

Energy Efficiency
Portfolio Application
of the

San Diego Regional Energy Network

Exhibit 1
2024-2031 Strategic Business Plan

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Executive Summary

The projected impacts of climate change on the San Diego region are profound, driving the need for urgent collective actions to decarbonize. The creation of 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.

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 (EE) and climate goals. SDREN's core values guide the design and execution of its program portfolio. These values are to 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, and be a trusted local resource to coordinate regional policy, partnerships, and programs.

The SDREN service territory is home to 3.3 million people, the second most populous of California's 58 counties and the fifth largest county in the United States. The Kumeyaay, referred to as Diegueno by the Spanish, are the original inhabitants of San Diego County. The SDREN service territory includes the County of San Diego, 18 incorporated cities, 18 Tribal communities, 16 significant naval and military installations, 47 school districts, and 24 water districts.

SDREN aspires to be a regional leader focused on helping communities invest in strategies that hasten decarbonization. Through its portfolio of programs, guided by its core values, 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.

Approval of the SDREN will complete the Regional Energy Network's (REN) statewide coverage, bolstering the California Public Utilities Commission's (CPUC) intention for RENs to fill gaps and complement investor-owned utility (IOU) services. Regional Energy Network (REN) programs have proven to be a critically important component of California EE and climate strategies, demonstrating the effectiveness of local governments to overcome barriers and motivate communities to take clean energy actions.

SDREN's overall portfolio goals are to advance decarbonization, provide comprehensive energy efficiency (EE) services that improve outcomes for underserved and HTR communities, and accelerate the clean energy economy through workforce opportunities, which support attainment of California's ambitious 2030 and 2045 climate goals. The proposed EE Portfolio is framed by three key principles—to advance environmental equity, catalyze collaboration, and support community-driven change.

SDREN is focused on working collaboratively with Environmental and Social Justice (ESJ) communities to provide needed programs and resources, aligned with the San Diego Regional

Decarbonization Framework, and informed by the CPUC's ESJ Action Plan. SDREN's long-term goal is to ensure an equitable transition to a carbon-free building sector in the San Diego region by 2050, seeking higher participation from HTR and underserved communities and reducing their energy burden.

SDREN's portfolio and administration is led by San Diego Community Power (SDCP) and the County of San Diego. SDCP, the lead Portfolio Administrator (PA), will lead fiscal, regulatory, procurement, and program management. The SDREN Advisory Committee, composed of local and regional governments and community-based organizations (CBOs), will advise on and recommend program improvements. An SDREN programs operation team composed primarily of SDCP employees and third-party implementers will oversee day-to-day program operations and administration.

San Diego has a strong history of collaboration and engagement in EE programs. The SDREN joins a group of local, regional, and state agencies that have jurisdiction over climate change activities in the region, as well as CBOs, labor, business groups and other organizations that support climate efforts. SDREN's proposed portfolio builds on the comprehensive regional sustainability and decarbonization planning in the region, and fills gaps and complements the programs provided by the region's serving utility, San Diego Gas & Electric (SDG&E).

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 and Training and Codes and Standards), Public, and Residential

SDREN is requesting \$124,274,206 over the four-year period from 2024 to 2027. This funding will enable SDREN to achieve its stated goals and outcomes and connect communities with available resources, which will accelerate decarbonization strategies in the region. All SDREN programs will target HTR and underserved communities, which comprise approximately 56% of the region's population. SDREN is directing 46% of its portfolio to Equity programs, while Market Support programs comprise 34%, Resource Acquisition 14%, and Codes and Standards 6%.

SDREN's portfolio includes two Equity Segment Residential Sector programs serving single-family and multifamily participants. Two Equity Segment programs are proposed for the Commercial Sector, targeting small and medium businesses, along with one Resource Acquisition program serving hard-to-reach and underserved commercial customers. SDREN is proposing one Market Support program within the Public Sector, supporting public agencies, and one Equity Segment Public Sector program supporting Tribes. Two Market Support Workforce, Education and Training (WE&T) programs will target high school students and adults supporting high road clean energy career pathways and skill development. A proposed Codes and Standards (C&S) program will assist public agency permitting authorities with compliance and policy support. All of SDREN's proposed programs support and complement the services of SDG&E and are designed to avoid duplication and customer confusion.

Collectively, SDREN’s portfolio-level strategies incorporate six delivery methods. Principles of **environmental and social justice** connect throughout these strategies and environmental justice considerations are incorporated across all programs, regardless of segmentation. First, 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. Second, by integrating **effective coordination and collaborations** with partners and existing trusted organizations across program segments and sectors, SDREN can identify synergies, reduce costs and complexity, and deliver higher-value programs that reflect local priorities and needs. It can also mitigate customer confusion and grow impacts and success of all programs. Third, the SDREN portfolio reduces barriers to participation by offering **customized support** and connecting customers with available resources and programs. Fourth, SDREN will promote decarbonization through **electrification measures** and incentives to move away from methane-gas-burning technologies. Fifth, SDREN will monitor the market and coordinate with other programs to **leverage** complementary offerings and **stack** supplemental program services and external funding opportunities. Sixth, **integration of integrated demand side management (IDSM)** offerings and support are considered as part of a holistic approach to deliver value to participants throughout the portfolio.

The creation of SDREN represents another milestone in California’s quest to reach its ambitious climate goals and ensure ESJ communities are at the forefront of these efforts. SDREN looks forward to joining the extensive statewide network of other RENs, IOUs, local agencies, CBOs, and others working collectively to achieve an urgently needed clean energy future.

Strategic Business Plan

SDREN’s Vision for EE in CA: 2024 - 2031

The projected impacts of climate change on the future of San Diego become clearer every day, at a concerning pace. The San Diego region urgently needs to accelerate the transition to clean energy as failure to do so will have steep costs for the natural world and for the health and livelihoods of everyone. Additionally, a collaborative and purposeful investment is needed to ensure that San Diego’s most vulnerable are not left behind in the region’s efforts to decarbonize.

Figure 1. SDREN's Vision



SDREN's¹ vision is to be a driving force for communities to adopt clean, reliable energy through community-driven solutions that contribute to local and state EE and climate goals.

SDREN aspires to be a leader supporting the 18 incorporated cities, 47 school districts, 18 recognized Tribal communities, and the unincorporated areas across the San Diego region. In keeping with its core values, SDREN will integrate a collaborative and purposeful investment in the region's underserved and HTR communities² to contribute to an equitable transition to a clean energy economy.

Approval of the SDREN will complete the statewide coverage of RENs and bolster the CPUC's intended outcomes for RENs to fill gaps and complement IOU services. SDREN is committed to delivering programs that make further inroads into communities to reduce GHG emissions, achieve equity, drive market transformation, and provide value to ratepayers.

Core Values

SDREN's EE portfolio is guided by three core values:

¹ All acronyms and abbreviations are listed in Exhibit 3 - Appendix A.

² As defined in D.23-06-055.

Figure 2. SDREN's Core Values



Guiding Principles

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

1. **Advance Environmental Equity.** Through its proposed portfolio of services SDREN is committed to representing underserved communities and advancing environmental equity. SDREN fills a significant gap as there currently exists no central organization in the San Diego region that focuses on the energy needs and challenges of these populations who are more vulnerable to the effects of climate change and are more likely to be left behind in the transition to a clean energy future.
2. **Catalyze Collaboration.** A collaborative approach provides powerful leverage and access to clean energy solutions. As a regional energy leader and a trusted partner, SDREN will play a critical role in cultivating strong regional partnerships and robust stakeholder coordination. SDREN will focus on marshaling resources, providing access to financing, building local capacity, and supporting integrated and comprehensive strategies. A key role is to leverage resources that are increasingly available for energy programs, filling gaps to ensure resources are used efficiently, and integrating and stacking funding sources, where possible, for maximum advantage to local communities.
3. **Support Community-Driven Change.** Community-driven change is a key to the successful adoption of practices and policies that support the transformation to a clean energy economy. 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

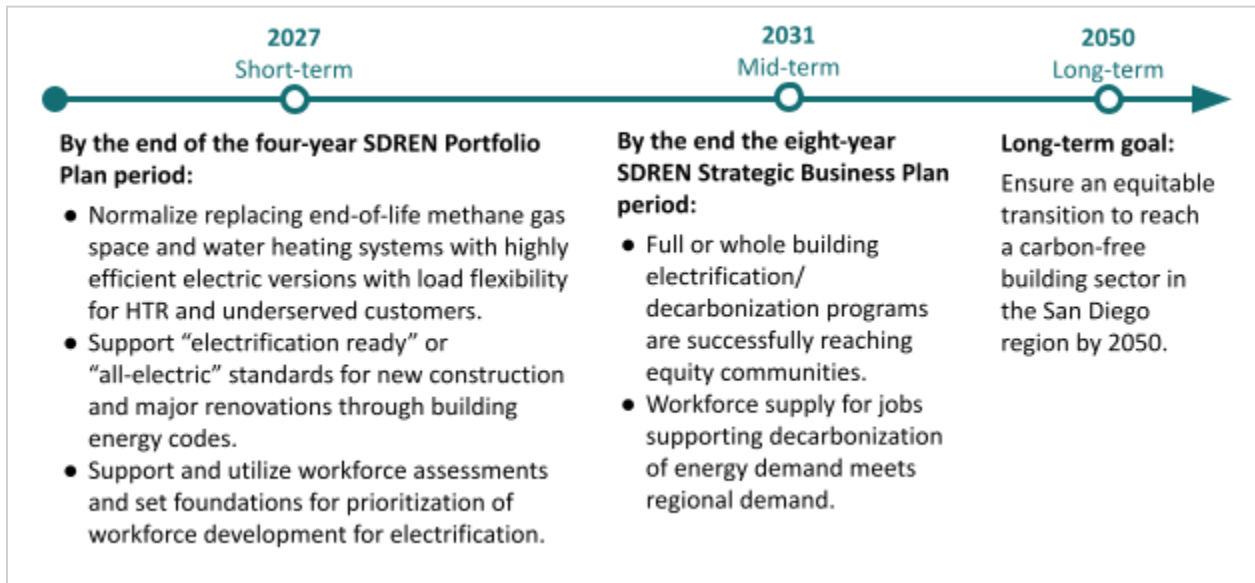
SDREN's portfolio complies with CPUC requirements and rulings and addresses the CPUC's goals for RENs to deliver programs and activities that fill gaps and complement IOU offerings.³ SDREN has set the following overarching three goals for its portfolio:

³ D.12-11-015, and reasserted in D.19-21-021.

1. **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.
2. **Provide Comprehensive EE Services That Improve Outcomes for Underserved and HTR Communities.** SDREN’s portfolio of services will be centered around minimizing barriers to participation for underserved and HTR communities.
3. **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. A goal is to support a high road⁴ approach to grow the regional clean energy economy and create new opportunities for the local workforce, with a focus on underserved communities.

These goals are intended to align with the Regional Decarbonization Framework (described further in the Regional Planning and Collaboration Framework section below) and were informed by the CPUC Environmental Social and Justice Action Plan (ESJAP)⁵. They can be further broken out into the following timeframes—short-term, mid-term and long-term.

Figure 3. SDREN’s Goals by Year



Business Plan Strategies

SDREN’s proposed EE strategy for the San Diego region builds off of the foundation established through long-standing local collaborations in the region (described below under Regional Planning and Collaboration Framework). The strategy is informed by SDRENs values and

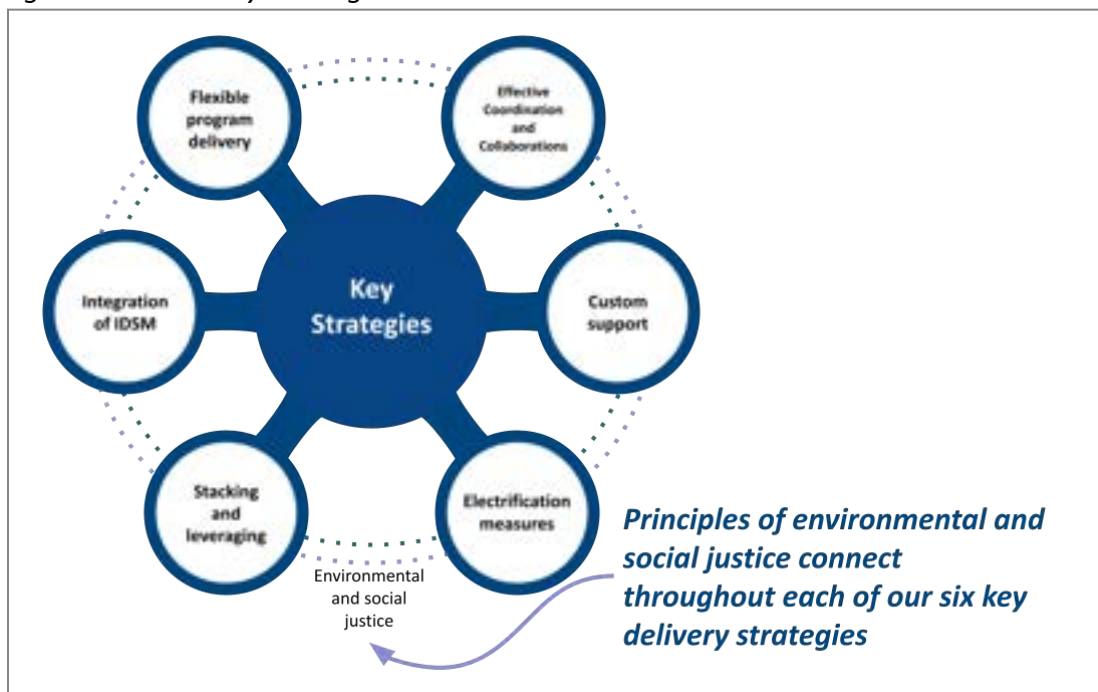
⁴ An approach that integrates intentional policies and investments that center employee benefits and needs.

⁵ <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>.

principles to deliver on the goals of decarbonization, comprehensive EE services, and building the local energy economy.

Collectively the portfolio-level strategies incorporate several key approaches as shown in Figure 4. First, 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. Second, by integrating **effective coordination and collaborations** with partners and existing trusted organizations across program segments and sectors, SDREN can identify synergies, reduce costs and complexity, and deliver higher-value programs that reflect local priorities and needs. It can also mitigate customer confusion and grow impacts and success of all programs. Third, the SDREN portfolio reduces barriers to participation by offering **customized support** and connecting customers with available resources and programs. Fourth, SDREN will promote decarbonization through **electrification measures** and incentives to move away from methane-gas-burning technologies. Fifth, SDREN will monitor the market and coordinate with other programs to **leverage** complementary offerings and **stack** supplemental program services and external funding opportunities. Sixth, **integration of IDSM** offerings and support are considered as part of a holistic approach to deliver value to participants throughout the portfolio (described in more detail under IDSM Strategies). Finally, principles of **environmental and social justice** connect throughout each of these strategies and environmental justice considerations are incorporated across all programs, regardless of segmentation.

Figure 4. SDREN Key Strategies



These key strategies will be integral to the SDREN through the Business Plan period to deliver on the desired outcomes.

Desired Portfolio Outcomes

By bringing together regional perspectives, deepening partnerships, and cultivating community led strategies, SDREN will help realize meaningful multi-benefit solutions that result in long term positive change. Success relies on implementing community-driven strategies to build climate resiliency and adopting energy efficiency and clean energy solutions that support the goals and policies of the CPUC.

- **Portfolio Outcome 1.** Reduce energy burden and improve energy affordability.
- **Portfolio Outcome 2.** Improve health and reduce energy consumption across the region.
- **Portfolio Outcome 3.** Improve access, increase participation by reducing the complexity of energy service programs, and achieve greater understanding of how to manage energy consumption, including peak demand reduction.
- **Portfolio Outcome 4.** Maximize benefits to customers by leveraging additional funding, such as the Inflation Reduction Act (IRA), to deliver on IDSM strategies.
- **Portfolio Outcome 5.** Create access to career pathways in clean energy.

An initial set of SDREN unique value metrics have been developed to track progress towards SDREN’s goals and outcomes that are described in Exhibit 2. Additionally, within the 2024-2027 portfolio plan period, SDREN will continue efforts with other stakeholders to refine relevant metrics, and to establish data methodologies, baselines and targets for tracking progress towards all portfolio goals.

Governance Structure

Led by San Diego Community Power (SDCP) and the County of San Diego⁶, SDREN leverages the region’s capacity and experience to create a strong and collaborative governance structure. The region has a strong history of collaboration and engagement in EE programs. The following chart depicts the SDREN governance model.

⁶ A letter of support from the County of San Diego is included in Exhibit 3 - Appendix B.

Figure 5. SDREN Governance Model



The **Oversight and Administration** team of SDCP and the County of San Diego will provide portfolio-level vision and strategy, enact program changes during the portfolio cycle, and oversee future Business Plan development. Important decisions will be made using a consensus process. The goal is to reach a consensus for any significant portfolio-wide related issues. However, if a consensus is not achieved in a timely fashion, a mediator will be used to make a final decision as a last resort. SDCP and the County of San Diego will proactively identify potential non-consensus issues early and work with impacted parties constructively.



San Diego Community Power is a Community Choice Aggregator (CCA) formed via a Joint Powers Authority by San Diego, Encinitas, La Mesa, Chula Vista, Imperial Beach, National City and the County of San Diego. As a not-for-profit public entity, SDCP is focused on bringing cleaner power at competitive rates to its customers and investing excess revenue in the communities it serves.

SDCP provides affordable clean energy and invests in the community to create an equitable and sustainable future for the San Diego region. SDCP aims to be a global leader, inspiring innovative solutions to climate change by powering communities with 100% clean affordable energy while prioritizing equity, sustainability, and high-quality jobs. SDCP is a values-led, mission-driven organization grounded in Justice/Equity/Diversity/Inclusion (JEDI), impact, integrity, innovation, servant leadership, and togetherness. SDCP’s mission is to bring 100% renewable power to its customers by 2035 or sooner. SDCP offers a 100% renewable product called Power100 which has helped many SDCP customers reach their respective ESG or GHG reduction goals.

In December of 2019, per the CPUC Resolution E-4907, the Cities of San Diego, Imperial Beach, Encinitas, La Mesa and Chula Vista, who had previously taken action to form a Joint Powers Authority, submitted to the CPUC an Implementation Plan and Statement of Intent for authority to provide service as a CCA to eligible customers within the geographical boundaries of their service territory. Once approved by the CPUC, SDCP was eligible to begin enrollment of eligible accounts in 2021.

In March of 2021 SDCP launched its service and began enrolling customers through a multi-phased effort starting with municipal customer accounts (Phase 1). Commercial and industrial accounts were enrolled in June 2021 (Phase 2), and residential accounts from February through May of 2021 (Phase 3). In December 2021, SDCP amended its JPA to expand its membership to include National City and the County of San Diego, and submitted an Implementation Plan to enroll eligible accounts of the new member agencies beginning in 2022. The enrollment of accounts located in the unincorporated areas of the County and National City commenced on April 1st, 2023 (Phase 4).

SDCP is deeply committed to collaborating and leveraging regional resources and championing community needs to implement a comprehensive and adaptive portfolio. Throughout its growth, SDCP has demonstrated responsible fiscal management, and its structure provides regular public consultation with various public committees.

Figure 6. SDCP Community Leadership



As a not-for-profit public agency, SDCP is committed to developing a suite of customer energy programs that respond to community needs, with a focus on Communities of Concern⁷. SDCP has engaged these communities in the development of a Community Power Plan to support future development of programs (both described in more detail below). SDCP's current customer program initiatives include:

⁷ Defined as the top 25% scoring areas from CalEnviroScreen, known as Disadvantaged Communities (DACs), as well as the additional census tracts identified by the cities of San Diego and Chula Vista through their Climate Equity Index (CEI) reports.

- 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



County of San Diego. The County of San Diego is a leader in sustainability. In pursuit of its vision for “a just, sustainable, and resilient future for all,” the County has undertaken ambitious sustainability and decarbonization efforts. One example is the creation of the Office of Sustainability and Environmental Justice (OSEJ), established in 2021, which strives to reduce disparities and expand opportunities in traditionally underserved communities as it works to achieve zero carbon emissions and safeguard the health of the region's people and natural resources. OSEJ focuses on both regional initiatives and County operations. OSEJ’s keystone effort is the Regional Decarbonization Framework (RDF) which is the County’s holistic approach to guide the region’s decarbonization efforts that promotes public and private interests working together to move the entire San Diego region toward zero carbon emissions in transportation, buildings, energy, food systems, and land use by mid-century (described further below). To lead by example, OSEJ works with the over 40 County departments and offices to implement sustainability plans to reduce the County’s carbon footprint in programs and operations. The County’s sustainability vision is to support all communities in the region by efficiently using and protecting its natural resources, balancing economic growth, and ensuring just and equitable provision of public services, without compromising the ability of future generations to also flourish and thrive. More information about the County's sustainable energy work is described in the next section, Regional Planning and Collaboration Framework.

The **Lead Portfolio Administrator**,⁸ SDCP, will lead fiscal, regulatory, procurement, and program management.

The **SDREN Advisory Committee** will include local and regional governments and community-based organizations with the role to advise on outreach and enrollment, provide feedback on program evaluation reports, and recommend program improvements.

As the Oversight and Administration team optimistically plans for the launch of SDREN, it believes it’s important to have its governance in place and ready to execute on program delivery upon approval. As to not further delay providing REN benefits and services to communities, SDREN established its inaugural Advisory Committee. The inaugural Advisory Committee members represent entities and agencies with a regional or multi-jurisdictional footprint and it is anticipated that the full Advisory Committee will be formed upon SDREN approval.

⁸ 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.

Confirmed Inaugural Committee Members include:

- Clean Energy Alliance
- MAAC
- San Diego Regional Climate Collaborative
- San Diego Association of Governments (SANDAG)
- Climate Action Campaign
- San Diego Green Building Council
- Port of San Diego

Expected Advisory Committee responsibilities include:

- Post submittal phase: Receive monthly email updates and attend occasional meetings on the status of the CPUC review process.
- Development phase (<6 months post-approval): Attend planning meetings approximately every other month to receive updates on SDREN launch (e.g., timing, marketing, regional coordination) and provide advisement on development of Implementation Plans, conflict of interest strategies/considerations, etc. and work closely with the Oversight and Administration team to develop processes to expand the full Advisory Committee, develop the Technical Ad-Hoc Sub-Committees, and determine related committee details such as terms and compensation.
- Implementation phase (>6 months post approval): Attend quarterly meetings to receive updates on program implementation and provide advisement on program outreach, enrollment, adjustments to program elements.

The inaugural Advisory Committee member selection was guided by the desire to have comprehensive regional representation leading into the initial phases of SDREN’s launch. SDREN will expand the Advisory Committee after the REN is authorized to include diverse organizations that can represent the variety of underserved and HTR communities in the San Diego region. SDREN places a high value on receiving input on program design and implementation directly from the communities who will benefit from its programs.

The **SDREN Program Operations Teams**, primarily composed of SDCP employees and third-party implementers, will oversee day-to-day program operations and administration.

Additionally, SDG&E will act as the Fiscal Agent. SDG&E’s role as a fiscal agent for SDREN, as a REN operating within SDG&E’s territory, will be limited to collecting and disbursing funds under the direction of the Commission and does not include any compliance or monitoring functions or obligations.⁹

Regional Planning and Collaboration Framework

Comprehensive regional sustainability and decarbonization planning provides a solid foundation for the future success of SDREN. Several local, regional, and state agencies have jurisdiction over

⁹ D.23-06-055, Conclusion of Law 13.

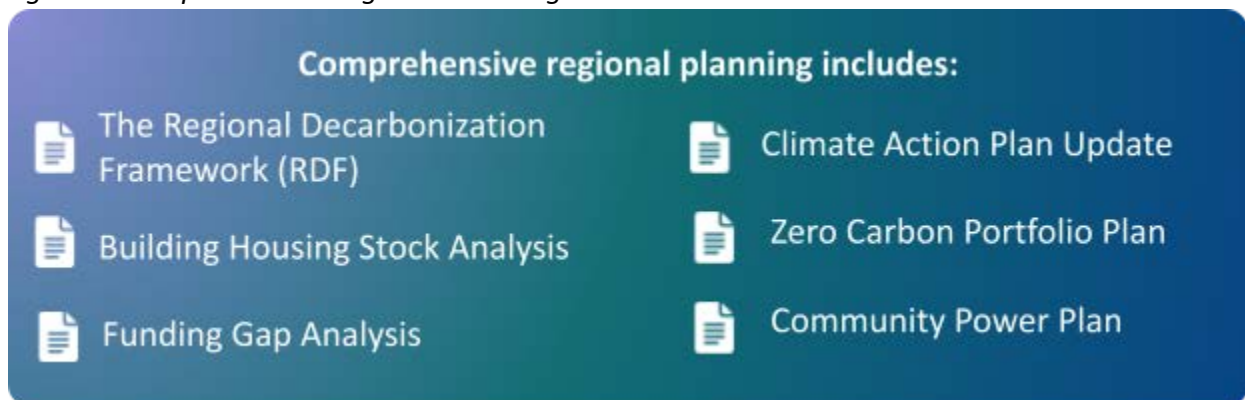
climate change activities in the San Diego region. Regional public agencies include SANDAG, San Diego County Air Pollution Control District, San Diego Community Power (SDCP), Clean Energy Alliance (CEA), the County, 18 local governments, 47 school districts, and 18 federally recognized Tribal communities.

Local Government Partnerships that formed in 2009 and were discontinued in 2020 not only expanded regional EE capacity but established an effective collaborative network among participating agencies. In 2023, the San Diego Regional Climate Collaborative (SDRCC) launched its Energy Resilience Working Group which consists of community and local government organizations committed to contributing to local, regional, and statewide decarbonization efforts. Over the last several years, the region launched two CCAs, San Diego Community Power and Clean Energy Alliance.

In addition, several cities in San Diego County have signed the US Mayors Climate Protection Agreement, others have joined the California Climate Action Registry, and most of the 18 cities in the region now have a Climate Action Plan (CAP). The University of San Diego Energy Policy Initiatives Center (EPIC) conducted a first of its kind analysis for the San Diego region in comprehensively assessing the impact of adopted CAPs. The study found that CAPs alone will not be enough to reach aggressive decarbonization goals, underscoring the need and importance of regional collaborative initiatives that span jurisdictional boundaries to tackle the region's climate issues.¹⁰

Additionally, EPIC's analysis found that most adopted CAPs do not include building electrification (BE) strategies, concluding that the impact of local CAPs in BE is limited. The report also highlighted that CAPs are only plans, and the measures included may not represent what is implemented over time. Therefore, regional initiatives such as a REN that span across jurisdictions are needed to help decarbonize buildings, reduce GHG emissions, and help tackle local climate issues.

Figure 7. Comprehensive Regional Planning

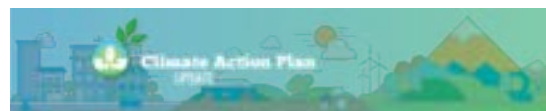


¹⁰ Regional Decarbonization Framework Technical Report. https://www.sandiegocounty.gov/content/dam/sdc/lueg/regional-decarb-frameworkfiles/RDF_Summary_for_Policy_Makers_FINAL_2022.pdf.



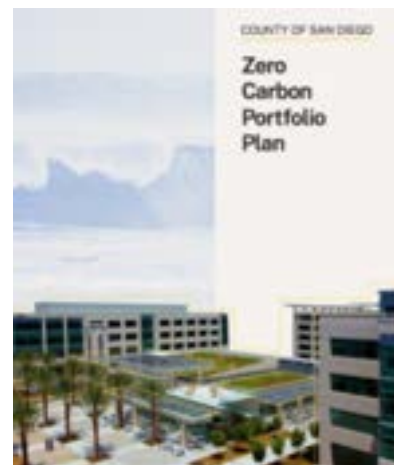
Regional Decarbonization Framework. In 2021, working with several regional stakeholders and technical experts, the County began working on the Regional Decarbonization Framework (RDF), a visionary framework that identifies community-driven partnerships, programs, and policies to support decarbonization. In 2022, the County released the first foundation element, the RDF - Technical Report, a scientific analysis of decarbonization pathways for the San Diego region to reach net zero emissions by mid-century. The RDF includes two other foundational elements, a workforce development study and the *Let's Get There Playbook*, a resource guide for local governments, organizations, and individuals to consult as they move toward zero carbon emissions. The RDF promotes public and private interests working together to move the entire San Diego region toward zero carbon emissions in transportation, buildings, energy, food systems, and land use. The RDF is intended to help policymakers work in harmony with community, industry, environmental, business, and labor groups to realize distinct and tangible actions that respond to the specific needs of cities and the unincorporated areas of the county.

County's Climate Action Plan Update. The County is currently developing a Climate Action Plan Update to implement bold climate actions that reduce GHG emissions. The CAP outlines actions, also referred to as measures, to meet state targets and achieve a goal of net zero carbon emissions by 2035-2045. The CAP and associated goals apply to the unincorporated areas of the County and County operations.



Screenshot of County of San Diego Climate Action Plan.

Zero Carbon Portfolio Plan. This plan applies to all facilities occupied by the County and presents a strategy and specific measures that will result in a reduction in operational carbon emissions of 90% by 2030, relative to its 2008 baseline. Additionally, all 40+ County of San Diego departments and offices have developed and operationalized Sustainability Plans to reduce carbon footprints from County operations and facilities.



Screenshot of Zero Carbon Portfolio Plan for facilities occupied by County of San Diego.

Community Power Plan (CPP). SDCP's CPP¹¹ was an intensive effort from its program team to integrate community goals, needs, and priorities into a 5-year strategic plan for energy programs. The *community needs assessment* was a fundamental piece of the CPP. Between May and November 2022, SDCP heard from more than 3,450 community members through listening sessions, workshops, pop-up events in HTR communities, and a customer-wide survey. This helped SDCP understand the challenges, needs,

¹¹ <https://sdcommunitypower.org/community-power-plan-cpp/>.

goals, and priorities that could be addressed through customer energy programs. Throughout the community engagement process, SDCP prioritized equity and Communities of Concern.

SDCP prioritized partnering with local community-based organizations that work directly with community members in Communities of Concern to co-host listening sessions to minimize obstacles for program participation. SDCP provided compensation to the CBOs and participants were offered interpretation services, children’s activities, food and drinks, and gift cards for compensating their time and shared lived experience.

SDCP considered accessibility for the broadest range of community characteristics, including language, internet access, physical disability, time limitations, and subject matter understanding. A mix of virtual and in-person outreach events were offered and events were held at varying times, including outside of normal work hours. SDCP sought to develop outreach materials and presentations for broad understanding using non-technical, simplified terms. In addition, outreach materials, including the survey and plan itself, were offered in English, Spanish, and Filipino (Tagalog), the most used languages in the region.

The team identified nine key community priorities based on feedback from initial community engagement. The priorities were included in the survey and respondents were asked to rank which were most important to them. Residential and commercial respondents ranked their top five priorities in the following order (Table 1). This feedback was considered in the development of SDREN’s program portfolio.

Table 1. Energy issues most important to SDCP residential and commercial respondents from the CPP community engagement process.

Order	Residential Priorities	Commercial Priorities
1	Reducing my energy bill	Creating good, well-paying jobs in the energy sector
2	Addressing climate change by reducing GHG emissions	Reducing my businesses’ energy cost
3	Getting rewarded to adjust when I use energy	Getting compensated for when my business uses energy
4	Creating good, well-paying jobs in the energy sector	Addressing climate change by reducing GHG emissions
5	Breathing cleaner air in my home	Breathing cleaner air in my building

Figure 8. Community Engagement Key Insights

Key Insights

- Community members are concerned about costs
- Community members want to see a variety of energy solutions
- Community members need more energy education and resources
- Rural community members have different concerns than city-dwellers
- Community members care about climate change, health, and the environment

Building and Housing Stock Analysis (BHSA) and Funding Gap Analysis. SDCP is developing a Building Housing Stock Analysis (BHSA) and Funding Gap Analysis that will be published in 2024. The BHSA will provide data that will help SDREN identify broad opportunities for electrification and decarbonization. With the Funding Gap Analysis, SDCP will be able to determine existing gaps in current electrification, decarbonization, and EE funding (including funding from the Infrastructure Investment and Jobs Act (IIJA) and IRA that flows directly to customers and those distributed to states and agencies). This will allow SDCP to make strategic decisions about how electrification programs are designed and identify investments needed to achieve our goals.



Stakeholder Engagement

In alignment with SDREN’s guiding principles, comprehensive engagement with key stakeholders was conducted during the preparation of this Business Plan. Key stakeholders include regional and community organizations as well as energy efficiency stakeholders across the state as detailed below. A majority of feedback was overwhelmingly positive with support for the formation of an SDREN, along with the proposed structure, values, strategies, and programs. A summary of this feedback and responses can be found in *Exhibit 3 - Appendix C*.

- **SDG&E:** SDCP met with SDG&E representatives on numerous occasions to discuss proposed programs and understand how services would be designed to avoid overlap and duplication. This included sector-level meetings with the appropriate SDG&E EE team members to walk through each program and discuss any comparable offerings and initial coordination strategies. The resulting SDCP work product that was reviewed with SDG&E during sector-specific coordination meetings can be found in *Exhibit 3 - Appendix H*. These conversations, alongside research into SDG&E’s portfolio, informed the sector specific coordination detailed within the Portfolio Plan. It also set a strong foundation for continued collaboration moving forward.
- **San Diego Regional Climate Collaborative (SDRCC):** SDRCC was formed in 2011 as a network for public agencies to advance climate change solutions that mitigate GHG emissions and adapt to the



effects of climate change. Partnering with academia, non-profit organizations, business and community leaders, the Collaborative raises the profile of regional leadership, shares expertise and leverages resources.¹²

- SDREN was presented to members on multiple occasions through the Regional Energy Resilience Working Group, which was launched in March 2023. Made up of approximately 30 members municipalities, educational entities, SDG&E, environmental NGOs, and consultants, this group was prioritized for early engagement and feedback. This included presenting both the draft governance structure and SDREN draft programs for feedback.
- **Local governments and public agencies:** Individual meetings were held with fourteen of the eighteen cities within the county and four key regional public agencies to collect feedback on SDREN programs and strategies. These agencies are listed below and individual letters of support from fifteen of these agencies can be found in *Exhibit 3 - Appendix D*.
 - City of Carlsbad, City of Chula Vista, City of El Cajon, City of Encinitas, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City, City of Oceanside, City of Poway, City of San Diego, City of San Marcos, City of Solana Beach, City of Vista, San Diego Association of Governments (SANDAG), Port of San Diego, San Diego County Air Pollution Control District, and Clean Energy Alliance.
- **CPUC Energy Division:** Monthly meetings were held from August 2023 through December 2023 to provide updates on Business Plan development and collect feedback on various elements of the SDREN formation and strategy. 
- **Existing RENs:** SDCP met with existing RENs across the state individually for general guidance and best practices during the planning process and Business Plan development. They also engaged with the newly formed CalREN, composed of all RENs, for feedback on draft programs, stakeholder engagement, and Business Plan strategies. 



- **SDCP Board of Directors Meetings:** SDCP staff secured Board support early in the process to lead efforts in forming a new REN and briefed them on progress throughout the Business Plan development. These meetings are outlined below:

¹² <https://www.sandiego.edu/soles/centers-and-institutes/nonprofit-institute/signature-programs/climate-collaborative>.

- May 2022 - SDCP staff presented an update on customer energy programs and outlined CPUC funding opportunities including REN formation as an option and discussed next steps to hire staff to lead development of application and program management.
- January 2023 - SDCP staff discussed leading initial steps in regional effort to form a REN as priority for 2023.
- February 2023 - SDCP staff presented an update on REN formation progress to include mention of open request for proposal for professional services to support Business Plan Application development and development of the SDREN governance structure.
- April 2023 - SDCP staff presented an update on REN formation at the 2023 Strategic Planning Session, reported addition of 1 full time employee dedicated to REN formation, and obtained approval of a Professional Services Agreement for consulting services to support REN formation.
- October 2023 - SDCP staff presented an update on REN formation and proposed programs, and budget range to the Board for feedback.
- December 2023 - SDCP staff presented an update on REN formation and requested approval to submit the Business Plan Application to the CPUC.
- **SDCP Community Advisory Committee (CAC) and CAC Programs Ad-Hoc Committee:** SDCP staff received feedback and support on SDREN proposed governance, programs, and budget and briefed them on progress. These meetings are outlined below:
 - September 2023 (CAC Programs Ad-Hoc) - SDCP staff presented an update on REN formation progress, draft programs and governance.
 - September 2023 (CAC) - SDCP staff presented an update on REN formation progress, draft programs and governance.
 - October 2023 (CAC Programs Ad-Hoc) - SDCP staff presented an update on REN formation progress and proposed budget.
- **Regional Stakeholders:** SDCP met with several regional stakeholders, including Community Based Organizations (CBOs), labor groups, and organizations that could support SDREN efforts, if authorized. During these discussions, SDCP presented formation concepts and draft program ideas to the following organizations:
 - Art Produce, Asian Business Association of San Diego, Business Improvement District (BID) Alliance, Center for Community Energy, Center for Sustainable Energy, City Heights Community Development Corporation, Cleantech San Diego, Climate Action Campaign, GRID Alternatives San Diego, International Brotherhood of Electrical Workers (IBEW) 569, Local Government Sustainable Energy Coalition, MAAC, Palomar College, San Diego Area Chapter of International Code Council (ICC), San Diego Building and Construction Trades Council, San Diego Building Electrification Coalition, San Diego Community College District, San Diego Foundation, San Diego Green Building Council, San Diego Green New Deal Alliance, San Diego Regional Chamber of Commerce, San Diego Regional Climate Collaborative, San Diego Regional Economic Development Corporation, San Diego Urban Sustainability Coalition, San Diego Workforce Partnership, Small Business Utility Advocates, Smart Grid Lab at San Diego State

University, South County Economic Development Council, Southwestern College, The Urban Collaborative Project CDC.

- **California EE Coordinating Committee (CAEECC):** On November 29, 2023, representatives from SDCP and the County of San Diego attended the regularly scheduled CAEECC meeting to present to CAEECC in accordance with CPUC Decision 19-12-021.¹³ Staff were able to respond to all questions following the presentation. Overall, the overview was positively received. The CAEECC presentation and resulting summary report of feedback and responses is included in *Exhibit 3 - Appendix E*.

Service Territory

The SDREN service territory is home to 3.3 million people and includes the County of San Diego, 18 incorporated cities, 18 Tribal communities, 16 significant naval and military installations, 47 school districts, and 24 water districts. Public agencies or districts own over 60% of the land in the County.¹⁴ The SDREN territory includes San Diego County, 70 miles of coastline, and shares an international border with Mexico. While the region's coastline is highly developed and populated, there are a significant number of rural and semi-rural communities in the southern and eastern portions of the county.¹⁵ The territory is a microcosm of the state and includes farming and non-farming workforces, with over 100 languages spoken,¹⁶ a large tourism economy accompanied by high cost of living, and the highest energy rates in California.

¹³ D.19-12-021, pg. 21 and OP2.

¹⁴ SanGIS.

¹⁵ [https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/NS/Newland%20DEIR/County%20Land%20Use%20Element%20Figure%20LU-1%20\(Regional%20Cat.%20Map\)%20EXISTING%20AND%20PROPOSED.pdf](https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/NS/Newland%20DEIR/County%20Land%20Use%20Element%20Figure%20LU-1%20(Regional%20Cat.%20Map)%20EXISTING%20AND%20PROPOSED.pdf).

¹⁶ <https://www.sandiego.gov/economic-development/sandiego/facts>.

Figure 9. SDREN will serve San Diego County, which is bordered by the Pacific Ocean, Orange County, Riverside County, Imperial County, and Mexico.



RENs currently cover all densely (or highly) populated electric IOU-serviced counties within California, except for the San Diego region (see Figure 10 below). Approval of the SDREN will close this gap and enable RENs to fulfill the CPUC's vision for RENs statewide to complement and supplement services not provided by IOUs. Existing collaborations established within the region make it well-suited to be designated as a single-county REN.

Figure 10. Authorized REN Territories



The following table showcases statewide RENs and their comparative size and demographic metrics.

Table 2. Statewide RENs: Size and Demographics

REN	Counties	Cities	Population	Area (Sq Miles)	Population/Sq Miles	IOU Territory
SDREN	1	18	3.3 million	4,210	784	SDG&E
RuralREN	31	115	7 million	78,249	89	PG&E, SCE, SCG
I-REN	2	52	4.5 million	27,263	170	SCE, SCG
BayREN	9	101	7.8 million	6,907	1,123	PG&E
SoCalREN	12	226	20 million	50,000	400	SCE, SCG
3C-REN	3	25	1.6 million	7,877	211	PG&E, SCE, SCG

Geography

San Diego County covers approximately 4,210 square miles, including 70 miles of coastline, bordered on the south by Mexico. The region is highly diverse in its geography and biology, situated in the rolling hills and mesas that rise from the Pacific shore to join with the Laguna Mountains to the east. San Diego Bay is one of the country's finest natural harbors, hosting tremendous biodiversity. The region covers a large area of vastly different terrain, from miles of ocean and bay shoreline, densely forested hills, and fertile valleys to mountains, canyons, and deserts.¹⁷ This is reflected in the region's diverse range of climate zones: the coastal climate zone 7, inland climate zone 10, mountain climate zone 14 and desert climate zone 15.

Figure 11. Division of Climate Zones in SDG&E territory¹⁸



Tribal Context

The Kumeyaay, referred to as Diegueno by the Spanish, are the original inhabitants of San Diego County. The San Diego region is built on Kumeyaay and Luiseño land, with the unincorporated area of San Diego County being home to 18 Tribal communities represented by 17 federally recognized Tribal Governments, more than any other county in the United States.¹⁹

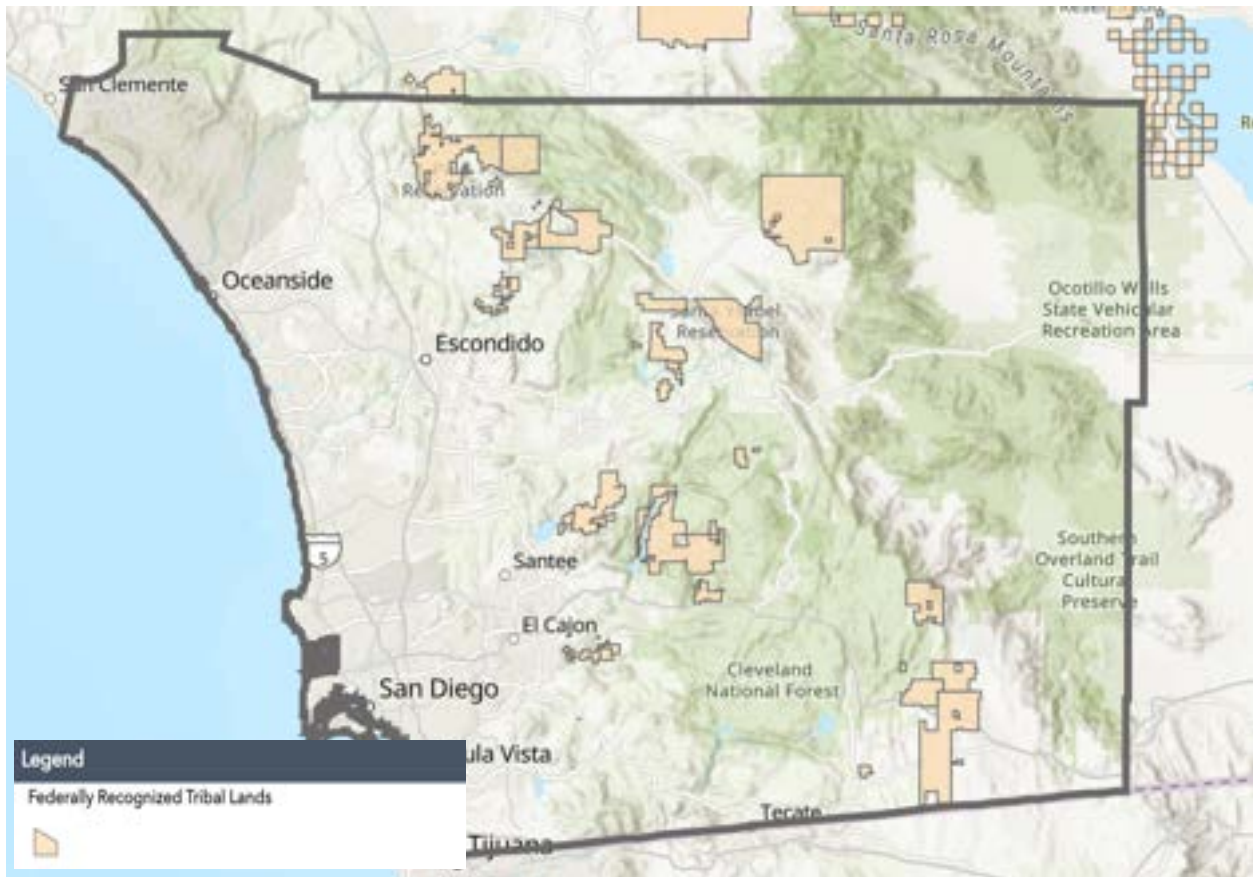
The County of San Diego and SDCP acknowledge the harmony that existed among the land, nature and its original peoples, who have since endured displacement, persecution, and systemic oppression. The County and SDCP pay respect to the unceded territory and homelands of the 18 federally recognized Tribes in our region, from four cultural groups, the Kumeyaay/Diegueno, the Luiseño, the Cupeño, and the Cahuilla. As climate change increasingly threatens the region, its peoples, and its cultural identities, the County and SDCP aspire to learn from Traditional Ecological Knowledge to create greater harmony with our natural environment and preserve the health of our planet. SDREN's program portfolio will work to find opportunities to provide custom services to San Diego's Tribal communities to bolster their access to resources that support their commitment to environmental stewardship.

¹⁷ Regional Focus 2050 Study, San Diego Foundation 2008.

¹⁸ Image Credit: SDG&E (<https://webarchive.sdge.com/baseline-allowance-calculator>).

¹⁹ <https://www.sandiego.edu/native-american/reservations.php>.

Figure 12. Federally Recognized Tribal Lands within San Diego County



Demographics

San Diego County is the second most populous of California's 58 counties and the fifth largest county in the United States, with a population of 3.3 million.

The San Diego region's population is not anticipated to grow significantly by 2050. Between 2016 and 2050, the San Diego region was expected to grow by nearly 700,000. However, San Diego's population is now expected to peak in 2042, and then decline by about 100,000 by 2060, according to the latest regional forecast by the San Diego Association of Governments (SANDAG).²⁰ Estimates are that by 2060, the region is only expected to have 40,000 more people than it does today, though forecasts still expect the region to add more jobs and housing.



The region's population is aging. The senior and disabled populations are growing disproportionately compared to the rest of the population. By 2050, almost one-fourth of the region's residents will be 65 or older. However, the current largest age demographic is age

²⁰<https://www.sandag.org/regional-plan/sustainable-growth-and-development>.

25-34, which represents a large number of renters and the need to serve a population with marginal disposable income, especially in disadvantaged communities.²¹

The San Diego region is ethnically diverse and will be increasingly so by 2050. Of residents under 18, 46% are Latino/a, and this population is expected to continue to grow at a rapid rate. Approximately 22% of the county's population are immigrants, including refugees who come from other countries, speak 100 different languages, and have various needs as they assimilate into their new environment.²²

Table 3. Demographic Data for San Diego County

Category	Regional Average Stats
Land Mass (sq mi)	4,210
Population	3,298,634
Population within “underserved communities”	1,855,064
Median Household Income	\$91,003
Percent of Residents in Rentals	47%
Unemployment Rate	5.4%
Under 5	6.0%
Under 18	20.7%
Above 18	78.3%
65 or Above	14.1%
Median Age	36.9
Language Other Than English Spoken at Home	36.30%
Percentage of Veterans	7.4 %
Percentage in Poverty	10.60%

Climate Impacts

The San Diego region is a popular place to live, known for its enviable lifestyle, beaches and amenities. The region is uniquely vulnerable to the impacts of climate change, with significant implications for its future success absent urgent collective action.²³



²¹ <https://www.sandiego.gov/economic-development/sandiego/population>.

²² San Diego Economic Equity Report 2023.

²³ Ibid.

All climate simulations indicate that **heat waves** will increase in frequency, magnitude, and duration. Data released by The National Oceanic and Atmospheric Administration (NOAA) confirms the predicted trend of the San Diego region growing increasingly warm and dry.²⁴ Over the next half-century, the warming in the San Diego region will likely equal or exceed the warming experienced over the last 100 years. Summers will be hotter, particularly in the inland areas, and on average, San Diego's daytime temperature will be 1.5 to 4.5 degrees higher than today.²⁵ Analysis has shown a 10-degree increase in temperature leads to a 3% increase in deaths on any given day. Heat waves have claimed more lives in California in the past 15 years than any other disaster events. In San Diego, heat-related health impacts occur at a higher rate in the inland regions than near the coast, though coastal San Diegans are less likely to have air conditioning.²⁶

Climate change will negatively impact the availability of both imported and local **water supplies**, while population and economic growth will drive up water demand. If current trends continue, by 2050 regional water demand is projected to increase 37 percent above recent levels. Regional water demands will continue to be met primarily by importing water, with imports from the Sacramento Delta and the Colorado River comprising about 80 percent of total supplies in 2050. Climate change threatens the reliability of both sources, however. Climate change could yield more instances of drought and reduce the chances that existing water sources will be able to meet projected demands. Despite plans for water conservation, desalinization, and recycling, demand for fresh water will outstrip supply by 2050, with growing potential for conflicts due to resource scarcity.²⁷

Increased air **pollution** will take a toll on public health, particularly for the elderly, who will comprise almost one-fourth of the population by 2050. San Diego ozone levels, already above federal standards, are in nonattainment, persistently exceeding the federally designated 8-hour ozone standard.²⁸

Wildfires will become more frequent and more intense. San Diego County already has among the worst fire conditions in the country, and the situation is likely to worsen with climate change. San Diego has experienced some of the State's most devastating fires in the last two decades. Moreover, the SB535 disadvantaged communities map overlays the fire threat, warranting the need for resilience and energy efficiency in the region. Wildfire frequency has increased in direct proportion to population growth, portending a hazardous trajectory for the future. Different climate change models yield somewhat different predictions about the frequency, timing, and severity of future Santa Ana wind conditions, leading to uncertainty regarding how San Diego regional fire regimes may differ in the future due to climate change.

²⁴ U.S. Climate Normals 2020, [NOAA](#).

²⁵ Regional Focus 2050 Study, San Diego Foundation 2008.

²⁶ Kalansky, Julie, Dan Cayan, Kate Barba, Laura Walsh, Kimberly Brouwer, Dani Boudreau. (University of California, San Diego). 2018. [San Diego Summary Report. California's Fourth Climate Change Assessment](#). Publication number: SUM-CCCA4-2018-009.

²⁷ Ibid.

²⁸ San Diego Climate Action plan, <https://www.sandiego.gov/sustainability-mobility/climate-action/cap>.

The CPUC High Fire Threat District Map entirely encompasses the service area aside from the most coastal communities in the region.²⁹

The seasonal **precipitation** for San Diego is roughly ten and a half inches depending on which series of seasons is used for the average. The impact of climate change on precipitation is not entirely clear at this time. Analysis indicates that while San Diego will retain its strong Mediterranean climate with relatively wetter winters and dry summers, projections of future precipitation suggest the region will continue to be highly vulnerable to drought.

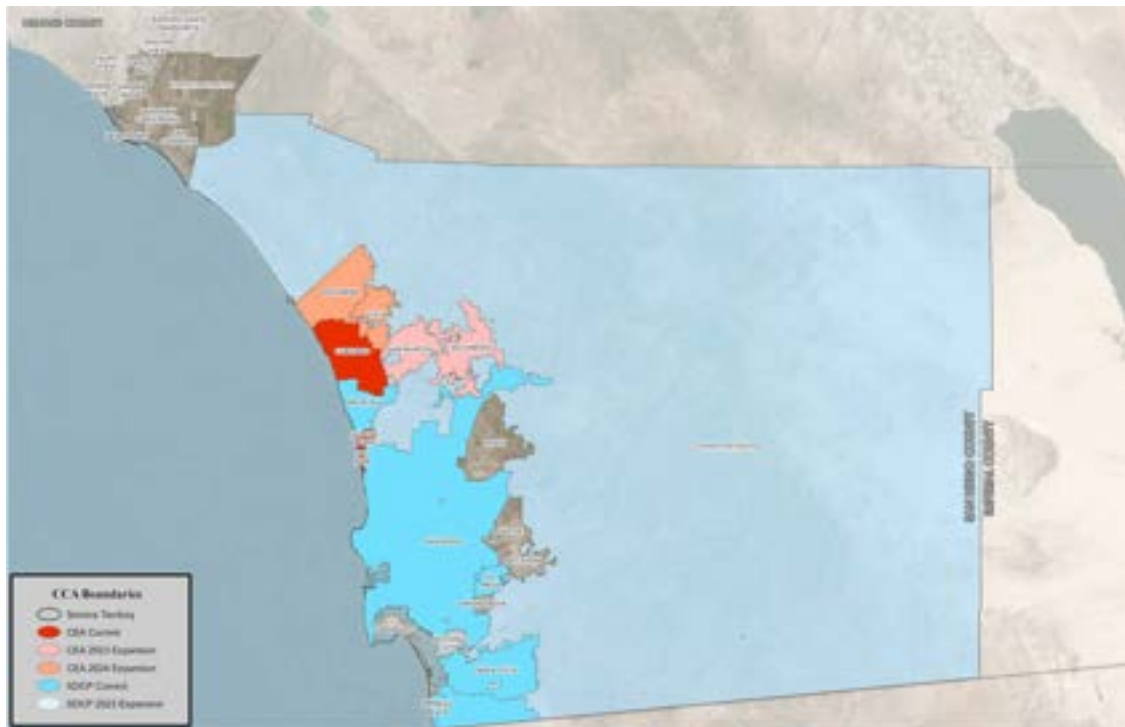
Over the next five decades, **sea level rise** will increase substantially—from threefold to almost sixfold—over its historical rate. By 2050, sea levels will increase relative to the 2000 level by 12-18 inches. As sea levels rise, there will be an increased incidence of extreme high sea level events (which occur during high tides, often when accompanied by winter storms and sometimes exacerbated by El Niño occurrences). Low-lying coastal areas of San Diego are at risk due to the combination of waves, tides, regional wind and barometric effects, El Niño effects and sea level rise. Sandy beach areas, wetlands, commercial, municipal, and residential properties will be lost or harmed, with implications for ecosystems, the economy, recreation, and public health.

Regional Energy Profile

The region's energy, electricity and methane-based natural gas, has historically been served by SDG&E. In 2019, two CCAs, SDCP and Clean Energy Alliance (CEA) formed. CEA began offering services to the cities of Carlsbad, Del Mar, Solana Beach, Escondido, San Marcos, Oceanside, and Vista in 2021. CEA is a member of the SDREN inaugural Advisory Committee and has been an active participant in ongoing and standing collaboration discussions with SDCP and SDG&E on customer energy programs.

²⁹ <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>.

Figure 13. Map of SDCP and CEA Service Area³⁰



SDG&E has been the primary provider of energy programs in the region. SDG&E is the only IOU service territory without a REN, providing ample opportunity to bring additional resources to the region's communities.

IOUs have inherent constraints within their EE portfolio, including cost-effectiveness requirements that limit the breadth of program offerings. SDREN will work to fill demonstrated gaps in the region in program participation. For example, historical claims filed by SDG&E in Climate Zone 7, which covers the coastal region of its territory and includes underserved communities, houses 69% of the population but only 49% of the claims. Market characterizations performed by SDCP and its partners reveal opportunities for SDREN to make significant programmatic contributions to the region.

In addition to existing programmatic gaps, the demand for electricity in San Diego County is projected to increase significantly by 2050, largely driven by population increases, greater frequency of heat waves, and peak demand for cooling. Annual electricity consumption is expected to increase by more than 60% and peak loads by 70%. That will push consumption from the current level of approximately 20,000 gigawatt hours (GWh) to more than 32,000 GWh in 2050. Climate change accounts for approximately 2 percent of the expected rise in electricity consumption by 2050, and up to 7 percent of the increase in peak demand.³¹

³⁰ Active CCA Providers, SDG&E. <https://www.sdge.com/customer-choice/community-choice-aggregation/active-ccas>.

³¹ Regional Foundation 2050 Study, San Diego Foundation.

Climate change will also have an impact on system reliability unless adequate planning and investments are made and consumers modify their consumption patterns. Peak demand will increase due to higher frequency of heat waves. Summertime, when demand is highest, is also the time when electric utility operating efficiency is lower and line losses increase—both due to temperature effects.³² These impacts will conspire to make managing regional demand even more challenging.

Equity Considerations

A goal of SDREN is to ensure that no communities are left behind in the transformation to a clean energy economy. In alignment with the CPUC’s equity segment, SDREN is using “underserved communities” and “hard-to-reach customers” to describe the target populations in their portfolio.

Figure 14. Defining Underserved³³ Customers in SDREN’s Service Territory

“Underserved communities” are at least one of the following...

- A “disadvantaged community” as outlined in the Public Resources Code.
- Considered “low-income” as defined in the Health and Safety Code.
- In the 25% most disadvantaged communities according to Cal EPA’s CalEnviroScreen 4.0.
- At least 75% of public school students **receive free or reduced-price meals.**
- Located on lands belonging to a **federally-recognized California Indian Tribe.**




Per Public Utilities Code Section 1601(e), to be considered “underserved” a community must meet one or more of the criteria listed above.

³² Ibid.

³³ Any residential or public customers living within an underserved community are considered an underserved customer. Other customers must also be an “underserved business group” as defined within Gov. Code Section 12100.63(h)(2) within an underserved community.

Figure 15. Defining HTR Customers in SDREN’s Service Territory

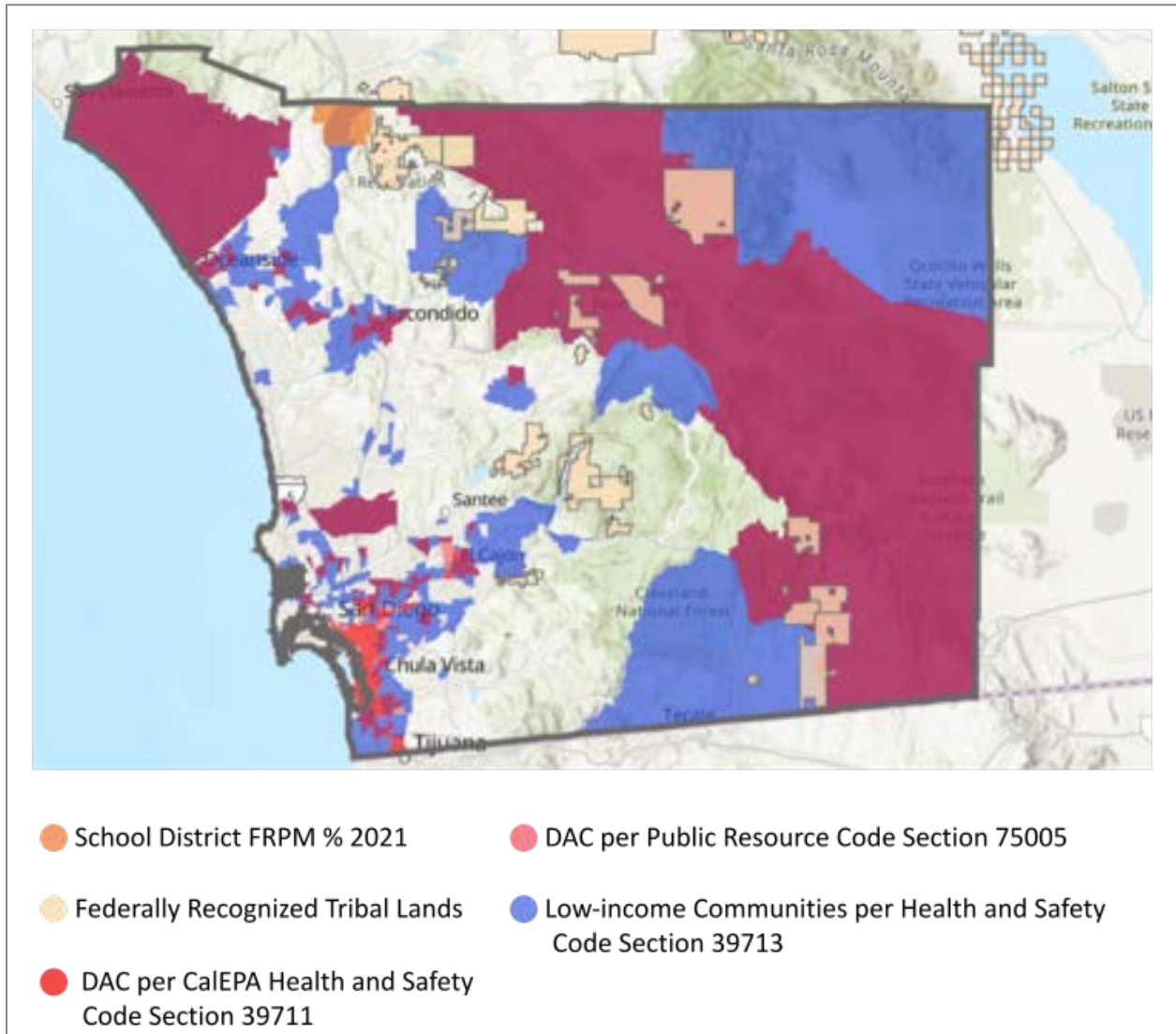
“Hard to reach” communities are...

-  **Governments**
 - California Native American Tribes of any kind.
 - Local governments in the 25% most disadvantaged communities per Cal EPA’s CalEnviroScreen.
-  **Residents**
 - In the 25% most disadvantaged communities according to Cal EPA’s CalEnviroScreen AND one or more of the following:
 - Primary language spoken is not English.
 - Qualified for CARE/FERA/ Energy Savings Assistance Programs.
 - A tenant in a multi-family or mobile home.
 - Not in the 25% most disadvantaged communities according to Cal EPA’s CalEnviroScreen, but meeting all other criteria listed above.
-  **Businesses**
 - In the 25% most disadvantaged communities according to Cal EPA’s CalEnviroScreen AND one or more of the following:
 - Primary language spoken is not English.
 - Classified as very small based on annual electric demand (< 20kW and/or < 10,000 therms) or based on having 25 or fewer employees
 - Operating from leased or rented facilities
 - Not in the 25% most disadvantaged communities according to Cal EPA’s CalEnviroScreen, but meeting all other criteria listed above.

In reviewing this criteria, SDREN has determined that approximately 56% of the region’s population lives in an underserved community. Given this, along with the demographic trends of a growing non-English speaking population, a geography with high cost of living, and the highest electric and gas rates in California, SDREN will devote the majority of its portfolio to programs designed to target HTR and underserved communities. SDREN acknowledges the region’s substantial disparities in poverty. Compared to their white counterparts, Latino/a San Diegans under the age of 18 were twice as likely to live in poverty, while young Black San Diegans were 2.5 more likely.³⁴

³⁴ San Diego Economic Equity Report 2023.

Figure 16. A map of the region with multiple indicators for underserved communities including CalEnviroScreen DACs, Tribal lands, low-income communities, and FRPM.



SDREN has undertaken stakeholder engagement initiatives and will continue to gather input from stakeholders to inform the design and execution of programs that address long-standing barriers and that are accessible to communities who have experienced structural exclusion.³⁵

SDCP, the City of San Diego, and the City of Chula Vista have committed ongoing investments to “**Communities of Concern**,” which are defined as the top 25% scoring areas from CalEnviroScreen, known as Disadvantaged Communities (DACs), as well as the additional census tracts identified by the cities of San Diego and Chula Vista through their Climate Equity Index (CEI) reports.

³⁵ Stakeholder engagement further described in Section vii. Alignment with Legislative and CPUC Requirements and Relevant Action Plans. Also see Appendix D showcasing letters of support from stakeholders engaged in the process.

SDCP is committed to supporting populations historically underrepresented in energy program participation and receiving associated benefits. As such, SDCP has committed at least 50% of a program's non-administrative budget, to the extent allowed by funding sources, to participation from Communities of Concern. SDCP will center Communities of Concern in program design to enable participation by all customers. It is important to note that while SDCP will follow the commitment with internal funds, it may not be possible with external funds due to specific rules and regulations.

In 2019, the City of San Diego developed the first-of-its-kind Climate Equity Index (CEI), in partnership with several community-based organizations representing Communities of Concern or advocating for environmental justice policy development. Specifically, the City of San Diego identified Communities of Concern as areas with very low, low, and moderate access to opportunity, whereas the City of Chula Vista defined them as the top 25% scoring areas within its own analysis.³⁶ In an ongoing attempt to elevate community-based language and needs, SDREN will continue to consider any indicators or definitions proposed by SDCP's member agencies.

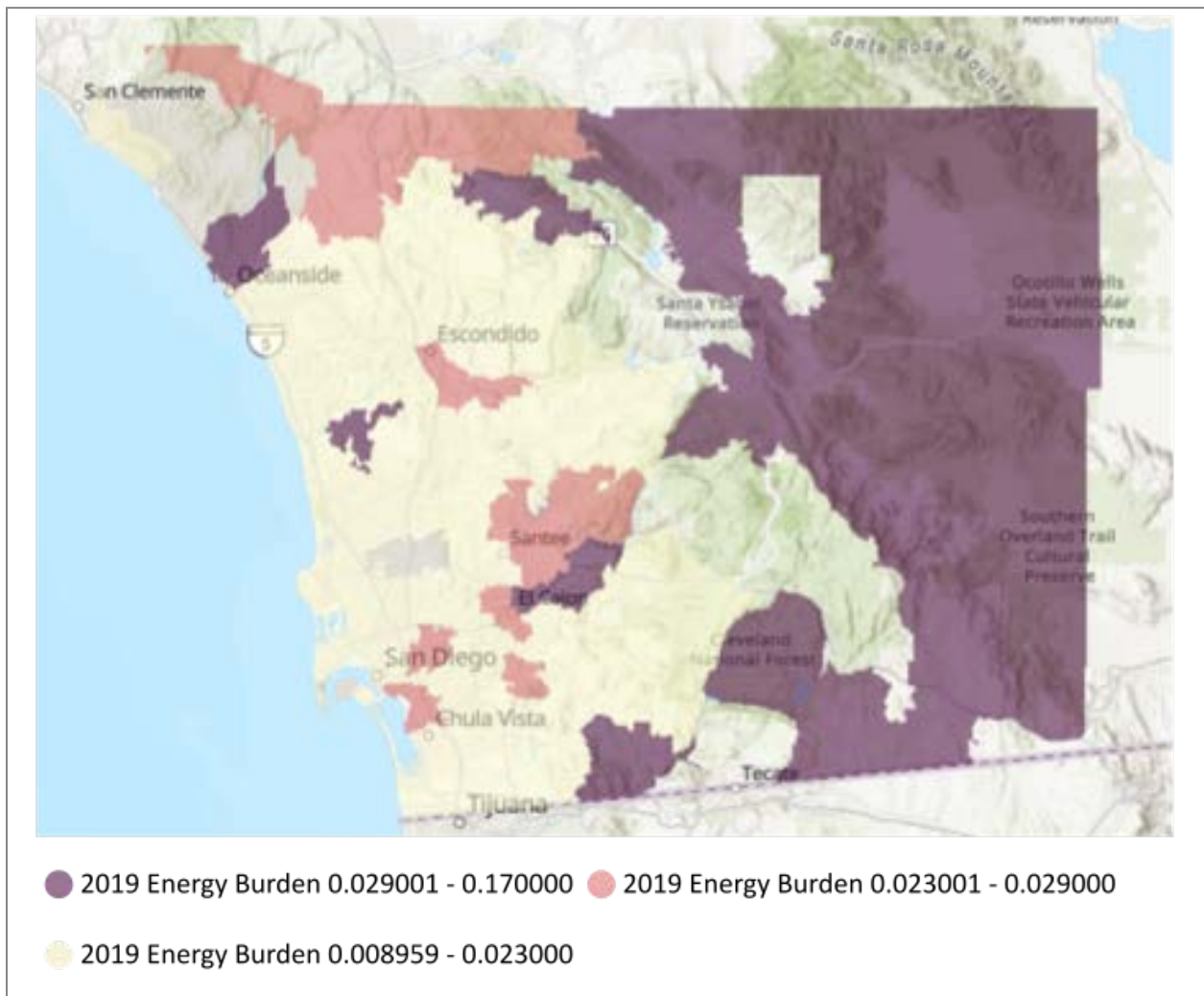
The goal of the CEI is to measure the level of access to opportunity residents have within a census tract and assess the degree of potential impact from climate change to these areas. The CEI is the first tool in the country that considers the effects of climate change, environmental pollution, and vulnerable populations. With the CEI, the City of San Diego has better identified Communities of Concern to include census tracts with very low, low, and moderate access to opportunity. These include Oceanside, Escondido, El Cajon, and National City. These regions are also considered underserved according to the CPUC's definition.

Energy costs and the energy burden for San Diego County residents disproportionately impact underserved communities. In 2021, an estimated 335,000 San Diegans were living below the poverty line.³⁷ With about one in ten San Diegans not having enough income to pay for basic expenses, this demonstrates a significant need to reduce energy burden. According to the DOE's Low-Income Energy Affordability Data (LEAD) tool, the national average energy burden for low-income households is 8.6%, three times higher than the estimated 3% for non-low-income households. In San Diego, low-income households paid an average of 3.9% of their income for energy, while all households paid an average of 2.3%. SDREN's proposed portfolio brings additional customized resources that are best equipped to penetrate these more vulnerable populations and overcome typical barriers to program participation.

³⁶ City of San Diego Climate Equity Index, <https://www.sandiego.gov/sites/default/files/prbr210715a-item201b.pdf>.

³⁷ [San Diego Economic Equity Report 2023](#).

Figure 17. A map demonstrating the region's energy burden³⁸



Workforce

Over the last 50 years, the San Diego region's economy has changed from one reliant on military, naval shipping, agriculture, and fisheries to a more diversified economy including manufacturing, scientific research, communications technology, and tourism. The San Diego region's economy relies heavily on the service sector for the majority (72.2%) of its output. Major service sector industries include financial, trade, professional and technical services, communications, high-technology, and hospitality. With respect to the production of



³⁸ Public data collection effort of customers reporting their annual energy cost and income.

goods in San Diego County, manufacturing, construction, and agriculture are the largest industries, accounting for 7.3 percent, 5.3 percent and 1 percent of total output respectively.

San Diego's unemployment rate is currently 5.4%. Employment declined less and recovered more quickly than in most other regions in California after the COVID-19 pandemic. The San Diego region has seen above-average employment growth, sitting at 2.9% relative to pre-pandemic levels (1.3 percentage points higher than statewide). Jobs in professional, scientific and technical services, health care, and transportation and warehousing are driving growth in the San Diego region. Expansions in administrative and support services have also contributed to job growth in the region.

The RDF-Technical Report estimates that no jobs in the region's fossil fuel-based industries will be displaced by 2030, even with contractions in fossil fuel demand.³⁹ However, job displacements will occur between 2031 – 2050, as oil consumption in the region falls by 95 percent relative to the present level and natural gas consumption falls by 75 percent. The modeling used in the RFD-Technical Report indicates that decarbonization will result in net job creation overall. Therefore, advancing the transition to a zero emissions economy is a critical part of regional decarbonization, and developing a viable set of just transition policies for the workers in the community who will experience job displacement between 2031 – 2050 will be essential.

There is an opportunity to meet demand for energy jobs that support statewide goals as the younger population (28% under 18) grows. The regional decarbonization framework projects overall net job creation due to decarbonization initiatives.⁴⁰ However, creating jobs is not enough to prevent negative impacts on workers. Ensuring the creation of high-road jobs is key. High-road jobs are defined by both job quality (i.e., family-supporting wages and benefits, long-term career pathways, and worker protections) and job access (i.e., access and entry-points to good jobs for local workers and training to support advancement). High-road jobs are a win-win approach for employers and communities as employers gain access to skilled and committed workers, and community members gain access to good careers. Investments in growing, diversifying, and upskilling the workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and achieving climate targets.

Energy Efficiency Strategy

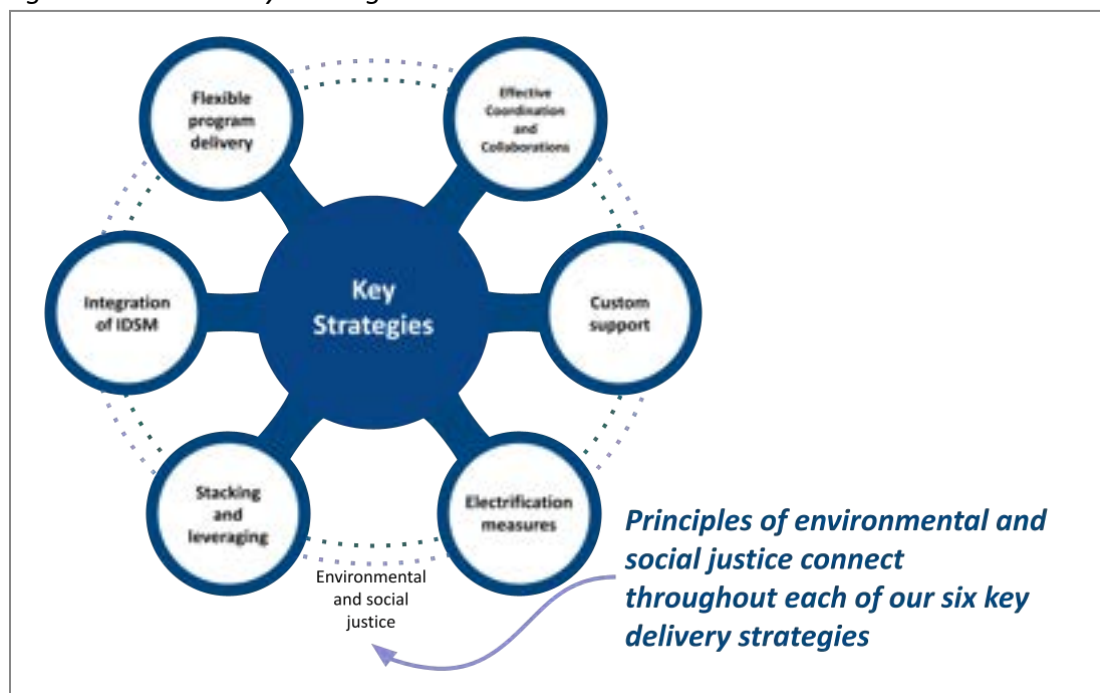
As described previously, SDREN's proposed EE strategy for the San Diego region builds off of the foundation established through long-standing local collaborations in the region and are informed by SDREN's values and principles to deliver on the goals of decarbonization, comprehensive EE services, and building the local energy economy.

³⁹ Carol Zabin, Maggie Jones, and Betony Jones, June 13, 2022, "Putting San Diego County on the High Road: Climate Workforce Recommendations for 2030 and 2050," Inclusive Economics, Oakland, CA.

⁴⁰ Eric Larson et al., "Net-Zero America: Potential Pathways, Infrastructure, and Impacts - Final Report Summary" (Princeton University, October 29, 2021), [https://netzeroamerica.princeton.edu/img/Princeton%20NZA%20FINAL%20REPORT%20SUMMARY%20\(29Oct2021\).pdf](https://netzeroamerica.princeton.edu/img/Princeton%20NZA%20FINAL%20REPORT%20SUMMARY%20(29Oct2021).pdf).

Collectively, the portfolio-level strategies incorporate several key approaches as shown in Figure 18 below.

Figure 18. SDREN Key Strategies



These key strategies will be integral to the SDREN through the Business Plan period and beyond. The tactics below are central to the first four-year Portfolio Plan and will continue to be refined over the Business Plan period.

Savings Forecasting and Quantification Methods

SDREN's savings forecast methods vary by the type of program being delivered. SDREN's savings projections were developed using only the approved savings assumptions and/or methodologies, as follows:

- 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. Savings forecasts were developed 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 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 and active in the eTRM (California Electronic Technical Reference Manual) database and follow the Statewide Deemed Workpaper Rulebook.

SDREN is not using the current custom process and meter-based methods to savings measurement as they will not be cost effective with the target customers in equity and market support segmented programs.

While SDREN recognizes the benefits of meter-based savings approaches, there are currently limitations to its effectiveness for certain customers. SDREN will actively engage in statewide working groups to overcome barriers and explore more cost effective solutions for smaller customers. SDREN third-party implementers will also be encouraged to explore opportunities to incorporate meter-based savings approaches into the programs. SDREN will also incorporate approaches through the JCM process how to support 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 4. Strategies for Market Intervention Based on 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, vision and hearing impaired customers taken into consideration) conducted by trusted local individuals 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, increase awareness and knowledge of how to manage and reduce energy consumption. ● Partner with CBOs to deliver messaging and services through local, trusted community members.

<p>Tribes</p>	<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 technical advisors with EE expertise to support successful implementation of programming and initiatives. ● Also, refer to all strategies noted above for other public agencies.
<p>Disadvantaged workers⁴¹</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, and ○ 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.

⁴¹ 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.

Code enforcement officials and stakeholders	<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 to provide comprehensive compliance and enforcement strategy support services.
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New Strategies for Spurring Innovation

With a focus on SDREN’s principles of environmental equity, collaboration, and community-driven, SDREN will incorporate the following strategies to spur innovation throughout the portfolio:

Table 5. 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 best strategies to reach equity customers, and ○ Build environmental justice priorities and opportunities to suggest innovations into all program solicitations. ● 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.

	<ul style="list-style-type: none"> ● 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 Program, 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 services that are developed and delivered not only reflect local needs and priorities but invest in community based program delivery. ● Identify success measures reflective of desired community outcomes, informed by SDCP’s 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.⁴² ● Tribal program designed to ensure community driven and culturally-centered design and service delivery.

Strategy for Incorporating Low Global Warming Potential Refrigerants

Hydrofluorocarbon refrigerants (HFCs) are “super” GHGs that are currently being phased out, but significant support is needed to accelerate the San Diego region to a safe transition to Low Global Warming Potential (low-GWP) refrigerants. Low-GWP refrigerants will be incorporated into the portfolio using the following strategies.

Table 6. Strategies for Incorporating Low-GWP Refrigerants Based on Sector

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.

⁴² D.23-06-055, OP 30.

	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● Provide information to all local permitting agencies and other market actors about the HFC phase out and low-GWP refrigerants along with code requirements.
Workforce Education & Training	<ul style="list-style-type: none"> ● Incorporate training to participants on proper installation and management of low-GWP refrigerants and proper reclamation of HFC-based refrigerants, along with education about phase out and benefits of low-GWP.

Additionally, SDREN will cooperate with the Market Transformation administrator should new HVAC and refrigeration initiatives be introduced to handle new low-GWP changes and regulations.⁴³

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. 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 six months of SDREN’s authorization.

SDREN anticipates allocating the full cap of \$4 million towards IDSM activities.⁴⁴ The integration of other IDSM activities and services alongside EE is a cost effective use of resources to drive deeper decarbonization strategies across the region. In line with SDREN’s goals of decarbonization and the portfolio strategy of customized support, SDREN will comprehensively consider IDSM opportunities across all programs to be integrated throughout the portfolio.

⁴³ D.21-05-031 at 60.

⁴⁴ 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.

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

- **Regional IDSM Working Group**
 - a. Convene regional load serving entities (LSEs) (CEA, 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, etc.) to inform program design, electrification priorities, and operational strategies.
 - c. As appropriate, update SDREN IDSM activities to incorporate feedback from Regional IDSM Working Group.
- **Equipment specification**
 - a. Document eligibility requirements of IDSM program, including equipment features and functionality, OEM eligibility, 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. Identification of IDSM opportunities based on customer preferences.
 - b. Incorporate enrollment (e.g., device enrollment) support and process (e.g., T&Cs acceptance) into SDREN programs, including marketplace offers, contractor partnerships, and 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 HPWHs, Flexible Demand Appliance Standards).
- **Workforce education and training**
 - a. Incorporate flexible load program requirements, incentives, commissioning processes and other IDSM program material into EE 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**
 - a. Assist customers in applying for additional IDSM funding and incentives.
 - b. 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.

Strategies for Tracking Outside Funding

The CPUC is focused on leveraging non-ratepayer funds to increase EE project implementation opportunities for customers. Substantial new funding for EE and IDSM projects is being made available through federal and state agencies. Many of these federal and state programs have not yet been launched and the final program designs and eligibility criteria have not yet been finalized. It is, therefore, not possible at present to know when and how these outside funds will be applied within SDREN territory to support specific customer EE activities.

SDREN is committed to the leveraging and stacking of non-ratepayer funding whenever possible, and supports the dissemination of information to customers, as a component of SDREN program's ME&O, on the applicable state and federal funding that is available to support their EE and IDSM projects. Additionally, to reduce customer confusion and complexity, SDREN anticipates supporting customers through the process of securing these additional funds when appropriate.

A majority, if not all, of the state and federal funding that will be available will flow directly to customers and not through SDREN. In these cases, it may not be possible for SDREN to accurately track the use of these funds separately. SDREN can work through the program "energy coaches" to collect this information through customer consultations. Customers can also be requested to self-report through a program survey, but this may be prone to data gaps when done voluntarily. SDREN is, however, supportive of future CPUC direction related to collecting information on customer use of non-ratepayer project funding that is feasible and practicable for SDREN to collect and track.

Portfolio Management Strategies

SDREN's portfolio management approach is focused on helping underserved and HTR communities invest in and accelerate decarbonization strategies and actions that benefit them and hasten the transformation to a clean energy future. SDREN's management strategies that help drive the distribution of budget across segments and sectors are described below in descending order based on priority for investment.

Segmentation Strategy Summary

Figure 18. Defining Equity

Equity

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

All programs within the SDREN portfolio have been designed with equity objectives in mind, regardless of segmentation. For example, a key strategy of SDREN's portfolio is to involve communities, grassroots organizations, and CBOs early in program development to assess needs, design strategies, and deliver the programs that meet local needs. SDREN's alignment with the CPUC's ESJAP is described later under the section *Portfolio Design and Alignment with Legislation and Relevant Action Plans*.

Nearly half (46%) of SDREN's portfolio is directed to Equity programs that support underserved communities. These programs will be key in driving progress towards SDREN's long-term goal of equitable decarbonation of the San Diego region. To support this goal, SDREN has integrated the following strategies into its equity programs:

- Focus outreach on and target underserved and HTR customers.
- Provide in-person, equitable, and inclusive outreach and support services.
- Customized energy programs and strategies shaped by community input.
- 1:1 support to connect customers to all other available programs, services, and funding opportunities.
- Offer direct installation of EE measures.

Additionally, SDREN will market and support customers in leveraging other resources and programs to maximize the benefits to these communities.

Figure 19. Defining Market Support

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.

A portfolio goal is to advance greater understanding and increase awareness and participation in energy programs, reduce the energy burden for communities, and lessen market confusion. SDREN's Market Support strategy, comprising over one third (34%) of its portfolio, seeks to bolster the green energy workforce in underserved communities by providing green career pathways for K-12 students, training adults who are incumbent or new to the green job market, developing skills, and supporting employers to increase green career opportunities.

A centerpiece of SDREN's Market Support strategy is to engage public sector agencies to adopt decarbonization measures. SDREN will support the County, 18 incorporated cities, 47 school districts and 31 water agencies to implement energy efficiency and decarbonization strategies, including agency wide benchmarking and strategic energy resilience planning. Start to finish customized, unbiased, hands-on, expert guidance and support will enable public agencies to accelerate adoption of urgently needed clean energy actions.

Figure 20. Defining Resource Acquisition

Resource Acquisition

Resource Acquisition programs have the primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems. Short-term is defined as during the approved budget period for the portfolio. (This segment should make up the bulk of savings to achieve TSB goals).

Fourteen percent of the portfolio budget is directed to Resource Acquisition through a program supporting commercial property owners. 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. A key strategy will be to provide performance-based incentives designed to cause project developers (aggregators) to deliver projects that reduce peak demand usage and verifiable savings. It is intended to deliver a majority of the TSB savings for the portfolio.

Sector Strategies

Following is an overview of SDREN's strategies for each portfolio sector in descending order based on priority for investment.

Residential

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. Because residential customers are typically confused by the number of program offerings and entry points, pairing behavioral engagement is a key strategy to

demystify funding opportunities for residents. Programs highlight non-energy benefits and incorporate a pathway to electrification through education about “healthy homes.” The total eight-year budget for Residential programs is \$84 million, representing 29% of the overall portfolio.

Commercial

SDREN proposes three Commercial sector programs that fill gaps and coordinate closely with SDG&E programs. Two are equity programs supporting small-medium businesses by raising awareness and increasing adoption of EE and other IDSM practices and measures. These programs will deploy a direct install approach to alleviate the cost barrier to participation and allow store owners to participate in EE program offerings as store owners have limited staff capacity and capital to invest in energy efficient equipment. The third program is a resource program providing incentives to commercial customers that realize peak demand reduction and verifiable energy savings. The total eight-year budget for the Commercial sector is \$83.8 million, representing 29% of the SDREN portfolio.

Public Sector

The Public Sector segment offers two programs that fill gaps in SDG&E services. One is a market support program that offers 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 determine program design and delivery. There are no current Tribal specific strategies or programs offered by SDG&E. The total eight-year budget for the Public Sector is \$56 million, representing 20% of the SDREN portfolio.

Cross-Cutting – Workforce, Education and Training (WE&T)

SDREN proposes two Market Support WE&T programs that fill gaps and support development of a green workforce representative of vulnerable populations, with opportunities to build more resilient communities. These programs support green career development for K-12 students, provide clean energy jobs training for new market entrants, and green workforce training through employers. The total eight-year budget for the Cross-Cutting WE&T sector is \$46.3 million, representing 16% of the SDREN portfolio.

Cross-Cutting – Codes & Standards (C&S)

SDREN’s proposed C&S program will supplement and complement both the SDG&E C&S programs and all statewide C&S programs. SDREN’s program will provide local agencies with policy and compliance support and enhance communication and experience among permitting authorities and permit applicants.

SDREN’s C&S program works with public agencies to provide policy and compliance support. The program fills gaps in the current SDG&E program which primarily focuses on advocacy at the CEC and DOE related to appliance and building standards. Programs designed for permitting agencies and local governments focus on Title 24 compliance education and adopting Title 24

reach codes. These programs are offered statewide by PG&E, SCE and SDG&E with limited local customization. All RENs in the state will have a C&S offering starting in 2024 highlighting a clear gap in San Diego for this enhanced support. The total eight-year budget for the Cross-Cutting C&S sector is \$17.6 million, representing 6% of the SDREN portfolio.

Distribution of Budget Among Sectors and Segments

The below tables provide a summary of the budget allocations based on the strategies described above.

Table 7. Budget Overview by Segment (excluding EM&V)

Segment	# of Programs	8-year Budget	% of Portfolio
Equity	5	\$132,578,532	46%
Market Support	3	\$97,891,627	34%
Resource Acquisition	1	\$39,690,430	14%
Codes & Standards ⁴⁵	1	\$17,640,065	6%

Table 8. Budget Overview by Sector (excluding EM&V)

Sector	# of programs	8-year budget	% of Portfolio
Residential	2	\$84,067,503	29%
Commercial	3	\$83,791,159	29%
Public	2	\$55,997,047	20%
CC-WE&T	2	\$46,304,880	16%
CC-C&S	1	\$17,640,065	6%

Portfolio Coordination

A key for success in achieving SDREN’s energy goals and outcomes is the effective collaboration and coordination among the numerous entities providing energy services to constituents. SDREN will actively coordinate with the following organizations and programs:

- **RENs statewide.** SDREN will join and engage in ongoing participation in the newly formed CalREN⁴⁶ organization.
- **SDG&E.** SDREN will coordinate with SDG&E in several ways, including (1) through the bi-annual Joint Cooperation Memo (JCM), (2) ongoing regular coordination at the portfolio level, and (3) additional coordination at the program level with SDG&E and associated third party implementers where complementary services are offered by SDREN.

⁴⁵ Codes & Standards is classified as both a segment and as part of the Cross-Cutting sector.

⁴⁶ <https://californiaregionalenergynetworks.org>.

- **Statewide programs.** SDREN will coordinate with the new BayREN statewide offering and will coordinate with all applicable statewide programs, including:
 - Statewide Reach Codes Program
 - Energy is Everything
 - Energize Careers
 - Golden State Rebates
 - Quality Residential HVAC Services Program
 - Comfortably California
 - CA Food Service Instant Rebate Program
 - Higher Education Energy Efficiency Program (HEEP)
 - California Energy Design Assistance Program (CEDA)
- **Other regional partners.** SDREN will coordinate with SDCP and CEA programs, as well as other regional partners delivering energy and workforce programs.
- **Other DSM programs.** SDREN will coordinate with other DSM programs, including:
 - CPUC DSM funding: TECH, BUILD, DR, SGIP, EV Charging
 - CPUC low-income programs: ESA
 - Single-family coordination
 - Multifamily coordination
 - Market Transformation
 - Emerging technologies, workforce initiatives, and strategies related to building performance and grid interactive buildings and grid impacts.
 - IRA, other federal funding
 - Education and guidance for customers on how to take advantage of offerings.
 - CA Equitable Building Decarb DI program and other state funding
 - Coordination with the SoCal Administrator for marketing and outreach to customers.

Evaluation, Measurement, and Verification (EM&V)

SDREN will coordinate with the CPUC, other PAs, and appropriate stakeholders to define data collection requirements and processes. SDREN will ensure data collection procedures capture relevant information that informs CPUC evaluation activities, program performance, and continuous improvement.

Table 9. EM&V Budget

Sector	8-year budget	% of Portfolio
EM&V	\$11,512,026	4%

Alignment with CPUC Requirements

The development of SDREN’s business plan follows all CPUC guidance and requirements as described below. Additionally, SDREN will comply with all applicable Commission policies and directives following authorization.

SDREN’s business plan aligns with the CPUC’s Guidance Decision (D.12-11-015 and updated in D.19-12-021) for Regional Energy Networks which calls for RENs to conduct activities that utilities or CCA Program Administrators cannot or do not intend to undertake. RENs may pilot activities where there is no current utility or CCA PA program offering, and where there is potential for scalability to a broader geographic reach, if successful. In addition, RENs may also pilot activities in HTR markets, whether or not there is a current utility or CCA PA program that may overlap.

All programs described in the 2024-2027 portfolio plan meet at least one of the existing REN criteria as listed above. SDREN also proposes that “underserved” be incorporated into the third criteria as detailed in the section *Recommendation for New or Modified EE Policy*.

SDREN’s proposal conforms with other CPUC directives, as follows:

- SDREN will coordinate with SDG&E on a Joint Cooperation Memo (JCM) to avoid overlap and duplication of programs and services.
- Programs are properly segmented, as follows:
 - Resource Acquisition
 - Market Support
 - Equity
 - Codes and Standards.
- SDREN’s business plan provides information on SDG&E programs and how proposed program designs mitigate or minimize ratepayer risk of program overlap or duplication.
- Programs that only meet the criterion of serving HTR customers (and not the gap filling or pilot criteria confirmed by D.19-12-021) are/will be designed to target, and will be marketed exclusively to, HTR customers or specific HTR customer segments.
- SDREN’s proposal is a result of coordination with overlapping PAs (SDG&E) in the course of preparing the filings.

The CPUC ruled in D.19-12-021 (pg 21) that a new REN proposal may be brought forward to the Commission by filing a motion in the Energy Efficiency Rolling Portfolio proceeding or its successor (in whichever proceeding is the open EE rulemaking at the time of the REN proposals), imposing certain requirements. A table outlining SDREN Business Plan compliance is included *Exhibit 3 - Appendix F*.

Alignment with Legislative Requirements and Relevant Action Plans

At its foundation, SDREN’s eight-year Business Plan is guided by the state’s goals of doubling EE in existing buildings by 2030, reducing emissions from existing buildings by at least 40 percent below 1990 levels by 2030, achieving 100 percent renewable and zero-carbon retail electricity by 2045, and becoming entirely carbon neutral by 2045. SDREN’s Plan is also guided by the state’s focus on identifying and addressing barriers to advancing EE and decarbonization in low-income and disadvantaged communities, as well as the CPUC’s most recent ESJAP 2.0 Update. Across all SDREN programs, the intent is to support and advance both state legislative

mandates as well as deliver programs that meet CPUC regulatory requirements, while simultaneously providing unique value to our local constituents.

The SDREN portfolio design and budget are aligned with the following policy and legislative mandates and actions plans:

- **CPUC Environmental & Social Justice Action Plan 2.0**
 - To demonstrate its commitment to advancing the state’s equity goals by serving ESJ communities, the SDREN is deeply aligned with the CPUC’s Environmental and Social Justice Action Plan (ESJAP) goals as described below.

Table 10. SDREN Business Plan Alignment with ESJAP

ESJAP Goals	SDREN Alignment
<p>Goal 1: Consistently integrate equity and access considerations throughout CPUC regulatory activities.</p>	<p>Equity and ESJ considerations are integrated throughout the SDREN Business Plan, and will be included in all future regulatory filings if authorized.</p> <p>The SDREN governance structure considers ESJ priorities within its Advisory Committee. There will be an effort to include ESJ representation on the committee and members will be provided educational opportunities to better understand the regulatory and decision making process.</p>
<p>Goal 2: Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.</p>	<p>Authorization of the SDREN advances this goal given that the goals of the SDREN drive for equitable decarbonization. Many of the decarbonization strategies of transitioning from methane gas to electrification within programs will lead to improved air quality and health benefits for ESJ community members.</p> <p>All SDREN programs will engage with ESJ communities and SDREN will pursue opportunities to better understand and analyze impacts of programs on ESJ communities.</p> <p>SDREN will work across all eligible funding sources and support IDSM efforts to maximize impacts to these communities.</p>

<p>Goal 3: Strive to improve access to high-quality water, communications, and transportation services for ESJ communities.</p>	<p>SDREN will collaborate with regional partners to support improved access to additional high quality services, such as clean transportation.</p>
<p>Goal 4: Increase climate resiliency in ESJ communities.</p>	<p>Climate resiliency is a key design consideration around programs that are focused on ESJ communities. Customized IDSM services will be integrated to support resilient ESJ communities.</p>
<p>Goal 5: Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC’s decision-making process and benefit from CPUC programs.</p>	<p>The SDREN Advisory Committee will include CBO representatives and will consider ESJ representation in membership. Members will be given opportunities to participate and learn about the CPUC regulatory process.</p> <p>The SDREN public sector Tribal Engagement program is intended to build pathways to involve these communities in the planning process to develop program strategies.</p>
<p>Goal 6: Enhance enforcement to ensure safety and consumer protection for all, especially for ESJ communities.</p>	<p>Trusted local partners will be used for engagement and program outreach. SDREN will manage all program implementation contracts with protections built in to protect against fraud and unfair business practices.</p> <p>SDREN’s C&S program will support enhancing the enforcement of codes to ensure safety and consumer protection for ESJ communities.</p>
<p>Goal 7: Promote high road career paths and economic opportunity for residents of ESJ communities.</p>	<p>SDREN’s WE&T programs are focused on promoting high road clean energy career paths in close partnership with other agencies. These programs will engage and support ESJ communities.</p>
<p>Goal 8: Improve training and staff development related to environmental and social justice issues within the CPUC’s jurisdiction.</p>	<p>All SDREN staff will be trained on ESJ issues and will work to support continued training on ESJ-aligned plans.</p>

Goal 9: Monitor the CPUC’s environmental and social justice efforts to evaluate how they are achieving their objectives.	SDREN will continue to monitor progress of CPUC ESJ efforts and will actively engage in the feedback loop, including supporting methodologies and metrics to track progress.
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- **California Long-term Energy Efficiency Strategic Plan**
 - The SDREN portfolio contains multiple strategies that are tied to the California Long-term Energy Efficiency Strategic Plan goals:
 - Local governments (LGs) lead by example in their facilities.
 - LGs lead their communities with innovative EE programs.
 - LGs lead adoption of advanced EE standards and reach codes.
 - LGs lead energy code compliance and enforcement.
- **AB 758, Existing Buildings Energy Efficiency Action Plan**
 - The SDREN portfolio contains multiple strategies that are tied to the Existing Buildings Energy Efficiency Action Plan:
 - Lays out a ten-year roadmap to mobilize market forces and transform California’s existing building stock into high performing and energy-efficient buildings.
 - Establishes requirements for providing energy assessments, benchmarking, energy ratings, cost effective energy improvements, financing options, public outreach and education and workforce training.
- **AB 802, Building Energy Benchmarking Program**
 - The SDREN portfolio contains multiple strategies that are tied to the Building Energy Benchmarking Program:
 - Mandates use of metered data for measurement of impacts from EE program interventions.
 - Program Administrators can receive credit for energy savings and provide incentives and support for EE projects that help customers meet current energy code requirements, in contrast to previous rules where Program Administrators could only count energy savings for projects where the improvements exceeded code requirements.
 - SDREN has incorporated a commercial program that uses a meter-based approach to measuring savings.
 - Provides a relevant framework to implement building benchmarking and labeling ordinances that accurately reflect what building operators and tenants see on their energy bills.
 - SDREN’s commercial programs will improve compliance with AB 802, the Building Energy Benchmarking Program, by helping businesses understand their energy consumption and comply with reporting requirements using Energy Star Portfolio Manager.®
- **SB 350, Clean Energy and Pollution Reduction Act**

- The SDREN portfolio contains multiple strategies that are tied to the Clean Energy and Pollution Reduction Act:
 - Mandates 50% renewable energy content in the state’s overall electricity mix and a doubling of energy efficiency goals for existing buildings by 2030.
 - SDREN’s commercial programs will help deliver deep and persistent energy savings for underserved and/or HTR small/medium businesses (SMBs) and commercial property owners.
 - Address barriers for low-income customers to EE and weatherization, especially in disadvantaged communities.
 - Require local governments to participate in efficiency program implementation.
- **SB 375, Sustainable Communities and Climate Protection Act**
 - The SDREN portfolio contains multiple strategies that are tied to the Sustainable Communities and Climate Protection Act:
 - Requires local governments to implement long-term integrated planning of land use and transportation.
 - Drives critical public agency initiatives to reduce per capita GHG emissions in the San Diego County region.
- **SB 32, California Global Warming Solutions Act**
 - The SDREN portfolio ties to the Sustainable Communities and Climate Protection Act through requiring the state to cut GHG emissions to 40 percent below 1990 levels by 2030.
- **SB 100, The 100 Percent Clean Energy Act of 2018**
 - The SDREN portfolio contains multiple strategies that are tied to the 100 Percent Clean Energy Act:
 - Sets a 2045 goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources—those such as solar and wind energy that do not emit climate-altering GHGs.
 - Requires the Energy Commission, Public Utilities Commission and Air Resources Board to use programs under existing laws to achieve 100 percent clean electricity.
 - Updates the state’s Renewables Portfolio Standard to ensure that by 2030, at least 60 percent of California’s electricity is renewable.
- **Governor’s Emergency Proclamation (July 30, 2021)**
 - The SDREN portfolio contains multiple strategies that are tied to the Governor’s Emergency Proclamation:
 - Ensure that California has a safe and reliable electricity supply to reduce strain on the energy infrastructure, and to ensure increased clean energy capacity by adding new energy efficiency programs or measures that target peak and net peak hours and integrating demand response or conservation actions with EE program actions or investments.

- CPUC to exercise its powers to expedite Commission actions, to the maximum extent necessary, to meet the purposes and directives of this proclamation, including by expanding and expediting approval of demand response programs and storage and clean energy projects.
- **SB 48 Building Energy Savings Act**
 - The SDREN portfolio contains multiple strategies that are tied to the newly enacted Senate Bill 48:
 - While this bill has not yet entered the rulemaking phase, it is anticipated that during the first and second EE portfolio cycles, opportunities will exist to engage with the CEC in the alignment of statewide and local equitable building performance standards.
 - Equitable building performance standards offer opportunities to combine cross cutting strategies to engage communities, accelerate regional decarbonization, and pilot new support programs that focus on IDSM strategies to improve the way buildings, people, and the grid operate.
- **CARB Scoping Plan**
 - The SDREN portfolio contains multiple strategies that are tied to the 2022 Scoping Plan for Achieving Carbon Neutrality:
 - The plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279.
 - The strategies within the Scoping Plan include dedicated guidance for local actions, sustainable and equitable communities, building decarbonization, and non-energy benefits such as public health.
 - As the CARB continues to update the plan and local air quality management districts consider new policy related to buildings and transportation, pilots and gap filling activities in the SDREN portfolio to promote viable electric alternatives, electrification, and community engagement will be leveraged to support CARB policy.
- **Flexible Demand Appliance Standards**
 - The SDREN portfolio contains IDSM strategies that are tied to the State’s Flexible Demand Appliance Standards:
 - Senate Bill 49 authorizes the California Energy Commission to adopt standards for appliances to facilitate the deployment of flexible demand technologies. The standards shall reduce GHG emissions by scheduling, shifting or curtailing appliance operations with consumer consent. The standards shall be feasible and cost-effective.
 - Title 20 and 24 are evolving to include controllable grid-enabled appliances, which aligns with SDREN efforts to target customers and measures that advance decarbonization.
 - The CPUC and CEC are actively engaged in developing data standards and infrastructure to enable dynamic price signals and tariffs, which will require localized efforts to address technology and behavioral energy adoption in disadvantaged communities via SDREN programs.

- These standards are reflected in CPUC rulemakings, including demand response requirements in the SGIP proceeding, the Distributed Energy Resource Program Cost-Effectiveness Issues, Data Access and Use, and Equipment Performance Standards proceeding, as well as the High DER proceeding.
- The latest EPIC 2021-2025 IOU program authorization includes strategies to “Increase the Value Proposition of DERs to Customers on the Grid.” This decision offers opportunities for collaboration to further align ESJ Action Plan goals through SDREN programs supporting DACs and communities to participate in complementary demand flexibility interventions.

Annual Portfolio Budgets

SDREN’s annual projected portfolio budget summary table adding up to the 8-year authorized budget cap including Savings, Cost Effectiveness & TSB forecasts is below and additional details can be found in *SDREN 2024-2031 Energy Efficiency Application Excel Sheets*.

Table 11. SDREN Annual Projected Portfolio Budget Summary

Year	Requested Budget	TSB	TRC	PAC	Net Annual kWh	Net Annual kW	Net Annual Therms
2024	\$15,852,720	0	0	0	0	0	0
2025	\$32,755,736	\$4,865,784	0.18	0.18	3,864,663	203	200,788
2026	\$36,031,310	\$6,168,332	0.21	0.20	4,990,604	228	235,749
2027	\$39,634,441	\$7,160,300	0.22	0.21	5,391,513	254	274,631
2028	\$41,219,818	\$7,370,804	0.22	0.21	5,300,382	249	269,989
2029	\$42,868,611	\$7,479,904	0.22	0.21	5,212,917	245	265,534
2030	\$44,583,355	\$7,620,565	0.21	0.20	5,128,857	241	261,252
2031	\$46,366,690	\$7,852,869	0.21	0.20	5,047,966	237	257,131
Total	\$299,312,680	\$48,518,558	0.20	0.19	34,936,902	1,657	1,765,074

Recommendations for New or Modified EE Policy

Decision 19-12-021, approved on December 5, 2019, adopts three revised criteria which will be considered by the Commission in approving new or renewed REN Business Plans. The third REN criterion that was designated is: “Activities serving hard-to-reach markets, whether or not there

is another utility or CCA program that may overlap.” In its discussion, the Decision notes that *“With respect to the third criterion, numerous commenters suggested broadening it beyond “hard-to-reach” which is now specifically defined in D.18-05-041, and to include a new category called “underserved.”*⁴⁷ The Decision further states that *“While we appreciate the motivation behind this suggestion, which is to serve more customers, no party provided a suggested definition of “underserved” that we can readily adopt here. Without a specific definition, we fear we would be opening up the REN portfolios too broadly and creating more potential for overlap in customer segments that are being served, but meet a particular proponents’ unique definition of underserved. As such, we will not adopt a broadening of the third criterion here.”*⁴⁸ The Decision then concludes that *“If a consensus among parties is reached in the future about an appropriate definition of “underserved,” we would consider broadening this criterion in the future.”*⁴⁹

In the Decision authorizing the 2024-2031 Energy Efficiency Portfolios and Business Plans, D.23-06-055 approved on June 9, 2023 (Sec. 7.2, pages 45-48), a very detailed and comprehensive definition for underserved customers was adopted by the Commission. As a logical next step to ensure the full incorporation of this newly adopted underserved customer definition into soon to be launched EE program portfolios, it is respectfully recommended that the Commission revise REN criterion number three as follows: “Activities serving hard-to-reach markets and **underserved customers**, whether or not there is another utility or CCA program that may overlap.”

⁴⁷ D.19-12-021, pg. 31.

⁴⁸ Ibid.

⁴⁹ Ibid.