

Energy Efficiency
Portfolio Application
of the

San Diego Regional Energy Network

Exhibit 2
2024-2027 Portfolio Plan

Table of Contents

Portfolio Summary	4
Core Values	4
Guiding Principles	5
Goals	5
Key Metrics and Outcomes	7
Portfolio Outcomes	7
Energy Efficiency Strategy	10
Savings Forecasting and Quantification Methods	11
Strategies for Market Intervention and Energy Efficiency Adoption	11
New Strategies for Spurring Innovation	13
Strategy for Incorporating Low Global Warming Potential (GWP) Refrigerants	15
Integrated Demand Side Management (IDSMS) Strategies	16
Application Summary Tables Covering the 4-year Budget Request	18
Distribution of Budget Among Sectors and Segments	18
Projected Sector-Level and Portfolio-Level Cost Effectiveness	20
Resource Acquisition Segment	20
All Segments	21
Forecast Methodology	22
Portfolio Administration vs. Program Implementation Costs	22
Segmentation Strategy	23
Strategies Driving Distribution of Budget Among Segments	23
Resource Acquisition	24
Preliminary Resource Acquisition Budget for 2024-2027 and Rationale for Distribution	24
Resource Acquisition Goals, Strategies, and Outcomes	25
Projected Portfolio and Sector-level Metrics	25
Resource Acquisition Segment-Specific Coordination	26
Codes & Standards	26
Preliminary Codes & Standards Budget for 2024-2027 and Rationale for Distribution	26
Codes & Standards Goals, Strategies, and Outcomes	27
Projected Annual Portfolio and Sector-Level Metrics	28
C&S Segment-Specific Coordination	29
Market Support	29
Preliminary Market Support Budget for 2024-2027 and Rationale for Distribution	30
Market Support Goals, Strategies, and Outcomes	31

Projected Annual Portfolio and Sector-Level Metrics	32
Market Support Segment-Specific Coordination	34
Equity	34
Preliminary Equity Budget for 2023-2027 and Rationale for Distribution	35
Equity Specific Strategies, Goals, and Outcomes	36
Projected Annual Portfolio and Sector-Level Metrics	37
Equity Segment Coordination	39
Sector Strategy	39
Strategies Driving Distribution of Budget Among Sectors and Alignment with Broader Portfolio Objectives	39
Description of Sectors SDREN Proposes to Serve	41
Preliminary Distribution of Budget Among Sectors for 2024-2027 and Rationale for Distribution	43
Commercial Sector	44
Market Characterization	44
Commercial Sector Goals, Objectives and Strategies	45
Commercial Sector Coordination	46
Categorization by Segment	48
Commercial Sector Program Details	49
Cross-Cutting Sector – Codes & Standards	59
Market Characterization	59
C&S Sector Goals, Objectives and Strategies	60
C&S Sector Coordination	62
Categorization by Segment	63
C&S Sector Program Details	63
Cross-Cutting Sector – Workforce, Education & Training	69
Market Characterization	69
WE&T Sector Goals, Objectives and Strategies	71
WE&T Sector Coordination	73
Categorization by Segment	74
WE&T Sector Program Details	75
Public Sector	84
Market Characterization	84
Public Sector Goals, Objectives and Strategies	85
Public Sector Coordination	88
Categorization by Segment	89

Public Sector Program Details	90
Residential Sector	99
Market Characterization	99
Residential Sector Goals, Objectives and Strategies	101
Residential Sector Coordination	103
Categorization by Segment	104
Residential Sector Program Details	105
Portfolio Management	113
Strategies to Optimize Portfolio and Manage Risk	113
How SDREN Will Stay On-Target	114
Approach to Risk Management	115
Approach to Flexible Portfolio Management	116
Planned Procedures and Course Correction if Off-Track	117
Third-Party Programs	117
Solicitation Strategy	118
Third-Party 2024-2027 Solicitation Schedule	118
Risk Distribution	118
Incorporation of Input on Current Solicitation Practices	119
Supplier Diversity	119
Continued Stakeholder Engagement on Solicitation Process	120
Statewide Programs	120
Assessment and Mitigation of Risk from Portfolio Diversity	120
Contract Management	121
Portfolio Coordination	121
Coordination with Other PAs	121
How SDREN’s Portfolio is Complementary With Other PAs in Service Territory	122
How SDREN’s Portfolio Mitigates Duplication of Efforts	124
How SDREN Will Coordinate Efforts With Other Demand-Side Programs	125
Stakeholder Engagement in the Development of This Application	127
Evaluation, Measurement, and Verification	128
Summary of Planned EM&V Studies and Activities	128
SDREN’s Budget Allocation and Justification	129
Cost and Cost Recovery	129
Summary of Costs at Portfolio-level	129
SDREN’s Approach to Classification of Unspent Funds	130

Portfolio Summary

The projected impacts of climate change on the San Diego region are profound, driving the need for urgent collective action to decarbonize. The San Diego Regional Energy Network (SDREN) represents an important step to support communities, particularly those who are underserved and hard-to-reach (HTR), to achieve a carbon-free building sector in the San Diego region by 2050.

Figure 1. SDREN’s Vision

The San Diego Regional Energy Network (SDREN) Vision
SDREN’s vision is to be a driving force for communities to adopt clean, reliable energy through community-driven solutions that contribute to local and state energy efficiency and climate goals.

SDREN aspires to be a regional leader supporting San Diego County, 18 incorporated cities, 47 school districts, and 18 federally recognized Tribal communities. Approval of the SDREN will complete the RENS’ statewide coverage, bolstering the California Public Utilities Commission’s (CPUC) intention for RENS to fill gaps and complement investor-owned utility (IOU) services. SDREN is focused on helping communities invest in and accelerate decarbonization to hasten the transformation to clean energy. SDREN is committed to delivering programs that make inroads into communities to reduce greenhouse gas (GHG) emissions, achieve equity, drive market transformation, and provide value to ratepayers.

Core Values

SDREN is guided by its core values.

Figure 2. SDREN’s Core Values

		
Integrate a collaborative and purposeful investment in the region’s underserved and HTR communities	Grow a regional clean energy economy that creates opportunities for the local workforce	Be a trusted local resource to coordinate regional policy, partnerships, and programs

Guiding Principles

SDREN's portfolio of services is informed by its core values and framed by the following principles:

- **Advance Environmental Equity.** Through its proposed portfolio of services, SDREN is committed to representing underserved communities and advancing environmental equity.
- **Catalyze Collaboration.** SDREN will collaborate with stakeholders to develop and strengthen regional partnerships to accelerate decarbonization and maximize community benefits.
- **Support Community-Driven Change.** SDREN's approach to program design and delivery will engage communities at early stages of planning to ensure the services that are developed reflect local needs and priorities.

Goals

SDREN has the following goals for its overall portfolio:

- **Advance decarbonization.** Beyond reducing energy use and GHG emissions, decarbonization ushers in a host of benefits making communities and economies more resilient. Decarbonization lowers energy costs, increases access to clean energy, ensures safer and healthier homes and communities, reduces environmental burdens, and expands economic opportunity and high-quality jobs.
- **Provide comprehensive energy efficiency (EE) services that improve outcomes for underserved and HTR communities.**¹ SDREN's portfolio of services will be centered around minimizing barriers to participation for underserved and HTR communities.
- **Accelerate the clean energy economy through workforce opportunities.** As a regional leader, SDREN will mobilize and leverage resources to support the local workforce and support the creation of energy-related jobs and skills that benefit local communities. SDREN's goal is to support a high road² approach to grow the regional clean energy economy and create new opportunities for the local workforce, with a focus on underserved communities.

In line with the San Diego Regional Decarbonization Framework - Technical Report³ and informed by the CPUC Environmental and Social Justice (ESJ) Action Plan, the long-term goal for the SDREN is to **ensure an equitable transition to a carbon-free building sector in the San Diego region by 2050.**

¹ As defined in D.23-06-055.

² An approach that integrates intentional policies and investments that center employee benefits and needs.

³ McCord, Gordon C., Elise Hanson, Murtaza H. Baxamusa, Emily Leslie, Joseph Bettles, Ryan A. Jones, Katy Cole, Chelsea Richer, Eleanor Hunts, Philip Eash-Gates, Jason Frost, Shelley Kwok, Jackie Litynski, Kenji Takahashi, Asa Hopkins, Robert Pollin, Jeannette Wicks-Lim, Shouvik Chakraborty, Gregor Semieniuk, David G. Victor, Emily Carlton, Scott Anders, Nilmini Silva Send, Joe Kaatz, Yichao Gu, Marc Steele, Elena Crete, and Julie Topf. San Diego Regional Decarbonization Framework: Technical Report. County of San Diego, California. 2022.

SDREN will prioritize equity so that building decarbonization includes underserved and HTR communities and relieves the burden of increasing gas rates. SDREN has the opportunity to meet the need for incorporating social equity considerations into building decarbonization policies. SDREN is focused on working with these communities and providing programs and resources that meet their needs.

The short and mid-term goals will support progress in reaching the region’s long-term goal of full decarbonization, as follows:

- Short-term goal by 2027: by the end of the four-year SDREN Portfolio Plan period
 - Normalize replacing end-of-life methane gas space and water heating systems with highly efficient electric versions with load flexibility for HTR and underserved customers.
 - Support “electrification ready” or “all-electric” standards for new construction and major renovations through building energy codes.
 - Support and utilize workforce assessments and set foundations for prioritization of workforce development for electrification.
- Mid-term goal by 2031: by the end of the eight-year period of the SDREN Strategic Business Plan
 - Full or whole building electrification/decarbonization programs are successfully reaching equity communities.
 - Workforce supply for jobs supporting decarbonization of energy demand meets regional demand.

As emphasis on electrification grows at the state and federal level, SDREN will focus on regional coordination, tools, and capacity building alongside targeted investments for appliance replacements that address equity concerns.

Figure 3. Regional Decarbonization Framework on Replacing Appliances

Replacing appliances is expensive so building decarbonization policies should account for incentivizing electrification equitably, especially in communities of concern, low-income communities, rural areas, and for renters. Developing the capacity and tools to understand and address the equity implications of building decarbonization policies in the San Diego region requires additional work.

(Regional Decarbonization Framework, Summary for Policy Makers, Page 25)

Key Metrics and Outcomes

Portfolio Outcomes

SDREN's portfolio complies with CPUC requirements and rulings and addresses the CPUC's goals for RENS to deliver local programs and activities that fill gaps and complement IOU offerings with a focus on HTR markets.⁴ By bringing together regional perspectives, deepening partnerships, and cultivating community-led strategies, SDREN will realize meaningful multi-benefit solutions and equitably transition to a carbon-free building sector in the San Diego region by 2050. If executed successfully, SDREN's mid-term goals of (1) full electrification/decarbonization programs successfully reaching equity communities⁵ and (2) a balanced supply and demand for jobs supporting decarbonization will deliver the following outcomes by 2031:

- **Portfolio Outcome 1.** Reduce energy burden and improve energy affordability. As customers move from methane gas to electric appliances, they should not see increased costs.
- **Portfolio Outcome 2.** Improve health and reduce energy consumption across the region. When done effectively, building electrification leads to both health benefits and a reduction of energy use.
- **Portfolio Outcome 3.** Improve access and increase program participation by reducing program complexity, helping program participants understand how best to manage their own energy consumption. Education is at the foundation of an equitable transition and ease of access to all resources.
- **Portfolio Outcome 4.** Maximize benefits to customers by leveraging additional funding, such as Inflation Reduction Act (IRA) funds, to deliver integrated demand side management (IDSM) strategies. Coordination of these resources will maximize benefits to the customer.
- **Portfolio Outcome 5.** Create access to career pathways in clean energy, supporting a trained clean energy regional workforce with high-quality jobs.

SDREN's portfolio application includes ten programs, organized by segment and sectors, as follows:

- **Segments:** Resource Acquisition, Market Support, Equity, and Codes & Standards.
- **Sectors:** Commercial, Cross-cutting (Workforce, Education & Training and Codes & Standards⁶), Public, Residential.

SDREN will measure progress toward achieving goals and delivering outcomes for each program, segment and sector through progress trackers that include various targets, indicators and metrics, which will be reported on either quarterly or annually. In addition to tracking progress at the program, segment and sector-level, SDREN will also track and report on progress at the portfolio level.

⁴ D.12-11-015, and reasserted in D.19-21-021.

⁵ As defined in D.23-06-055.

⁶ Codes & Standards is categorized as both a distinct segment and a cross-cutting sub-sector.

All indicators and metrics are detailed in the SDREN 2024-2031 EE Application Excel Sheets. They include indicators for equity and market support segments from D.23-06-055, the “common metrics and indicators” from D.18-05-041, and SDREN’s unique value metrics (UVMs). The common metrics include both portfolio and sector-level metrics.

For the 2024-2027 portfolio period, SDREN has established an initial set of UVMs and identified additional key metrics/indicators at the portfolio, sector, and segment level that will measure progress towards eight-year business plan outcomes (see Table 1 below). Data methodologies and targets for tracking progress have been established for these UVMs and are outlined in the *SDREN 2024-2031 EE Application Excel Sheets*.

Figure 4. Indicator, Metric, Target, and Progress Tracker Definitions

Definitions

- **Indicators** are progress trackers that do not typically have targets associated with them.
- **Metrics** are progress trackers that do or are expected to have targets associated with them.
- **Targets** are forecasted achievements against which to track progress.
- **Progress Trackers** refer to indicators, metrics, and targets.

Table 1. Mapping of Portfolio Plan key indicators and metrics with Business Plan strategic outcomes

Type of progress tracker	Progress Tracker	Tie-in with Portfolio Plan Outcomes
Unique Value Metric	% of customers anticipated to experience lower energy costs as a result of program participation, by sector	Outcome 1: Reduce energy burden and improve energy affordability.

Equity Segment Indicator	Median of equity target participants' expected first-year bill savings in equity segment, by sector	
Portfolio Metric	Total system benefit (TSB) achieved	Outcome 2: Improve health and reduce energy consumption across the region.
Unique Value Indicator	EE savings channeled to non-SDREN programs	
Unique Value Metric	% of customers channeled to non-SDREN programs	Outcome 3: Improve access and increase program participation.
Unique Value Metric	External funding leveraged to support SDREN programs/communities as a % of total budget spend	Outcome 4: Maximize benefits to customers by leveraging additional funding.
Unique Value Indicator	Count of newly educated or credentialed individuals	Outcome 5: Create access to career pathways in clean energy.
Unique Value Metric	% of equity customers served compared to total customers served	Not directly tied to portfolio outcomes but demonstrates progress toward portfolio goals.

Ahead of authorization, SDREN will engage with the joint Portfolio Administrators (PAs)⁷ as part of the joint Tier 2 Advice Letter (AL) to be filed by May 1, 2024.⁸ This action is intended to address any modifications of the common metrics and indicators and to clarify and modify the adopted equity and market support indicators. This coordination will help to define the process for proposing and adopting long-term market support and equity goals, and will help to establish the metrics for success for the next portfolio period.

SDREN will conduct an evaluation, measurement, and verification (EM&V) study before filing the 2028-2031 Portfolio Plan to refine goals and UVMs. The study will support development of the appropriate methodologies, baselines and targets to align with SDREN's goals for the

⁷ D.23-05-066 makes the shift from "program administrator" to "portfolio administrator" or abbreviated as "PA". Both terms may be found in this application.

⁸ D.23-06-055 Ordering Paragraph (OP) 11: "The portfolio administrators shall jointly submit a Tier 2 Advice Letter by no later than May 1, 2024 clarifying all of the Indicators adopted in this decision, including any modifications from metrics and Indicators adopted in Decision 18-05-041, and identifying information that could be used as baselines for future targets or methodologies for how the indicator information can be used as baselines."

portfolio. The EM&V study will set the foundation for developing an effective 2028-2031 Portfolio Application that will deliver on SDREN's mid- and long-term goals. This study will be coordinated with other RENS' efforts to develop a total community benefit or alternative REN metric. Since a majority of the SDREN portfolio supports the market support and equity segments,⁹ SDREN will also coordinate with the joint PAs' work to establish equity and market support metrics and goals.

Before filing for the 2028-2031 portfolio period, SDREN's goals will conform to the guidance of D.23-06-055, and will have all of the following characteristics:

- A medium to long term (i.e., 12-24 years) timeframe, divided by four-year increments.
- Goals established from known baselines.
- Be high-priority metric(s), a score or ratio, or single monetary value (or equivalent).
- Count total progress toward market support and equity goals from all programs in the portfolio, regardless of segmentation.
- Set targets and measures demonstrating incremental progress toward meeting goals.

Energy Efficiency Strategy

SDREN's proposed EE strategy builds off of the foundation established through long-standing regional collaborations. The strategy is informed by SDREN's desire to deliver decarbonization, comprehensive EE services, and workforce opportunities.

Our portfolio-level strategies incorporate several key approaches, as listed below.

1. The portfolio is designed to provide **flexibility in program delivery** so that services can adapt and change as new programs or resources become available and when programs close.
2. By integrating **effective coordination and collaboration** with partners and trusted organizations across program segments and sectors, SDREN can identify synergies, reduce costs and complexity, and deliver high-value programs that reflect local priorities and needs. With effective coordination and collaboration, SDREN will also mitigate customer confusion and maximize the success of all programs.
3. The SDREN portfolio reduces barriers to participation by offering **customized support** and connecting customers with available resources and programs.
4. SDREN will promote decarbonization through **electrification measures** and incentives to move away from technologies that burn methane gas.
5. SDREN will monitor the market and coordinate with other programs to **leverage** complementary offerings and **stack** supplemental program services and external funding opportunities.

⁹ From D.23-06-055 "because the majority of the REN portfolios is dedicated to equity and market support offerings, new goals covering these primary purposes should be important accountability mechanisms for RENS...It is our intention that a goals development process for the market support and equity segments will follow a timeline that aligns goals adoption to the next portfolio cycle beginning in 2028. ...Market support and equity goals are ultimately expected to be long-term, broken into four-year increments, and will begin in 2028. This approach is also intended to allow the RENS to continue to work on their proposed Total Community Benefit metric, included in rebuttal testimony, if they so choose."

6. SDREN will take a holistic approach, **integrating IDSM** offerings to deliver value to participants throughout the portfolio (described in more detail under IDSM Strategies).

Principles of **environmental and social justice** connect throughout each of these strategies. SDREN will consider and incorporate environmental justice across all programs, regardless of segmentation.

Savings Forecasting and Quantification Methods

SDREN's savings forecast methods vary by program type. SDREN's savings projections were developed using only approved savings assumptions and/or methodologies, as described below.

SDREN is proposing a **single resource acquisition program** that will comply with D.23-06-055 by using a **meter-based method** for savings measurement. SDREN developed high-level savings forecasts taking into account program ramp-up and available incentive budgets, including incentive rate estimates in line with other similar programs. Savings claimed will be based on **actual savings realized** and will apply a population-level normalized metered energy consumption (NMEC) approach in alignment with the most current version of the CPUC's NMEC Rulebook.

All **equity and market support** programs utilize **deemed measures** that are currently approved in the California Electronic Technical Reference Manual (eTRM) database and follow the Statewide Deemed Workpaper Rulebook. SDREN will explore the benefits of establishing a deemed measure working group modeled after SoCalREN's efforts. This group would monitor the effectiveness of measures most relevant to its target customers and portfolio goals, recommend new measure additions, and make recommendations for phasing out deemed measures.

SDREN will not use the current custom process and meter-based approaches to savings measurement because they will not be cost-effective with the target customers in equity and market support segment programs.

While SDREN recognizes the benefits of meter-based savings approaches, there are currently limitations to its effectiveness for certain customers. SDREN will engage in statewide working groups to overcome barriers and explore cost-effective solutions for smaller customers. SDREN's third party implementers will be encouraged to explore opportunities to incorporate meter-based savings approaches into the programs. SDREN will also use the joint cooperation memo (JCM) process to identify the best strategies to support San Diego Gas and Electric (SDG&E) third party program providers with the delivery of meter-based savings projects, as appropriate.

Strategies for Market Intervention and Energy Efficiency Adoption

SDREN will incorporate the following strategies for market intervention and EE adoption.

Table 2. Strategies for market intervention and EE adoption by target audience

Target Audience	Strategy
Non-English speaking resident or business owner	<ul style="list-style-type: none"> ● In-person equitable and inclusive education and outreach (i.e. in-language materials with cultural understanding, and taking into consideration customers with impaired hearing or vision) conducted by trusted local representatives when possible.
Homeowner, business owner, public agency	<ul style="list-style-type: none"> ● Offer comprehensive concierge services and speak to holistic benefits to simplify adoption by customer and present a single point of entry to access programs, including SDG&E offerings. ● Provide customized technical assistance paired with advisory services to identify and install comprehensive EE and IDSM opportunities at homes/facilities. ● Offer funding, financing assistance, and guidance to customers on how to qualify, utilize, and stack funding sources such as IRA, on-bill financing (OBF), TECH, and self-generation incentive program (SGIP). ● Provide direct installation of no- to low-cost EE measures. ● Deliver outreach, education, and training to improve access, increase participation, and increase awareness and knowledge of how to manage and reduce energy consumption. ● Partner with community-based organizations (CBOs) to deliver messaging and services through local, trusted community members.
Tribes	<ul style="list-style-type: none"> ● Offer direct funding to Tribal nations to propose, design, and deliver tailored programming and initiatives to meet their unique community needs to increase access to EE programs, reduce energy burdens, and decarbonize assets. ● Provide ongoing access to a technical advisor with EE expertise to support successful implementation of programming and initiatives. ● Also, refer to all strategies noted above for other public agencies.

<p>Disadvantaged workers¹⁰</p>	<ul style="list-style-type: none"> ● Build and leverage external partnerships to enhance DAC worker outcomes such as: <ul style="list-style-type: none"> ○ Employers to provide training to staff and boost opportunities for growth. ○ Local community college partnerships to provide college-level courses and skill development opportunities. ● Provide education through the provision of training, certifications, networking, and apprenticeship opportunities to build skills to enter the green workforce. ● Offer wraparound services such as career coaching to match participants with employers to secure clean energy jobs.
<p>Employers connected to EE deployment</p>	<ul style="list-style-type: none"> ● Support and work alongside employers to understand and overcome barriers to offer targeted EE training for staff. ● Deploy a targeted survey to local employers to determine emerging clean energy industry careers and required skills and qualifications for incoming professionals to be successful. ● Stack opportunities available to employers by connecting them to other workforce development programs.
<p>Code enforcement officials and stakeholders</p>	<ul style="list-style-type: none"> ● Leverage data-driven insights to develop tools, technical resources, and templates for permitting electrification and other energy efficiency measures. ● Educate officials and authorities having jurisdiction (AHJ) about permitting and codes. ● Provide person-to-person support through an Energy Code Coach who can provide comprehensive compliance and enforcement strategy support.

New Strategies for Spurring Innovation

With a focus on SDREN’s environmental equity, collaboration, and community-driven principles, SDREN will incorporate the strategies outlined in the table below to spur innovation throughout the portfolio.

¹⁰ Disadvantaged worker definition from D.19-08-006, Attachment B, p.6: “Disadvantaged Worker” means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

Table 3. Strategies for Innovations Based on SDREN Principles

SDREN Principle	SDREN Strategies for Innovation
Environmental Equity	<ul style="list-style-type: none"> ● Focus on methods that maximize non-energy benefits for equity customers such as: <ul style="list-style-type: none"> ○ Engage multiple markets to identify the best strategies to reach equity customers including collaborations with community-based organizations that may overlap with but not be directly tied to energy (e.g. health work, local and sustainable food systems). ○ Build environmental and social justice priorities and opportunities to incorporate innovations into all program solicitations. Examples could include strategies for culturally sensitive outreach, customer protections, and emphasis on non-energy benefits that benefit underrepresented communities. ● Compensation for CBOs that engage and support SDREN. SDREN would also provide any needed energy education and training to these groups in order to build staff capacity and more effectively contribute to SDREN goals.
Collaboration	<ul style="list-style-type: none"> ● Prioritize collaboration, coordination and flexibility in program design in order to fill gaps and develop future innovations through the following strategies: <ul style="list-style-type: none"> ○ Work with local energy program administrators and implementers to optimize coordinated service delivery and ensure resources are used efficiently. ○ Work with SDREN Advisory Committee members and other regional partners, such as CBOs and local governments, to design approaches that reflect local needs and priorities, and maximize advantages for local communities. ● Leverage and marshal financial resources, provide access to financing, integrate and stack funding sources. <ul style="list-style-type: none"> ○ This includes state and federal funding opportunities, such as IRA and the CEC Equitable Building Decarbonization DI Program¹¹, as well as regional offerings, such as SDG&E programs, where feasible.
Community-Driven	<ul style="list-style-type: none"> ● Engage communities at early stages of planning to ensure the

¹¹ <https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program>

	<p>services that are developed and delivered not only reflect local needs and priorities, but invest in community-based program delivery.</p> <ul style="list-style-type: none"> ● Identify success measures reflective of desired community outcomes, informed by the San Diego Community Power (SDCP) Community Power Plan and the County of San Diego’s Regional Decarbonization Framework. ● SDREN Advisory Committee to include CBOs with the role to advise on outreach and enrollment, provide feedback on program evaluation reports, and recommend program improvements. ● Ongoing engagement will focus on collecting feedback to inform 2028-2031 Portfolio Plan. <ul style="list-style-type: none"> ○ This will also be informed by the community-based pilot led by SoCalREN.¹² ● Tribal program designed to ensure community-driven and culturally-centered design and service delivery.
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Strategy for Incorporating Low Global Warming Potential (GWP) Refrigerants

Hydrofluorocarbon refrigerants (HFCs) are “super” GHGs that are being phased out due to their negative environmental impact. However, the San Diego region needs significant support to transition safely to low-GWP refrigerants. Low-GWP refrigerants will be incorporated into the portfolio using the strategies outlined in the table below.

Table 4. Strategies for Incorporating Low-GWP Refrigerants

Portfolio Sector/Program	SDREN Supporting Strategy
Residential, Commercial and Public	<ul style="list-style-type: none"> ● Offer education about low-GWP refrigerants with customers receiving relevant measures or recommendations within technical assistance offered. ● Requirements for installers to use low-GWP refrigerants in newly installed equipment. ● Support proper reclamation of HFC refrigerants in addition to providing measures with low-GWP refrigerants.
Codes & Standards	Provide information to all local permitting agencies and other market actors about the HFC phase-out and low-GWP refrigerants along with code requirements.

¹² D.23-06-055, OP 30.

Workforce, Education & Training	Incorporate training to participants on proper installation and management of low-GWP refrigerants and proper reclamation of HFC-based refrigerants, along with education about the phase-out and benefits of low-GWP.
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SDREN will cooperate with the Market Transformation administrator should new HVAC and refrigeration initiatives be introduced to handle low-GWP changes and regulations.¹³ SDREN will closely monitor programs with low-GWP strategies, such as TECH and the BayREN Refrigerant Replacement Program, to drive the market toward low-GWP refrigerants and identify best practices to integrate into program designs before launching programs.

Integrated Demand Side Management (IDSM) Strategies

CPUC ruling D.23-06-055 authorizes PAs to propose IDSM programs by submitting a Tier 3 Advice Letter (AL) no later than March 15, 2024 for programs to be launched during the 2024-2027 portfolio period.¹⁴ Guidance for what is to be included in the AL was issued by the Energy Division (ED) on December 28, 2023.

Given that SDREN is not anticipated to be authorized as a PA before March 15, 2024, SDREN’s proposed framework and structure for their IDSM strategy is outlined below. SDREN will file a Tier 3 Advice Letter following the guidance issued by the Energy Division within 6 months of SDREN’s authorization.

SDREN anticipates allocating the full cap of \$4 million towards IDSM activities¹⁵ because integrating IDSM activities and services alongside EE is a cost-effective use of resources to drive deep decarbonization across the region. In line with SDREN’s decarbonization goal and the portfolio strategy of customized support, **SDREN will comprehensively consider IDSM opportunities across all programs** to be integrated throughout the portfolio.

SDREN’s proposed potential IDSM strategies across the portfolio include:

- **Regional IDSM Working Group**
 - a. Convene regional Load Serving Entities (Clean Energy Alliance, SDCP, and SDG&E) to discuss IDSM programs, including building electrification, transportation electrification, demand response, distributed generation, and storage, in order to optimize SDREN program design and delivery.
 - b. Discuss regional grid needs (e.g., hosting capacity, distribution congestion) to inform program design, electrification priorities, and operational strategies.

¹³ D.21-05-031 at 60.

¹⁴ The CPUC will allow IDSM programs to be proposed through the submission of Tier 3 Advice Letters no later than March 15, 2024, for programs to be launched during the portfolio period (2024-2027).

¹⁵ Per CPUC ruling A.22-02.005, a PA may, but is not required to, expand up to 2.5 percent, or \$4 million, whichever is greater, of its energy efficiency budget for the portfolio period, up to a maximum of \$15 million, on a pilot basis for ongoing load shifting that reduces peak consumption.

- c. As appropriate, update SDREN IDSM activities to incorporate feedback from the Regional IDSM Working Group.
- **Equipment Specification**
 - a. Document IDSM program eligibility requirements, including equipment features and functionality, original equipment manufacturers (OEM) eligibility, Distributed Energy Resource Management System (DERMS) integration, and compatibility with relevant codes, industry standards, and workforce needs.
 - b. Work with SDREN implementers to align, to the extent possible, program Qualified Product Lists (QPLs) with regional IDSM program requirements.
- **Identification, Installation and Commissioning**
 - a. Identify IDSM opportunities based on customer preferences.
 - b. Incorporate enrollment (e.g., device enrollment) support and process (e.g., terms and conditions acceptance) into SDREN programs, including marketplace offers, contractor partnerships, and Energy Division (ED) guidance on incentive stacking and IRA reporting.
 - c. Integrate device commissioning requirements for IDSM programs (e.g., digital connectivity commissioning, DERMS integration) into contractor-driven SDREN program delivery.
 - d. Ensure customer preferences, awareness, and education activities are integrated throughout the program delivery lifecycle.
- **Codes and Standards**
 - a. Provide education and technical support to code officials on implementation of new requirements related to flexible load technologies (e.g., Title 24 compliance credits for storage and heat pump water heaters (HPWHs), flexible demand appliance standards).
- **Workforce Education and Training**
 - a. Incorporate flexible load program requirements, incentives, commissioning processes and other IDSM program material into energy efficiency training modules for participating contractors.
 - b. Educate and collaborate with participating contractors on inclusive outreach, customer acquisition, and sustained customer satisfaction with technology and behavioral interventions contributing to IDSM program goals.
- **Education and Customer Support**
 - c. Assist customers in applying for additional IDSM funding and incentives.
 - d. Incorporate information on the opportunities and benefits of IDSM program participation into customer education and outreach materials and workshops.

Customers will be channeled into appropriate programs and decarbonization strategies that will result in event-based or permanent load shifting or load reduction. As part of its development of IDSM strategies, SDREN will closely coordinate with other IDSM programs and administrators.

Application Summary Tables Covering the 4-year Budget Request

SDREN’s annual budget request for 2024-2027 is outlined in the table below. The 2024 budget request is lower than subsequent years to account for a partial year and ramp up activities, in anticipation of the application not being authorized until mid-2024. For example, contracting and coordination with SDG&E, program solicitations, development of Implementation Plans, SDREN branding/website, and regulatory activities are anticipated to begin in mid-2024.

Table 5. Annual Budget Request Breakdown by Budget Category

Budget Category	2024	2025	2026	2027	Total
Administration	\$1,524,300	\$3,149,590	\$3,464,549	\$3,811,004	\$11,949,443
Marketing and Outreach	\$914,580	\$1,889,754	\$2,078,729	\$2,286,602	\$7,169,666
Direct Implementation - Non-incentive	\$12,804,120	\$15,687,391	\$17,256,130	\$18,981,743	\$59,517,456
Direct Implementation - Incentive	\$0	\$10,769,165	\$11,846,082	\$13,030,690	\$40,857,865
EM&V	\$609,720	\$1,259,836	\$1,385,820	\$1,524,402	\$4,779,777
Total	\$15,852,720	\$32,755,736	\$36,031,310	\$39,634,441	\$124,274,206

Distribution of Budget Among Sectors and Segments

Table 6. Distribution of 2024-2027 budget by sector and segment¹⁶ (does not include EM&V)

Sector	Resource Acquisition	Market Support	Equity	C&S	Total
Commercial	\$16,479,316	-	\$18,310,722	-	\$34,790,038
Cross-Cutting C&S	-	-	-	\$7,323,955	\$7,323,955
Cross-Cutting WE&T	-	\$19,225,425	-	-	\$19,225,425
Public	-	\$21,418,605	\$1,831,406	-	\$23,250,011
Residential	-	-	\$34,905,000	-	\$34,905,000
Total	\$16,479,316	\$40,644,030	\$55,047,128	\$7,323,955	\$119,494,429

¹⁶ Portfolio support is allocated by program and sector based on segmentation for all budget tables in Exhibit 2.

Figure 5. Budget Breakdown by Segment

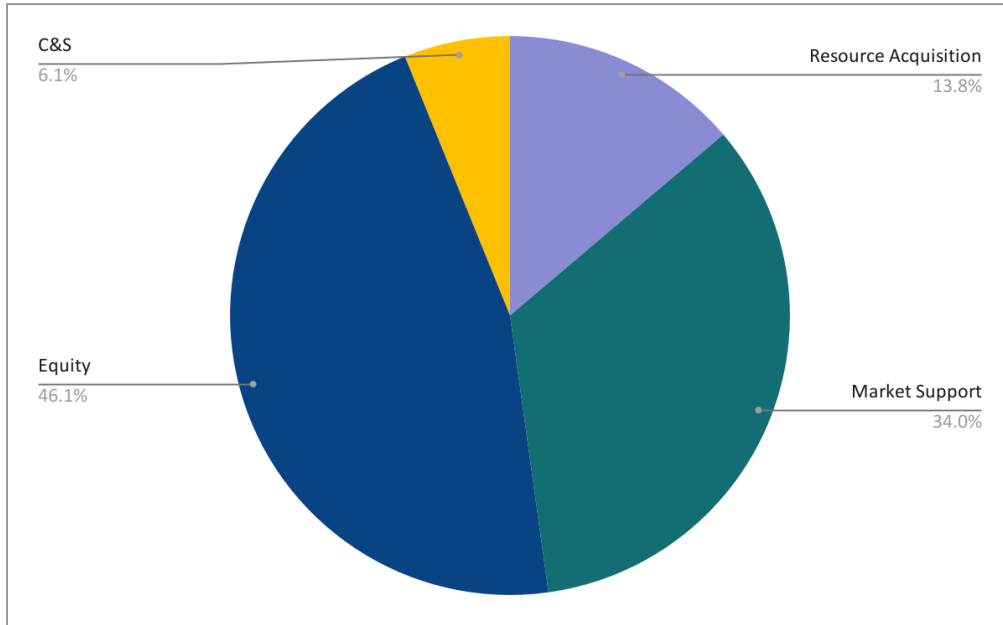
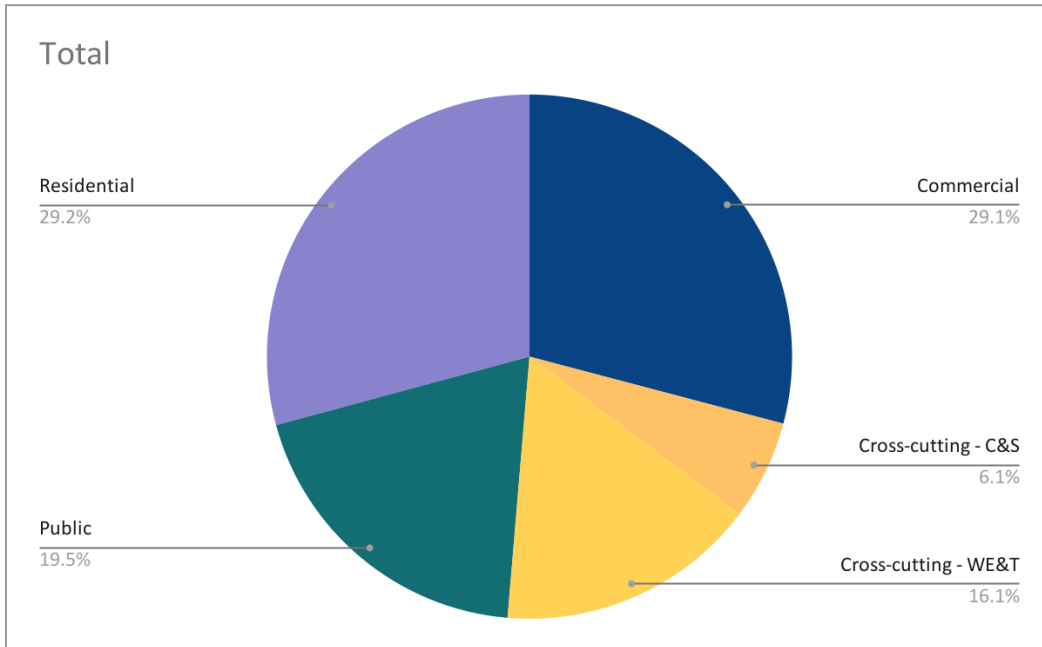


Figure 6. Budget Breakdown by Sector



Projected Sector-Level and Portfolio-Level Cost Effectiveness

Table 7. Forecasted cost-effectiveness for portfolio and by sector and segment

	TRC, No Admin	TRC, W/ Admin	PAC, No Admin	PAC, W/ Admin
Portfolio	0.51	0.17	0.48	0.17
Resource Acquisition	0.64	0.39	0.87	0.46
Market Support	0.16	0.03	0.16	0.03
Equity	0.08	0.03	0.06	0.03
Codes & Standards	0.00	0.00	0.00	0.00
Commercial	0.51	0.27	0.62	0.29
WE&T	0.00	0.00	0.00	0.00
Public	0.16	0.06	0.16	0.06
Residential	0.26	0.14	0.19	0.12

Resource Acquisition Segment

The below table details the forecasted cost-effectiveness for the Resource Acquisition segment. There is one Commercial Sector program segmented as Resource Acquisition in the portfolio. For this reason, only the Commercial Sector is listed below.

Table 8. Forecasted cost-effectiveness of resource acquisition segment at portfolio, sector, and program level

	TRC, no Admin	TRC, w/Admin	PAC no Admin	PAC w/Admin
Resource Acquisition Segment	0.64	0.39	0.87	0.41
Commercial Sector	0.51	0.27	0.62	0.29
SDREN Market Access Program	0.64	0.43	0.87	0.52

All Segments

SDREN is proposing one Resource Acquisition program, five Equity programs, three Market Support programs, and one Codes and Standards program. Several of these programs will contribute to SDREN's total system benefit (TSB) forecasts by offering measures and services not covered by other programs. Most, if not all, SDREN programs will drive participation in SDG&E programs through referrals. This will, in turn, contribute to the region's TSB goals.

The biannual Potential and Goals (P&G) Study that develops savings goals to inform EE program planning for PAs does not currently set goals for RENs. The CPUC Decision Adopting Energy Efficiency Goals for 2024-2032 established the TSB goal for 2024-2027 in SDG&E territory at \$184,147,673, based on the 2023 P&G Study.¹⁷ Based on their most recently filed true up Advice Letter (TUAL), SDG&E's total TSB forecast is \$395,517,890 for program years 2024-2027, equating to 215% of their goal.¹⁸

SDREN recognizes the importance of delivering on the TSB goals set through the authorization of this portfolio. The table below outlines the forecasted four-year TSB, net first year kWh, kW, therms, and CO₂ emissions avoided at the portfolio level, by segment and by sector.

Table 9. Forecasted 2024-2027 cumulative TSB, net first year savings, and GHG emissions avoided

	TSB (\$)	Net kWh	Net kW	Net Therms	Tons CO ₂ e
Portfolio	\$18,194,415	14,246,780	684	711,169	8,561
Resource Acquisition	\$7,428,942	12,615,801	0	0	4,278
Market Support	\$6,826,309	364,996	313	456,726	2,533
Equity	\$3,939,164	1,265,984	371	254,443	1,750
Codes & Standards	\$0	0	0	0	0
Commercial	\$9,021,653	15,493,358	371	(444)	5,215
WE&T	\$0	0	0	0	0
Public	\$6,826,308	364,996	313	456,726	2,533
Residential	\$2,346,453	(1,611,573)	0	254,887	813

¹⁷ D. 23-08-005, pg. 18

¹⁸ SDG&E True Up Advice Letter 4302-E.

Forecast Methodology

Portfolio Administration vs. Program Implementation Costs

SDCP started its portfolio planning process by focusing on the REN directives and designing an energy efficiency program portfolio appropriate to meet the unique unmet needs within San Diego County. A reasonable budget range sufficient to service these unmet needs was then established for the portfolio, and the program-level budgets were then developed using a zero-based budget approach and following guidance from the CPUC and EE Policy Manual.

SDCP has tried its best to assess the EE program gaps and EE service needs within San Diego County, focusing particularly on HTR and underserved customer segments, to design and propose programs that will fill gaps and meet communities' needs. The proposed budgets are calibrated to allow a sufficient scale for program delivery to the targeted customer segments in the SDREN service territory and to confidently expect significant positive customer impacts. The requested budgets are commensurate with the program and portfolio budgets that have previously been approved by the CPUC for RENs in other IOU territories.

SDREN developed a budget conforming to CPUC guidance (referencing D.21-05-031 pp 32-33 for program administration versus program implementation) and the Energy Efficiency Policy Manual. The budget breakdown in the *SDREN 2024-2031 EE Application Excel Sheets* and *SDREN Attachment B Supplemental Budget Information Narrative* includes the following categories and costs:

- Administration: The budget forecast allocates 10% of each program budget to Portfolio Support based on program segmentation for activities not associated with program implementation. As a new REN, SDCP is allocating the full 10% cap, but anticipates developing administrative efficiencies to reduce administrative costs during operation. SDREN will meet regularly with other PAs, such as the other RENs, to understand best practices for decreasing the overall portfolio allocation to administration.
- Marketing, education, and outreach (ME&O): 6% ME&O has been allocated within each program to be apportioned for activities both at the program level and the portfolio level.
- Direct implementation - incentives: This has been allocated at the program level for any program that offers incentives for measures that deliver TSB. The allocation by program has been determined based on estimated incentive value disbursed through the program and energy savings targets achieved for measures installed or delivered.
- Direct implementation - non-incentives: This has been allocated at the program-level and is based on the services and resources the programs will deliver. It has been developed to align with the incentive program forecast when applicable.
- EM&V: 4% has been allocated at the portfolio level in accordance with D.21-05-031 and in alignment with the 2024-2031 EE Application Attachment Tables.

Segmentation Strategy

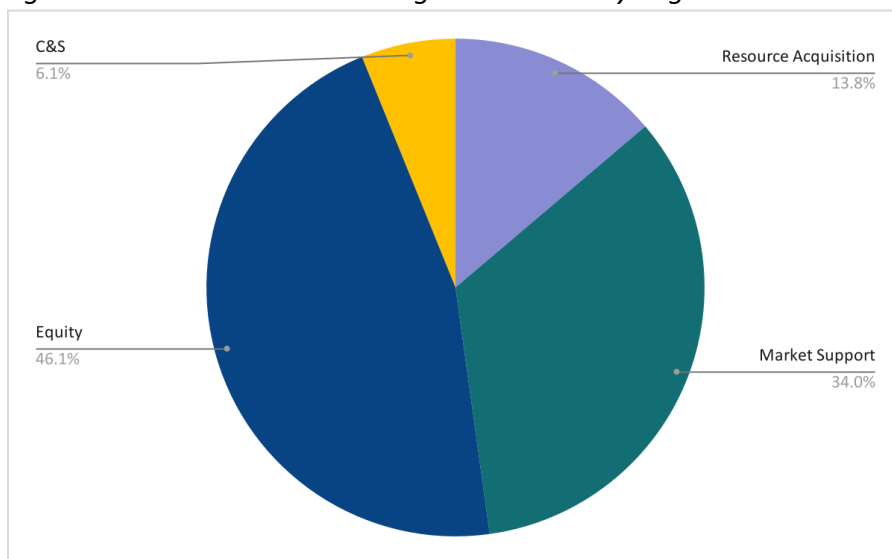
SDREN’s overarching segmentation strategy is described below. Additional details on SDREN’s segmentation justification at the program level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A*.

Strategies Driving Distribution of Budget Among Segments

SDREN’s portfolio includes programs in all segments, with the majority of its budget allocated to the market support and equity segments. The strategies driving its segmentation approach and budget distribution are in alignment with broader portfolio objectives to complement existing and emerging offerings to accelerate equitable decarbonization throughout San Diego County. SDREN’s segmentation strategy, as described below, is informed by its core values and guiding principles.

The budget allocation by segment is illustrated in the graphic below.

Figure 7. SDREN 2024-2027 Budget Allocation by Segment



Resource Acquisition: SDREN has allocated nearly 14% of its budget toward the resource acquisition segment. SDREN recognizes that SDG&E is investing heavily in this segment and is projected to significantly exceed TSB goals established from the P&G study.¹⁹ Given SDG&E’s investment in resource programs, SDREN is proposing only one resource acquisition program. It is targeted to HTR customers that are not anticipated to be served by SDG&E programs. This market access program (MAP) expands an existing SDCP program that has been launched in their territory. The SDREN proposed program will expand this existing program to the entire SDREN territory using lessons learned from SDCP’s program.

¹⁹ SDG&E True Up Advice Letter 4302-E.

Codes & Standards: Approximately 6% of SDREN’s portfolio budget is allocated toward codes and standards activities for a program focused on decarbonization-related code enforcement, compliance, and adoption of reach codes. SDREN identified that C&S activities are a demonstrated strength of RENS. As such, SDREN’s budget allocation is commensurate with spending by other RENS within this segment.

Market Support: 34% of SDREN’s budget is allocated to the market support segment. SDREN is proposing three market support programs, primarily focused on workforce, education, and training. All programs are based on successful models to build local capacity and strengthen the energy market’s long-term success.

Equity: The highest proportion of SDREN’s budget, at just over 46%, is allocated to equity programs. SDG&E has a limited investment in the equity segment, with just 7%²⁰ of their portfolio directed to equity programs.²¹ SDREN’s portfolio includes five equity programs designed to fill this gap in funding for equity customers. These programs are key to meeting SDREN’s long-term goal of equitable decarbonization of the San Diego region. They will help equity customers to leverage other resources and programs and maximize the benefits to their communities.

Resource Acquisition

Resource acquisition programs have the primary purpose of and short-term ability to deliver cost-effective avoided cost benefits to the electricity and natural gas systems.²² For SDREN, this segment is forecasted to deliver the bulk of savings to achieve TSB goals.

Preliminary Resource Acquisition Budget for 2024-2027 and Rationale for Distribution

SDREN’s resource acquisition segment budget is \$16,479,316, representing 13.8% of SDREN’s proposed 2024-2027 budget. There is one commercial sector program within the resource acquisition segment, which will focus on projects that reduce peak demand usage and deliver verifiable energy savings. This program will help SDREN advance decarbonization, reduce energy burdens, reduce energy consumption, and increase participation in and access to EE programs. The program will focus outreach efforts on small to medium HTR and underserved commercial customers that may be missed or passed over by other programs. It is intended to deliver a majority of the TSB savings for the portfolio.

Table 10. Resource Acquisition Four-Year Budget Breakdown by Sector

Sector	2024	2025	2026	2027	Total
Commercial	\$2,102,000	\$4,343,600	\$4,777,960	\$5,255,756	\$16,479,316

²⁰ SDG&E True Up Advice Letter 4302-E.

²¹ CPUC Budget Filing Metrics 2024-2027

<https://public.tableau.com/app/profile/capublicutilities/viz/CPUC24-27BudgetFilingData/BudgetPlanDashboard>.

²² Decision 21-05-031, pg 14.

Resource Acquisition Goals, Strategies, and Outcomes

For the 2024-2027 portfolio period, SDREN will follow the goals, strategies, and outcomes in the table below for the resource acquisition sector. The strategies included will help the state achieve Environmental and Social Justice Action Plan (ESJAP) goals 2 and 4 by investing in clean energy resources and improving climate resilience, while benefiting ESJ businesses.

Table 11. Resource Acquisition Goals, Strategies and Outcomes

Goals	Strategies	Outcomes
<ul style="list-style-type: none"> ● Accelerate implementation of EE measures. ● Accelerate load modification program participation. ● Provide short-term benefits to electricity and methane gas systems, as measured by TSB. ● Achieve verifiable energy savings and peak demand reductions. ● Increase HTR and underserved businesses' participation in EE programs. 	<ul style="list-style-type: none"> ● Scale an existing program that incentivizes long-life measures that also reduce peak demand. ● Leverage incentives and commissioning process for load modification programs alongside EE measure purchase and installation. ● Focus on commercial customers that are underserved by other regional market access programs. ● Work with trusted local advisors to support access to programs. 	<ul style="list-style-type: none"> ● Establish emerging EE technologies such as heat pump water heaters with DR integration capabilities as the standard practice. ● Normalize device commissioning and enrollment in load modification programs as a standard business practice by contractors. ● Fully realize the potential of EE through comprehensive whole building retrofits that capture 'stranded' to-code energy savings at the meter. ● Small and medium businesses that have previously not participated in EE experience multiple benefits through participation.

Projected Portfolio and Sector-level Metrics

The following resource acquisition metrics will also be reported at the portfolio and commercial sector levels. Additional metrics and/or indicators may be identified by the implementer once under contract or through Commission direction. SDREN will report on relevant common metrics and others that roll up into the unique value metrics.

Table 12. Resource Acquisition Metrics

Description	2024	2025	2026	2027	Total
Total system benefit (TSB; \$)	\$0	\$1,979,434	\$2,624,811	\$2,824,697	\$ 7,428,942
Net GHG reduction	0	1,143	1,553	1,581	4,278
Net kWh savings	0	3,333,474	4,444,630	4,837,697	12,615,801
Net kW savings	0	0	0	0	0
Net therms savings	0	0	0	0	0

Resource Acquisition Segment-Specific Coordination

SDG&E is growing the number of resource acquisition commercial sector programs it offers through several current and upcoming third party solicitations. SDREN will coordinate closely with SDG&E ahead of program launch to prevent any market confusion. To ensure commercial customers are served effectively, SDREN will train local trusted entities as customer engagement representatives to direct customers to programs that fit their needs. Customer engagement representatives will target and market programs to HTR and underserved commercial customers who would benefit from customized engagement approaches.

Codes & Standards

The codes and standards segment has the following primary purposes:

- Influencing standards and code-setting bodies (such as the CEC) to strengthen energy efficiency and load management regulations.
- Improving compliance with existing codes and standards.
- Helping local governments develop ordinances that exceed statewide minimum requirements.
- Coordinating with the other programs and entities to support the state’s policy goals.²³

Preliminary Codes & Standards Budget for 2024-2027 and Rationale for Distribution

The Codes & Standards segment budget is \$7,323,955, representing 6.1% of the SDREN proposed four year budget. The segment mirrors the cross-cutting C&S sector, which includes just one program. SDREN’s C&S segment is intended to complement existing efforts at the state

²³ D.23-06-055, pg.13-14.

and regional levels by improving compliance at the local level. The C&S landscape requires a localized approach due to the current gaps, barriers, and challenges permitting agencies face and the urgency needed to rapidly scale up compliance to meet ambitious decarbonization goals. SDREN’s program will provide tailored support to help agencies navigate the intricate energy code compliance landscape effectively. Given agencies’ needs and successes noted in other regions, the budget was developed to be commensurate with budget allocations for other REN C&S programs.

Table 13. C&S Four-Year Budget Breakdown

Sector	2024	2025	2026	2027	Total
C&S	\$934,000	\$1,930,500	\$2,123,550	\$2,335,905	\$7,323,955

Codes & Standards Goals, Strategies, and Outcomes

For the 2024-2027 portfolio period, SDREN will follow the goals, strategies, and outcomes for the C&S sector outlined in the table below. The strategies below will support the state in meeting ESJAP goal 6: enhancing the enforcement of codes to ensure safety and consumer protection for ESJ communities. Reference the *C&S Sector Goals, Objectives, Strategies* section for a full description of goals, strategies, and outcomes.

Table 14. Codes & Standards Goals, Strategies and Outcomes

Goals	Strategies	Outcomes
<ul style="list-style-type: none"> Empower permitting agencies and the C&S community to improve energy code compliance, reduce energy consumption, and reduce GHG emissions while supporting the state’s EE and GHG goals. Help public agencies compile and use data to enhance energy code compliance and facilitate adoption of advanced energy codes and policies. Promote the adoption, implementation, and enforcement of 	<ul style="list-style-type: none"> Streamline permitting processes. Provide comprehensive support for implementation of advanced energy codes. Develop compliance and enforcement strategies and effective tracking mechanisms. Create a suite of tools, technical resources, and templates, including an energy code coach. Build participant staff capacity and their ability to use building stock, benchmarking and C&S data. Create feedback loops from C&S activities that inform 	<ul style="list-style-type: none"> The C&S community achieves high-performance and resilient buildings. Streamlined permit approvals that include energy resiliency and climate adaptation design elements. Public agency energy resilience action plans, energy/GHG reduction targets, and other strategies are informed by digitized data collected from permitting. Reduced energy costs, improved indoor air quality, and enhanced building functionality.

<p>advanced energy codes, standards, and policies that improve building energy performance and accelerate decarbonization.</p>	<p>comprehensive strategies across SDREN offerings.</p> <ul style="list-style-type: none"> • Provide educational information to the C&S community about the phase out of HFCs and low-GWP refrigerant alternatives. 	<ul style="list-style-type: none"> • State and federal technical expertise and funds are leveraged to develop and deploy new policies. • Local building performance standards (BPS) and building benchmarking requirements that improve building efficiency, comfort, economics, and health become common practice.
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Projected Annual Portfolio and Sector-Level Metrics

The following C&S metrics/indicators will be reported at the Portfolio and Cross-Cutting C&S Sector levels. Additional metrics/indicators may be identified by the implementer once under contract or through Commission direction.

Table 15. Codes & Standards Metrics

Metric or Indicator	Metric/Indicator Description	2024-2027
Metric	Number and percent of local government permitting agencies receiving C&S program services and assistance.	To be confirmed after SDREN awards contract to implementer.
Metric	Number and percent of local governments who adopt model energy codes and advanced energy policies/standards.	
Indicator	Magnitude of improved code compliance and closed permit outcomes by participating local governments.	
Indicator	Number and percent of local governments who implement improved permit data collection, tracking, and analysis to enhance energy code compliance outcomes.	
Metric	Number of training activities (classes, webinars, workshops, etc.) held and number of participants by category.	

Metric	Number and percent of permitting agencies who receive assistance from an SDREN energy code coach.	
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SDREN will also report on segment- and sector-specific common metrics and other metrics and indicators that roll up into the portfolio’s unique value metrics.

C&S Segment-Specific Coordination

SDREN will coordinate its C&S segment strategies with SDG&E’s C&S programs and with statewide C&S programs administered by the IOUs and the CEC. Coordination with other C&S programs will avoid potential overlap and duplication and ensure that the SDREN C&S programs and initiatives provide substantial new value to the San Diego County C&S community. SDREN will leverage best practices, coordination strategies, program design innovations, and tools and resources from other RENs and IOUs, such as Energy Code Ace and the Energy Hub developed with the San Diego Regional Climate Collaborative (SDRCC), to develop consistent and comprehensive C&S solutions.

SDREN and SDG&E staff will convene regular meetings and communication to ensure a well-coordinated set of codes and standards program offerings and a comprehensive set of C&S policy strategies and compliance solutions. SDREN and SDG&E will also work together on marketing and outreach efforts. Both the proposed SDREN C&S program and the SDG&E Local C&S program will strive to offer a comprehensive set of strategies to effectively address current and anticipated C&S policy drivers and increase compliance support for permitting agencies and permit applicants. Areas of anticipated SDREN and SDG&E collaboration and coordination include:

- Working together on C&S needs assessments.
- Developing customized education and technical assistance for city and county building departments.
- Developing complementary C&S education tools, resources, workshops, training, and forums.
- Developing complementary approaches to educating and advocating for improved existing building performance, such as benchmarking, building performance standards, rating systems, energy auditing, etc.
- Working together to create innovative C&S solutions that assist in meeting state climate and energy goals.

Market Support

Market Support programs have a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness.²⁴

²⁴ D.21-05-031, pg 14.

Multiple sub-objectives for the segment have also been identified and are listed below:²⁵

1. Demand: Build, enable, and maintain demand for energy-efficient products and services in all sectors and industries to ensure interest in, knowledge of, and awareness of how to obtain energy efficient products and/or services.
2. Supply: Build, enable, and maintain supply chains to increase the capability of market actors to supply energy-efficient products and/or services, and to increase the ability, capability, and motivation of market actors to perform/ensure quality installations that optimize energy efficiency savings.
3. Partnerships: Build, enable, and maintain partnerships with consumers, governments, advocates, contractors, suppliers, manufacturers, community-based organizations and other entities to obtain delivery and/or funding efficiencies for energy-efficient products and/or services and create added value for partners.
4. Innovation and Accessibility: Build, enable, and maintain innovation and accessibility in technologies, approaches, and services to increase value, decrease costs, increase energy efficiency, and/or increase scale of and access to energy-efficient products and services.
5. Access to Capital: Build, enable, and maintain increased and equitable access to capital and program coordination to increase affordability of and investment in energy-efficient projects, products, or services.

SDREN will also consider the integration of flexible load products and projects alongside energy efficiency for these sub-objectives.

Preliminary Market Support Budget for 2024-2027 and Rationale for Distribution

SDREN’s Market Support segment budget is \$40,644,030, representing 34.0% of SDREN’s proposed 2024-2027 budget. There are a total of three market support programs in the portfolio, one in the Public sector and two in the Cross-Cutting WE&T sector. SDREN’s investment in the Market Support sector will support the long-term success of the EE market in the San Diego region by investing in a strong workforce and the public agencies that represent and lead the region. The allocation of budget to this segment is imperative for SDREN to deliver on all three of its portfolio goals: advancing decarbonization, providing comprehensive services that improve outcomes for underserved and HTR communities, and accelerating the clean energy economy through workforce opportunities. The overall budget is commensurate with the investments of other RENs within the market support segment.

Table 16. Market Support Four-Year Budget Breakdown by Sector

Sector	2024	2025	2026	2027	Total
Public	\$2,732,000	\$5,645,500	\$6,210,050	\$6,831,055	\$21,418,605
WE&T	\$2,452,000	\$5,067,500	\$5,574,250	\$6,131,675	\$19,225,425
Total	\$5,184,000	\$10,713,000	\$11,784,300	\$12,962,730	\$40,644,030

²⁵ Ibid.

Market Support Goals, Strategies, and Outcomes

For the 2024-2027 portfolio period, SDREN will follow the goals, strategies, and outcomes listed in the table below for the market support sector. The strategies related to public agencies will support the state in meeting ESJAP goals 2 and 4 by increasing climate resiliency and investment in clean energy resources to benefit ESJ communities. Strategies related to workforce development will address the ESJAP goal 7 to promote high road career paths and economic opportunity for residents of ESJ communities.

Table 17. Market Support Goals, Strategies and Outcomes

Sector	Goals	Strategies	Outcomes
WE&T	<ul style="list-style-type: none"> ● Build participant workforce capacity. ● Enhance workforce training pathways. ● Strengthen employee skills and support professional growth focused on green careers. 	<ul style="list-style-type: none"> ● Provide comprehensive workforce educational and wraparound services to build skills and match participants with employers. ● Coordinate with job placement programs to support workforce development. ● Partner with local community college districts to provide college-level courses and skill development opportunities. 	<ul style="list-style-type: none"> ● Increase the supply of skilled employees entering into the energy and green workforce. ● Increase opportunities for job training and certifications. ● Connect participants to high road jobs. ● Increase participating organizations' staff retention and internal promotional opportunities.
Public	<ul style="list-style-type: none"> ● Increase capacity, awareness, and understanding of the benefits of decarbonization and IDSM strategies. ● Help public agencies address and adapt to climate change by reducing GHG emissions and increasing 	<ul style="list-style-type: none"> ● Offer comprehensive project management and technical assistance services to identify and install projects. ● Deliver education and training to public agencies. ● Deliver customized decarbonization and resilience roadmaps. ● Provide energy analysis reports at the portfolio and project level. 	<ul style="list-style-type: none"> ● Agencies improve their energy resilience, increase preparedness for climate-related emergencies, and decarbonize their facilities and assets. ● Public agencies demonstrate awareness of benefits of distributed energy resources (DERs) and integrate policies and actions as standard practice.

	energy resilience.	<ul style="list-style-type: none"> • Directly install EE and flexible load measures. • Channel project opportunities to other applicable EE and IDSM programs. • Help agencies secure internal and external funding for decarbonization projects. 	<ul style="list-style-type: none"> • Agency awareness of energy consumption and costs. • Integration of EE and IDSM recommendations into existing or new Climate Action Plans. • Agencies receive capital to fund their decarbonization and energy resilience projects. • Energy bill reductions are achieved.
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Projected Annual Portfolio and Sector-Level Metrics

The 2023 decision authorizing EE Portfolios and Business Plans adopted a set of Market Support segment objectives and indicators. SDREN will engage with the joint PAs as part of the joint Tier 2 Advice Letter to be filed by May 1, 2024²⁶ to modify the common metrics, clarify and modify the adopted indicators, and define the process for proposing and adopting long-term market support and equity goals and metrics for success.

SDREN will track and report on the adopted and finalized Market Support indicators (by sector where applicable). These will be reported annually or quarterly and either at the segment or portfolio level, as outlined in the table below.

Table 18. Adopted Market Support Indicators

Market Support Indicators	Reported Annually or Quarterly?	Reported at Segment or Portfolio Level
Number of partners by type and purpose(s)	Q	P
Dollar value of non-ratepayer in-kind funds/contributions provided via partnerships	A	P
Participation rate relative to eligible target population for curriculum	Q	S
Percent of total WE&T program participants that meet the CPUC’s definition of disadvantaged worker	Q	S
Number of career and workforce readiness participants who have been employed for 12 months after receiving training	A	S

²⁶ D.23-06-055 Ordering Paragraph (OP) 11.

Prior year percentage of new measures added to the portfolio that were previously emerging technology program (ETP) technologies	A	P
Prior year percentage of new codes or standards that were previously ETP technologies	A	P
Savings (lifecycle net kWh, kWh, and therms) of measures currently in the portfolio that were supported by ETP, added since 2009. Ex ante with gross and net for all measures, with ex post where available	A	P
Number of new, validated technologies recommended to the California Technical Forum	A	P
Cost-effectiveness of a technology before and after intervention by the market support program (percentage change in cost-effectiveness)	A	S
Number of collaborations, with a contextual descriptions, by business plan sector to jointly develop or share training materials or resources	A	P
Number of participants by sector that complete training	Q	S
Number of projects (outside of ETP) that validate the technical performance, market barrier knowledge, and/or effective program interventions of an emerging/under-utilized or existing energy efficient technology	A	P
Total projects completed/measures installed and dollar value of consolidated programs by sector	Q	P
Ratio of ratepayer funds expended to private capital leveraged by sector	Q	P
Percentage of partners that have taken action supporting energy efficiency by type	Q	P
Number of contractors (that serve in the portfolio administrator service areas) trained by relevant market support programs to provide quality installations that optimize energy efficiency	Q	S
Assessed value of the partnership by partners	A	P
Percent of market penetration of emerging/under-utilized or existing energy efficiency products or services	A	P
Percent of market participant awareness of emerging/under-utilized or existing energy efficiency products or services	A	P

Aggregated confidence level in performance verification by production, project, and service (for relevant programs)	A	P
Cost differential between comparable market rate products and program products	A	P
Comparisons between market-rate capital vs. capital accessed via energy efficiency programs (e.g., interest rate, monthly payment)	A	P

Other progress trackers SDREN will report on include:

- The additional seventeen indicators focused on awareness, knowledge, attitude, and behavior (AKAB) outlined in D.23-06-055, once additional guidance is available.²⁷
- Program-level progress trackers, which are outlined in the program cards and will be finalized after award of contract to implementation consultant.
- Portfolio- and sector-specific common metrics and indicators.
- Metrics and indicators that roll up into the portfolio’s unique value metrics.

Market Support Segment-Specific Coordination

To meet the objectives of the market support segment, SDREN will thoughtfully and consistently coordinate with SDG&E and their third party program implementers. SDREN will engage with SDG&E ahead of soliciting any of the market support programs to third party implementers in order to clearly outline service gaps and opportunities for integrating coordination into the solicitations. Additionally, SDREN will coordinate with other workforce development actors in the region and across the state, such as other RENs and EE third party implementers, to share best practices and resources.

As part of SDREN’s unique value and to meet market support objectives, they will coordinate with the following regional entities: San Diego Regional Climate Collaborative, SDCP, CEA, SDG&E, San Diego Workforce Partnership, San Diego Association of Governments (SANDAG), San Diego Green Building Council, and International Code Council (ICC) San Diego Chapter.

SDREN will also closely monitor market transformation initiatives and activities from CalMTA²⁸ for opportunities to incorporate them into the Market Support segment of the SDREN portfolio.

Equity

The purpose of Equity segment programs is to provide energy efficiency resources to HTR or underserved customers and disadvantaged communities and to advance the ESJ Action Plan.²⁹

²⁷ D.23.06.055, pg 63.

²⁸ <https://calmta.org/>

²⁹ D.21-05-031, pg 14.

Multiple sub-objectives for the segment have also been identified as listed below:³⁰

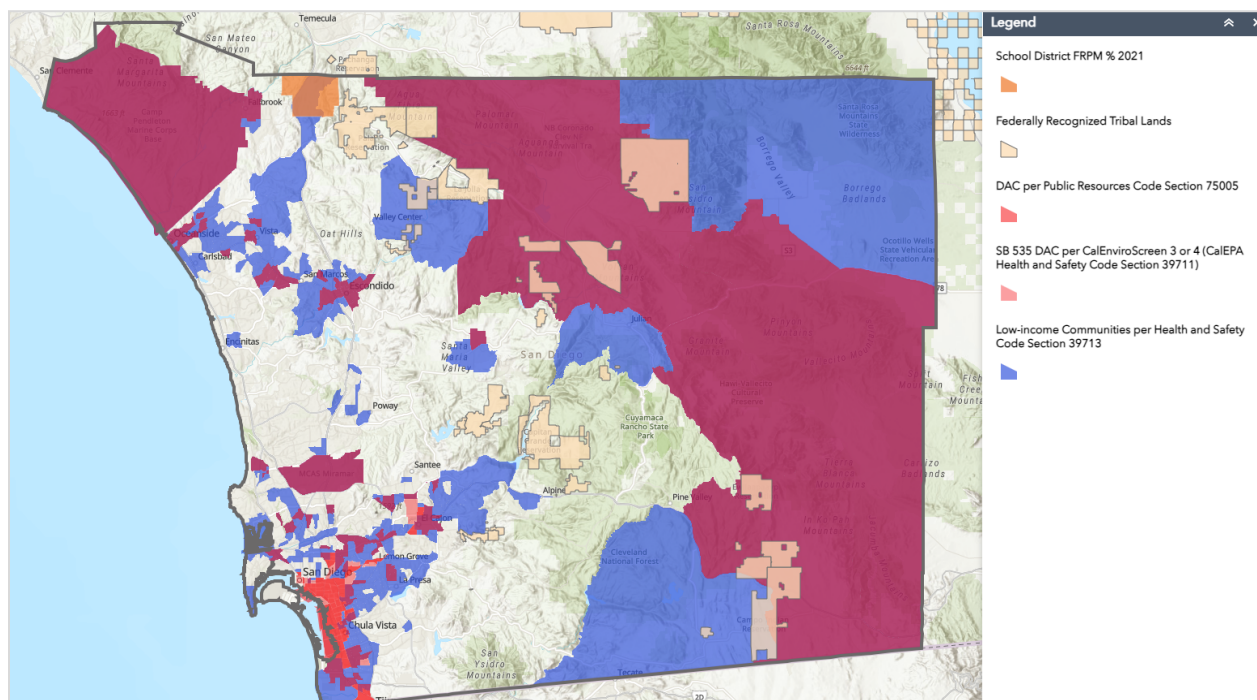
1. Address disparities in access to energy efficiency programs.
2. Promote resilience, health, comfort, safety, energy affordability, and/or energy savings.
3. Reduce energy-related GHG and criteria pollutant emissions.
4. Provide workforce opportunities.

Preliminary Equity Budget for 2023-2027 and Rationale for Distribution

SDREN's Equity segment budget is \$55,047,128, representing 46.1% of SDREN's proposed 2024-2027 budget. Consistent with SDREN's Guiding Principle 1 (to advance environmental equity) and Portfolio Goal 2 (to improve outcomes for underserved and HTR communities), SDREN has allocated the most significant portion of its budget to Equity segment activities. This focus area fills a gap in the region since SDG&E's portfolio focuses only a small fraction of its budget on Equity segment activities.

As part of the market assessment when developing this application, SDREN developed a map to visualize the geographic regions considered HTR and underserved based on definitions adopted in D.23-06-055. Based on this map, it was determined that **56% of the SDREN population lives in an underserved community**.

Figure 8. Underserved communities within SDREN territory, where 56% of the population resides



SDREN proposes a total of five Equity programs in the Commercial, Public, and Residential sectors. The total budget allocated to each sector within the Equity segment is outlined in the table below. It is notable that nearly half (46%) of the total segment budget is allocated to direct install measures. This strategy, in alignment with SDREN's portfolio vision, enhances SDREN's

³⁰ Ibid.

ability to ensure underserved, HTR, and disadvantaged communities are not left behind in the clean energy transition.

Table 19. Equity Four-Year Budget Breakdown by Sector

Sector	2024	2025	2026	2027	Total
Commercial	\$2,336,000	\$4,826,200	\$5,308,820	\$5,839,702	\$18,310,722
Public	\$234,000	\$482,600	\$530,860	\$583,946	\$1,831,406
Residential	\$4,453,000	\$9,200,000	\$10,120,000	\$11,132,000	\$34,905,000
Total	\$7,023,000	\$14,508,800	\$15,959,680	\$17,555,648	\$55,047,128

Equity Specific Strategies, Goals, and Outcomes

For the 2024-2027 portfolio period, SDREN will pursue the goals, strategies, and outcomes listed in the table below for the Equity sector. All of the below strategies will support the state’s ESJAP goals. The strategies related to Tribes will support the state in meeting ESJAP goal 5 by involving Tribal communities in the process of developing program strategies. All other strategies support ESJAP goals 2 and 4 by increasing climate resiliency and investment in clean energy resources to benefit ESJ communities.

Table 20. Equity Segment Strategies, Goals, and Outcomes

Goals	Strategies	Outcomes
<ul style="list-style-type: none"> ● Deliver equitable services to traditionally underserved and HTR customers to ensure they are included in the clean energy transition. ● Reduce barriers to EE and flex load program participation among HTR and underserved customers. 	<ul style="list-style-type: none"> ● Focus outreach on and target underserved and HTR customers. ● Provide in-person, equitable, and inclusive outreach and support services (i.e. in-language materials with cultural understanding, taking into consideration customers with impaired hearing or vision, and customers without internet access, etc.). ● Customized energy programs and strategies shaped by community input. ● Increased incentive opportunities for HTR and underserved communities. ● One-on-one support to connect customers to other 	<ul style="list-style-type: none"> ● Increased access to and awareness of energy efficiency, DER technologies, and funding and financing programs. ● Increased participation in ratepayer-funded EE programs by HTR customers and underserved communities. ● Reduced energy burden for HTR and underserved participants. ● Energy co-benefits (e.g. health, comfort) realized by HTR and underserved participants. ● A clean energy transition inclusive of customers historically left out of energy programs. ● Energy justice for HTR customers and underserved communities.

	<p>available programs, services, and funding opportunities.</p> <ul style="list-style-type: none"> • Direct installation of energy efficiency measures. • Framework in which Tribal governments propose and design customized energy programs and strategies to meet their unique community needs. • Funding and financing support, connecting participants to other incentive programs, financing offerings, tax credits, etc. 	<ul style="list-style-type: none"> • Increased adoption of EE and IDSM measures and strategies.
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Projected Annual Portfolio and Sector-Level Metrics

The Equity segment objectives and indicators were adopted in D.23-06-055. SDREN will engage with the joint PAs as part of the Tier 2 Advice Letter to be filed by May 1, 2024³¹ to modify the common metrics, clarify and modify the adopted indicators, and define the process for proposing and adopting long-term market support and equity goals and metrics for success.

SDREN will track and report on the adopted and finalized Equity segment indicators (by sector where applicable). These will be reported annually or quarterly and either at the segment or portfolio level as outlined in the table below.

Table 21. Adopted Equity Indicators

Equity Sector Indicators	Reported Quarterly or Annually?	Reported by Segment or Portfolio?
Count of equity target participants in equity segment, by sector	Q	S
Sum of equity target participants’ expected first-year bill savings in equity segment, by sector	Q	S
Count of equity target participants in market support segment, by sector	Q	S
Count of equity target participants in resource acquisition segment, by sector	Q	S

³¹ D.23-06-055 Ordering Paragraph (OP) 11

Sum of all equity segment participants' greenhouse gas reductions (in tons of carbon dioxide equivalent) in equity segment	Q	S
Sum of all equity segment participants' kilowatt hour (kWh) savings in equity segment	Q	S
Sum of all equity segment participants' kW savings in equity segment	Q	S
Sum of all equity segment participants' therm savings in equity segment	Q	S
Sum of all equity segment participants' TSB in equity segment	Q	S
Median of equity target participants' expected first-year bill savings in equity segment, by sector	Q	S
Percent of HTR customer participants in portfolio by residential single-family/multifamily and commercial sector	A	P
Percent of disadvantaged community customer participants in portfolio by residential single-family/multifamily and commercial sector	A	P
Percent of equity target participants in equity segment, by sector	Q	S

Other equity segment metrics SDREN will report on include:

- Program-level progress trackers for the adopted Equity segment indicators. These trackers are outlined in the program cards and will be finalized after a contract is awarded to an implementation consultant.
- Portfolio- and sector-specific common metrics.
- Metrics and indicators that roll up into the portfolio's unique value metrics.
- Pursuant to D.23-06-055, SDREN will also develop indicators for the equity segment to measure community engagement. These will be included in the mid-cycle Advice Letter in 2025 and in subsequent annual reports.³²

SDREN will engage in efforts outlined in D.23-06-055 to quantify non-energy benefits (NEBs) and report demographic EE program participation.

SDREN will participate in the newly formed working group intended to inform goals, priorities and scope of a study that responds to questions regarding NEBs.³³ Achievement of NEBs directly ties to equity objectives and SDREN anticipates that it will serve as a key metric for future portfolios focused on serving equity customers.

In D.23-06-055, the Commission directed PAs to work with the Reporting Policy Coordination Group to jointly submit a report addressing demographic questions by no later than September

³² D.23-06-055 OP 24.

³³ D.23-06-055 pg. 34.

1, 2025. SDREN will participate in this process and, based on that analysis, will include preferred approaches to reporting demographic energy efficiency program participation information in its 2026 proposal.³⁴

Equity Segment Coordination

Similar to the other segments, SDREN will coordinate closely with SDG&E’s team managing Equity programs. In addition to EE market rate program coordination, SDREN will look to engage with low-income programs for ongoing coordination strategies.³⁵ Before releasing solicitations for the Equity programs, SDREN and SDG&E will work together to clearly outline service gaps and opportunities for integrating coordination into the solicitations. SDREN will promote and support access to SDG&E programs for equity customers whenever possible.

To advance the ESJ Action Plan Goal 5 to “enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC’s decision-making process and benefit from CPUC programs,”³⁶ SDREN will look for ways to engage with communities to collect ongoing feedback to inform program design and delivery.

Sector Strategy

Strategies Driving Distribution of Budget Among Sectors and Alignment with Broader Portfolio Objectives

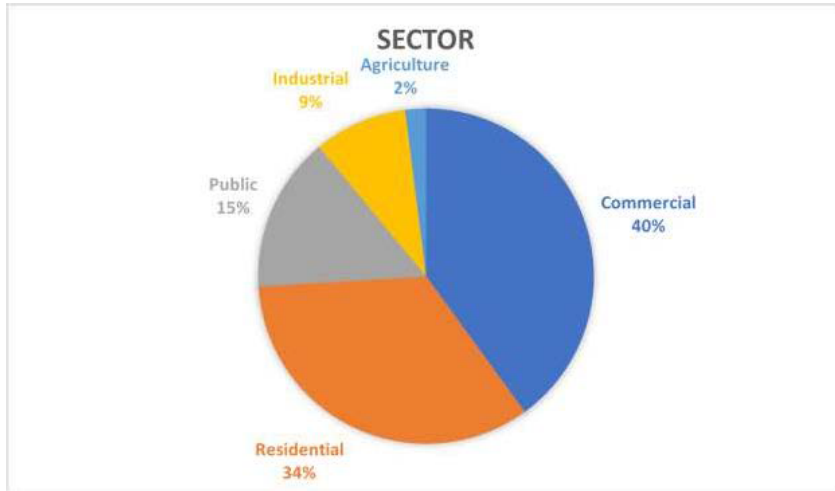
SDREN’s portfolio includes the Commercial, Public, Residential, and Cross-Cutting C&S and WE&T sectors. The portfolio’s focus and budget allocation across the targeted sectors of Commercial, Residential, and Public is in close alignment with the distribution of electricity consumption of these sectors across SDG&E’s territory.

³⁴ D.23-06-055 OP 23.

³⁵ Page 15 of D.21-05-031 states, “the ‘equity’ category is distinct from our separate low-income energy efficiency Energy Savings Assistance (ESA) programs, which have separate goals and regulatory treatment. While there is some overlap in customers within the target segments, the ‘equity’ category is intended to be defined within the energy efficiency programs covered in this rulemaking that are not specifically targeting low-income populations with program offerings that low-income populations could receive at no cost from the ESA program.”

³⁶ Environmental & Social Justice Action Plan Version 2.0.

Figure 9. SDG&E 2018-2020 Average Electric Consumption by Sector³⁷

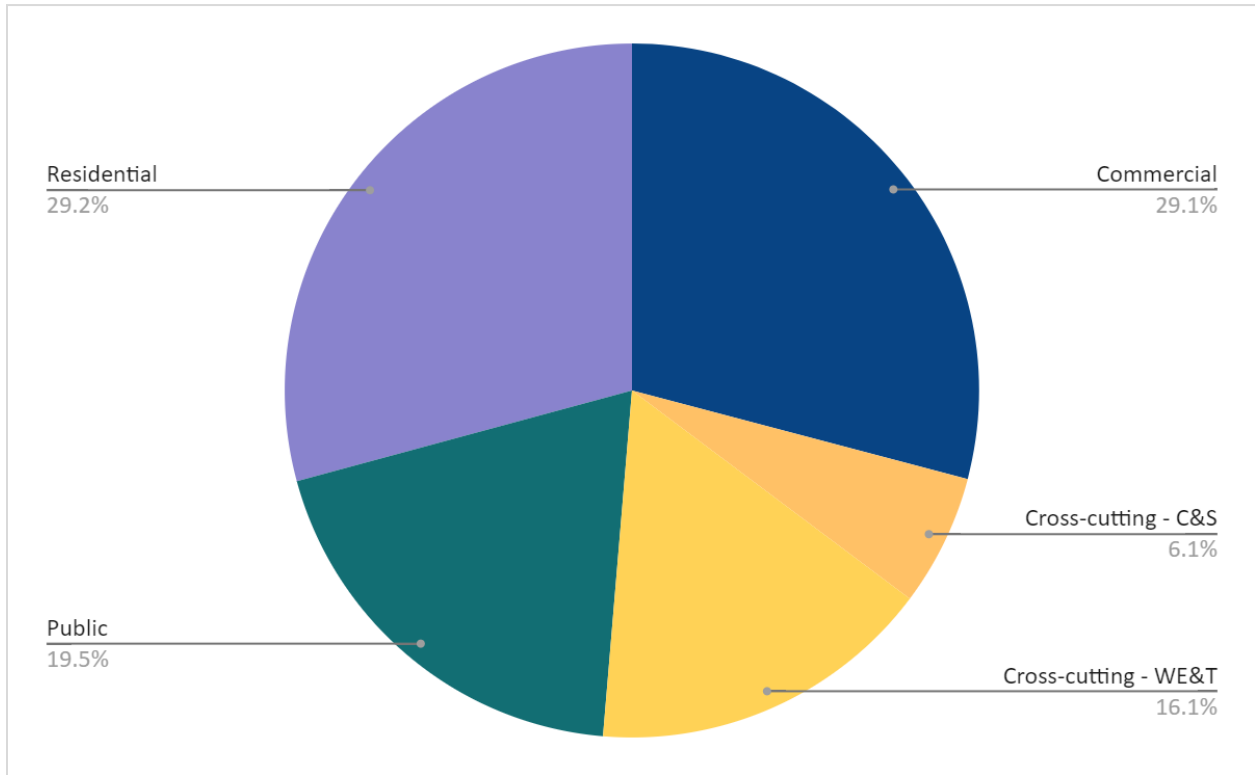


The Commercial, Residential, and Public sectors' budget allocations also reflect the portfolio objectives related to decarbonization and providing comprehensive services. SDREN's investment in the Cross-Cutting sector supports the portfolio objectives related to accelerating the clean energy economy through workforce, education and training and codes and standards offerings.

The budget allocation by sector is illustrated in the graphic below.

³⁷ SDG&E EE Business Plan Testimony (2024-2031) - Exhibit 1, pg.9.

Figure 10. SDREN 2024-2027 Budget Allocation by Sector



Description of Sectors SDREN Proposes to Serve

Through a market assessment, SDREN evaluated energy data (including the number of customers by type), energy efficiency program availability, and participation across sectors in San Diego County. This analysis informed SDREN’s sector focus and resources for its portfolio.

To address gaps and adequately serve HTR communities, SDREN has identified programs that will serve the Commercial, Residential and Public sectors as well as the Cross-Cutting sectors of WE&T and C&S.

Commercial Sector: SDREN proposes three Commercial Sector programs that fill gaps and will be closely coordinated with SDG&E programs. Two are equity programs, targeting HTR small-to-medium-sized businesses. The goal of these programs is to deliver equitable services to HTR customers to ensure they are not left behind in the clean energy transition. The programs will achieve this goal by reducing barriers to participation, increasing awareness, and increasing adoption of EE practices and measures. Store owners, particularly HTR owners, have limited staff capacity and capital to invest in energy-efficient equipment. Two of SDREN’s three commercial sector programs will deploy a direct install approach to alleviate the cost barrier to participation and enable store owners to participate in energy efficiency program offerings. SDREN’s third commercial sector program is a resource program that will provide incentives to commercial customers for peak demand reduction and verifiable energy savings.

Public Sector: The public sector will offer two programs that fill gaps in SDG&E services and will guide participants to SDG&E programs where applicable. One is a market support program that offers comprehensive, customized and unbiased end-to-end EE project services to public agencies within San Diego County. The second is an equity program that will collaborate with Tribal communities to design and deliver community-specific programs. There are no current Tribal-specific EE strategies or programs offered by SDG&E or any other PA.

Residential Sector: SDREN proposes two residential programs, both of which address equity. Both fill gaps in current SDG&E offerings to multifamily and single-family customers by providing customized support and education to HTR renters and homeowners. Because residential customers are typically overwhelmed by complex program offerings and multiple entry points, SDREN will provide behavioral engagement and an unbiased “energy advisor” to demystify funding opportunities. Programs will conduct education and outreach to highlight non-energy benefits and a pathway to electrification. Understanding that the multifamily sub-sector has experienced EE program challenges across the state, SDREN will coordinate directly with PAs and implementers to apply the latest lessons learned from other multifamily programs prior to implementation.

Cross-Cutting Sector: SDREN’s portfolio supports the Cross-Cutting sector through C&S and WE&T programs.

- **Codes & Standards:** SDREN’s proposed codes and standards program will supplement and complement SDG&E’s C&S programs and all statewide C&S programs. SDREN’s program will provide local agencies with policy and compliance support, increase permitting authorities’ expertise, and enhance communication between permitting authorities and permit applicants. SDREN’s C&S program works with public agencies to provide policy and compliance support. Similar to other RENs, the program will coordinate closely with the current local SDG&E program and statewide programs, which primarily focus on advocacy to the CEC and Department of Energy (DOE) related to appliance and building standards.
- **Workforce, Education & Training:** SDREN proposes two market support WE&T programs that fill gaps, support the development of a green workforce that includes vulnerable populations, and build resilient communities. These programs offer wraparound services targeting individuals in HTR, DAC, and historically underserved communities. They will provide equitable access to education and skill-building pathways that will increase clean energy career opportunities for new market entrants and increase green workforce training through employers.

Preliminary Distribution of Budget Among Sectors for 2024-2027 and Rationale for Distribution

Table 22. Distribution of programs and budgets among sectors for 2024-2027 (not including EM&V)

Sector	Number of Programs	2024-2027 Budget	% of Portfolio
Residential	2	\$34,905,000	29%
Commercial	3	\$34,790,038	29%
Public	2	\$23,250,011	20%
Cross-Cutting: WE&T	2	\$19,225,425	16%
Cross-Cutting: C&S	1	\$7,323,955	6%
Total	10	\$119,494,429	100%

Commercial Sector: SDREN proposes three Commercial sector programs with a total four-year budget of \$34.8 million, representing 29% of the SDREN portfolio. The Commercial sector accounts for the largest share of electricity consumption within SDG&E's service territory, comprising 40% of the total usage.³⁸ Approximately 77% of SDG&E commercial sector customers fall into the small commercial category and nearly two-thirds of all commercial customers have fewer than five employees.³⁹ This market context, coupled with the fact that all but one of the planned EE programs within the commercial sector will be focused on resource equity goals, justifying SDREN’s focus on this sector.

Cross-Cutting Sector: Approximately 22% of SDREN’s portfolio is allocated to the Cross-Cutting sector, which includes both C&S and WE&T programs.

- **C&S:** SDREN is proposing a single codes and standards program with a total four-year budget of \$7.3 million, representing 6% of the total portfolio budget. The budget is based on SDREN’s evaluation of C&S market needs within San Diego County and is commensurate with total budget allocations of other REN C&S budgets that support IOU and statewide efforts. The C&S sector program fills gaps and is critical to accelerating a decarbonized energy future in San Diego County. The SDREN program will support permitting agencies on Title 24 compliance and adopting Title 24 reach codes, and will offer customized support. All other RENs in the state will have a C&S offering starting in 2024, highlighting a clear gap in San Diego for this support.
- **WE&T:** SDREN’s portfolio includes two WE&T programs with a total four-year budget of \$19.2 million, representing 16% of the total portfolio. The allocation of other REN WE&T budgets ranges from 4% (SoCalREN) to 25% (RuralREN). The transition toward

³⁸ SDG&E EE Portfolio Testimony (2024-2027), Exhibit 2, pg. 57.

³⁹ SDG&E Business Plan, Exhibit 1, pg. 9.

decarbonized buildings, coupled with substantial investments in a clean energy economy (e.g. IRA and the Equitable Building Decarbonization Program), creates a heightened need for a skilled workforce to deliver on local, state, and federal climate and energy goals. SDREN is dedicated to addressing the shortage of workers with essential skills to support the transition to clean energy.

Public Sector: The Public sector segment will offer two programs with a total four-year budget of \$23.3 million, representing 20% of the SDREN portfolio. SDREN has allocated a significant budget to this sector because it has historically been underserved. Existing programs in the sector are resource segment programs, which tend to leave small customers behind due to strict cost-effectiveness requirements. Furthermore, during coordination discussions with SDG&E, SDREN identified a programmatic gap that formed when SDG&E's third party implemented K-12 schools program closed. SDREN's programs fill this gap and ensure public agencies are served equitably and comprehensively.

Residential Sector: SDREN proposes two residential equity programs with a total four-year budget of \$34.9 million, representing 29% of the overall portfolio. SDREN has allocated a significant portion of its budget to this sector since the Residential sector is the largest customer group in SDG&E territory and it is currently challenging for HTR customers to participate in and fully benefit from the clean energy program landscape. Additionally, the EE P&G study found the opportunity for significant savings in the region based on incremental market potential.

Commercial Sector

Market Characterization

The small-medium business (SMB) community is composed of diverse business owners, with approximately 77% falling into the small commercial category (energy demand of <20 kW). Nearly two-thirds of all commercial customers are micro-businesses with fewer than five employees.⁴⁰ Additionally, it is estimated that 38% of San Diego County residents speak a language other than English at home.⁴¹ SDREN's proposed Commercial sector programs open the door to a substantial market opportunity in the Commercial sector. The Commercial sector accounts for the largest share of electricity consumption within SDG&E's service territory, comprising 40% of the total usage.⁴²

There are currently two SDG&E EE third party Commercial sector programs available for commercial customers, but SDG&E is actively soliciting several Commercial sector offers as outlined in the table below. These additional commercial programs are anticipated to be contracted and launched over the next eighteen months and are anticipated to target several market sub-sectors. Five of SDG&E's EE Commercial programs are segmented as resource acquisition programs, and there is one equity and one market support program anticipated to launch in early 2024.

⁴⁰ SDG&E Business Plan, Exhibit 1, pg. 9.

⁴¹ US Census Data for San Diego County. <https://www.census.gov/quickfacts/fact/table/sandiegocitycalifornia/PST045222>

⁴² SDG&E EE Portfolio Plan Testimony (2024-2027), Exhibit 2, p.57.

Table 23. Current and upcoming SDG&E EE third party commercial programs

Program Type or Name and Segmentation	Status
Comprehensive Energy Management Solutions (CEMS) for customers >20kW - Resource Acquisition	Currently active
Business Energy Solutions (BES) for customers <20kW - Resource Acquisition	Will ramp down for new equity program
Small Business Saver - Equity	Anticipated launch Q1 2024
Groceries, Restaurants, Food Storage - Resource Acquisition	Anticipated launch Q4 2024
Private Institutions, Healthcare - Resource Acquisition	Anticipated launch Q2 2025
Lodging - Resource Acquisition	Anticipated launch Q1 2025
Cross-cutting Non-Residential Behavior - Market Support	Advice letter pending / anticipated launch Q1 2024

Commercial Sector Goals, Objectives and Strategies

SDREN’s commercial portfolio has been crafted to meet the diverse energy efficiency needs of various business types, with a focus on HTR and underserved commercial customers. SDREN’s services aim to bridge gaps by referring customers to appropriate programs and services.

The overarching objective for this sector is to deliver equity-driven and high-impact EE programs. These programs are designed to expand market reach, particularly among HTR and underserved businesses. Furthermore, they seek to accelerate the implementation of deep EE retrofits and deliver quantifiable EE benefits that reduce GHG emissions and increase grid reliability.

Table 24. Commercial Sector Goals, Objectives, and Strategies

Goals	Strategies	Objectives
Deliver equitable services to the traditionally underserved micro and small business sectors.	<ul style="list-style-type: none"> ● Focus on disadvantaged, underserved, and HTR communities within San Diego County. ● Provide in-person, in-language and community-specific outreach and support services through trusted representatives. 	<ul style="list-style-type: none"> ● Increase participation of HTR customers in ratepayer-funded EE programs. ● Create equity co-benefits such as healthy, fresh food offerings in local grocery stores.
Reduce barriers to EE program participation among commercial customers.	<ul style="list-style-type: none"> ● Provide each participant with a single implementer point of contact (energy coach) as a connection point to programs and services. 	<ul style="list-style-type: none"> ● Increase commercial sector adoption of EE equipment. ● Increase awareness of EE technologies and

	<ul style="list-style-type: none"> ● Offer direct installation of energy efficiency measures for SMBs. ● Build program participants' EE expertise and train them to identify energy-saving potential at their businesses. ● Connect businesses to and provide information on EE funding/financing, including IRA tax credits, in alignment with the 2023 Potential and Goals Study. ● Provide in-language and culturally sensitive outreach materials and program documents. 	<p>funding/financing programs.</p> <ul style="list-style-type: none"> ● Reduce lifecycle costs of installing EE measures. ● Help customers save on energy bills and reduce GHG emissions. ● Realize TSB.
<p>Accelerate implementation of EE measures and long-term EE market transformation through program interventions.</p>	<ul style="list-style-type: none"> ● Provide pathways through the SMB Energy Coach program for decarbonization, such as through heat pump water heaters. ● Market Access Program will incentivize long-life measures that provide high TSB via multi-year energy savings. ● Facilitate access to programs that encourage long-term sustainable energy actions, such as the California Green Business Network. 	<ul style="list-style-type: none"> ● Emerging EE technologies like heat pump water heaters become standard practice. ● Realize the full potential of EE through comprehensive whole building retrofits that capture 'stranded' to-code energy savings at the meter. ● Avoid peaker plant GHG emissions through deep peak demand reduction. ● Increase participation in locally recognized programs that offer green business certifications.

Commercial Sector Coordination

SDG&E and statewide programs overlapping in this sector include:



- **Comfortably California**, a statewide upstream and midstream heating, ventilation and air conditioning (HVAC) program that offers deemed HVAC measures. SDREN's SMB Energy Coach program may refer program participants to this program as applicable.
- The **Smart Thermostat Program for Businesses**, where customers receive a \$50 incentive for installing and registering an approved thermostat that activates during DR events. SDREN's SMB Energy Coach program will highlight this opportunity to eligible participants.
- SDG&E's commercial portfolio includes a Small Business Outreach equity program called **Small Business Saver** targeting EE interventions with small business customers (under 20 kW). As of the filing of this Business Plan, this program has not yet launched with a new third party implementer. SDREN will coordinate closely with this program to fill gaps and avoid duplication.
- SDG&E offers a market access program and the **Comprehensive Energy Management Solutions** (CEMS⁴³) program for large commercial customers (over 20 kW). While the CEMs and SDG&E Market Access Program (MAP) will be available to customers also eligible for the SDREN Market Access Program, the programs have notable differences, including:
 1. SDG&E CEMS offers direct install, deemed, custom, and site-NMEC incentives.
 2. SDG&E MAP offers a population-NMEC approach for a subset of measures that are unable to participate in SDG&E's other downstream EE programs with performance-based incentives paid to the aggregator.
 3. SDREN Market Access Program offers a measure-flexible population-NMEC approach with performance-based incentives paid to the aggregator targeted to underserved and HTR businesses.

To avoid overlap among SDG&E and statewide programs in the region, SDREN will coordinate closely with SDG&E and the statewide program administrators and their implementers to offer complimentary and gap-filling services to program participants. Upon Business Plan approval, SDREN will file a JCM with SDG&E to outline coordination protocols that ensure services fill gaps, meet regional needs, and avoid duplication. Some initial strategies discussed with SDG&E during the portfolio application development include:

- Mapping of full commercial portfolios, including eligibility criteria, customer targeting, and services ahead of SDREN solicitations.
- Coordinating closely with the new SDG&E Commercial Equity program to fill gaps in service and prevent market confusion.
- Developing a joint customer messaging strategy.
- Promoting complementary programs such as Comfortably California and the Smart Thermostat Program to eligible customers.

⁴³ <https://cedars.sound-data.com/documents/download/2889/main/>

SMB Energy Coach pairs technical assistance and advisory services with turnkey direct install measure delivery for a seamless, integrated program experience. SDREN’s direct install model alleviates the out-of-pocket cost barrier to EE measure adoption. Importantly, the SMB Energy Coach will identify all opportunities available to participants including SDG&E, statewide, and federal programs and funding opportunities. As with all of SDREN’s offerings, the program will also integrate IDSM support. SDREN’s Efficient Refrigeration program will target small local grocery stores, corner stores, and local small businesses that sell food products. The equity efficient refrigeration program will offer direct install measures not offered by other programs. Both the SMB Energy Coach and equity Efficient Refrigeration programs will target HTR customers.

SDREN will monitor the market and coordinate with other programs to leverage complementary offerings and combine incentives, including:

- **Leveraging** GoGreen Financing to develop projects with favorable financing terms through California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) and IDSM incentive programs.
- **Stacking** IRA tax credits, 179D Commercial Building EE tax deductions, and TECH incentives to reduce equipment costs.

Categorization by Segment

Additional details on SDREN’s segmentation justification at the program level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A* from D.23.06.055.

Table 25. Commercial Sector Program Categorization by Segment

Program	Segment	Justification/Goal
SMB Energy Coach	Equity	Provide energy efficiency services to HTR and/or underserved communities in alignment with the Commission’s Environmental and Social Justice Action Plan.
Efficient Refrigeration		
Market Access Program	Resource Acquisition	Deliver cost-effective avoided cost benefits to the state’s energy systems. SDREN will rely on this program to deliver the bulk of the commercial portfolio’s TSB target, in alignment with the CPUC’s directive to expand NMEC programs statewide.

Commercial Sector Program Details

Table 26. Program Card for SMB Energy Coach

Program Name: SMB Energy Coach	
Program ID: SDREN-01-COM-SMB New/Existing: New Link to implementation plan if existing (see D.21-05-031): N/A	
Portfolio Segment: Equity	Implementation Party: Third-Party Implementer
Applicable Sector: Commercial	Market Sub-Sector: Small/Medium Businesses (SMBs)
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● SMBs may be unaware of EE technologies and value, and lack bandwidth to research and access resources. ● SMBs lack education on how to develop and pursue EE projects while meeting the varying requirements to access incentives, tax credits, and financing. ● SMBs need technical expertise to identify EE opportunities and to develop the scope of work and technical specifications for EE projects. ● Many small businesses lease their space and do not control investing/implementing EE opportunities. <ul style="list-style-type: none"> ○ Coordination with both tenants and landlords is required. ● Without energy program support, up-front capital costs prevent EE measure implementation. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Small businesses (<20 kW) make up the majority (77%) of commercial SDG&E customers. ● Assist SMBs to work with local CA Green Business Network to receive recognition for EE program participation. ● Provide EE education and advisory services to landlords/property management companies and tenants to address split incentive challenges. ● Educate SMBs on behavioral, retro-commissioning, and operational (BRO) measures applicable to their facilities. ● In alignment with AB 793, educate SMBs on energy management technologies.
<p>Known Equity Concerns in the Selected Markets: There are multiple equity concerns related to SMBs in San Diego County. Many SMBs lack the knowledge and/or experience to pursue incentive opportunities and financing programs for EE projects, which</p>	<p>Proposed Solutions to Equity Concerns: This program will provide a dedicated energy coach as a single point of contact and entry point to commercial sector opportunities. This energy coach will serve as an extension of the participants' staff, offering education,</p>

<p>may deter them from considering energy upgrades. SMBs commonly perceive EE measures as expensive investments, and they may lack the capital to pursue EE measures in their budget. Given the diversity of business owners in San Diego County, there are often language barriers for SMBs in HTR neighborhoods; current programs might not provide effective in-language outreach or materials to accommodate this need.</p>	<p>technical assistance, and project management support. The program will also provide direct installation options for energy efficiency measures to avoid out-of-pocket costs to participating businesses. The program will provide various in-language and culturally sensitive outreach materials and program documents with messaging that resonates with diverse SMBs and their staff.</p>
<p>Program Description: The SMB Energy Coach Program will raise awareness and increase the adoption of energy efficiency practices and measures. The program will connect a dedicated energy coach to each participating SMB to educate them on the value of EE and IDSM, provide facility benchmarking and EE opportunity assessments, support access to funding and financing, offer technical assistance, and install EE measures at no cost to program participants. The program will coordinate with SDG&E EE programs, statewide EE programs, and the San Diego Green Business Council, the local partner of the Green Business Network, to combine service offerings and compound the programs’ value. Through coordination with the Green Business Network, program participants may receive public recognition via Green Business Certification for their EE upgrades, encouraging continued investment in EE. The program may leverage partnerships with community-based organizations to provide resources for returning program participants, encourage continuous pursuit of clean energy measures, and provide ongoing education and training for SMB staff.</p>	
<p>Intervention Strategy: Downstream - direct install and technical assistance.</p> <ul style="list-style-type: none"> ● Facility energy report and opportunity assessments: the program will provide on-site and virtual assessments to identify EE measures at each business and provide an in-language energy report. The report will incorporate: <ul style="list-style-type: none"> ○ No and low-cost EE measures available through EE programs. ○ Incentive and funding opportunities through external mechanisms such as SDG&E, statewide, and federal programs. ○ Green Business Certification. ○ IDSM program opportunities, including demand response. ○ Education on reducing energy costs. 	<p>Program Metrics:</p> <ul style="list-style-type: none"> ● kWh ● kW ● Therms ● TSB ● Annual GHG reductions ● Number of SMBs enrolled ● Number of SMBs served ● Number of facility benchmarking and EE opportunity assessments performed ● Number of direct install projects completed ● Number of funding and financing presentations performed ● Number of projects where technical assistance was provided

<ul style="list-style-type: none"> ○ If applicable, the program will assist with benchmarking in Energy Star Portfolio Manager (ESPM) to help businesses understand their facility's energy performance and comply with AB802 for facilities over 50,000 sq. ft. ● Technical assistance: the program will provide technical specifications for identified projects to ensure implemented measures realize anticipated energy savings. ● Direct installation: the program will offer a menu of direct install measures available at low-to-no-cost for program participants. Sample EE measures include smart thermostats, LED lighting, controls, economizer controls/repair, duct sealing, appliances, faucet aerators, auto door closers, ice makers, and smart plugs. ● Funding and financing support: the program will connect SMBs to other incentive programs, SDG&E on-bill financing, GoGreen Financing, IRA tax credits, and other local/state/federal funding and financing programs. 	
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High-level description of delivery workforce including necessary scale and its risks:

SDREN's local trusted partners will engage with businesses to determine eligibility and interest in program offerings. The program implementer staff and energy coaches will guide program participants through the SDREN commercial and other applicable program offerings and services. Licensed local contractors, electricians, and equipment manufacturers will support the direct installation of energy efficiency measures. Engineering consultants will provide technical assistance as needed. The program implementer(s) will work with community partners, including CBOs, to ensure SMB participants are aware of local resources and opportunities. There are workers in place to support these programs, but an increase in demand may require additional training and recruitment of specialized support. A delay in manufacturing and delivery of equipment (or high demand) can pose a risk to project completion timelines.

Market actors necessary for success: <ul style="list-style-type: none"> ● Third-party implementer(s). ● Trade professionals. ● Local contractors. ● Equipment manufacturers. ● Community outreach staff. ● Property management/landlords, if applicable. 	
Solicitation Strategy: Third-party solicited	Transition Plan: Not applicable
Expected Program Life: 2024 - ongoing	Short Term Plan: Launch program in 2024 and ramp up implementation through 2027 to serve SMB customers.
Cost Effectiveness: 4 Year TRC: 0.14	Long Term Outlook: <ul style="list-style-type: none"> ● Increased interest in EE and IDSM. ● Adoption of EE measures among SMBs as a result of program intervention. ● Continuous engagement with returning and new program participants to achieve program objectives in alignment with state goals.
Proposed Annual Budgets for 2024-2027: 2024: \$1,402,000 2025: \$2,895,700 2026: \$3,185,270 2027: \$3,503,797 2024-2027 Total: \$10,986,767	Anticipated directional and scale changes in budget for years 2028-2031: SDREN will maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.
Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.	

Table 27. Program Card for Efficient Refrigeration

Program Name: Efficient Refrigeration	
Program ID: SDREN-02-COM-ERF	
New/Existing: New	
Link to implementation plan if existing: N/A	
Portfolio Segment: Equity	Implementation Party: Third-party Implementer

<p>Applicable Sector: Commercial</p>	<p>Market Sub-Sector: Micro, small, and medium businesses, focusing on small local grocery stores, corner stores, and local small businesses that sell food products.</p>
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● Store owners have limited staff capacity and capital to learn about high-efficiency equipment options and to invest in energy-efficient equipment. ● Business priorities and day-to-day operations take precedence over energy efficiency. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● A direct install approach alleviates the cost barrier to participation and allows store owners to participate in energy efficiency program offerings. ● Leverage other programs, such as the CDFA Healthy Refrigeration Grant Program⁴⁴ to create co-benefits, such as educating store owners about health benefits to providing local access to fresh, perishable food options (fruits, vegetables, nuts). ● Installation of high-efficiency refrigeration equipment with low-GWP refrigerants will realize utility bill savings for participants, encouraging future investment in energy efficiency.

⁴⁴ Program info here: <https://cafarmtofork.cdfa.ca.gov/hrgp.html>. SDCP was awarded a 2023 Equipment Award.

<p>Known Equity Concerns in the Selected Markets: Past programs offering support with refrigeration equipment have focused on larger customers, leaving smaller customers without any offerings focused on refrigeration. Based on the recent EM&V study conducted by SoCalREN, energy burden is a concern for this sub-market. Corner stores in particular feel burdened by high electricity bills associated with refrigeration.⁴⁵</p> <p>Recent inflation and supply chain issues have also impacted small business owners, with 85% of small business owners indicating they are concerned about inflation.⁴⁶</p> <p>Additionally, when considering this sub-market, it is beneficial to consider the health-energy nexus related to food access. Several communities within San Diego County face poverty and food insecurity.⁴⁷ In 2019, 77 census tracts had a poverty rate of 50% or more. Across San Diego County, the percentage of the population experiencing food insecurity by region is: central: 26.9%, east: 46.6%, north central: 38.5%, north coastal: 39.8%, north inland: 30.9%, and south: 27.7%. These communities lack regular access to fresh, healthy foods. They need personalized in-person, in-language and culturally sensitive outreach and program services.</p>	<p>Proposed Solutions to Equity Concerns: This program will encourage stores to sell fresh, healthy, and affordable food products by providing high efficiency refrigerators and freezers. This program will also develop in-language outreach materials to improve the education and communication to staff at participating businesses and the local community. The program will deploy in-person program outreach staff to reach businesses and tell them about program opportunities and objectives. This program will leverage local contractors to stimulate the local economy and support local workforce development.</p>
<p>Program Description: The Efficient Refrigeration program will provide energy efficiency education and no-cost, direct install efficient refrigeration equipment to small corner stores/grocers/small businesses to support energy cost savings and the stocking of healthy, fresh, and affordable food products. This program will provide technical assistance to identify refrigerators that are eligible for replacement with high efficiency units. This program will also leverage other programs and resources to provide one-on-one education on sourcing California-grown produce and product placement/promotion to encourage shopper purchases. Additionally, it will deliver community outreach events to promote program</p>	

⁴⁵ SoCalREN Food Desert Energy Efficiency Equity Program Market Study, pg. 14.
⁴⁶ “Special Report on Inflation and Supply Chain Shocks on Small Business,” U.S. Chamber of Commerce, March 3, 2022, <https://www.uschamber.com/small-business/special-report-on-inflation-and-supply-chain-shocks-on-small-business>.
⁴⁷ <https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/CHS/Poverty%201%20Areas%20of%20Concentrated%20Poverty%20and%20Food%20Insecurity%20Brief.pdf>.

services, provide education on the benefits of energy efficiency, and encourage the public to shop at participating business locations by highlighting the availability of fresh, healthy foods. This program’s target measures include glass and solid door refrigerator and freezer units. This program will also look for opportunities to integrate strategies from the new BayREN Refrigerant Replacement Program to encourage low-GWP refrigerants.

Intervention Strategy: Downstream - direct install, education and outreach.

- In-person and in-language culturally sensitive outreach: given the staff capacity barrier to EE program participation and that 36% of County residents speak a language other than English at home, the program will provide in-person and in-language outreach to target businesses that are underserved by existing programs.
- Direct installation of high efficiency refrigeration equipment: the program will provide no-cost installation of refrigeration equipment, generating utility bill savings for program participants at no cost.
- Community-level and one-on-one education on EE and healthy food options: the program will educate program participants on the benefits of EE, low-GWP refrigerant, EE programs, and best practices for stocking healthy, fresh, perishable foods.
- IDSM program participation education: share informational materials and resources to participants on the benefits of participating in DR and other IDSM programs.

Program Metrics:

- kWh
- Therms
- TSB
- Number of small corner stores/grocers/small businesses enrolled
- Number of small corner stores/grocers/small businesses served
- Number of in-person outreach events
- Number of in-language outreach activities (events and/or marketing materials)
- Number of direct-installations of high efficiency refrigeration equipment completed

High-level description of delivery workforce including necessary scale and its risks: This program is reliant on partnership with owners and staff of small grocery and corner stores across San Diego County. The program also requires installer partner(s) to facilitate the purchase and installation of efficient refrigerators and freezers. Implementer staff and outreach partners will perform program education and outreach. No risks were identified regarding the delivery of workforce for this program.

Market actors necessary for success: <ul style="list-style-type: none"> • Third-party implementer(s). • Multi-lingual local outreach staff. • Grocery and corner store owners. • Local refrigerator/freezer installers. • Refrigerator/freezer manufacturers and distributors. 	
Solicitation Strategy: Third-party solicited	Transition Plan: Not applicable
Expected Program Life: 2024 - ongoing	Short Term Plan: Ramp up third-party program to full implementation to deliver year-round peak demand reduction.
Cost Effectiveness: 4 year TRC: 0.02	Long Term Outlook: <ul style="list-style-type: none"> • Small corner stores/grocers/small businesses realize utility bill savings by installing high efficiency refrigeration equipment. • Local communities have increased access to fresh, healthy food. • Small corner stores/grocers/small businesses understand the benefits of EE and pursue opportunities beyond refrigeration upgrades.
Proposed Annual Budgets for 2024-2027: 2024: \$934,000 2025: \$1,930,500 2026: \$2,123,550 2027: \$2,335,905 2024-2027 Total: \$7,323,955	Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.
Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.	

Table 28. Program Card for SDREN Market Access Program

Program Name: SDREN Market Access Program	
Program ID: SDREN-03-COM-MAP New/Existing: New Link to implementation plan if existing: N/A	
Portfolio Segment: Resource Acquisition	Implementation Party: Third-party Implementer

<p>Applicable Sector: Commercial Property Owners</p>	<p>Market Sub-Sector: Small/Medium Businesses (SMBs)</p>
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● Delivering scalable programs with costs less than delivered TSB. ● High administrative and capital cost barriers to business participation in EE programs. ● Limited customized solutions have to serve a wide range of customer types, including HTR and underserved businesses. ● Risk of large program investment without the delivery of anticipated TSB. ● Customer engagement through a trusted entity. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Capture significant energy savings and peak demand reduction through tailored services offered via aggregators. ● Bundle program services with federal IRA funding to improve project cost-effectiveness. ● Leverage performance-based aggregator incentive approach to minimize program investment without the delivery of TSB and demand reduction. ● Work with local trusted partners, such as chambers of commerce, to reach HTR and underserved businesses.
<p>Known Equity Concerns in the Selected Markets: Barriers to EE implementation vary from business to business. However, small-to-medium businesses typically have limited staff capacity and resources to pursue EE projects. High capital costs are also a common barrier. There is often a lack of programs or incentives designed to serve HTR and underserved businesses.</p>	<p>Proposed Solutions to Equity Concerns: To reduce customer administrative burden, the aggregator will manage a program compliance process and provide flexible benefits to each customer. Benefits may include price concessions or technical services to motivate the customer to pursue the project. Higher investment and targeted approaches will help engage and serve HTR and underserved businesses.</p>
<p>Program Description: SDREN’s Market Access Program will provide performance-based incentives to project developers (aggregators) who deliver projects that realize peak demand reductions and verified energy savings. The program will utilize a population NMEC methodology to verify savings while paying incentives based on TSB achieved, encouraging long-life measures that deliver maximum grid benefit. The program will develop a suite of tools for aggregators to use to identify high opportunity projects at facilities with significant summer and year-round peak demand reduction potential, estimate energy savings, and secure incentives. Local trusted entities will lead customer engagement to high opportunity businesses, with a focus on HTR and underserved businesses. Aggregators will develop project opportunities and offer customizable services and financial benefits to participating businesses. This will influence businesses to implement identified energy measures. Since incentives will be delivered to aggregators based on NMEC-verified benefits to the grid, aggregators are encouraged to ensure projects realize or exceed anticipated energy savings.</p>	

Sample EE measures include HVAC replacement, HVAC controls, variable frequency drives (VFDs), lighting replacement, lighting controls, building envelope, and refrigeration.

Intervention Strategy: Downstream – population-level normalized metered energy consumption (NMEC).

- Aggregator network: the program will maintain a network of qualified aggregators that operate in the marketplace to identify and install EE projects in exchange for performance-based incentives.
- Performance-based incentives: the program will provide performance-based incentives to aggregators based on achieved TSB for their portfolio of projects.
- Tax provision education: The program will educate aggregators on available EE tax provisions, including the 179D Energy Efficient Commercial Buildings tax deduction, which was recently enhanced by IRA, in order for aggregators to bundle ratepayer-funded incentives with tax deductions to improve project cost-effectiveness.
- Targeted outreach: the program will partner with trusted local entities to develop materials and outreach strategies for HTR and underserved businesses.

Program Metrics:

- kWh
- kW demand savings
- Therms
- TSB
- Annual GHG savings
- Number of participating businesses
- Number of projects installed
- Number of aggregators enrolled
- Dollar amount of incentives disbursed to aggregators
- Number of local entity partnerships

High-level description of delivery workforce including necessary scale and its risks: Program success will rely on the availability of qualified aggregators. The delivery workforce will include implementer staff, equipment vendors, and local trusted entities for outreach. There are no known workforce risks for successful implementation of the program.

Market actors necessary for success:

- Third-party implementer(s).
- Aggregators and contractors.
- EE equipment vendors.
- Local trusted organizations for outreach.

Solicitation Strategy: Third-party solicited	Transition Plan: Not applicable
Expected Program Life: 2024 - ongoing	Short Term Plan: Ramp up third-party program to full implementation to deliver year-round peak demand reduction.
Cost Effectiveness: 4 year TRC: 0.43	Long Term Outlook: <ul style="list-style-type: none"> • Year-round peak demand reductions are delivered. • Delivered TSB exceeds program costs.
Proposed Annual Budgets for 2024-2027: 2024: \$2,102,000 2025: \$4,343,600 2026: \$4,777,960 2027: \$5,255,756 2024-2027 Total: \$16,479,316	Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.
Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.	

Cross-Cutting Sector – Codes & Standards

Market Characterization

The Codes and Standards (C&S) community is multi-faceted and involves a diverse array of stakeholders including local agency building department staff (who play a pivotal role in the energy code enforcement), building owners, contractors, developers, architects, mechanical engineers, and energy code consultants. The interactions among the various players are integral to achieving energy code compliance and enforcement.

Energy codes and energy technologies in new and existing buildings are growing more complex. This complexity is closely tied to the growing trend toward hyper-efficiency and the trend toward the “electrification of everything” as we modernize the electrical grid and strive to meet air quality standards. Permit agency staff and the broader C&S community need new knowledge, training, and experience to keep up. They must become well-versed in the selection, installation, and operation of heat pump water and space heating equipment, distributed renewable generation, battery storage, electric vehicle (EV) charging, real-time energy management systems, low-carbon construction materials, passive construction practices, and many other emerging building technologies.

Local governments are increasingly asserting their leadership in the realms of energy efficiency and decarbonization practices. Their authority over construction, land use, and the implementation of model codes, standards, and policies position them as catalysts for

enhancing building energy performance. Their regulatory leadership will propel communities toward more sustainable construction and contribute to state and local policies accelerating cleaner, more energy efficient practices within their jurisdictions.

C&S Sector Goals, Objectives and Strategies

SDREN's Codes and Standards (C&S) interventions are designed to work in harmony with SDG&E's C&S programs, statewide IOU programs, the CEC's building and appliance standards, CARB's evolving scoping plan, and regional climate policy. By complementing and supplementing existing initiatives, SDREN aims to strengthen collective impact on the C&S landscape.

The C&S landscape needs a localized program approach, particularly in light of current gaps, barriers, and challenges for permitting agencies. These agencies require tailored support to navigate the intricate energy code compliance landscape effectively.

SDREN, as a local government-led network, is poised to play a pivotal role in assisting local government agencies with energy code compliance. SDREN's support will include collecting and evaluating building stock characteristics, energy use patterns, and building permit data. SDREN will champion advanced energy codes and requirements, setting the stage for a decarbonized energy future.

Energy use in California is shifting toward full electrification of buildings and transportation. The recent influx of federal and state funding is hastening this transformation, which will hinge on the adoption of advanced, efficient, and integrated energy technologies. To meet the state's climate goals and support the transition to a clean energy future, permitting processes must not prohibit large-scale adoption of these technologies.

To address these needs, SDREN's proposed energy code coach services will be a focal point of the sector. These services will target gaps and overcome barriers that previous C&S programs have insufficiently addressed. The program will emphasize smaller and rural permitting agencies that face more capacity and resource constraints than their larger counterparts to ensure they can access tools and knowledge to overcome these constraints. By promoting local activities and addressing agency-specific limitations, SDREN's program will create a more equitable and comprehensive C&S landscape in support of energy code compliance and a decarbonized energy future.

Table 29. C&S Goals, Objectives, and Strategies

Goals	Strategies	Objectives
Provide permitting agencies and the C&S community with actionable resources to improve energy code systems and compliance, reducing energy	<ul style="list-style-type: none"> Coordinate with the C&S community to simplify and streamline permitting processes while demonstrating the economic benefits of 	<ul style="list-style-type: none"> Provide the C&S community with actionable resources that enable them to achieve high-performing and resilient buildings by improving permitting,

<p>consumption and GHG emissions in buildings and supporting the state’s energy efficiency and GHG goals.</p>	<p>enhanced energy code compliance.</p> <ul style="list-style-type: none"> ● Create a suite of tools, technical resources, and templates, including an energy code coach, to support the C&S community, industry groups, trade allies, and their supply chains to accelerate building and transportation systems electrification and the adoption of emerging clean energy technologies. 	<p>inspection, and enforcement compliance outcomes.</p> <ul style="list-style-type: none"> ● Streamline the permit review and approval processes to facilitate the inclusion of energy resiliency and climate adaptation design elements, including DERs, in new and existing buildings. ● Coordinate with the C&S community to enhance consumer protections, increase affordability of high-performance buildings, and prevent unjust or inequitable implementation of energy codes and policies.
<p>Assist public agencies in compiling and utilizing building stock and C&S data to enhance energy code compliance and facilitate adoption and implementation of advanced energy codes and policies.</p>	<ul style="list-style-type: none"> ● Implement data-driven training strategies to build the staff capacity, competency, and permit agencies’ efficiency, making use of building stock and C&S data. ● Provide access to residential and commercial energy benchmarking and energy performance standards tools and software to increase energy performance outcomes in new and existing buildings. ● Create feedback loops from C&S activities that lead to comprehensive strategies across SDREN offerings. 	<ul style="list-style-type: none"> ● Enable public agencies to leverage digitized data collected from their permitting activities to inform their energy resiliency action plans and energy/GHG reduction targets and strategies. ● Enable C&S community to reduce energy costs while improving building health and functionality through assistance with EE, load reduction strategies, and beneficial electrification approaches, which help mitigate costs from time- and location-dependent electricity pricing.

<p>Promote the adoption, implementation, and enforcement of advanced energy codes, standards, and policies that lead the way for improved building energy performance and accelerate the decarbonization of building construction practices.</p>	<ul style="list-style-type: none"> ● Assist with and advocate for the development and adoption of reach codes, model codes, and advanced energy regulations/policies. ● Provide comprehensive support to local permit agencies for the implementation of advanced energy codes. ● Assist in the development of compliance strategies, enforcement strategies, and effective tracking mechanisms for advanced energy codes. ● Leverage state and federal funding and technical analysis to develop equitable policies aligned with Justice 40, the ESJ Action Plan 2.0, and the DOE Affordable Home Energy Shot.™ ● Provide educational information to the C&S community about the phase out of HFCs and low-GWP refrigerant alternatives. 	<ul style="list-style-type: none"> ● Coordinate and promote the adoption of advanced energy codes that pave the way for improved building performance and increased prevalence of decarbonized and zero net energy (ZNE) buildings. ● Facilitate and advocate for local building performance standards (BPS) and building benchmarking requirements that will improve the efficiency, comfort, economics, and health of buildings. ● Lead regional efforts to attract funding and technical expertise for policy development and deployment. ● Promote and facilitate regional policies that support adoption of efficient heat pump-based space and water heating systems to replace methane-gas-based systems in both new and existing buildings.
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C&S Sector Coordination

SDREN acknowledges that cross-sector coordination is essential to empowering local governments and their constituents to lead the way towards a clean energy transformation within their communities.

Local governments have significant legal purview through their permitting authority to improve the way energy is generated and used within their communities. Land-use policies, building codes, and other regulations can improve the performance of new and existing buildings.

SDREN’s C&S program will harness strong relationships with local governments to support portfolio success across sectors and segments. SDREN will create a resource hub for referring C&S program participants to other program opportunities.

SDREN is committed to harmonizing its efforts with all statewide codes and standards programs, including any San Diego County-specific programs implemented by SDG&E or local government permit agencies. SDREN will collaborate with SDG&E to ensure that SDREN’s C&S services will augment and not duplicate the C&S programs and services already available in the County of San Diego. SDREN will also coordinate with statewide residential and commercial new construction programs and C&S programs administered by other RENs, particularly with BayREN, to build on their C&S experience and lessons learned. SDREN will collaborate with professional associations for building officials and building departments, statewide professional groups, and associations that focus on education and cooperation between permitting agencies and building permit/code compliance professionals. (See the C&S Segment-specific coordination discussion in the Codes & Standards program section above).

SDREN will forge partnerships with the administrators of energy benchmarking and energy performance standards tools and software. These partnerships will empower local permitting agencies to improve energy performance in new and existing buildings, align with the clean energy objectives in their communities, and create tailored solutions for underserved and HTR communities. Through this comprehensive approach, SDREN will foster a unified, cohesive, impactful, and just transformation toward cleaner and more efficient energy practices.

Categorization by Segment

Additional details on SDREN’s segmentation justification at the program-level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A*.

Table 30. C&S Sector Program Categorization by Segment

Program	Segment	Justification
Codes and Standards	Codes and Standards	This program is designed to improve compliance with existing codes and standards, helps local governments develop ordinances that exceed statewide minimum requirements and will coordinate with other programs and entities to support the state’s policy goals.

C&S Sector Program Details

Table 31. Program Card for C&S

Program Name: Codes & Standards
Program ID: SDREN-01-CS-CSS
New/Existing: New
Link to implementation plan if existing (see D.21-05-031): N/A

Portfolio Segment: Codes and Standards	Implementation Party: Third-party Implementer
Applicable Sector: Cross-Cutting	Market Sub-Sector: Cross-Cutting
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● Energy codes are complex and local government staff lack sufficient capacity and time to understand the codes and implement effective review and enforcement mechanisms. ● Energy efficiency is typically not a high priority for building departments, permit applicants, or within the C&S community. This results in missed opportunities for significant energy savings. ● There is a lack of resources for training, capacity, and technical support to build local government staff expertise, impeding their capacity to meet evolving energy code requirements. ● Increasingly stringent energy codes create compliance gaps, hindering the state from reaching decarbonization and greenhouse gas reduction goals. ● Future code cycles will incorporate requirements for building and transportation electrification, demand flexibility, indoor air quality, and grid interactive buildings, which will necessitate education for permitting agencies and their staff. ● Many types of projects (HVAC, water heating, etc.) have low permitting rates. This not only diminishes potential energy savings but also complicates code enforcement efforts, which play a vital role in energy efficiency. ● Most local governments lack the capacity and confidence to lead by example in advanced energy codes 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Conducting a needs assessment to identify C&S compliance gaps and barriers among local permitting agencies. ● Ongoing technical assistance, training, tools, case studies, peer-to-peer learning, and online resources can help local building department staff and permit applicants understand and comply with current and future energy codes and standards. ● An energy code coach can fill gaps in building department code comprehension and capacity. They can serve as a dedicated expert to assist local agencies with effectively implementing energy codes. ● Leverage SDCP’s Building Housing Stock Analysis currently underway to inform strategies. ● Data-driven assistance with advanced energy codes, building performance requirements, and benchmarking requirements will encourage local leadership in energy efficiency, passive design, and ZNE construction. ● Energy code comprehension and compliance within the C&S community (developers, contractors, architects, engineers, property owners, etc.) can be enhanced through technical information, online and in-person education and training, and more effective code compliance assistance. This approach will create a more informed and compliant industry.

<p>and standards for new and existing buildings, which is important for broader compliance.</p> <ul style="list-style-type: none"> ● There is frequently a disconnect between new energy code development, adoption, and enforcement. The disconnect can lead to confusion and delays in code implementation. ● Energy code requirements vary by permit scope, climate zone, and building or site attributes. Moreover, energy code interpretation and enforcement varies by jurisdiction. These nuances and variability can lead to confusion and inconsistencies. ● There is no transparent data available on local building stock. Better data could inform permitting and code compliance actions and reduce energy use and GHGs in the building sector. ● Over the next several years, billions of dollars in new federal and state funding are earmarked for electrification and efficiency retrofits to existing buildings (with a major emphasis on income-qualified households), which will create significant new workload for permitting agencies. 	<ul style="list-style-type: none"> ● The compilation and evaluation of accurate, digitized, and standardized permitting and compliance data will drive better local decision-making and better energy performance in new and existing buildings. ● Given the expected influx of federal and state funding for electrification and efficiency retrofits in the coming years, permitting agencies must prepare in advance. This will ensure they can efficiently review and approve the significant number of new projects that are coming soon. Preparation will mitigate workload impacts and result in more efficient and well-managed building projects.
<p>Known Equity Concerns in the Selected Markets: One pressing equity concern in the market is the issue of low compliance with energy code performance requirements, which leads to increased energy consumption and less healthy, safe, and comfortable living and working environments. This disproportionately affects vulnerable communities, further exacerbating existing disparities in access to energy efficient and comfortable spaces.</p> <p>Low-income building owners and occupants are often confronted with significant financial</p>	<p>Proposed Solutions to Equity Concerns: The program recognizes the potential for substantial improvements in code compliance and building performance through improved, more efficient, and more effective practices by permitting agencies. Permitting agencies can ensure codes are followed by improving their processes, resulting in higher-performing buildings that are more energy efficient and provide healthier, safer, and more comfortable environments for occupants.</p>

constraints. As a result, they may be more likely to perform unpermitted work within their buildings to reduce immediate costs and bypass code compliance requirements.

To address equity concerns, the program places a strong emphasis on implementing building permit services and offering technical assistance designed for underserved, HTR, and disadvantaged communities. This approach will help alleviate customer trepidation often associated with the permit process, which can disproportionately affect these communities. In collaboration with the statewide Codes and Standards Enhancement (CASE) team and research institutions, the program will develop grid-friendly electrification opportunities that provide building owners and residents with shared economic benefits. In doing so, SDREN expects to significantly reduce the prevalence of unpermitted work in underserved, HTR, and DAC communities. Increased compliance will ultimately enhance energy efficiency, health, and safety. By directly engaging with communities and providing tailored support, the program seeks to bridge gaps in access to energy efficient and quality building practices, promoting a more equitable and sustainable future for all of San Diego County.

Program Description: The Codes and Standards (C&S) program will complement existing statewide and regional investor-owned utility programs and fill gaps in services for local governments and the C&S community. This program will engage and support local government permitting agencies to help them enhance energy code compliance and embrace advanced energy codes, standards, and policies. By doing so, the program seeks to significantly reduce energy consumption and GHG emissions, accelerating local government leadership in energy efficiency.

This program is committed to providing local agencies and the C&S community with data-driven and actionable resources. These resources will bolster understanding of energy codes, increase compliance, decrease energy consumption within buildings, and support the state's energy efficiency and GHG reduction goals. The C&S program will help public agencies collect and use data on the age and condition of building stock, comparative energy usage within building sectors, and permit issuance and enforcement processes. This data will inform energy code compliance efforts and help identify the most promising opportunities for reach codes and policies.

Intervention Strategy: Downstream – technical assistance, education, training, and outreach.

- **Design and deliver a comprehensive needs assessment** that will serve as the foundation of the intervention strategy. It will analyze permitting trends, identify gaps in current local government permit processes, and flag barriers to improved energy code compliance.
- **Provide targeted education, tools, training and resources** to local governments and C&S community stakeholders, including access to an energy code coach, to improve energy code compliance and effectiveness.
- **Leverage existing data resources** and existing tracking mechanisms to measure and analyze code compliance and code development interventions that are supported by the program. This data-driven approach will provide insights and feedback for continuous improvement.
- **Provide information, analysis, and technical assistance** to design, adopt, and implement advanced energy codes, benchmarking and energy audit requirements, buildings emissions performance standards, and other model approaches to lowering energy usage and GHGs (including low-GWP refrigerants) in new and existing buildings.
- **Activate and engage key stakeholder representatives** in disadvantaged and HTR communities to aid in the development and delivery of programs. This approach will foster a sense of community ownership and will ensure interventions are tailored

Program Metrics:

- Number and percent of local government permitting agencies receiving C&S program services.
- Number and percent of local governments who adopt model energy codes and advanced energy policies/standards.
- Magnitude of improved code compliance and closed permit outcomes by participating local governments.
- Number and percent of local governments who implement improved permit data collection, tracking, and analysis to enhance energy code compliance outcomes.
- Number of training activities (classes, webinars, workshops, etc.) held and number of participants by category.
- Number and percent of permitting agencies who receive assistance from an energy code coach.

to the specific needs and concerns of participating communities.	
<p>High-level description of delivery workforce including necessary scale and its risks: The program implementer staff will play a crucial role in leading participants through the program’s offerings and services, acting as guides and facilitators. The program will leverage specialized subject-matter practitioners who are engaged by the implementer to provide comprehensive training and energy code coaching. The program will also leverage specialists to support data compilation, data analysis, and education and training.</p>	
<p>Market actors necessary for success: The primary actors for the C&S program are local government departments/divisions that are responsible for building permit issuance and enforcement. Within most agencies this would include building and safety, community development, planning, and any other departments responsible for developing, overseeing, and enforcing statewide and local building standards and ordinances. Practitioners (developers, contractors, architects, engineers, etc.) who apply for permits that trigger energy code requirements are also market actors necessary for the program’s success, as well as third-party implementer(s).</p>	
<p>Solicitation Strategy: Third-party solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - Ongoing</p>	<p>Short Term Plan: The program will launch in 2024 and ramp up implementation through 2027 to reach and serve the entire service area.</p>
<p>Cost Effectiveness: TRC: N/A</p>	<p>Long Term Outlook:</p> <ul style="list-style-type: none"> ● Capacity and competence of local permitting agencies to review, inspect, and enforce energy code compliance will increase. As a result, local communities will experience improved energy efficiency, leading to more sustainable and comfortable buildings. ● As new and more stringent energy code requirements spread throughout the state, local permitting agencies will be capable of achieving broad compliance with the new standards, while contributing benefits to the entirety of the energy system. This will result in adherence to energy codes

	<p>and contribute to the state’s energy and climate goals.</p> <ul style="list-style-type: none"> • The C&S community will increase understanding of and adherence to energy code requirements. They will actively support more energy efficient and lower GHG construction practices.
<p>Proposed Annual Budgets for 2024-2027: 2024: \$934,000 2025: \$1,930,500 2026: \$2,123,550 2027: \$2,335,905 2024-2027 Total: \$7,323,955</p>	<p>Anticipated directional and scale changes in budget for years 2028-2031: Continue to maintain program steady-state beyond 2027.</p>
<p>Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.</p>	

Cross-Cutting Sector – Workforce, Education & Training

Market Characterization

SDREN recognizes that the building sector is undergoing a fundamental transformation towards electrification and decarbonization. These changes will have a profound impact on the job market, influencing both workforce requirements and workforce development.

The move towards electrification brings with it a growing demand for a workforce with specialties such as HVAC technicians, certified electricians, building automation and controls specialists, and plumbers as outlined in the table below. At the same time, existing jobs in legacy industries, such as oil and gas, may be affected. One study cited that reducing commercial and residential gas usage by 30% could result in 6,200 fewer gas extraction jobs in California.⁴⁸ California’s move toward clean energy introduces both opportunities and challenges for the workforce.

Studies have forecasted a significant shortage of workers with essential skills needed to support the transition to a clean energy future. The UCLA Luskin Center for Innovation completed a study in 2019 detailing employment impacts of building decarbonization, which requires both energy efficiency improvements and reducing the use of fossil fuels, including methane gas. Their analysis concluded that electrifying 100% of California’s existing and new buildings by 2045 would require over 100,000 additional full time workers in the construction industry and up to 4,900 additional full-time manufacturing workers.⁴⁹ This shortage underscores the urgency of developing a skilled workforce across San Diego County, where over 8% of Californians reside.

⁴⁸ California Building Decarbonization Workforce Needs and Recommendations, UCLA Luskin Center for Innovation, Executive Summary pg. 4.

⁴⁹ Ibid.

Table 32. Average number of jobs created in the San Diego region annually through energy demand expenditures from 2021-2030, by subsectors and technology. Figures assume 1 percent average annual productivity growth.⁵⁰

Investment Area	Average Annual Expenditure	Direct Jobs	Indirect Jobs	Direct and Indirect Jobs	Induced Jobs	Direct, Indirect, and Induced Jobs
Vehicles	\$7.7 billion	3,427	1,427	4,854	1,508	6,362
HVAC	\$897.0 million	1,345	699	2,044	764	2,808
Refrigeration	\$761.9 million	1,315	491	1,806	711	2,517
Appliances	\$188.6 million	143	77	220	78	298
Construction	\$113.4 million	263	149	412	146	558
Lighting	\$106.6 million	177	95	272	100	372
Manufacturing	\$45.7 million	40	32	72	27	99
Other Commercial and Residential	\$38.9 million	59	30	89	33	122
Agriculture	\$17.2 million	144	21	165	45	210
Mining	\$2.4 million	1	1	2	1	3
Total	\$9.9 billion	6,914	3,022	9,936	3,413	13,349

As we seek to electrify and decarbonize our buildings, SDREN will provide comprehensive training for the existing workforce and will prepare new workers to enter the industry, ensuring a pipeline of skilled professionals for the clean energy sector.

The transition toward decarbonized buildings, coupled with substantial investments in a clean energy economy (e.g. IRA and the Equitable Building Decarbonization Program), will require a

⁵⁰ IMPLAN 3.1

skilled workforce. In response to these needs, SDREN is committed to investing in workforce development through its programs, ensuring that all San Diegans have the opportunity to participate in the industry or acquire the new skills needed to support the transition to a clean energy economy.

WE&T Sector Goals, Objectives and Strategies

SDREN will deliver impactful workforce, education, and training programs focused on individuals in HTR, disadvantaged, and historically underserved communities. These programs will teach the necessary skills through comprehensive training and development opportunities to meet the future regional needs of the energy, electrification, and decarbonization career sectors, resulting in increased career opportunities.

SDREN’s programs will train workers to identify, develop, fund, and implement energy savings across buildings and facilities.

The proposed programs focus on ensuring workers from HTR and underserved communities have access to certification, apprenticeship, education, and skill development opportunities to set them up to access high-quality jobs and ensure the San Diego region has skilled workers to meet future needs.

Table 33. Cross-Cutting WE&T Goals, Objectives, and Strategies

Goals	Strategies	Objectives
<ul style="list-style-type: none"> ● Expose high school students to energy/green career pathways. ● Encourage students to enroll in Science, Technology, Engineering, Arts, and Mathematics (STEAM) college courses. ● Build students’ connections with employers to boost their interest in a career within the green workforce. 	<ul style="list-style-type: none"> ● Target high school students in disadvantaged and HTR communities to promote program equity and skill development opportunities in areas with fewer resources and historic underinvestment. ● Partner with local community college districts to provide college-level courses and skill development opportunities to enhance employment opportunities. ● Partner with local employers to connect high school students with employers for coaching and mentorship opportunities. 	<ul style="list-style-type: none"> ● Build pathways for high school students to enter the green workforce with knowledge of industry practices and network connections. ● Prepare students with on-the-job energy and green workforce skills for a smoother entry into the green workforce. ● Increase the number of students interested in pursuing energy and green careers. ● Build career pathways and a network of high schools and colleges as feeders to employment opportunities.

<ul style="list-style-type: none"> ● Build participant workforce development capacity in the region. ● Enhance workforce training pathways through existing employers. ● Strengthen employee skill sets by focusing on entry-level energy and green job skill development for workforce participants. ● Support participating employers' internal professional growth focused on green careers. 	<ul style="list-style-type: none"> ● Provide training, certifications, networking, and apprenticeship opportunities to build skills for participants to enter the clean energy workforce. ● Provide wraparound services such as career coaching and mentorship to match participants with employers to secure jobs. ● Survey local employers to determine emerging industry careers and necessary skills for incoming professionals to succeed. ● Work with employers to design and deliver employee training to boost internal growth opportunities and employee retention. ● Guide employers to develop new policies to encourage employee training opportunities, funding for external training (e.g., the IRA-funded Home Energy Efficiency Contractor Training Grants), and time allocation for skill development. ● Target employees at CBOs, public agencies, contractors, and labor unions for workforce training pathways. ● Explore worker placement programs to build capacity and support workforce development. ● Coordinate closely with SDREN programs, with a focus on residential 	<ul style="list-style-type: none"> ● Increase the supply of skilled employees entering into the energy and green workforce. ● Increase access to opportunities for job training, certifications, and apprenticeships. ● Provide one-on-one career pathway assistance to support entry into the workforce. ● Benefit future generations and build career opportunities within the green workforce. ● Work with employers to develop customized internal training to boost employee skills. ● Coordinate with certification and apprenticeship opportunities to boost internal employee skill development. ● Increase participating employers' staff retention and internal promotional opportunities. ● WE&T program participants support other SDREN programs.
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	<p>programs, to create placement opportunities for trained workforce</p>	
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WE&T Sector Coordination

SDREN anticipates coordination efforts with the following approved SDG&E, statewide, and regional programs:

- **Career Connections - Energy is Everything**, a statewide program administered by PG&E, provides standards-aligned, K-12 STEM, energy and environmental-focused curriculum and lesson supplies to educators statewide at no cost. The program also offers high school internships focused on energy and water audits to help students gain relevant industry skills. SDREN will coordinate on services, shared partnerships, internships, and/or job opportunities for program participants.
- **Career & Workforce Readiness - Energize Careers**, a statewide program administered by PG&E, provides holistic services to support disadvantaged workers through technical training, job placement, and wrap-around support. Energize Careers partners with regional contractors, pre-apprenticeship programs, apprenticeship programs, community-based training organizations, and community colleges.
- **SDG&E Workforce, Education, & Training**, provides no-cost online energy classes that are readily available for skill development.
- **Construction Career Jumpstart Program**, a regional program administered by San Diego Workforce Partnership, provides a four-week paid, hands-on program covering the fundamentals of a construction skilled trade position, including safety, trenching, jackhammering, proper usage of power tools, and other essential skills. Trainees are certified in several skills upon graduation.
- **Apprenticeship Readiness Program**, a regional program administered by San Diego Workforce Partnership, provides the opportunity to explore various career/trade options while providing participants with the skills needed to get started in a construction career. The program utilizes the Multi-Craft Core Curriculum (MC3), which provides an overview of what each trade does and the qualifications and skills needed. This program offers an introduction to the tools of the trades, builds math skills, teaches workplace safety, and more.
- **California Climate Action Corps**, a statewide program administered through California’s Office of the Governor, places fellows across California to work with public agencies, non-profits, CBOs, universities, colleges, school districts, and Tribes. The fellows gain training and work experience while supporting state climate action goals focused on wildfire resiliency, urban greening, organic waste diversion, and edible food recovery.
- **Sustainability Service Corps**, a statewide program administered by Bay Area Community Resources, places fellows across California to work with public agencies, non-profits, CBOs, universities, colleges, school districts, and Tribes. The fellows gain training and work experience in energy and environmental capacity building.

- **CivicSpark**, a statewide program administered by the Local Government Commission, places fellows across California to work with local governments. The fellows provide capacity building support to agencies addressing climate change, water resource management, affordable housing, and mobility resilience challenges within their jurisdiction. CivicSpark is implemented in partnership with California’s Office of Planning and Research and CaliforniaVolunteer.

Upon Business Plan approval, SDREN will file a JCM with SDG&E to outline coordination protocols between programs and ensure services fill gaps, meet regional needs, and avoid duplication. Additional stakeholders SDREN will coordinate with that do not fall under the JCM include regional employers, college districts, and high schools.

SDREN will also monitor the market and coordinate with other programs to leverage complementary offerings and supplement program services. This includes:

- **Leverage:**
 - Career Connections - Energy is Everything to align on shared partnerships and services provided.
 - SDG&E to highlight potential internship or job opportunities for SDREN program participants.
 - Career & Workforce Readiness - Energize Careers and other WE&T programs to share strategies and expand resources across the entire region. Partnership with Energize Careers will foster self-sustaining collaborations to train partners and industry partners.
- **Stack:**
 - Opportunities available to high schools and students served through Career Connections - Energy is Everything program to offer community college courses (CTE).
 - Opportunities available to employers by connecting them with programs such as Energize Careers for placement opportunities. Coordinate training resources, including custom training offerings offered directly through employers.
 - Sector-wide WE&T offerings through coordination on program-specific curriculum development and collaboratively filling gaps.

Categorization by Segment

Additional details on SDREN’s segmentation justification at the program level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A*.

Table 34. Cross-Cutting WE&T Programs Categorization by Segment

Program	Segment	Justification/Primary Goal
Energy Pathways Program	Market Support	Increase awareness and build accessible pathways for youth to enter the green workforce, build

		long-lasting careers, and form a robust professional network.
Workforce Training & Capacity Building	Market Support	Build capacity in the region by working directly with individuals and employers to increase opportunities for education, training, certifications, mentorship, and job connections for energy job acquisition.

WE&T Sector Program Details

Table 35. Program Card for Energy Pathways Program

Program Name: Energy Pathways Program	
Program ID: SDREN-01-WET-EPP	
New/Existing: New	
Link to implementation plan if existing (see D.21-05-031): N/A	
Portfolio Segment: Market Support	Implementation Party: Third-Party Implementer
Applicable Sector: Cross-Cutting: Workforce, Education, & Training	Market Sub-Sector: Workforce, Education, & Training
<p>Sector Challenge:</p> <ul style="list-style-type: none"> • High school students often need academic prerequisites or specific skills to pursue energy-related careers. • Costs and the competitive nature of higher education and energy-related training programs that many energy careers require can be a significant barrier to entering the sector. • High school students may not be aware of energy career opportunities and the pathway to an energy career. • The energy industry can be highly competitive with limited job openings. High school students often need extra skills to distinguish themselves and secure job opportunities. • The perceived value of working in construction and other skilled trades is low, reducing the number of 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> • Services that inform high school students of energy career pathways and skills to support their interest in entering the energy sector. • Incorporating a standards-aligned curriculum and career technical education (CTE) with employment opportunities and postsecondary training. • Programs that connect high school students to dual enrollment in college courses and/or other academic offerings to provide industry knowledge and the technical skills (including IDSM education/training opportunities) required to enter the workforce. • Connect high school students directly to employers in their area to provide

<p>individuals interested in entering this field. For those interested, understanding how to access these trades is limited and pathways for entry can be complicated.</p>	<p>mentorship, coaching, and career guidance focused on industry skills, terminology, and career pathways.</p> <ul style="list-style-type: none"> ● Provide or connect high school students with paid internship opportunities to build skills, create network connections, and increase industry knowledge. ● Inform high school students of industry trends and the value and earning potential of energy careers through networking with professionals to support them in navigating their career paths. ● Create or connect high school students to scholarship opportunities to pursue higher education, industry technical skills certification, or apprenticeships in STEAM or IDSM fields. ● Access to resources such as financial aid through college partners, private scholarships, stipends for opportunity youth, and paid internships. ● Leverage supplemental funding opportunities to enhance or expand STEAM or IDSM program services (as available).
<p>Known Equity Concerns in the Selected Markets: There is a lack of access to Science, Technology, Engineering, Arts, and Mathematics (STEAM) programs for high school students, especially in disadvantaged and HTR communities. Because access to these skill-building pathways is limited, marginalized communities in the energy and STEAM industries are affected. Representation in the field matters, and high school students may be discouraged from pursuing careers in energy if they do not identify with the current industry makeup.</p>	<p>Proposed Solutions to Equity Concerns: This program will focus on disadvantaged HTR communities and Title I high school students to provide access to STEAM educational opportunities. By connecting high schools to no-cost educational resources, paid internship opportunities, and professional networks, eligible high school students will access a network of diverse (gender and ethnicity) energy/green professionals to act as coaches and mentors, provide guidance, and encourage them to pursue careers in energy.</p> <p>The program will provide one-on-one support to help identify career pathways, navigate</p>

	<p>course selection and enrollment, and secure paid internships that will reduce equity concerns and barriers to participation. Multilingual educational outreach materials and program documents will meet HTR high school students where they are and build the skilled worker pipeline for local employers.</p>
<p>Program Description: SDREN’s proposed Energy Pathways program will increase access to education and training resources to develop students' awareness of energy/green career pathways, help them learn the skills to enter the workforce, and provide sector-specific information. The Energy Pathways program will provide high school students in the San Diego region with a standards-aligned curriculum focused on career technical education. Successful program implementation will build a bridge connecting participants to local employers within the energy, electrification, and decarbonization sectors.</p> <p>Participants will have access to a diverse network of mentors and coaches to provide one-on-one guidance and educate them on the value of energy/STEAM career pathways. This personalized mentorship will focus on navigating the job market, building a network, resume development, interviewing skills, financial education, and industry-specific knowledge based on their desired field of employment. Partnerships with local higher education institutions will enable eligible students to enroll in college-level courses that boost their industry knowledge and technical skills to prepare them for the workforce at no cost. Students facing monetary barriers will be connected to additional resources such as financial aid through college partners, private scholarships, stipends for opportunity youth, and paid internships.</p>	
<p>Intervention Strategy: Downstream – Technical assistance, education, training, and outreach.</p> <ul style="list-style-type: none"> ● Deploy a needs assessment to inform content development and identify job trends, skills gaps, and barriers to accessing entry-level positions in STEAM careers, including IDSM pathways. ● Deliver no-cost standards-aligned curriculum and career technical education in partnership with local education agencies. ● Create placement opportunities for program graduates within full-time high-quality jobs (e.g., fellow to full-time work placement, an electrician at the local utility, etc.). 	<p>Program Metrics:</p> <ul style="list-style-type: none"> ● Number of high schoolers enrolled in programming. ● Number of training hours provided. ● Number of DACs/HTR or Title I schools participating. ● Number of mentors/coaches matched with high school students. ● Number of college courses completed. ● Number of internships, certifications, or apprenticeship opportunities provided. ● Percentage of knowledge and skills gained from program participants. ● Dollar amount of supplemental funding leveraged. ● Long term: Percentage of participants entering into the

<ul style="list-style-type: none"> ● Leverage existing data resources and tracking to measure and analyze energy career trends and future industry needs. ● Engage key stakeholders (employers, high schools, and colleges) in local communities to support program development and delivery. ● Develop a one-on-one coaching/mentorship network with local employers. ● Build articulation agreements between participating high schools and local colleges to support dual enrollment in STEAM college courses at no cost. ● Develop certification opportunities for high school students to boost their employability and match students to paid internships, trade, school, or apprenticeship opportunities. ● Build a network and career pipeline between high schools, colleges, trade schools, and local employers and offer networking events to make direct connections. 	<p>energy/STEAM/IDSM career sector, if the program is able to track.</p>
<p>High-level description of delivery workforce, including necessary scale and its risks: The delivery workforce will include SDREN’s program implementation staff to lead program participants through offerings and services. Other workforce members include high school educators facilitating program delivery after participating in train-the-trainer exercises, faculty/staff within partner organizations (local colleges, trade schools, and apprenticeships), and local employers in our network of mentors/coaches. No risks were identified regarding the delivery of workforce for this program.</p>	
<p>Market actors necessary for success: Third-party implementer(s), high school administrators, high school teachers, high school career counselors, high school students, local college district partners, and local energy employers/employees as mentors and coaches.</p>	
<p>Solicitation Strategy: Third-party solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - ongoing</p>	<p>Short Term Plan: Launch the program in 2024 and ramp up implementation through 2027 to reach and serve the entire service area.</p>

<p>Cost Effectiveness: TRC: N/A</p>	<p>Long Term Outlook:</p> <ul style="list-style-type: none"> ● Increase the pipeline of skilled local workers in clean energy jobs (e.g. STEAM, ISDM). ● Increase the opportunity for youth in HTR and underserved communities to build skills, overcome barriers to high-quality jobs, and create a representative workforce.
<p>Proposed Annual Budgets for 2024-2027: 2024: \$934,000 2025: \$1,930,500 2026: \$2,123,550 2027: \$2,335,905 2024-2027 Total: \$7,323,955</p>	<p>Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.</p>
<p>Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.</p>	

Table 36. Program Card for Workforce Training and Capacity Building

<p>Program Name: Workforce Training and Capacity Building</p>	
<p>Program ID: SDREN-02-WET-BRC New/Existing: New Link to implementation plan if existing (see D.21-05-031): N/A</p>	
<p>Portfolio Segment: Market Support</p>	<p>Implementation Party: Third-party implementer</p>
<p>Applicable Sector: Cross-Cutting - Workforce, Education, & Training</p>	<p>Market Sub-Sector: Workforce, Education, & Training</p>
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● Most clean energy careers require specialized education or training. Adult workers new to energy and incumbents may need new skills or certifications, which can be time-consuming and costly. ● Specialized skills and certifications are expensive for employees, and they may be unable to invest their own 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Provide workers with no or low-cost specialized skill training, certifications, networking, and apprenticeship opportunities to build skills to enter the clean energy workforce. ● Create no-cost employer-led EE and IDSM training programs for essential and emerging industry skills. Connect employees to external certifications and skill-building opportunities.

money into training due to other pressing financial considerations.

- Inexperienced workers may struggle to find entry-level positions in the energy industry if they lack the required experience or education. They may need to start at a lower level than their previous careers, which can be financially challenging.
- Workers may not have emerging industry-specific knowledge, training, experience, or the technical skills required to maintain employment.
- Lack of disadvantaged and HTR workers with knowledge of energy efficiency, electrification, decarbonization, or green building skills makes it difficult to find local candidates for employment. Lack of access to external training resources, such as training centers or facilities, can be particularly challenging for employees in remote or less developed areas.
- High regional demand for energy efficiency, electrification, decarbonization, or green building workers in the face of an insufficient supply of skilled workers.
- Employees may struggle to find time for training within regular job duties and personal responsibilities or may not know what training will benefit career growth.
- Workplace culture may not support training and skill development, which can discourage employees from seeking opportunities on their own, especially if they do not see a direct pathway for career advancement or pay increases.

- Provide entry-level on-the-job training and wraparound services such as career coaching and mentor/mentee support by matching participants with employers to support securing jobs.
- Survey local employers to determine the emerging industry careers and necessary skills for incoming professionals to be successful in the industry.
- Increase network connections through industry events, professional organizations, networking, or shadowing professionals to build connections and gain insights.
- Directly support career preparedness training focused on resume development, interviewing skills, transferable skills, financial literacy, and networking skills.
- Support high-quality career pathways, labor standards, and job quality within clean economy careers, particularly in the residential sector.
- Develop or change employer policies on training to allocate dedicated time and funds to pursue education and training opportunities that will benefit the employees and employers.
- Increase on-the-job training and skill-building opportunities through pre-professional shadowing, expert guest speakers, and industry leaders.
- More accredited training or certification opportunities in accessible locations or online.
- Improve employer outcomes and revenues through a workforce capable of installing measures in alignment with local, state, and federal policies and funding streams (e.g. IRA-funded Home Energy Efficiency Contractor Training Grants).

	<ul style="list-style-type: none"> ● Create career connections to opportunities within other SDREN programs.
<p>Known Equity Concerns in the Selected Markets: A major known equity concern and barrier to entry is the cost associated with education opportunities, certification, or retraining programs. These costs can be prohibitive, particularly for those from low-income backgrounds.</p> <p>Workers from minority groups face challenges accessing information, training materials, or job opportunities, which reduces access to quality education and training opportunities in HTR and underserved communities. Additionally, members of marginalized communities disproportionately hold low-wage positions, perpetuating the cycle of poverty. Employer policies regarding training, hiring, promotions, and general career advancement may have biases that prevent minority employees from advancing in their positions. Further, a lack of training opportunities or knowledge of where to access training prevents career growth.</p>	<p>Proposed Solutions to Equity Concerns: SDREN seeks to bolster internal employee training and skill-building programs within energy-efficiency or IDSM-deploying employers to upskill the existing workforce and enable HTR and underserved participants to access high-quality jobs in the clean energy economy. The program will use a network of clean energy and green professionals from diverse and representative backgrounds as coaches and mentors to improve equitable access to industry-specific guidance and knowledge and support participants’ long-term career success. Identifying or creating additional EE and IDSM accredited training or certification opportunities in accessible formats will ensure all program participants will benefit.</p> <p>SDREN will help workers in HTR and underserved communities access no-cost education and certifications. By doing so, we will also support businesses by providing on-the-job training and skill development for underserved, entry-level workers. Working directly with the workforce and employers places SDREN in a position to address equity concerns with multiple stakeholders. SDREN will encourage employers to change training policies to dedicate time and funds to education and training that will benefit the employee and employer. By creating no-cost employer-led training programs for essential and emerging industry skills, SDREN will give employees access to external certifications and skill-building opportunities directly.</p> <p>SDREN will provide multilingual educational outreach materials and on-the-job training opportunities through pre-professional shadowing, expert guest speakers, and industry leaders. These training opportunities</p>

	will meet participants where they are and expand the skilled worker pipeline for local employers.
<p>Program Description: SDREN’s Workforce Training & Capacity Building program will enhance the clean energy workforce in our region, focusing on skill development for individuals interested in entering the green workforce and incumbent workers. The program will target individuals, employees/employers, boosting skills and employer capacity to work on electrification and decarbonization projects.</p> <p>By developing and delivering no-cost EE and IDSM training and certifications, SDREN will bolster employability, fill gaps for in-demand technical skills, and provide pathways for individuals to enter the clean energy workforce. This program will increase skills within the existing workforce, improve employee retention rates, foster participant career advancement, and provide opportunities for networking through industry events, professional organizations, and shadowing with seasoned professionals in the field. Participants will receive career coaching and mentorship focused on resume development, interviewing skills, transferable skills, financial literacy, and networking.</p> <p>The program will collaborate with stakeholders within clean energy, electrification, and decarbonization workforce sectors, including CBOs, public agencies, SDREN program implementers, contractors, and labor unions. Partnerships will boost growth opportunities for incumbent workers, increase retention rates for employers, and enhance employer workforce training. SDREN will guide participating employers to develop policies to promote employee training, allocate funding for external training, and set aside time for skill development.</p>	
<p>Intervention Strategy: Downstream – technical assistance, education, training, and outreach.</p> <ul style="list-style-type: none"> ● Develop and deploy a survey for local employers to determine the emerging clean energy industry careers and required skills and qualifications for professionals to be successful. ● Provide relevant training and ongoing workforce support aligned with industry needs to build capacity in the region, supporting employers along the way. ● Partner with local agencies to create a network of connection resources, standardize content, and offer EE and IDSM-focused training. ● Create opportunities for program graduates to seamlessly transition into employment with local 	<p>Program Metrics:</p> <ul style="list-style-type: none"> ● Number of participants trained. ● Number of jobs secured after program participation. ● Number of training hours completed. ● Number of certifications provided. ● Number of employee program participants. ● Percentage of HTR and underserved participants. ● Number of mentors/mentees. ● Percent of knowledge and skills gained related to fundamental concepts, emerging tech, best workplace practices, and utility programs. ● Number of career and workforce readiness participants who have been employed for 12 months after receiving training.

<p>employers. Establish partnerships with employers to facilitate job placements.</p> <ul style="list-style-type: none"> ● Foster connections between the workforce and SDREN’s residential programs. ● Create opportunities for participants to connect with SDREN, IOU, and statewide programs to gain additional skills at no cost. ● Explore worker placement programs that can build workforce capacity while supporting participants skill development. 	<ul style="list-style-type: none"> ● Number of employers participating. ● Number of internal employer trainings delivered. ● Number of employer policies updated. ● Number of external training opportunities offered.
<p>High-level description of delivery workforce, including necessary scale and its risks: The delivery workforce will include SDREN’s program implementation staff to lead participants through program services. Other workforce members include local employers in the network of mentors and coaches for new and incumbent workers.</p>	
<p>Market actors necessary for success: Third-party implementer(s), adult workers interested in entering the energy sector, incumbent workers, local energy employers within the clean energy, electrification, and decarbonization workforce sectors, and training providers.</p>	
<p>Solicitation Strategy: Third-party solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - Ongoing</p>	<p>Short Term Plan: Launch the program in 2024 and ramp up implementation through 2027 to reach and serve the entire service area.</p>
<p>Cost Effectiveness: TRC: N/A</p>	<p>Long Term Outlook:</p> <ul style="list-style-type: none"> ● Increase the skills of the local workforce and provide pathways for employment in the energy workforce within local communities. ● Substantially increase workforce skills and provide pathways for industry advancement. ● Increase employers’ capacity to take on new work within the clean energy, electrification, and decarbonization workforce sectors.
<p>Proposed Annual Budgets for 2024-2027: 2024: \$1,518,000</p>	<p>Anticipated directional and scale changes in the budget for years 2028-2031: SDREN will</p>

<p>2025: \$3,137,000 2026: \$3,450,700 2027: \$3,795,770 2024-2027 Total: \$11,901,470</p>	<p>continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.</p>
<p>Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.</p>	

Public Sector

Market Characterization

The public sector market is the group of customers that are taxpayer funded, have political mandates, and that must go through a public budgeting and decision-making process.⁵¹ They are a distinct and unique segment of non-residential customers with a set of exceptional challenges and characteristics that set them apart from other customer groups.

Public agencies encounter unique challenges based on common characteristics including multiple and competing goals, lengthy procurement processes, risk aversion, and funding constraints, among many others. Given these challenges, there is significant opportunity for SDREN to help agencies overcome barriers to participating in energy efficiency programs.

Historically, SDG&E has made efforts to engage with the public sector. However, previous efforts spanning 2018-2020 only yielded 4% of SDG&E’s overall portfolio energy savings, though the public sector accounts for 15% of overall system electric consumption.⁵² Within SDG&E’s jurisdiction there are over 14,000 public sector accounts, with a significant 77% made up of small accounts with a peak demand of 20 kW or less.⁵³ These small accounts often face difficulties qualifying for existing IOU resource programs, generally due to those programs’ cost effectiveness requirements.

SDG&E recently closed their K-12 Energy Efficiency program and this customer group is being served by their Commercial BES program until another offering is available. This was out of SDG&E’s control and was unplanned since the implementer suspended business operations.⁵⁴ Through coordination conversations with SDG&E leading up to this Business Plan submission, SDREN identified school districts in the territory as a service gap it could fill. Given this history and the persisting challenges in engaging public sector participants, SDREN identified a substantial opportunity to introduce impactful localized programs and services in this customer segment. As a result, SDG&E is not planning a new solicitation for this program, anticipating that SDREN will fill this gap if authorized.

⁵¹ Decision Authorizing Energy Efficiency Portfolios for 2024-2027 and Business Plans for 2024-2031. Conclusions of Law #33.

⁵² SDG&E Business Plan Exhibit 2 p. 163.

⁵³ Ibid.

⁵⁴ SDG&E AL 4302-E, pg. 29.

Public Sector Goals, Objectives and Strategies

San Diego County hosts a diverse range of public agencies which SDREN aims to support through its offerings, including:⁵⁵

- 24 San Diego Water Authority members.
- 19 local governments.
- 42 K-12 school districts and higher education.
- 13 community service districts.
- 18 Tribal nations.

These public agencies manage a wide range of infrastructure and facilities, from police stations and schools to wastewater treatment plants and streetlights. As public assets, these facilities are essential for community well-being and highly visible and accessible to the public. This unique positioning empowers public agencies to lead by example, setting the stage for community resilience.

By completing energy upgrades, public agencies can improve reliability, support cleaner energy systems, generate cost savings, inspire local action, and boost the local economy. This vital role of public agencies within their communities underscores the importance of addressing their unique needs and challenges.

SDREN will deliver programs and services that enable public agencies to lead their communities by example to a more decarbonized, affordable, and resilient energy future. The proposed public sector programs offer a comprehensive suite of services to public agencies throughout San Diego County. These services will overcome common barriers by helping agencies identify, develop, fund, and implement energy savings opportunities across buildings and facilities, ultimately contributing to local and regional decarbonization goals.

Public agencies are instrumental in setting the example for their communities. Therefore, our programs will go beyond conventional energy efficiency and will provide agencies with valuable educational information and technical support services for IDSM strategies. These offerings empower public agencies to establish or reinforce community resilience hubs, which play a crucial role as safe havens during climate-related emergencies. SDREN is well positioned to design and implement these programs successfully as its inaugural Advisory Committee consists of representatives from public agencies that are multi-jurisdictional.

SDREN's public sector programs are designed to ensure underserved and HTR communities are not left behind in the clean energy transition. We will prioritize outreach and offer specialized services to HTR or underserved public agencies and K-12 schools to ensure that all communities in San Diego County can access the benefits of a cleaner, more resilient energy future.

⁵⁵ Federal and state are currently served by existing programs and SDREN will not focus on these agencies unless there is a request from these agencies or SDG&E to coordinate and support offerings.

Table 37. Public Sector Goals, Objectives and Strategies

Goals	Strategy	Objectives
<p>Help public agencies address and adapt to climate change by reducing GHG emissions and increasing energy resilience.</p>	<ul style="list-style-type: none"> ● Technical assistance through energy efficiency audits, project management services, and incentive and financing application support to identify and fund DER projects. ● Direct EE measure installations with a special focus on K-12 schools. ● Portfolio analyses and benchmarking paired with community indicators to identify facilities that are good candidates for resilience hubs. ● Identify and apply for outside funding sources of DER implementation including EE, renewables, etc. ● Prioritize Tribal outreach to improve and increase access to programs that will provide technical assistance and support implementation of shovel-ready EE projects. ● Support transition away from HFC refrigerants by providing education about low-GWP alternatives. Customers will receive relevant measures or recommendations with technical assistance. ● Coordinate with the C&S community to simplify and streamline permitting processes for IDSM and DERs. 	<ul style="list-style-type: none"> ● Agencies improve their energy resilience and preparedness for climate-related emergencies. ● Decarbonization of agency facilities and assets by implementing DER projects including EE, solar, battery storage, EV charging, DR program enrollment, etc. ● Agencies lead their communities by example. ● Agencies receive capital to fund their decarbonization and energy resilience projects. ● Energy bill reductions are achieved. ● Serve diverse and HTR communities.

<p>Increase energy capacity, awareness, and competency.</p>	<ul style="list-style-type: none"> ● Agencies receive education and training through webinars, workshops, and program deliverables on the benefits of decarbonization, energy resilience, and DR program participation. ● Build capacity and awareness through ongoing engagement, sharing of case studies, and educational resources. ● Provide energy analysis reports at the portfolio and project level. ● Develop customized decarbonization and resilience roadmaps that align with established agency goals and priorities. 	<ul style="list-style-type: none"> ● Agencies demonstrate awareness of DER benefits by integrating related policies and actions as a standard practice. ● Agencies are aware of energy consumption and costs across their assets. ● Agencies incorporate recommendations from the program's decarbonization and resiliency roadmaps into their CAPs to increase the energy resilience of their critical infrastructure, increasing public buy-in. ● Agencies are more actively engaged in supporting decarbonization and resilience activities in their communities.
<p>Ensure underserved public agencies are not left behind in the clean energy transition.</p>	<ul style="list-style-type: none"> ● Develop a new framework in which Tribal governments propose and design customized energy programs and strategies to meet their unique community needs. ● Specialize services developed to target K-12 schools that would otherwise not be served. ● Track all supplemental funding sources, including state and federal funding sources such as IRA's Indian Affairs Tribal Electrification Program, that can be leveraged for projects and offer application assistance for program participants. 	<ul style="list-style-type: none"> ● Tribal communities benefit from increased access to EE resources through tailored programming. ● Energy justice for DAC and HTR communities through reduced energy burden.

Public Sector Coordination

Our primary goal for coordination efforts is to eliminate customer confusion about EE programs and encourage seamless participation. We will work closely with SDG&E and other stakeholders, and there are several key programs we aim to coordinate with:

- The **SDG&E Local Government Third Party Program, Climate Action Plan for Zero Net Energy (CAP4ZNE)** offers a concierge approach tailored to local governments for energy efficiency and GHG reductions. SDREN's Public Sector programs will closely collaborate with this program to ensure SDREN's program is complementary and fills gaps. SDREN will also channel project opportunities to this program wherever possible.
- The **Statewide Water Infrastructure and System Efficiency™ program (SW WISE™)** provides solutions related to water production, distribution, and water/wastewater treatment systems. SDREN's Climate Resilience Leadership program will introduce agencies with eligible project types to the WISE program and fill gaps in their services.
- The **Business Energy Solutions (BES)** program, which offers no-to-low cost direct install measures paired with audits and recommendations. SDG&E had intended to close the BES Program at the end of 2023 due to the launch of its new Small Business Equity Program (Small Business Saver Program) at the start of 2024. However, due to the early termination of the K-12 Energy Efficiency Program (KEEP), SDG&E now plans to keep the program active to serve the K-12 customer base.⁵⁶ Instead of issuing a new solicitation for their K-12 EE program, SDG&E will continue to offer the BES program until the launch of the SDREN Climate Resilience Leadership program, which will serve K-12 school districts.
- The **SDG&E On-Bill Financing (OBF) program** offers 0% financing for energy upgrades; SDREN will facilitate access to SDG&E OBF for projects eligible for SDG&E incentive programs. SDREN will help public agencies apply for and access SDG&E OBF for projects pursuing an SDG&E program.
- The **Higher Education Energy Efficiency Program (HEEP)** serves existing higher education facilities owned or operated by University of California, California State University, or California Community College. SDREN will coordinate as applicable.
- The **California Energy Design Assistance (CEDA) program** offers EE incentives for new construction projects. SDREN will refer program participants to this program where applicable, as SDREN services do not address new construction.
- **San Diego (SD) EnergyLink** provides energy services to federal buildings, military bases, and Tribal nations. SDREN will coordinate with the program to ensure participants receive comprehensive services.

⁵⁶ SDG&E AL 4302-E, pg. 17.

SDREN will also collaborate with the San Diego Regional Climate Collaborative (SDRCC) and the San Diego Association of Governments (SANDAG) to build on successes from previous LGP programs. These organizations are established regional networks for public agencies to develop and advance climate change and decarbonization solutions.

Effective coordination is paramount to deliver comprehensive and efficient services to the public sector. To avoid overlap with SDG&E and statewide programs in the region, SDREN will coordinate closely with SDG&E and the statewide program administrators and their implementers to offer services that fill gaps for program participants. Upon Business Plan approval, SDREN will file a JCM with SDG&E to outline coordination protocols that ensure services fill gaps, meet regional needs, and avoid duplication. Initial strategies discussed with SDG&E during the portfolio application development include:

- Close coordination with existing programs to fill gaps in service and prevent market confusion.
- Mapping of full public sector portfolios including eligibility criteria, customer targeting, and services ahead of SDREN solicitations.
- Develop joint strategy around messaging to customers.
- Promote complementary programs such as SDG&E’s CAP4ZNE and statewide WISE.

SDREN will also monitor the market and coordinate with other programs to **leverage** complementary offerings and **stack** supplemental program services, including:

- **Leverage** the CAP4ZNE program incentives and other unique offerings to bring incentive opportunities and services to public agency participants.
- **Stack** IRA tax incentives, 179D Commercial Building EE tax deductions, and TECH incentives to reduce equipment costs.
- **Leverage** previously drafted climate action plans to guide and inform opportunities with participants.

Categorization by Segment

Additional details on SDREN’s segmentation justification at the program level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A*.

Table 38. Public Sector Program Categorization by Segment

Program	Sector	Justification/Primary Goal
Climate Resilience Leadership	Market Support	Build capacity for public agency participants through education, training, and technical services and instill EE as a best practice. These goals are in alignment with the Commission market support objective to support long term success of the EE market.

Tribal Engagement	Equity	Provide energy efficiency services to Tribes, a HTR community that has been historically underserved. This goal is in alignment with the primary purpose of Equity segment programs, i.e. to provide EE services to HTR customers in DACs in advancement of the Commission’s Environmental and Social Justice Action Plan.
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Public Sector Program Details

Table 39. Program Card for Climate Resilience Leadership

Program Name: Climate Resilience Leadership	
Program ID: SDREN-01-PUB-CRL New/Existing: New Link to implementation plan if existing: N/A	
Portfolio Segment: Market Support	Implementation Party: Third-party Implementer
Applicable Sector: Public	Market Sub-Sector: Eligible public agency types. <ul style="list-style-type: none"> ● Cities ● County ● Public education agencies ● Special districts ● Tribes
Sector Challenge: <ul style="list-style-type: none"> ● Limited staff capacity, understanding, and expertise to address EE and decarbonization opportunities to improve energy resilience. ● Lengthy and cumbersome public procurement processes. ● Limited access to data for informed decision making. ● Limited capital and/or competing priorities for EE projects. ● Risk aversion. ● Resource constraints as staff and budgets have many competing priorities and energy management is just one of many. ● Complex decision making and political dynamics. 	Sector Opportunity: <ul style="list-style-type: none"> ● Comprehensive yet tailored services to meet public agencies’ unique needs, with a focus on agencies serving underserved and HTR communities. ● Provision of technical assistance and resources to help public agencies identify and implement clean energy projects and meet regional decarbonization goals. ● Increase staff capacity through education, outreach, project management, and technical assistance to integrate EE as standard practice across operations.

<ul style="list-style-type: none"> ● Long-term planning challenges. ● Gaps in IOU third party offerings, including school district programming. ● Aging infrastructure, including buildings and utility systems that may require substantial energy efficiency upgrades. 	<ul style="list-style-type: none"> ● Reduced energy burden by reducing energy costs and reinvesting energy bill savings into communities. ● Provide no to low-cost EE measure installations through a direct install offering. ● Offer portfolio energy analyses to help inform decision making, targeting of clean energy opportunities, and creation of resilience hubs across agency owned assets. ● Support updating or creating short and long-term energy resilience plans.
<p>Known Equity Concerns in the Selected Markets: Public agencies, especially smaller ones, often have constrained budgets and staff resources, making it difficult to allocate funding and staff for clean energy projects or to take advantage of available services and funding. Additionally, a large proportion of public agency accounts are small (<20kW) and may not qualify for many IOU resource programs due to potential projects not meeting programs’ cost effectiveness requirements. This in turn leads to even greater inequity in the long run, as energy and operational costs continue to rise while projects are delayed. These smaller agencies may not have resources to develop climate action or resilience plans and build internal capacity around DERs. Public agencies are expected to lead their communities by example, but there is limited funding and services to support them in achieving their goals.</p>	<p>Proposed Solutions to Equity Concerns: The program proposes to address equity concerns by prioritizing outreach to agencies that have historically been overlooked by EE programs. The program will provide technical assistance, end-to-end project management services, and educational resources to public agencies/facilities of all sizes, acting as an extension of agency staff. Financial assistance services will help agencies identify, apply for, and secure funding for EE and IDSM projects. The program will also offer:</p> <ul style="list-style-type: none"> ● Increased incentives and no-cost direct install support of EE measures for HTR and underserved agencies. ● Education and training resources to help agency staff grow their capacity and awareness of the benefits of EE, DER technologies, and DR program participation to drive decarbonization efforts. ● Assistance for underserved agencies to develop actionable resilience roadmaps.
<p>Program Description: The Climate Resilience Leadership program is designed to overcome barriers hindering public agencies from implementing EE projects. It also promotes IDSM technologies and programs, facilitating deeper decarbonization to help agencies meet their climate goals. Dedicated project managers will act as an extension of agency staff to provide</p>	

customized and unbiased start-to-finish guidance and to coordinate delivery of technical services to identify and implement EE projects.

The program operates through dedicated project managers who offer tailored guidance throughout the project cycle and coordinate technical service delivery to identify and implement EE and DER projects. This personalized approach ensures successful project execution.

To address common challenges related to funding and procurement and to fill IOU program gaps, the program provides direct installation of EE measures. This will include providing targeted and specialized direct install services to K-12 schools, recognizing that there is a gap in services available to this market sub-sector. Project managers will also coordinate and facilitate access to third-party incentive programs. Moreover, the program will monitor emerging funding opportunities for public agencies (such as IRA) and provide support for all relevant incentive and financing applications, relieving them of major administrative burdens.

In addition to the suite of project delivery services, the program tackles knowledge and capacity barriers by offering educational resources on DERs and DR programs through webinars, peer to peer learning opportunities, and case studies. Small grants will also be available to fund public agency staff attendance at decarbonization or DER-related conferences and events. These resources empower agency staff to become champions for decarbonization internally while showcasing climate leadership to the broader community through successful project delivery.

Intervention Strategy: Downstream – technical assistance, incentives via direct install, outreach and education, funding and financing support.

EE and DER project identification and delivery interventions.

- Agency portfolio energy analysis and resilience roadmap: provides participants with overview of energy consumption and costs and facilitates project opportunities by identifying energy-intensive infrastructure. Sets foundation for development and delivery of energy resilience roadmap, which identifies DER opportunities to improve community energy resilience and recommends sites to serve as resilience hubs.
- Comprehensive energy audits: identify energy savings, EE and decarbonization opportunities.

Program Metrics:

- kWh
- Therms
- TSB
- Number of public agencies engaged and receiving services (including project management and education and outreach activities)
- Dollar amount of energy bill savings
- Audits completed
- Financial analyses delivered
- Projects managed
- Number of educational activities delivered (webinars/workshops)
- Number of unique outreach materials created
- Number of buildings benchmarked
- Number of energy resilience roadmaps delivered
- Number of energy savings measures identified and installed

- Financial analysis: utilizes outputs from audit reports to provide business case summary to invest in clean energy projects.
- Project financing and funding assistance: facilitate access to various financing options including cash incentives, low-to-no-interest loans, tax credits, and grants to help agencies overcome financial barriers to projects.
- Procurement assistance: provides agencies with documentation to procure installation contractors and receive applicable internal approvals.
- Construction support: review scope and contractor equipment submittals to ensure alignment with anticipated energy savings outcomes and funding eligibility requirements.

Engagement, education and outreach interventions.

- Workshops/webinars/training and educational resources to build public agency staff’s capacity and awareness of EE, sustainability, and decarbonization measures, including DR program participation.
- Small grants to fund public agency participation in educational events, e.g. conferences.

Direct installation of EE measures that help agencies overcome funding, financing, and procurement hurdles and achieve decarbonization and resilience goals.

- Sample direct install measures include: economizer controls/repair, heat pump water heaters, occupancy sensors, outdoor LED lighting, and pipe insulation.

- Number of funding and financing applications supported
- Dollar amount of non-ratepayer funding leveraged

<p>High-level description of delivery workforce including necessary scale and its risks: The program delivery workforce will include SDREN staff and third party implementation partners, including subcontracted engineering consultants and other industry experts to provide as needed services to program participants. There are no known related workforce risks for successful implementation of the program.</p>	
<p>Market actors necessary for success:</p> <ul style="list-style-type: none"> • Third-party implementer(s). • Local entity or entities familiar with public agency barriers and solutions to installing EE and DERs. • Local engineering firms and contractors. 	
<p>Solicitation Strategy: Third-party Solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - Ongoing</p>	<p>Short Term Plan: Ramp up third-party program to full implementation to serve at least 50% of all eligible customers in service territory.</p>
<p>Cost Effectiveness: TRC 2024-2027: 0.41</p>	<p>Long Term Outlook</p> <ul style="list-style-type: none"> • Public agencies look to SDREN as a trusted advisor to help them improve energy resiliency and address energy needs. • Energy and cost savings realized. • Broader reach and support across underserved communities. • Agencies demonstrate increased awareness of EE and IDSM best practices and integrate into operating practices and procedures. • Enhanced resilience to climate challenges and emergencies, including more resilient energy infrastructure and practices. • Disparities in energy access and program participation are reduced.
<p>Proposed Annual Budgets for 2024-2027: 2024: \$2,732,000 2025: \$5,645,500 2026: \$6,210,050 2027: \$6,831,055 Total 2024-2027: \$21,418,605</p>	<p>Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.</p>

Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.

Table 40. Program Card for Tribal Engagement

Program Name: Tribal Engagement	
Program ID: SDREN-02-PUB-TRE New/Existing: New Link to implementation plan if existing: N/A	
Portfolio Segment: Equity	Implementation Party: Third-Party Implementer
Applicable Sector: Public	Market Sub-Sector: Tribes
<p>Sector Challenge:</p> <ul style="list-style-type: none"> • Tribal cultural sensitivities, distrust in government programs. • Some Tribal governments may lack in-house technical expertise, resources, and staff capacity to plan, implement, and manage energy efficiency initiatives, making it challenging to take advantage of available programs. • Lack of capital to invest in EE and decarbonization strategies. • Most public sector accounts in SDG&E territory are small (<20kW) and may be passed over by IOU resource programs with cost effectiveness requirements. • Aging infrastructure, including buildings and utility systems that may require substantial energy efficiency upgrades. • Navigating the complex regulatory environment, including compliance with federal and Tribal regulations, can be challenging for Tribal governments. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> • Tribal community-led design of initiatives to facilitate energy planning, increase access to EE programs, reduce energy burdens, and decarbonize assets. • Ongoing access to technical advisor with EE expertise to support successful programming and initiatives; access to industry experts including engineering firms. • Advance climate resiliency on Tribal lands and in Tribal communities. • Tribes demonstrate leadership in EE and share best practices and lessons learned.

Known Equity Concerns in the Selected

Markets: Tribal participants have long been underserved and underrepresented in energy efficiency programs. This historical underinvestment in outreach to Tribal participants is one of many factors that have significantly eroded Tribal governments’ trust in public sector programs. This has led to missed opportunities for Tribal governments to secure vital funding and resources.

One of the key equity concerns in Tribal communities is limited access to information about available programs, incentives, and resources. This limited access not only hinders the development of sustainable energy practices within Tribal lands but also compromises the resilience of Tribal communities in the face of energy-related emergencies and challenges.

Proposed Solutions to Equity Concerns:

The Tribal Engagement program recognizes that addressing equity concerns within Tribal communities is a multifaceted endeavor that requires a tailored, culturally sensitive and empathetic approach. To overcome historical underinvestment in Tribal communities, the program proposes to provide grant funding and no-cost technical assistance to Tribal participants for community-driven interventions. This support will empower Tribal governments to design and offer EE programs to their Tribal government and community members. By providing financial resources and technical expertise, we aim to break down the barriers that have historically hindered Tribal participation in energy initiatives.

Building trust within Tribal communities is a fundamental component of our approach. We understand that trust is built through meaningful relationships, respect for cultural sensitivities, and a genuine understanding of Tribal needs. To achieve this, we plan to establish partnerships with trusted leaders in Tribal communities. These partners will play a pivotal role in ensuring program design and delivery is culturally sensitive and responsive to the unique needs of each Tribal community. This includes acknowledging and addressing historical disparities in energy access, infrastructure investment, and environmental impacts that may have disproportionately affected Tribal governments. Building trust and engaging Tribal communities takes time; we are prepared to listen, learn, and adapt our approach to the unique cultural and historical context of each Tribal community.

Program Description: The Tribal Engagement program will create a pathway for Tribes and Tribal organizations in the San Diego region to develop, propose, and implement energy-related initiatives to address their unique needs and contribute to sustainability, resilience, and economic development within Tribal communities. Through our community-driven program, we will empower Tribes to take ownership of initiatives and exercise self-determination in pursuing decarbonization and sustainable energy practices.

Program resources will include tailored no-cost technical assistance, including a dedicated technical advisor to support initiative applications and champion their success from idea inception to successful execution.

All initiative applications will be required to promote sustainable energy practices within Tribal lands and enhance the resilience of Tribal communities by increasing their capacity to withstand energy-related emergencies and challenges. The third party program implementer will develop high-level blueprints of program design options for Tribes to follow and secure funding to implement. Moreover, SDREN welcomes and encourages innovative ideas outside of these blueprints, granting Tribes the freedom to propose unique solutions that align with their goals.

Initiative applications will be evaluated based on their alignment with Tribal needs, sustainability, resilience, and economic development goals. Approved initiatives will receive customized services and resources to support implementation. These services may include technical expertise, project funding, and partnerships.

The Tribal Engagement program is a catalyst for Tribal communities in the San Diego region to shape their energy destinies. By nurturing local talent, inspiring innovation, and providing the necessary support, SDREN aims to create a vibrant and resilient energy landscape that Tribal communities can proudly call their own.

This program will coordinate with SDREN’s Climate Resilience Leadership program to ensure that there is no duplication of efforts. Tribes will be able to access all the technical services available from both programs, including direct install measure installations.

Intervention Strategy: Downstream – technical assistance, outreach and education.

- **Initiative ideation and application technical services support:** technical assistance is provided to help Tribes develop ideas and draft applications.
- **Direct funding grants** provided to Tribes to implement initiatives.
- **Initiative application evaluation:** includes approval by program implementer.
- **Technical assistance:** Approved initiatives receive customized services and resources to support delivery,

Program Metrics:

- Number of initiative applications submitted
- Number of initiative applications approved
- Number of implementation plans prepared
- Number of Tribes served
- Dollar amount of grant funds awarded

Additional metrics to be determined as Tribal initiatives are approved.

<p>including support to develop implementation plans.</p> <ul style="list-style-type: none"> ● Access to energy experts (e.g. engineering firms, financial advisors, local agencies, and relevant stakeholders) to leverage expertise and resources. 	
<p>High-level description of delivery workforce including necessary scale and its risks: The delivery workforce will include third party implementation partners, including on-call subcontracted engineering consultants, and energy leaders from Tribal communities and organizations. Time and resource availability for Tribal energy leaders may be a risk factor.</p>	
<p>Market Actors necessary for success:</p> <ul style="list-style-type: none"> ● Third-party implementer(s). ● Tribal nations and Tribal organizations. ● Others to be determined based on proposed and approved grant initiatives. 	
<p>Solicitation Strategy: Third-party Solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - Ongoing</p>	<p>Short Term Plan: Ramp up third-party programs to full implementation to offer grants to at least 8 Tribes.</p>
<p>Cost Effectiveness: TRC: N/A</p>	<p>Long Term Outlook:</p> <ul style="list-style-type: none"> ● Tribes become more empowered as they gain experience proposing, implementing, and managing initiatives, and they become more sustainable as a result. ● A large portfolio of initiatives are serving diverse Tribal needs. ● Reduced energy burden and increased revenue generation through clean energy projects. ● Enhanced resilience to climate challenges and emergencies including more resilient energy infrastructure and practices. ● Disparities in energy access and program participation are reduced. ● Supplemental funding sources can be leveraged, including IRA funding earmarked for Tribal governments to administer residential electrification and DER programs.

	<ul style="list-style-type: none"> • Successful initiatives serve as models for other Tribal communities within and beyond San Diego. Scalability may lead to expansion in other regions, increasing impacts. • Over time, Tribal communities that have successfully implemented initiatives may become sources of knowledge and best practices for other communities, fostering a culture of shared learning.
<p>Proposed Annual Budgets for 2024-2027: 2024: \$234,000 2025: \$482,600 2026: \$530,860 2027: \$583,946 2024-2027 Total: \$1,831,406</p>	<p>Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.</p>
<p>Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.</p>	

Residential Sector

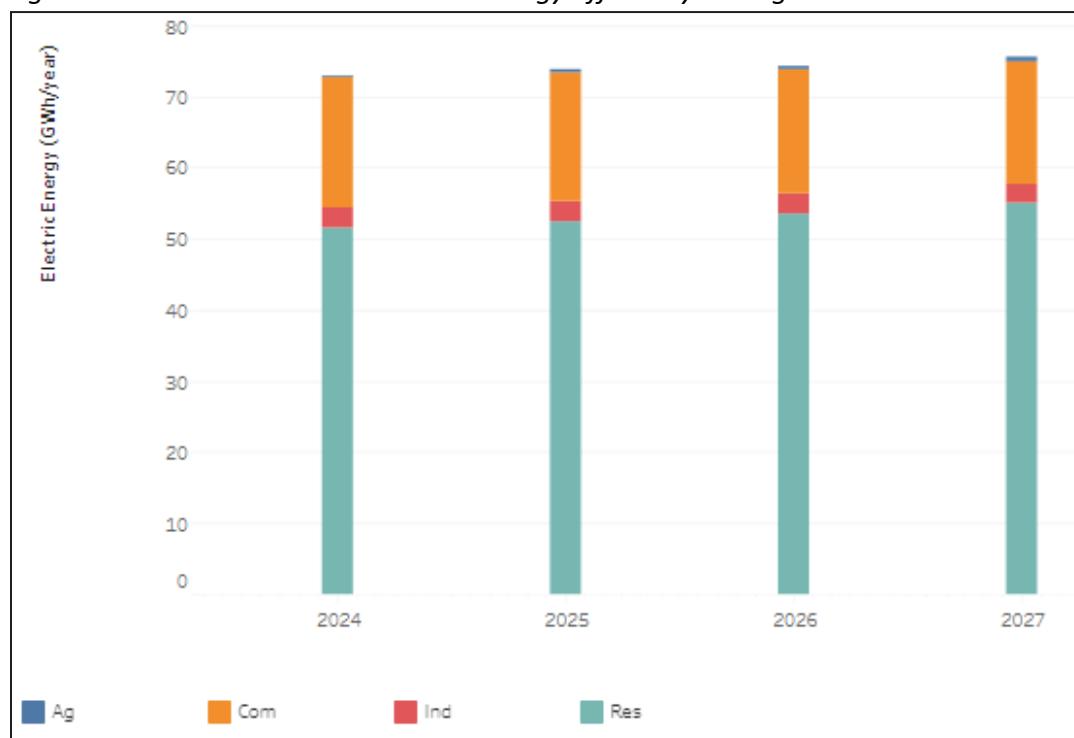
Market Characterization

The residential sector is the largest customer group in SDG&E territory, making up 1.49 million accounts and consuming over a third of all electricity and more than half of all methane gas in San Diego County.⁵⁷ The importance of serving this sector in the realm of energy efficiency is clear, as it represents a substantial opportunity for significant savings in the region based on incremental market potential identified in the 2023 Energy Efficiency Potential and Goals Study findings.⁵⁸ These findings unequivocally illustrate the immense potential within the SDG&E territory's residential sector when compared to other sectors like agricultural, commercial, and industrial, as depicted in the figure below.

⁵⁷ SDG&E Business Plan Exhibit 2. P. 189.

⁵⁸ 2023 P&G Study Results Viewer V1.0; filtered for SDG&E, Residential, Cumulative Market Potential for all measures.

Figure 11. SDG&E Residential Sector Energy Efficiency Savings Potential



Moreover, the study categorizes a significant majority of this potential as behavioral, retro-commissioning, and operational (BRO), accounting for 94% of potential savings, with fuel substitution and water heating making up the majority of the remaining potential.⁵⁹

These statistics emphasize the need for programs and services that can equitably serve the residential sector and instigate behavioral change and home electrification.

The residential sector has a diverse landscape of customer types, including single-family homes and multifamily dwellings, each with a distinct set of challenges and opportunities. The complexities vary from program accessibility and entry barriers to concerns surrounding equity and inclusion. For instance, programs targeting multifamily homes can have higher barriers, often necessitating approvals by property managers and owners, larger capital expenditures, and the potential for uneven distribution of program benefits, particularly among renters and property owners.

Furthermore, there is often a shortfall in ensuring equitable access to these programs, especially among HTR and underserved customers, due to insufficient consideration of equity and inclusion in program outreach and educational materials. This lack of accessibility is further compounded by the fact that affordable housing is often located in multifamily buildings, which can exacerbate gaps in program access and equity.

⁵⁹ Ibid.

Residential Sector Goals, Objectives and Strategies

To help bridge existing program gaps and create a more equitable landscape, SDREN will implement two residential sector programs designed to deliver equitable services to underserved and HTR community members for single-family and multifamily homes. These programs will work in harmony with all relevant existing third-party programs offered by SDG&E, state, and federal agencies. A key focus of the programs will be on stacking incentives wherever feasible, maximizing the benefits for customers while efficiently utilizing available resources.⁶⁰ Understanding that the multifamily sub-sector has experienced EE program challenges across the state, SDREN will review the latest EM&V studies and coordinate directly with PAs and implementers to apply the latest lessons learned from other multifamily programs prior to implementation. SDREN will focus on deemed measures and will not use the current custom process and meter-based approaches to savings measurement because they will not be cost effective with the target customers for these equity programs.

Both of SDREN’s residential sector programs are strongly rooted in the principle of equity. They prioritize delivery to HTR customers by offering in-language outreach and anti-displacement policies. These programs will provide EE measures and serve buildings not covered (or only partially covered) through existing programs. Furthermore, they will fill gaps by addressing the specific needs of renters, including direct install upgrades and educational initiatives that emphasize non-energy benefits. Complementing these services, SDREN will help customers to leverage external funding and financing opportunities, including the stacking of incentives.

SDREN’s residential sector programs aim to promote equity and inclusivity, recognizing the diversity of challenges that both single-family and multifamily homes face within the realm of clean energy initiatives. We believe that through these programs, SDREN can create meaningful change, ensuring that every member of the community benefits from the clean energy future.

Table 41. Residential Sector Goals, Objectives, and Strategies

Goals	Strategy	Objectives
<p>Deliver equitable services to traditionally underserved and HTR residential customers to ensure they are included in the clean energy transition.</p>	<ul style="list-style-type: none"> ● Focus on underserved and HTR residential customers within San Diego County. ● Provide in-person, equitable, and inclusive outreach and support services (i.e. in-language materials with cultural understanding, taking into account customers with impaired hearing or vision, etc.). 	<ul style="list-style-type: none"> ● Increased access to and participation in ratepayer-funded EE programs by HTR customers and underserved communities. ● Reduced energy burden and increase energy co-benefits (e.g. health, comfort) realized by HTR and underserved residents. ● A clean energy transition inclusive of customers

⁶⁰ SDREN will ensure that there is no “double dipping” of ratepayer funding.

	<ul style="list-style-type: none"> ● Customized energy programs and strategies shaped by community input and tailored to meet unique community needs. ● Increased incentive opportunities offered to HTR and underserved communities. 	<p>historically left out of energy programs.</p> <ul style="list-style-type: none"> ● Energy justice for HTR customers and underserved communities.
<p>Reduce barriers to EE program participation among residential customers.</p>	<ul style="list-style-type: none"> ● Provide one-on-one and in-language support to residents via an energy advisor who can connect customers to all other available programs, services, and funding opportunities (e.g. IOU third party, state, federal programs, etc.). ● Offer direct installation of energy efficiency measures to lower residents' energy bills and help secure rebates for other identified measures, ensuring various funding sources are identified and stacked wherever feasible. ● Provide guidance and support to customers seeking federal tax credits and other available incentives for clean energy projects. ● Educate residents and provide them with resources to understand energy-saving and co-energy benefits (e.g. health and comfort). ● Equitable and inclusive, culturally sensitive 	<ul style="list-style-type: none"> ● Increased residential sector adoption of EE and energy upgrades/retrofits. ● Improved comfort and health despite climate threats like extreme heat. ● Increased access to and awareness of EE technologies and available funding and financing programs. ● Customer energy bill savings and GHG reductions realized.

	in-language outreach materials and program documents.	
Accelerate implementation of EE and decarbonization measures and long-term market transformation through program interventions.	<ul style="list-style-type: none"> ● The energy advisor works to overcome barriers to program adoption. ● Adapt and evolve program services to best meet customer needs. ● Programs foster community and industry partnerships to develop holistic solutions to address resident needs. ● Support deeper and expanded electrification of space and water heating systems and other methane gas-based systems like ovens and dryers with efficient electric versions in order to accelerate building decarbonization. ● Assist resident enrollment in demand response (DR) programs and install DR-ready measures. 	<ul style="list-style-type: none"> ● Emerging EE technologies (e.g. heat pump water heaters) move toward standard practice. ● Full potential of EE for the residential sector is realized. ● Residents have a plan and the resources for future/capital intensive clean energy upgrades. ● Avoided peaker plant emissions through peak demand reductions.

Residential Sector Coordination

During the development of SDREN’s Business Plan, SDREN held discussions with SDG&E to address potential overlap in ratepayer-funded programs and to avoid duplicating efforts. Notable existing programs discussed during these meetings include:

- **Residential Zero Net Energy Transformation (RZNET) program:** a regional third-party program that serves multifamily and manufactured homes.
- **Residential Energy Solutions (RES) program:** a regional third-party program that serves single-family homes.
- **Quality Residential HVAC Services:** a statewide program that provides extra incentives, training, and tools to HVAC contractors who provide enhanced services including maintenance plans, maintenance calls, and quality installations.

- **Golden State Rebates:** a midstream statewide plug load and appliance program that offers incentivized EE measures to participating retailers and distributors.

Other SDG&E-specific programs for collaboration may include the Energy Savings Assistance (ESA) program,⁶¹ the future residential equity program (anticipated to launch mid-2024), and the residential fuel-substitution market support program (anticipated to launch in 2025).

Upon approval of the Business Plan, SDREN will file a JCM with SDG&E. The JCM will outline coordination protocols to ensure that SDREN services fill gaps, meet regional needs, and avoid duplication. SDREN will collaborate with SDG&E, PAs, program implementers, and any applicable initiatives or campaigns to offer complementary services that fill gaps for residential program participants. An example initiative is the Switch Is On, which inspires consumers to “equitably electrify communities.”⁶²

SDREN will monitor the market and coordinate with other programs to **leverage** complementary offerings and **stack incentives**, including:

- Self Generation Incentive Program (SGIP).
- CEC Equitable Building Decarbonization Program (EBDP).
- California Electric Homes Program (CalEHP).
- California's Homeowner Managing Energy Savings Program (HOMES).
- High-Efficiency Electric Home Rebate Program (HEEHRA).
- TECH Clean California (TECH).
- Energy Savings Assistance (ESA) Multifamily Energy Savings program.
- GoGreen financing.
- IRA tax credits (e.g., Energy Efficient Home Improvement Credit and Clean Energy Tax Credit).

Categorization by Segment

Additional details on SDREN’s segmentation justification at the program level can be found in *SDREN 2024-2031 EE Application Excel Sheets - 20 Segmentation Justification Attachment A*.

Table 42. Residential Sector Program Categorization by Segment

Program	Segment	Justification
Residential Equity Program (single-family)	Equity	The primary goal of these programs is to provide energy efficiency services to HTR customers and/or disadvantaged communities in alignment with the Commission’s Environment and Social Justice Action Plan.
Multifamily Residential (two or more units)		

⁶¹ <https://www.sdge.com/residential/pay-bill/get-payment-bill-assistance/assistance-programs/no-cost-energy-efficient-home-improvements>.

⁶² <https://switchison.org/>.

Residential Sector Program Details

Table 43. Program Card for Single-Family

Program Name: Single-Family	
Program ID: SDREN-02-RES-SFM New/Existing: New Link to implementation plan if existing: N/A	
Portfolio Segment: Equity	Implementation Party: Third-party Implementer
Applicable Sector: Residential	Market Sub-Sector: Detached, renter or owner-occupied single-family residences
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● Residents often have limited familiarity with and/or are confused by existing EE and IDSM technologies, programs, and service offerings. ● Capital intensive upgrades resulting from deferred maintenance hinders holistic projects and streamlined program implementation. ● Difficulty establishing trust with HTR customers and within underserved communities. ● HTR and underserved communities have historically faced disparities in access to clean energy programs and resources. ● Split incentives between renters and property owners limit the opportunities to reach renter-occupied homes. ● Many single-family homes have aging infrastructure, which can be a barrier to implementing energy efficient technologies. ● Local regulations and permitting requirements can be a major hurdle for homeowners looking to make energy-efficient improvements. Navigating the bureaucracy and securing the necessary approvals can be time-consuming and frustrating. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Partner with trusted CBOs and community partners for customer outreach to explain program opportunities. These organizations often have deep community connections and can reach underserved and HTR populations. ● Focus on EE and IDSM offerings and educational opportunities that result in reduced energy costs and non-energy benefits for residents. ● Support HTR and underserved communities with early decarbonization efforts. These communities often bear a disproportionate burden of environmental and energy-related challenges. Targeted support can improve living conditions and energy resilience of these customers. ● Pair program opportunities with external programs for deeper savings and incentive stacking. ● Provide no-cost installations through a direct install offering. ● Offer rebates for selected EE measures that can stack with, or meet gaps of, other program rebate offerings.

<ul style="list-style-type: none"> • Homeowners may be resistant to change, especially if they are unfamiliar with or skeptical of new energy efficient and IDSM technologies. 	
<p>Known Equity Concerns in the Selected Markets: Single-family residents in HTR and underserved communities often receive limited outreach from EE programs. Shortfalls in outreach can impede access to vital resources and accessible funding, limiting program participation. Programs often remain inaccessible to community members due to insufficient consideration of equity and inclusion in outreach and educational materials. The absence of culturally sensitive, linguistically appropriate, and inclusive materials exacerbates barriers to participation, especially for non-English speaking residents.</p> <p>Additionally, residents’ busy schedules and their need for personalized outreach and program services through multiple mediums further hinders HTR and underserved community participation in EE programs.</p>	<p>Proposed Solutions to Equity Concerns: To address equity concerns within the residential sector, the program will implement a multi-faceted approach that includes an energy advisor service. Advisors will be tasked with ensuring expanded access to program services. Their role will encompass technical guidance, community outreach, and engagement.</p> <p>To make information more accessible to all community members, the program will prioritize marketing materials that are in-person, equitable, and inclusive. These materials will be thoughtfully designed, taking into consideration diverse needs such as in-language content, cultural understanding, accommodations for customers with impaired hearing or vision, etc.</p> <p>Recognizing the importance of community trust and engagement, the program will partner with trusted CBOs and community partners for outreach. By working alongside organizations deeply rooted in the community, the program can leverage partners’ existing networks and credibility to foster community trust and engagement.</p>
<p>Program Description: SDREN’S Single-Family equity program will create a home energy advisor for residents that will serve as a personal concierge-style service to connect them to program information and funding and financing opportunities. The energy advisor will refer and connect residents to all eligible program resources and will act as a closed loop between participants and program service providers by coordinating with SDREN-supported contractors and contractors supporting other external programs. The program will offer a growing and evolving knowledge base to support participants.</p> <p>This approach aims to increase program participation for HTR and underserved residents who would otherwise have limited access to these resources. To maximize accessibility for the community, the program will provide services through multiple mediums, including an online</p>	

platform with chat features, direct email correspondence to respond to participant questions and requests for information, and call centers.

The program’s support services will meet homeowner and renter needs. The program seeks to meaningfully engage with the renter community, a group historically left out of traditional energy programs, by offering a package of no-cost energy efficiency upgrades (direct-install measures) for their homes. These upgrades will reduce residents’ energy consumption and lower their energy bills, and can complement other existing state programs aimed at reducing income-qualified resident utility bills, such as the Energy Savings Assistance program.

The energy advisor can support renters by working directly with property owners to advocate for upgrades at their properties. Rebates for additional energy efficiency measures will also be available. Targeted efficiency measures may include attic and wall insulation, LED lighting, duct testing and sealing, low-flow shower heads, and faucet aerators. The program will also focus on improving indoor air quality for residents through electrification by targeting heat pump water heaters, HVAC heat pumps, induction stoves, and heat pump clothes dryers. To support residents’ demand flexibility, the program will include smart thermostats to support demand response. The program will leverage local contractors for installations to stimulate the local economy and support local workforce development.

The program will provide energy efficiency kits and educational opportunities for renters and homeowners to create awareness of the benefits of energy conservation, energy efficiency, electrification, clean and renewable energy, DR program participation, and low-GWP refrigerants. Educational topics may include energy efficiency technologies and why they are eligible for incentives. For example, one educational opportunity might walk through a sample project scenario with stacked incentives and explanations of energy, financing, and policy-related terms (e.g. kilowatt hour, power purchase agreement, and governmental reach codes).

The program will provide equitable and inclusive marketing and outreach strategies to promote the energy advisor services to both renters and homeowners. It will partner with trusted CBOs and community partners for strategic outreach to explain available program opportunities to customers. The program will share specific information and materials for renters to help renters advocate for upgrades in their homes. The energy advisor can work with property owners directly to educate and advocate for upgrades on behalf of renters.

Intervention Strategy: Downstream – Technical assistance, incentives (both rebates and direct install), education, training, and outreach.

- Personal support and coaching for customers through an energy advisor service that is accessible through multiple mediums.
- Closed loop design for the customer with a single source to provide guidance and referrals to connect

Program Metrics:

- kWh
- Therms
- TSB
- GHG
- Number of outreach strategies conducted
- Number of equity target participants expressing interest via one or more engagement channels

<p>participants with relevant program contractors.</p> <ul style="list-style-type: none"> ● Equitable and inclusive outreach and marketing materials. ● Educational materials including an EE starter kit for customers. ● Direct install of selected EE measures. ● Rebates for selected EE measures that can stack with, or meet gaps of, other program rebate offerings. 	<ul style="list-style-type: none"> ● Percent of disadvantaged community and HTR customer participants ● Number of and type of program referrals provided by energy advisor ● Sum of equity target and non-equity participants' expected first-year bill savings ● Sum of all participants' greenhouse gas reductions (in tons of carbon dioxide equivalent; channeled) <ul style="list-style-type: none"> ● kWh channeled ● kW channeled ● Therms channeled
<p>High-level description of delivery workforce including necessary scale and its risks: SDREN staff, the program implementer staff, and the energy advisors will guide program participants through the SDREN residential program offerings and services, in partnership with subcontracted engineering consultants, CBOs, and community partners. Licensed local contractors, electricians, and equipment manufacturers will support the direct installation of energy efficiency measures. There are no known workforce related risks for successful implementation of the program, though a delay in manufacturing and delivery (or high demand) of equipment could pose a risk to project completion timelines.</p>	
<p>Market actors necessary for success:</p> <ul style="list-style-type: none"> ● Third party implementer(s). ● Trade professionals. ● Local contractors. ● Equipment manufacturers. ● Homeowners. ● Renters. ● Community-based organizations and community outreach partners. 	
<p>Solicitation Strategy: Third-party Solicited</p>	<p>Transition Plan: Not applicable</p>
<p>Expected Program Life: 2024 - Ongoing</p>	<p>Short Term Plan: Launch program in 2024 and ramp up implementation through 2027.</p>
<p>Cost Effectiveness: 4-year TRC: 0.15</p>	<p>Long Term Outlook:</p> <ul style="list-style-type: none"> ● HTR and underserved customers have fair and equal access to energy efficiency programs. ● HTR and underserved communities leverage program resources and incentives at an equal or greater rate than customer base at large.

<p>Proposed Annual Budgets for 2024-2027: 2024: \$2,904,000 2025: \$6,000,000 2026: \$6,600,000 2027: \$7,260,000 2024-2027 Total: \$22,764,000</p>	<p>Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.</p>
<p>Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.</p>	

Table 44. Program Card for Multifamily

<p>Program Name: Multifamily</p>	
<p>Program ID: SDREN-01-RES-MFM New/Existing: New Link to implementation plan if existing: N/A</p>	
<p>Portfolio Segment: Equity</p>	<p>Implementation Party: Third-party Implementer</p>
<p>Applicable Sector: Residential</p>	<p>Market Sub-Sector: Multifamily buildings of two or more units.</p>
<p>Sector Challenge:</p> <ul style="list-style-type: none"> ● HTR and underserved residents and property owners often have limited familiarity with existing EE and IDSM technologies, programs, and service offerings, especially electrification. ● Difficulty establishing trust with HTR customers and within underserved communities. ● Split incentives between renters and property owners limit the opportunities to reach renter-occupied homes. ● No existing single-program solution to meet the needs of a multifamily dwelling. ● Local regulations and permitting requirements can be major hurdles. ● Risks of tenant displacement as a result of increased property values and rising rents. 	<p>Sector Opportunity:</p> <ul style="list-style-type: none"> ● Pair program opportunities with external existing and emerging programs for incentive stacking to realize deeper savings and decarbonization of multifamily properties. ● Partner with trusted CBOs and community partners for customer outreach to explain program opportunities. ● Focus on EE and IDSM offerings and educational opportunities that result in reduced energy costs and increased non-energy benefits for residents. ● Reduce property owners’ energy and operating costs to support reinvestment into the building and improve quality of life for tenants. ● Provide EE and IDSM education and advisory services to property owners, property management companies,

	<p>and tenants to address the split incentive challenge.</p> <ul style="list-style-type: none"> ● Provide no-cost installations through a direct install offering, with a focus on electrification measures to support HTR and underserved communities decarbonize. ● Work to protect tenants from potential increased rents that can result from property investments. ● Coordinate directly with PAs and implementers to apply the latest lessons learned from other multifamily programs prior to implementation.
<p>Known Equity Concerns in the Selected Markets: Multifamily residents and property owners in HTR and underserved communities often receive limited outreach from EE programs, which results in limited awareness and knowledge of available energy program services and potential benefits. Residents and property owners also often hold the perception that EE and IDSM measures are too capital intensive to pursue; they may not fully understand the savings benefits or long-term payback considerations. Programs may also be inaccessible to community members due to insufficient consideration of equity and inclusion in program outreach and educational materials.</p>	<p>Proposed Solutions to Equity Concerns: To make information more accessible to all community members, the program will prioritize marketing materials that are in-person, equitable, and inclusive. These materials will be thoughtfully designed, taking into consideration diverse needs such as in-language content, cultural understanding, accommodations for customers with impaired hearing or vision, etc.</p> <p>Recognizing the importance of community trust and engagement, the program will partner with trusted CBOs and community partners for strategic outreach. By working alongside organizations deeply rooted in the community, the program can leverage their existing networks and credibility to foster community trust and engagement.</p>
<p>Program Description: SDREN’s Multifamily program will target multifamily property owners/managers as well as tenants to address facility upgrades that impact both common area measures (CAM) and renter-specific in-unit utility bill savings.</p> <p>For property owners and property managers, the program will provide customizable engagement strategies tailored to the decision-maker for property upgrades. The program will promote benefits such as energy bill savings, operating cost savings, return on investment, and increased property value, as well as non-energy benefits such as health and comfort. The program will also offer technical assistance to property owners and managers in the form of</p>	

unbiased program staff support throughout the project lifecycle. This turnkey service will engage decision-makers in energy upgrade decisions and ensure that projects achieve their intended energy cost savings and benefits.

The program will offer a systems tune-up assessment as an outreach strategy that will identify “quick-win” savings with project payback of less than two years. Building upgrades will be focused on impacts to CAM areas by providing energy audits to identify opportunities for energy efficiency measures. Recommended upgrades will be presented to the property owner or manager alongside corresponding costs, savings, and financial metrics. The program will offer rebates that can be stacked onto other applicable utility, regional, state, or federal program incentives, and will also provide financial resources to help secure external funding and financing, including for IDSM opportunities. Property owners and managers will receive guidance on state and municipal building code requirements and compliance, including reach codes and any upcoming Title 24 updates, to help guide upgrade decisions. Additionally, the program will offer unbiased reviews of contractor quotes to help make a contractor selection.

Specific to renters, the program seeks to meaningfully engage with the renter community—a group historically left out of traditional energy programs—by offering a package of free energy efficiency upgrades (direct install measures) for their residences. These upgrades will reduce residents’ energy consumption and lower their energy bills, and can complement other existing state programs aimed at reducing income-qualified resident utility bills, such as the Energy Assistance Savings program. Rebates for additional energy efficiency measures will also be available. Targeted efficiency measures include attic and wall insulation, LED lighting, duct testing and sealing, low-flow shower heads, and faucet aerators. The program will also focus on improved indoor air quality for residents through electrification by targeting heat pump water heaters, induction stoves, heat pump clothes dryers. The program will target smart thermostats to support demand response and demand flexibility for residents. The program will leverage local contractors for installations to stimulate the local economy and support local workforce development.

The program will provide energy efficiency kits and educational opportunities for renters to create awareness of the benefits of energy conservation, energy efficiency, electrification, clean and renewable energy, DR program participation, and low-GWP refrigerants. Educational topics may include energy efficiency technologies, why the technologies are eligible for incentives, a sample project scenario with stacked incentives, and energy, financing, and policy-related terms.

The program aims to improve multifamily facilities while protecting tenants from potential increased rents that can result from property investments. As such, the program will partner with CBOs and trusted community partners with subject matter expertise alongside local municipalities to create awareness of existing and help inform new anti-displacement policies. An informed and community approach to anti-displacement policies will create a network involving tenants, property owners, and community partners where feedback is shared and incorporated, allowing all stakeholders to participate and prioritize the overall needs and long-term shared vision for the community.

<p>Intervention Strategy: Downstream – Technical assistance, incentives (both rebates and Direct Install), education, training, and outreach.</p> <ul style="list-style-type: none"> ● Personal project support for property owners and managers through turnkey technical assistance. ● Equitable and inclusive outreach and marketing materials, targeted and customized to property owners, managers, and tenants. ● Educational materials, including an EE starter kit for customers. ● Direct install of selected EE measures. ● Rebates for selected EE measures that can stack with, or meet gaps of, other program rebate offerings. 	<p>Program Metrics:</p> <ul style="list-style-type: none"> ● kWh ● Therms ● TSB ● GHG reductions ● Number of EE kits delivered to participants ● Number of system tune-up assessments delivered ● Number of outreach strategies conducted ● Number of equity target participants expressing interest via one or more engagement channels ● Percent of disadvantaged community and HTR customer participants ● Number of and type of program referrals ● Sum of equity target and non-equity participants’ expected first-year bill savings ● Number of partners engaged
<p>High-level description of delivery workforce including necessary scale and its risks: SDREN staff and the program implementer staff will guide program participants through the SDREN residential program offerings and services in partnership with subcontracted engineering consultants, CBOs, and other community partners. Licensed local contractors, electricians, and equipment manufacturers will support the direct installation of energy efficiency measures. There are no known workforce related risks to the successful implementation of the program, though a delay in manufacturing and delivery (or high demand) of equipment could pose a risk to project completion timelines. Additional partners and stakeholders not under contract may include trade associations, chambers of commerce, and municipalities.</p>	
<p>Market actors necessary for success:</p> <ul style="list-style-type: none"> ● Third party implementer(s). ● Trade professionals. ● Local contractors. ● Equipment manufacturers. ● Community-based organizations and community outreach partners. ● Property owners. ● Property managers. ● Tenants. 	
<p>Solicitation Strategy: Third-party Solicited</p>	<p>Transition Plan: Not applicable</p>

Expected Program Life: 2024 - Ongoing	Short Term Plan: Launch program in 2024 and ramp up implementation through 2027.
Cost Effectiveness: 4-year TRC: 0.12	Long Term Outlook: <ul style="list-style-type: none"> ● HTR and underserved customers, specifically renters, have fair and equal access to programs. ● HTR and underserved communities leverage program resources and incentives at an equal or greater rate than customer base at large. ● Property owners and property managers are aware of program offerings and resources and have the policies to support energy efficiency upgrades.
Proposed Annual Budgets for 2024-2027: 2024: \$1,549,000 2025: \$3,200,000 2026: \$3,520,000 2027: \$3,872,000 2024-2027 Total: \$12,141,000	Anticipated directional and scale changes in budget for years 2028-2031: SDREN will continue to maintain program steady-state beyond 2027. For years 2028-2031, budgets will increase at a moderate 4% to address inflation and to meet increasing customer demand.
Implementation Plan: Implementation Plans for all SDREN programs will be developed after CPUC approval of SDREN’s application and before implementation begins.	

Portfolio Management

Strategies to Optimize Portfolio and Manage Risk

A comprehensive set of goals and metrics, as outlined in this Portfolio Application, is central to SDREN’s strategy for optimizing its portfolio. SDREN’s approach to integrate these goals and metrics into our portfolio management is guided by several key strategies, as detailed below.

Establishing a Strong Foundation through Systems and Tracking: We recognize the critical importance of robust tracking and reporting systems to maintain a comprehensive record of program participation and results. These systems will ensure that all aspects of our portfolio are systematically monitored and evaluated. This foundational approach will allow us to maintain transparency, accountability, and a complete understanding of the impact of our programs.

Regular Access to Metrics and Progress: To ensure that our portfolio remains dynamic and adaptable, we will develop data systems capable of generating automated reports for reporting and analysis. This real-time performance tracking will provide us with up-to-date insights into the progress of our programs. It allows us to promptly identify successes and challenges,

offering opportunities for continuous improvement. This timely feedback loop will benefit both SDREN and our program implementers, empowering us to make informed decisions and adjust strategies as needed, while also informing our future planning activities.

Prioritization of Goals and Metrics that are Clearly Understood: We recognize that clarity is paramount in our goal-setting and metric selection. Prioritizing goals and metrics that are clearly understood by all stakeholders involved ensures that everyone is working toward a common purpose. This clear understanding fosters alignment and shared commitment to achieving the desired outcomes.

Adaptability and Adjustment to New Metrics and Goals: Our portfolio approach will remain nimble in order to adapt to any new metrics and goals as directed by the CPUC. We will also adjust targets based on evolving market trends or the unique needs of local communities. This adaptability ensures that our programs remain responsive to changing circumstances and are well positioned to achieve their objectives.

Goal Setting and Regular Progress Reporting from Implementers: Our strategy places strong emphasis on goal setting and regular progress reporting by our program implementers. SDREN will set regular reporting schedules while also adhering to any CPUC reporting timelines and requirements. Regular reflection on progress toward programmatic goals will ensure that all stakeholders are informed of successes and challenges, which can open dialogue to pivot and/or enhance implementation activities.

Adjustments to Programs to Optimize Delivery of Goals and Priority Metrics: SDREN seeks to optimize the delivery of goals. Strategies that may be implemented to accomplish this aim include modifying program strategies, reallocating resources, or introducing new initiatives to ensure that we are consistently on track to achieve our targets, while continuing to ensure programs comply with REN CPUC directives.

Our approach to using goals and metrics for portfolio optimization is built upon a foundation of systematic tracking, regular reporting, and evaluation of progress. These strategies ensure that we are not only meeting our goals but are also continuously refining and enhancing our programs to maximize their impacts.

How SDREN Will Stay On-Target

As described above, SDREN recognizes the importance of establishing systems and procedures for tracking and reporting to monitor portfolio progress and ensure it stays on track to achieve its targets. One key element of these plans involves SDREN's implementation of a customer relationship management (CRM) software platform. SDREN's CRM will track progress across all SDREN programs. This platform will form the backbone for collecting, storing, and managing data related to program targets. Further, third party implementers will be expected to use their own tracking databases when appropriate; their data will be shared with SDREN for upload and import to their internal CRM.

To oversee data collection and reporting, a dedicated reporting lead will collaborate closely with program implementers. The lead will be responsible for coordinating the data collection efforts

across various programs, ensuring that data is collected accurately and in a timely manner, while ensuring adherence to any CPUC reporting requirements.

SDREN is committed to ongoing assessment and analysis of portfolio reports. These reports will be broken down by sector, segment, and individual program, enabling a granular evaluation of performance. The reports will cover key performance metrics and status, including but not limited to energy savings, TRC, and TSB, among others. Continuous assessment will ensure that the program is informed of progress and allows for timely identification of potential areas of concern. Any metrics appearing to be at risk of not meeting the 4-year portfolio targets or goals will be promptly flagged. SDREN will subsequently initiate a structured process and request that implementers develop a corrective action plan that specifies the actions, strategies, and resources needed to get the targets back on track.

Approach to Risk Management

As the threat of climate change looms, it is imperative for any program portfolio to have a risk management strategy in place. The San Diego region, like many others in the state, has faced a range of unpredictable events, including pandemics, wildfires, flooding, and droughts. These occurrences have underscored the necessity of proactive planning for unforeseen challenges.

As a community choice aggregator (CCA), SDCP is familiar with the risks and liabilities associated with handling customer data. SDREN will leverage SDCP's experience and customer data confidentiality policy to protect customer information and mitigate the risk of data breaches.

The County of San Diego's Office of Sustainability and Environmental Justice (OSEJ) is a PA of SDREN. This relationship equips SDREN to conduct region-wide assessments following any unpredictable event. Through these assessments, we can swiftly gauge the impacts of events such as natural disasters or crises, enabling SDREN to make data-informed decisions on program adjustments and resource allocations. SDREN is also able to quickly coordinate with SDG&E in these circumstances so resources can be mutually mobilized as needed.

While unpredictable events can present challenges, they also create opportunities for targeted and creative solutions. Such events may lead to increased program participation as communities seek solutions to address their immediate needs. SDREN is positioned to identify and implement approaches that address the evolving priorities of our stakeholders and provide value during times of crisis.

SDCP was not administering customer programs during the beginning of the COVID-19 pandemic, as SDCP officially launched its service and began enrolling customers in March of 2021. Although SDCP was not administering programs when COVID first emerged, best practices from that time were adopted that will be applied to SDCP's management approach. The COVID-19 pandemic demonstrated the importance of adaptability, resilience, and community focused solutions including:

- Similar to other agencies, to limit the spread of COVID-19, SDCP adopted best practices like remote work which has remained post pandemic.
- Taking measures to avoid any breakdowns in IT security.
- Staff are equipped with tools to be able to work collaboratively.

The County of San Diego has developed a robust COVID-19 response that is rooted in health equity. Through data examination, the County identified disparities among race/ethnic groups, age, zip code and other factors. This data helped to inform strategies to ensure equity.

Components of the County's COVID-19 response include the Test, Trace, Treat (T3) strategy, a large-scale public health strategy which uses collaborative effort to achieve collective impact in protecting the public's health and ensuring the continuity of such protection throughout all stages of the region's reopening. The T3 Strategy includes accessible COVID-19 testing, culturally competent disease investigation, and assistance with safe isolation with individualized services.

Throughout all COVID-19 response activities, multiple strategies have been employed including:

- A focus on equity.
- Early, active, and sustained engagement of community partners.
- Utilization of scientific evidence and data.
- Proactive transparency and communication.
- Clear goals and measurable results.
- Culturally responsive hiring and staffing practices.

Approach to Flexible Portfolio Management

SDREN has set forth clear high-level goals and crafted **portfolio, segment, and sector-specific strategies** to deliver outcomes that align with our overarching vision. As a smaller non-IOU program administrator, SDREN is well positioned to respond to unexpected events or market adjustments, enabling us to remain agile in the face of change.

Drawing lessons from other regional energy networks that have showcased their ability to remain nimble and adjust program offerings, incentives, or open and close programs to respond to market changes, SDREN is similarly committed to managing our portfolio, segments, and sectors with adaptability in mind. Our primary focus will be on overall management across different levels, ensuring that each program contributes to our overall vision and adheres to SDREN's core values.

SDCP, serving as the lead portfolio administrator, will oversee, manage and regularly assess if adjustments are necessary within the portfolio to properly manage portfolio, sector or segment level outcomes. These assessments will occur via forecasts, tracking and regular evaluation of outcomes, and review of schedules and costs against established forecasts. SDREN's Advisory Committee, made up of local and regional governments and community-based organizations, will also provide feedback on these assessments and recommend portfolio enhancements. SDREN will consider forming sector-specific ad hoc committees that include subject matter experts who will be informed on program assessments. These experts will guide and advise sector strategies to ensure alignment with the overarching portfolio vision.

SDREN will monitor market trends and emerging opportunities to identify where SDREN could effectively fill gaps. This includes any changes to the SDG&E EE portfolio, such as the closing of a third party program. SDREN will regularly coordinate with SDG&E on opportunities to fill gaps, including opportunities to develop offerings that leverage additional programs or funding

opportunities for San Diego communities. If an issue or opportunity is identified, SDREN will work collaboratively with appropriate partners to make adjustments to scopes, budgets or schedules to meet the portfolio's needs. This adaptability extends to the closing or developing of new programs as circumstances dictate. All of these activities will focus on both administrative efficiency and portfolio effectiveness.

Planned Procedures and Course Correction if Off-Track

As detailed above and in Exhibit 1, SDCP will oversee the SDREN portfolio, taking responsibility for both the oversight and management of goals and outcomes, including key metrics. While it's important to note that as a regional energy network, SDREN is not subject to specific cost-effectiveness requirements, we are committed to managing the portfolio to deliver on key metrics. These metrics include TSB, SDREN's unique value metrics, and program specific metrics, all of which will be achieved within budget over the 4-year program period. We also recognize that additional efforts are underway towards the adoption of common long-term market support and equity goals and associated metrics. SDREN intends to engage in this process, since the majority of SDREN's portfolio falls within the equity and market support segments. Once these goals and metrics are finalized, SDREN will also oversee progress toward their achievement.

All programs will be implemented by third party implementers, so when metrics are off track, SDCP will work closely with the implementer to course correct and ensure that goals are achieved. Specific thresholds necessitating corrective actions will be determined depending on the priority of the goal itself. These thresholds will be individually established in each program's manual once the portfolio is approved and programs are launched. In the event that SDREN's portfolio, segment, or programs are noted to be off target based on the regular assessments described in the section above, SDREN will engage its implementer(s) to develop a corrective action plan. SDREN will embed guidance into its contractual documents with each implementer that will specify and outline procedures for the implementer to initiate the plans. Once reviewed and approved, the implementer will put the plan into action and the issue will be monitored until it is resolved. As appropriate, SDREN will engage the Advisory Committee and sector specific ad hoc committees on the proposed improvement plan for feedback and guidance.

Third-Party Programs

As mentioned in previous sections, SDCP is the lead portfolio administrator for the SDREN portfolio and will be responsible for soliciting and managing contracts, tracking performance, and making decisions to deliver on goals. Neither SDCP nor the County of San Diego will be directly implementing programs. Upon CPUC authorization of the SDREN, SDCP will issue solicitations for all programs and select third party implementers to design and deliver all of its approved programs. All of the implementation responsibilities will be solely with the implementer.

Solicitation Strategy

As SDCP serves as the lead portfolio administrator responsible for procurement, SDCP's procurement process will be followed for SDREN.

As a public agency, SDCP's procurement processes are open and transparent and all contracts above \$125,000 are reviewed and executed by the SDCP Board. Contract approvals are placed on Board agendas and discussed at public Board meetings that are subject to the Brown Act. SDCP's Procurement Policy⁶³ establishes practices that facilitate efficient business operations and provide fair compensation and local workforce opportunities whenever possible within a framework of high quality, competitive service offerings.

The scope of solicitations will be based on the program cards included in this application. Solicitations will consider any market changes since submitting the Portfolio Plan, including new legislation, new CPUC decisions and guidance, SDG&E programs, or new programs such as the CEC Equitable Building Decarbonization DI Program. All programs included in this application will be solicited within six months of SDRENs authorization date.

Third-Party 2024-2027 Solicitation Schedule

SDREN anticipates releasing Requests for Proposals (RFPs) for the residential, public, workforce education and training, and codes and standards sectors in Q4 2024 and for the commercial sector in Q1 2025.⁶⁴ This is subject to change based on CPUC approval timelines and other unforeseen factors.

Risk Distribution

SDREN will follow processes and protocols established for SDCP including the following to mitigate and distribute risk across its portfolio:

- **Procurement Policy** establishes administrative procurement practices that facilitate efficient business operations and provide fair compensation and local workforce opportunities whenever possible within a framework of high quality, competitive service offerings.
- **Supplier Diversity** protocols to encourage diverse businesses to seek contracting opportunities with us. SDCP is committed to providing resources on the Supplier Diversity Program to ensure eligible vendors have the awareness and support they need to pursue certification. SDCP encourages all eligible vendors to seek certification through the CPUC Supplier Clearinghouse. Per California Senate Bill 255 (2019), community choice aggregators (CCAs) like SDCP are required to report to the CPUC on spending with diverse businesses, as defined by CPUC General Order 156.

⁶³ SDCP's Procurement Policy can be viewed here:

https://sdcommunitypower.org/wp-content/uploads/2022/12/SDCP-Procurement-Policy_Adopted_2022.07.28.pdf.

⁶⁴ Assumes SDREN is authorized ahead of Q3 2024.

- **Inclusive and Sustainable Workforce Policy** demonstrates SDCP’s commitment to inclusion extends to its supply chain. Where appropriate, and consistent with applicable law and other SDCP policies, including its Procurement Policy, to support a diverse and inclusive supply chain, SDCP will strive to:
 - Use local businesses and provide fair compensation in the purchases of services and supplies.
 - Proactively seek services from local businesses and from businesses that are taking steps to protect the environment.
 - Engage in efforts to reach communities of concern, to ensure an inclusive pool of potential suppliers.
 - Collect information from vendors and project developers on their status as a woman, minority, disabled veteran, and/or LGBT business enterprise.
 - Encourage reporting from project developers and vendors on inclusivity in business staff.
 - Be transparent about these practices and lessons learned.
 - Provide contact information for staff who can answer questions about this Policy.

Additionally, SDREN activities as it relates to its risk distribution of third-party programs fall under oversight of SDCP’s Finance and Risk Management Committee (FRMC), a standing committee of the SDCP Board, subject to the Brown Act, whose purpose, as stated in section 5.10.2 of SDCP’s JPA Agreement, includes providing input and oversight on matters related to financial policies and procedures and risk management policies and procedures.

Incorporation of Input on Current Solicitation Practices

This is not applicable to non-IOU PAs.

Supplier Diversity

SDCP is subject to the requirements of CPUC General Order 156 regarding supplier diversity. To increase the diversity of contractors and services that are utilized by SDREN, SDCP plans to post SDREN solicitations to the Supplier Clearinghouse portal which is visible to certified businesses. While SDCP, as a public agency, is subject to Proposition 209 constraints that prohibit preferential contracting based on race, sex, and ethnicity, it conducts outreach at events such as the CPUC Small Business Expo and within its own community to educate suppliers on the benefits of certification.

Per California Senate Bill 255 (2019), community choice aggregators like SDCP are required to report to the CPUC on spending with diverse businesses, as defined by CPUC General Order 156.⁶⁵ Through the statewide Supplier Diversity Program, established by General Order 156 from the California Public Utilities Commission (CPUC), the state aims to connect an increasing portion of these utility expenses with CPUC-certified minority-owned, women-owned, disabled veteran-owned, and/or LGBTQ-owned businesses. Certified suppliers are listed in the publicly

⁶⁵ SDCP’s Annual Reports can be found here: <https://sdcommunitypower.org/supplier-diversity/>

accessible Supplier Clearinghouse database. Many utilities, including CCAs like SDCP, utilize the Clearinghouse to identify potential bidders for supplier solicitations.

Public Utilities Code Section 366.2(m) requires certain community choice aggregators, including SDCP, to annually submit to the CPUC: (1) a detailed and verifiable plan for increasing procurement from small, local, and diverse business enterprises, and (2) a report regarding its procurement from women, minority, disabled veteran, and LGBT business enterprises. To assist SDCP with its reporting obligations under Public Utilities Code Section 366.2(m) and with evaluating its supplier outreach and other activities, proposers that are awarded the contract will be asked to voluntarily disclose their certification status with the CPUC Clearinghouse, as well as their efforts to work with diverse business enterprises, including WBEs, MBEs, DVBES, and LGBTBEs.

Continued Stakeholder Engagement on Solicitation Process

This is not applicable to non-IOU PAs.

Statewide Programs

SDREN does not anticipate management of statewide programs, but looks to support existing and future statewide programs. For example, SDREN plans to support or co-brand with BayREN's statewide program if it is deemed appropriate. SDREN programs will also channel projects and customers to statewide programs where applicable. As another example, if the public sector programs identify water or wastewater pumping or process optimization project opportunities, the program will coordinate with the statewide WISE program. Current applicable statewide programs where SDREN plans to coordinate are listed under coordination strategies for each sector.

Assessment and Mitigation of Risk from Portfolio Diversity

As SDCP is the lead Portfolio Administrator responsible for procurement and contract management, SDREN will follow all processes and protocols in place for SDCP, including compliance with SDCP's Procurement Policy, SDCP's Supplier Diversity protocols, and SDCP's Inclusive and Sustainable Workforce Policy.

As a public agency, SDCP is subject to the Brown Act, ensuring all SDREN procurement and contracting by its nature is open and transparent. In compliance with SDCP's procurement policies, SDREN contracts above \$125,000 must be approved by the SDCP Board of Directors before final execution. For contracts below \$125,000 informal bidding procedures will be applied.

Contract Management

SDCP is the lead agency in the administration of SDREN and will be responsible for contract management. Contract administration and management roles and responsibilities including monitoring, tracking, managing performance, and invoice processing will be described in the Memorandum of Understanding that will be executed between SDCP and the County of San Diego upon CPUC approval of SDREN and approved by their respective Boards. SDREN will deploy effective contract management practices to ensure compliance, meeting critical deadlines, and staying within approved budgets. All contracts will adhere to SDCP procurement policies, SDCP Supplier Diversity protocols and SDCP’s Inclusive and Sustainable Workforce Policy, utilize approved language and templates, and comply with CPUC guidelines.

Portfolio Coordination

Coordination with Other PAs

SDREN will operate in a territory that only overlaps with one existing program administrator, SDG&E. Both SDCP and SDG&E have demonstrated commitment to maintaining regular and ongoing coordination, as evidenced by the Letter of Commitment provided in *Exhibit 3 - Appendix G: Letter of Commitment*.

- SDCP facilitates a bimonthly San Diego region CCA and SDG&E program coordination call to share information and to coordinate on customer-facing programs to ensure customers are well served.
- Meetings began in February 2023 and are ongoing. SDCP staff provide regular updates on REN developments.
- Program coordination calls with SDCP and SDG&E outside of bimonthly program coordination calls began in October 2023.
- Targeted meetings with SDGE sector specific teams occurred in October – November 2023.

SDREN and SDG&E are both committed to coordinating their respective programs, including all third party programs (3PP). Together, they aim to minimize duplicative offerings and ensure SDREN complements and supplements SDG&E and SDG&E’s 3PPs while serving the purpose of the RENs.

SDG&E, in its recent Portfolio Application, emphasized its commitment to coordinating with regional energy networks:

- In the SDG&E Portfolio Application under Codes and Standards, on page 123, SDG&E notes that they will “partner and support collaboration with RENs to educate others on C&S activities.”
- Under Portfolio Coordination on page 237, SDG&E notes: “...in the event that a Community Choice Aggregation (CCA) or Regional Energy Network (REN) EE PA is

approved in SDG&E's service territory, SDG&E will coordinate program offerings with them to avoid customer confusion and duplication of efforts...SDG&E will partner with these entities to effectively deliver Energy Efficiency programs to our customers in our shared territory. In the case that a CCA is looking to start offering EE programs in its geographic location, SDG&E will support the interested CCA by sharing SDG&E's portfolio of programs, policies affecting EE, goals/metrics and overall administration of the EE portfolio. This will ensure that the CCA has the tools and support necessary to be successful."

In alignment with the JCM requirements that originated in D.18-05-041 and were refined in D.21-05-031 and D.23-06-055, SDREN will coordinate closely with SDG&E to develop a Joint Coordination Memo (JCM). The JCM will outline regular and ongoing coordination efforts between SDG&E and SDREN. This initial JCM will be developed and filed within 6 months of SDREN's authorization and ahead of program IPs being finalized. This will ensure coordination protocols are established prior to program launch. Updated JCMs will then be filed within 60 days of each true-up and mid-cycle Advice Letter filing to align with the timing of other RENS.

SDREN will maintain coordination with SDG&E ahead of SDREN's next four-year Portfolio Application. The primary objective behind this coordination is to maximize benefits to the community and customers. Through this approach, SDREN and SDG&E will work in the best interest of the participating customers by providing complementary tools that help bridge gaps in meeting the region's climate goals and avoid customer confusion.

As a new REN, SDREN plans to work closely with the other RENS through CalREN, a new statewide collaborative for California's existing RENS. CalREN's mission centers on fostering collaboration and unity amongst California's regional energy networks. CalREN provides a venue for RENS to work together to share resources and knowledge, use ratepayer funds cost-effectively, avoid duplicating services and customer confusion, speak with a unified voice in stakeholder engagement processes, and amplify their shared interest in issues that affect their communities. Together, California's RENS can leverage local knowledge, develop best practices, and conduct regulatory and legislative advocacy with a unified voice.

Additionally, SDREN looks forward to collaborating with all existing program administrators through various statewide initiatives and Project Coordination Groups (PCGs). Active participation in these statewide groups will enable SDREN to stay informed about emerging best practices as it emerges as a new program administrator. These groups help to create efficiencies through sharing of resources towards common goals and also promote statewide consistency. SDCP will join the California Energy Efficiency Coordinating Committee (CAEECC) as a program administrator coordinating committee member once authorized. In anticipation of becoming a program administrator, SDCP has already started participating in regular CAEECC meetings and is participating in joint program administrator calls regarding metrics.

How SDREN's Portfolio is Complementary With Other PAs in Service Territory

SDREN has completed a comprehensive review of SDG&E's 2024-2031 Business Plan, 2024-2027 Portfolio Application, solicitation schedule, and available Implementation Plans of existing

programs. Our approach involves closely monitoring Advice Letters and actively participating in public webinars for programs that are in the process of closing or are at the IP draft stage. This proactive strategy allows us to stay abreast of the latest developments in SDG&E's programs.

As previously mentioned, SDREN held meetings with SDG&E during the development of the SDREN Business Plan and Portfolio Application. SDG&E invited EE staff leading the sectors/segments identified by SDREN to provide updates on solicitation plans and review draft SDREN programs. SDCP also held sector-specific coordination meetings with the SDG&E commercial, codes and standards, WE&T, public, and residential sector and appropriate EE program team members to discuss any comparable programs, potential gap filling activities, and anticipated coordination strategies at the individual program level. This gave SDG&E an opportunity to ask any clarifying questions and voice any anticipated concerns with future program delivery. The matrix developed in coordination with SDG&E is listed in *Exhibit 3 - Appendix H: SDREN SDG&E Comparison Matrix*. The specific strategies discussed were also incorporated into the sector-specific coordination strategies outlined in earlier sector strategy sections. The goal of these interactions was to ensure SDREN's proposed programs are designed to complement SDG&E's planned and existing programs.

Given that SDG&E has several solicitations within the SDREN targeted sectors that are either ongoing or yet to be developed, SDREN remains flexible in its approach. After approval of the Business Plan, we plan to reevaluate certain programs and will make adjustments prior to soliciting programs to third parties. In situations where program services appear to be similar or overlap between SDREN and SDG&E, SDREN will market these programs to HTR customers not targeted by the SDG&E program.^{66, 67}

The table below offers a sector-by-sector breakdown of how SDREN's portfolio complements SDG&E's, illustrating the strategic alignment and cooperation between the two Program Administrators to maximize benefits for the region.

Table 45. SDREN Summary of Complementary Offerings by Sector

SDREN Sector	How it complements SDG&E'S portfolio
Commercial	<ul style="list-style-type: none"> <li data-bbox="586 1339 1357 1409">● Fill geographic and service gaps with SDGE&'s programs, with a focus on small businesses and corner stores.

⁶⁶ D. 23-06-055 Pg 88: The Commission also agrees with providing further direction regarding REN programs that only meet the criterion of serving hard-to-reach customers (and not the gap filling or pilot criteria confirmed by D.19-12-021). Such programs must be designed to target, and must market exclusively to, hard-to-reach customers or specific hard-to-reach customer segments. REN whole building multifamily residential programs that only meet the hard-to-reach criterion should target their marketing efforts to properties in which they can reasonably infer the majority of tenants are hard-to-reach customers; to facilitate coordination, we will require RENs to describe in their JCMs how they will identify customers or buildings to target marketing.

⁶⁷ D. 23-06-055 Pg 89: we expect programs offered by different PAs will not significantly overlap, except for programs intended to serve hard-to-reach customers. We maintain a preference for PAs to work collaboratively not only to minimize duplication in non-hard-to-reach customer populations but importantly to strive toward effective regional strategies and complementary program offerings; to be clear, PAs should communicate regularly in the course of administering their portfolios and preparing applications for future cycles; this regular communication is particularly important in light of the IOUs' solicitations, which could result in the launch of new programs at any time and potentially implicate existing programs offered by other PAs.

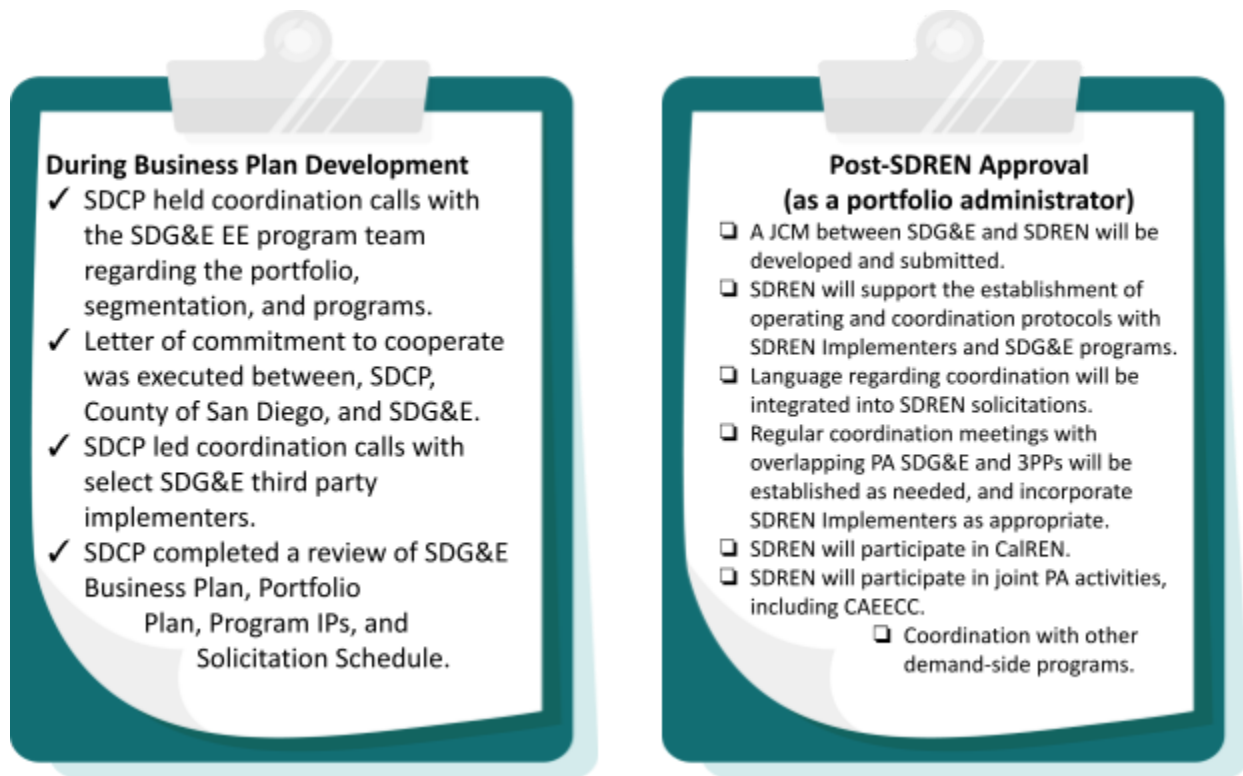
	<ul style="list-style-type: none"> ● Customer engagement representatives will direct customers to programs that best suit their needs, including SDG&E programs. ● Ongoing discussions with SDG&E as they finalize their commercial portfolio.
Codes & Standards	<ul style="list-style-type: none"> ● Additional support for electrification mandates. ● Customized educational solutions for public agency building departments. ● Coordinate with SDG&E to develop complementary codes & standards and subsequent educational strategies to increase regional compliance and advance state goals.
Workforce, Education & Training	<ul style="list-style-type: none"> ● Coordinate with SDG&E on potential internships and job opportunities. ● Build upon curriculum offered in statewide programs by offering community college courses (CTE).
Public	<ul style="list-style-type: none"> ● Coordinate targeting of K-12 schools to address gap left by discontinued SDG&E KEEP program. ● Refer participating Tribes to SDG&E programs as appropriate. ● Develop programming that addresses gaps for Tribal projects that do not qualify for SDG&E programs.
Residential	<ul style="list-style-type: none"> ● Coordination with ESA - multifamily offering to support multifamily facilities only partially covered by ESA. ● Coordinate with the ESA program to direct customers to program when eligible and measures will complement ESA measures. ● Coordination with SDG&E residential equity program (anticipated launch Q3 2024) to identify complementary measures.

How SDREN’s Portfolio Mitigates Duplication of Efforts

As described in the previous sections, SDREN’s approach to portfolio design places a strong emphasis on complementing and coordinating with SDG&E’s portfolio. This alignment extends beyond design and planning; SDREN remains committed to ongoing collaboration and coordination following authorization to prevent duplication of efforts or customer confusion and to ensure cost efficiency. Our actions during the development of this Portfolio Application reflect this commitment.

The figure below summarizes actions SDREN took during the development of the Business Plan and what actions are planned following authorization.

Figure 12. Activities to mitigate duplication of efforts between SDREN and SDG&E



How SDREN Will Coordinate Efforts With Other Demand-Side Programs

SDREN recognizes the importance of a coordinated approach with other demand-side programs to ensure maximum energy efficiency and customer benefit. Our coordination efforts include joint marketing initiatives, the stacking of incentives, and comprehensive customer education.

SDREN’s commitment to coordination is integral to meeting our portfolio goals of advancing decarbonization, providing robust EE services that improve outcomes for underserved and HTR communities, and accelerating the clean energy economy through workforce opportunities. Our coordination plans entail a broad spectrum of strategies aimed at ensuring that demand side programs are interconnected and complementary, maximizing the benefits to our customers. The following table outlines the planned coordination and integration strategies:

Table 46. Coordination and Integration Strategies for Other IDSM Offerings

Other IDSM offerings	Coordination and Integration Strategies
IRA - Tax Credits, rebates, grants, & loans	<ul style="list-style-type: none"> ● Increase customer awareness through education and outreach about offerings customized for customers by segment and program. ● Support customers with the stacking of rebates with SDREN offerings. ● Offer support services to customers to take advantage of tax credits, tax deductions, and grants where feasible. ● Provide technical assistance and guidance to customers on how to qualify for and utilize IRA funding. ● Include IRA opportunities in financial analyses for customers.
TECH Clean California	<ul style="list-style-type: none"> ● Coordinate on workforce development efforts. ● Offer education and marketing; seek co-branding opportunities. ● Develop and integrate strategy for stacking of offerings and incentives. ● Integrate C&S focus for heat pump permitting statewide efficiency efforts.
CEC Equitable Building Decarbonization Direct Install Program	<ul style="list-style-type: none"> ● Coordination with selected Southern California program administrators. ● Offer local marketing and outreach support. ● Stack rebates and other offerings for customers.
Energy Savings Assistance Programs - Multifamily & Single-Family	<ul style="list-style-type: none"> ● Multifamily: Assist eligible customers in accessing the program and facilitate stacking of incentives for non-deed restricted units. ● Single-family: Assist eligible customers in accessing the program.
SDG&E Demand Response Programs ⁶⁸	<ul style="list-style-type: none"> ● Base Interruptible Program (SDG&E proposes to retire this program in 2024) ● Capacity Bidding Program (SDG&E proposes to retire the traditional CBP product due to lack of interest while retaining CBP Elect products) ● Capacity Bidding Residential Pilot

⁶⁸ Application of SDG&E Requesting Approval of Its Demand Response Portfolio for Bridge Year 2023 and Program Years 2024-2027, Prepared Direct Testimony of E Bradford Mantz - Chapter 1B on Behalf of San Diego Gas and Electric Company, May 2, 2022. As of the writing of this document, the CPUC has not adopted a final decision on SDG&E's Demand Response portfolio for Program Years 2024-2027.

	<ul style="list-style-type: none"> ● AC Saver Program (SDG&E proposes to rename program "Smart Energy Program" and expand program beyond ACs) ● Heat Pump Water Heaters ● Emergency Load Reduction Program (ELRP)
Self-Generation Incentive Program (SGIP)	<ul style="list-style-type: none"> ● Deliver marketing and education to customers. ● Potential to support customers applying for incentives (eligible through IDSM funding).
SDCP programs	<p>Assist eligible customers in accessing available programs, as appropriate. Programs include:</p> <ul style="list-style-type: none"> ● Residential Solar and Storage Program ● Solar for Our Communities green tariff Program ● Commercial Peak Load Reduction Pilot ● Community Clean Energy Innovation Grant Program ● DAC-SASH Enabling Roof Repair Pilot ● Managed EV Charging Pilot
Clean Energy Alliance Programs	<ul style="list-style-type: none"> ● Support marketing of programs to customers. ● Encourage and offer stacking of offerings where appropriate.
EV Charger Programs (CALeVIP's Golden State Priority Project, SDG&E Power Your Drive, etc.)	<ul style="list-style-type: none"> ● Offer education and marketing of programs to customers. ● Provide support to access incentives (eligible through IDSM funding).
Market Transformation	<ul style="list-style-type: none"> ● General collaboration with Market Transformation Administrator and initiatives to ensure program funds and efforts are aligned. ● Collaborate to support inclusion of currently non-cost-effective electric technologies in programs in support of transition to economic viability and broader adoption through programs. ● Support strategies related to building performance and grid interactive buildings. ● Explore opportunities to collaborate for C&S. ● Integration into WE&T programs.

Stakeholder Engagement in the Development of This Application

In response to the CPUC requirements of stakeholder feedback and SDREN's desire to have effective and community-centric programs, SDREN conducted robust stakeholder feedback

processes. The region's previous efforts to start a REN were examined and considered upon partaking in this effort. Key stakeholders include regional and community organizations as well as energy efficiency stakeholders across the state. A majority of feedback was overwhelmingly positive with support for the formation of SDREN, along with the proposed structure, values, strategies, and programs. An overview of this engagement is included in *Exhibit 1 - SDREN Business Plan (2024-2031), Stakeholder Engagement*.

In total, SDREN consulted with stakeholders in over 60 meetings throughout the development of the Business Plan. Business Plan updates and calls for feedback were also presented in eight public meetings. In both instances, feedback was encouraged and the process was communicated to ensure adequate time and information for review. All stakeholder feedback, including SDREN's response, can be seen in *Exhibit 3 - Appendix C: Stakeholder Feedback*. Feedback collected during this time period was generally in support of bringing REN resources to the region.

Evaluation, Measurement, and Verification

Summary of Planned EM&V Studies and Activities

SDREN is committed to actively participating in the evaluation, measurement, and verification (EM&V) process to ensure the effectiveness and efficiency of its energy programs. We recognize the importance of collaboration with various stakeholders to enhance the EM&V framework and contribute to well-informed decision-making on both SDREN and the energy efficiency portfolios across PAs. Our approach to EM&V aligns with the collective efforts of the energy community in California. We are committed to the following:

Engagement and Collaboration: SDREN plans to work closely with CPUC staff, IOUs, and other PAs, with a particular focus on coordinating with other fellow RENs. We will actively participate in the development of CPUC EM&V Roadmaps and engage in various EM&V studies and working groups to ensure alignment with statewide objectives.

Contribution to REN Studies: SDREN recognizes that there are common needs and objectives among RENs. We are committed to joining and contributing to studies and activities that are relevant to RENs, ensuring that our actions are in harmony with regional and statewide efforts.

Built-In Data Collection: In line with our commitment to sound program evaluation, SDREN plans to incorporate data collection mechanisms within each of our energy programs. This approach will facilitate the collection of valuable data needed for program performance assessment and the broader EM&V process.

Active Participation in EM&V Planning: We will take an active role in the planning and implementation of EM&V activities. This includes contributing to the design and execution of measurement and verification plans to assess the effectiveness of our energy programs.

By embracing these principles, SDREN will contribute to the continuous improvement of the EM&V framework and ensure that our energy programs deliver the expected benefits to the

community and the environment. We are dedicated to maintaining an open and collaborative approach, working hand-in-hand with the CPUC, IOUs, and fellow PAs to enhance the EM&V process for the benefit of all stakeholders.

Planned EM&V Studies: Following the approach outlined above, SDREN will build out a more comprehensive plan for EM&V studies following authorization. Some initial planned activities include:

- Leading an SDREN unique value metrics and goals study as described in the *Key Metrics and Outcomes* section.
- Supporting a study to set goals for the market support and equity segment indicators.⁶⁹
- Coordinating with existing workforce assessments to determine gaps that could be supported through SDREN EM&V efforts towards prioritization of workforce development for electrification.

SDREN’s Budget Allocation and Justification

SDREN has applied an additional 4% budget allocation on top of its portfolio budget request to set aside for EM&V activities. This equates to a total EM&V budget of \$4,779,777. Pursuant to Decision 16-08-019, the total EM&V budget split between SDREN as the program administrator is at 27.5% and CPUC at 72.5%.⁷⁰

Cost and Cost Recovery

SDG&E is the only overlapping program administrator with SDREN. Our recommendation is 100% of the funding and cost recovery come from SDG&E as the fiscal agent. This approach is also consistent with the Letter of Commitment signed by SDG&E.

Summary of Costs at Portfolio-level

SDREN built a program-level budget to deliver on the priorities of the region. As the budget was developed, inflation and program ramp up costs were considered. SDREN also assumed that programs would not launch until late 2024, therefore 2024 budgets are much smaller than future years. Detailed budget breakdowns are included in the *SDREN 2024-2031 EE Application Excel Sheets*, in accordance with CPUC Decision 21-05-031.⁷¹ The below table summarizes portfolio-level costs.

⁶⁹ D.23. , OP. 25 “The portfolio administrators (PAs) shall set aside at least \$1 million from their collective evaluation, measurement, and verification (EM&V) budgets and shall select one PA from among them to hire a vendor or vendors to conduct a study to set goals for the market support and equity segment indicators. By no later than March 1, 2025, the PAs must submit a joint Tier 3 advice letter...”

⁷⁰ D.16-08-019, pg. 81.

⁷¹ D.23-06-055, OP5.

Table 47. Summary of Portfolio-Level Costs 2024-2027

Sector	Admin	M&O	Direct Implementation - Non Incentive	Direct Implementation - Incentive	Total
Commercial	\$3,479,004	\$2,087,402	\$14,052,495	\$15,171,137	\$34,790,038
Cross Cutting: WE&T	\$1,922,543	\$1,153,526	\$16,149,357	\$0	\$19,225,425
Cross Cutting: C&S	\$732,396	\$439,437	\$6,152,122	\$0	\$7,323,955
Public	\$2,325,001	\$1,395,001	\$12,823,341	\$6,706,668	\$23,250,011
Residential	\$3,490,500	\$2,094,300	\$10,340,140	\$18,980,060	\$34,905,000
EM&V	\$4,779,777	\$0	\$0	\$0	\$4,779,777
Total	\$16,729,220	\$7,169,666	\$59,517,456	\$40,857,865	\$124,274,206

SDREN’s Approach to Classification of Unspent Funds

SDREN will follow all procedures and guidance from the CPUC Energy Efficiency Policy Manual and Energy Division in coordination with SDG&E on classification and handling of “committed” funds. SDREN will apply the policy from the CPUC EE Policy Manual, which is quoted below:⁷²

“Committed funds are defined as those associated with individual customer projects and/or are contained within contracts signed during a previous program cycle and associated with specific activities under the contract. Committed funds are not considered “unspent funds,” and need not be spent during that program cycle so long as there is an expectation that the activities will be completed and that the committed funds are spent to complete the activities for which they were committed. Savings will be counted in the cycle in which the project is completed (D.12-11-015, pg. 92).”

SDREN has reviewed SDG&E’s approach to classification of “committed” funds in their Portfolio Application⁷³ and will apply best practices from their approach to committed funding as SDREN initiates operations.

⁷² CPUC Energy Efficiency Policy Manual, Version 6, April 2020, Section II. 6.

⁷³ SDG&E EE Portfolio Plan Testimony (2024-2027) - Exhibit 2, pg. 254 “As part of the preparation for closing out the program year, SDG&E analyzes each program to identify existing contracts or approved program expenditures for which the underlying contracted service or program activity will be completed after December 31 of the program year. SDG&E retains copies of the contracts, agreements, engineering documentation, subsequent invoices, and any other relevant documentation that supports the identification of a future expenditure as committed to a prior program year and therefore not applied to reduce revenue recovery of a future program year. SDG&E monitors the status of committed funds through the future payment of the program expenditure. SDG&E does not propose any changes to the treatment of unspent, uncommitted funds for program years 2024-2027.”