Southern California REGIONAL ENERGY NETWORK

ENERGY EFFICIENCY PROGRAMS

SoCalREN Commercial Sector

Hard-to-Reach Commercial Direct Install Program Implementation Plan

Prepared by the County of Los Angeles on behalf
of the Southern California Regional Energy Network

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Program Overview

The Southern California Regional Energy Network (SoCalREN) Hard-to-Reach Commercial Direct Install (DI) Program is an equity program that fills market gaps by serving hard-to-reach businesses that are underserved by other energy efficiency programs. The DI Program helps hard-to-reach businesses achieve no-cost energy and peak demand savings. Services include site assessments, equipment purchasing, installation, recycling, disposal, customer education, and marketing. The DI Program overcomes numerous market barriers by expanding access to hard-to-reach communities through turnkey installation of a range of prescribed energy efficiency measures.

Program Budget and Savings

Table 1: Program Budget and Savings		
1	Program Name	SoCalREN Hard-to-Reach Commercial Direct Install Program
2	Program ID number	SCR-COM-E5
3	Program Implementer	SoCalREN
4	Portfolio Administrator	SoCalREN
5	Program Implementer Type (IOU Core, Third-Party Solicited, REN/CCA)	REN
6	Portfolio Segment (Resource Acquisition, Equity, Market Support, or Codes and Standards)[1]	Equity
7	Total Program Budget	$8,925,211
8	Program Budget by Year	2025 - $3,305,323 2026 - $1,562,701 2027 - $4,057, 186
9	Program Duration (Start Date - End Date)	2025 - 2027
10	Total System Benefit (TSB) (Total Program TSB and TSB by Program Year)	7,166,532
11	CO_2 (Lifecycle, First Year, Net, Gross)	Lifecycle Net – 25,604 First Year Net – 1,482 Lifecycle Gross – 27,112 First Year Gross – 2,880
12	KW (First Year, Net, Gross)	First Year Net – 97 First Year Gross - 105
12	KWh (Lifecycle, First Year, Net, Gross)	Lifecycle Net - (17,193,186) First Year Net – (1,479,591) First Gross – (1,198,032)
13	Therms (Lifecycle, First Year, Net, Gross)	Lifecycle Net - 5,763,882 First Year Net – 620,598 First Gross – 640,086

[1] D.21-05-031 Ordering Paragraph 2

Table 1: Program Budget and Savings		
14	Program Cost Effectiveness: Total Resource Cost (TRC): (Total TRC and TRC by Year)	2025 – 0.88 2026 – 0.71 2027 – 0.85 Total - 0.84
15	Program Cost Effectiveness: Program Administrator Cost (PAC): (Total PAC and PAC by Year)	2025 – 0.92 2026 – 0.72 2027 – 0.89 Total - 0.88
16	Market Sector(s) (i.e., residential, commercial, industrial, agricultural, public or cross-cutting) If multi-sector, provide estimated % of the total budget for each sector)	Commercial
17	Program Type (i.e., Non-resource, Resource)	Non-resource
18	Delivery Type(s) (i.e., Upstream-Manufactured, Midstream-Distributor, Midstream-Retail, Downstream, Downstream - Direct Install,[2] Codes & Standards)[3]	Downstream – Direct Install
19	Intervention Strategies (e.g., Strategic Energy Management (SEM), Market Access Program (MAP), Direct Install, Incentive, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing and Outreach, etc.)	Direct-Install
20	M&V Methods (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other (if applicable, describe Other M&V method))	Other

[2] https://cedars.sound-data.com/deer-resources/deemed-measure-packages/guidance/
[3] Database for Energy Efficiency Resources (DEER) 2026 Delivery Types

Implementation Plan Narrative

1. Program Description

The SoCalREN Hard-to-Reach Commercial Direct Install program maximizes the impact for those customers who need it the most. 100% of customers will qualify as hard-to-reach customers, further identified through Low-Income Low Access (LILA) and Disadvantaged Communities (DAC) zip codes. The program will prioritize customer cost savings by offering measures through a direct install delivery that simplifies the process and supports energy and cost savings for the customer. Through a community by community approach the program will create economies of scale and community awareness of the energy efficiency offerings. The program will expand access to work opportunities and training through an open contractor network for local contractors.

The program offers no-cost installation of electric and gas measures for qualified customers. The program is offered in coordination with the SoCalREN HTR Business Energy Advisor (BEA) program and the Food Desert Energy Efficiency Equity (FDEEE) Program.

Consistent with the ESJ Action Plan, and the overall goals of the Equity Segment, the SoCalREN Hard-to-Reach Direct Install Program's planned objectives directly supports the following ESJ Action Plan 2.0 goals:

Table 2: ESJ Action Plan Goal

Objectives	ESJ Action Plan Goal	SoCalREN Core Value
Objective #1: Increase SoCalREN participation by small, hard-to-reach businesses	**Goal 2:** Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.	Expand access to EE benefits
Objective #2: Deliver streamlined, turnkey energy efficiency projects for small, hard-to-reach businesses	**Goal 2:** Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.	Expand access to EE benefits; Build energy capacity and economic resilience
Objective #3: Increase regional reach and delivery of services across SoCalREN territory, including in disadvantaged, rural, and hard-to-reach communities	**Goal 4:** Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.	Expand access to EE benefits; Build energy capacity and economic resilience
Objective #4: Ensure businesses receive education about energy efficiency so they can better understand the benefits and pursue future energy savings opportunities.	**Goal 5:** Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs.	Build energy capacity and economic Resilience

Eligible measure types include:

- Water heating
- Lighting
- HVAC
- Refrigeration
- Food Service

The full measure list is provided in Table 4.

2. Performance Tracking

Similar to the programs within the existing SoCalREN portfolio, the HTR CDI Program will be reported monthly, quarterly, and annually through CEDARs. In addition to the CPUC required common metrics, the SoCalREN HTR CDI proposed program will include the collection and tracking of the following data/performance metrics:

The Primary Performance Metrics, as specified in Table 1 above are:

- Total System Benefit (TSB) ($)
- TRC Ratio

The following Indicators are used to track program progress:

- Actual/Forecasted TSB ($)
- Actual/Forecasted peak demand savings (kW)
- Actual/Forecasted energy savings (kWh/Therms)

3. Program Delivery and Customer Services

Target Market and Population Served:

The target market for this program is hard-to-reach commercial customers across the SoCalREN territory. In coordination with the SoCalREN HTR Business Energy Advisor program, the program will identify customers that are hard-to-reach, further identified through Low Income Low Access (LILA) and Disadvantaged Communities (DAC) zip codes.

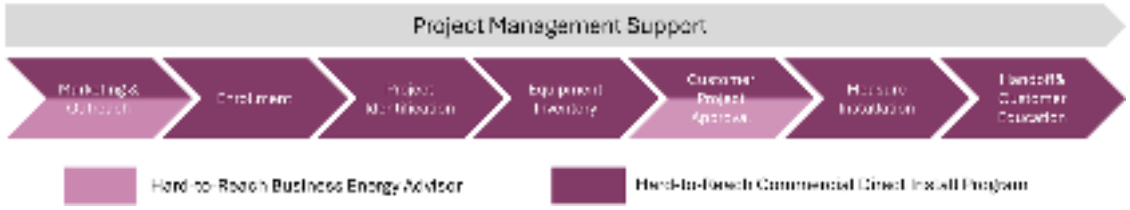
Program Delivery Strategies:

The program will leverage the SoCalREN Business Energy Advisor Program for outreach to potential customers and to identify eligible customers. The program will coordinate with other SoCalREN and investor-owned utility commercial programs to avoid overlap, "double-dipping," and customer confusion.

The program will maintain an open contractor network and will recruit and train local contractors. This simplifies participation for small contractors and increases recruitment of contractors in hard-to-reach communities. The program provides equipment purchasing, installation, clean-up, disposal, and information about the installed measures to explain the energy efficiency benefits they have received and operation and maintenance practices to ensure sustained performance.

Figure 1 below depicts the steps for customer enrollment and highlights the coordination between SoCalREN commercial programs to simplify the customer experience.

Figure 1: DI Program Participation Process



Marketing & Outreach

Marketing and outreach efforts will be coordinated with the SoCalREN HTR Business Energy Advisor Program to identify the target customer segments. The program will target eligible stores through grassroots and onsite outreach to store owners. It will also utilize online marketing such as websites, social media, and email outreach to engage potential stores. Working with outreach partners, including local governments, regional partners, chambers of commerce, and nonprofits, the program will collaborate with trusted community-based organizations and actors to reach stores.

Enrollment

Business Energy Advisors will enroll the customer for participation, and during that meeting will perform a pre-install site visit. BEA's will screen and enroll customers based on interest and eligibility. Following confirmation that an eligible store is interested in the program, HTR CDI will conduct an onsite site visit and walk-through to help determine what products and measures will work best for the store site

Project Identification and Approval

Projects are identified. Equipment inventories, project scoping and cost are presented after the site visit is completed. Program participation agreement is presented. Energy assessment findings presented same day, utility cost impacts are included, questions and concerns are addressed, customer approves project.

Measure Installation

The contractor will install energy efficiency measures at the site based on the agreed upon timeline. After installation, the implementer will complete a post-installation verification to confirm claimable energy savings and adherence to program guidelines. Upon verification, the contractor will be reimbursed for the costs of the project.

Handoff and Customer Education

After the project is installed, customers will receive educational information on energy savings, cost savings, and non-energy benefits delivered by the program. The program will provide the customer with additional information about other savings and program opportunities they may benefit from.

4. Program Design and Best Practices

The direct install approach is designed to address market barriers and increase the adoption of energy efficiency in hard-to-reach customers.

The table below outlines the market barriers and DI intervention strategies to overcome them.

Table 3: Market Barriers and Intervention Strategies

Barrier	Program Intervention Strategies Based on Best Practices and Lessons Learned
Limited energy efficiency offerings for HTR facilities and projects	The program exclusively serves HTR customers, with additional qualifiers for LILA and DAC communities, ensuring services reach those who need it most and have not previously had access.
Limited staff to implement energy efficiency and energy efficiency is deprioritized	The program provides a one stop shop through direct install delivery to expand access and increase the ability to implement energy efficiency.
Limited energy efficiency awareness	The program will create awareness by delivering outreach through a community and customer-focused approach, with the support from local governments, community-based organizations, and SoCalREN Regional Partners.
Limited funding for facility improvements	Measures offered at no-cost to program participants overcome customers lacking available funds.

The Program incorporates several lessons learned from similar direct install program implementations. Among these learnings were that:

- Messaging and participation requirements for the customer need to be simple. Participation will be higher with hard-to-reach customers if the impact to their business is minimized. The project process will be flexible to address customer concerns (e.g. scheduling or reducing the time at the sites) without compromising the quality of service.
- The program will provide a high level of customer service by making sure the contractors are well trained on customer-facing skills, which will help the program succeed by increasing word-of-mouth promotion from satisfied participants. The program will measure customer satisfaction at the completion of every project and will refine processes as needed based on customer feedback and lessons learned.

5. Innovation

The program will install demand response (DR) enabled equipment where applicable and work with IOU DR programs to enroll customers in DR.

6. Pilots

The HTR Commercial Direct Install Program does not have any pilot elements, making this section not applicable.

7. Workforce Education and Training

The HTR Commercial Direct Install Program is not a Workforce, Education and Training Program, making this section not applicable.

8. Workforce Standards

The Program will ensure that energy efficiency projects supported by the program adhere to workforce standards for heating, ventilation, and air conditioning (HVAC) and advanced lighting controls as applicable. The Program will integrate compliance checks throughout the project lifecycle to ensure projects comply with CPUC workforce standards as stipulated in D.18-10-008. Workforce standards will be applied for the following measures:

a. **HVAC Measures**

   i. Contractors installing measures with an incentive of $3,000 or more are required to be installed by workers or technicians who meet one of the following criteria:

      1. Enrolled in and/or completed an accredited HVAC internship
      2. Completed more than five years of work experience at the Journey level per California Department of Industrial Relations definition, passed competency tests, and received specific credentialed training
      3. Has a C-20 HVAC contractor license issued by the California Contractors State License Board (CSLB)

b. **Advanced Lighting Controls Measures**

   i. Installation of non-residential lighting control measures with an incentive of $2,000 are required to be installed by installation technicians who have completed an International Association of Lighting Management companies (NALMCO) Certified Lighting Controls Professional (CLCP) certification.

9. Disadvantaged Worker Plan

The program will coordinate with SoCalREN's Workforce, Education, and Training programs to present information on career opportunities for disadvantaged workers in the energy efficiency industry.

10. Market Access Programs

The HTR Commercial Direct Install Program is not a market access program, making this section not applicable.

11. Additional information

No additional information.

Supporting Documents

1. Program Manual and Program Rules

The following describes the review of measure eligibility and customer eligibility for the HTR Commercial Direct Install Program. The Program is an equity energy efficiency program available to hard-to-reach commercial customers, designated Low Income Low Access (LILA) and located in Disadvantaged Communities (DAC) zip codes.

1. Eligible Measures

CDI focuses on a core set of deemed EE measures designed to deliver community benefits while being cost-effective. Measures focus on key building systems:

- Water heating
- Refrigeration
- HVAC
- Lighting
- Food Service

Measures are provided at no cost to the participants. Measure level eligibility for any given project is a function of:

- **Total project TSB and TRC:** CDI reviews TSB and TRC to determine whether the full set of recommended measures facilitates budget goal achievement.
- **Feasibility:** CDI reviews the feasibility of given measures. If the project is not feasible due to existing conditions or because it is cost-prohibitive, the program considers removing the measure.
- **Compliance:** CDI reviews each potential measure for compliance with measure package and CPUC policies and rules.

  All the measures listed and active in the eTRM that can be implemented through a downstream direct installation delivery type may be considered based on each participant's unique energy-saving facility opportunities.

2. Customer Eligibility Requirements

Customer eligibility requirements focus on the following factors: 100% of customers will qualify as hard-to-reach customers, further identified through Low Income Low Access (LILA) and Disadvantaged Communities (DAC) zip codes.

- Receive services from SCE and/or SoCalGas
- In SoCalREN's regional territory
- Is Equity-qualified customers
- Has the authority to make operational decisions regarding the served facility

- Is willing to sign the participation agreement and accept SoCalREN terms and conditions
- Commitment to support permitting and granting facility access to all appropriate stakeholders: SoCalREN program staff, contractors, permitting officials, CPUC staff, and others as required

HTR Business Energy Advisors (BEAs) collaborate closely with each participant during customer acquisition to ensure that program eligibility is reviewed, and that the customer is aware of program requirements.

3. Contractor Eligibility Requirements

Contractors must meet all workforce requirements previously discussed and be in good standing with the Contractors' License Board (CSLB). Contractors providing installation services work with the program provider and accept their data security, safety, insurance, bonding, and direct install practices.

4. Participating Contractors, Manufacturers, Retailers, Distributors, and Partners

The HTR Commercial Direct Install Program is a downstream DI program, this section is not applicable.

5. Additional Services

Equity and Beneficial Electrification

SoCalREN HTR communities have been historically underserved and under-resourced. CDI is designed to prioritize equity and beneficial electrification through acknowledging that:

- SoCalREN CDI customers may not have previously had access to no-cost or low-cost, EE direct-install offerings; that are now sunset, such as linear LEDs, LED A and pin-based lamps, and T24-compliant controls.
- Electrification may increase the customer's electric energy bill, and EE upgrades offer a key opportunity to mitigate cost increases.
- Lighting controls and code compliance are often cost-prohibitive to hard-to-reach and rural businesses. Lighting upgrades may not be permitted, and controls may not be to code. CDI will support to-code controls to ensure that the business receives the benefit while mitigating any utility cost increase associated with electrification.

Additional but no longer available measures may be considered where they address a key equity concern and support beneficial cost-effective electrification where any utility cost increase is mitigated.

6. Audits

The SoCalREN CDI program requires pre- and post-site surveys. The surveys confirm customer program eligibility and identify EE opportunities.

Pre-installation surveys across key building systems: Water Heating, Refrigeration, HVAC, and Lighting. They are designed to identify and appropriately document opportunities while facilitating project scoping, costing, program cost impacts, and the information needed to install the approved EE measures. BEAs and/or program staff perform the pre-installation survey.

Participating contractors conduct preconstruction (PreCon) site visits. These visits allow the contractors to review the scope and cost to ensure feasibility, collect additional permitting information, and assess potential safety concerns. The PreCon findings are shared with the program, and the program and the customer approve any alterations to scope or cost.

The program staff conducts post-installation reviews to ensure that each approved measure was installed and commissioned. In addition, post-installation reviews collect the necessary information to document the installation and confirm alignment to the measure package documentation requirements. Should the project not conform to program requirements or additional work be needed to complete the scope, the program issues a punch list to the installing contractor. In this case, post-installation inspections continue until all compliance and punch-list items are resolved.

7. Program Quality Assurance Provisions

Quality assurance and controls are internalized throughout the program design process.

Quality Assurance

- Customer acquisition: Pre-qualification checklists to ensure customer eligibility is confirmed
- Equity qualifications: Customer affidavit and Accelerated Replacement deemed measures Preponderance of Evidence affidavits are signed for Hard-to-Reach customers, and business locations are confirmed for DAC and Underserved status before services are provided.
- Customer project: Project checklists are used on every project.
- Key software solutions: Prospector, Direct Install, and Photo-Capture are used to guide implementers through the required data collection while geolocating all efforts
- Project review: Project and measure review and approval process checklists are generated to communicate assurance processes to team members.

Quality Control

- CDI managers review pre-qualification checklists to ensure eligibility before committing services
- Hard-to-reach status affidavits are reviewed for 100% of participants to confirm program eligibility.

- DAC and Underserved status is reviewed to confirm program eligibility, review of zip+4 codes.
- CDI program management and professional engineering staff review 100% of site visits conducted by BEAs to ensure all program compliance documentation is collected.
- CDI compliance engineers review 100% of project packages to ensure measure package requirements are met.
- Software solutions are intended to collect required documentation, geolocate services, and warehouse information for ongoing availability for SoCalREN or independent evaluation.

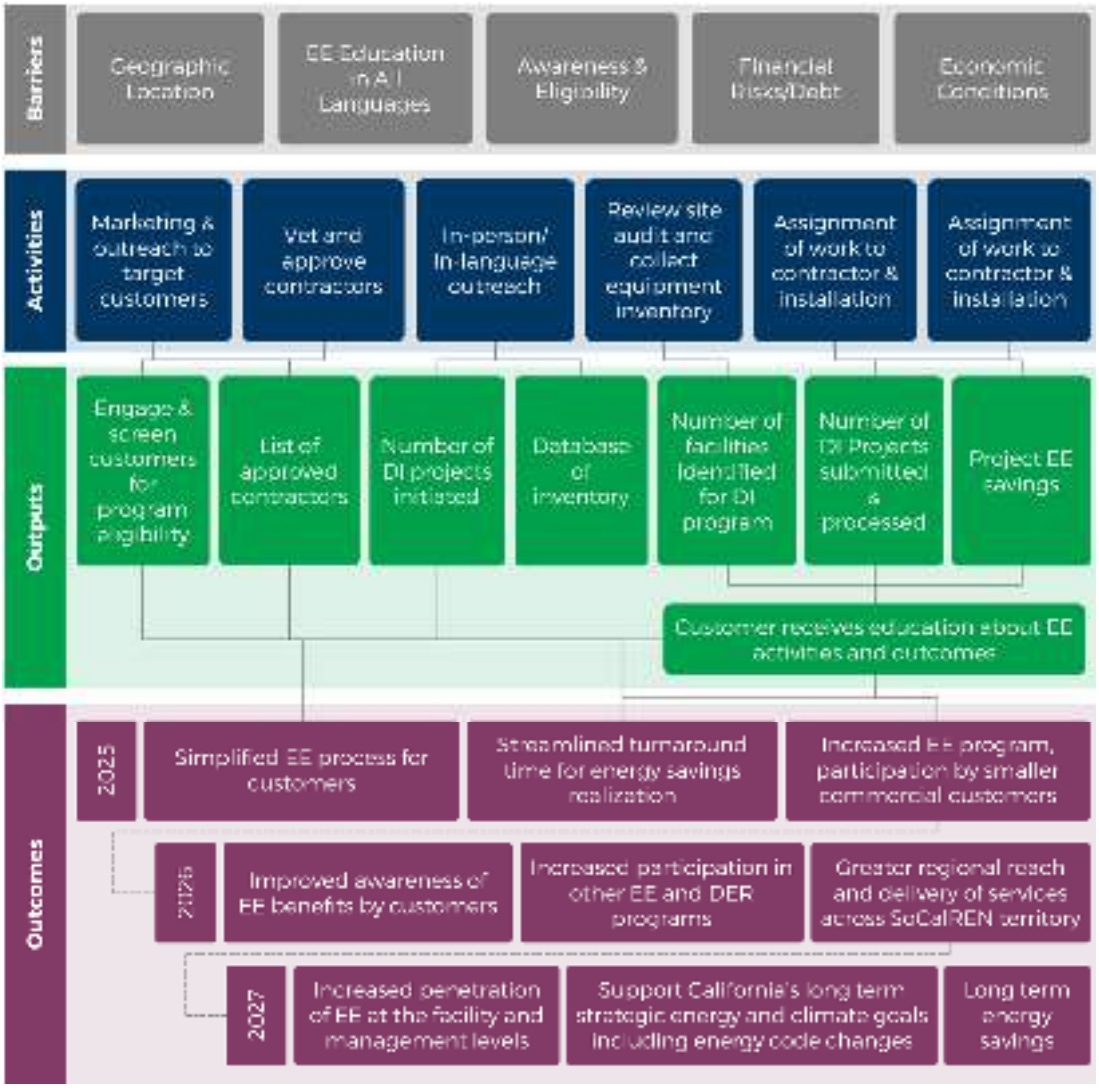
Iterative Quality Assurance and Control

CDI takes an iterative approach to quality assurance and control tools and processes by using staff near-miss and incident reporting. Where a process or tool leads to a near-miss or incident where quality and/or compliance were not maintained, that occurrence is documented, discussed, and addressed in process and/or tool updates. Updates are then monitored to ensure that the deficiency in the process/tool was addressed.

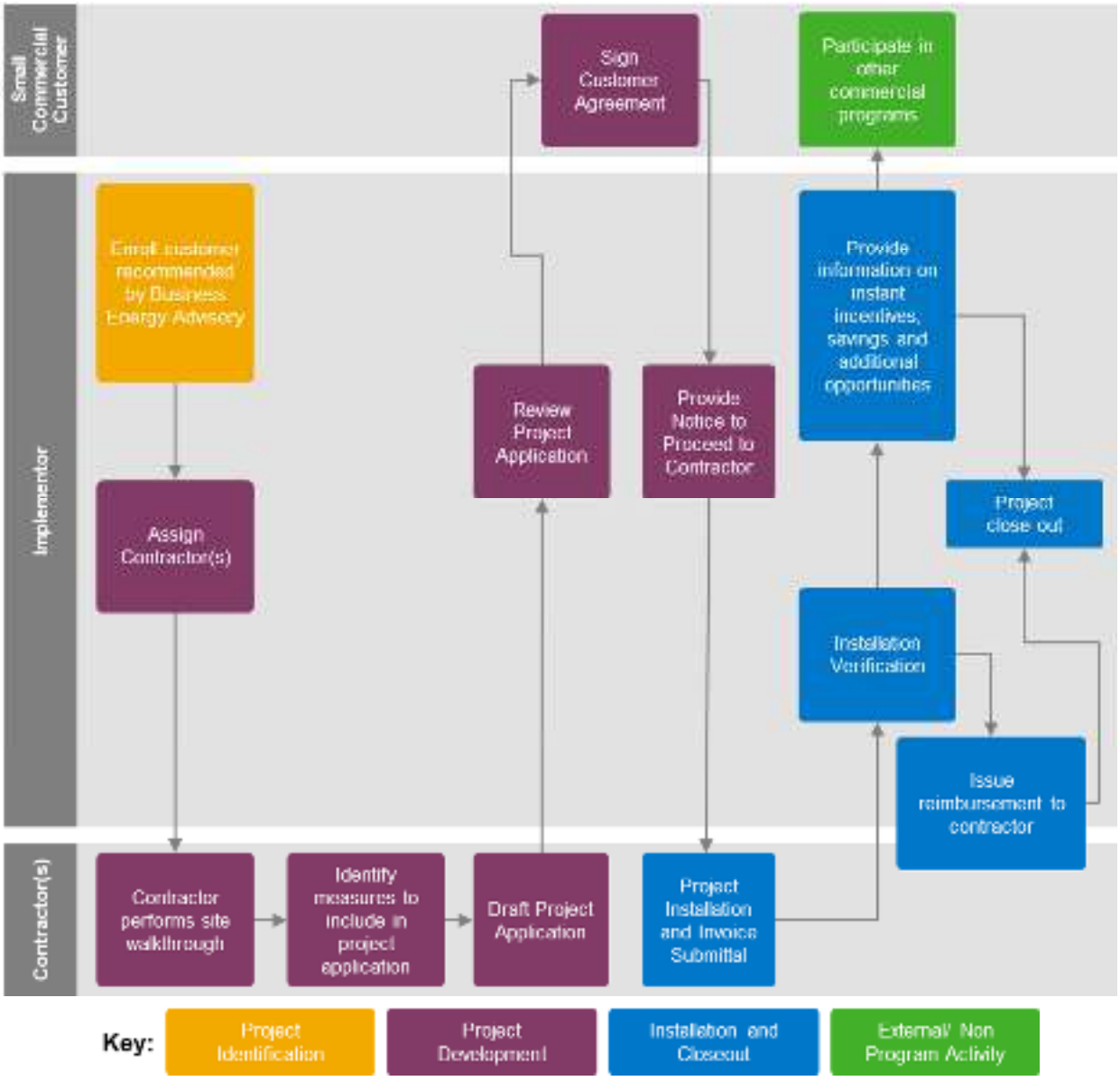
8. Program Metrics

- TSB: eTRM Measure Package permutations and CEDARs claims data
- First-year and lifetime energy and climate impacts: eTRM Measure Package permutations and CEDARs claims data
- TRC: CEDARs quarterly and annual claims data
- Number and Type of Sunset Measure Deployment: Implementing program reports from the direct install application
- Customer Utility Cost Impacts: 12-month utility cost data, energy savings estimates from eTRM permutations, and direct install application
- Electrification Measures: Number of units installed by building type as reported through claims data

2. Program Theory and Program Logic Model



3. Program Process Flow Chart

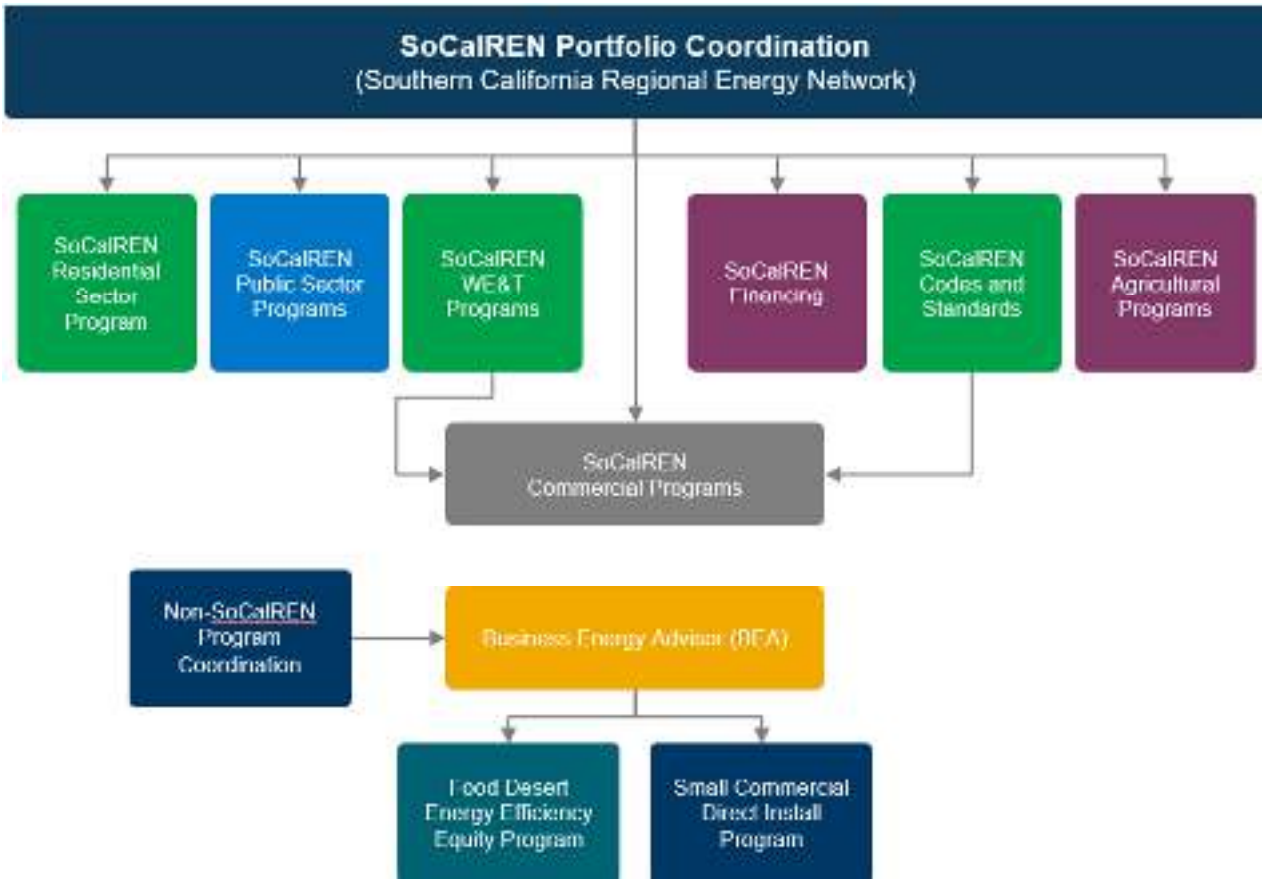


4. Incentive Tables for Measures, Measure Packages

Table 4: Measure List

Target End Use	Target Measures	Relevant Workpapers	Incentive
Lighting	Interior LED Lighting	SWLG091-01-draft	Full Measure Cost
	Exterior LED Lighting	SWLG031-01-draft	Full Measure Cost
	Tubular LED Lighting	SWLG061-01-draft	Full Measure Cost
	Lighting Controls (T24)	SCE13LG025.2	Full Measure Cost
Service and Domestic Cold Water	High-Efficiency Toilets	SWMI003-01	Full Measure Cost
Service and Domestic Hot Water	Faucet Aerator	SWWH019-05	Full Measure Cost
	Hot Water Pipe insulation	SWWH017-05	Full Measure Cost
	Tankless Water Heater	SWWH006-07	Full Measure Cost
	Recirculation Pump Timer	SWWH021-01	Full Measure Cost
	Low-Flow Showerhead	SWWH020-05	Full Measure Cost
	Hot Water Tank Insulation	SWWH018-04	Full Measure Cost
	Heat Pump Water Heater (replacing electric storage or HPWH)	SWWH031-03	Full Measure Cost
Service and Domestic Hot Water (Electrification)	Heat Pump Water Heater (replacing storage NG or tankless)	SWWH027-04	Full Measure Cost
	Large Heat Pump Water Heater (replacing large storage NG or instantaneous WH)	SWWH028-04	Full Measure Cost
Food Service	Efficient Commercial Convection Oven, full/half	SWFS001-03	Full Measure Cost
	Efficient Commercial Fryer	SWFS011-06	Full Measure Cost
	Low-Flow Pre-Rinse Spray Valve	SWFS013-03	Full Measure Cost
Food Service (Electrification)	Efficient Commercial Convection Oven, full/half (gas to electric)	SWFS022-03	Full Measure Cost
	Efficient Commercial Fryer (gas to electric)	SWFS021-04	Full Measure Cost
HVAC	Smart Thermostat	SWHC039-08	Full Measure Cost
	VSD for HVAC Fan Controls	SWHC018-04	Full Measure Cost
Building Envelope	Reflective Window Film	SCE13HC002.2	Full Measure Cost

5. Program Links



6. Program Measurement & Verification (M&V)

Program level measurement and verification (M&V) activities will be conducted throughout the program cycle to inform program improvements and future program design. The M&V process involves the following steps to ensure program services and data points are tracked.

1. Data Collection Strategies

The Program uses the following data collection through data management in a secure project customer relationship management (CRM) platform that tracks customer information, baseline condition equipment details, measures installed including geotagged photographs, copies of invoices, number and cost of units, incentives applied, and dates of installation. This centralized data hub allows for detailed reports and dashboards to track progress towards program goals and key performance indicators.

Embedded within the project process is quality control checks: all project deliverables and project
application/customer agreement materials are put through rigorous internal quality control
checks prior to being delivered to clients or the CPUC. Including a post-installation inspection.

2. Performance Metric Reporting

Timeline	Action	Key Performance Indicators
Monthly	Review program progress, discuss emerging barriers, and deploy optimizations. Key performance indicators include:	• TSB in progress, installed and claimed as a percentage of annual goals
		• Program expenditures to budget as a percentage of year and TSB goal
Quarterly	Review TRC ratio trends no less than quarterly and deploy optimizations as needed to trend to TSB goal with an acceptable TRC ratio	• Progress in meeting or exceeding TRC target
		• Customer project pipeline is sufficient to meet annual TSB goal
	Review project documentation for completeness	• 100% of measure package documentation is available for review • 100% of necessary additional information for reporting and claims has been collected
	Review all incentive disbursements	• 100% of incentive disbursements can be tracked to customers
Annual		• Claims to forecast TSB • Claims to forecast TRC ratio

		• In-community Clean Energy Advisor placement % with disadvantaged worker information collected, tracked and reported

3. **Independent Evaluations**
   SoCalREN collects the necessary data to support future independent evaluation and ensures that the requested data is provided promptly.

7. Normalized Metered Energy Consumption (NMEC) Program M&V Plan

Not applicable

8. Multi-DER IDSM Pilots

Not applicable

9. SEM Programs Only

Not applicable