiency savings.

Equity

Expand Access to EE Benefits

A C F P R W

- Equity-targeted populations served by SoCalREN programs.

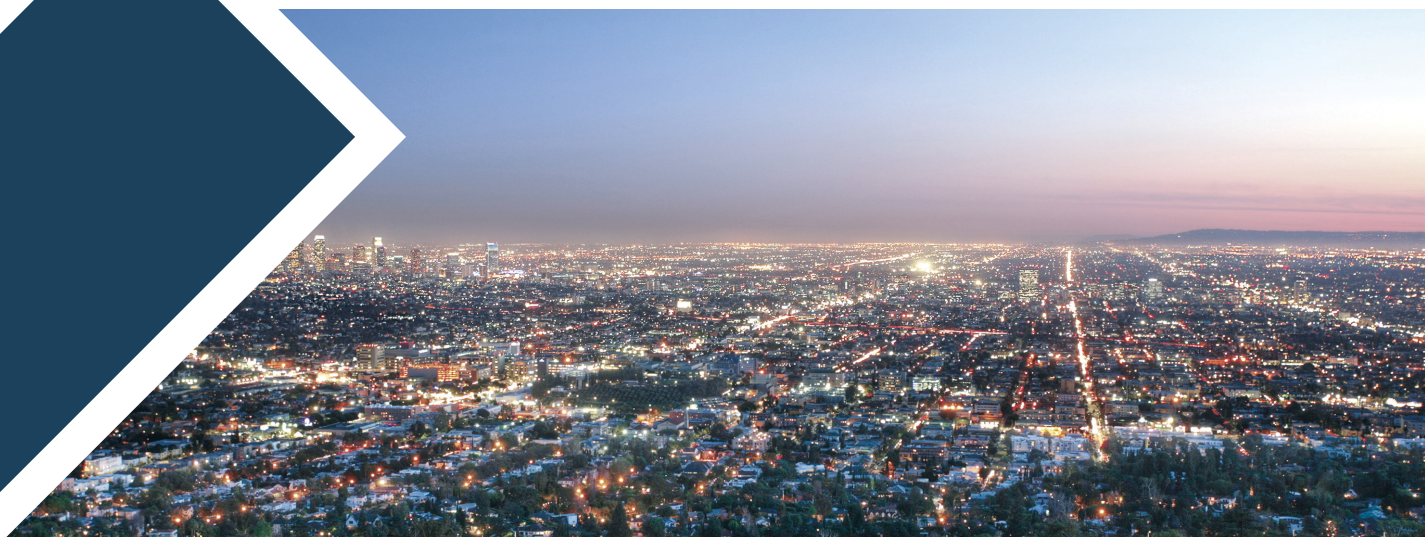
A C F P R

- Energy savings in equity-targeted populations.
- Utility bill savings in equity-targeted populations.

A W

- Inclusion of diverse workers in EE workforce.

A Agriculture C Commercial F Finance P Public Agencies R Residential W Workforce Education & Training



4. SoCalREN'S SEGMENTATION STRATEGIES

The SoCalREN long term segmentation strategy for its energy efficiency portfolio is a balanced approach across resource acquisition, equity, and market support. SoCalREN agrees with the Commission that market support and equity activities have been reduced or eliminated from portfolios across the state due to the increased pressures of having to achieve cost-effective overall portfolios. SoCalREN's eight-year Business Plan has been segmented to support long-term value of programs for which the primary focus is not only to achieve energy savings, but to help underserved communities, support equity goals, enable long-term market success, or to channel opportunities toward resource programs.

The success of lasting energy efficiency will not only depend on resource acquisition programs that can achieve immediate energy savings, but also to efforts that will support the longer-term success of the energy efficiency market while meeting the environmental and social justice needs that are critical to California. The SoCalREN's portfolio approach to metrics, portfolio segmentation, and cost effectiveness will enable long-term energy efficiency planning and help California achieve its climate goals such as those in SB 350 and Environmental Justice Action Plan goals set forth by the Commission.

SoCalREN Business Plan portfolio is segmented into the three proposed portfolio segments of resource acquisition, market support, and equity. Through a symbiotic relationship, all three segment categories work together to accomplish the SoCalREN's long term vision in which communities are actively shaping a safe, secure, resilient, and affordable clean energy future. SoCalREN's current market support and equity programs are designed to provide the needed services to channel energy savings opportunities to resource acquisition programs. Figure 6 is an illustrative example of how SoCalREN's portfolio segmentation works.

Codes & Standards is not categorized as one of the three segments and is not incorporated into the discussion below. SoCalREN's approach to C&S can be found under sector strategies.

Resource Acquisition

Since its inception, the SoCalREN has utilized both resource and non-resource strategies that have contributed to providing significant energy savings to both the EE industry and its industry partners (i.e., IOU Partners). SoCalREN resource programs have performed comparably and in certain elements, exceed that of its IOU-PA peers. The SoCalREN is committed to be comparably cost-effective as other actors' resource programs provided, they are similar in delivery channels and customer segments. SoCalREN's resource strategies are not only an essential element in meeting the aggressive state legislative energy efficiency objectives over the next 8 years but also an essential element to meeting the needs of the constituents and communities it serves. Furthermore, it is key pillar to SoCalREN's unique value - prioritizing climate action and delivering impact. Table 4 outlines SoCalREN's 8-year outlook resource acquisition strategies, goals, and outcomes.

Table 4. SoCalREN Resource Acquisition Goals, Strategies, and Outcomes

GOAL: Achieve over 519 GWH of annual net electric savings and 5.9 million Therms of natural gas savings resulting in 3.6 million GHG emission reductions.	
STRATEGY:	**OUTCOME:**
• Support California's energy efficiency and greenhouse gas emissions goals by implementing custom, deemed, NMEC, and direct install resource programs for all sectors.[6]	• Local and state energy and climate goals are achieved and cost savings realized by residential, public agency, agricultural, and commercial customers

GOAL: Engage community members to go beyond traditional measure replacement practices.	
STRATEGY:	**OUTCOME:**
• Provide detailed technical assistance and audits that provide NPV analysis regarding proposed projects.	• Greater project completion rates occur due to customers positive cost benefit analysis.
• Provide performance based and tiered incentives that drive customers to implement measures with high efficiency and high grid impacts.	• Customer capital cost hurdle overcame through project cost buy downs resulting in greater # of projects completed annually.

[6] Does not include cross-cutting.

GOAL: Drive action into more comprehensive EE projects.	
STRATEGY:	**OUTCOME:**
• Require multiple measures be installed per project for incentive programs.	• Increased number of measures installed thus higher savings per project achieved.
• Deploy direct install market interventions to overcome project implementation hurdles in hard to reach and disadvantaged communities.	• Increased number project completion rates for rural and hard to reach customers thus resulting in greater GHG reductions for vulnerable communities.
• Incentivize projects based on grid lifetime GHG emission reductions to encourage deeper and more comprehensive projects.	• Customers reduce GHG emissions through deep energy retrofits that create sustained energy savings with high grid impact.

GOAL: Enable community members and community leaders to benefit from decarbonized energy future.	
STRATEGY:	**OUTCOME:**
• Drive incorporation of all DERs by leveraging external, non-ratepayer funded, resources granted to the SoCalREN through state grants and federal funding to provide DER audits, technical assistance, and incentives.	• Increased number of shovel ready IDSM projects implemented resulting in the realization of a clean energy communities.
• Couple EE resource programs with authorized grant programs managed by the County to deploy bundled DER resource programs.	• Amplified implementation of EE combined with DERs resulting in deep GHG reductions

Budget Allocation

Table 5 summarizes SoCalREN's estimated resource acquisition budget. As SoCalREN implements the portfolio described in this business plan, the budget will be reevaluated over time to respond to market changes, lessons learned, and regulatory directives. Further details on these changes will be reflected in SoCalREN's "true-up" Compliance filing as dictated by D.21-05-031.

In developing these budgets, SoCalREN has factored in a nominal increase in funding per year beyond year 2027 to account for program cost increases typically incurred over a contracts cycle such as cost of labor and materials. While an increase in funding may not be necessary each year based on program performance, participation, and overall REN performance. The next application process will allow for these budgets to reflect more recent cost forecast and address these issues accordingly in 2026.

Table 5. Resource Acquisition Budget by Sector

Sector	2024	2025	2026	2027	2028	2029	2030	2031
Residential	$10,958,319	$11,925,713	$12,865,766	$13,680,027	$15,514,838	$17,066,322	$18,772,954	$20,650,250
Public	$5,062,195	$6,429,223	$7,799,266	$8,980,696	$9,926,541	$10,919,196	$12,011,115	$13,212,227
Agriculture	$870,030	$1,965,265	$2,326,497	$2,903,261	$3,298,714	$3,628,586	$3,991,444	$4,390,589
Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WE&T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C&S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	**$15,990,544**	**$19,220,202**	**$21,741,529**	**$23,963,241**	**$26,979,277**	**$29,677,205**	**$32,644,925**	**$35,909,417**

Market Support Programs

Since its inception the SoCalREN has utilized both resource and non-resource strategies that have contributed to providing significant energy savings to both the EE industry and its industry partners (i.e. IOU Partners). SoCalREN non-resource programs have been historical leaders in achieving aggressive attributable savings by providing essential gap filling support services that are necessary for resource acquisitions programs. These support services and strategies have been critical in moving projects from inception to completion. In addition, they not only support project activity but the energy efficiency industry as a whole and provide key value propositions that are essential to driving clean energy communities. SoCalREN's market support strategies are not only an necessary element in meeting the aggressive state legislative energy efficiency objectives over the next 8 years but also an essential element to meeting the needs of the constituents and communities it serves. Furthermore, it is another key pillar to SoCalREN's unique value—build energy capacity and economic resilience. Table 6 outlines SoCalREN's 8-year outlook market support goals, strategies, and outcomes.

Table 6. SoCalREN Market Support Goals, Strategies, and Outcomes

GOAL: Increased demand for energy efficient products or services among SoCalREN targeted groups.	
STRATEGY:	**OUTCOME:**
• Provide customers access to their energy usage data, assist in benchmarking and provide support so they are knowledgeable about program/project opportunities.	• Public agency staff (trainees) have knowledge to make long-term decisions about energy management and drive deeper energy savings. • Agriculture and property owners customers can achieve deeper energy savings.
• Provide sectors projects comprehensive project support services (that would not otherwise occur) are initiated and completed by because of SoCalREN guidance and support (e.g., leveraging resource programs)	• Public Agencies have financial savings available to re-invest into the community. • Pubic agencies are provide shovel ready projects that get implemented and possibly leverage federal funding opportunities thus improving communities exponentially.

GOAL: Contractors (as part of the supply chain) better equipped to enable energy efficiency savings.	
STRATEGY:	**OUTCOME:**
• Provide contractors foundational knowledge/skills to work in EE (from Level 1 training) and equip contractors to participate in SoCalREN/IOU projects and have knowledge/skills to submit/contribute projects (Level 2 – project-based training).	• Drives a deeper pool of eligible contractors able to participate in IOU programs. • More availability of contractors will allow for customers more choice thus drive more projects to completion.
• Provide contractors customized knowledge, skills and organizational capacity (e.g., certifications) to compete in EE projects.	• Drives a deeper pool of contractors including small businesses to participate in EE projects bids.

GOAL: Access to capital for green energy and energy saving projects.	
STRATEGY:	**OUTCOME:**
• Provide public agencies and agriculture loans that support green energy projects.	• Overcomes capital access barrier to EE projects.
• Leveraged non-CPUC funds (in $) for investment in the community.	• Public Agencies have financial savings available to re-invest into the community.

GOAL: Provide tactics currently not offered by other PAs that support the EE industry.	
STRATEGY:	**OUTCOME:**
• Leverage external funding that can amplify existing market support services, for example offering wrap around services to the disadvantaged workforce so they may enter the EE workforce.	• Leveraging external funding will lessen the burden on ratepayer funds while simultaneously amplify the outcomes SoCalREN can produce and the services it can provide.
• Provide Youth and transitional adults with industry certified training and industry internships/job placement/paid work experience.	• Tapping into an underrepresented and largely available workforce will help provide a supply of skilled workforce that will be able to meet the long term demand of the upcoming clean energy market, specifically EE.

Budget Allocation

Table 7 summarizes SoCalREN's estimated market support budget. As SoCalREN implements the portfolio described in this business plan, the budget will be reevaluated over time to respond to market changes, lessons learned, and regulatory directives. Further details on these changes will be reflected annually in SoCalREN's "true-up" Compliance filing.

In developing these budgets, SoCalREN has factored in a nominal increase in funding per year beyond year 2027 to account for program cost increases typically incurred over a contracts cycle such as cost of labor and materials. While an increase in funding may not be necessary each year based on program performance, participation, and overall REN performance. The next application process will allow for these budgets to reflect more recent cost forecast and address these issues accordingly in 2026.

Table 7. Market Support Budget by Sector

Sector	2024	2025	2026	2027	2028	2029	2030	2031
Public	$11,478,094	$13,119,565	$13,979,646	$14,478,113	$16,000,694	$17,600,764	$19,360,840	$21,296,924
Commercial	$2,100,000	$1,159,960	$1,216,000	$1,300,000	$1,430,000	$1,573,000	$1,730,300	$1,903,330
Agriculture	$650,000	$725,000	$800,000	$800,000	$880,000	$968,000	$1,064,800	$1,171,280
Financing	$500,000	$580,000	$608,000	$650,000	$715,000	$786,500	$865,150	$951,665
WE&T	$1,060,000	$1,110,000	$1,120,000	$1,130,000	$1,243,000	$1,367,300	$1,504,030	$1,654,433
Residential	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C&S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	**$15,788,094**	**$16,694,525**	**$17,723,646**	**$18,358,113**	**$20,268,694**	**$22,295,564**	**$24,525,120**	**$26,977,632**

Equity

SoCalREN's highest priority is serving the most underserved, disadvantaged and vulnerable communities. It is critical to these communities that strategies be deployed that serve to reduce their utility burden while also contributing the advancement of environmental justice, reduced GHG and better air quality. The Covid-19 pandemic has revealed that communities facing the most economic disparity also face the most disparity in environmental justice, health and well-being. By deploying tactics that help combat barriers to EE project implementation or entry into the industry, the SoCalREN is ensuring that inequities are reduced or albeit eliminated for those with the largest disparity. Table 8 outlines SoCalREN's 8-year Equity segment strategies, goals and outcomes.

Table 8. SoCalREN Equity Goals, Strategies, and Outcomes

GOAL: Equity-targeted populations served by SoCalREN programs.	
STRATEGY:	**OUTCOME:**
• Target underserved, rural, HTR and provide strategies that overcome long term barriers (i.e. incentives, direct install interventions, etc).	• Environmental and Non-Energy Benefits achieved.
• Expand further into rural or other areas in region that were not comprehensively served due to lack of funding.	• Increased awareness of the relationship between energy efficiency, operations, and sustainable long term growth for public agencies, agriculture customers, small businesses and MF property owners in EJ communities.
• Leverage regional partnerships that can provide targeted support to the most vulnerable communities.	• Drives deeper community engagement thus building trust on state and local programs thus driving more participation by EJ communities.
• Continue offering multi-language services and tools thus building confidence with the most underserved and vulnerable communities.	• Greater engagement of an underserved segment that results in a larger pipeline of completed projects. • Taps into a large potential not currently be targeted.

GOAL: Energy savings in equity-targeted populations.	
STRATEGY:	**OUTCOME:**
• Provide additional incentives exclusive to DACs/HTR communities and their members.	• Deeper energy savings are able to be achieved by HTR and DAC members/communities.
• Provide detailed close out in multi-language as well as offer SPOCs.	• A persistence of savings that results in reduced GHG and better air quality for EJ communities.

GOAL: Utility bill savings in equity-targeted populations.	
STRATEGY:	**OUTCOME:**
• Provide no cost measures installed and other tactics that allow EJ communities to implement EE.	• Utility savings are realized and mitigate macroeconomic impacts to the most vulnerable communities and struggling customers.
• Provide NPV assessments that tie the cost benefit analysis of EE.	• Will drive customers to see EE as a long term financial benefit thus resulting in community members to identify additional opportunities.

GOAL: Inclusion of diverse workers in EE workforce.	
STRATEGY:	**OUTCOME:**
• Provide Small and WMDVBE contractors training through workshops, classes, or customized mentoring that enables them to compete in EE project Bids as well as IOU programs.	• Provides more diversity to the current contractor pool not only for SoCalREN but all PAs and the industry as a whole. • Provides the opportunities for SM and diverse business growth opportunities.
• Provide certified training, on-the-job training and full wrap around services to obtain employment in the EE industry for disadvantaged workers—Women, Minorities, Re-entering citizens and at risk youth.	• Reduction of income and wealth disparities among DACs and vulnerable community members. • Removes barriers and serves to make the EE current and future workforce more diverse. • Provides intergenerational prosperity.

Budget Allocation

Table 9 summarizes SoCalREN's estimated equity budget. As SoCalREN implements the portfolio described in this business plan, the budget will be reevaluated over time to respond to market changes, lessons learned, and regulatory directives. Further details on these changes will be reflected annually in SoCalREN's "true-up" Compliance filing.

In developing these budgets, SoCalREN has factored in a nominal increase in funding per year beyond year 2027 to account for program cost increases typically incurred over a contracts cycle such as cost of labor and materials. While an increase in funding may not be necessary each year based on program performance, participation, and overall REN performance. The next application process will allow for these budgets to reflect more recent cost forecast and address these issues accordingly in 2026.

Table 9. Equity Budget by Sector

Sector	2024	2025	2026	2027	2028	2029	2030	2031
Public	$2,727,096	$4,130,372	$5,466,356	$7,333,363	$8,228,897	$9,051,787	$9,956,966	$10,952,662
Commercial	$3,295,854	$7,143,294	$5,265,348	$9,314,943	$10,342,586	$11,376,844	$12,514,529	$13,765,982
Agriculture	$1,159,750	$2,603,624	$3,424,547	$3,779,031	$4,328,438	$4,761,282	$5,237,410	$5,761,151
Financing	$500,000	$580,000	$608,000	$650,000	$715,000	$786,500	$865,150	$951,665
WE&T	$1,530,000	$1,600,000	$1,700,000	$1,750,000	$1,925,000	$2,117,500	$2,329,250	$2,562,175
Residential	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C&S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	**$9,212,700**	**$16,057,291**	**$16,464,250**	**$22,827,337**	**$25,539,921**	**$28,093,913**	**$30,903,305**	**$33,993,635**

5. SoCalREN'S SECTOR STRATEGIES

Public Sector 8-Year Strategic Plan

California's clean energy future is fast approaching, and public agencies play a critically important role in achieving resource integration, comprehensive energy savings, and a reduction of greenhouse gas (GHG) emissions to meet the State's aggressive energy and climate goals. Unleashing the potential of the public sector to lead by example and motivate action is key to charting the pathway to a clean energy community future, particularly within underserved communities.

A clean energy community offsets its annual energy usage through the equivalent generation of renewable energy and intelligent management of energy demand to achieve a low to zero carbon footprint.[7]

By focusing on the design and development of clean energy communities and creating appropriate metrics and milestones to measure progress, public agencies can implement solutions that consider all of the sources and uses of energy within their boundaries, identify the best approaches for coordinated energy project investments, and leverage broader opportunities and greater benefits for their citizens. Moreover, agencies can support local job and economic growth by investing in

[7] Carlisle, N., Van Geet, O., Pless, Shanti, "Definition of a Zero Net Energy Community," National Renewable Energy Laboratory, Technical Report NRE? TP-74A2-46065, November 2009.

clean energy projects and lead by example to inspire similar progress throughout neighboring communities.

Achieving these milestones requires a focus on the distinctive needs and requirements of the public agency customer. Public agencies, particularly those serving underserved communities, face unique challenges and barriers that include limited technical resources and expertise to identify, develop and implement projects, inadequate and limited access to data about building performance, financing hurdles, unique procurement requirements, multi-step decision-making processes, and managing political environments, among others.[8]

As an entity managed by the public sector for the public sector, SoCalREN is uniquely suited to overcome these barriers and unlock the potential for public agency energy leadership and collective energy actions.

Public Agency Milestones on the Pathway to a Clean Energy Community

- Agency is aware of their energy usage, energy costs, and GHG consumption across their owned assets;
- Agency has developed a local energy resilience action plan as a roadmap for addressing clean energy and GHG reductions;
- Agency is knowledgeable and actively engaged in supporting energy efficiency (EE) and clean energy within their community or communities, and;
- Agency has completed EE and DER upgrades in its own buildings and facilities.

SoCalREN is helping realize its vision by providing public agencies with the expertise, resources, and support they need to create a safe, secure, and resilient energy future that is decarbonized, diversified, and decentralized. Since this requires support and assistance to public agencies that is broader and more comprehensive than what is currently available through the California Public Utilities Commission (CPUC)-authorized EE portfolio of SoCalREN and the IOUs, SoCalREN successfully leverages outside resources through various grants, local project funding, and other sources to supplement, enhance, and expand the energy and GHG impacts of the public sector programs. For example, Los Angeles County secured funding through the CEC to offer distributed energy resource technical assistance to enhance the outcomes of the Distributed Energy Resources Disadvantaged Community Project Delivery program (DER DAC).

SoCalREN serves public agencies with a focus on those who lack the experience or resources to pursue EE without support. Its offerings are available to over 700 cities, counties, tribes, school districts, water districts, wastewater districts, and other special districts within the Southern California Edison (SCE) and Southern California Gas (SoCalGas®) service territories.

Public Sector Goals, Strategies, and Outcomes

Public agencies have the unique potential to lead their communities by example and set the foundation of community resilience by creating cost savings through clean, reliable energy projects that benefit the local economy and inspire local action. SoCalREN's public sector strategies will unleash this potential and drive carbon reductions by maximizing opportunities and motivating customers to adopt more comprehensive EE and DER approaches that are characterized by deeper, longer-lasting savings.

[8] Bain, R., and Rothschild. L., "Driving Energy Efficiency in the Public Sector," ACEEE White Paper, 2016.

Table 10. Public Sector Goals, Strategies, and Outcomes

GOAL: Increased uptake of high value EE and DER projects in public agency owned facilities, with a focus on project implementation in underserved communities and critical facilities.	
STRATEGY:	**OUTCOME:**
• Deliver comprehensive, objective, and no-cost project management services from energy benchmarking and project identification through procurement, financing, and construction completion. • Expedite delivery of energy savings projects and address public agency procurement and funding barriers by providing turnkey, direct installation of no-cost EE measures.	• Local climate and energy goals are achieved and public agencies receive cost savings and resiliency benefits.

GOAL: Agencies develop and adopt strategic energy resilience action plans as a roadmap for addressing clean energy and GHG reductions.	
STRATEGY:	**OUTCOME:**
• Provide public agencies with a plan to identify and inform community-wide and regional activities that support state, regional, and local energy and GHG goals. • Identify energy supply and usage patterns, identify high and low carbon intensity times and locations and grid reliability concerns, and identify the best opportunities for energy efficiency, DER, and GHG mitigation actions.	• Long-term strategies are implemented that align with public agency energy goals that lead to energy, financial, avoided GHG emissions and other community benefits.

GOAL: Programs offered fill gaps in the market to ensure that underserved communities are not left behind in the clean energy transition.	
STRATEGY:	**OUTCOME:**
• Deliver expedited deemed and custom energy savings projects to underserved customers through a streamlined application process that cuts down on processing times and enables public agencies to implement projects sooner and reduce the costs of delay.	• Underserved communities gain increased access to EE benefits from cost savings to non-energy benefits like improved health and safety.

GOAL: Local trusted regional experts, SoCalREN's regional partners, support the design and implementation of innovative, targeted programs and strategies that meet the unique needs of public agencies in their geographic spheres of influence.	
STRATEGY:	**OUTCOME:**
• Enable Regional Partners develop and test innovative intervention strategies to meet the diverse needs of local communities. As appropriate, scale successful initiatives to other regions.	• Improved uptake of energy programs among served special populations.

GOAL: Public agencies are aware of their energy usage, energy costs, and GHG consumption across their owned assets.	
STRATEGY:	**OUTCOME:**
• Provide public agencies with access to benchmarking tools, reports, and training to improve staff's ability to better manage their energy consumption, plan projects, and ensure energy savings achieved persist over time.	• Increased energy capacity, competency, and economic resilience across public agencies.

To balance the public sector portfolio, SoCalREN developed strategies with a focus on an equitable distribution across the new program segmentations as defined by the CPUC in D.21-05-031 which include resource acquisition, market support, and equity. While each program is designated in a primary segment, key objectives of other segments are intertwined throughout to ensure that public agencies receive comprehensive support to meet local climate and energy needs and priorities.

Metrics

The SoCalREN public sector metrics are designed to align with SoCalREN's core values and deliver unique benefits to the sector.

The portfolio's core values are intertwined to serve participants while supporting California's carbon reduction goals. In alignment with the core values, SoCalREN will assess its accomplishments through the metrics outlined in Table 11.

Budget

The following table provides a summary of SoCalREN's public sector budget. As SoCalREN implements the strategies described, the budget and programs offered will be evaluated over time to respond to market changes, needs of the portfolio, and regulatory directives.

Table 11. Public Sector 8-Year Budget by Segment

Segment	2024	2025	2026	2027	2028	2029	2030	2031
Resource Acquisition	$4,162,195	$5,329,223	$6,549,266	$7,379,953	$8,165,724	$8,982,297	$9,880,526	$10,868,579
Equity	$2,727,096	$4,130,372	$5,466,356	$7,333,363	$8,228,897	$9,051,787	$9,956,966	$10,952,662
Market Support	$11,478,094	$13,119,565	$13,979,646	$14,478,113	$16,000,694	$17,600,764	$19,360,840	$21,296,924
Total	**$18,367,384**	**$22,579,161**	**$25,995,268**	**$29,191,430**	**$32,395,316**	**$35,634,847**	**$39,198,332**	**$43,118,165**

Coordination Between Other Sectors

SoCalREN acknowledges that cross-sector coordination is critical to successfully supporting SoCalREN's overall vision where public agencies and their constituents play an active leadership role in shaping clean energy communities that are safe, secure, resilient, equitable, and affordable. Local governments (LGs) have an immense opportunity and an important role to play in demonstrating how public and private sector organizations can contribute to the State's energy and climate goals. LG's have the significant legal power to improve the way energy is generated and used within their communities over time through land-use policies, building codes and regulations, and broad permitting authority. Additionally, they are well-positioned to engage their citizens and businesses with targeted financial incentives to support and accelerate clean energy actions. Given the role of LGs, the SoCalREN public sector will leverage its relationships with LG participants to support the portfolio's success across sectors through the following actions:

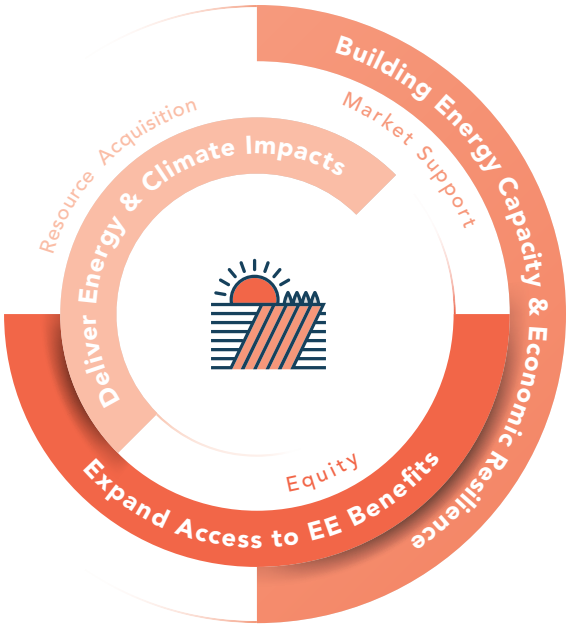
- Coordinate with the SoCalREN Codes & Standards Compliance Enhancement (C&S) program to facilitate introductions and engagement with appropriate LG staff and increase participation rates in the C&S sector;
- Leverage LG communication channels to engage and inspire local businesses and constituents to participate in SoCalREN's Commercial, Residential, Agricultural, and Workforce, Education, and Training (WE&T) programs, and;

Additionally, SoCalREN's cross-cutting sector supports the adoption of EE in public agencies. The SoCalREN Project Delivery Program (PDP) and Pathway to Zero programs market SoCalREN's cross-cutting Revolving Savings Fund (RSF) program so that agencies can take advantage of available financing and develop pipeline projects. Ongoing coordination efforts have supported the success of both the public sector and the cross-cutting sector. In 2021, the full amount of the American Recovery and Reinvestment Act (ARRA) seed funds secured by Los Angeles County as the funding source for the program were fully subscribed as a result of coordinated efforts.

To ensure continuous cross-sector coordination, SoCalREN implements the following strategies:

- Meet quarterly with program implementers for all sectors to share program updates and identify opportunities for collaboration;
- Share program marketing materials and talking points so implementers can address high level, cross-sector questions as they come up with program participants;
- Establish a public sector single-point-of-contact as a referral contact for non-public sector programs, and;
- Develop a clearinghouse of non-public sector single point-of-contacts and other non-public sector program resources to direct customers to if they are identified as non-public sector customers.

Agriculture Sector 8-Year Strategic Plan



SoCalREN's vision for the Agriculture Sector is to support and effectively serve the region's small and medium, rural, disadvantage communities/customers (DAC) as defined by Cal EnviroScreen,[9] to help reduce their energy costs, increase the comfort and health of their indoor environment, and to equip them to sustainably manage their energy and carbon footprint on the pathway to a clean energy community.

The Agriculture (Ag) sector consists of a large and diverse customer base that requires a range of products to address their energy needs. Despite this need, unique offerings and programs have diminished. This is not surprising given the fact that achieving cost effective Ag sector electric savings has become increasingly difficult. Historically it is more difficult to obtain cost-effective savings for small and medium sized facilities and businesses compared to their larger counterparts. CPUC encourages alternative approaches to achieve energy savings among the overlooked hard-to-reach small and medium customer class.[10]

SoCalREN is well positioned and eager to reduce the drop-off in offerings to the cost-effective challenged customer segments and can provide a variety of offerings to fill the gaps. SoCalREN can penetrate often overlooked commercial segments such as the small and medium business customers, with a focus on those classified as hard-to-reach business customers.

SoCalREN recognizes that small and medium Ag Customers are vital to the economic health of southern California, as well as to the well-being of the communities they serve. It is estimated that 3% of Southern California Edison (SCE's) total load or 2,400 GWh is consumed by this sector. If Ag Customers were to undertake strategic energy efficiency (EE) investments, they could reduce their energy usage and utility costs by over 10% to 30% annually without sacrificing service or quality. By becoming more energy efficient, Ag customers can significantly contribute to the reduction in greenhouse gas emissions while also reducing their energy burden. Ag customers must be included in our decarbonized future and should be given meaningful access to the benefits of related programs. Yet, this customer segment is vastly underserved by EE programs that have emphasized short term energy savings and high-cost effectiveness in the large Ag sub-segment. Based on the makeup of current IOU portfolios, the segment will continue to be underserved relative to its market potential for savings and the need for longer term, more sustainable support.

This is further proven by information obtained from CEDARS[11] which we have compiled to demonstrate the last three (3) years (2019-21) claimed savings by the two largest IOUs in CA.

[9] Link: CalEnviroScreen 4.0 | OEHHA

[10] CPUC EE Portfolio Report, May 2018, pp. 36.

[11] Source: https://cedars.sound-data.com/upload/dashboard/list/

Due to the trends in falling TRC, the programs have spent less and achieved less year after year. Furthermore, as compared to the 2022 incremental achievable potential[12] the percent achieved continues to drop. The table below demonstrates this fact and the percent to achievable incremental percentages will drop even further as the potential study indicates increases in achievable potential.

Table 12. IOU Agriculture Sector Summary

Year	IOU	TRC	PAC	Total Expenditures	First Year Net kWh	% of 2022 Incremental Achievable Potential	First Year Net kW	% of 2022 Incremental Achievable Potential
2019	PGE	0.56	1.17	$10,705,082	18,135,463	55%	6,478	59%
	SCE	0.34	0.43	$2,330,112	1,951,946	18%	327	3%
2020	PGE	1.04	1.76	$11,605,850	12,611,015	39%	4,664	43%
	SCE	0.26	0.36	$1,876,806	1,468,257	13%	462	4%
2021	PGE	0.78	1.14	$4,322,100	5,636,238	17%	1,454	13%
	SCE	0.35	0.48	$747,238	599,172	5%	254	2%

Accordingly, the SoCalREN is proposing a portfolio of programs to fill the gaps left by the IOUs' portfolio that include a balance of resource acquisition, market support, and equity programs.

The SoCalREN seeks to learn from previous program interventions offered through the IOUs and leverage best practices from other SoCalREN offerings to offer targeted solutions to reduce energy costs, improve efficiencies with a focus on hard-to-reach customers and disadvantaged communities. SoCalREN's small and medium underserved Ag sector offerings will provide a one-stop shop for Ag customers with readily available resources and standardized tools to facilitate the adoption of long-term EE practices and installation of cost-effective EE measures. Educating and supporting Ag customers to strategically pursue deeper EE investments will not only reduce regional energy cost and carbon emissions but will further align communities with SoCalREN's Core Values of as: delivering energy and climate impacts, building energy capacity and economic resilience, and expanding access to EE benefits within the communities that they serve.

Small and Medium Ag Customer's Milestones on the Pathway to a Clean Energy Community

- Increased engagement with partners to reach DAC Ag customers across the SoCalREN territory;
- Ag customers are aware of their energy usage, energy costs, and the holistic benefits of EE;
- Ag customers have taken action to address clean energy and GHG reductions, and;
- Ag customers incorporates sustained integration of energy-conscience business practices.

[12]Source: 2021 PG Study Results Viewer | Tableau Public

Agriculture Sector Goals, Strategies, and Outcomes

Table 13. Agriculture Sector Goals, Strategies, and Outcomes

GOAL: Facilitate substantial energy and water savings as well as GHG emission reductions.	
STRATEGY:	**OUTCOME:**
• Prioritize program resources to small and medium Ag customers to improve business sustainability through reduced energy costs.	• Complete projects that contribute to local and state sustainability goals.
GOAL: Enroll 200 Ag customers within SoCalREN territory.	
STRATEGY:	**OUTCOME:**
• Deliver comprehensive and no-cost technical and project management services throughout the project lifecycle.	• Build a stronger extended agricultural energy community.
GOAL: At least 60% of claimable SoCalREN Ag energy savings are from DAC and HTR projects.	
STRATEGY:	**OUTCOME:**
• Partner with irrigation districts, rural water agencies and local governments to co-deliver energy and water savings.	• Improve educational, technical, and capital access to the underserved Ag communities.
GOAL: Encourage the adoption and proliferation of EE measures and practices in the Ag sector.	
STRATEGY:	**OUTCOME:**
• Encourage the adoption and proliferation of EE measures and practices in the Ag sector by recognizing local business leaders for excellence in facility energy management.	• Reduce the EE upgrade cost burden for underserved Ag customers.

Budget

The table below summarizes the 2024–2031 funding to implement SoCalREN's three core Agriculture programs. This funding will provide small and medium underserved Agriculture customers the resources needed to identify and implement much needed energy efficiency strategies. SoCalREN is determined to further strengthen the local Agriculture community through achieving impactful energy and water savings.

Table 14. SoCalREN 2024-2031 Agriculture Budget

Program Name	Agriculture Project Delivery Program	Rural-HTR Agriculture Direct Install	Agriculture Retrofit	Totals
Segment	**Market Support**	**Equity**	**Resource Acquisition**	
2024	$650,000	$1,800,000	$1,700,000	**$4,150,000**
2025	$725,000	$3,200,000	$2,100,000	**$6,025,000**
2026	$800,000	$3,700,000	$2,500,000	**$7,000,000**
2027	$800,000	$4,100,000	$3,100,000	**$8,000,000**
2028	$880,000	$4,510,000	$3,410,000	**$8,800,000**
2029	$968,000	$4,961,000	$3,751,000	**$9,680,000**
2030	$1,064,800	$5,457,100	$4,126,100	**$10,648,000**
2031	$1,171,280	$6,002,810	$4,538,710	**$11,712,800**
Total	**$7,059,080**	**$33,730,910**	**$25,225,810**	**$66,015,800**

Coordination Between Other Sectors

To ensure cross-sector coordination, SoCalREN will implement the following strategies:

- Clearly define program eligibility criteria and establish Ag Sector single-point-of- contact as a referral contact for non-Ag programs.
- Develop a clearinghouse of non-Ag Sector single-point-of- contacts and other non-Ag Sector program resources to direct customers to if they are identified as non-Ag Sector customers.
- Coordinate with other sectors on shared midstream and upstream measures, where applicable, to develop a comprehensive and regional approach.

Commercial Sector 8-Year Strategic Plan

SoCalREN's vision for the commercial sector is to support and effectively serve the region's small and medium sized businesses (SMBs), with a focus on those in disadvantaged and hard to reach communities, to help reduce their energy costs, increase the comfort and health of their indoor environment, and to equip them to sustainably manage their energy and carbon footprint on the pathway to a clean energy community.

The commercial sector consists of a large and diverse customer base that requires a range of products to address their energy needs.[13] Despite this need, unique offerings and programs have diminished. This is not surprising given the fact that achieving cost effective commercial sector electric savings has become increasingly difficult.[14] Historically it is more difficult to obtain cost-effective savings for small sized facilities and businesses compared to their larger counterparts. CPUC encourages alternative approaches to achieve energy savings among the overlooked hard-to-reach small commercial business customer class.[15]

SoCalREN is well positioned and eager to reduce the drop-off in offerings to the cost-effective challenged customer segments and can provide a variety of offerings to fill the gaps. SoCalREN can penetrate often overlooked commercial segments such as the small and medium business customers, with a focus on those classified as hard-to-reach business customers.

SoCalREN recognizes that these small and medium businesses (SMBs) are vital to the economic health of southern California, as well as to the well-being of the communities they serve. It is estimated that 44% of all commercial building energy usage in the United States can be attributed to these small businesses.[16] If SMBs were to undertake strategic energy efficiency (EE) investments, they could reduce their energy usage and utility costs by over 10% to 30% annually without sacrificing service, quality, or comfort.[17] By becoming more energy efficient, SMBs can significantly contribute to the reduction in greenhouse gas emissions while also reducing their energy burden. SMBs must be included in our decarbonized future and should be given meaningful access to the benefits of related programs. Yet, this customer segment is vastly underserved by EE programs that have emphasized short term energy savings and high cost effectiveness in the large commercial sub-segment. Based on the makeup of current IOU portfolios, the segment will continue to be underserved relative to its market potential for savings and the need for longer term, more sustainable support. Accordingly, the

[13] "PY2013-2014 Third Party Commercial Program Value and Effectiveness Study Report (Volume 1 of II), Opinion Dynamics Corporation, June 15, 2016, pp. 18-20.

[14] SCE EE Rolling Portfolio Business Plan, pp. 91.

[15] CPUC EE Portfolio Report, May 2018, pp. 36.

[16] NREL Maximizing Energy Savings for Small Businesses. www.nrel.gov/buildings/small-businesses.html. Accessed August 30th, 2021.

[17] Energy Star. Small Businesses: An Overview of Energy Use and EE Opportunities. www.energystar.gov/sites/default/files/buildings/tools/SPP%20Sales%20Flyer%20for%20Small%20Business.pdf

SoCalREN is proposing a portfolio of programs to fill the gaps left by the IOUs' portfolio that include a balance of resource acquisition, market support, and equity programs.

The SoCalREN seeks to learn from previous program interventions offered through the IOUs, and leverage best practices from other SoCalREN offerings to offer targeted solutions to reduce energy costs, improve efficiencies with a focus on hard-to-reach customers and disadvantaged communities. SoCalREN's Commercial Sector offerings will provide a one stop shop for SMB customers with readily available resources and standardized tools to facilitate the adoption of long-term EE practices and installation of cost-effective EE measures. Educating and supporting SMBs to strategically pursue deeper EE investments will not only reduce regional energy cost and carbon emissions but will further align communities with SoCalREN's Core Values of as: delivering energy and climate impacts, building energy capacity and economic resilience, and expanding access to EE benefits within the communities that they serve.

Small and Medium Business Milestones on the Pathway to a Clean Energy Community

- Increased engagement with partners to reach HTR SMBs across the SoCalREN territory;
- SMB is aware of their energy usage, energy costs, and the holistic benefits of EE;
- SMB has taken action to address clean energy and GHG reductions, and;
- SMB incorporates sustained integration of energy-conscience business practices.

Commercial Sector Goals, Strategies, Outcomes

SoCalREN's commercial sector portfolio seeks to deliver strategies that address clear market gaps to deliver outcomes that support the sector goals. SMBs need tailored strategies to successfully contribute to a low carbon, resilient, and equitable clean energy future. SoCalREN addresses this challenge and directly supports California's energy goals and policies through intervention strategies organized around a mix of holistic, regional interventions, and smaller-scale, targeted project interventions with the goal of maximizing energy and GHG savings.

Table 15. Commercial Sector Goals, Strategies, and Outcomes

GOAL: SMBs are aware of their energy usage, energy costs, and the holistic benefits of EE.	
STRATEGY:	**OUTCOME:**
• Participants receive information about energy savings opportunities and the benefits of energy efficiency.	• Participating businesses recognize the relationship between energy efficiency, business operations, and sustainable long-term growth.

GOAL: SMBs take action to address clean energy and GHG reductions.	
STRATEGY:	**OUTCOME:**
• Mitigate out-of-pocket cost barriers for small and medium hard-to-reach businesses by delivering seamless no-cost EE measures and strategies.	• Commercial sector participants achieve energy cost reductions ranging from 10-25% on their utility bills.

GOAL: SMBs incorporate sustained integration of energy-conscience business practices.	
STRATEGY:	**OUTCOME:**
• Encourage the adoption and proliferation of EE measures and practices in the commercial sector by recognizing local business leaders for excellence in facility energy management.	• Businesses adopt more sustainable energy practices in their operations over the long-term.

Budget

Table 16. Commercial Sector 8-Year Budget by Segment

Segment	2024	2025	2026	2027	2028	2029	2030	2031	Total
Equity	$3,295,854	$7,143,294	$5,265,348	$9,314,943	$10,342,586	$11,376,844	$12,514,529	$13,765,982	**$73,019,380**
Market Support	$2,100,000	$1,159,960	$1,216,000	$1,300,000	$1,430,000	$1,573,000	$1,730,300	$1,903,330	**$12,412,590**
Total	**$5,395,854**	**$8,303,254**	**$6,481,348**	**$10,614,943**	**$11,772,586**	**$12,949,844**	**$14,244,829**	**$15,669,312**	**$85,431,970**

Coordination Between Other Sectors

SoCalREN acknowledges that cross-sector coordination is critical to successfully supporting SoCalREN's overall vision and ensuring the success of the Commercial programs, as many customers will be eligible for multiple program sectors. To ensure cross-sector coordination, SoCalREN will implement the following strategies:

- Clearly define program eligibility criteria and establish Commercial Sector single-point-of- contact as a referral contact for non-commercial programs.
- Develop a clearinghouse of non-Commercial Sector single-point-of- contacts and other non-Commercial Sector program resources to direct customers to if they are identified as non-Commercial Sector customers.
- Coordinate with other sectors on shared midstream and upstream measures, where applicable, to develop a comprehensive and regional approach.

Residential Sector 8-Year Strategic Plan

SoCalREN recognizes that the residential sector plays a key role towards achieving California's energy efficiency, grid resilience, and decarbonization goals. The SoCalREN region is home to more than 20 million residential customers that account for over one-third of electricity and almost one-quarter of natural gas usage in the region. SoCalREN's vision for this sector is to increase focus on customers in sub-segments who have not traditionally been served as part of other Portfolio Administrators' program offerings. SoCalREN's Residential portfolio will focus on residents in the underserved, hard-to-reach, and disadvantaged communities of southern and central California, and will provide services, incentives, and support needed to help them manage their energy use to reduce waste and lower their energy costs and put California on a path to meet its 2045 climate goals.

SoCalREN's focus on the residential sector is rooted in our core values:

1. **Delivering Energy and Climate Impacts.** Contribute to local climate action and sustainability goals by installation of GHG-reducing electric and gas saving EE measures and leveraging additional funding opportunities to bring more comprehensive DER (i.e., EV charging, solar water heating and electric PV) solutions to the region.

2. **Build Capacity and Expertise and Economic Resilience.** Engage local contractors to increase their knowledge, skills, and abilities to deliver comprehensive energy services and position them to better help their customers manage their environmental footprint. Simultaneously, increase customer awareness about how to reduce energy use while improving indoor comfort and overall quality of life through energy efficiency improvements and how to work with their contractor base to procure energy services. Help residential customers reduce their monthly energy cost and help provide a higher degree of economic security a better quality of life. Local economies are boosted by the new jobs created when contractors can offer more services and increase sales of program-supported equipment/measures.

3. **Expand Access to EE Benefits.** Target rural and HTR customers who have been historically underrepresented in DSM programs, allowing them access to cost reduction strategies, incentive funds and valuable services to help them continue to save on their energy bills. In addition, incorporate innovative pilot activities focused on small multifamily customers to demonstrate comprehensive iDSM strategies such as energy efficiency, rooftop solar, energy storage and EV charging technologies and ensure that these disadvantaged communities fully benefit from California's energy and environmental policies.

In carrying out our Vision, it is SoCalREN's objective to seek out and fill gaps in the IOU's portfolios with innovative approaches to ensure that a majority of the region's residential customers have access to the technical and financial support they need to benefit from California's investment in climate action. With nearly half of the region's residents living in multifamily buildings, and with most of those categorized as either Hard-to-Reach, or located in a Disadvantaged Community, our proposed portfolio focuses mainly on these multifamily buildings and the residents who live there, offering a variety of services and financial support that benefit both building owners and their tenants.

Residential Sector Goals, Strategies, and Outcomes

Table 17. Residential Sector Goals, Strategies, and Outcomes

GOAL: Support California's energy efficiency and greenhouse gas emissions goals.	
STRATEGY:	**OUTCOME:**
• Achieve over 30 GWH of annual net electric savings and 1.4 million therms of natural gas savings.	• Energy savings goals are achieved, and cost savings realized by tenants and property owners.
GOAL: Expand access to contracting trades that serve the multifamily segment.	
STRATEGY:	**OUTCOME:**
• Achieve 10 percent compound annual growth in the number of participating contractors over 8 years.	• Vibrant contractor network available to support multifamily customer base with energy efficiency services.
GOAL: Achieve program savings through comprehensive DER retrofits.	
STRATEGY:	**OUTCOME:**
• Integrate EV charging, PV and solar water heating into overall program offering.	• Increased engagement, participation, and satisfaction from multifamily customer segment.
GOAL: Improve health and comfort of ESJ communities.	
STRATEGY:	**OUTCOME:**
• Achieve at least 80 percent of program results from DAC and HTR customers by 2031.	• ESJ communities benefit from improved environmental conditions and monthly cost savings resulting from energy retrofit projects.

Budget

Table 18. Residential Sector 8-Year Budget

2024	2025	2026	2027	2028–2031	Total
$10,958,319	$11,925,713	$12,865,766	$13,680,027	$72,004,365	**$121,434,190**

Coordination Between Other Sectors

The residential sector coordinates with the Public and Workforce Education and Training sectors to achieve sector-level goals. Specific areas of coordination include:

- Public Sector – The Kits for Kids program leverages relationships with local school districts established through the Public Agency program. The Public Agency program has been successful at making connections with civic leaders and engaging school districts in energy efficiency retrofits. These connections can help to introduce Kits for Kids to school districts that have already demonstrated a commitment to energy efficiency.
- Workforce Education and Training – A key barrier to delivering energy efficiency savings to the multifamily sector is the lack of a well-trained contractor network to serve the unique needs of this sector. Multifamily properties are generally too small for large contracting firms that focus on commercial accounts and too large for small contractors that focus on residential. Working in collaboration with Workforce Education and Training, the Residential Sector can help deliver technical training to better position contractors for serving multifamily customers.

WE&T 8-Year Strategic Plan

The SoCalREN Workforce Education and Training (WE&T) sector consists of programs to address the barriers and gaps disadvantaged and hard-to-reach communities face when entering the EE field. It is positioning itself to meet the demand not only for energy efficiency but also for skilled labor and contractors to perform the work. California's clean energy targets are even more aggressive, through the Paris Climate Accord alone, the US has pledged 100% clean energy and net zero emissions by 2050. In order to achieve these goals, it will require increasing the capacity and bringing together a fragmented energy efficiency ecosystem of building owners, contractors, and workforce.

The SoCalREN WE&T sector serves as the leader in meeting the changing targets and standards needed to achieve these renewable goals by increasing the size, skills, and diversity of the EE labor force to ensure effective implementation of the state's EE goals. Specifically, the E-Contractor Academy Program trains and provides technical assistance to SMWDVBE firms to perform EE projects while statistically saving public agencies money when contracting with small and diverse businesses. The ACES Pathway and Green Path Careers programs help to diversify the pool of local and skilled workers in the EE field by providing the necessary training to overcome initial barriers. The WE&T Opportunity HUB was created to serve as the focal point for all program participants to have the one-stop shop needed when accessing resources and opportunities, as well as serve as the umbrella for the Regional Workforce Alliance. The Ag-WE&T intervention will develop a reliable, diverse, and highly skilled Ag workforce to deliver high-quality agricultural EE services to the SoCalREN region. In result, the Regional Workforce Alliance serves to strengthen and align public, private, and community-based programs to develop quality career jobs and business opportunities for disadvantaged communities of color in the clean energy sector.

WE&T Sector Goals, Strategies, and Outcomes

The WE&T Sector aims to leverage a unique opportunity to create a labor/worker pipeline to meet the supply and demand in EE while strengthening the number and diversity of skilled workers and contractors at all levels of the DSM and EE industry. SoCalREN will focus on meeting CPUC'supplier diversity objectives and on workforce education and training of disadvantaged communities, leveraging federal and local government resources to do so

Table 19. WE&T Sector Goals, Strategies, and Outcomes

GOAL: Organize SoCal EE delivery system.	
STRATEGY:	**OUTCOME:**
• Establish Regional WE&T Opportunity HUB to serve as opportunity clearinghouse.	• Strengthened EE/Clean Energy workforce and small business ecosystems and programs. • Increased number of skilled workers and businesses in EE sector.
GOAL: Increase employer participation in WE&T program.	
STRATEGY:	**OUTCOME:**
• Implement the Regional Workforce Alliance; Involve direct engagement of the EE industry and employers in program design and implementation.	• Strong pipeline between disadvantaged contractors/workers to clean energy projects and careers.
GOAL: Increase EE career awareness and exposure within DAC.	
STRATEGY:	**OUTCOME:**
• Regional training network of community-based training partners with YouthBuild USA, Conservation Corps, Urban League, etc.	• Increased workforce diversity and inclusion of the EE sector. • Increase participation of residents from HTR/DAC communities in EE careers.
GOAL: Expand access to structured EE career pathways.	
STRATEGY:	**OUTCOME:**
• Multi-path curricula development with partners and community college.	• Diversity in the EE and broader ACE sector. • DAC/HTR populations pursuing college and career pathways in EE.
GOAL: Increase the capacity of MWDBEs to compete and perform EE projects.	
STRATEGY:	**OUTCOME:**
• Increase contractor training, coaching and technical assistance.	• Increased public and private EE projects awarded to small, women-owned, MWDBE and DAC businesses. • Increased penetration of EE programs and services within DAC and HTR communities.

Objectives

- Expand employer engagement in program design and implementation.
- Increase EE career awareness within DACs.
- Increase multi-skill pathways for in-school and out-of-school youth from disadvantaged communities through education, training, internships, and jobs in EE.
- Expand the technical, financial, and organizational capacity of small and disadvantaged contractors to acquire and perform EE projects that support REN's residential and public sector programs and other projects within the IOU service area.
- Strengthen jobs and business opportunities for disadvantaged communities by establishing regional Clean Energy (EE/RE) HUBS (virtual and physical) as resource centers that connect/network workers and contractors to on-going information, resources, training, jobs, and project opportunities.
- Increase building operational efficiencies through a capacity building program and a regional energy management training program.

Sector Outcomes

SoCalREN's WE&T programs help the IOUs meet their goal of doubling energy efficiency (EE) savings by 2030 while increasing the diversity of the utility/EE sector by overcoming the barriers/challenges connecting workers and contractors from DAC to EE training, jobs, and business opportunities. SoCalREN WE&T programs will specifically organize the Southern California workforce education and training and small business eco-systems to meet the technical demands of the IOUs, including energy savings, demand response, GHG emissions reductions, clean energy generation, and other Zero Net Energy strategies. Industry-defined basic and advanced skills training will be standardized to provide DACs with career pathways and contractor capacities in such areas as: 1) construction/EE retrofits, 2) energy professional certifications, and 3) sales/customer service, with a focus on IDSM marketing.

Budget

Table 20. WE&T Sector 8-Year Budget

2024	2025	2026	2027	2028–2031	Total
$2,590,000	$2,710,000	$2,820,000	$2,880,000	$14,702,688	**$25,702,688**

Finance 8-Year Strategic Plan

Financing tools are becoming increasingly important to the success of energy efficiency (EE) programs. The California Public Utility Commission (CPUC) already mandates that investor-owned utilities (IOUs) implement financing. SoCalREN embraces the growing role of EE financing by building on and complementing the success of existing programs and services.

SoCalREN helps program participants overcome financing barriers to the implementation of EE projects. Typical barriers include: lack of capital for energy projects, customer aversion to taking "on-balance sheet" debt, staff capacity to complete applications and post-installation documentation, and access to funding to cover full project costs of an EE project. To overcome these barriers, SoCalREN services include providing financial analyses, incentive application support, access to financing, and grant application support.

A significant challenge for most customers is how to pay for EE projects. Access to funding has historically been one of the biggest barriers to energy retrofits. The IOUs have addressed this barrier by offering incentives, rebates, and on-bill financing; however, these products have significant limitations. For example, customers typically receive these funds several months after projects are completed. The delays in receiving incentive and OBF funds from the utilities require an agency to on their own separately secure 100% of the capital needed for an energy efficiency project before construction can commence. In some cases, customers may have to wait up to one to two years from the start of a project to receive their incentive payment and/or on-bill financing allocation. In addition, some customers may be interested in pursuing EE projects that are not eligible for on-bill financing and incentives. Given these challenges, many projects are left stranded and not completed until funding is identified and allocated to the projects.

IOU funding offerings are useful for customers that have their own funds to commit ahead of reimbursement but have limited utility for customers with limited and/or constrained financial resources. This situation can be particularly acute for customers in hard to reach (HTR) and underserved communities. A significant opportunity exists to support EE project funding for these customers by providing upfront loan funds and filling the gaps in the programs offered by the IOUs.

SoCalREN's cross-cutting business plan finance offerings fill the gap for the public sector and agricultural customers through loan programs that provide access to upfront funds that cover 100% of the construction cost. The fund is replenished through payments by participating customers which typically come from the utility bill savings generated by the project. The capital resources in the revolving savings fund are therefore self-perpetuating over time.

These financing services are offered alone or in conjunction with other SoCalREN services, such as project management and other technical assistance through SoCalREN's public sector and agricultural sector programs. SoCalREN's approach provides specialized information and expert analysis that is objective and transparent including customized financial advisory services to ensure projects are bundled appropriately and that all available funding sources are evaluated. SoCalREN also provides assistance to the customer in completing and submitting their financing applications to ensure the maximum amount of required funding required for their project(s) is secured.

This approach complements and fills gaps in SCE and SCG offerings and encompasses a coordinated effort among all the PA's that aims to ensure a seamless one-stop process for the customer and the sharing of best practices and lessons learned among the PAs.

Finance Cross-Cutting Goals, Strategies, and Outcomes

Table 21. Finance Cross-Cutting Goals, Strategies, and Outcomes

GOAL: Provide access to low cost of capital and low risk financing solutions for energy efficiency projects for SoCalREN participants.	
STRATEGY:	**OUTCOME:**
• Provide customers with up-front capital needed to finance and install energy efficiency projects through a streamlined program participation experience.	• Participants tackle projects sooner and receive the benefits of reduced energy consumption and carbon emissions.
GOAL: Stimulate and increase overall underserved customer participation in SoCalREN programs, and accelerate project development and implementation.	
STRATEGY:	**OUTCOME:**
• Overcome barriers to participation in financing programs by supporting financial decision-makers with the development, submission, and management of financing applications.	• More underserved participants complete energy savings projects as a result of support to overcome financing barriers to EE.
GOAL: Build awareness of the lifecycle financial benefits of low cost financing options as a funding source for energy efficiency projects and services.	
STRATEGY:	**OUTCOME:**
• Conduct marketing and outreach to increase awareness of funding and financing sources and financial benefits of low-cost of capital finance options.	• Increased long-term knowledge and expertise about both the lifecycle benefits of low-cost financing options and project cost savings through deliverables, workshops, and meetings that lead to continued interest and motivation to complete EE projects.

Budget

The following table provides a summary of SoCalREN's finance sector budget. These budgets will be evaluated over time to respond to market changes, portfolio needs, and regulatory requirements.

Table 22. Finance Sector 8-Year Budget

2024	2025	2026	2027	2028	2029	2030	2031	Total
$1,000,000	$1,160,000	$1,216,000	$1,300,000	$1,408,500	$1,512,265	$1,621,769	$1,767,528	**$10,986,062**

Coordination Between Other Sectors

SoCalREN acknowledges that cross-sector coordination is critical to successfully supporting SoCalREN's overall vision where communities are actively shaping a safe, secure, resilient, and affordable clean energy future. Given the nature of the cross-cutting programs to provide access to capital for EE projects supported by both the public sector and agricultural sector, the programs will coordinate closely with the program implementers to share marketing collateral, engage participants, and develop a pipeline of projects that are in need of financing.

To ensure continuous cross-sector coordination, SoCalREN implements the following strategies:

- Meet quarterly with program implementers for all sectors to share program updates and identify opportunities for collaboration;
- Share program marketing materials and talking points so implementers can address high level, cross-sector questions as they come up with program participants, and;
- Establish a public sector single-point-of-contact as a referral contact.

Codes & Standards 8-Year Strategic Plan

SoCalREN's codes and standards (C&S) sector envisions a future in which the C&S community effectively delivers the critically important co-benefits of proper and correct permitting and compliance at a scale needed to achieve the state's energy goals for new and existing construction.

The C&S community—namely planning and building department staff, developers, and contractors—plays a pivotal role in ensuring compliance with standards so that SoCalREN's goals can be realized. The C&S community needs help navigating the rapidly advancing landscape of policies, programs, and resources available to help it meet and exceed state mandates, and adopting cost-effective strategies to achieve decarbonized zero net energy (ZNE) buildings and communities through the use of accurate and actionable data to inform C&S decisions. The C&S program is a cross-cutting program, but SoCalREN's C&S interventions should nonetheless result in increased energy savings that will benefit other SoCalREN, SCE, and SoCalGas program efforts.

Codes & Standards Goals, Strategies, and Objectives

SoCalREN will design all Codes and Standards (C&S) interventions within a framework for creating decarbonized zero net energy (ZNE) communities. SoCalREN seeks to accelerate local government leadership in energy efficiency (EE), ZNE, and greenhouse gas (GHG) goals through their regulatory authority over construction and land use. SoCalREN will also build local government capacity for the development, adoption and implementation of model energy codes, standards, and policies that will improve the energy performance of existing buildings and new construction on both a mandatory and voluntary basis.

Table 23. Codes & Standards Goals, Strategies, and Outcomes

GOAL: More accurate and more actionable access to data available from local government electronic permit systems.	
STRATEGY:	**OUTCOME:**
• Needs assessment research to identify permitting trends, gaps and barriers.	• Compilation and evaluation of transparent and more accurate permitting and compliance data will drive better energy performance in new and existing buildings.

GOAL: Web-based training modules for agency staff, virtual workshops, specialized compliance and enforcement information, and customizable assistance from an Energy Code Coach.

STRATEGY:	OUTCOME:
• Provide targeted resources, tools and training to local governments, including an Energy Code Coach.	• Better compliance with energy code requirements, reduced energy use in new and existing buildings, and greater number of high energy performance buildings.

GOAL: Code cycle update workshops, online forums for peer-to-peer learning, "Ask an Expert" resource, climate zone specific HPWH and electrification information, online clearinghouse for high performance building tools and case studies, and online and in-person training.

STRATEGY:	OUTCOME:
• Provide targeted resources and tools to C&S stakeholders (contractors, developers, building owners, etc.)	• Raised energy awareness, improved adherence to energy codes and standards, reduced energy use in new and existing buildings, and greater number of high energy performance buildings.

GOAL: Identification of agencies with best advanced energy code adoption opportunities, targeted planning and technical assistance for advanced energy code development, and regional coordination services for code development and adoption efforts.

STRATEGY:	OUTCOME:
• One-stop end-to-end support to individual jurisdictions, including planning and technical assistance, to design and adopt advanced energy codes, buildings emissions performance standards (BEPS), and benchmarking and audit ordinances/ regulations.	• Growing number of local governments who are playing a leadership role and have adopted advanced energy codes, standards, practices, and/or requirements to create higher performing buildings and support local Energy Resilience Action Plan initiatives.

GOAL: Easy to access database on age and characteristics of building stock and community energy profile baselines, and development of tools and technical assistance to provide reliable ongoing access to accurate C&S data by jurisdiction.

STRATEGY:	OUTCOME:
• Leverage existing data sources and existing data tracking and analysis tools to provide a shareable platform for baseline energy data and for measuring and analyzing impacts from code compliance and code development Interventions.	• Establish a solid understanding of the age, characteristics and energy profiles of the building stock to enable more significant, impactful, and verifiable interventions to improve overall building energy performance.

Budget

The following is a summary of SoCalREN's Codes & Standards budget. As SoCalREN implements the intervention strategies described above, the budget and program designs will be continuously evaluated to respond to market changes; evolving needs of the SoCalREN portfolio; legislative, policy and regulatory directives; and technological advancements.

Table 24. Codes & Standards 8-Year Budget

2024	2025	2026	2027	2028	2029	2030	2031	Total
$650,000	$720,000	$810,000	$800,000	$880,000	$968,000	$1,064,800	$1,171,280	**$7,064,080**

Coordination Between Other Sectors

SoCalREN acknowledges that cross-sector coordination is critical to successfully supporting SoCalREN's overall vision where public agencies and their constituents play an active leadership role in shaping clean energy communities that are safe, secure, resilient, equitable, and affordable. Local governments (LGs) have an immense opportunity and an important role to play in demonstrating how public and private sector organizations can contribute to the State's energy and climate goals. LG's have the significant legal power to improve the way energy is generated and used within their communities over time through land-use policies, building codes and regulations, and broad permitting authority. Additionally, they are well-positioned to engage their citizens and businesses with targeted financial incentives to support and accelerate clean energy actions. Given the role of LGs, the SoCalREN C&S program will leverage its relationships with LG participants to support the overall portfolio's success across sectors through the following actions:

- Coordinate with SoCalREN public sector programs to facilitate introductions and engagement with appropriate LG staff and increase participation rates in applicable SoCalREN programs.
- Leverage LG communication channels to engage and inspire local businesses and constituents to participate in SoCalREN's portfolio of programs.

To ensure continuous cross-sector coordination, SoCalREN implements the following strategies:

- Meet quarterly with program implementers for all sectors to share program updates and identify opportunities for collaboration;
- Share program marketing materials and talking points so implementers can address high level, cross-sector questions as they come up with program participants, and;
- Develop a clearinghouse of SoCalREN program resources for information and referrals of C&S program participants to additional SoCalREN program participation opportunities.

6. SoCalREN'S 8-YEAR PORTFOLIO BUDGET

Annual Portfolio Budget

SoCalREN has proposed a comprehensive portfolio of energy efficiency programs which builds on past successes and fills gaps left by traditional energy efficiency programs. Overall, SoCalREN has expanded market support program access to underserved customers to ensure increased adoption of energy efficiency, designed equity programs that fill voids in disadvantaged communities, and proposed targeted resource acquisition programs where IOUs have been either unwilling or unable to.

Table 25 below summarizes SoCalREN's estimated 8-year portfolio budget. The budget was built using a program level zero-based bottoms-up budget for the first four-year cycle and then adjusted at a fixed rate annually for portfolio years 2028-2031. The annual adjustment for those portfolio years was developed based on anticipated escalations in costs as well as the anticipated ability to deliver against more aggressive targets as programs are launched. As illustrated in the four-year Portfolio Plan, both inflation and lasting impact of the COVID-19 pandemic are anticipated to affect costs of programs over the long-term. SoCalREN will carefully assess the actual escalations in costs and needs for increased budgets when developing the next portfolio application to be submitted in February of 2026. Additionally, as SoCalREN implements the portfolio described in this business plan, the budget will be reevaluated over time to respond to market changes, lessons learned, and regulatory directives. Further details on these changes will be reflected annually in SoCalREN's "true-up" compliance filing as dictated by D.21-05-031.

Table 25. SoCalREN Annual Budget Request 2024–2031

2024	2025	2026	2027	2028	2029	2030	2031	Total
$43,383,761	$54,895,359	$59,112,203	$68,706,028	$76,748,020	$84,422,822	$92,864,832	$102,151,616	**$582,284,641**

Budget by Market Segment

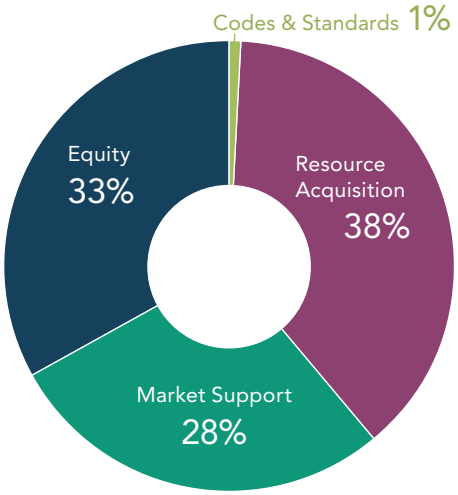
SoCalREN will continue its proven approach to market support and equity program implementation but will complement its portfolio with resource acquisition programs designed to fill gaps in the portfolio and target hard to reach customers. These programs are designed to deliver total system benefits (TSB), which will increase over the 8-year term of the proposed portfolio. As such, SoCalREN has carefully designed a balanced portfolio of resource acquisition, market support, equity, and codes and standards programs across public, residential, commercial, agricultural, codes and standards, workforce, education, and training, and finance sectors. These programs will build on a decade of growth, trust, and influence in the communities served by SoCalREN and fill gaps left by other program administrators.

SoCalREN's portfolio is principally balanced between Market Support, Equity, and Resource Acquisition programs, with a small non-resource Codes and Standards program being offered to accelerate code adoption. Although the Resource Acquisition program portfolio represents approximately 37% of the total budget, nearly half of that is expected to be allocated to customer incentives.

Table 26. Budget Distribution by Segment

Market Segment	2024-2031 Budget ($)
Resource Acquisition	$206,126,340
Market Support	$162,631,388
Equity	$183,092,353
Codes & Standards	$7,064,080
Subtotal	$558,914,161
EM&V	$23,370,474
Total	**$582,284,641**

Figure 6. SoCalREN 2024-2031 Budget Distribution by Segment



Budget by Sector

SoCalREN has effectively supported underserved public and residential sector customers with energy efficiency programs and services since 2013. These programs have channeled considerable savings into partner IOU programs, and have been supplemented with workforce, education, and training opportunities which both enable the delivery of energy efficiency projects, but also provide employment opportunities to disadvantaged populations. As these programs have grown and cost burdens on local government and their constituents have increased, there is an immediate need for increased funding to deliver incremental value to underserved ratepayers.

As the number of public agencies served by SoCalREN has grown to 201 enrolled agencies, of which 152 are considered underserved, SoCalREN has grown the public sector offerings to meet

the unique needs of this important customer sector. SoCalREN has further expanded the residential sector with targeted equity and market support programs. These were specifically designed to reduce the financial burden of COVID and inflation either where no IOU programs are being offered or in targeted hard-to-reach customer sub-sectors. SoCalREN is further proposing to leverage its large network of public agencies and its established position as a program administrator to fill gaps in underserved commercial and agricultural customer sectors, filling a multi-year gap left by current program portfolios. SoCalREN's WE&T, Finance, and C&S sectors are designed to provide targeted support in specific energy efficiency market sectors and address equity gaps in line with the CPUC Environmental and Social Justice Action Plan.

Table 27. Budget Distribution by Sector

Sector	2024	2025	2026	2027	2028	2029	2030	2031	Total
Residential	$10,958,319	$11,925,713	$12,865,766	$13,680,027	$15,514,838	$17,066,322	$18,772,954	$20,650,250	**$121,434,191**
Public	$18,367,384	$22,579,161	$25,995,268	$29,191,430	$32,395,316	$35,634,847	$39,198,332	$43,118,165	**$246,479,903**
Commercial	$5,395,854	$8,303,254	$6,481,348	$10,614,943	$11,772,586	$12,949,844	$14,244,829	$15,669,312	**$85,431,970**
Agriculture	$2,679,780	$5,293,889	$6,551,044	$7,482,292	$8,507,152	$9,357,867	$10,293,654	$11,323,020	**$61,488,698**
Financing	$1,000,000	$1,160,000	$1,216,000	$1,300,000	$1,430,000	$1,573,000	$1,730,300	$1,903,330	**$11,312,630**
WE&T	$2,590,000	$2,710,000	$2,820,000	$2,880,000	$3,168,000	$3,484,800	$3,833,280	$4,216,608	**$25,702,688**
C&S	$650,000	$720,000	$810,000	$800,000	$880,000	$968,000	$1,064,800	$1,171,280	**$7,064,080**
EM&V	$483,785	$611,603	$658,767	$765,137	$854,744	$940,218	$1,033,967	$1,137,664	**$6,485,885**

Total System Benefit by Sector

SoCalREN has designed the 2024-2031 portfolio to deliver a combination of market support and equity goals as well as resource acquisition goals measured as TSB. TSB is expected to surpass resource acquisition program budgets beginning in the second year of the 8-year cycle and gradually increase over time. By the end of 2031, TSB is expected to be nearly two-fold the resource acquisition budget and almost 80% of the total projected SoCalREN budget, including market support and equity segment programs which are designed to meet different policy objectives.

Figure 7. SoCalREN Forecasted 2024-2031 TSB ($) vs. Portfolio and Resource Acquisition Budgets

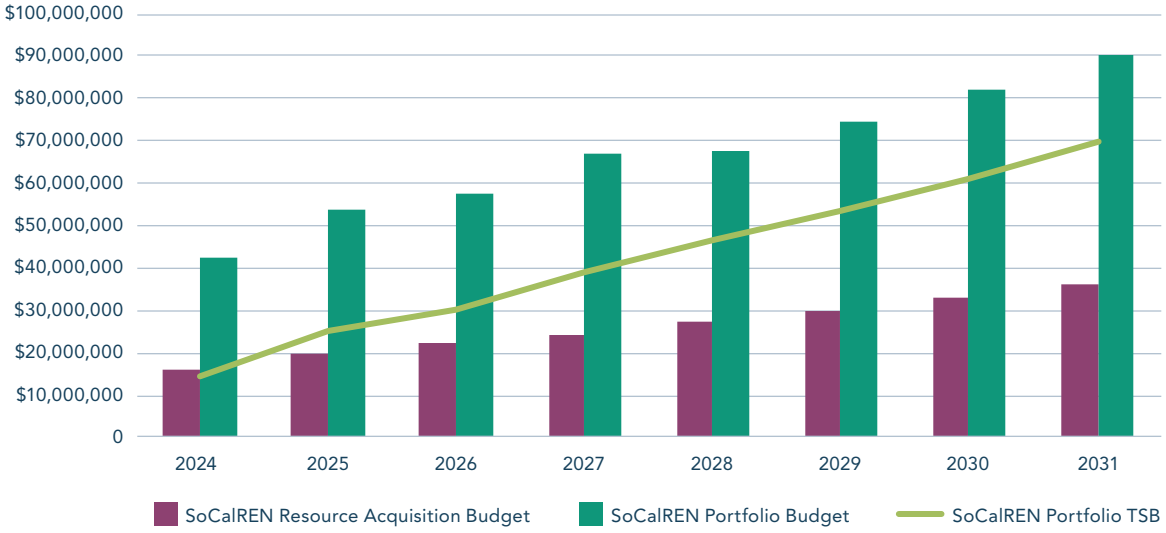


Table 28 below presents TSB at the sector level over the 8-year portfolio cycle.

Table 28. SoCalREN Forecasted 2024-2031 Sector and Portfolio-Level Total System Benefits ($)

Sector	2024	2025	2026	2027	2028	2029	2030	2031	Total
Residential	$6,871,306	$8,741,469	$9,674,352	$15,853,191	$18,847,077	$21,530,073	$24,530,383	$27,966,771	**$134,014,622**
Public	$4,919,503	$8,909,013	$10,968,906	$11,811,526	$14,015,142	$16,143,859	$18,501,361	$21,265,912	**$106,535,222**
Commercial	$173,244	$498,506	$527,028	$643,163	$762,633	$870,575	$986,377	$1,123,006	**$5,584,532**
Agriculture	$2,433,217	$6,686,498	$9,117,756	$10,864,623	$12,870,109	$14,837,777	$17,042,630	$19,635,786	**$93,488,396**
Financing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WE&T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C&S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	$14,397,270	$24,835,486	$30,288,042	$39,172,503	$46,494,961	$53,382,284	$61,060,751	$69,991,475	**$339,622,772**

Energy Savings

SoCalREN's portfolio of gap filling programs will deliver energy savings principally through the targeted resource acquisition programs, but also in part as part of secondary objectives of both market support and equity programs. The following table illustrates the projected savings over the course of the 8-year portfolio cycle.

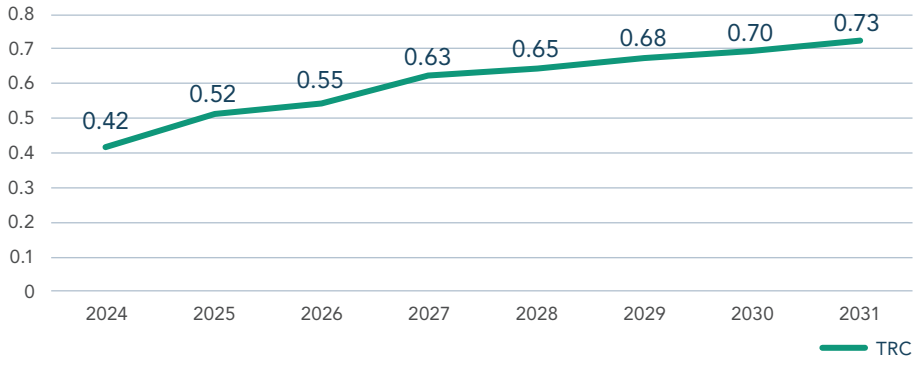
Table 29. Project Energy Savings Over 8-Year Portfolio Cycle

	Net GWh	Net MW	Net Therms
2024	23.8	9.0	405,363
2025	43.2	18.3	516,143
2026	56.9	27.8	709,038
2027	64.7	31.0	709,946
2028	71.1	34.1	780,941
2029	78.2	37.5	859,035
2030	86.1	41.3	944,939
2031	94.7	45.4	1,039,433
Total	**518.6 GWh**	**244.3 MW**	**5,964,838 Therms**

Cost-Effectiveness

Although RENs are not required to achieve a specific cost-effectiveness metric given the nature of their portfolios and their primary purposes, SoCalREN believes it is important to be as cost-efficient as possible in the use of rate-payer funds when targeting resource acquisition activities, even if they are in areas that have been historically underserved. SoCalREN will strive to meet an increasing cost-effectiveness target through its strategies and optimization practices deployed throughout the business plan period. Figure 8 shows the anticipated cost-effectiveness for SoCalREN's resource acquisition programs over the course of the 8-year portfolio. SoCalREN strongly advocates for continued accountability and will work to show progress regarding cost-effectiveness.

Figure 8. SoCalREN Resource Acquisition Portfolio TRC Forecast



7. SoCalREN STRATEGIC 8-YEAR PORTFOLIO UNIQUE VALUE METRICS

SoCalREN presents its proposed value metrics that quantifiably measure the progress and support of meeting its overall goals and core values. The value metrics provided in this document are the quantifiable measurements of each SoCalREN core value categories that demonstrate SoCalREN's impacts to reduce GHG emissions and increase energy savings. Each metric is a measurement, intended to directly speak to the value that SoCalREN provides to the State and the communities it serves.

SoCalREN is proposing value metrics for each sector regarding each category as well as portfolio value metrics that are represented within each sector thus are applicable REN-wide (portfolio wide). The proposed value metrics by sector provide a bottom up approach in assessing:

1. The progress each sector's programs are contributing to the overall mission/objectives of SoCalREN; and

2. Reveal the unique value each sector's programs contain.

Through this exercise SoCalREN quickly identified that even at the program level there were unique characteristics that are not necessarily quantifiable REN-wide however, are significantly impactful and thus are key to demonstrating the unique value and benefit of that SoCalREN sector program.

Since these metrics have not been formally reported in prior years, SoCalREN intends to utilize 2020 as a baseline year (a year to collect 12 months' worth of data). Once 2020 program year data is finalized and reported, SoCalREN will work to develop targets for the near, mid and long-term future. First year baseline will be included in SoCalREN's 2019 Annual Compliance Report. SoCalREN aims to have targets established and included in either the next ABAL or Business Plan filing (whichever may occur first).

Included below in summary are SoCalREN's proposed value metrics at the portfolio level. Sector unique value metrics have also been identified which will gauge the measurable progress of each sector program and are being proposed but due to the long list are not included in this document. Instead, they can be found in the SoCalREN's 2021 ABAL Budgetary Appendix under the tab titled "SCR UVM" (please note there are multiple tabs that support the summary SCR UVM tab).

To properly measure and ensure accountability of sector progress toward meeting portfolio objectives, SoCalREN's business plan proposes a set of key metrics for each sector and cross-cutting program activity. To properly monitor progress toward the desired outcome over time, the metrics will rely on qualitative and quantitative data collected, tracked, and verified as part of SoCalREN's data requirements (e.g., number of agencies, customer participation). This data collection will assist in improving the accuracy and timeliness of metric tracking for both the program administrator and the CPUC, while keeping the monitoring costs at reasonable levels. Sector metrics and targets may change over the 8-year rolling portfolio cycle, as SoCalREN and its implementers deliver programs and learn more about market characteristics and responsiveness to intervention strategies.

Table 30 summarizes SoCalREN's metrics by sector and the attributed metric source as well as the expected implementation horizon.

Table 30. Portfolio Metrics by Sector

Core Value	Segment	Portfolio-level Value Metric	Measurement	Methodology	Detailed Measurement	2024	2025	2026	2027	2028-2031
Delivering Energy & Climate Impacts	Resource Acquisition	Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings	GHG reductions - as well as kWh/therms/kW - claimed by SoCalREN	kWh, kW, therm, GHG (metric tons) savings inclusive of SoCalREN resource program claimed savings only. Installed net 1st year Savings.	kWh savings	21,595,747	38,744,208	53,868,239	56,082,961	256,312,435
					kW savings	8,700	17,726	26,730	29,231	133,338
					therm savings	365,450	436,084	590,807	584,818	2,985,552
					GHGs emissions avoided (metric tons)	5,570	9,032	12,708	13,851	64,931
		Channeled (not claimable by SoCalREN) energy and GHG reductions	GHG reductions - as well as kWh/therms/kW - from projects supported by SoCalREN	kWh, kW, therm, GHG savings (metric tons) installed **excluding** SoCalREN resource program savings. Installed gross 1st year Savings.	kWh savings	14,735,252.00	8,353,437.00	3,376,426.00	8,243,051.00	32,972,204.00
					kW savings	1,473.53	835.34	337.64	824.31	3,297.22
					therm savings	20,000.00	25,000.00	30,000.00	35,000.00	140,000.00
					GHGs emissions avoided	3,135.15	1,849.73	853.10	1,880.04	7,520.15
Build Economic Energy Capacity, Competency & Resilience	Market Support	Increased demand for energy efficient products or services among SoCalREN targeted groups	Cumulative # Ag Customers that receive energy coaching through SoCalREN	Count of unique Ag Customers that receive direct energy education services from Agricultural SoCalREN programs		125	150	200	250	1000
			Cumulative # SMBs that receive energy coaching through SoCalREN	Count of unique SMBs that receive direct energy education services from Commercial SoCalREN programs		170	180	190	200	800
			Total number of contractors mentored - territory-wide			15	18	19	30	34
			# contractors trained through Level 1 (ALL and by diversity category), ave. training hours per participant, knowledge gain (from survey effort)	Knowledge gain would come from Level 1 survey effort completed by implementer.		100	100	100	100	400
			# receiving skill certificates by type of certificate	• Industry-recognized skill certificates with East LA CC and high school/college credit • SOLIDWORKS Associate Certification • BPI Certifications/MF Energy Audit skills or other certification		25	35	45	60	200
			# of interns/internships; survey of interns to understand knowledge or competencies gained Career plans for transitional adults in Green Path Careers (from earlier outcome); Youth who express interest in future green career # of job placements; survey	This is a newer effort. Data was not reviewed but would be reviewed in 2022 WE&T process evaluation.		20	30	40	50	175
					Total Covered Participants	**455**	**513**	**594**	**690**	**2609**
			# Ag Customer projects delivered for energy savings	Count of Ag Customer EE projects completed		250	300	400	500	2000
			# SMB projects delivered for energy savings	Count of SMB EE projects completed		340	360	380	400	1600
					Total Covered Projects	**590**	**660**	**780**	**900**	**3600**
		Access to capital for green energy and energy saving projects	# projects where external (non-IOU) financing was leveraged by MF properties due to support by SoCalREN	Count of projects where a loan was used; Cumulative value of loans in dollars		3	3	3	4	19
				Total $ leveraged		$126,696	$140,370	$141,332	$210,924	$893,264
				Source of external (non-IOU) financing - Private		3	3	3	4	19
				# projects where external (non-IOU) financing was leveraged by SoCalREN		10	16	25	38	145
				Total $ leveraged		$100,000	$160,000	$250,000	$380,000	$1,450,000
				Source of external (non-IOU) financing - State		10	16	25	38	145
Expand Access to EE Benefits	Equity	Equity-targeted populations served by SoCalREN programs	Total # HTR Ag Customers participating in SoCalREN programs	Count of Ag Customers that enroll in a SoCalREN Agricultural program that are categorized as HTR		50	60	80	100	400
			DAC, HTR and underserved MF are served	# of participating properties - DAC		41	52	61	105	511
				# of participating properties - Rural/HTR		117	150	174	203	917
				# of tenant units served - DAC		8,122	10,461	12,184	20,963	102,171
				# of tenant units served - Rural/HTR		2,926	3,739	4,362	5,067	22,933
			Total # HTR SMBs participating in SoCalREN programs	Count of SMBs that enroll in a SoCalREN Commercial program that are categorized as HTR		16	21	24	42	204
			*Partnerships expand access for Small or WMDVBE (or contractors/ future workers classified as disadvantaged)	# partners and type of partner; description of benefits		12	12	12	14	50
		Inclusion of diverse workers in EE workforce	Small and WMDVBE contractors are trained through workshops, classes, or customized mentoring		# trained; # mentored	100	100	100	100	400
					# receive new certifications as a result of SoCalREN support. These are "agency" certifications based on ownership structure. For example, contractors have to prepare financial docs for DVBE certification.	25	25	25	25	100
		Energy savings in equity-targeted populations	* Regional Partners engage MF DAC/HTR/underserved		# of partnerships	4	4	4	4	4
					# of participating contractors in HTR (rural) or underserved areas made aware of the program due to the partner's marketing	1	1	2	2	4
					# of participating buildings in HTR (rural) or underserved areas made aware of the program due to the partner's marketing	21	42	63	84	210
			*Projects expand into rural or other areas in region that were not previously served (i.e., underserved)		Total incentive payments - DAC	$1,772,506	$2,285,375	$2,653,481	$4,335,861	$21,131,931
					Total incentive payments - Rural/HTR	$948,750	$1,212,292	$1,423,125	$1,633,958	$5,348,352
					Total project costs - DAC	$2,954,177	$3,808,959	$4,422,468	$7,226,435	$35,219,885
					Total project costs - Rural/HTR	$948,750	$1,212,292	$1,423,125	$1,633,958	$5,348,352
			DAC/HTR owners, as well as DAC tenants, save energy and reduce GHG		GHG reduced from equity targeted areas	35	45	53	61	276
					kWh (net) reduced from equity targeted areas	35,641	45,542	53,129	61,716	279,302
					kW (net) reduced from equity targeted areas	13	16	19	22	101
					Therms (net) reduced from equity targeted areas	1,904	2,432	2,859	3,274	14,818
			Public agencies in DAC or underserved areas save energy and reduce GHG	kWh, kW, therm, GHG savings supported **excluding** SoCalREN resource program savings. Gross 1st year Savings.	kWh savings	8,800,000	9,600,000	10,000,000	10,400,000	41,600,000
					kW savings	1,012	1,120	1,223	1,203	4,813
					therm savings	42,972	51,990	105,842	66,340	265,362
					GHGs emissions avoided	2,037	2,249	2,617	2,490	9,958
		Additional benefits in equity-targeted populations while supporting green energy and energy saving projects	Utility bill savings in equity-targeted populations	*DAC/HTR owners, as well as DAC tenants, save on their utility bill	Estimated annual bill savings by DAC/HTR owner	$3,400	$3,400	$3,400	$3,700	$3,800
					Estimated annual bill savings by the average DAC/HTR tenant	$200	$200	$200	$180	$180
	Codes & Standards	Building energy capacity & economic resilience	Increased demand for energy efficient products or services among SoCalREN targeted groups	Better compliance with energy code requirements, reduced energy use in new and existing buildings, and greater number of high energy performance buildings	# of jurisdictions receiving C&S services and assistance	7	15	20	30	45
					% of increased code compliance and permit closeout in participating jurisdictions	15.00%	15.00%	15.00%	15.00%	15.00%
			Communities are better equipped to facilitate energy efficiency savings	C&S stakeholders have the tools and assistance necessary to enhance codes and standards policies	# of local governments using SoCalREN data evaluation tools & assistance to enhance C&S activities and policies	3	15	25	35	45
		Delivery energy & climate impacts	Energy and GHG reductions due to SoCalREN's innovative or gap filling program offerings	Support, design, and adoption of buildings emissions performance standards and benchmarking and audit ordinances/regulations	# of local governments adopting advanced energy codes, standard, or policies	2	4	6	8	10

8. SoCalREN PORTFOLIO COORDINATION

SoCalREN has a long history of coordination with the Investor-owned Utilities (IOU) Program Administrators (PAs) within the same service territory, Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). In 2021, SoCalREN expanded collaboration to new statewide and third-party programs. In addition, SoCalREN plans to continue coordinating with new PAs in the territory such as new Regional Energy Networks (RENs) or Community Choice Aggregators (CCAs). This ongoing collaboration is key to the efficiency of all potentially overlapping programs. For the duration of the Business Plan, SoCalREN will continue to coordinate with other PAs through various strategies and channels.

IOU and IOU Third Party Coordination

SoCalREN coordinates closely with the overlapping IOU PAs, SCE and SoCalGas, to ensure seamless customer communication and avoid duplication of services. This is thoroughly documented on an annual basis through the Joint Cooperation Memo (JCM), filed as a Tier 2 Advice Letter (AL) pursuant to Decision (D.) 18-05-041.

In addition to the JCM, SoCalREN has established a set of protocols for coordinating with the IOUs when engaging public agencies to ensure a seamless customer experience for the agency and to avoid confusion about roles and responsibilities. These protocols are established with program implementation teams and updated regularly as new programs are launched or evolve that serve the public sector. Similar protocols will be established for other sectors as needed.

Several SoCalREN intervention strategies support channeled savings to resource programs led by the IOUs or third-party program implementers. SoCalREN works closely with the IOUs and the appropriate implementers that serve these customers to ensure that SoCalREN can flag projects claimed by resource programs external to SoCalREN. SoCalREN will continue to bring this same level of coordination and cooperation as the program expands into the new and enhanced services outlined in this Business Plan to ensure that SoCalREN's services continue to be complementary and not duplicative of IOU programs.

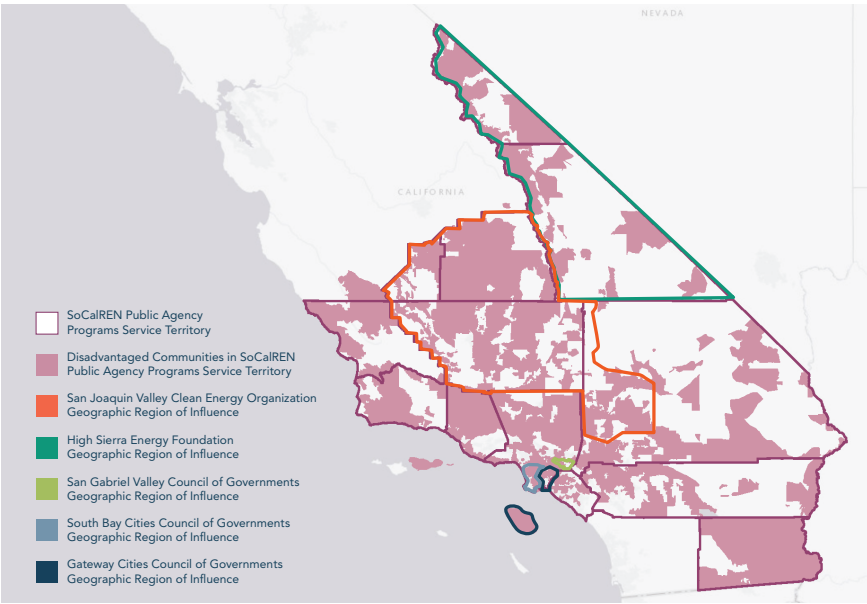
SoCalREN will overlap with two statewide targeted third-party solicitations that are currently going through SCE's third-party solicitation process: higher education and water/wastewater pumping. SoCalREN anticipates supporting significant energy savings opportunities with water, wastewater agencies, and community college districts that may be overlooked when targeting only the most cost-effective opportunities through the statewide effort. SoCalREN will coordinate with these third-party implementers to ensure that there is no duplication of efforts across these customer segments or any customer confusion.

Since its launch, SoCalREN worked to develop a data exchange and tracking process that ensures SoCalREN non-resource activities match up with resource activities. REN projects are flagged through a monthly data reconciliation with IOU core program participation data to ensure that the IOU data submitted to the California Public Utilities Commission (CPUC) is comprehensive and accurate. This data exchange and tracking process were established between SoCalREN, SCE, and SoCalGas when the program first launched in 2013 and ensures non-resource activities explicitly align with resource activities. The data exchange is referenced in the SoCalREN, SCE, and SoCalGas 2022 JCM.

Regional Partnership Coordination

SCE eliminated funding non-resource activities under their Local Government Partnership (LGP) programs in 2020, and SCG in 2022. In anticipation of this transition, SoCalREN engaged with various Councils of Governments (COGs) and NGOs to discuss how to fill the gaps created by this change. This led to the formation of SoCalREN Regional Partners that work directly with public agencies and the residential program implementers within their geographic regions of influence to support the customized delivery of SoCalREN services. There are currently five Regional Partners supporting 38% of SoCalREN territory (by county), with conversations with additional potential Regional Partners underway. SoCalREN's Regional Partners also play a key role in soliciting feedback from enrolled agencies on program operations as well as recommendations for program modifications. Over the last few years, SoCalREN has run Regional Partner focus groups to collect input on the SoCalREN portfolio. These insights have informed the Business Plan.

Figure 9. SoCalREN territory supported by Regional Partners



REN Coordination

SoCalREN regularly coordinates with REN PAs at the portfolio level to share information, reports, and program data as well as lessons learned, potential program enhancements, and REN-related policies and approaches. SoCalREN recently supported the development of a JCM with the newly established Inland Empire REN (I-REN), which serves the Counties of Riverside and San Bernardino, both currently served by SoCalREN. As I-REN's portfolio includes a Public Sector program, a codes and standards C&S program, and a workforce, education, and training (WE&T) program, SoCalREN anticipates extensive coordination with I-REN similar to the coordination with the IOUs. SoCalREN will also coordinate with 3C-REN on any overlapping sectors as needed. The remaining REN, BayREN, does not overlap geographically with SoCalREN.

CCA Coordination

The number of CCAs within SoCalREN territory continues to grow each year. As CCAs become more established within SoCalREN's service territory, there will be increased opportunity for the SoCalREN to collaborate with CCAs in the delivery of energy efficiency and clean energy programs to participating public agencies. For example, some CCAs have either implemented or are in the process of designing and delivering targeted EE, demand response, and DER program options for their residential and commercial customers including public agencies. One relevant example is a current Clean Power Alliance (CPA) initiative to help fund the construction of microgrid resiliency hubs at a critical facility located in each of their member cities and counties. SoCalREN intends to continue its engagement and collaboration with CCAs in its territory to ensure that EE and DER assistance and resources available to public agencies from both the SoCalREN and CCAs are cost-effectively cross-leveraged.

At this time, all CCAs within the SoCalREN territory are running programs outside of EE-ratepayer funding. Lancaster Choice Energy applied for funding under Elect to Administer (ETA) in the past but did not reapply after the initial 3-year funding period. SoCalREN anticipates that additional CCAs will pursue CPUC authorized EE funding through the ETA and possibly the Apply to Administer (ATA) pathways in the future. SoCalREN intends to support and coordinate with any CCAs within the same region that choose either pathway. The Orange County Power Authority (OCPA) sits on the SoCalREN Advisory Committee and signed an Memorandum of Understanding with SoCalREN in late 2021 that speaks to their aligned values and commitment to coordinate.

9. SoCalREN'S EVALUATION, MEASUREMENT AND VERIFICATION (EM&V) PLANS

EM&V funds will be used to improve SoCalREN's portfolio of programs and ensure that the programs are collecting data to support evaluation needs.

A comprehensive workplan will be developed by SoCalREN's third-party EM&V team at the beginning of each year to identify the study needs in the portfolio, determine the timeframe and allocate the budget per study. The annual workplan may include updates or build upon studies conducted in previous years.

The workplan will include the following four types of research activities:

- **Process Evaluation Studies** to examine how to improve the programs and/or improve the participant experience.
  - Process Evaluation Studies for individual programs will be conducted after programs have been implemented for at least one year. SoCalREN also plans to conduct at least one Process Evaluation study at the portfolio level to help look broadly at SoCalREN's accomplishments, identify gaps, and help define the direction of the portfolio in the latter part of the Business Planning period (2028-2031).
- **Evaluability Studies** to ensure that the program goals are well defined and plausible (given the program activities in the logic model) and ensure that the program is cost efficiently collecting data to support future impact studies and/or metrics.
  - Evaluability Studies will be conducted for newly added programs described within the Business Plan, with a focus on data tracking for Resource Acquisition programs and any Market Support or Equity metrics deemed critical to the CPUC or SoCalREN.

- **Market Studies** to understand gaps in the market, understand how to better serve target audiences, or understand new services.
  - Market Studies will be conducted as needs are identified over the 8-year period. Market studies are planned at end of the first four years to help identify gaps and areas for new offerings. Depending on the 2022 and 2023 research activities, market studies may also be needed early in the period to help determine baselines.
- **Ad Hoc Research Support** to support quick turn-around research, provide direct SoCalREN support, or assist with other needs such as providing or reviewing information for CPUC-led studies.
  - Ad hoc support will be on an as needed basis as determined by the SoCalREN EM&V project manager.

Study results from all of the areas above will provide insight and recommendations that will inform SoCalREN's future approach to program design, data collection, and implementation.

Table 31. Distribution of SoCalREN 2024-2031 EM&V Budget by Partner IOU

SoCalREN EM&V Budget	2024	2025	2026	2027	2028	2029	2030	2031
From SoCalGas	$79,736	$94,088	$103,534	$113,696	$127,588	$140,347	$154,382	$169,820
From SCE	$404,049	$517,515	$555,233	$651,441	$727,156	$799,871	$879,585	$967,844
Total	**$483,785**	**$611,603**	**$658,767**	**$765,137**	**$854,744**	**$940,218**	**$1,033,967**	**$1,137,664**

10. POLICY RECOMMENDATIONS

The Commission should confirm several energy efficiency policies, described below, to enable program administrators to unlock additional energy savings and other customer benefits through their business plans.

The Commission should confirm that Strategic Energy Management (SEM) is applicable for the Public Sector.

The 2019 CPUC Energy Efficiency Potential and Goals (P&G) Study described customers that benefit the most from Strategic Energy Management (SEM) as typically being: 1) campuses with multiple buildings and building types, 2) customers with a large portfolio of buildings and a range of building types, and 3) buildings with complex energy systems, each with its own unique set of energy management requirements. The study specifically highlights schools, colleges, healthcare, and large office buildings as segments most suitable for SEM program approaches, all of which are representative of the public sector. There is significant opportunity to utilize SEM strategies to achieve immediate long-term and persistent public sector energy savings. Introducing SEM practices within K-12 schools, colleges, and water/wastewater facilities will enable market transformation and help develop energy efficiency competency among critically important public facilities. SoCalREN requests that the Commission confirm that SEM can be applied to the public sector. Providing this confirmation will allow SoCalREN to implement the two public SEM programs proposed within this business plan application: the Underserved Schools Strategic Energy Management Program and Water and Wastewater Strategic Energy Management Program.

The Commission should confirm that the Hard-To-Reach (HTR) definition should be expanded to include Public Agencies.

The Commission should designate public sector customers as "hard-to-reach" if they meet the geographic criteria approved in Resolution G-3497 and updated in D.18-05-041, and are classified as a local government, K-12 school, community college, or tribal lands. Adding the public sector to the hard-to-reach definition will encourage resource acquisition program implementers to

focus more on hard-to-reach public sector customers because of the increased hard-to-reach cost-effectiveness adjustments. This addition will also allow market support and equity segment programs to better serve public sector customers that meet these criteria.

Commission should confirm that Normalized Meter Energy Consumption (NMEC) methods can be applied to all non-buildings including all energy-using public facilities and infrastructure.

The current version of the Commission's NMEC Rulebook (v 2.0) states in Section II.1.B that "NMEC projects must occur in existing buildings…". Commission resolution E-4818 established the policy that NMEC as a savings methodology may only be used in the Existing Building alteration type. In the public sector, there are a number of non-building energy end-uses that are thus ineligible to participate in an NMEC program, such as outdoor lighting, park lighting, safety lighting, and street lighting. These end-use applications typically operate during an important portion of the peak demand window, and LED retrofits accompanied by photocells or dimmable controls could provide significant demand reduction within communities across California.

Due to advancing standard practice baselines and the 2019 Title 24 energy code, no resource acquisition programs currently support energy efficiency retrofits for outdoor, park, or roadway lighting. Normal replacement deemed measures for these applications would not provide any incremental savings to be claimed, and accelerated replacement measures would have limited cost effectiveness under current rules preventing projects from advancing and resulting in a substantial stranded savings opportunity.

The commission has already authorized NMEC for specific use in non-building applications, such as Industrial SEM and agricultural BRO (D.16-08-019). However, outdoor and roadway lighting are not currently classified as industrial loads and, given the simplicity of the energy use correlation between fixture run hours and wattage, SEM programs would be an unnecessarily cumbersome method for capturing these stranded savings. Given the ability of NMEC programs to accurately deliver stranded resource savings by applying an existing conditions baseline, the Commission should revisit the interpretation of the AB 802 bill language and confirm public outdoor and roadway lighting to be eligible for site or population level NMEC programs. Allowing NMEC to be applied to all non-buildings will enable SoCalREN's Metered Savings Program to achieve significant additional energy savings that cannot be captured by utility custom and deemed incentive programs.

The Commission should confirm that non-IOU program administrators are allowed to engage in all appropriate IDSM activities when engaging a customer to implement energy efficiency measures.

D.18-05-041 authorized IOU program administrators to integrate demand response capability with existing energy efficiency activities.[18] However, the decision did not confirm, nor restrict whether, non-IOU PAs such as RENs could engage in IDSM activities.

California has long led the effort to decrease energy use and costs to ratepayers. California's "loading order" has ensured that the most cost-effective clean energy solutions are prioritized as the state pursues aggressive clean energy and GHG reduction policies. Earmarking funds

[18] D.18-05-041, page 36

specifically for energy efficiency, demand response, or other integrated demand-side management programs is a means of promoting activities that follow this loading order with the good intention of ensuring responsible use of ratepayer funds.

Program funding silos have, however, prevented the integration of programs over time. As the DER market has matured at different rates across the spectrum of technologies and strategies currently available to decarbonize and reduce site energy consumption, there is an opportunity to increase cost efficiency to both customers and the grid. Energy efficiency, energy storage, demand response, and on-site generation are treated essentially as separate solutions that must be developed and implemented in isolation of each other for most markets served by ratepayer funded programs. This method is problematic for several reasons.

While energy efficiency is still generally the most cost-effective clean energy solution, at greater depths of penetration within a given customer segment, the marginal cost of the resource may rise to a point where other solutions, such as solar-paired storage, would be a more economical choice for continuing on a pathway to net zero carbon. Conversely, energy storage and on-site generation can be more economically sized when energy efficiency activities and demand response strategies are deployed simultaneously. Customers should have access to programs and services that consider and evaluate all potential clean energy solutions, rather than just those for which a given program is authorized.

Siloing of program funding can also stretch out the implementation of DER measures at a time when climate change impacts are accelerating rapidly. Many customers are not able to implement multiple separate projects simultaneously due to resource constraints and mis-aligned value propositions between program offerings. Relaxing these often-illogical funding restrictions would accelerate the identification and implementation of crucial clean energy solutions throughout the state.

Currently, customers must navigate multiple programs, vendors, and eligibility requirements to pursue holistic DER strategies. This creates confusion, decision fatigue, and may lead to duplication of efforts across programs. Since all these programs are collectively intended to support the same clean energy and GHG reduction goals for California, unnecessary duplication of efforts across programs is an inefficient and sub-optimal use of ratepayer funds. To simultaneously pursue the state's climate goals and protect ratepayer funds, these barriers should be removed for all program administrators.

SoCalREN has previously proposed the Demand Response Enablement and Enrollment Program that leverage's SoCalREN existing infrastructure to offer demand response opportunities to public sector customers.[19] Although previously rejected, SoCalREN has interest in implementing such a program during this business plan period. To do so, SoCalREN requests that the Commission confirm that non-IOU PAs are allowed to engage in IDSM activities.

[19]SoCalREN Opening Comments on Email Ruling Requesting Proposals to Address Governor's Proclamation, page 7

APPENDIX A. SoCalREN UNIQUE VALUE METRICS

UVM Table

Core Value	Segment	Portfolio-level Value Metric	Measurement	Methodology	Detailed Measurement	2024	2025	2026	2027	2028-2031
Delivering Energy & Climate Impacts	Resource Acquisition	Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings	GHG reductions - as well as kWh/therms/kW - claimed by SoCalREN	kWh, kW, therm, GHG (metric tons) savings inclusive of SoCalREN resource program claimed savings only. Installed net 1st year Savings.	kWh savings	21,595,747	38,744,208	53,868,239	56,082,961	256,312,435
					kW savings	8,700	17,726	26,730	29,231	133,338
					therm savings	365,450	436,084	590,807	584,818	2,985,552
					GHGs emissions avoided (metric tons)	5,570	9,032	12,708	13,851	64,931
		Channeled (not claimable by SoCalREN) energy and GHG reductions	GHG reductions - as well as kWh/therms/kW - from projects supported by SoCalREN	kWh, kW, therm, GHG savings (metric tons) installed **excluding** SoCalREN resource program savings. Installed gross 1st year Savings.	kWh savings	14,735,252.00	8,353,437.00	3,376,426.00	8,243,051.00	32,972,204.00
					kW savings	1,473.53	835.34	337.64	824.31	3,297.22
					therm savings	20,000.00	25,000.00	30,000.00	35,000.00	140,000.00
					GHGs emissions avoided	3,135.15	1,849.73	853.10	1,880.04	7,520.15
Competency & Economic Resilience / Build Energy Capacity	Market Support	Increased demand for energy efficient products or services among SoCalREN targeted groups	Cumulative # Ag Customers that receive energy coaching through SoCalREN	Count of unique Ag Customers that receive direct energy education services from Agricultural SoCalREN programs		125	150	200	250	1000
			Cumulative # SMBs that receive energy coaching through SoCalREN	Count of unique SMBs that receive direct energy education services from Commercial SoCalREN programs		170	180	190	200	800
			Total number of contractors mentored - territory-wide			15	18	19	30	34
			# contractors trained through Level 1 (ALL and by diversity category), ave. training hours per participant, knowledge gain (from survey effort)	Knowledge gain would come from Level 1 survey effort completed by implementer.		100	100	100	100	400
			# receiving skill certificates by type of certificate	• Industry-recognized skill certificates with East LA CC and high school/college credit • SOLIDWORKS Associate Certification • BPI Certifications/MF Energy Audit skills or other certification		25	35	45	60	200
			# of interns/internships; survey of interns to understand knowledge or competencies gained Career plans for transitional adults in Green Path Careers (from earlier outcome); Youth who express interest in future green career # of job placements; survey	This is a newer effort. Data was not reviewed but would be reviewed in 2022 WE&T process evaluation.		20	30	40	50	175
					Total Covered Participants	**455**	**513**	**594**	**690**	**2609**
			# Ag Customer projects delivered for energy savings	Count of Ag Customer EE projects completed		250	300	400	500	2000
			# SMB projects delivered for energy savings	Count of SMB EE projects completed		340	360	380	400	1600
					Total Covered Projects	**590**	**660**	**780**	**900**	**3600**
		Access to capital for green energy and energy saving projects	# projects where external (non-IOU) financing was leveraged by MF properties due to support by SoCalREN	Count of projects where a loan was used; Cumulative value of loans in dollars		3	3	3	4	19
				Total $ leveraged		$126,696	$140,370	$141,332	$210,924	$893,264
				Source of external (non-IOU) financing - Private		3	3	3	4	19
				# projects where external (non-IOU) financing was leveraged by SoCalREN		10	16	25	38	145
				Total $ leveraged		$100,000	$160,000	$250,000	$380,000	$1,450,000
				Source of external (non-IOU) financing - State		10	16	25	38	145
Expand Access to EE Benefits	Equity	Equity-targeted populations served by SoCalREN programs	Total # HTR Ag Customers participating in SoCalREN programs	Count of Ag Customers that enroll in a SoCalREN Agricultural program that are categorized as HTR		50	60	80	100	400
			DAC, HTR and underserved MF are served	# of participating properties - DAC		41	52	61	105	511
				# of participating properties - Rural/HTR		117	150	174	203	917
				# of tenant units served - DAC		8,122	10,461	12,184	20,963	102,171
				# of tenant units served - Rural/HTR		2,926	3,739	4,362	5,067	22,933
			Total # HTR SMBs participating in SoCalREN programs	Count of SMBs that enroll in a SoCalREN Commercial program that are categorized as HTR		16	21	24	42	204
			*Partnerships expand access for Small or WMDVBE (or contractors/ future workers classified as disadvantaged)	# partners and type of partner; description of benefits		12	12	12	14	50
		Inclusion of diverse workers in EE workforce	Small and WMDVBE contractors are trained through workshops, classes, or customized mentoring		# trained; # mentored	100	100	100	100	400
					# receive new certifications as a result of SoCalREN support. These are "agency" certifications based on ownership structure. For example, contractors have to prepare financial docs for DVBE certification.	25	25	25	25	100
		Energy savings in equity-targeted populations	* Regional Partners engage MF DAC/HTR/underserved		# of partnerships	4	4	4	4	4
					# of participating contractors in HTR (rural) or underserved areas made aware of the program due to the partner's marketing	1	1	2	2	4
					# of participating buildings in HTR (rural) or underserved areas made aware of the program due to the partner's marketing	21	42	63	84	210
			*Projects expand into rural or other areas in region that were not previously served (i.e., underserved)		Total incentive payments - DAC	$1,772,506	$2,285,375	$2,653,481	$4,335,861	$21,131,931
					Total incentive payments - Rural/HTR	$948,750	$1,212,292	$1,423,125	$1,633,958	$5,348,352
					Total project costs - DAC	$2,954,177	$3,808,959	$4,422,468	$7,226,435	$35,219,885
					Total project costs - Rural/HTR	$948,750	$1,212,292	$1,423,125	$1,633,958	$5,348,352
			DAC/HTR owners, as well as DAC tenants, save energy and reduce GHG		GHG reduced from equity targeted areas	35	45	53	61	276
					kWh (net) reduced from equity targeted areas	35,641	45,542	53,129	61,716	279,302
					kW (net) reduced from equity targeted areas	13	16	19	22	101
					Therms (net) reduced from equity targeted areas	1,904	2,432	2,859	3,274	14,818
			Public agencies in DAC or underserved areas save energy and reduce GHG	kWh, kW, therm, GHG savings supported **excluding** SoCalREN resource program savings. Gross 1st year Savings.	kWh savings	8,800,000	9,600,000	10,000,000	10,400,000	41,600,000
					kW savings	1,012	1,120	1,223	1,203	4,813
					therm savings	42,972	51,990	105,842	66,340	265,362
					GHGs emissions avoided	2,037	2,249	2,617	2,490	9,958
		Additional benefits in equity-targeted populations while supporting green energy and energy saving projects	Utility bill savings in equity-targeted populations	*DAC/HTR owners, as well as DAC tenants, save on their utility bill	Estimated annual bill savings by DAC/HTR owner	$3,400	$3,400	$3,400	$3,700	$3,800
					Estimated annual bill savings by the average DAC/HTR tenant	$200	$200	$200	$180	$180
	Codes & Standards	Building energy capacity & economic resilience	Increased demand for energy efficient products or services among SoCalREN targeted groups	Better compliance with energy code requirements, reduced energy use in new and existing buildings, and greater number of high energy performance buildings	# of jurisdictions receiving C&S services and assistance	7	15	20	30	45
					% of increased code compliance and permit closeout in participating jurisdictions	15.00%	15.00%	15.00%	15.00%	15.00%
			Communities are better equipped to facilitate energy efficiency savings	C&S stakeholders have the tools and assistance necessary to enhance codes and standards policies	# of local governments using SoCalREN data evaluation tools & assistance to enhance C&S activities and policies	3	15	25	35	45
		Delivery energy & climate impacts	Energy and GHG reductions due to SoCalREN's innovative or gap filling program offerings	Support, design, and adoption of buildings emissions performance standards and benchmarking and audit ordinances/regulations	# of local governments adopting advanced energy codes, standard, or policies	2	4	6	8	10

APPENDIX B. SUMMARY LIST OF POLICY CHANGES

SoCalREN respectfully submits the following suggested language for potential ordering paragraphs should the Commission chose to adopt the recommended policy changes provided as part of SoCalREN's 2024-2031 Strategic Business Plan.

Proposed Ordering Paragraphs:

1. All Program Administrators, including approved Regional Energy Networks, are authorized to administer and implement Strategic Energy Management (SEM) programs for all public sector customers.
2. Public Sector customers which meet the geographic criteria approved in Resolution G-3497 and updated in D.18-05-041, and which are classified as a local government, special district, K-12 school, community college, or tribal lands, shall be designated as "hard-to-reach".
3. Normalized Meter Energy Consumption (NMEC) methods are authorized and may be applied to non-building facilities and equipment including all energy-using public facilities and infrastructure.
4. Non-IOU program administrators, including approved Regional Energy Networks, are authorized to engage in all appropriate integrated demand side management activities which generate Total System Benefits when engaging a customer to implement energy efficiency measures.

APPENDIX C. STATEMENTS OF QUALIFICATIONS

COUNTY OF LOS ANGELES ON BEHALF OF SOUTHERN CALIFORNIA REGIONAL NETWORK STATEMENT OF QUALIFICATIONS OF MINH LE

Q1 Please state your name and business address.

A1 My name is Minh Le. My business location is at 1100 North Eastern Avenue, Los Angeles, California.

Q2 Briefly describe your responsibilities at County of Los Angeles on behalf of SoCalREN.

A2 I am the General Manager of the County of Los Angeles Office of Energy and Environmental Services (EES) overseeing the SoCalREN's portfolio of EE solutions aimed at helping customers eliminate unnecessary energy use and supporting California in achieving a cleaner and more reliable energy future.

Q3 Please summarize your educational and professional background.

A3 I have served in my current role for 4 years overseeing the County's energy and environmental programs that includes programs in clean transportation, energy efficiency, and renewable energy. Prior to this role, I served in the federal government in the Executive Office of the President as a senior advisor at the Office of Management and Budget and developed budgets for energy storage and water innovation. Prior to that, I served as the Director as well as Chief Engineer of the Solar Energy Technologies Office at the Department of energy and led a $250 million per year program which funded R&D as well as technology demonstrations and workforce development programs across the country to help enable solar to become a cost-effective energy source. I also worked in the private sector and managed an R&D organization for Evergreen Solar and helped build factories for solar manufacturing. Prior to my career in solar energy, I worked for 9 years in the semiconductor industry developing technologies for high-speed data communication networks. I earned my Bachelor's and Master's degrees from the Massachusetts Institute of Technology and have authored several patents and research publications.

Q4 What is the purpose of your testimony?

A4 I am sponsoring the following testimony in support of SoCalREN's Energy Efficiency 2024-2031 Portfolio Plan Application:

- Exhibit 1, "SoCalREN 2024-2031 Strategic Business Plan":
  - SoCalREN's Energy Efficiency Vision for California, 2024-2031
  - SoCalREN's 8-Year Portfolio Budget
  - Appendix C: Statement of Qualifications
- Exhibit 2, "SoCalREN 2024-2027 Portfolio Plan":
  - Four-Year Portfolio Summary
  - Forecast Methodology

Q5 Does this conclude your statement of qualifications?

A5 Yes, it does.

COUNTY OF LOS ANGELES ON BEHALF OF SOUTHERN CALIFORNIA REGIONAL NETWORK STATEMENT OF QUALIFICATIONS OF LUJUANA MEDINA

Q1 Please state your name and business address.

A1 My name is Lujuana Medina and am currently working remotely as County of Los Angeles is under an emergency Covid-19 telework directive. My normal business location is at 1100 North Eastern Avenue, Los Angeles, California.

Q2 Briefly describe your responsibilities at County of Los Angeles on behalf of SoCalREN.

A2 I am the Environmental Initiatives Manager of the County of Los Angeles Office of Energy and Environmental Services (EES). I am responsible for the management, administration, and oversight of the SoCalREN Energy Efficiency portfolio. I am responsible for strategy, optimization, delivery, reporting, regulatory, fiscal management, performance, and oversight of SoCalREN's Energy Efficiency programs across all sectors. In addition, my responsibilities include developing and supporting energy efficiency portfolio strategic plans in alignment with regulatory requirements and internal priorities as well as contributing to California Public Utilities Commission filings within the energy efficiency proceeding as well as other proceedings involving energy efficiency coordination.

Q3 Please summarize your educational and professional background.

A3 I have received a Bachelor of Arts degree in economics and a Masters in Business Administration from San Diego State University. Before joining the County of Los Angeles in 2018, I worked for ICF consulting as the contract Regulatory Manager for SoCalREN. Prior to ICF, I worked for Southern California Gas Company as a Regulatory Advisor for the Energy Efficiency department, a Regulatory Case Manager for Southern California Edison in their energy procurement department and a Generation Resource Planner for San Diego Gas & Electric.

Q4 What is the purpose of your testimony?

A4 I am sponsoring the following testimony in support of SoCalREN's Energy Efficiency 2024-2031 Portfolio Plan Application:

- Exhibit 1, "SoCalREN 2024-2031 Strategic Business Plan":
  - SoCalREN Energy Efficiency Strategies
  - SoCalREN Segmentation Strategies
  - SoCalREN Sector Strategies
  - SoCalREN Strategic 8-Year Portfolio Unique Value Metrics
  - SoCalREN Portfolio Coordination
  - SoCalREN Evaluation, Measurement and Verification (EM&V) Plans
  - Policy Recommendations
  - Appendix A: SoCalREN Unique Value Metrics

  - Appendix B: Summary List of Policy Changes
  - Appendix C: Statement of Qualifications
- Exhibit 2, "SoCalREN 2024-2027 Portfolio Plan":
  - Portfolio Segmentation Strategy
  - Portfolio Market Sector Strategies
  - Portfolio Strategies
  - Portfolio Management
  - Evaluation, Measurement, and Verification
  - Portfolio Costs and Committed Funds
  - Appendix A: SoCalREN's Energy Efficiency 2024-2027 CEDARS Filing Submission Receipts and Links
- Exhibit 3, SoCalREN's Responses, Pursuant to Energy Division Template
  - SoCalREN's Energy Efficiency 2024-2031 Application Tables, Pursuant to Energy Division Template
  - SoCalREN's Energy Efficiency 2024-2027 Supplemental Budget Narrative Information, Pursuant to Energy Division Template
- Exhibit 4, SoCalREN Energy Efficiency 2024-2027 Implementation Plans

Q5 Does this conclude your statement of qualifications?

A5 Yes, it does.

APPENDIX D. COMPLIANCE CHECKLIST

CPUC Template Description	Chapter	Section
a. PA's Vision for EE in CA: 2024-2031	**SoCalREN's Energy Efficiency Vision for California, 2024–2031**	**All Sections**
i. Desired outcomes of portfolio [in narrative form, and description of broad principles that drive the proposed business plan strategies.]	**SoCalREN's Energy Efficiency Vision for California, 2024–2031**	**SoCalREN Eight-Year Outcomes**
ii. Description of service territory [and service territory-related factors that could make achieving EE goals easier or harder. This may include a discussion of types, substantive differences, and relative impact of climates within service territory or other aspects unique to service territory.]	**SoCalREN's Energy Efficiency Vision for California, 2024–2031**	**SoCalREN Service Territory**
iii. PA's EE Strategy [Identify and summarize major strategies in this application, including but not limited to:]	**SoCalREN Energy Efficiency Strategies**	**All Sections**
1. Strategy for application/use of various and new methods for savings forecasting and quantification methods (e.g., normalized metered energy consumption including requirements in Public Utilities Code section 25310(c)(5))	SoCalREN Energy Efficiency Strategies	New Forecasting and Quantification Methods
2. Strategies for market intervention and energy efficiency adoption: e.g., targeted points of intervention; delivery channels/platforms/methods	SoCalREN Energy Efficiency Strategies	Market Intervention and EE Adoption Strategies
3. New strategies for spurring innovation: e.g., cultivating new, diverse, businesses to enter EE design/implementation, cultivating relationships with traditional actors in other markets to enter EE design/implementation, supporting the adoption of new and evolving GHG reducing technologies	SoCalREN Energy Efficiency Strategies	Marketplace Innovation

CPUC Template Description	Chapter	Section
4. Strategy for incorporating low global warming potential (low-GWP) refrigerants in the portfolio	SoCalREN Energy Efficiency Strategies	Incorporation of Low-GWP Refrigerants
5. Portfolio management strategies		
a. Segmentation Strategy Summary (including Resource Acquisition, Market Support, Equity)	SoCalREN Segmentation Strategies	All Sections
b. Sector Strategy (Ag, Commercial, Cross-Cutting, Industrial, Public, Res)	SoCalREN Sector Strategies	All Sections
c. Very high-level discussion of strategies driving distribution of budget among sectors and segments	SoCalREN 8-Year Portfolio Budget	All Sections
d. Outsourcing (required for IOUs only)	N/A	N/A
i. Strategy for continuing to maintain outsourcing target	N/A	N/A
ii. High-level discussion of solicitation strategies (scope, schedule). Identify major changes to strategies from prior strategic business plan	N/A	N/A
e. Portfolio Coordination (other PAs, statewide programs, other DSM programs)	SoCalREN Portfolio Coordination	All Sections
6. Evaluation, measurement and verification (EM&V)	SoCalREN's Evaluation, Measurement and Verification (EM&V) Plans	SoCalREN's Evaluation, Measurement and Verification (EM&V) Plans
7. Alignment with Legislative and CPUC Requirements and Relevant Action Plans	SoCalREN Energy Efficiency Strategies	Alignment with Legislative and CPUC Requirements and Relevant Action Plans
a. Demonstrated alignment of business plan strategies and outcomes with Legislative and CPUC requirements	SoCalREN Energy Efficiency Strategies	Alignment with Legislative and CPUC Requirements and Relevant Action Plans
b. Discussion of how the portfolio design and budget aligns with relevant action plans beyond the energy efficiency proceeding related to providing clean, safe, reliable, affordable energy to all customers. This includes, for example, the Environmental and Social Justice Action Plan, greenhouse gas reduction, reliability, and integrated resources planning	SoCalREN Energy Efficiency Strategies	Alignment with Legislative and CPUC Requirements and Relevant Action Plans
b. Annual portfolio budgets [Annual projected portfolio budgets adding up to the 8- year authorized budget cap including Savings, Cost Effectiveness and TSB forecasts]	**SoCalREN 8-Year Portfolio Budget**	**All Sections**
c. Recommendations for New or Modified EE Policy	**Policy Recommendations**	**All Sections**