

SoCalREN

ESSMA WO 1028

Portfolio-level Process Evaluation



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Executive Summary

Background

In 2012, the Commission adopted D.12-11-015 which authorized the piloting of Regional Energy Networks. Within that decision, the Commission allowed for the creation of Regional Energy Networks (RENs) and directed RENs to deliver:

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

Through this decision's authority, the Southern California Regional Energy Network (SoCalREN) was established in late 2012. SoCalREN's portfolio seeks to deliver strategies motivating customers to adopt more comprehensive energy efficiency approaches that are characterized by deeper, longer-lasting savings. Subsequently, in Decision D.19-12-021, the Commission reaffirmed the value of public agency leadership and its ability to meet local needs and priorities while pooling energy management resources. The Commission also adopted an updated framework for Regional Energy Networks and acknowledged the distinct value of RENs and the unique capacities local governments may bring in the delivery of energy efficiency.¹ In addition to this acknowledgement, the decision also requested that:

"RENs must state their desired outcome from activities that fill gaps of other program administrators. The RENs shall also propose savings goals and metrics associated with their unique value, as well as a methodology for measuring progress toward their metrics, in their business plans and ABALs."²

In 2020, SoCalREN filed its 2021 ABAL, which included the first draft of metrics by which to measure SoCalREN's unique value proposition. SoCalREN utilized a multi-step approach to determine these initial metrics. First, SoCalREN outlined the Commissions directives. Then, SoCalREN mapped out its mission statement as identified in its original Business Plan filing. These first two steps assisted in determining all the various gap filling and unique value-added activities that the SoCalREN programs provide. Once those were identified, clear themes began to present themselves across the portfolio. These subsequently became SoCalREN's core values, which were then translated into quantifiable metrics.

However, the proposed value metrics included in the 2021 SoCalREN ABAL were just the preliminary step in identifying SoCalREN's true value proposition and unique capacities. Similar to BayREN's "2019 Process Evaluation Study, 2020", SoCalREN conducted a cross-cutting process evaluation of its entire portfolio. The study's objective as presented in this document was to help SoCalREN understand how it can improve program coordination, provide more effective delivery of services, and maximize outcomes and customer benefits. In addition, SoCalREN utilized this study to fine-tune and improve on the proposed value metrics while also incorporating the new segmentation directives in D. 21-05-031 so that the initial proposed value metrics are more aligned with Commission objectives.

¹ D.19-12-021, p. 18.

² Ibid., p. 30-31

Summary of the Portfolio Process Evaluation

This evaluation looked across SoCalREN's portfolio of programs to determine appropriate metrics by which to measure SoCalREN's unique value proposition and demonstrate the impacts/strengths of SoCalREN's programs. SoCalREN delivers a variety of resource and non-resource energy efficiency (EE) programs that both complement and supplement Southern California's Investor-Owned Utility (IOU) EE programs. The SoCalREN programs and offerings have been designed to serve 12 counties and over 20 million individuals.

The evaluation team sought to help SoCalREN:

- Propose metrics that show SoCalREN's *unique value* while also aligning these metrics with the new CPUC segments (i.e., Resource Acquisition, Market Support, and Equity)
- Clearly document and actively acknowledge how SoCalREN's efforts meet the three CPUC criteria (i.e., to fill gaps, serve Hard to Reach (HTR) markets, and pilot innovative solutions).

Within each sector (i.e., Public, Residential-Multifamily (MF), and Workforce, Education & Training (WE&T)), the evaluation team documented the value provided by SoCalREN's programs and explored how SoCalREN's programs met the three CPUC directives. Overall, the evaluation team found that:

- SoCalREN's value spans the new CPUC segments (i.e., resource acquisition, market support and equity).
- The majority of SoCalREN's offerings fit clearly within the REN criteria, but there are a few places where SoCalREN should look to clarify how an offering fits into the CPUC's directive to the RENs to help stakeholders understand the value of the offering.

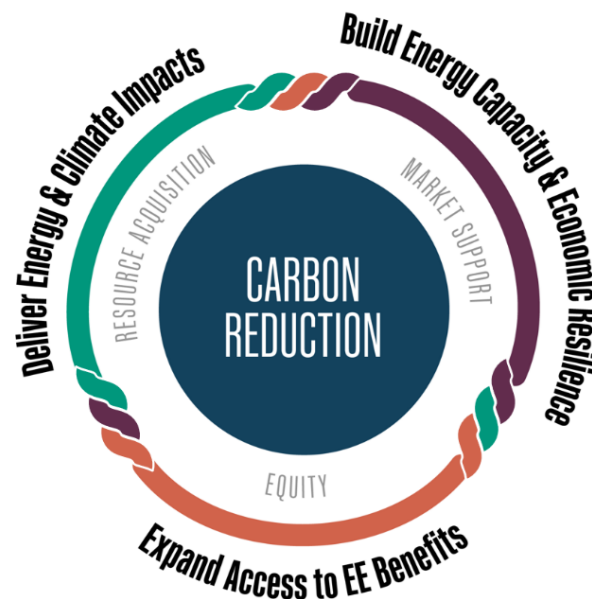
Based on our review of SoCalREN's portfolio, the evaluation team made recommendations for how to realign the proposed metrics with the current guidance. These early recommendations included renaming and focusing some of the metrics, and bringing together others, as described in the table below.

Table 1. Recommendations to Align SoCalREN Core Values with CPUC Segments

SoCalREN Core Value, 2021 ABAL	Recommendations to Realign Core Value with New Directives	Recommended Core Value
Climate Action Leadership	Rename "Climate Action Leadership" to "Deliver Energy & Climate Impacts" and focus on <u>trackable</u> reductions in energy use and GHG to align with what is required from resource acquisition programs.	Deliver Energy & Climate Impacts
Building Capacity & Energy Competency	Bring together "Building Capacity & Energy Competency" and "Economic Resilience" since they are both activities that support households, businesses, market actors and communities (i.e., market support activities).	Build Energy Capacity & Economic Resilience
Economic Resilience		
Equity	Relabel "Equity" to "Expand Access to EE Benefits" and keep this as SoCalREN's equity bucket since so many of SoCalREN's activities are oriented towards supporting equity targeted communities.	Expand Access to EE Benefits
Innovation	Document innovative activities in SoCalREN's Annual reports (since piloting innovative activities is one of the CPUC's criteria for REN's), but do not call this out as a stand-alone core value since "innovation" permeates all of SoCalREN's programs and sectors.	N/A

The evaluation team recommended that SoCalREN describe its core value as: delivering energy & climate impacts, building energy capacity & economic resilience, and expanding access to EE benefits within the communities that they serve.

Figure 1. Summary of SoCalREN Value



- **Delivering energy & climate impacts** – SoCalREN supports activities with trackable energy savings and greenhouse gas (GHG) reductions within the SoCalREN service area that contribute to local and state climate or sustainability goals.
- **Building energy capacity & economic resilience** – SoCalREN builds long-term knowledge and skills for public agencies, contractors, and transitional age youth through workforce education and training that leads to energy competency, policies or other infrastructure & helping local communities build long-lasting, strong, and self-sufficient economies (by supporting projects and investment into communities).
- **Expanding access to EE benefits** - SoCalREN expands access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities.

In many of SoCalREN’s programs, these core areas are intertwined to serve participants while supporting California’s carbon reduction goals.

Based on our findings, we recommend that SoCalREN collect data that demonstrates the value that their portfolio of programs provides. This includes data to show the following:

- Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN’s innovative or gap filling program offerings
- Channeled energy and GHG reductions (claimable by IOUs) due to SoCalREN’s guided and supported services
- Energy and GHG reductions outside of EE-programs due to SoCalREN’s guided and supported services
- Equity-targeted populations served by SoCalREN programs
- Energy savings in equity-targeted populations (sub-set of what is under resource acquisition)
- Utility bill savings in equity-targeted populations (in estimated dollars saved)
- Inclusion of diverse workers in EE workforce
- Increased demand for energy efficient products or services among SoCalREN targeted groups
- Access to capital for green energy and energy saving projects
- Contractors better equipped to enable energy efficiency savings
- Additional participant benefits which accrue while supporting green energy and energy saving projects

A summary of the recommended portfolio-level value metrics is shown in the figure below. See Figure 2.

Tables with the detailed measurements for these value metrics can be found in Attachment 1. Detailed Value Metrics.

We also recommend that SoCalREN continue to clearly document how all programs meet the CPUC's REN criteria. This can be done within SoCalREN's Annual Reporting effort. Other recommendations by sector are described below.

Within the Public sector, SoCalREN should:

- Consider how to distinguish the Metered Energy Savings Program better from the IOU NMEC offering (if the IOU offering continues). This could be as easy as having a more distinctive name in the BBAL or Business Plan (e.g., Agency Savings through Technical Support) or providing more distinct activities.

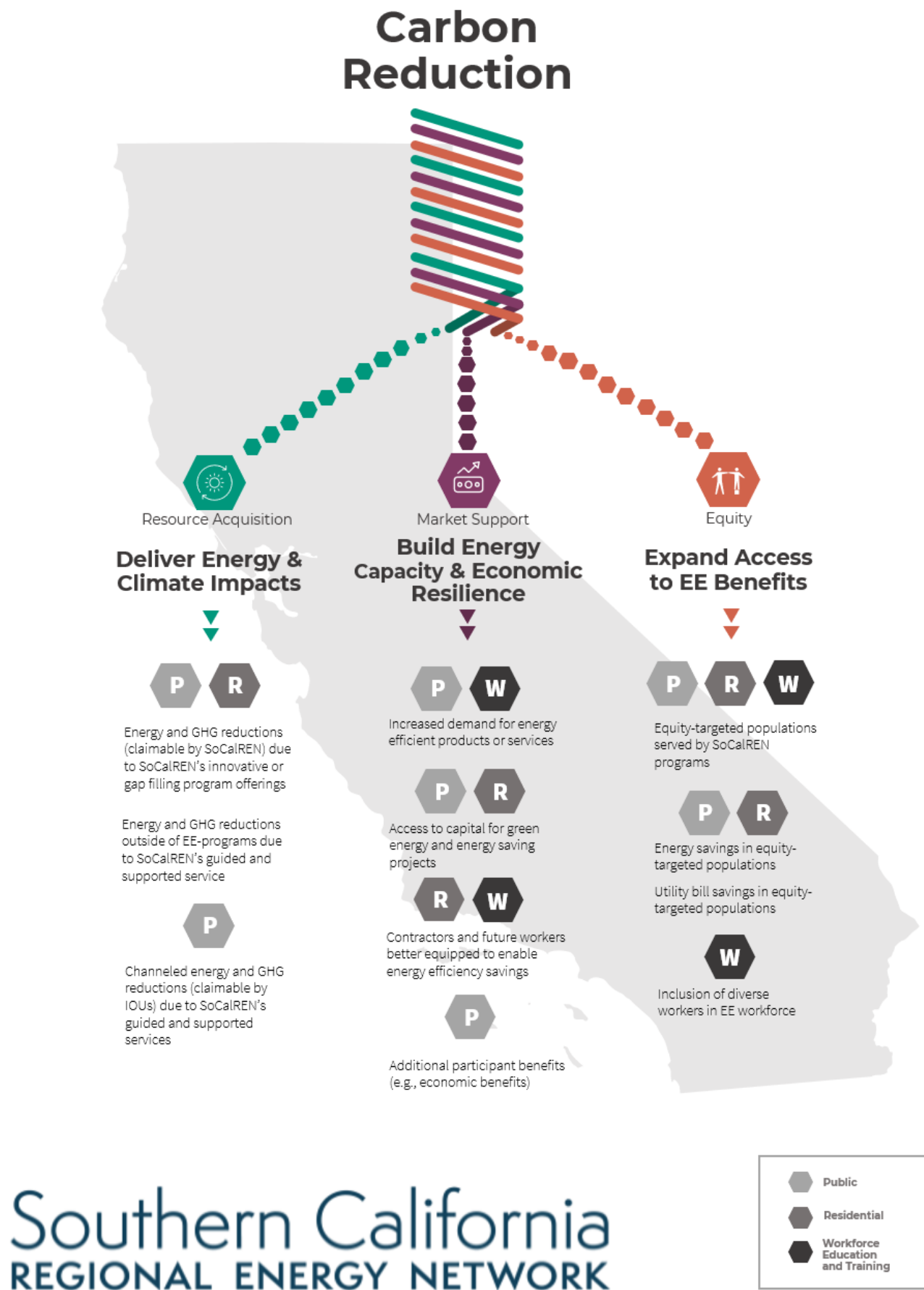
Within the Residential-Multifamily (MF) sector, SoCalREN should:

- Clearly document how the MF Program and other, newer residential programs not included in this evaluation meet the CPUC's REN criteria.
- Consider whether the MF Program best fits within the Equity segment (where it can overlap with other programs) or the Resource Acquisition segment (where it would need to be clearly distinguished from the IOU efforts).
- If SoCalREN seeks to distinguish their program in the marketplace, consider enhanced offerings or a revised program name:
 - One "enhanced" option that SoCalREN is currently considering is whether the program can leverage non-CPUC funds to offer a more comprehensive EE/DER/EV program offering, which would more clearly distinguish the program from other similar Resource Acquisition offerings. If so, SoCalREN should collect data about DER/EV projects that occur at MF sites as a value metric.
 - SoCalREN may also want to consider a more distinctive program name that would allow MF customers and contractors to better understand the uniqueness of the SoCalREN program.

In addition, within the WE&T sector, SoCalREN should:

- Explore any possible overlap with the statewide WE&T program
- Conduct a follow-up WE&T process evaluation to ensure value is able to be tracked for all components of SoCalREN's WE&T program
- Explore whether WE&T could be expanded to help bring in new rural contractors to support the MF program's expansion to rural areas since this is a gap in the Residential-MF Sector
 - Note that SoCalREN's current WE&T offerings appear to be heavily focused on the LA county area (rather than rural areas)

Figure 2. Summary of SoCalREN Proposed Value Metrics (with details in Attachment 1. Detailed Value Metrics)



Introduction to the Portfolio-level Assessment

SoCalREN delivers a variety of resource and non-resource energy efficiency (EE) programs that both complement and supplement Southern California's Investor-Owned Utility (IOU) EE programs. SoCalREN's EE programs are designed to maximize opportunities for customers (many of whom are underserved) in the Southern California Edison (SCE) and Southern California Gas (SoCalGas) service territories. SoCalREN's programs seek to deliver strategies motivating customers to adopt more comprehensive energy efficiency approaches that are characterized by deeper, longer-lasting savings. These programs and offerings have been designed to serve 12 counties and over 20 million individuals.

This evaluation looked across SoCalREN's portfolio of programs to determine appropriate metrics by which to measure SoCalREN's value and express the impacts/strengths of SoCalREN's programs.

This portfolio-level evaluation effort took place within an evolving context, i.e., SoCalREN's programs, the IOU programs, and the regulatory environment were all changing during the evaluation period. The evolving regulatory and program context is described below.

Background



Since the establishment of RENs in 2012 (D.12-11-015), the state of California's sustainability objectives have become increasingly complex. Over this timeframe, the California Public Utilities Commission's (CPUC's) directives to the RENs (released in the years highlighted green) have also evolved.

In 2012, the CPUC directed the RENs to deliver program offerings that meet three REN criteria (with no formal metrics required). RENs were asked to:

1. **Fill gaps** by conducting activities that the IOUs cannot or do not intend to undertake.
2. **Serve hard-to-reach (HTR) markets** by conducting activities in hard-to-reach markets³, whether or not there is a current IOU program that may overlap.
3. **Pilot innovative solutions** by conducting activities where there is no current IOU program offering, and where there is potential for scalability to a broader geographic reach, if successful.

SoCalREN established several programs in 2013. As such, the first wave of program development occurred under this initial CPUC directive and prior to the first official business planning cycle.

In 2016, all Program Administrators (PA), including RENs, were asked to develop and report common metrics, which focused on energy savings, for the first business planning cycle (2018-2025). SoCalREN, as well as all other RENs, included common metrics within their first business plan, submitted in January 2017.

Three years later, in 2019, under Decision D.19-12-021, the CPUC authorized the continued operation of RENs. In this decision, the Commission reaffirmed the value of public agency leadership to meet local needs and priorities while pooling energy management resources. The Commission acknowledged the distinct value of RENs, and the unique capacities local governments may bring in the delivery of energy efficiency. As part of this decision, the CPUC also formally requested that the RENs propose their own unique REN value metrics (while also continuing to meet the initial three criteria from 2012 and report the common metrics from their Business Plan).

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

³ HTR has been defined by the CPUC. There are current discussions to revise this definition. Defining HTR was not the focus of this evaluation effort as this is an evolving topic within a group that is broader than SoCalREN stakeholders.

Given this new policy directive, in SoCalREN's 2021 Annual Budget Advice Letter (ABAL filed in September 2020), SoCalREN proposed draft value metrics. As part of this filing, they stated that they planned to finalize the value metrics following a third-party evaluation of their proposed metrics (i.e., this evaluation). However, during the current evaluation period (spanning Q4 2020 through Q4 2021), a significant regulatory directive was issued by the CPUC. This new directive (described below) is applicable to all program administrators (PAs) and reshapes the segmentation of each of the PAs portfolios.

Under D.21-05-031, (May 2021), the CPUC requested that all PAs, including RENs, propose programs that fall into three CPUC-proposed segments:

1. **Resource Acquisition.** Programs with a primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity system and natural gas systems.⁴
2. **Market Support.** Programs with 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.
3. **Equity.** Programs with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission's Environmental and Social Justice (ESJ) Action Plan. Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.

In addition to placing each program in one of the three segments, the CPUC also requested that the PAs track additional metrics specifically for Market Support and Equity programs. In D.21-05-031, the CPUC directed that these additional metrics be developed through the California Energy Efficiency Coordinating Committee (CAEECC) and be filed with the Commission by November. These new metrics will apply to future programs for all PAs, including the RENs.

SoCalREN is currently in the midst of reviewing their portfolio of offerings and determining new programs both for the 2-year (2022-2023) Bi-annual Budget Advice Letter (BBAL) filing in November 2021 as well as for the new business plans, which are due in February of 2022.

The findings and recommendations in this report take into consideration both the growth of the SoCalREN portfolio, as well as all of the CPUC directives to RENs and PAs as described above.

Overview of Evaluation

To complete this evaluation, the evaluators utilized three steps that were specifically intended to assist in clearly identifying the unique value of SoCalREN's portfolio. These include:

1. Working with SoCalREN and SoCalREN's implementers to understand SoCalREN's value (by sector)
 - The evaluation team reviewed the proposed value metrics from SoCalREN's 2021 ABAL, worked with SoCalREN and their implementers to document a proposed theory for each sector (and the programs in the sector), and developed a strawman logic model against which to test SoCalREN's value.
2. Collecting information from participants and review program tracking data
 - The evaluation team collected data from participants in each sector⁵ and reviewed program tracking data. Evaluation surveys and/or interviews were used to test the proposed value, while also gathering insights on value not previously identified by the program team.
3. Aligning value with CPUC guidance and SoCalREN's proposed program implementation; proposing revised value metrics

⁴ REN's portfolios are not subject to cost-effective delivery as they have different rules.

⁵ The specific data collection activities for each sector are presented in the sector-by-sector write ups below.

- The evaluation team worked to fine tune SoCalREN's proposed value and ensure that the value metrics both effectively supported SoCalREN's mission while also aligning with CPUC directive and the portfolio, as implemented.

This document provides findings and recommendations based on:

- An early assessment of SoCalREN's proposed value and value metrics
- An assessment of whether (and how) SoCalREN's portfolio meets CPUC-proposed REN criteria (D.12-11-015), by sector
- An assessment of SoCalREN's value (by sector), which included
 - An assessment of SoCalREN's portfolio against the newer segmentation sought by the CPUC (D.21-05-031)
 - Suggested measurements (or value metrics) in compliance with D.19-12-021

We note that this evaluation effort focused on SoCalREN's 2020 programs. While this portfolio-level evaluation is intended to help support SoCalREN's future decision making, the evaluation did not consider new programs that SoCalREN is planning to propose in their 2022+ Business Plan (due Feb 2022).⁶

Early Assessment of SoCalREN's Proposed Value and Value Metrics

In 2020, SoCalREN filed its 2021 ABAL. Within this document, SoCalREN included its first draft of metrics by which to measure SoCalREN's unique value proposition for Commission consideration. SoCalREN documented that they utilized a multi-step approach. First, SoCalREN outlined the Commissions directives. Then, SoCalREN mapped out its mission statement as identified in its original Business Plan filing. These first two steps assisted in determining all the various gap filling and unique value-added activities that the SoCalREN programs provide. Once those were identified clear themes began to present themselves across the portfolio. These subsequently became SoCalREN's core values which were then translated into quantifiable metrics, or *draft* value metrics.

As mentioned above, the evaluation team reviewed the *draft* value metrics that SoCalREN proposed in their 2021 ABAL. The evaluation team conducted this assessment and provided early-stage recommendations that helped to frame our value metrics work.

Based on our early assessment of SoCalREN's proposed metrics, we recommended that SoCalREN:

- **Focus on a smaller number of metrics.** SoCalREN's value metrics⁷ should be outward facing metrics that demonstrate value to the state. Those proposed in the 2021 SoCalREN ABAL, while appropriately linked to SoCalREN's program offerings, were numerous and sometimes duplicative. We found some value metrics (e.g., number of impressions or number of events), were not clearly distinguishable from those of other PAs, which made it difficult to understand how those metrics helped SoCalREN demonstrate unique strengths or compliance with the CPUC's three REN-specific criteria (i.e., fill gaps, serve HTR markets, or pilot innovative solutions). Most of the metrics were well-suited to help SoCalREN monitor the performance of implementers who help run the programs (that is, they were good key performance indicators and should continue to be tracked), but not all of them seem to rise to the level of a "value metric."
- **Propose metrics that show SoCalREN's *unique value* while also aligning these metrics with the new CPUC segments (Resource Acquisition, Market Support, and Equity).** SoCalREN proposed five core values in the 2021 SoCalREN ABAL including Building Capacity, Economic Resilience, Climate Action Leadership, Equity, and Innovation. On April 16, 2021, the CPUC proposed that all future programs be

⁶ The evaluation team does not have insight into these future programs as they are in the development phase.

⁷ Note that SoCalREN also needs to present the Common Metrics and other CPUC requirements.

aligned with one of three segments: (1) Resource Acquisition, (2) Market Support, or (3) Equity. The evaluation team recommended re-aligning SoCalREN value (from ABAL) with the new CPUC segments to help stakeholders understand the REN's value within larger context of what the CPUC is looking for. To align existing core values with the three segments, we recommended reorganizing and re-categorizing SoCalREN's core value metrics in the ways captured in Table 2 below.

Table 2. Recommendations to Align Existing SoCalREN Core Values with CPUC Segments

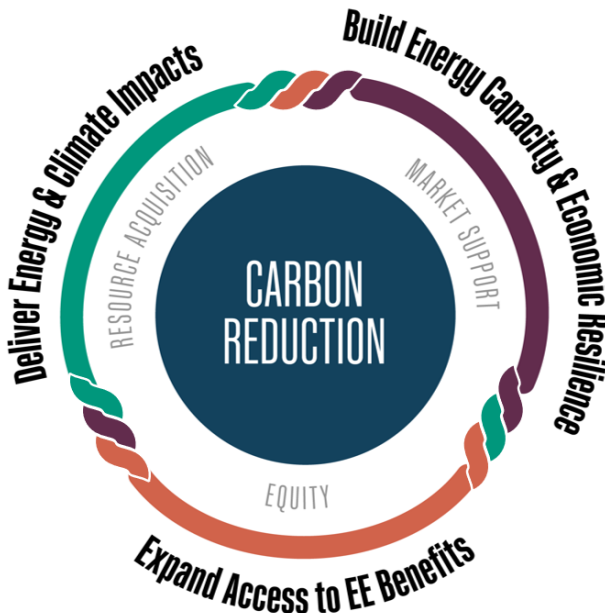
SoCalREN Core Value, 2021 ABAL	Recommendations to Realign Core Value with New Directives	Recommended Core Value
Climate Action Leadership	Rename "Climate Action Leadership" to "Deliver Energy & Climate Impacts" and focus on <u>trackable</u> reductions in energy use and GHG to align with what is required from resource acquisition programs.	Deliver Energy & Climate Impacts
Building Capacity & Energy Competency	Bring together "Building Capacity & Energy Competency" and "Economic Resilience" since they are both activities that support households, businesses, market actors and communities (i.e., market support activities).	Build Energy Capacity & Economic Resilience
Economic Resilience		
Equity	Relabel "Equity" to "Expand Access to EE Benefits" and keep this as SoCalREN's equity bucket since so many of SoCalREN's activities are oriented towards supporting equity targeted communities.	Expand Access to EE Benefits
Innovation	Document innovative activities in SoCalREN's Annual reports (since piloting innovative activities is one of the CPUC's criteria for REN's), but do not call this out as a stand-alone core value since "innovation" permeates all of SoCalREN's programs and sectors.	N/A

- **Clearly document and actively acknowledge how SoCalREN's efforts meet CPUC criteria (i.e., to fill gaps, serve HTR markets, and pilot innovative solutions).** As part of this evaluation, we assessed how SoCalREN uniquely meets these three criteria. As a result of our assessment, we recommend that SoCalREN:
 - Clearly document program efforts and metrics that fill gaps in services that utilities cannot or do not intend to undertake. While the Joint Cooperation Memo seeks to do this, the explanation needs to be strengthened.
 - Describe the HTR or underserved market served, when relevant. In addition, collect data that can be used to verify that those served were HTR or underserved participants.
 - Actively acknowledge in future annual reports how SoCalREN pilots innovative efforts. This acknowledgement should be descriptive only, where SoCalREN describes new planned innovation efforts in future business plans or confirms which were put into action in annual reports. Documenting these activities at a high level is sufficient; no value metrics are needed.

Recap of Recommended “SoCalREN Value”

The evaluation team proposed that SoCalREN’s value (and value metrics) be succinctly categorized within three categories. These are: **1) delivering energy & climate impacts, 2) building energy capacity & economic resilience, and 3) expanding access to EE benefits within the communities that they serve**, as described in the table below.

Table 3. Mapping of SoCalREN Core Values, Definitions and CPUC Proposed Segments

<div>  <p>SoCalREN’s portfolio delivers energy & climate impacts, builds energy capacity & economic resilience, and expands access to EE benefits.</p> </div>		
Recommendation for Core Value Areas	Recommended Definition	CPUC Proposed Segments*
DELIVER ENERGY & CLIMATE IMPACTS	Supporting activities with trackable energy savings and GHG reductions within the SoCalREN service area that contribute to local and state climate or sustainability goals.	Resource Acquisition
BUILD ENERGY CAPACITY & ECONOMIC RESILIENCE	Building long-term knowledge and skills for public agencies, contractors, and transitional age youth through workforce education and training that leads to energy competency, policies or other infrastructure & helping local communities build long-lasting, strong, and self-sufficient economies (by supporting projects and investment into communities).	Market Support
EXPAND ACCESS TO EE BENEFITS	Expanding access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities.	Equity

*Note that these CPUC Proposed Segments are defined in D.21-05-031.

The evaluation team developed sector-level logic models and detailed metrics tables using these three core values. These are described, by sector, in the following sections.

Assessment of CPUC REN Criteria and Core Value - by Sector

The evaluation team explored the value provided by each sector (i.e., Public, Residential-MF, and WE&T). The evaluation team also explored how SoCalREN's programs met the three CPUC directives. Overall, we found that:

- SoCalREN's value spans the three new segments (i.e., resource acquisition, market support and equity).
 - The majority of SoCalREN's offerings fit clearly within the REN criteria; however, there are a few areas where SoCalREN can improve by clarifying their offerings. We call these out in our discussion and recommendations below.
- In addition, there are a few areas of SoCalREN's portfolio that are still ramping up and were not developed enough to be fully assessed through this evaluation. These will require follow up evaluation activities. We call these out in our discussion and recommendations below.

Public Sector Assessment

As of September 2020, SoCalREN offered three⁸ Public Sector Programs for public agencies:

- Energy Efficiency **Project Delivery Program (PDP)** (SCR-PUBL-B1) – a non-resource program
- Distributed Energy Resource (DER) Disadvantaged Community (DAC) Project Delivery Program, also known as **Pathway to Zero** (SCR-PUBL-B2) – a non-resource program that targets agencies serving DAC and underserved communities⁹
- Public Agency **Normalized Metered Energy Consumption** Program, also known as the **Metered Saving Program** (SCR-PUBL-B3) – a resource program

In addition to the three main offerings listed above, SoCalREN's public agency offerings also include two sub-programs: the Capacity Building sub-program¹⁰ and a Benchmarking Call to Action (BMCTA) sub-program that enhances the Pathway to Zero Program with California Energy Commission (CEC) funding. At the time of our evaluation, SoCalREN was also considering new program offerings such as Regional Partner Initiatives, which would support activities proposed locally by SoCalREN's Regional Partners.

Within this suite, a single public agency can participate in multiple programs. For example, a city or school district may have facilities in both DAC and non-DAC neighborhoods that implement energy efficiency retrofits through SoCalREN's programs, thus leveraging the PDP (for project management support), Pathway to Zero (for DAC-specific services), and the Metered Savings programs (for non-DAC NMEC projects).

Public Sector Data Collection and Review

The Public Sector assessment drew on:

- Interviews with the implementer (The Energy Coalition (TEC))
- In depth interviews (21 total)
 - 14 of 89 participating public agencies representing cities, counties, and school, water, and community districts
 - Four (4 of 5) Regional Partners and three (3) additional Advisory Committee Members
- Interviews with IOUs in the Public Sector
- Review of program materials and data
 - PIPs, census data, tracking databases, TEC survey data, Joint Cooperation Memo (JCM) with IOUs

All interviews took place in April-June 2021.

⁸ SoCalREN also offers Revolving Loan Fund (RLF) for public agencies under their financing efforts. This program was not explored in depth in our evaluation since it was just ramping up in 2020. It was renamed to Revolving Savings Fund in late 2020 and is available to enrolled public agencies. Note that we do call it out in the logic model since it was an offering at the time of the evaluation.

⁹ Pathway to Zero was only available to DAC agencies in 2020. Starting in 2021, eligibility expanded to underserved communities such as low-income communities, Title 1 schools, and rural communities.

¹⁰ It was offered in 2020 and was in development for 2021 but is currently on hold.

A. Value of Public Agency Programs

According to SoCalREN, the Public Sector programs successfully identify and address specific challenges/barriers faced by public agencies (e.g., staff resources, technical knowledge, approval bureaucracy, procurement issues), many of which are unique to this sector. SoCalREN described how the program implementers act as an extension of agency staff (working hand-in-hand with the public agency) to help public agencies complete activities that would not be completed in the absence of a SoCalREN program. This includes helping public agencies manage and complete multi-year projects, institute facility energy management practices, understand energy policy and technology, understand and leverage funding options, and become energy leaders in their communities.

Based on feedback from participants, Regional Partners, Advisory Committee members, and SoCalREN's program data, we found that SoCalREN's Public Sector programs provide value in three areas.

SoCalREN's Public Sector programs: (1) deliver energy & climate impacts, (2) expand access to energy efficiency benefits, and (3) build capacity & economic resilience.

A1. Deliver Energy & Climate Impacts (both Resource Acquisition and non-Resource Acquisition efforts)

All three of SoCalREN's Public Sector programs help directly implement energy efficiency projects, leading to trackable energy savings (i.e., Resource Acquisition). The Metered Savings Program does this as a resource program, while PDP and Pathway to Zero work to build a pipeline of projects directly for resource acquisition programs (both IOUs programs and SoCalREN's Metered Savings Program), as well as other non-CPUC programs (such as CEC loan programs, Cal eVIP electric vehicle programs, and SoCal Water\$mart programs). SoCalREN's Public Sector programs also support State goals to have local governments lead-by-example and reduce GHG emissions.

While PDP is a non-resource program, it presents resource opportunities to agencies within SoCalREN's service area, and then walks agencies through projects for their facilities, providing project management support where needed. PDP also offers agency-wide benchmarking services through the delivery of Comparative Energy Analyses (CEA) and support with benchmarking in Energy Star Portfolio Manager which support project identification, energy awareness, and facility energy management. We found that PDP helps the agencies overcome staffing, technical, and bureaucratic barriers so that agencies who would otherwise have difficulty participating can engage in IOU or other program offerings (both CPUC-funded and those funded by non-CPUC sources such as through the CEC). Most of the agencies we spoke with described that they would have had challenges or been unable to complete their SoCalREN-supported projects because of limitations to their budgets and/or staffing. In some cases, agencies described having little to no budget set aside for capital improvements like energy efficiency upgrades. In other cases, agencies described not having staff with enough technical expertise to gather information they needed to participate. Some agencies said support offered through PDP helped them justify a project to decision-makers and get the project approved.

The project would "probably not [have been done in the absence of SoCalREN]. I've tried to speak with individuals from Edison, got a lot of red tape...Once I started to work with SoCalREN, they did all the leg work. It's very valuable."

We also found that Pathway to Zero projects advance local climate action and support community energy resilience. Pathway to Zero is a non-resource program specifically designed to provide both energy efficiency project delivery services, educational information and resources on DERs, and enhanced technical DER services (through the BMCTA subprogram) within agencies serving DAC and underserved communities.¹¹ While no DER installations¹² occurred in 2020 or the first half of 2021 during the evaluation period, we found that the pathway to GHG reductions through Pathway to Zero was clear.

¹¹ Pathway to Zero, through CPUC ratepayer funds provide public agencies with high level educational information and resources on DER and sustainability strategies. Once an agency confirms which strategies they are interested in pursuing based on the Pathway to Zero Report deliverable, they are then offered comprehensive technical support through BMCTA/CEC funds. The nuance between ratepayer funded and allowable EE activities is the high level education & resources vs. non-ratepayer funded in depth technical assistance. The CPUC allowed for REN to provide DER educational info but not technical assistance.

¹² There was support given for future DER projects. This is described under Building Capacity and Economic Resilience. Only trackable energy savings are described under A1.

Finally, SoCalREN's Metered Savings Program, as a resource acquisition program, directly contributes SoCalREN-claimable savings. The Metered Savings Program offers agencies a new way to access SoCalREN's support services using normalized metered energy consumption (NMEC), a methodology that calculates energy savings at the meter. Through the Metered Savings Program, public agencies can receive support for projects that would often otherwise be left stranded.¹³ Participants may also receive support services through the PDP and Pathway to Zero; however, only non-duplicative services are captured under SoCalREN's Metered Savings Program. Our evaluation reviewed SoCalREN's Metered Savings Program at a high level, but we did not specifically collect data on this program since it is a newer program and there was only one participating agency (with multiple projects) at the time of our evaluation.

In total, SoCalREN PDP and Pathway to Zero channeled 10.15 M first year gross kWh, 1,026 kW, and 2,402 therms of savings to resource programs in 2020 and have shown even more success in delivering savings from projects started prior to the pandemic.¹⁴ While much of these energy savings are not claimable by SoCalREN, the savings were supported by SoCalREN's program efforts.¹⁵ As such, we conclude that all of SoCalREN's Public Sector programs lead to trackable energy savings and GHG reductions.

This value is identified in the green shapes within the Public Sector logic model. See Figure 3.

A2. Access to EE Benefits (Equity)

SoCalREN's Public Sector portfolio, specifically Pathway to Zero, is designed to focus resources to identify and educate champions, garner energy savings and GHG reductions, and install DERs in public agencies that are in communities classified as low-income, rural, and/or DACs. In 2020, SoCalREN supported 4 Pathway to Zero projects in DACs¹⁶ (of 59 total projects completed in 2020). In addition, the Public Sector programs provided 27 BMCTA-supported benchmarking efforts, 13 DER audits and 4 additional DER services to agencies serving DACs.

SoCalREN also initiated a data-driven annual process to assess local equity needs within the Public Sector - their Equity Action Plan. SoCalREN's implementer (TEC) identified public agencies that are underserved and have a more difficult time participating in standard program offerings. For example, in 2021, this included Title 1 schools which may not be located in a DAC community, but that have a significant number of low-income students (as determined through use of federal funding to meet school educational goals).

In addition, SoCalREN engaged five Regional Partners to help them engage agencies who have not participated in SoCalREN programs in the past. These Regional Partners also ensure the unique needs of agencies in their geographic sphere of influence are considered and addressed by SoCalREN. These partners are helping SoCalREN expand and enhance their Public sector offerings to meet agencies where they are and encourage program participation.

We found that SoCalREN's efforts to target DAC and underserved agencies directly aligns with the CPUC's Equity segment objectives.

This value is identified in the orange shapes within the Public Sector logic model (Figure 3).

A3. Building Energy Capacity & Economic Resilience (Market Support)

Through our evaluation effort, we also found multiple ways in which SoCalREN's Public Sector programs build capacity and economic resilience:

¹³ According to SoCalREN, before NMEC, some projects could not be channeled into a resource program and became stranded without EE programs to help see them through to implementation.

¹⁴ In 2019, SoCalREN reported that their PDP and P2Z supported construction completion of 17.6 million kWh, 707 kW, and 15,203 therms, much of which was channeled into IOU 2019 claimed savings. (Note that the timing of program savings and when they are claimed by the IOUs can cause some discrepancies in the reported numbers.)

¹⁵ SoCalREN is in the process of working with the IOUs to determine whether there is a way to attribute savings to the REN even if counted by the IOU. All projects supported by PDP or Pathway to Zero are currently flagged as SoCalREN supported in IOU databases.

¹⁶ Many projects in Pathway to Zero eligible territories were initiated before the program was launched and so they were classified as PDP projects when completed in 2020. After the launch of Pathway to Zero, all new projects within the eligible territory were funneled through the DER DAC, or Pathway to Zero, channel.

- The PDP and Pathway to Zero programs build capacity by helping agencies overcome staffing and resource constraints (as described above). Note that the capacity¹⁷ described was primarily shorter-term (i.e., for the length of the multi-year project), but it was also clear that it was critical to project completion.
- The PDP, Pathway to Zero, and Metered Savings programs help public agencies gain access to their energy usage data and in some cases, benchmark their facilities. As mentioned above, there were 27 on-site BMCTA audits conducted using outside funding. There were also 23 CEA reports delivered in 2020. These efforts provide agencies with a way to gain knowledge about their usage and opportunities to save energy in their facilities, which increases their capacity to make energy use and savings decisions. Better energy use decisions increase the agency's economic resilience over time. We note that benchmarking may also fulfill AB802 requirements.
- Through the Public Sector programs, SoCalREN also helps agencies identify and leverage non-CPUC funding (such as CEC funds for the BMCTA on-site benchmarking and DER technical assistance, California's Prop 39 funding or CEC Energy Conservation Assistance Act (ECAA) loans). Leveraging these outside funds helps agencies invest more into the communities (described next) and ultimately support economic resilience at the community level.

Uniquely for this sector, the programs have the added benefit of freeing up money for other community (or societal) needs (e.g., the \$ agencies save on energy though SoCalREN's programs reduces expenditures for the agency). Some participating agencies directly reported how saving energy helps the community by keeping taxes low (i.e., saving energy by the agency helps save taxpayers money since the agency needs less revenue to cover its costs). One described how maintaining equipment reduces larger, periodic replacement expenditures which helps to stabilize taxpayer rates over time.

"We'll be able to operate more efficiently, save money on energy bills, which helps save residents money...My overhead will be less with the energy costs reduced. The money goes somewhere else or stays in my department so I can spend it on something else."

"EE benefits to residents help us so that we don't need more tax revenue. Last thing we want to be is a tax and spend kind of group. We try to be very efficient."

SoCalREN has started to build longer-term capacity by training agency staff through their Capacity Building sub-program. In 2020, SoCalREN offered a multi-session capacity building training series to help agency staff learn about energy efficiency fundamentals of lighting and HVAC, demand side management techniques, operations and maintenance in the time of COVID-19, and an overview of energy assessments, screening audits, and equipment selection. The first training series took place in October 2020. Of the 21 agencies with staff who attended at least one course (25 staff),¹⁸ most attended Course 1: Energy Efficiency Fundamentals (20 agencies, 23 staff), many attended Course 2: Energy Assessments (19 agencies, 21 staff), and the fewest attended Course 3: Energy Systems (14 agencies, 16 staff).

Fourteen agency staff responded to a post-training series test.¹⁹ When asked if the training series provided the attendees with new skills to help them make more informed decisions about energy and facility management, responding agency staff gave an average score of about 4.25 out of 5,²⁰ indicating that they did gain these new skills. Responding agency staff gave an average rating of about 3.75²¹ when asked if, by leveraging the skills learned, they anticipated an opportunity to reduce reliance on external technical support. The slightly lower score indicates slightly lower confidence that the courses may help to reduce their reliance on external technical support.

All of these capacity building and economic resilience program efforts are aligned with the CPUC Market Support segment objectives.

This value is identified in the maroon shapes within the Public Sector logic model (Figure 3).

¹⁷ This capacity would not necessarily be longer-term capacity that would exist beyond the length of the project.

¹⁸ Most agencies were cities (16). Other agency types included school districts (2), county parks (1), Metrolink (1), and public works (1).

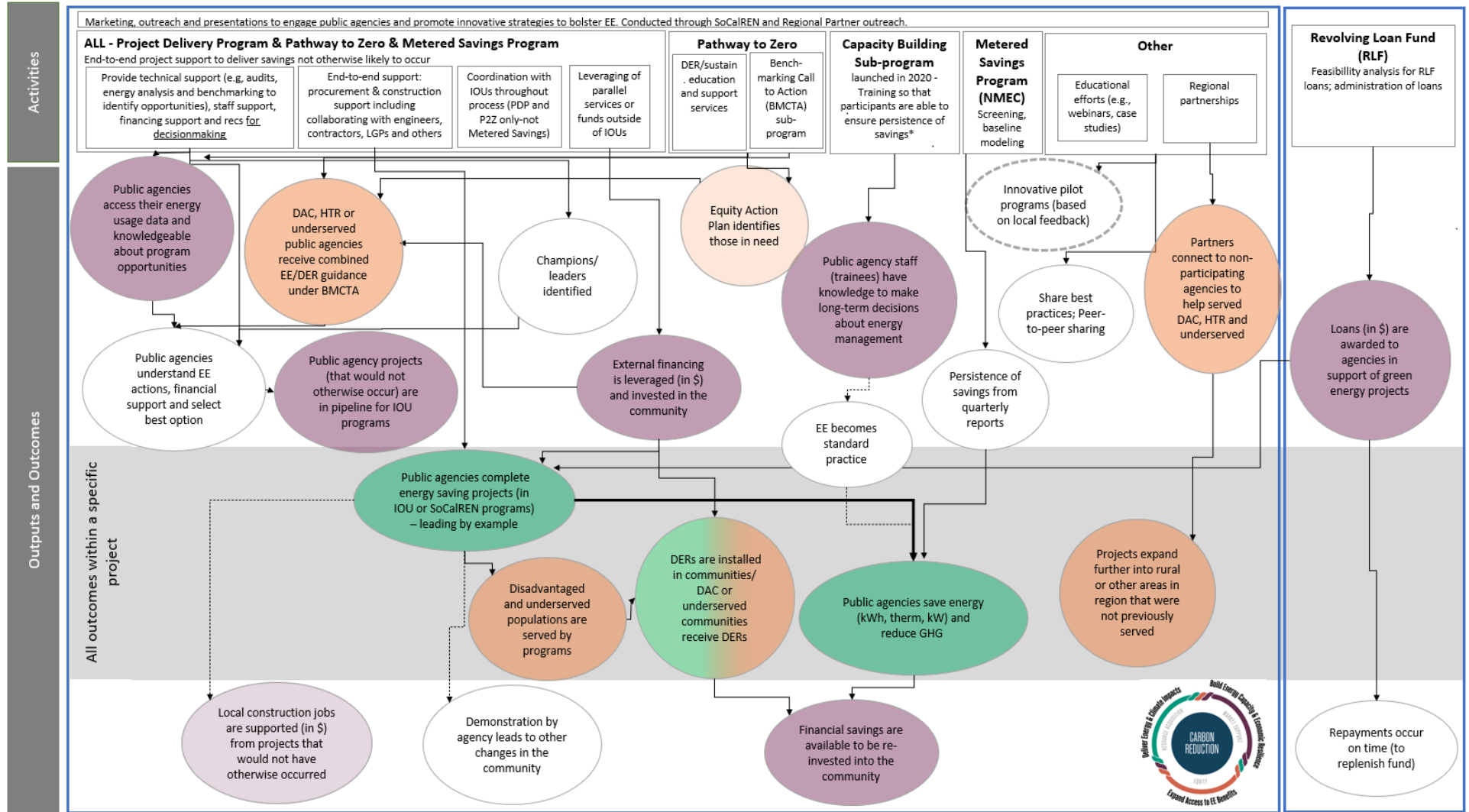
¹⁹ This was fielded by TEC. The evaluation team did not collect data on the capacity building sub-program.

²⁰ Two agencies gave a rating of 3, seven agencies rated it a 4, and five agencies rated it a 5.

²¹ One agency gave a rating of 2, four agencies rated it a 3, six agencies rated it a 4, and three agencies rated it a 5.

Figure 3. Public Sector Logic Model

PUBLIC SECTOR Logic Model



B. Assessment of three CPUC REN Criteria (Public Sector)

All three of the CPUC's directives for RENs (i.e., fill gaps, serve HTR markets, pilot innovative solutions) are supported by SoCalREN's Public Sector programs.

The evaluation team found solid evidence that the programs fill a gap, serve DAC and underserved populations (such as schools that serve low-income populations), and provide innovative solutions.

B1. Solid evidence that Public Sector programs fill gaps

According to participating agencies, it is hard for many under-resourced public agencies to benefit from the CPUC's energy efficiency offerings. While IOUs offer financial incentives, the gap identified by participating public agencies was a lack of staffing resources and knowledge of how to navigate both IOU programs and public processes to get projects approved. Our evaluation collected direct evidence that the Public Sector programs (PDP and Pathway to Zero) lead to projects that otherwise would not have occurred under IOU program efforts. One participating agency captured how SoCalREN's Public Sector programs fill a gap.

"The RENs and The Energy Coalition have really transformed the way that energy efficiency projects are delivered by offering a lot more technical assistance, handholding, project management, procurement, financing and funding support. You know, to think about all the work that any one individual would have to go through on their own to get an energy efficiency project done without all of that help. It's really crazy to think that we would be able to achieve the goal that we have at the local and the state level when it comes to energy without that kind of assistance."

In addition, our evaluation found that SoCalREN is starting to fill a gap left by the discontinuation of Southern California Edison's (SCE) local government partnership (LGP) efforts. Specifically, SoCalREN is initiating Regional Partner specific strategies to support local needs. According to participants, the discontinuation of LGPs by the IOUs leaves a gap that SoCalREN is helping to fill.

While we did not delve deeply into the Capacity Building or BMCTA sub-programs, the value of those efforts – both in terms of offering a service that the other PAs do not, i.e., filling a gap, and providing assistance that is needed by some agencies – was clear to the evaluation team. Notably, however, not all agencies have the ability to benefit from the Capacity Building sub-program because they cannot dedicate the time to training. Specifically, agencies without adequate time or staff cannot benefit since they do not have the time to put into this training; thus, they see more value in SoCalREN acting as an extension of their staff rather than training their own under-resourced public agency staff.

B2. Solid evidence that Public Sector programs serve underserved (e.g., DAC) markets

The evaluation team also found strong evidence that SoCalREN's programs directly support DACs and underserved populations. As described above, Pathway to Zero specifically targets disadvantaged communities, providing additional support for green projects through the program's DER educational services. SoCalREN also provides BMCTA-supported DER audits and on-site benchmarking efforts to agencies serving DAC or HTR markets.

B3. Some indication that Public Sector programs include pilot offerings with innovative solutions

SoCalREN's new Metered Savings Program (an NMEC program) may fit the CPUC criteria of an innovative solution or filling a gap. Based on the evaluation team's review, it was not immediately clear.²² We found distinction between the SoCalREN and IOU NMEC offerings in the details of the program designs outlined in the JCM and through our discussions with REN and IOU staff. Specifically:

- SoCalREN's Metered Savings Program provides staffing and technical support with no financial incentives to public agencies
- IOU NMEC offering for public agencies provides financial incentives for savings without the more extensive staffing and technical support
- According to SoCalREN, the Metered Energy Savings Program also offers Quarterly Savings Reports to help participants ensure persistence of savings. Staff training is also offered, as needed, to ensure persistence of

²² According to SoCalREN, savings thresholds for participation are different. Also, SoCalREN indicated that they have streamlined program processes and approves applications in less than a fraction of the time, reducing the cost of delay to public agencies seeking to move forward on projects.

savings, and applications are processed quickly and efficiently to avoid the costs of delay. SoCalREN representatives also indicated that SoCalREN's Metered Savings Program offers a streamlined process compared to IOU NMEC offerings; it provides expedited reviews of project applications (30 days), whereas SCE project application reviews average 200 days. Note that this was not verified through the evaluation effort.

However, the distinction between SoCalREN's offering and the IOU offering could be difficult for stakeholders to observe or deduce based on the program name, available descriptions, and general discussions about the programs. To more clearly demonstrate how the program is aligned with the CPUC's directives, SoCalREN should clarify the Metered Savings Program's intended value and whether it is designed to fill a gap in offering staffing and technical support to public agencies, or if it is an innovative solution not previously available in the market (i.e., program without financing that may be scalable without incentives). The need for SoCalREN to be clearer about whether and how the program fills a gap or offers an innovative solution is restated in the recommendations section below.²³

Because there was only one participant during the evaluation period, and because we were unable to reach this participant, we did not fully evaluate the Metered Savings Program. We were unable to gather information to understand the participant's perspective on this offering.

Based on these findings, our recommendations for the Public Sector are laid out below.

C. Public Sector Recommendations

Below we first present recommendations related to the CPUC's REN Criteria, followed by a list of value metrics that should be collected for the Public Sector.

C1. Recommendations related to CPUC's REN Criteria

Based on the findings above, SoCalREN should continue to clearly document how all programs meet the CPUC's REN criteria. This can be done within SoCalREN's Annual Reporting effort. In addition, SoCalREN should:

- Consider how to distinguish the Metered Energy Savings Program better from the IOU NMEC offering (if the IOU offering continues). This could be as easy as having a more distinctive name in the BBAL or Business Plan (e.g., Agency Savings through Technical Support) or providing more distinct activities.

C2. Recommendations related to Value Metrics

Based on the value described above, we recommend that SoCalREN Public programs collect data that demonstrates the value of this sector (depicted in Figure 4). The specific value of the sector includes:

- **Delivering Energy & Climate Impacts** (Resource Acquisition through IOUs, SoCalREN Metered Savings Program, and outside of programs)
 - Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings
 - Public agencies save energy and reduce GHG through SoCalREN's innovative program offerings, specifically a new NMEC solution (or other innovative or gap filling offering in the future)
 - Channeled energy and GHG reductions (claimable by IOUs) due to SoCalREN's guided and supported services
 - Public agencies save energy and reduce GHG because of SoCalREN guidance and support through IOU programs (i.e., channeled savings)
 - Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported services
 - *DERs/EV/sustainability projects occur in enrolled communities lead to energy savings and/or GHG reductions outside of EE programs
- **Expanding Access to EE Benefits** (Equity, specifically Pathway to Zero)
 - Equity-targeted populations served by SoCalREN programs
 - Public agencies in DAC and underserved areas participate in SoCalREN programs

²³ As a note, SoCalREN is proposing to offer incentives in 2022/2023, with enhanced incentives for underserved communities, thus the program would target hard to reach markets.

- DAC or underserved public agencies receive combined EE/DER guidance e.g., under Pathway to Zero and BMCTA
- Regional Partners engage DAC and underserved public agencies who otherwise would not be served by EE programs
- Projects expand into rural or other areas in region that were not previously served (i.e., underserved)
- Energy savings in equity-targeted populations (sub-set of what is under resource acquisition)
 - Public agencies in DAC or underserved areas save energy and reduce GHG
- Utility bill savings in equity-targeted populations (in estimated dollars saved)
 - Public agencies in DAC or underserved areas save on their utility bills
- Additional benefits (Non-Energy Benefits) in equity-targeted populations (while supporting green energy and energy saving projects)
 - Given the recent CAEECC working group discussions, the evaluation team expects that the CPUC will be interested in this data in the future. Note that SoCalREN should consider collecting information from public agencies and MF in DAC and underserved areas to understand other benefits (e.g., health and safety benefits) that may result from their interaction with the SoCalREN programs.

SoCalREN's Public Sector programs also have initiated an Equity Action Plan to identify local underserved populations. While is this currently only for the Public Sector, SoCalREN may want to expand this type of a plan to cover additional sectors, and to document how they plan to engage local and equity-targeted communities. Note that engaging equity-targeted populations is an area that was discussed during the CAEECC Equity Metrics Working Group – and an area where the CPUC will likely provide future direction.

- **Building Energy Capacity & Economic Resilience** (Market Support through PDP and Pathway to Zero)
 - Increased demand for energy efficient products or services among SoCalREN targeted groups
 - Public agencies access their energy usage data and are knowledgeable about program opportunities
 - Public agency staff (trainees) have knowledge to make long-term decisions about energy management
 - Public agency projects (that would not otherwise occur) are initiated and completed because of SoCalREN guidance and support (e.g., leveraging resource programs)
 - Access to capital for green energy and energy saving projects
 - Public agencies have access to additional capital because SoCalREN leveraged non-CPUC funds (in \$) for investment in the community
 - Public agencies leverage loans that support green energy projects
 - Additional participant benefits (which accrue while supporting green energy and energy saving projects)
 - Public agencies have financial savings available to re-invest into the community

The value from the Public Sector is summarized in the figure below. A detailed table listing the specific data to collect (i.e., the measurement of the value stated above) is included in Attachment 1. Detailed Value Metrics.

Figure 4. Summary of Public Sector Value



After the CPUC reviews the CAEECC working group proposals and provides guidance on the final segment-specific metrics, SoCalREN should revisit the Public Sector metrics to determine if there are additional data points that should be collected. SoCalREN should also confirm whether underserved groups within the Public Sector (e.g., Title 1 schools) are being captured in the CPUC's definition of underserved and which segment is the best place for each program

Residential-Multifamily Sector Assessment

As of September 2020, SoCalREN offered one core program in the Residential Sector, which targets multifamily buildings and tenant units:

- **Multifamily Program (SCR-RES-A1)** – SoCalREN launched the Multifamily (MF) Program in 2013, targeting low-income and market rate MF properties in the combined service territory of Southern California Edison (SCE) and Southern California Gas (SoCalGas). This program has evolved over the past eight years, and currently relies on a contractor network to provide both common area and tenant unit measures.

In addition, a second residential program was ramping up within the Residential Sector during our evaluation period.

- **Kits 4 Kids (SCR-RES-A4)** - This is a new program that was in the design phase during the evaluation period. The evaluation team did not attempt to collect data for this program.

At the time of this evaluation, SoCalREN was also developing a multifamily loan program, but that program ended in September 2021 so was not included in this forward-looking evaluation effort.

A. Value of the RES-MF Programs

SoCalREN's Residential Sector resource program focuses on the MF segment and targets (approximately 50%) investments in buildings in Disadvantaged Communities (DAC).

Based on feedback from participants, Regional Partners, and our assessment of SoCalREN's program data, the evaluation found value in three areas.

SoCalREN's MF Program: (1) most strongly "delivers energy & climate impacts" since it produces energy savings, 2) expands the benefits of EE by targeting services to buildings in DACs, and 3) builds the energy capacity of contractors through one-on-one mentoring.

A1. Deliver Energy & Climate Impacts (Resource Acquisition)

SoCalREN's MF Program is a resource acquisition program that contributes to climate action and sustainability goals through direct support of energy saving projects. The program helps MF properties achieve electric and gas energy savings, seeking deep and comprehensive energy savings for building owners and tenants. The program has a history of delivering savings. In 2019 (prior to the pandemic), the program was able to reach 61 projects and provided 5.7 net GWh, 0.36 net MW and 0.35 net MM Therms. In 2020, MF Program stakeholders continued delivering savings by overcoming barriers associated with the COVID-19 pandemic. That year, the program successfully served 29 properties and 5,994 tenant units, delivering 1.9 Net GWh and 0.13 MM net therms of energy savings in 2020 alone (Figure 5).

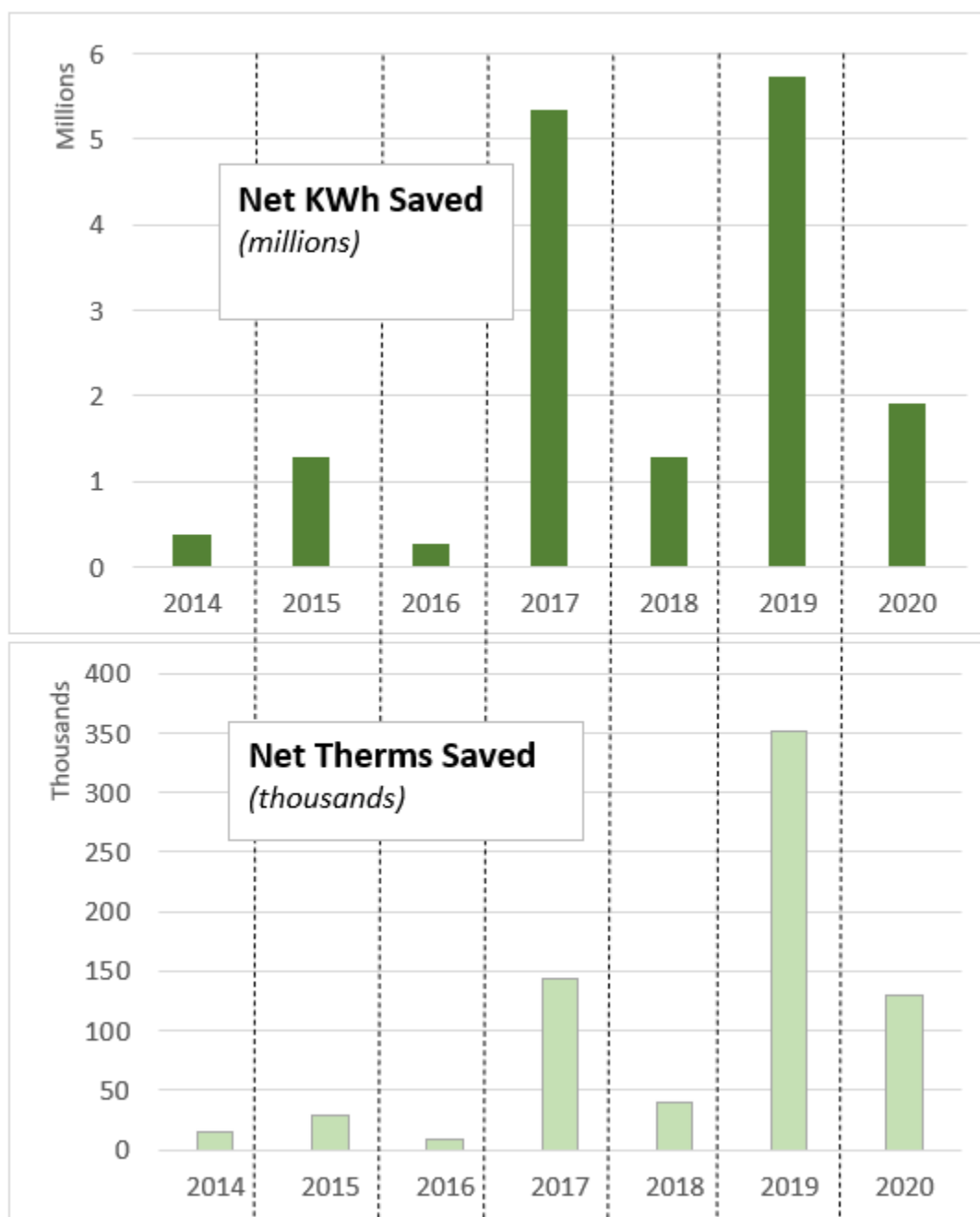
Residential-MF Sector Data Collection and Review

The RES-MF sector assessment drew on:

- Interviews with the implementer (ICF)
- In depth interviews (20 total)
 - 12 of 90 participating multifamily owners/property managers (2019-2020 participants)
 - 1 near participant
 - 7 of 13 participating contractors
- Interviews with IOUs in the MF Sector
- Review of program materials and data
 - PIPs, census data, tracking databases, Joint Cooperation Memo (JCM) with IOUs

All interviews took place in April-June 2021.

Figure 5. SoCalREN's MF Program Has A History of Delivering Savings



This value is identified in the green shapes within the Residential-MF Sector logic model (Figure 6).

A2. Expanding Access to EE Benefits (Equity)

SoCalREN's MF program seeks to distribute program funds in support of equity goals by directly targeting DACs and rural or urban HTR communities through Regional Partnerships and through the program's own marketing.

Through our review of program data, the evaluation team found clear evidence that the 2020 program served DACs. More than half (52%) of all 2020 projects served DACs, resulting in projected energy savings and lower utility bills for both owners and tenants. The program provides enhanced services through higher incentives (75% cap) for DAC properties.

Most DACs the program served in 2020 were located in 5 of the 12 counties within SoCalREN's service area. At the time of this evaluation, SoCalREN was actively building a network of Regional Partners to support service expansion to more

DACs in HTR or rural areas.²⁴ Among these partners, two directly serve rural areas (i.e., expanding into rural areas). The other two are working to target MF participants not previously served through the program (i.e., expanding into other underserved populations). This value is identified in the orange shapes within the Residential-MF Sector logic model.

A3. Building Energy Capacity & Economic Resilience (Market Support)

The evaluation also found evidence that SoCalREN's MF Program builds contractor capacity by providing one-on-one mentoring or coaching and online training in partnership with ICF. These efforts support contractors to become more knowledgeable about energy efficient technologies and to identify energy saving opportunities at properties. One participant stated:

"I've been in the multifamily energy efficiency space for over 10 years now and through ICF we've been able to gain a lot of knowledge on how a lot of these measures directly impact and support Multifamily communities."

In addition, the program supports job attainment, although it is unclear if these are jobs with local contractors (which would help lead to a strong economy in the local community) or if they support contractors who reside and work primarily outside of SoCalREN's area.²⁵

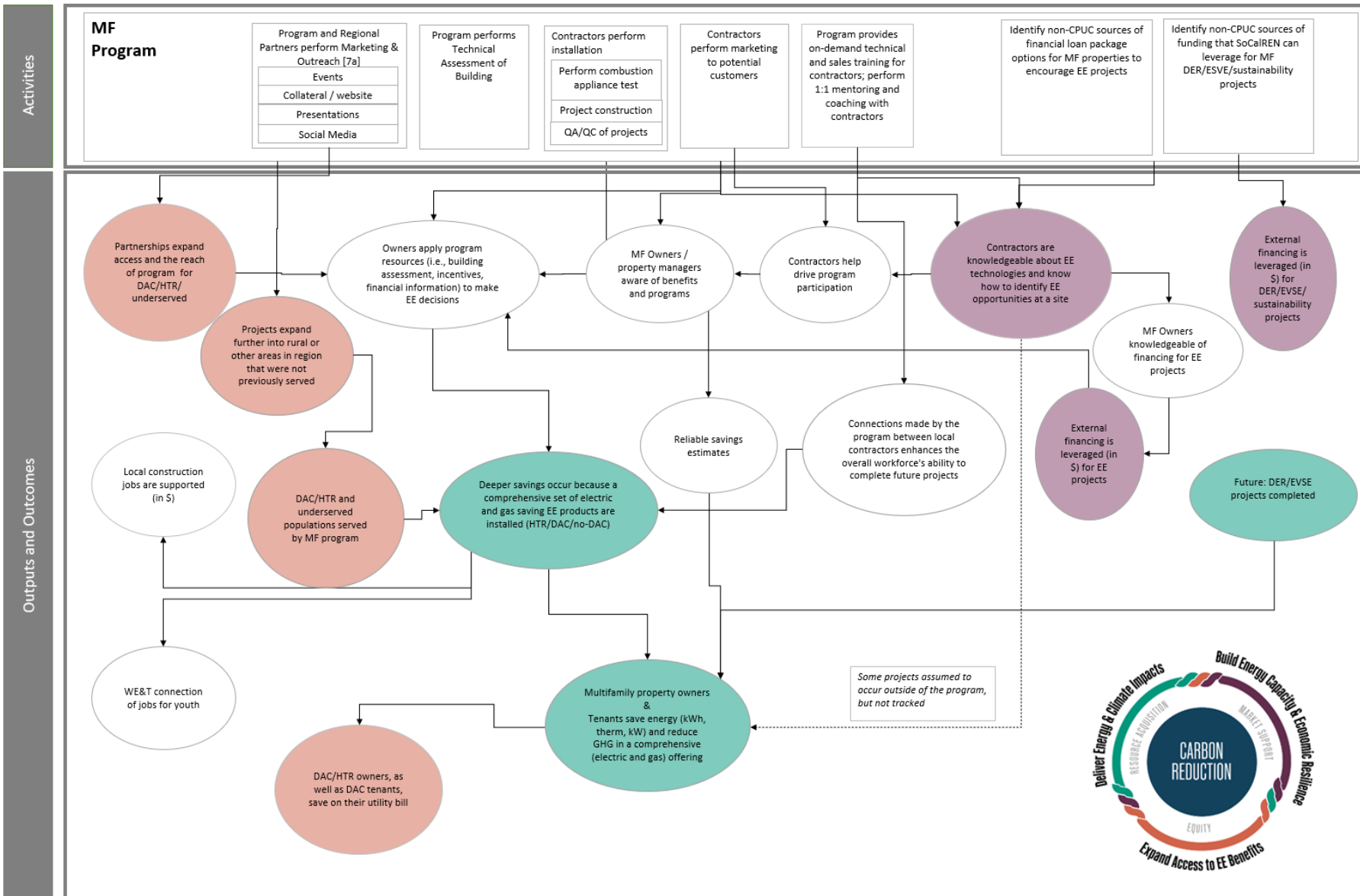
This value is captured in the maroon shapes within the Residential-MF Sector logic model.

²⁴ We note that since Regional Partners were added 2021, there was no evidence-to-date of savings in rural areas and/or program funds being distributed to rural areas. This is an area that SoCalREN should explore in the future.

²⁵ This may be an area for SoCalREN to explore and/or track in the future.

Figure 6. Multifamily Logic Model

RES-MF Logic Model



B. Assessment of three CPUC REN criteria (RES-MF Sector)

The evaluation team found solid evidence that SoCalREN's MF Program serves a population that is hard to reach (specifically, DACs); but it was not immediately clear whether the MF Program fills a gap. We note that if the focus of the program (in the future) is stated as an "Equity" focus (rather than "Resource Acquisition"), then the program does not need to "fill a gap" since CPUC guidelines state that RENs can offer programs that serve underserved markets, "whether or not there is a current IOU program that may overlap." We did not assess the MF program as an innovative offering since it was not presented as an innovative offering.

B1. Solid evidence that MF program serves disadvantaged communities

As described above, the MF program targets and serves DACs as well as non-DAC multifamily buildings (i.e., 52% of projects and 57% of all units served were in DACs). Notably, in interviews, IOU staff described how SoCalREN's ability to target and serve multifamily DACs (due to not having a TRC constraint) was a distinguishing feature from an IOU program offering.

IOUs, however, also acknowledged that they try to serve these communities as well. In reviewing the JCM, SoCalGas multiprogram description states "the [SoCalGas] Multifamily Whole Building Program recognizes the specific needs of Hard-to-Reach customers and those within Disadvantaged Communities; its incentive structure allows for higher incentive amount to assist with project costs." In addition, SCE's Multifamily program description in the JCM states, "The program's primary objective is to meet SCE's business plan goals and achieve deeper savings through comprehensive energy management solutions. An additional objective is to increase EE adoption rates by targeting MF residential sub-segments including hard-to-reach (HTR) customers and/or those in disadvantaged communities (DACs)."²⁶

Notably, MF is sometimes described as an underserved community. If MF is considered (by the CPUC) to fall under the definition of underserved, the program would have a strong focus on equity (with the ability to overlap with other PA programs since overlap is permitted with equity-related efforts); however, the current definition of underserved is still being discussed.

B2. Evidence that the MF program distinctly offers an electric and gas (described as a comprehensive) program and thus fills a gap, but its uniqueness is not immediately clear from a customer or regulator perspective since many of the past and future MF offerings are referred to as comprehensive

SoCalREN is able to offer a "more comprehensive" multifamily program because they can offer *both* electric and gas measures, which is different than the Southern California IOUs (SoCalGas and SCE), which are only able to offer single-fuel programs.²⁷ However, this is not a clear distinguishing feature given the complex residential marketplace. While the JCM lays out the differences in incentives or approach across the IOUs and RENs²⁸ - and the recent CPUC evaluation²⁹ indicates that the JCM process is adequate with no concerns about overlap from those who run the programs - the IOU multifamily offerings appear similar to SoCalREN's offering to those who are not versed in how to interpret the JCM. Moreover, future MF programs by IOU third-parties (3Ps) may also appear to be similar from the customer (and potentially, regulator) perspective. As such, it is difficult to easily identify how SoCalREN's program fills a gap in the marketplace.

At the time of the evaluation effort, SoCalGas had two MF programs – a single-measure rebate program and DI program – both of which *only* offer gas measures but not do not include electric measures which are available through the SoCalREN program. Additionally, SCE did not offer an *electric* MF program at the time of evaluation as they terminated their MF program offering in 2020. SoCalREN's program is the only local program that offers measures that address both end uses.

We note, however, that in interviews, IOUs mentioned that any gap was likely a temporary gap that they anticipate will be filled soon by third parties (although we note that they would still, only focus on one fuel type). The directive to fill a gap is challenging in a marketplace where the programs are changing. However, SoCalREN's JCM does call out where

²⁶ As noted above, REN offerings do not need to be unique if serving underserved populations.

²⁷ We note that the IOUs do, sometimes, have co-branded programs between electric and gas utilities.

²⁸ SoCalGas does not offer a dual fuel program (except in LADWP). SCE offers a deemed rebate, PLAs and a direct install but they no longer offer a comprehensive (must install 3 measures program that is custom incentive based).

²⁹ March 2021. Assessment of Regional Energy Networks - Draft Report, CPUC Contract Group B: Deliverable 22B Year 2 Study.

the incentive structure, available measures and delivery model are in different combinations from the IOU MF offerings. Notably, a recent CPUC evaluation (*Assessment of Regional Energy Networks, CPUC Contract Group B: Deliverable 22B Year 2 Study*³⁰) acknowledged that it is a challenge for the RENs to ensure they are filling a gap (long-term) since they do not have insights into the IOU process.

In the recommendations section below, we offer recommendations to more clearly define SoCalREN's value proposition to the multifamily market.

C. Residential-MF Sector Recommendations

Below we first present recommendations related to the CPUC's REN Criteria, followed by a list of value metrics that should be collected for this program.

C1. Recommendations related to CPUC's REN Criteria

Based on the findings above, SoCalREN should:

- Clearly document how the MF Program and other, newer residential programs not included in this evaluation meet the CPUC's REN criteria. This can be done within SoCalREN's Annual Reporting effort.
- Consider whether the MF Program best fits within the Equity segment (where it can overlap with other programs) or the Resource Acquisition segment (where it would need to be clearly distinguished from the IOU efforts).
- If SoCalREN seeks to distinguish their program in the marketplace, consider enhanced offerings or a revised program name:
 - One "enhanced" option that SoCalREN is currently considering is whether the program can leverage non-CPUC funds to offer a more comprehensive EE/DER/EV program offering, which would more clearly distinguish the program from other similar Resource Acquisition offerings. If so, SoCalREN should collect data about DER/EV projects that occur at MF sites as a value metric (also listed below).
 - SoCalREN may also want to consider a more **distinctive program name** that would allow MF customers and contractors to better understand the uniqueness of the SoCalREN program.

C2. Recommendations related to Value Metrics

Based on the value described above, we recommend that SoCalREN Residential programs collect data to demonstrate the value of this sector (also depicted in Figure 7). The specific value of the sector is bulleted below and the specific data elements supporting each of these value propositions are described in Attachment 1. Detailed Value Metrics.

- **Delivering Energy & Climate Impacts** (Resource Acquisition)
 - Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings
 - Multifamily property owners save energy and reduce GHG in a comprehensive (electric and gas) offering
 - Tenants save energy (kWh, therm, kW) and reduce GHG in a comprehensive (electric and gas) offering
 - Deep savings occur at MF properties because a comprehensive set of electric and gas saving EE products are installed
 - Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported services
 - DER/Electric Vehicle Supply Equipment (EVSE) projects at MF sites lead to energy savings and/or GHG reductions outside of EE programs
- **Expanding Access to the Benefits** (Equity)
 - Equity-targeted populations served by SoCalREN programs
 - DAC, HTR and underserved MF are served (e.g., participate)
 - Regional Partners engage MF DAC/HTR/underserved who otherwise would not be served by EE programs

³⁰ September 20, 2021.

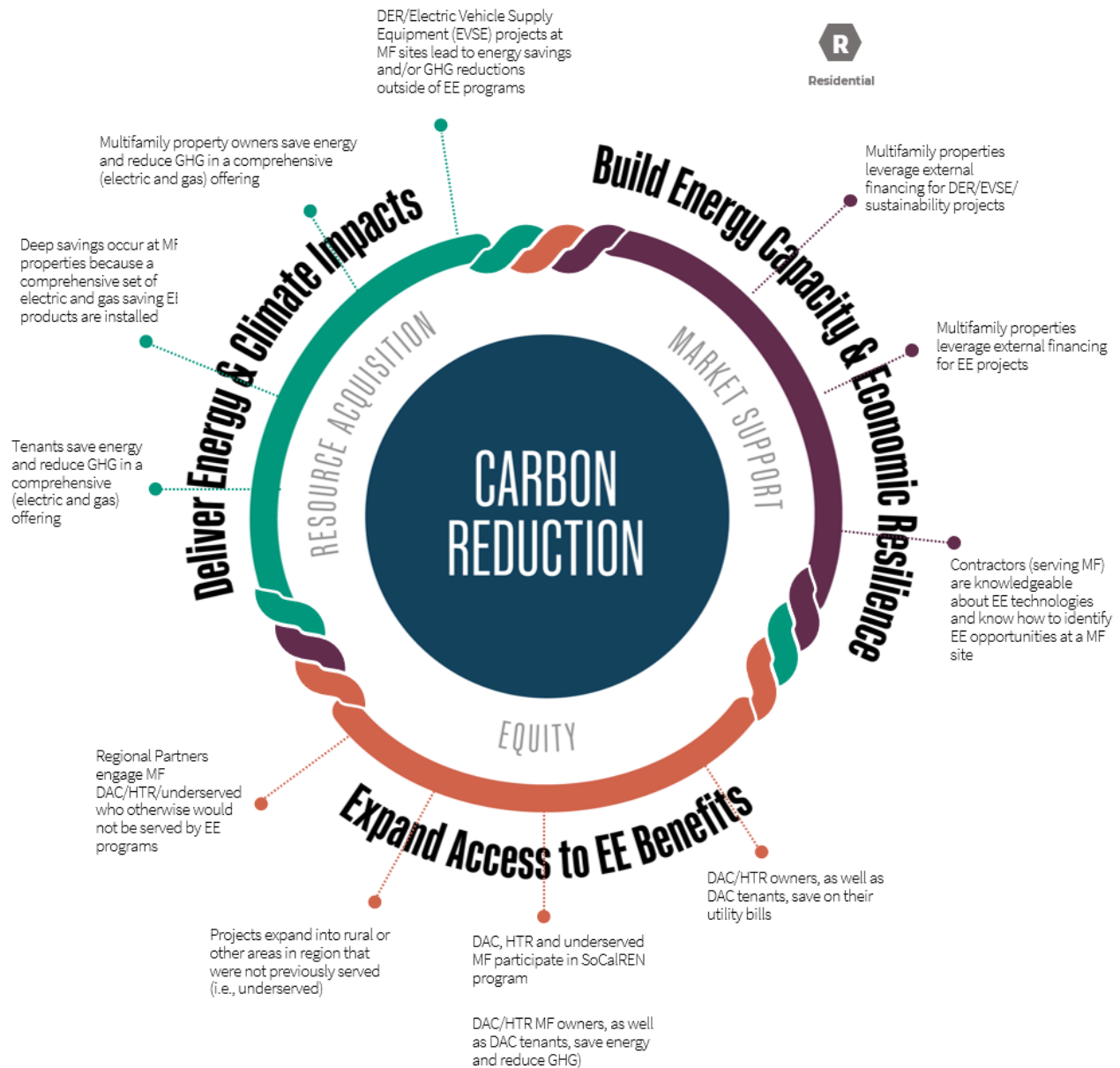
- Projects expand into rural or other areas in region that were not previously served (i.e., underserved)
- Energy savings in equity-targeted populations (sub-set of what is under resource acquisition)
 - DAC/HTR MF owners, as well as DAC tenants, save energy and reduce GHG
- Utility bill savings in equity-targeted populations (in estimated dollars saved)
 - DAC/HTR owners, as well as DAC tenants, save on their utility bills
- Additional benefits (or non-energy benefits, NEBs) in equity-targeted populations while supporting green energy and energy saving projects
 - Note that SoCalREN should consider collecting information from MF in DAC and underserved areas to understand other benefits (e.g., health and safety benefits) that may result from their interaction with the SoCalREN programs.

We recommend that SoCalREN explore how the MF Program builds energy capacity & economic resilience and consider whether to propose other value metrics in this area. This may depend on ability to measure, track, and show related program impacts.

- **Building Energy Capacity & Economic Resilience (Market Support)**
 - Access to capital for green energy and energy saving projects
 - Multifamily properties leverage external (non-CPUC) financing for EE projects
 - Multifamily properties leverage external financing for DER/EVSE/sustainability projects
 - Contractors (as part of the supply chain) better equipped to enable energy efficiency savings
 - Contractors (serving MF) are knowledgeable about EE technologies and know how to identify EE opportunities at a MF site

The value from the Residential-MF Sector is summarized in the figure below. A detailed table listing the specific data to collect is included in Attachment 1. Detailed Value Metrics.

Figure 7. Summary of Residential-MF Sector Value



One additional metric for consideration by the SoCalREN team includes support (in dollars) for local construction jobs. This may or may not be a unique value metric for SoCalREN. If SoCalREN is focused on (and can document) building the connections between the WE&T efforts and the MF program, this would be valuable to track. That is, if the contractors hired through the program are local and/or small and WMDVBE contractors, this could be considered a metric that shows SoCalREN's unique value. Note that if there is no specific effort to focus on local, small or WMDVBE contractors, then this is similar to any program and should not be considered a REN-specific³¹ value metric.

In addition, after the CPUC reviews the CAEECC working group proposals and provides guidance on the final segment-specific metrics, SoCalREN should revisit the MF Program metrics to determine if there are additional data points that should be collected.

³¹ We note that SoCalREN's value extends beyond what we are calling out here, but our evaluation effort focuses on REN-specific value metrics.

WE&T Sector Assessment

As of September 2020, SoCalREN offered one Workforce Education & Training (WE&T) program (SCR WET D1) with several distinct sub-programs:

- Contractor program (formerly, E-Contractor Academies and Workshops)
- Green Path Careers
- Architecture, Construction, Engineering Students (ACES)

SoCalREN partners with Emerald Cities Collaborative (ECC) to implement all WE&T programming. This evaluation focused on the Contractor program. We also explored Green Path Careers and ACES at a high level, but the evaluation team did not conduct an in-depth assessment or collect participant data from these two WE&T Sector sub-programs.³²

Through the Contractor sub-program, contractors can attend a variety of educational sessions including one-day workshops, multi-session training series, and one-on-one coaching. As part of this program, SoCalREN coordinates with ICF to connect contractors to ICF's multifamily program training, and with Southern California Edison (SCE) and Southern California Gas (SoCalGas) to connect contractors with IOU programs and educational opportunities.

A. Value of the WE&T Programs

We found that SoCalREN's Contractor Program provides value in two areas: (1) expanding access to energy efficiency benefits and (2) building capacity among contractors (specifically small and Women, Minority, and Disabled Veteran-Owned Business Enterprises or WMDVBE contractors).

These findings are based on a review of program data, feedback from participants, Regional Partner interviews, and our assessment of the Contractor Program design and implementation as of the time of this evaluation.

A1. Expanding Access to EE Benefits (Equity)

SoCalREN's WE&T offerings are designed to target underserved populations who have not been able to benefit from California's past EE programs due to the barriers they would have to overcome to do so. SoCalREN's WE&T programs seek to build a diverse EE workforce by providing training and education that benefits small, local, and WMDVBE contractors through the Contractor Program, at-risk transitional age (18- to 24-years) former foster youth through Green Path Careers and disadvantaged youth through ACES³³.

To demonstrate SoCalREN's reach and monitor the effectiveness of service delivery to these groups, SoCalREN collects the demographic and firmographic information listed below. This data is critical to demonstrating how SoCalREN serves disadvantaged communities (DAC) through WE&T programming. Further, being able to provide this evidence enables SoCalREN to classify the program within the CPUC's Equity segment rather than Market Support, if desired.

Tracked WE&T Participant Demographics and Firmographics:

- Business Type
- Business Vocation/Trade

WE&T Sector Data Collection and Review

The WE&T Sector Contractor Program assessment drew on:

- Interviews with implementer (ECC)
- Interviews with six contractors who received training, including:
 - General construction, insulation, pest control
 - HVAC
 - Lighting contractor
 - New construction and remodeling
 - Operations and Process Design Specialist
 - Structural ironworker
- Interviews with IOUs (SoCalGas and SCE)
- Review of program materials and data including program tracking, attendance data, survey feedback from trainings and the Joint Cooperation Memo (JCM) with IOUs

All interviews took place in April-June 2021.

³²SoCalREN is planning a WE&T process evaluation for 2022, which will explore all WE&T program efforts in more depth.

³³ ACES is available at the middle school level as early as 7th grade. Prior to COVID workshops and industry days were held for all grade levels K-12. ACES is also available to college students who participated in program while in high school.

- California Certifications
 - Small Business (SBE)
 - Minority-Owned Business (MBE)
 - Disadvantaged Business (DBE)
- Union affiliation status
- Contractor gender
- Contractor race
- Contractor military/veteran status
- Contractor's household income

The evaluation team reviewed WE&T program data. Among the 24 contractors with available detailed registration information, all appear to meet the target criteria of small and WMDVBE contractors (Tables 4 and 5).³⁴ Given this information, we can see that SoCalREN is targeting underserved populations and we believe that SoCalREN will be able to demonstrate their focus on small and WMDVBE contractors. However, this is based on the limited information available to the evaluation team at the time of the study. Therefore, the findings in the table below should not be considered as an assessment of how well SoCalREN reached and served small and WMDVBE contractors during the study timeframe.

Table 4. WE&T Contractor Firmographics, August 2019 to February 2021

Contractor Characteristics	One-Day Workshop Only Attendees	Academy Session Only Attendees	Attendees of Both	TOTAL
Certifications	3	8	13	24
Small Business Enterprise (SBE) only	0	3	3	6
Minority-Owned Business (MOB) only	0	0	1	1
Both SBE and MOB	1	1	7	9
Neither SBE nor MOB	2	4	2	7
Business Type	3	8	13	24
Corporation	2	7	10	19
Limited Liability Corporation (LLC)	1	0	2	3
Sole Proprietorship	0	1	1	2
Union Affiliation Status	3	8	13	24
Not a union contractor	2	7	10	19
Union contractor	1	1	3	5

Source: SCR_Training_Workshops_2019-2020_v2.xlsx received on March 26, 2021.

Note: SoCalREN collected other firmographics not shown in the table including number of employees, single and aggregate bond capacity, history of working on a public works project, US SBA size standards – not to exceed annual revenue amount

Table 5. WE&T Contractor Demographics, August 2019 to February 2021 (n=24)

Contractor Characteristics	One-Day Workshop Only Attendees	Academy Session Only Attendees	Attendees of Both	TOTAL
Gender	3	8	13	24
Male	3	6	10	18
Female	0	2	3	5

³⁴ Of the contractors in the full list, detailed registration information was only available for 24 who completed the registration online. Registration information for all other contractors was available in hard copy only (136 in total), which the evaluation team was unable to access due to COVID-19 restrictions which did not allow the implementer access to the building with the files.

Contractor Characteristics	One-Day Workshop Only Attendees	Academy Session Only Attendees	Attendees of Both	TOTAL
Household Income	3	8	13	24
< \$35k	1	3	3	7
\$36k to \$51k	0	0	3	3
\$52k to \$64k	1	2	0	3
> \$65k	1	3	7	10
Race	3	8	13	24
African American	2	1	5	8
Asian	0	0	1	1
Asian American	1	0	2	3
Garifuna	0	0	1	1
Hispanic	0	3	2	5
Native Hawaiian and Pacific Islander	0	0	1	1
White	0	4	1	5
Military Status	2	7	13	22
Disabled Veteran	1	0	2	3
Not a Veteran	0	7	8	15
Veteran	1	0	3	4

Source: SCR_Training_Workshops_2019-2020_v2.xlsx received on March 26, 2021.

As we describe above, SoCalREN's efforts to target small and WMDVBE contractors aligns with the CPUC Equity segment objectives.

This value is identified in the orange shapes within the WE&T Sector logic model. See Figure 8.

A2. Building Energy Capacity & Economic Resilience (Market Support)

SoCalREN's WE&T sub-programs also build energy-efficiency related capacity in contractors, youth, and transitional age (18- to 24-years) young adults.

The Contractor program seeks to increase contractors' ability to complete energy efficiency projects by building foundational knowledge and skills that equip contractors to successfully bid on public sector projects (Public Sector Pathway), deliver SoCalREN's Multifamily program offerings (Multifamily Pathway), and access contractor opportunities from IOUs (IOU Pathway).

- Public Sector Pathway.** The Public Sector pathway begins with contractors who participate in the Academy Level 1 and Level 2 series and/or one-on-one coaching. Level 1 is designed to help contractors meet eligibility requirements that would enable them to bid on public agency projects. Level 2 is designed to support contractors through the bidding process, from start to finish, as they submit real bids for currently available public agency projects. Contractors join an Academy series as a cohort where attendance to at least 3 sessions within the series constitutes completion of the whole series. SoCalREN helps contractors access certifications through the Public Sector pathway as needed. Through one-on-one coaching, contractors can access customized, individual support to identify and address the steps they need to take to ready their businesses for competitive bidding.
- Multifamily Pathway.** SoCalREN, in partnership with ICF, offers a one-day workshop to introduce contractors to the Multifamily program offering. This in-depth orientation acts as an on-boarding platform for contractors to pursue becoming an official provider of SoCalREN's Multifamily offering. The Multifamily Pathway includes in-

depth trainings delivered by ICF through an online learning center platform. Contractors can log-in to the platform and complete trainings at their own pace.

- **IOU Pathway.** SoCalREN collaborates with SoCalGas and SCE to share information with contractors and help contractors understand the licensing or certification requirements that contractors will need to bid on IOU projects. Through this collaboration, SoCalGas and SCE also opened their educational offerings to contractors participating in SoCalREN's Contractor program. At times, SoCalGas and SCE provide training specifically for the Contractor program.

We found that workshops and Academy series helped contractors break into the energy efficiency market and keep up with industry trends.

"On a personal level, I've never dealt with energy efficiency programs, so the workshops helped me understand what the demands were, how to develop this for customers who don't know about it. They helped me feel equipped to expand this program out."

In addition, the Level 1 Academy series helped equip contractors to submit competitive bids for public agency energy efficiency projects.

"Getting the knowledge on different subjects and learning what the playing field is about as far as bidding on projects with local utilities and contract companies (has been helpful). Our company is now better prepared on what to expect and what's required for project bids. (Receiving information on) creating our statement as a business, that describes our services, submitting bid processes, reporting process on payroll, OSHA requirements in this process has all been really informative."

The ACES and Green Path Careers programs seek to provide youth³⁵ and at-risk, transitional age (18- to 24-years) adults with technical skills, key workforce certifications, and job experience to set participants up to successfully pursue a career in clean energy. While not verified through this evaluation effort, SoCalREN leverages outside funding sources, strategic partnerships, and professional networks to connect ACES and Green Path Careers participants to internships and job opportunities.

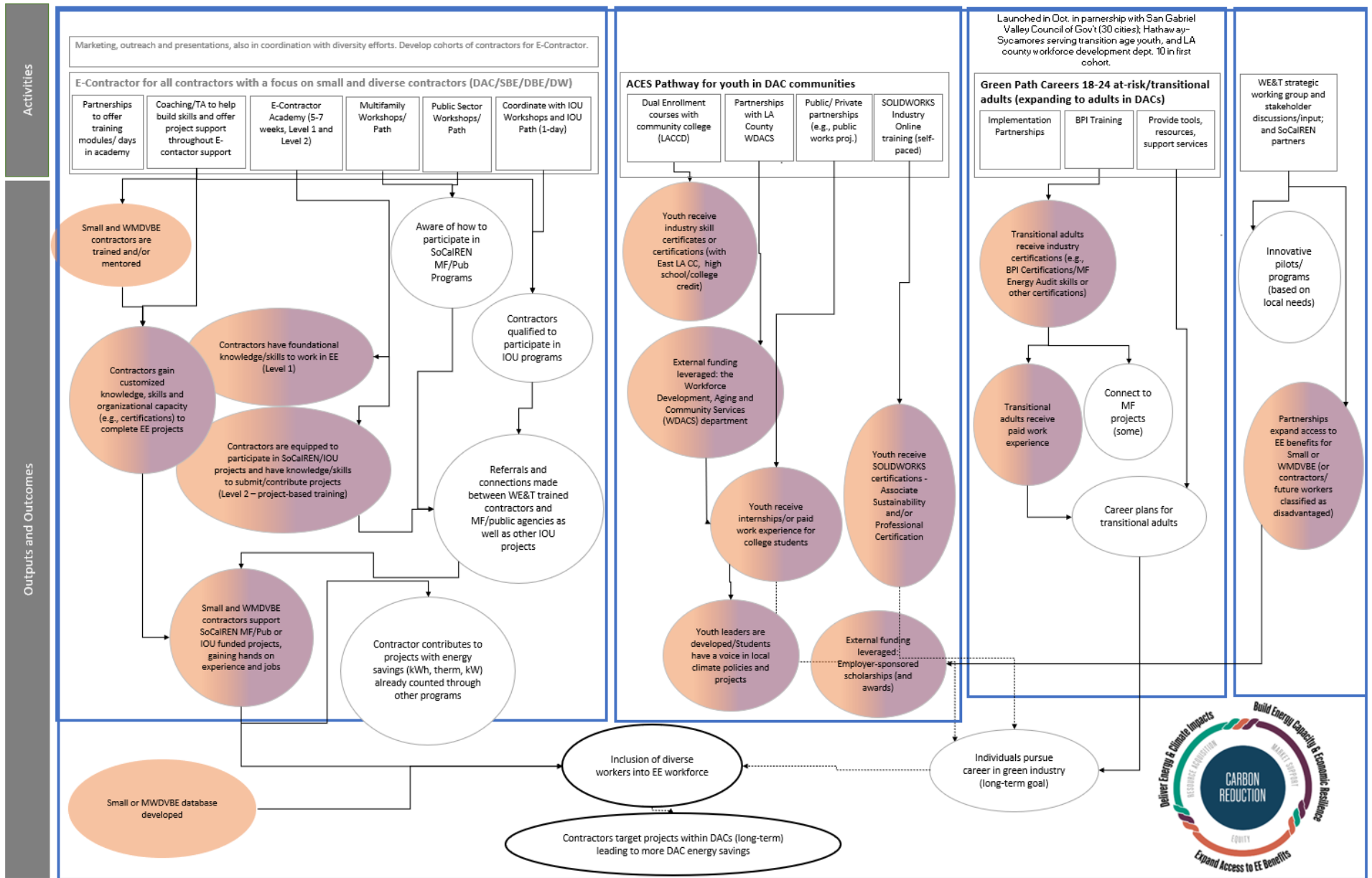
All of these capacity-building efforts align with the CPUC Market Support segment objectives.

This value is identified in the maroon shapes within the WE&T Sector logic model. Note that these are two-toned in the logic model to express that when the target is aligned with disadvantaged workers or populations that meet the CPUC's definition of HTR, DAC or underserved, these same efforts also support Equity segment objectives.

³⁵ See footnote on ACES above regarding ages and breadth of "youth."

Figure 8. WE&T Logic Model

WE&T Logic Model



B. Assessment of three CPUC REN criteria (WE&T Sector)

The evaluation found that two of CPUC's criteria for RENs are met by SoCalREN's WE&T Sector Contractor Program.

We note that Green Path Careers and ACES, which were not assessed in depth in this evaluation, may further support all three of the CPUC's REN criteria. We begin by presenting the evidence around serving disadvantaged and underserved audiences since this appeared to be the strongest value for the WE&T sector.

B1. Solid evidence that the WE&T Sector Contractor Program serves disadvantaged and underserved audiences

As described above, SoCalREN's WE&T programs are designed to engage small and WMDVBE contractors, disadvantaged youth, and at-risk transitional age (18- to 24-years) former foster youth. This is both clear in the program theory, and in the data collected by the program. When discussing SoCalREN's Contractor Program, both REN and IOU staff stated that SoCalREN's contractor offerings are geared toward minority and diverse contractors. In addition, data in the tables above support that this is happening. As such, there is strong evidence that SoCalREN's program is reaching and delivering services to underserved markets.

B2. Solid evidence that the WE&T Sector Contractor Program fills a gap

SoCalREN's WE&T offerings appear to be distinct from IOU offerings both because of who they target and because of the services that they provide. In interviews, IOU staff felt that there was no duplication of or wasted efforts between IOU and SoCalREN offerings. IOU staff identified that:

- SoCalREN's program targets a different audience. SoCalREN's offerings focus more on contractors who are newer to energy efficiency and clean energy projects while IOUs offerings tend to be geared more toward established contractors in the energy efficiency space.
- SoCalREN's offerings focus very much on getting contractors involved in LA County projects (although SoCalREN's focus notably narrow to just this county) while IOUs focus on their full service territories beyond county boundaries.

We note that PG&E will roll out a statewide WE&T program offering soon that may or may not overlap with SoCalREN's offering.³⁶ The IOUs we spoke with, and who collaborated with SoCalREN at the time of this study (not PG&E), were *not* fully knowledgeable about PG&E's statewide WE&T program development efforts as non-PG&E IOUs simply provide funds to the statewide program.

Our recommendations for the WE&T Sector are laid out below.

C. WE&T Sector Recommendations

Below we present recommendations related to the CPUC's REN Criteria just described, followed by a list of value metrics that should be collected for this sector.

C1. Recommendations related to CPUC's REN Criteria

Based on the findings above, SoCalREN should continue to clearly document how all programs meet the CPUC's REN criteria. This can be done within SoCalREN's Annual Reporting effort.

In addition, SoCalREN should:

- Explore any possible overlap with the statewide WE&T program
- Conduct a follow-up WE&T process evaluation to ensure value is able to be tracked for all components of SoCalREN's WE&T program
- Explore whether WE&T could be expanded to help bring in new rural contractors to support the MF program's expansion to rural areas since this is a gap in the Residential-MF Sector
 - Note that SoCalREN's current WE&T offerings appear to be heavily focused on the LA county area (rather than rural areas)

³⁶ An "Energize Careers" program targeting disadvantaged workers (implemented by Strategic Energy Innovations) and an "Energy is Everything" program targeting K-12 educators and students (implemented by The Energy Coalition).

C2. Recommendations related to Value Metrics

SoCalREN will need to grapple with whether to classify the Contractor Program as an Equity program or a Market Support program since it aligns with both segments.³⁷ While we observe that the Contractor Program “promotes economic and workforce development opportunities in ESJ communities” (as desired by the CPUC’s ESJ Goal 7) in alignment with Equity, several of the metrics in this sector also align with the Market Support metrics proposed by the CAEECC (e.g., number of contractors trained to support quality EE installations).

We also observed that the program trains contractors in alignment with Market Support. We found that SoCalREN runs the Contractor Program to be inclusive of a broader audience when participant space is available. In building capacity and serving a broader audience whenever possible, SoCalREN’s Contractor Program may be better positioned under Market Support. However, if the program is classified as Market Support, the distinction from IOU WE&T offerings may become less clear.

Based on the value described above, we recommend that SoCalREN collect information to demonstrate SoCalREN’s progress toward realizing this value (also depicted in Figure 9). Note that SoCalREN’s WE&T program already tracks many of these datapoints recommended below.

- **Expanding Access to EE Benefits (Equity).** SoCalREN’s WE&T programs do this by establishing a workforce development pipeline resulting in a more diverse workforce and more local contractors who will serve underserved populations (e.g., DAC and HTR) in the future, leading to the following.
 - Inclusion of diverse workers in EE workforce
 - Small and WMDVBE contractors are trained through workshops, classes, or customized mentoring and some receive new certifications as a result of SoCalREN support³⁸. These are “agency” certifications based on ownership structure
 - Equity-targeted populations served by SoCalREN programs
 - *Partnerships expand access to EE benefits for small and WMDVBE (or those classified as DAC/HTR). Specifically, partnerships lead to paid work experience or other opportunities for equity-targeted audiences

Note that several metrics related to building a more diverse workforce are captured under the Market Support category below.

We also think that SoCalREN may want to call out its small or WMDVBE database since this is a valuable effort to help expand access to EE benefits.

- **Building Energy Capacity & Economic Resilience (Market Support)** SoCalREN’s WE&T programs do this by building up the skills of contractors, leading to the following.
 - Contractors (as part of the supply chain) better equipped to enable energy efficiency savings
 - Contractors have foundational knowledge/skills to work in EE (from Level 1 training)
 - Contractors are equipped to participate in SoCalREN/IOU projects and have knowledge/skills to submit/contribute projects (Level 2 – project-based training)
 - Contractors gain customized knowledge, skills and organizational capacity (e.g., certifications) to complete EE projects
 - Contractors are equipped to participate in SoCalREN/IOU projects and have knowledge/skills to submit/contribute projects (Level 2 – project-based training)
 - External financing leveraged to support workforce

While our review did not cover Green Path Careers or ACES in depth, we also suggest the following value be tracked for these program efforts:

- Future workers are better equipped to enable energy efficiency savings

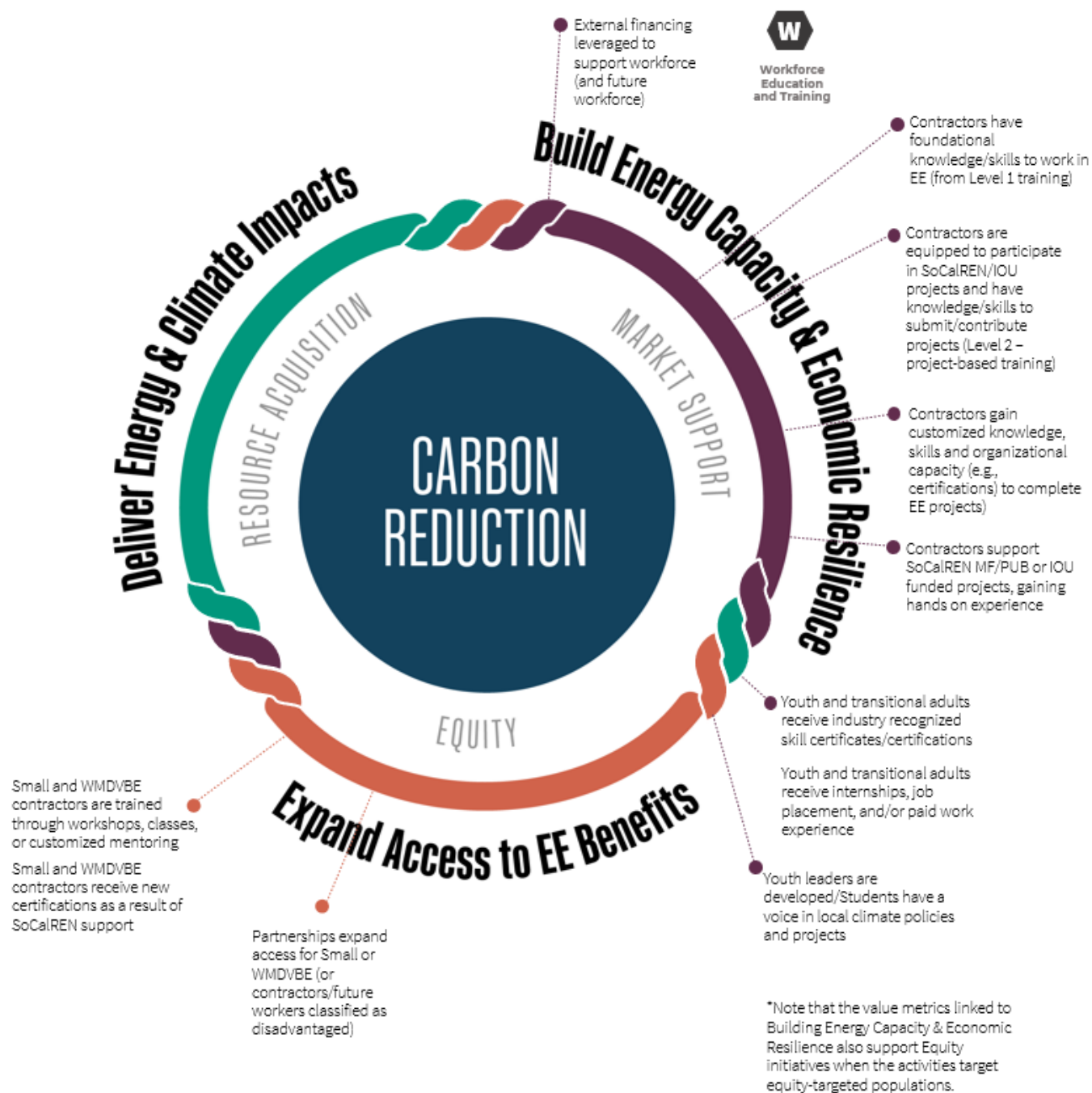
³⁷ We note that the Green Path Careers and ACES programs may also support both categories.

³⁸ For example, contractors have to prepare financial docs for DVBE certification. SoCalREN would help with this effort. Each certification required different levels of support.

- External financing leveraged to support (future) workforce
- Youth and transitional adults receive industry recognized skill certificates/certifications (e.g., skill certificates with East LA CC and high school/college credit, SOLIDWORKS Associate Certification, BPI Certifications/MF Energy Audit skills or other certifications). These are industry or professional certifications based on the development of new skills.
- Youth and transitional adults receive internships, job placement, and/or paid work experience
- Increased demand for energy efficient products or services among SoCalREN targeted groups
 - Youth leaders are developed/Students have a voice in local climate policies and projects

The value from the WE&T Sector is summarized in the figure below. A detailed table listing the specific data to collect is included in Attachment 1. Detailed Value Metrics.

Figure 9. Summary of WE&T Sector Value



Summary of Proposed Value Metrics

Below we summarize the evaluation team's recommended value metrics. These are metrics to highlight the value of SoCalREN's offering that we described in earlier parts of this report.

We note that several of these metrics overlap with Common Metrics (or CPUC-required metrics), such as kWh, kW, therms and tons GHG reduced. The categories of metrics proposed below are also generally aligned with the new direction to categorize efforts by segment (i.e., CAEECC working group proposals). Because the overarching categories are generally aligned with what other PAs are providing, we recommend including the more detailed language shown in the sub-bullets to better highlight SoCalREN's value. The specific language in the sub-bullets can change over time as the programs evolve. In addition, SoCalREN may choose to add sub-bullets or categories as they develop new programs and activities.

The summary by core value area is listed below. This list should be considered a starting point for consideration by the SoCalREN team. Targets, when needed, would be for the sector-level value metric (i.e., those sub-bullets without asterisks).

Below we provide value metrics related to each of the core value areas.

Note that we use the term Value Metric to refer to both metrics (with targets) and indicators (which do not have targets) because both of these highlight SoCalREN's value. **An asterisk (*) indicates that there is no planned target.** These are indicators that speak to the gap filling or innovative nature of savings that occur as a result of SoCalREN's programs.

Delivering Energy & Climate Impacts (Resource Acquisition-related Value Metrics)

SoCalREN Value Metrics related to Resource Acquisition

- Energy³⁹ and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings
 - Public agencies save energy and reduce GHG through SoCalREN's innovative program offerings, specifically a new NMEC solution (or other innovative or gap filling offering in the future)
 - Multifamily property owners save energy and reduce GHG in a comprehensive⁴⁰ (electric and gas) offering
 - Tenants save energy (kWh, therm, kW) and reduce GHG in a comprehensive (electric and gas) offering
 - *Deep savings occur at MF properties because a comprehensive set of electric and gas saving EE products are installed
- Channeled energy and GHG reductions (claimable by IOUs) due to SoCalREN's guided and supported services
 - Public agencies save energy and reduce GHG because of SoCalREN guidance and support through IOU programs (i.e., channeled savings)
- Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported services
 - *DERs/EV/sustainability projects occur in enrolled communities lead to energy savings and/or GHG reductions outside of EE programs
 - *DER/Electric Vehicle Supply Equipment (EVSE) projects at MF sites lead to energy savings and/or GHG reductions outside of EE programs

Expanding Access to EE Benefits (Equity Value Metrics)

³⁹ Although TSB is a CPUC-required metric, we do not call this out as a value metric (e.g., one that expresses the unique value that the RENs provide over and above other PAs). RENs are working to improve cost-effectiveness and TSB, and these will both be important to track and report in the Annual Report.

⁴⁰ Note that the evaluation team suggest that SoCalREN be specific about what comprehensive means (e.g., electric and gas), or determine a better term to use since all PAs describe their MF offerings as comprehensive. SoCalREN may want to use a term such as multifuel offering.

SoCalREN Value Metrics related to Equity

- Equity-targeted populations served by SoCalREN programs
 - Public agencies in DAC and underserved areas participate in SoCalREN programs
 - *DAC or underserved public agencies receive combined EE/DER guidance e.g., under Pathway to Zero and BMCTA
 - DAC, HTR and underserved MF participate in SoCalREN program
 - *Regional Partners engage DAC and underserved public agencies who otherwise would not be served by EE programs
 - *Regional Partners engage MF DAC/HTR/underserved who otherwise would not be served by EE programs
 - *Projects expand into rural or other areas in region that were not previously served (i.e., underserved)
 - *Partnerships expand access Small or WMDVBE (or contractors/future workers classified as disadvantaged)
- Energy savings in equity-targeted populations (sub-set of what is under resource acquisition)
 - Public agencies in DAC or underserved areas save energy and reduce GHG
 - DAC/HTR MF owners, as well as DAC tenants, save energy and reduce GHG
- Utility bill savings in equity-targeted populations (in estimated dollars saved)
 - *Public agencies in DAC or underserved areas save on their utility bills
 - *DAC/HTR owners, as well as DAC tenants, save on their utility bills
- Inclusion of diverse workers in EE workforce
 - *Small or WMDVBE contractors are trained and/or mentored (i.e., “served”)
 - Note that several metrics related to building a more diverse workforce are captured under the Market Support category below
- Additional benefits (Non-Energy Benefits) in equity-targeted populations (while supporting green energy and energy saving projects)
 - Given the recent CAEECC working group discussions, the evaluation team expects that the CPUC will be interested in this data in the future. Note that SoCalREN should consider collecting information from public agencies and MF in DAC and underserved areas to understand other benefits (e.g., health and safety benefits) that may result from their interaction with the SoCalREN programs.

SoCalREN’s Public Sector programs also have initiated an Equity Action Plan to identify local underserved populations. While this is currently only for the Public Sector, SoCalREN may want to expand this type of a plan to cover additional sectors, and to document how they plan to engage local and equity-targeted communities. Note that engaging equity-targeted populations is an area that was discussed during the CAEECC Equity Metrics Working Group – and an area where the CPUC will likely provide future direction.

Building Energy Competency & Economic Resilience (Market Support Value Metrics)

SoCalREN Value Metrics related to Market Support

- Increased demand for energy efficient products or services among SoCalREN targeted groups
 - *Public agencies access their energy usage data and are knowledgeable about program opportunities
 - *Public agency staff (trainees) have knowledge to make long-term decisions about energy management
 - *Youth leaders are developed/Students have a voice in local climate policies and projects
 - Public agency projects (that would not otherwise occur) are initiated and completed because of SoCalREN guidance and support (e.g., leveraging resource programs)
- Access to capital for green energy and energy saving projects
 - *Public agencies have access to additional capital because SoCalREN leveraged non-CPUC funds (in \$) for investment in the community
 - *Public agencies leverage loans that support green energy projects
 - *Multifamily properties leverage external financing for EE projects
 - *Multifamily properties leverage external financing for DER/EVSE/sustainability projects
- Contractors (and future workers) better equipped to enable energy efficiency savings

- *Contractors (serving MF) are knowledgeable about EE technologies and know how to identify EE opportunities at a MF site
- *Contractors have foundational knowledge/skills to work in EE (from Level 1 training)
- *Contractors are equipped to participate in SoCalREN/IOU projects and have knowledge/skills to submit/contribute projects (Level 2 – project-based training)
- *Contractors gain customized knowledge, skills and organizational capacity (e.g., certifications) to complete EE projects
- *Contractors support SoCalREN MF/Pub or IOU funded projects, gaining hands on experience
- *External financing leveraged to support workforce (or future workforce)
- *Youth and transitional adults receive industry recognized skill certificates/certifications
- *Youth and transitional adults receive internships, job placement, and/or paid work experience
- Additional participant benefits (which accrue while supporting green energy and energy saving projects)
 - *Public agencies have financial savings available to re-invest into the community

Attachment 1. Detailed Value Metrics

We use the term Value Metric to refer to both metrics (with targets) and indicators (which do not have targets) because both of these highlight SoCalREN’s value. An asterisk (*) indicates that there is no planned target.

The summary by core value area is listed below. This list should be considered a starting point for consideration by the SoCalREN team. Targets, when needed, would be for the sector-level value metric (i.e., those specific sector value metrics without asterisks).

Public Sector Proposed Value Metrics with Detailed Measurements

Public Sector Value Metrics (by Core Value)			
Delivering Energy & Climate Impacts			
Supporting activities with trackable energy savings and GHG reductions within the SoCalREN service area that contribute to local climate or sustainability goals.			
Portfolio-level VM	Specific Sector VM	Measurement(s) (data to collect to support value metric)	Notes
Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings	Public agencies save energy and reduce GHG through SoCalREN's innovative program offerings, specifically a new NMEC solution (or other innovative or gap filling offering in the future)	GHG reductions - as well as kWh/therms/kW counted in SoCalREN Resource Acquisition programs <ul style="list-style-type: none"> → Flag for DAC or non-DAC community → Flag for rural → Flag for low-income → Flag through Regional Partner engagement → Record which SoCalREN program offering 	Currently, this includes savings in SoCalREN's Metered Savings Programs. (See earlier discussion about documenting how the Metered Savings Program meets the CPUC's REN criteria.) By county shown in the internal dashboard.
Channeled (not claimable by SoCalREN) energy and GHG reductions	Public agencies save energy and reduce GHG because of SoCalREN guidance and support through IOU programs	GHG reductions - as well as kWh/therms/kW - from projects supported by SoCalREN <ul style="list-style-type: none"> → Flag for DAC or non-DAC community, → Flag for rural → Flag for low-income → Flag through Regional Partner engagement → Record IOU program where savings are counted 	These are the savings (in addition to the ones in the first row) from SoCalREN efforts that "fill a gap" in IOU offerings because the savings supported through these programs (as described in this document) overcome staffing and technical barriers. By county shown in the internal dashboard.
Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported services	*DERs/EV/ sustainability projects in enrolled communities lead to energy savings and/or GHG reductions outside of EE programs	# of communities and # and type of DERs installed GHG reductions specifically from DERs <ul style="list-style-type: none"> → Flag for DAC or non-DAC community, → Flag for rural → Flag for low-income → Flag through Regional Partner engagement 	Note that the "support" is counted in a table below. This would metrics or indicators that lead to (or are expected to lead to) energy or GHG savings. Note that the Pathway to Zero program only supports DERs in DACs but may be expanded to areas outside of DACs in future. DER Project Proposal includes % progress to ZNE and GHG emissions reductions, which can be used as an estimate of GHG reduction from DER project.

Public Sector Value Metrics (by Core Value)

Expand Access to EE Benefits

Expanding access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities.

Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Equity-targeted populations served by SoCalREN programs	Public agencies in DAC and underserved areas participate in SoCalREN programs *DAC or underserved public agencies receive combined EE/DER guidance, e.g., under Pathway to Zero and BMCTA	Total # equity-targeted (e.g., DAC or underserved) agencies participating in SoCalREN programs Cumulative # of equity-targeted public agencies that benchmark facilities under BMCTA (and # of facilities) Cumulative # of equity-targeted public agencies that receive other EE/DER support (and # of facilities) → Flag for DAC → Flag for other underserved (and describe category)	BMCTA is funded by the CEC and is an Equity initiative. Pathway to Zero focuses on agencies in DACs but agencies in DAC may also participate in other Public Sector programs (e.g., Metered Energy Savings). Supporting DERs is currently an Equity initiative (but effort may expand in the future). This includes information, education and technical assistance support.
	*Regional Partners engage DAC and underserved public agencies	# Regional Partners # non-participating DAC or underserved agencies that the Regional Partners connect to program	Regional Partners help expand the reach of the programs into other areas or agencies not previously served.
	*Projects expand further into rural or other areas in region that were not previously served (i.e., underserved)	\$ investment in areas not previously targeted → Flag for DAC → Flag for rural (and/or through partners) → Flag for other underserved	SoCalREN has been focused on LA and surroundings areas, and should use this to demonstrate a more equitable distribution of funds across counties served and those not yet served (as of 2020), or urban/rural, etc.
Energy savings in equity-targeted populations	Public agencies in DAC or underserved areas save energy and reduce GHG	GHG reductions - as well as kWh/therms/kW in equity-targeted populations → Flag for DAC or non-DAC community → Flag for rural → Flag for low-income	(sub-set of what is under resource acquisition)
Utility bill savings in equity-targeted populations	*Public agencies in DAC or underserved areas save on their utility bills	Estimated utility bill savings for DAC or underserved public agencies	We note that this similar to (and a sub-set of) a metric found within Building Capacity & Economic Resilience, but we call out here as

			well since is most likely to be a metric within Equity.
Additional benefits in equity-targeted populations while supporting green energy and energy saving projects	* Public agencies in DAC or underserved areas receive other benefits as a result of SoCalREN programs	Non-energy benefits (NEBS) <ul style="list-style-type: none"> → Health – “non-energy benefits” in “counts of participants receiving this benefit” → Comfort - “non-energy benefits” in “counts of participants receiving this benefit” → Safety - “non-energy benefits” in “counts of participants receiving this benefit” → Economic or other “non-energy benefits” (as proposed by the PAs or program) in dollars or “counts of participants receiving this benefit” 	Based on the recommendation from the Equity Metrics Working Group, SoCalREN may want to collect information on NEBs that result due to their programs.
*Note that we also think that SoCalREN may want to call out its Equity Action Plan (and perhaps expand that to include information such as that recommended by CSE during the Equity Working Group meeting, e.g., engagement with the community).			

Public Sector Value Metrics (by Core Value)

Build Energy Capacity, Competency & Economic Resilience

Building long-term knowledge and skills for public agencies, contractors, and transitional age youth through workforce education and training that lead to energy competency, policies or other infrastructure & helping local communities build long-lasting, strong, and self-sufficient economies (by supporting projects and investment into communities).

Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Increased demand for energy efficient products or services among SoCalREN targeted groups	*Public agencies access their energy usage data and are knowledgeable about program opportunities	Cumulative # public agencies (and # facilities) that gain access to energy usage data and/or opportunities for savings with SoCalREN help and increase in knowledge about what to do → record by DAC or non-DAC community	Direct support for savings. These would be agencies that received BMCTA or other energy use analyses such as the Comparative Energy Analysis (CEA) and benchmarking support services. There would need to be a report generated or something that could be accessed by an evaluator.
	*Public agency staff (trainees) have knowledge to make long-term decisions about energy management	#s trained and survey indicating knowledge gain	This would be the number of individuals that go through the sub-program. Record agency and role, if possible. We note that the SoCalREN Capacity Building Sub-program already administers an exit survey. This is a newer program element (as of 2020). The Capacity Building Sub-Program was put on hold in 2021.
	*Public agency projects (that would not otherwise occur) are initiated and completed by because of SoCalREN guidance and support (e.g., leveraging resource programs)	# public agency projects delivered for energy savings – tracked by resource program and SoCalREN program (and potentially projects with no additional programs) # of agencies (and # facilities) that participate in SoCalREN programs → Flag for DAC or non-DAC community, → Flag for rural (and/or through partners) → Record program that they are channeled into	Direct support for savings. This is essentially another count of the same energy saving projects shown in the first table but described in a way that meets this core value. Savings are counted in the resource acquisition table, and counts are here. Report as percentage of resource channeled/tracked public projects

Access to capital for green energy and energy saving projects	*Public agencies have access to additional capital because SoCalREN leveraged non-CPUC funds (in \$) for investment in the community	# projects where external (non-public agency/non-IOU) financing was leveraged by SoCalREN; \$ leveraged and source	These are non-ratepayer funds where SCR is the direct awardee. This may include CEC funds, local funds, and funding for any non-CPUC-EE budgets. SoCalREN currently collects some information on BMCTA but should expand, where possible, to collect information about dollars leveraged for non-CPUC projects.
	*Public agencies leverage loans that support green energy projects	# projects where loans were used; \$ loan value	These are non-ratepayer funds where SCR support access to the funding but is not the direct awardee (that is, money awarded to agencies). This may include CEC funds, SGIP or ECAA loans. Where possible, would be good to also collect estimated energy savings for project and % of energy savings supported by loan, but this is currently being reported in \$ not energy savings with the acknowledgement that energy savings may not be available.
Additional benefits	*Public agencies have financial savings available to re-invest into the community	Estimated \$ savings on energy bill for public sites with projects	Public agencies indicate that this is a benefit of the program. \$ savings (available for reinvestment) would be estimated by the program.
Local construction jobs (in \$) are supported from projects that would not have otherwise occurred - \$ dollars and # construction jobs from ARRA (or related) calc, # contractors engaged with SoCalREN efforts. This is a benefit to the region and as such, could be tracked if there is evidence of the funding going to local construction jobs (e.g., due to local procurement policies by the agencies served). If not confirmed to be local, this does not set SoCalREN apart from any other PA program. This still represents a value provided by SoCalREN – and SoCalREN may choose to report it for other stakeholder - it is just not a metrics that distinguishes SoCalREN from other PAs.			

Residential-MF Sector Proposed Value Metrics with Detailed Measurements

RES-MF Sector Value Metrics (by Core Value)			
Delivering Energy & Climate Impacts			
Supporting activities with trackable energy savings and GHG reductions within the SoCalREN service area that contribute to local climate or sustainability goals.			
Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Energy and GHG reductions (claimable by SoCalREN) due to SoCalREN's innovative or gap filling program offerings	Multifamily property owners save energy and reduce GHG in a comprehensive (electric and gas) offering	GHG reduced - as well as kWh/therms/kW - from common area projects supported by SoCalREN → Flag for DAC or non-DAC community, → Flag for rural/HTR (and/or through partners)	See discussion under the Residential-MF section C1. Recommendations related to CPUC's REN Criteria about whether these are savings that "fill a gap" in IOU offerings.
	Tenants save energy (kWh, therm, kW) and reduce GHG in a comprehensive (electric and gas) offering	GHG reduced - as well as kWh/therms/kW - from tenant unit projects supported by SoCalREN → Flag for DAC or non-DAC community, → Flag for rural/HTR (and/or through partners)	See discussion under the Residential-MF section C1. Recommendations related to CPUC's REN Criteria about whether these are savings that "fill a gap" in IOU offerings.
	*Deep savings occur at MF properties because a comprehensive set of electric and gas saving EE products are installed	# projects with both gas and electric savings % savings / baseline usage from model → Flag for DAC or non-DAC community, → Flag for rural/HTR (and/or through partners)	Note that this type of a metric should be considered as a value metric if SoCalREN's program is designed to offer both gas and electric, and get to "deeper" (i.e., specify the percentage goal) savings. With a few exceptions, this is basically 100% of projects as projects typically cannot make the 10% savings threshold without gas measures which save significantly more energy on a kBtuh basis than electric measures. The program should also track # measure types installed at the site, but this is not expected to be a value metric.
Energy and GHG reductions outside of EE-programs due to SoCalREN's guided and supported services	*DER/Electric Vehicle Supply Equipment (EVSE) projects at MF sites lead to energy savings and/or GHG reductions outside of EE programs	# of MF sites that receive DERs/EV, # and type of DERs/EV projects installed; GHG reductions specifically from DERs/EV projects → Flag for DAC or non-DAC community → Flag for rural (and/or through partners)	This is intended for future efforts Record by type of project

RES-MF Sector Value Metrics (by Core Value)

Expand Access to EE Benefits

Expanding access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities.

Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Equity-targeted populations served by SoCalREN programs	DAC, HTR and underserved MF are served	# of participating DAC and HTR MF properties # of tenant units served in DAC or HTR properties	Note that these sites have energy savings included under “Delivering Energy & Climate Impacts”
	* Regional Partners engage MF DAC/HTR/underserved	# of partnerships # of participating contractors in HTR (rural) or underserved areas made aware of the program due to the partner’s marketing # of participating buildings in HTR (rural) or underserved areas made aware of the program due to the partner’s marketing	
	*Projects expand into rural or other areas in region that were not previously served (i.e., underserved)	Program \$ investment by DAC, HTR (e.g., rural) or other targeted “previously underserved” areas	Total incentive payments (but also record all program costs for targeted groups as a percent of total budget). SoCalREN would want to document what hasn’t been served and whether the program is focusing on this. (sub-set of what is under resource acquisition)
Energy savings in equity-targeted populations	DAC/HTR owners, as well as DAC tenants, save energy and reduce GHG	GHG reductions - as well as kWh/therms/kW in equity-targeted populations → Flag for DAC or non-DAC community → Flag for rural	
Utility bill savings in equity-targeted populations	*DAC/HTR owners, as well as DAC tenants, save on their utility bill	Estimated annual bill savings by DAC/HTR owner and the average tenant in DAC or HTR properties.	Bill savings are calculated based on the estimated energy savings from the model and multiplied by the average cost per kWh or per therm (not actual bills). Once TOU becomes mandatory, savings and costs for this metric may need to be determined by time of day. Note that this could be estimated for all facilities and units, but we are calling out those that support Equity initiatives here. We did not see any information on this in the program tracking database

*In future survey efforts of MF participants (or in tracking data, as relevant), SoCalREN should also collect data on non-energy benefits and/or, if measures related to health, safety or comfort are installed.

RES-MF Sector Value Metrics (by Core Value)

Build Energy Capacity, Competency & Economic Resilience

Building long-term knowledge and skills for public agencies, contractors, and transitional age youth through workforce education and training that lead to energy competency, policies or other infrastructure & helping local communities build long-lasting, strong, and self-sufficient economies (by supporting projects and investment into communities).

Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Contractors (as part of the supply chain) better equipped to enable energy efficiency savings	*Contractors (serving MF) are knowledgeable about EE technologies and know how to identify EE opportunities at a MF site	Total numbers trained/mentored and % of contractors who indicated that the 1:1 mentoring, or training increased their energy efficiency knowledge or helped them identify good EE improvements at sites [x of y with any mentoring or training]	Mentoring helps the contractors identify opportunities – how the systems interact with each other and what makes a good EE project for a specific site. However, we note that this is challenging to quantify because much of this mentoring is not formal and happens during discussions while doing site audits or working on SOWs with contractors. It may also happen from interaction with the Energy Efficiency Learning Center (EELC), an on-demand online set of information about specific technology and doesn't have anything to do with a specific site or the program. Monitoring effort may be beyond what is possible by the program. Provide information for rural contractors separately.
Access to capital for green energy and energy saving projects	*Multifamily properties leverage external (non-CPUC) financing for EE projects	\$ leveraged and source # projects where external (non-IOU) financing was leveraged by MF properties due to support by SoCalREN	This is non-CPUC financing used by MF properties (recommended or connected by SoCalREN support services). May occur in the future.
	*Multifamily properties leverage external financing for DER/EVSE/sustainability projects	\$ leveraged and source # projects where external (non-IOU) financing was leveraged by SoCalREN	This allows SoCalREN to expand to non-ratepayer \$ being used for DER projects/EVSE and sustainability projects (in the future).

May also want to consider local construction jobs supported (in \$). This is a benefit to the region and as such, should be tracked if there is evidence of the funding going to local small and WMDVBE contractors (e.g., due to local procurement policies by the properties served). If not confirmed to be local, small WMDVBE, this does not set SoCalREN apart from any other PA program. This type of a metric may cross over to the WE&T value metrics.

WE&T Sector Proposed Value Metrics with Detailed Measurements

WE&T Sector Value Metrics (by Core Value)			
Expand Access to EE Benefits			
Expanding access to energy resources to enhance carbon reduction opportunities and other environmental outcomes for hard-to-reach markets including disadvantaged communities, rural areas, and underserved communities.			
Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Inclusion of diverse workers in EE workforce	Small and WMDVBE contractors are trained through workshops, classes, or customized mentoring	# trained; # mentored # receive new certifications as a result of SoCalREN support ⁴¹ (i.e., contractors without certification pre and with certification post, by certification). These are “agency” certifications based on ownership structure.	SoCalREN should determine a minimum level of engagement that aligns with the program theory and use counts of contractors (e.g., an assessment meeting and follow up support). All contractors have an assessment meeting. They may see this as technical assistance. They would not see it as coaching. The support given to contractors is different based on their needs.
Equity-targeted populations served by SoCalREN programs	*Partnerships expand access for Small or WMDVBE (or contractors/ future workers classified as disadvantaged)	# partners and type of partner; description of benefits	Partnerships for paid work experience or other opportunities
Note that we also think that SoCalREN may want to call out its Small or MWDVBE database since this is a valuable effort to help expand access to EE benefits.			
Note that other related value metrics are currently included under market support, but SoCalREN may choose to put them here if the efforts target underserved since they speak to SoCalREN’s work creating a more diverse workforce.			

⁴¹ For example, contractors have to prepare financial docs for DVBE certification. SoCalREN would help with this effort. Each certification required different levels of support.

WE&T Sector Value Metrics (by Core Value)

Build Energy Capacity, Competency & Economic Resilience

...much of which is targeted at audiences that appear to be aligned with equity definition (see equity definition in table above)

Building long-term knowledge and skills for public agencies, contractors, and transitional age youth through workforce education and training that lead to energy competency, policies or other infrastructure & helping local communities build long-lasting, strong, and self-sufficient economies (by supporting projects and investment into communities).

Portfolio-level VM	Specific Sector VM	Measurement (data to collect to support value metric)	Notes
Contractors (as part of the supply chain) better equipped to enable energy efficiency savings	*Contractors have foundational knowledge/skills to work in EE (from Level 1 training)	# contractors trained through Level 1 (ALL and by diversity category), ave. training hours per participant, knowledge gain (from survey effort)	Knowledge gain would come from Level 1 survey effort completed by implementer.
	*Contractors are equipped to participate in SoCalREN/IOU projects and have knowledge/skills to submit/contribute projects (Level 2 – project-based training)	# participating in Level 2, ave. training hours/participant (ALL and by diversity category), SoW/quals or other outputs from Level 2, knowledge gain (from survey effort)	This is a newer effort. There were no level 2 trainees at the time of our evaluation. Data was not reviewed but would be reviewed in 2022 WE&T process evaluation. Knowledge gain would come from an embedded Level 2 survey effort.
Also, when equity-targeted, supports...	*Contractors gain customized knowledge, skills and organizational capacity (e.g., certifications) to complete EE projects	# contractors mentored (both ALL and by diversity category); knowledge/skills gain (from survey effort)	Knowledge/skills gain would come from survey after mentoring
	*Contractors support SoCalREN MF/Pub or IOU funded projects, gaining hands on experience	# ALL, and Small or WMDVBE contractors that participate in CPUC funded EE projects (as a result of their involvement with SoCalREN program) (by diversity category)	Note that SoCalREN can track if contractors participate in SoCalREN EE projects, but other data would need to be collected through a follow-up contractor survey. This is a newer effort. Data was not reviewed but will be reviewed in 2022 WE&T process evaluation.
Inclusion of diverse workers in EE workforce			

Several of the bubbles in the ACES and Green Path Careers logic model have been combined in the categories below

Contractors and future workers (as part of the supply chain) better equipped to enable energy efficiency savings	*Youth and transitional adults receive industry certifications	# receiving skill certificates by type of certificate	<ul style="list-style-type: none"> • Industry-recognized skill certificates with East LA CC and high school/college credit • SOLIDWORKS Associate Certification • BPI Certifications/MF Energy Audit skills or other certification
	*Youth and transitional adults receive internships/job placement/paid work experience	# of interns/internships; survey of interns to understand knowledge or competencies gained # of job placements; survey Career plans for transitional adults in Green Path Careers (from earlier outcome); Youth who express interest in future green career	This is a newer effort. Data was not reviewed but would be reviewed in 2022 WE&T process evaluation.
Increased demand for energy efficient products or services among SoCalREN targeted groups	*Youth leaders are developed/Students have a voice in local climate policies and projects	Students who participate or contribute to in climate policies and projects (and description of student's efforts or contribution)	This is a newer effort. Data was not reviewed but would be reviewed in 2022 WE&T process evaluation.
Contractors and future workers (as part of the supply chain) better equipped to enable energy efficiency savings	*External financing leveraged to support workforce (or future workforce)	\$ leveraged or invested in internships and to support paid work experience	<ul style="list-style-type: none"> • from the LA County Workforce Development, Aging and Community Services (WDACS) department • through employer-sponsored scholarships (and awards)

Appendices 1-4.

Through our data collection efforts, the evaluation team also provided process-related recommendations to SoCalREN. These recommendations were provided to SoCalREN in mid-2021 and are captured in Appendices 1-4.

These recommendations were provided to SoCalREN over the course of the evaluation period and in many cases, SoCalREN has already taken action to make changes to their program processes in response to the feedback.

Appendix 1. Overarching Process Evaluation

Recommendations

RENs are described as regional EE portfolios administered by local governments.⁴² While Los Angeles County administers SoCalREN and is itself a local government, SoCalREN as an organization does not appear to be fully representative of the 12 county area served by SoCalREN since it does not have representation from all 12 counties. However, it has started to engage Regional Partners to help expand its efforts.

Table 1. Coverage of SoCalREN Services

County	Population Served by SoCalREN	Advisory Committee Members	Regional Partner Coverage (5)
Los Angeles	9.96 million	San Gabriel Valley COG South Bay Cities COG Gateway Cities COG City of Culver City City of Palmdale	San Gabriel Valley COG South Bay Cities COG Gateway Cities COG
Orange	2.6 million	Orange County Power Authority City of Irvine City of Fullerton [moved to OCPA]	
Riverside	2.31 million	Coachella Valley Association of Governments Western Riverside COG	
San Bernardino	2 million	San Bernardino County Transportation Authority	
Ventura	840,000	Ventura County Regional Energy Authority*	
Imperial	160,000		
Tulare	140,000		San Joaquin Valley Clean Energy Organization
Santa Barbara	60,000	Santa Barbara County City of Santa Barbara	
Kings	60,000		San Joaquin Valley Clean Energy Organization
Kern	40,000		San Joaquin Valley Clean Energy Organization
Inyo	10,000		HSEF
Mono	10,000		HSEF
<p><i>Source:</i> Populations, Advisory Committee Members and Regional Partners provided by SoCalREN materials. Advisory Committee Members as of July 2021.</p> <p>* Representative is an employee of the County of Ventura. The Regional Energy Authority is a JPA with the County as the lead.</p> <p><i>Notes:</i> Multifamily projects are currently <u>only</u> in the top five counties. Imperial county does not appear to have representation either through an Advisory Committee Member or Regional Partnership. Imperial County is serviced by SCG only and so there has been limited opportunities to engage this region to promote current SoCalREN programs.</p>			

⁴² https://californiaseec.org/wp-content/uploads/2019/07/SEEC_-RENs-Best-Practices-and-Lessons-Learned_FINAL.pdf

While the Advisory Committee is well run (by TEC) and viewed as a valuable service to the region, it (generally) does not engage local communities⁴³ to inform the program design. However, there are public sector activities that are tied to local groups, such as: an annual public agency survey helps guide and advise public sector program design; public sector workshops where public agencies come together to learn; regional energy meetings that SoCalREN helped to get off the ground and continue to support like the one in Ventura; and non-regional partner COG coordination efforts (WRCOG and SBCOG).

Increase Local Connections

Based on our findings, we recommend that SoCalREN look for ways to increase local connections outside of the Advisory Committee to reflect the expectation of a “Regional Energy Network,” (i.e., Regional EE portfolio administered by local governments).

One option is to utilize Regional Partners more. The Regional Partners have a contractual relationship with SoCalREN, which seems to make them more invested in the programs. The proposed Regional Partner Pilots also offer the opportunity to show that local voices are helping to design SoCalREN’s program offerings since the Regional Partners propose and pilot activities that they feel are needed by their communities.

For Regional Partners, there may be a need to adjust some of the interactions (e.g., overstaffing of meetings with CBOs that have only one representative) or roles (e.g., related to KPIs) slightly. SoCalREN may also want to consider offering different tiers of support based on the Regional Partner’s available resources. For those with resources/time to engage, the Regional Partner would like to take on a larger role (e.g., let the Regional Partner set up the first meetings for Public Sector programs and engage in some of the project management), with technical support by SoCalREN. For those with more limited resources, the current structure of SoCalREN playing the project management role will continue to be valuable.

Appendix 2. Public Sector Process Evaluation Recommendations

Based on our Public sector interviews, we present six process-related recommendations for the Public sector below.

1. Clearly Define and Brand SoCalREN Services

SoCalREN should find ways to more clearly describe to participating agencies and future participants what SoCalREN offers and why. Agencies we spoke with commonly expressed uncertainty about all that SoCalREN offered and sometimes attributed program offerings to TEC or SCE rather than SoCalREN.⁴⁴ While it appears that agencies do experience a seamless delivery of SoCalREN’s offerings through TEC, this seamlessness may inadvertently cause confusion or cloud awareness about SoCalREN’s broader role, purpose, and goals. This is evidenced by the following comments:

- *“The Energy Coalition (TEC) has been excellent and SoCalREN has been pretty much non-existent...” – City*
- *“I associate SoCalREN with TEC staff. I think both liaisons are really good about communication...I work with the two liaisons from TEC and it’s been great. They’re responsible, resourceful and responsive. Are TEC and SoCalREN in formal partnership together?” – City*
- *“From my understanding, SoCalREN was a program that was funded by SCE to provide these rebates as part of a mandate or part of SCE’s broader program, paid to manage getting people to apply and helping them through the application process to get the grant from SCE...It’s all been confusing on SoCalREN versus Lincus versus Energy Coalition. It all goes through SCE, but I’m not sure how it all works...I haven’t looked into it enough, I*

⁴³ Exceptions to this may be the proposed Regional Partner Pilots and WE&T efforts, which partners with local WE&T-focused groups outside of the Regional Partnerships.

⁴⁴ SoCalREN made adjustments to communication practices in 2021 including ensuring that staff properly introduce SoCalREN’s goals, services, and role at the top of key deliverable meetings and any time a new stakeholder is introduced. Examples include TEC staff using SoCalREN screen backgrounds during all SoCalREN external online conferencing meetings, ensuring TEC staff introduce themselves with a SoCalREN title before describing their association with TEC, consistent use of SoCalREN-branded agenda and minutes templates.

don't know what else SoCalREN could offer that we would be interested in, or what they don't offer that we would want." – Wastewater Authority

- *"Apart from surveying our HVAC systems, I don't know what else is available to me [from SoCalREN, in terms of services/rebates provided]. I'm pretty busy in my day so I probably couldn't be actively looking to what SoCalREN could offer me. The only work we've had done (HVAC system audit) is what my rep from SoCalREN informed me on."* – School District

It is important to the success of SoCalREN's programs that participating agencies understand offerings made possible through SoCalREN are *SoCalREN services* (rather than TEC or utility services). A low awareness among participants is an indicator that non-participants may be just as unaware if not more unaware of SoCalREN, which may be a barrier to accessing SoCalREN's services for non-participating agencies. As SoCalREN clarifies messaging for participants, these efforts should carry through to general marketing and outreach practices.⁴⁵

Related to this recommendation about providing more clarity on which services SoCalREN offers, we also recommend that SoCalREN verify the tracking of which SoCalREN services were proposed to agencies during initial meetings with TEC; which the agency accepted, considered or rejected; and which were conducted and/or completed. (See recommendation 6a below.)

2. Streamline (and Prioritize) Communications

SoCalREN should consider ways to incorporate stronger branding (as described above) while also continuing to leverage TEC as a central point of contact with agencies including marketing both for programs and inter-agency collaborative meetings (not including active project updates and activities). We asked agencies about their satisfaction with communications from SoCalREN and their preferred mode of communicating. Agencies recalled receiving emails or phone calls, attending project management meetings with TEC, and attending other meetings like Council of Governments (COG) meetings, although the exact meetings they referred to was unclear. While agencies said their preferred mode of communication in general is email, they also described regularly receiving a high volume of emails and having limited time to dedicate toward opening and reading marketing emails.⁴⁶ Several agencies said that it would be much easier for them to get all of their information about the SoCalREN projects and other opportunities through a single source, their TEC project manager. Interestingly, agencies (at times) associated the project communications as TEC communications and the general marketing (which they saw as less important) as SoCalREN communications.

- *"I prefer to get ideas on all new projects directly from TEC...Anything I do with SoCalREN, I want them to run it through TEC."* – City
- *"I'm not a huge fan of email blasts...sometimes we get webinars through email blasts, a personal email or a close contact email (preferably via TEC) would be really helpful because I'm more inclined to read that thoroughly."* – Wastewater Authority

As described above, many agencies don't really understand what SoCalREN offers, and what is offered by the IOU.

- *"[SoCalREN] may offer many things that I do not know of. They've conducted an audit for us and once we're done with that, I've no idea what else SoCalREN could offer that may benefit the district that I don't know of. There are so many (mass) emails that come through, unless there's a relevant title to it, I don't have the time for more than a cursory read. Scheduling face to face time would enable us to cover more territory, ask more questions, and get specific."* – School District
- *"I haven't been as clued in with SoCalREN (since 2020); I know they're offering webinars but not everyone can attend those so having more regular check-ins (especially during COVID-19) and more communication would be really helpful."* – City

⁴⁵ In 2021, SoCalREN began using attention-grabbing newsletter headlines to help raise awareness of the services they offer. In May 2021, the newsletter headline read, "Don't miss out! Expiring incentive opportunities," and in June 2021 it read, "Funds are limited! Get your facilities benchmarked today."

⁴⁶ In 2021, SoCalREN re-evaluated the frequency of recurring meetings, identified opportunities to combine customer meetings with audit site visits, and integrated a process to ensure customers understand when projects will likely require more of their time and why. For example, custom projects may require interviews to conduct Industry Standard Practice (ISP) studies.

3. Provide Additional Help Identifying Financial Resources and Guiding Agencies through Non-IOU Funding Sources

SoCalREN should consider providing additional referrals for financial resources. This would include expanding beyond referrals for SoCalREN or IOU offerings, providing assistance with applications, and providing support to help manage funding requirements. In interviews, most agencies described appreciating SoCalREN's financial resource support, giving examples of assistance with SCE and SoCalGas program applications and On-Bill Financing (OBF).⁴⁷ Yet, when we asked agencies about opportunities to enhance SoCalREN's public sector programs in general, most described wanting more information about funding resources, including those outside of SoCalREN, SCE, and SoCalGas, like federal, state, and local grants. While SoCalREN has offered grant-focused sub-committee meetings for Advisory Committee members and has recently started to talk about federal financing with their partners, agencies did not seem to acknowledge that they received any help beyond the SoCalREN and IOU offerings.

Beyond identification of these resources, some said that they would want support with applying for these opportunities. Given staffing and budget limitations, agencies felt that they would benefit from project management support that extends to cover related funding requirements (data tracking, reporting). Note that SoCalREN does offer this type of support in some cases (e.g., for agencies that leveraged Prop 39 funds); however, there may be a need to extend this support and/or help agencies be aware of this SoCalREN service.

- *"If there were more grants cities could apply for, or if SoCalREN and the city could apply for grants together, it could accelerate the initiative."* – City
- *"[School District] has sought out funding for multiple things over the years...since we're a small district...sometimes it's a bit of a struggle to apply for a grant and do all the leg work. I didn't know exactly what they could offer but I wanted to know what we could get assistance with. In trying to figure out what we could do and what could benefit us...we realized they could survey our HVAC systems for us (in a portion of the district)."* – School District
- *"Depending on the initiative, every city or utility, or if you touch the water system – you can leverage water funds...there are a ton of grants. It's challenging to go for them. You have to balance grant acquisition rather than use local fund you can control. Financing is one thing that would help cities act quicker. If there are more grants (available to us, that we know of) that we could apply to with SoCalREN's support that would really help accelerate more initiatives."* – City

Advisory Committee members and regional partners comments were in line with this request. One described that funding (for example for efficient street lighting or other outdoor lighting) is a huge need.⁴⁸ While staff support and technical expertise were the most recognized SoCalREN services, the highest need (not currently met by the program) appears to be funding of projects.

OBF (and more recently, SoCalREN's Revolving Loan Fund, RLF) are available options; however, these options may not work for all agencies. Not all agencies seemed to think that OBF was a good fit for them. For some agencies, getting decision-maker buy-in on OBF was a barrier to participation in the OBF offering. In some cases, interviewees described challenges they faced. For example, decision-makers holding an elected office may prioritize projects with short returns on investment that would manifest during their term in office. An agency may be eager to implement and complete projects quickly to avoid the risk of other initiatives popping up and derailing the project. An agency with little to no budget may be hesitant to agree to the cost at all, even if there are no upfront costs and payment is spread out over time, or an agency may disregard any project proposals related to clean energy upgrades all together while they are focused on directing funds toward other needs they see as more urgent to address. Agencies said:

- *"[OBF] works for some, but not every agency. If the initiative is low cost, why not just save and do it all at once rather than run the risk of other...priorities coming up and derailing it. [OBF] can help cities act quicker...without a funding source, if cities were averse to OBF, then the project is delayed"* – City

⁴⁷ No agencies mentioned leveraging the Revolving Loan Fund (RLF) program, although the program is new, and we were unable to speak with any participants. There was only one agency in the sample flagged as an RLF participant.

⁴⁸ We note that current SoCalREN program offerings are designed to deliver claimable IOU savings. Measures like street and outdoor lighting are no longer eligible for incentives given their low cost-effectiveness (as measured by the Total Resource Cost (TRC) test).

Related to the agency's desire to be connected to additional external funding sources, we also recommend that SoCalREN track all financial resource referrals, by agency, and over time. (See recommendation 6b below.)

4. Look for Ways to Provide Additional DER/EV Support for All Agencies

Agencies expressed interest in additional Distributed Energy Resources (DER) and electric vehicle (EV) support. SoCalREN currently offers DER program support through the P2Z program and support services to agencies for their EV initiatives; however, SoCalREN should look for additional ways to provide this kind of support. At the time of our interviews in April 2021, several cities we spoke with were working on their new (required) Sustainability Plan or Climate Action Plan to reduce greenhouse gas emissions. In many cases, cities were considering how to incorporate plans for leveraging DERs like energy generation through solar panels. Some cities were considering how to incorporate EV initiatives (infrastructure, fleet/vehicle purchasing, charging stations, etc.). One agency described a focus on the disadvantaged community they serve.

- *"I'd love to do some solar at some point. We're trying to reduce our overall footprint. It's good for the environment, it's good for the ratepayers too. If we use less energy, we can charge less money. Initially [SoCalREN] could not look at the solar aspect for me. Just this year, that changed...It's a big benefit."* – City
- *"Energy generation would be an area that'd be great to have support in (such as solar energy generation, demand softening)...Recently, this has become a possible option that SoCalREN has just mentioned."* – City
- *"The big things we talked about...were cleaner energy, less vehicles, more EV charging infrastructure, more solar panels...I mean, anything you can image for a disadvantaged community. It can be quite a challenge...the perspective of sustainability can change depending on who you're dealing with. Sustainability can be seen as a privileged problem."* – City

Advisory Committee members and regional partners provided feedback that echoed the comments above, expressing that most cities are interested in solar and electric charging station projects. One also mentioned the need to upgrade wiring or panels to allow for these projects.

In addition, one regional partner recently proposed two pilots that speak to the needs of their community. The first was for Energy Action and Resilience Planning for their communities and the second was for an equipment inventory (filling a gap left behind by the previous IOU Local Government Programs).

5. Provide "Bite-sized" Offering and Easier Path to Entry

SoCalREN should develop a simple path to participation for new customers with less experience with clean energy projects. For example, SoCalREN could develop a multi-step approach where the first interaction highlights SoCalREN's goals, briefly describes partner roles, and primarily focuses on audits as a first step to participation. Then, as the customer becomes more familiar with the value and impacts of energy savings, SoCalREN should gradually provide orientation to other offerings. This bite-sized approach would be an alternate path than introducing the full suite of SoCalREN's services upfront. However, to support raising awareness of all SoCalREN services among all customers, SoCalREN should still share marketing collateral and refer new customers to the SoCalREN website to flag the larger breadth of services.

- While the majority of our findings are based on feedback from participating agencies, regional partners and Advisory Committee members were also able to provide some feedback on the difficulties of engaging with non-participating agencies. According to feedback from regional partners, the products that come out of SoCalREN need to be simplified so that they provide an easier path for entry. One regional partner mentioned that they "Need to be presented as snacks not as a whole meal." Others mentioned that it is difficult to get cities to join and that they need to be creative to get new agencies to the table (even when there is interest). Many don't have resources and have a lot of staff turnover. To help, regional partners recommended removing jargon, taking an audit-first approach, and batching projects for effectiveness and efficiency at the decision-making level. *"SoCalREN is a great program because they do a lot of the work, but it's hard to get cities to the table. Just to explain that it's free and they don't have to join (just sign a form and you are in), but the cities are slow to do that because they don't have time. Typically, you need a reason to bring something to city. What is the benefit to the cities? Why should they give 5 minutes? To even have the conversation you need to package it in a way that is even more bite sized."* – Regional Partner

- *“Need to remove the jargon. It’s a little daunting to explain to them what is offered. There are lots of programs and it’s hard to understand what all of the jargon is/means.” – Regional Partner*
- *“Audit is the first entry point. SoCalREN will do a free energy audit. [In the report,] you can see where all of the money is and then based on that you can see what you want to do. SoCalREN seems to say that it’s the first step now. It’s free. It gives you information that you didn’t have.” – Regional Partner.*
- *“It takes a really long time to get these projects done regardless of the size. If it’s going to be a \$50,000 or a \$5 million dollars it takes the same amount of time to get project approval and going through your own boards and council and going through procurement and then implementation... Looking for more strategic implementation and project delivery rather than ad hoc. A lot of jurisdictions don’t have the bandwidth so [batching multiple projects] could help. Look at all HVAC or all lighting. Thinking on a grander scale can be useful in helping staff make process more efficient.” – Regional Partner*

6. Consider Enhancing Data Tracking to Help with Future Evaluation

As mentioned above, there are two areas where SoCalREN could enhance data tracking practices, monitoring end-to-end activities associated with the financial resource referrals provided to agencies, and tracking services agencies are offered, accept or reject, and complete as a result of the program. These are described below.

6a. Verify Tracking of All SoCalREN Services

SoCalREN should record which SoCalREN services were proposed to agencies during initial meetings with TEC; which the agency accepted, considered or rejected; and which were conducted and/or completed. While SoCalREN currently tracks services, in some cases, it appears to be incorrect, outdated, or missing. To make this information more robust and better understand service preferences among agencies, consider adding a status indicator to the tracking data to differentiate between proposed services and completed services. Information about why services were selected or rejected could also inform future program planning. In addition, consider establishing a quality control process to check for accuracy, input errors, or other information checks to ensure good record keeping.

6b. Track Financial Resource Referrals

SoCalREN should track all financial resource referrals separately, by agency, and over time. According to agencies, a key resource they need and use from SoCalREN are the financial referrals. Due to limited data tracking, little is known about what referrals are made, which are pursued, and which are successfully attained. Information like the name of the resource, funder, amount, date referral given, whether the agency followed-up on the referral, and whether the agency successfully accessed the resource could be leveraged to both measure the effectiveness of SoCalREN’s referral support and quantify the magnitude of resources SoCalREN was able to help agencies access.

Appendix 3. WE&T Sector Process Evaluation Recommendations

Based on our WE&T evaluation efforts, we present seven process-related recommendations for the WE&T sector below.

1. Find ways to enhance the contractor workshop experience

SoCalREN should offer varied workshop content by experience level. Some contractors who attended one-day workshops expressed interest for future offerings to go beyond foundational basics (although, we note that none of these went on to attend the Academy, Level 1 sessions during the study timeframe). By offering workshops with varied levels of expertise, SoCalREN could ensure that relevant content is provided where and as needed.⁴⁹

- *“An updated list of available technical assistance [from SoCalREN] and ways that we can be assisted in preparing for opportunities (would be helpful).” – Owner [How to do Business with SCR – LA County; Opportunities in the Green Building Sector]*
- *“[SoCalREN should] do an assessment of the participants and see where they are in their career and how they [SoCalREN] can meet us where we are, customize trainings to serve contractors based on their level of experience*

⁴⁹ In 2021, SoCalREN launched the E-Contractor Academy, Level 2 workshops which dig deeper into contractor development and address some of these concerns expressed by contractors.

or expertise in the subject matter.” – Owner [[How to do Business with SCR – LA County; Opportunities in the Green Building Sector](#)]

- “I think trainings need to get more specific to cater to specific skillsets and not stay quite so general.” – Owner [[How to do Business with SCR – LA County](#)]
- “I know more now that I didn’t know at the start [of the SoCalREN workshops] and I was hoping the information would keep building on the initial information and...continue to expand my learning, but it’s felt pretty redundant...each workshop felt like we were starting from the beginning.” – Project Manager [[How to do Business with SCR – MF](#)]

One contractor suggested improving the one-day workshop experience by providing features like a list of FAQs or facilitating a live guided Q&A discussion during workshops.

- “If they had Q&A opportunities [as part of every event] and were open to taking more questions on things that confused the contractors before and after workshops, or an FAQs section on their site or mailed out to us, that would be beneficial.” – Project Manager [[How to do Business with SCR – MF](#)]

2. Find ways to encourage participating contractors to engage for the full length of the Academy series

While we did not probe into why contractors did not attend all five sessions, only 42% met the minimum requirement of attending three sessions (16 contractors). Overall attendance numbers suggest that attendees were more likely to attend the first two sessions than the last two. There are several potential reasons why attendance may have waned:

1. **Just getting started.** The program was new, having launched in late 2020 amidst the disruptions of the COVID-19 pandemic. These disruptions may have affected whether or how often contractors participated in each session.
2. **Not for everyone.** Contractors had varying levels of expertise and educational backgrounds. Some may have felt that the content of the sessions was not as applicable to them (see recommendation below about enhancing workshops).
3. **Platform preference.** Some contractors did not like or find useful the online education platform compared to an in-person platform (see recommendation below about offering a mix of platforms).

Given these potential reasons, it is reasonable to suggest that rates of attendance may change, possibly increase, as the program grows beyond this pilot year.

3. Continue and enhance efforts to keep contractors informed about new job opportunities

Contractors mentioned wanting to be kept aware of future projects where they might have an opportunity to apply what they learned in training. In discussions with the ECC, they acknowledged receiving similar feedback. To address this, SoCalREN created their newsletter, [the Surge](#), where contractors can not only hear about upcoming job opportunities but can also stay informed on upcoming training opportunities.

- “...I wasn’t able to get into the city program for helping homeowners make their homes more energy efficient. We want to see if there’s any way we can get into that program...Would SoCalREN be able to offer us support in getting that sort of work and in the implementation phase of those kinds of projects? Apart from that, education on more [project] opportunities from SoCalREN would be really helpful.” – Owner [[Academy sessions 1-3 and 5](#)]
- “[I’d like to attend trainings that delve deeper into green energy. [Aside from additional training,] a project list of upcoming solar projects or a job list...that keeps us aware of upcoming work that’s green-related, would be helpful.” – Owner [[Opportunities in the Green Building Sector, Academy sessions 1-3](#)]

4. Tailor future training opportunities by trade.

Contractors are interested in educational material more tailored to their trade (HVAC, general construction, ironworking, etc.).

Tailoring trainings, in general, by trade could help SoCalREN obtain a clearer picture of the contractors they are reaching, determine if they need to consider targeted outreach to specific contractor groups, and direct contractors to the best-fit new project opportunities.

By trade:

- “I want to see more specifics on energy efficient insulation, framing, things like that which will directly be beneficial to us.” – Owner [[Academy sessions 1-3 and 5](#)]
- “They have been trying to bring in solar for city roofs and city buildings to start building out streetside car chargers, so more technical information on putting solar into a city infrastructure [would be helpful].” – Owner [[Opportunities in the Green Building Sector, Academy sessions 1-3](#)]
- “We’re a growing small (HVAC) business...HVAC is considered to be one of the top 10 industries that really affect global warming and our sustainable energy sources...All of the training we took has improved our operations management and made us more savvy as business owners...I would want to take advantage of any additional trainings they have.” – Owner [[How to Do Business with SCR – LA County; Academy, Level 1 Sessions 1-5](#)]

Other training suggestions

- “[I would like to see] the anatomy of a successful contracting business; business contracting tips, financing and operational assistance...[And,] we want to participate in the larger projects, so we’d like guidance on how to approach those as well as pilot programs.” – Owner [[How to do Business with SCR – LA County; Opportunities in the Green Building Sector](#)]

5. Continue offering a mix of in-person and online training events

WE&T program delivery method was affected by COVID-19 restrictions during 2020. While SoCalREN was unable to host in-person training events, they adapted to an online format for both one-day workshops and academy sessions. Contractors gave mixed feedback about whether they preferred in-person training or online training. After discussing the future platform for E-Contractor events, ECC confirmed that they heard similar feedback and plan to offer a hybrid of both in-person and online trainings going forward.

- “The fact that webinars can hold a much larger occupancy than in-person trainings [is] a plus for me. I’m thankful for taking advantage of getting access to so much more information via the webinar platform. It offers so much more convenience and access. (The only caveat is,) I can’t network with other folks or see other people. So it’s a give and take.” – Owner [[How to Do Business with SCR – LA County; Academy, Level 1 Sessions 1-5](#)]
- “I’m looking forward to in-person trainings. Virtual platforms have been helpful in 2020 but if we had personal interaction, you can ask questions better in-person...when it’s all virtual, it’s not as easy to ask questions.” – Owner [[Academy sessions 1-3 and 5](#)]
- “I liked the in-person trainings...for me, the locations have been convenient.” – Owner [[How to do Business with SCR – LA County; Opportunities in the Green Building Sector](#)]

Continuing to offer virtual trainings may also allow SoCalREN to expand their contractor trainings to include remote or rural locations. The lack of qualified contractors in rural areas was a barrier identified by some regional partners.

6. Continue and build upon the tracked data points to ensure program evaluability

The E-Contractor program targets smaller, local, and diverse contractors (WMDVBE contractors) to help build a more diverse workforce. Tracking the right information on a consistent basis is key to SoCalREN’s ability to demonstrate how well they have reached and served their target population. Based on a review of the E-Contractor application, we found that SoCalREN collects the right information to assess whether they reach targeted contractors, however, additional information may be useful to assess program effectiveness in the long term. Tracking certain data points over time enables SoCalREN to assess longer term outcomes and impacts of contractor offerings.

Below we list priority data points that SoCalREN currently does not collect that would help SoCalREN demonstrate differences in contractor success rates in bidding and winning public sector clean energy projects after education. Understanding this (potential) difference could provide insights about the need for certain training topics, the quality of the trainings, or the general effectiveness of the program. In addition to the current data tracking effort, we recommend that the WE&T program collect the following.

Participant characteristics - demographic and firmographic information can be used to demonstrate reach to small, WMDVBE businesses⁵⁰:

- Names and addresses (including zip code) of public agencies for which participating contractors won bids to understand the degree to which they provide services to agencies in DAC areas
- Number of public project bids submitted/won before and after program participation (for public sector pathway)
 - Flag for bids submitted/won with SoCalREN support
- Other certifications
 - Disabled Veteran Business Enterprise (DVBE)
 - Additional (relevant) Certifications
- Number and proportion of company's recent projects located in DAC areas

Experiential feedback – additional feedback on participant satisfaction or suggestions for improvement can help the program demonstrate and enhance the quality of programming.

- Satisfaction with SoCalREN (or ECC)
- Deeper inquiry into pain points (e.g., how could the training be improved)

7. Consider a process evaluation that explores the development of the program over the first few years to get a true assessment of program value

The early findings presented in this memo come after a handful of piloted training events. SoCalREN's WE&T program is still evolving. In this context, it is understandable that we have not yet seen a strong statement of the program's value, as designed. As SoCalREN continues to roll out and adapt the E-Contractor program design, it is important to monitor and gather information from all involved - participants, staff, and implementers. Their input can help guide successful program development and the establishment of effective measurements of the program's proposed value.

Appendix 4. Multifamily Sector Process Evaluation Recommendations

Note that an evaluation of SoCalREN's Multifamily program was conducted in parallel with this portfolio-level evaluation. The process-related findings and recommendations for the multifamily sector are presented in a separate report (http://calmac.org/publications/SoCalREN_Multifamily_Program_Process_Evaluation_Study_Report.pdf).

⁵⁰ This data is also key to demonstrating how SoCalREN services disadvantaged communities (DAC) through WE&T programming, which meets criteria established by the CPUC for RENs to serve DACs. Further, being able to provide this evidence enables SoCalREN to classify the program within the CPUC's Equity rather than Market Support.