







Agencies Enrolled in the SoCalREN

COUNTIES: County of Los Angeles • County of Orange • County of Santa Barbara

CITIES: City of Alhambra • City of Arcadia • City of Barstow • City of Beaumont • City of Beverly Hills • City of Brea • City of Buena Park • City of California City • City of Camarillo • City of Carpinteria • City of Chino Hills • City of Claremont • City of Corona • City of Costa Mesa • City of Covina • City of Culver City • City of Downey • City of Duarte • City of Fontana • City of Fullerton • City of Garden Grove • City of Hesperia • City of Highland • City of Huntington Beach • City of Irvine • City of Laguna Niguel • City of Long Beach • City of Laguna Woods • City of La Habra • City of La Palma • City of La Puente • City of Lynwood • City of Maywood • City of Mission Viejo • City of Monrovia • City of Montclair • City of Monterey Park • City of Moreno Valley • City of Murrieta • City of Newport Beach • City of Norwalk • City of Orange • City of Oxnard • City of Palmdale • City of Perris • City of Placentia • City of Pomona • City of Rancho Cucamonga • City of Rancho Mirage • City of Rancho Santa Margarita • City of Redlands • City of Rialto • City of San Bernardino • City of Santa Ana • City of Santa Barbara • City of Santa Monica • City of Santa Paula • City of Signal Hill • City of Simi Valley • City of South Pasadena • City of Temecula • City of Temple City • City of Thousand Oaks • City of Ventura • City of Visalia • City of West Covina • City of West Hollywood • City of Whittier • City of Yorba Linda

WATER AGENCIES: Carpinteria Sanitary District • City of Los Angeles Bureau of Sanitation • Coachella Valley Water District • Cucamonga Valley Water District • Eastern Municipal Water District • Goleta Sanitary District • Idyllwild Water District • Inland Empire Utilities Agency • Jurupa Community Services District • Lake Arrowhead Community Services District • Las Virgenes Municipal Water District • Ojai Valley Sanitary District • Orange County Sanitation District • Running Springs Water District • United Water Conservation District • Western Municipal Water District • Western Riverside County Regional Wastewater Authority • Yucaipa Valley Water District

OTHER AGENCIES: Bridges Charter School • Conejo Recreation and Parks District • Conejo Valley School District • Los Angeles Department of Tourism • Los Angeles General Services Department • North Net Training Center • Orange Unified School District • Oxnard Union High School District • Rio School District • San Gabriel Valley Council of Governments • San Gabriel Valley Economic Partnership • The Port of Hueneme, Oxnard Harbor District • University of California, Los Angeles • Ventura Unified School District



WELCOME

County of Los Angeles Internal Services Department

Commissions, Ratepayers, and Colleagues:

We're pleased to present this 2017 Annual Report on behalf of the SoCalREN.

It's been a dynamic year-leading with assessment, progressing into action, and closing with remarkable and unprecedented performance that exceeded ambitious expectations. Strategy and planning for the 2018-2025 Rolling Portfolio cycle have been at the forefront, with efforts directed toward even greater environmental, social, and economic returns to be delivered from REN programs and leveraged assets to the community.

This year's potent transition is captured in the following pages, along with a preview of Rolling Portfolio objectives.

John L. Geiger Standards & Practices, General Manager

Demetra J. McBride **Environmental Initiatives** Division Manager

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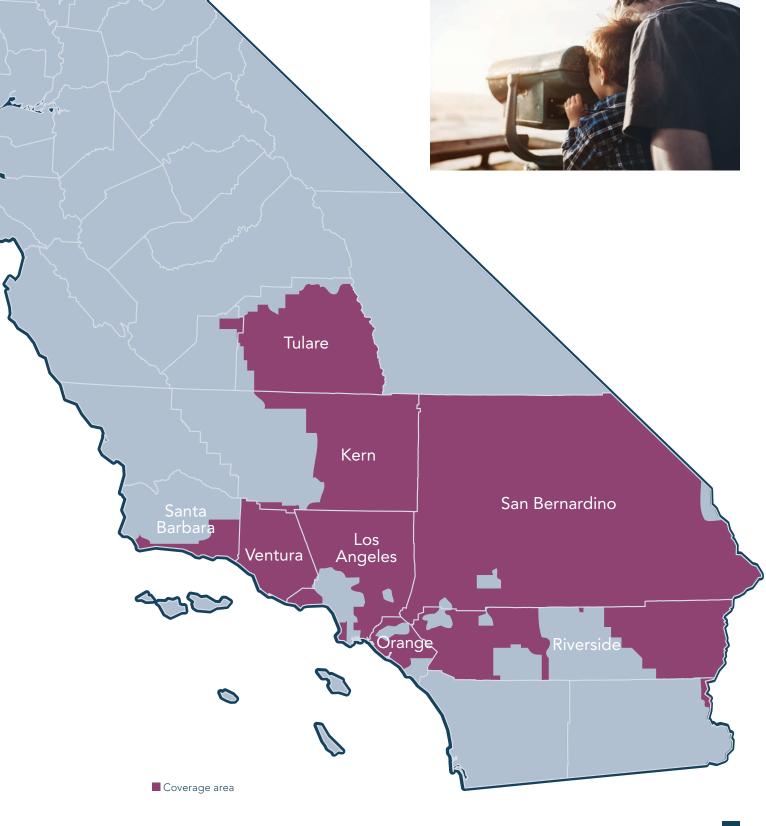
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SoCalREN COVERAGE AREA

The Southern California Regional Energy Network (SoCalREN) serves residents, businesses, and public agencies throughout the areas served by Southern California Edison (SCE) and SoCalGas®.





SoCalREN Coverage Area SoCalREN Coverage Area



Interior lighting upgrades at a municipal basketball court in Palmdale

EXECUTIVE SUMMARY

The County of Los Angeles administers and manages the Southern California Regional Energy Network (SoCalREN), including the design and implementation of public agency facilities upgrades, single-family and multifamily residential retrofits, Codes and Standards, Energy Equity, Workforce Education and Training, and energy efficiency behavioral transformation programs.

The SoCalREN undertook aggressive actions throughout 2017 to optimize implementation and outcomes for the 2017 Portfolio. These actions were also designed to position the Portfolio for transition from customary two-year cycles to a California Public Utilities Commission (CPUC) Energy Efficiency Rolling Portfolio that will establish funding and potential for eight years (2018–2025).

Key indicators of improvement and performance optimization in 2017 include:

- An **increase of 2100%** in Multifamily Program energy savings
- A nearly 300% increase in Public Agency Program energy savings
- Cost-Effectiveness improvement of nearly 300%
- Streamlined administrative and marketing costs

- Success in training and establishing
 Minority and Disadvantaged
 Enterprise Businesses and individuals
- Overall Portfolio share of approximately
 38% in Disadvantaged Communities
- Active regulatory participation that secured and increased opportunities for government Program Administrators (RENs and Community Choice Energy Authorities)
- Enhanced relationship-building, collaboration, and coordination with SCE and SoCalGas

To achieve these improvements in 2017, the SoCalREN:

- ✓ Conducted and commissioned program performance assessments
- ✓ Implemented corrective adjustments to Resource Programs (programs that produce direct energy savings)
- ✓ Restructured Portfolio management and administration
- ✓ Retired redundant or non-performing activities and effected permitted funds shifts into programs that produce direct energy savings; specifically, the Residential Loan Loss Reserve, Water-Energy Nexus, Regional Energy Project Tracking and Permitting (CEEPMS), and Green Building Labeling Programs



What I like best about my Home Upgrade is breathing cleaner air since I have asthma.

Homeowner in Norwalk

Executive Summary

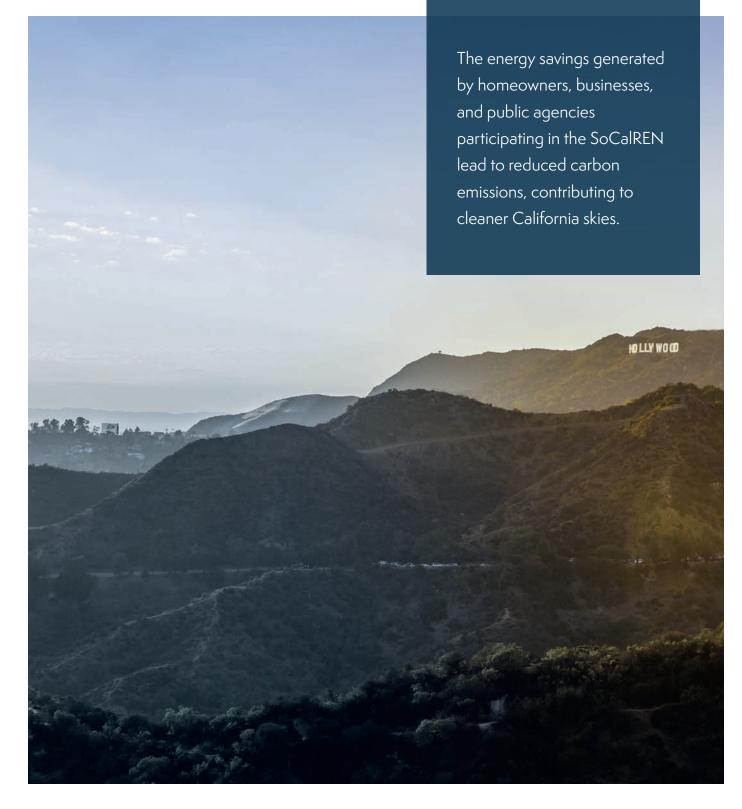


- Integrated the Public Agency Marketing, Education and Training, and Aggregated Regional Procurement Programs into the Public Agency Program. Through this integration and assimilation, the SoCalREN realized efficiency and budget savings in the avoidance of duplicate or redundant administration and other implementation costs
- Required third-party implementers to account by project, to track and improve program cost/kWh to reduce consumption
- Implemented Quality Assurance/Quality Control (QA/QC) measures and routine measurability-accountability reviews with third-party implementers

The SoCalREN also engaged the CPUC, its Energy Division, and the Office of Ratepayer Advocates to aggressively evaluate its programs, mine Commission concerns and constructive criticism, and to report progress. This dialogue has been essential to the rigor of the SoCalREN's self-examination and the maturation necessary to fix the RENs as enduring Program Administrators in the State's Energy Efficiency Portfolio.

As a result of these initiatives, the SoCalREN Portfolio is evolving, maturing, and self-optimizing, with further near-term enhancements and actions summarized in this Annual Report as Rolling Portfolio Key Objectives.





SoCalREN PORTFOLIO OF PROGRAMS

MULTIFAMILY UPGRADES

SINGLE-FAMILY IMPROVE



SoCalREN PROGRAM STRUCTURE

The Southern California Regional Energy Network (SoCalREN) comprises a portfolio of sub-programs that provide residential, financial, and public agency services encouraging and supporting energy conservation.

When the California Public Utilities Commission (CPUC) authorized the SoCalREN, Commission policies and accounting structure defined the REN as a single program under existing Southern California Edison (SCE) and SoCalGas portfolios. The sub-programs that compose the SoCalREN were designed locally to meet the needs of residents and businesses located within the coverage area (see pages 4 and 5 to view a map of the SoCalREN coverage area).

The following section takes a detailed look at these subprograms and the services they provide to residents, businesses, and public agencies. In addition to a summary of the services provided by each sub-program, information on budgets and savings achievements are detailed.

CPUC Classifications as Related to the SoCalREN

All energy efficiency programs authorized under the CPUC, including the SoCalREN's sub-programs, are classified by both type and sector.

Resource programs claim energy savings and provide financial incentives, usually at a measure level. These programs are typically referred to as Deemed or Custom



LED street light upgrade in The City of Orange

incentive programs, with the stated intention of driving participants to pursue a higher level of energy savings above code than they would have completed were an incentive not available.

Non-Resource programs do not claim energy savings directly; rather, such programs typically influence customers to pursue energy efficiency opportunities. For example, a non-resource financing program can provide the participant with the means to proceed with a project that will go on to claim energy savings through an established resource program.

Each resource or non-resource program is further categorized into one of six sectors:

- Agricultural
- Commercial
- Cross-Cutting

- Industrial
- Public
- Residential

The sub-programs offered through the SoCalREN are a mixture of resource and non-resource programs covering three of the six sectors: Residential, Public, and Financing (Cross-Cutting). The SoCalREN does not address the three remaining sectors, as they were not part of the SoCalREN's original filing.

Prior to implementation, all programs must have an approved Program Implementation Plan (PIP) on file with the CPUC. The PIP provides transparent details on each program's design and intent, and is available to the public upon request. The Program Profiles featured in this report provide a high-level summary of the information covered by each sub-program's PIP.







Improvements to the SoCalREN During 2017

Throughout 2017, the SoCalREN took a number of aggressive actions to optimize implementation and outcomes for the 2017 portfolio, and also to make necessary strategic changes in preparation for the Rolling Portfolio that begins in 2018. These changes include:

- Closing redundant or non-performing activities, refining spending levels for "soft impact" programs, and shifting funding into programs that produce energy savings
- Closed the Water-Energy Nexus Program
- Closed the Regional Energy Project Tracking and Permitting (CEEPMS) Program
- Closed the Green Building Labeling Program
- Closed the Residential Loan Loss Reserve Program
- Moved the Aggregated Regional Procurement and Marketing, Outreach, Education, and Training Programs under the existing Integrated Whole Building Retrofit (Public Agency) Program
- Performing strategic outreach to take the Multifamily Program project pipeline from weak to fully subscribed with a waitlist for participation
- Taking over under-performing programs and driving energy upgrade projects



Public Agency Program outreach event

- Implementing Quality Assurance/Quality Control (QA/QC) measures in consultant/vendor billing
- Preparing optimization strategies for rebidding the SoCalREN portfolio, including:
- Pay-for-performance procurement
- Replacing single-implementer program contracts with a more competitive multiple-implementer procurement
- Pivoting toward a measurability standard, embedding programs with actual energy savings targets
- Developing competitive 2018 pilot proposals, designed for scalability and replicability
- Containing investment in "soft impact" programs
- Working with the CPUC to arrive at a reasonable yet responsible cost-effectiveness methodology and targets for SoCalREN

The SoCalREN continues to enhance the portfolio of programs offered based on market conditions, customer feedback, CPUC feedback, and necessary innovation to drive customers to pursue energy efficiency projects far above and beyond existing building codes. The 2018 SoCalREN Business Plan strives to offer additional resource programs, innovative financing options, and programs to help address "to code" stranded savings. These current and future efforts anchor the SoCalREN's position as a continuously evolving Program Administrator focused on the CPUC's goals of cost-effectiveness and success.

The data on the following pages (kWh, kW, therms, etc.) contains the best available data forecasted and information available at the time of publication. All data is subject to minor changes based on actual final savings claims with the CPUC and all data will be finalized in the CPUC Annual Report submitted in 2018.





SoCalREN Project Locations



Customer home

ENERGY UPGRADE CALIFORNIA® HOME UPGRADE (FLEX PATH)

Annual Budget

Implementation \$772.325

Incentives \$1,534,829

\$2,307,154

Total

Homes Served



1,857

kWh Saved



1,249,961

Therms Saved



125,908

Number of Contractors



84

Total Incentives



\$4,241,936





Average Savings



77.14 Therms/Home Average Savings

Both Home Upgrade and Flex Path encourage single-family homeowners to take the first step toward a more energy-efficient future by providing financial incentives on qualifying high-efficiency retrofits and measures, including heating and cooling equipment, insulation, and windows.

The Flex Path Residential program was developed during and carried over from the federal 2010-12 stimulus of the American Recovery and Reinvestment Act, or ARRA. Home Upgrade is a second-generation entry point retrofit program, redesigned from its ARRA-based predecessor. Both programs were created to demystify home energy efficiency improvements for property owners, and to drive the wholehome approach, as opposed to incremental single energy efficiency measures.

From a list of eligible measures, participants work with a Participating Contractor to select a combination of preferred measures, earning up to \$3,000 in incentives. This prescriptive approach gives homeowners freedom to undertake multiple upgrades over time and according to their specific needs. Owner-occupied single-family detached homes are eligible under these programs, and work must be performed by a trained, qualified, and certified Home Upgrade Participating Contractor.

Home Upgrade is the result of CPUC facilitation of a statewide stakeholder group to address one of the Portfolio's

most challenging sectors—the Residential market—which has continuously stymied Program Administrators with high implementation costs and modest impact. Despite this significant collaborative effort, Home Upgrade has struggled in the market as a basic-level upgrade option burdened with design constraints and complex documentation requirements. This has suppressed interest by contractors as well as homeowners.

As a result, the SoCalREN has endeavored to improve Residential performance through marketing, outreach, and contractor relationships, and to bundle the Home Upgrade Program as a Residential energy efficiency option, along with Residential PACE, and the utilities' Advanced Home Upgrade offering.

In 2017, the SoCalREN assessed a wide variety of Residential Programs, and has developed scenarios, modified program designs, a "hybridized" proposal, and leveraged partnerships with the potential to increase the performance and costeffectiveness of the Single-Family Residential market.



MULTIFAMILY PROGRAM

Annual Budget



Implementation \$1,412,500

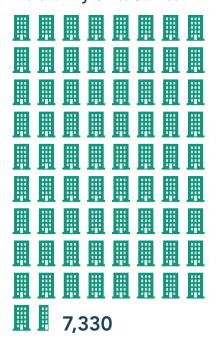
+

Incentives **\$6,823,159**

Iotal

\$8,235,659

Multifamily Units Served





189,067 Therms Savings



6,902,890 kWh Savings

Average Energy Savings per Project

21% Life of Program



32% 2017



\$125,985 Average Incentive per Project



\$7+ Million
Total Incentives
Since Program
Inception

The Multifamily Program provides audit incentives and retrofit rebates to building owners and managers to promote whole-building upgrades, with an emphasis on driving building improvements in underserved neighborhoods and Disadvantaged Communities.

Building owners can earn Multifamily Program incentives for comprehensive energy efficiency upgrades to qualifying structures of at least four units (although the Program's footprint to date is dominated by medium-sized buildings between 12 and 563 units). Projects must install at least three energy efficiency measures and achieve a minimum 10% improvement over existing conditions.

The SoCalREN Multifamily Program offers a tiered promotion strategy designed to stimulate multi-measure upgrades. The Program was originally developed as a flexible turnkey solution, composed of technical assistance, advanced building audits, program implementation, and construction/installation incentives. While the basic assumptions were sound, over time the Program migrated to an audit-incentive program that did not convert building audits into corrective upgrades. Actual energy savings were weak compared to investment, evidenced by the 2016 Multifamily score of .3 Total Resource Cost calculation (TRC is the process by which the CPUC measures program cost-effectiveness, with a Portfoliowide goal of 1.00 to 1.25).



In February 2017 the County's Office of Energy + Environment (OEE) launched a series of comprehensive performance assessments on a program-by-program basis, to identify corrections that would drive down administrative costs and increase energy savings. A resulting series of design adjustments and redesign measures were folded into the original Multifamily Program, incorporating a number of strategies similar to pay-for-performance standards and models. By May 2017 the Program attained a fully subscribed pipeline and substantial project waitlist. Current year-end calculations demonstrate a 2100% increase in kWh savings in 2017, with a projected Program TRC of 1.25.

2017 Strategic Program Development

Since February 2017, the SoCalREN Program Administrators have assessed additional enhancements to the Program, which will be integrated into the 2018 Rolling Portfolio launch. Also, the Administrators are considering market segmentation strategies, additional targeted marketing tactics, and the potential for a focus on multifamily rental buildings.

Multifamily Program

Multifamily Program



WORKFORCE DEVELOPMENT PROGRAM

Annual Budget



Implementation \$150.000

+

Incentives **\$0**

=

Total **\$150,000**

Total Enrollment

in Architecture Construction Engineering Students (ACES)



Participating Schools



8



\$74,768
Internship Dollars Earned
by ACES Students

The Workforce Development Program was launched as a support system to provide training, tools, and opportunity to minority participants across the region, focusing on energy and water efficiency measures and installations. In 2018, the Program looks to work with the CPUC to expand offerings that reflect the State's future plans to reinvent the "grid," deploy microgrids, and approach energy efficiency from an integrated approach of distributed generation (with combined measures and technologies, including energy efficiency, renewables, battery storage, electrification of transportation, and automated systems).

The Workforce Development Program was launched in 2014 to drive and generate upstream and downstream impacts through energy sector skills training and certifications for minority participants and focused deployment in underserved areas. The SoCalREN's key implementer in this initiative, Emerald Cities Collaborative (ECC), serves to facilitate the participation of under-represented individuals and businesses in the energy efficiency sector through workforce and business development and capacity building.

These efforts are leveraged from previous activities to build upon the workforce development infrastructure and alignment, to remove barriers to participation that commonly occur among Disadvantaged Communities, and to support a pathway from pre-apprenticeship training to apprenticeship. The Program also reaches beyond training and apprenticeship to forge continued capacity building support for small minority contractors through an E-Contractor Academy Program.

The implementation of the Local Worker Hiring Program (LWHP) for energy efficiency projects awarded by the County of Los Angeles Internal Services Department helps establish the foundation for the expansion of the LWHP within the SoCalREN. Expansion of the LWHP supports a skilled, diverse workforce to deliver greater energy savings, and broadens choice and opportunity among underserved communities and resident workforce.



Workforce Development Program

Workforce Development Program



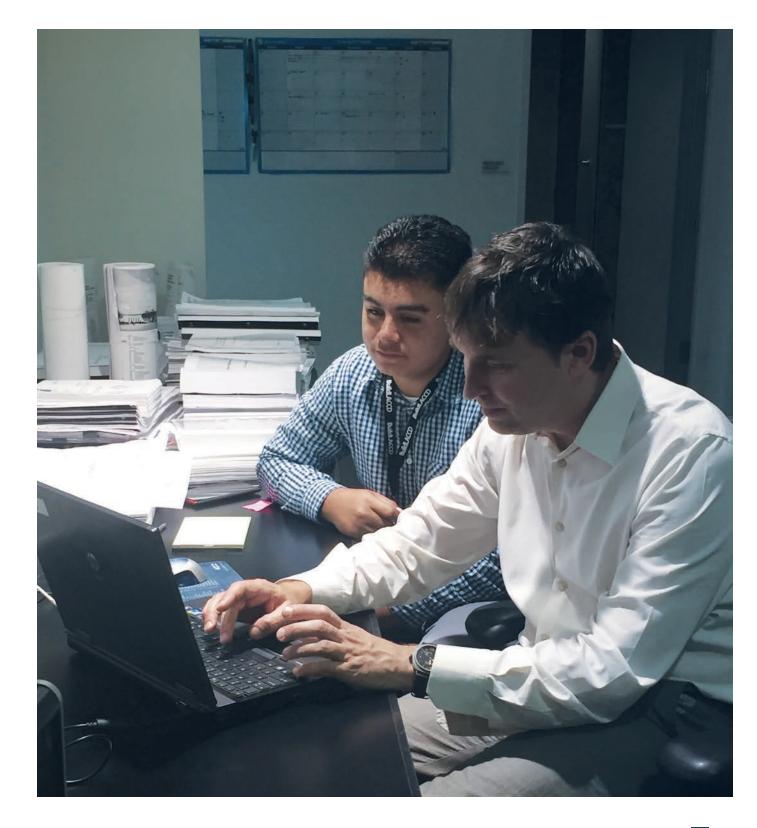
"The Program helped us grow to what we are today. We are still researching ways to grow and make a positive impact on our community by continuing to hire a diverse workforce."

Liz Perez, President of GC Green

To ensure compliance with the LWHP provisions and to report on the inclusion of under-represented individuals performing energy efficiency project work, ECC continues to provide contractor training on how to use LCP Tracker, an online certified payroll system, and share its best practices and strategies for local worker inclusion.

2017 Strategic Program Development

The County's SoCalREN Administrator is working with ECC to identify more aggressive social, economic, employment, and equity goals for this Program. The Program may also diversify stakeholders in the Program, and establish new tangible, measurable, and accountable targets for performance and outcomes with the expectation that the Program is capable of delivering not only direct benefits, but a suite of cascading co-benefits as well (e.g., expanded training with tools and software, education and training in the future design of fully-integrated microgrids, and opportunities in both the private and public sector). Through early discussions with the CPUC, the OEE is exploring the potential to expand the training scope of this Program to anticipate greater employment opportunity not simply in energy efficiency, but in electrification, microgrids, and distributed generation installations and systems.



Workforce Development Program

Workforce Development Program



INTEGRATED COMPREHENSIVE WHOLE BUILDING RETROFITS (PUBLIC AGENCY PROGRAM)

Annual Budget



Implementation \$3,328,601

+

Incentives **\$0**

=

Total

\$3,328,601



504Jobs Created



104
Participating
Agencies

Participating Agencies:

Counties

SH SH SH

3

Cities

Water Agencies



18

14

Other Agencies







The technical support, financial assistance, and project management expertise from start to finish provided to districts and local governments through the SoCalREN Public Agency Program has led to the implementation of 209 energy and/or water efficiency projects in public facilities and sites throughout Southern California. In the 2017 calendar year, the Program exceeded its 2016 performance, serving 102 local governments and

participating cities are underserved and Disadvantaged Communities.

districts, completing 100 energy and/or water efficiency projects, and, producing

nearly 30 Million kWh in energy savings. Moreover, approximately 60% of the Program's

The SoCalREN's Public Agency Program is the first fully-integrated, turnkey program serving public agency, district, and local government facilities and buildings. The Program was designed to fill substantial gaps in existing programs (such as Local Government Partnerships), and to address deep inconsistencies and gaps governments face in the technical, design, implementation and financing resources, and expertise necessary to build and implement meaningful energy efficiency plans for buildings and sites. This offering couples the upgrade program with building performance benchmarking and reporting, and offers a demonstration framework for expansion of energy performance and management reporting. The Public Agency Program was further expanded in 2016, through integration of an Aggregated Regional Procurement element.

The SoCalREN offers customized, comprehensive technical support services to public agencies to enable them to implement deeper and more cost-effective energy upgrades and energy management practices. The Program is now available on a supra-regional basis, with participating





facilities throughout 104 cities, counties, water agencies, special districts, and school districts.

More specifically, the Program offers a full spectrum of turnkey services, including:

- Customized guidebooks and templates for energy efficiency measures, tailored for local government needs
- Technical support, featuring a Local Government Needs Assessment Study (whole building approach), building audits, use of energy information (Enterprise Energy Management Information Systems, or EEMIS) and building performance management systems, and remote auditing software tools

- Facilitated procurement processes and best practices
- Enrollment in joint and bulk purchasing, supported by qualified vendor lists
- Direct support in identifying and accessing financing options, including available credits and incentives
- Design/install engineering that leverages aggregated measures to drive down project costs and return economics, and to create building-specific pro-formas that demonstrate advantages of deep retrofit implementation strategies
- Growing resource library of case studies and best practices, supplemented by Program Project studies





RESIDENTIAL MARKETING, EDUCATION, AND OUTREACH

Annual Budget



Implementation \$1,636,372

+

Incentives **\$0**

То

\$1,636,372

Homeowner Events



13

Local Community Events



38



Resulting in

少

and



Assessment Vouchers
Submitted

9,559 kWh Savings

2,165Therms Savings

The Residential Marketing and Outreach Program informs property owners, building contractors, and other stakeholders about the SoCalREN's energy efficiency offerings, using direct outreach, events, and a variety of media tools.

Marketing, Education, and Outreach (ME&O) is an essential component of nearly all CPUC Energy Efficiency Programs. Under the SoCalREN portfolio, there are several ME&O tracks, including one uniquely designed to promote both Single-family and Multifamily (Residential) SoCalREN programs.

Residential ME&O includes:

- Engagement and Facilitation Events (key stakeholders, working groups)
- Community Events and Outreach, including tabling opportunities at regional conferences, home shows, and forums
- Home Upgrade Advisor and Call Center
- Stakeholder Newsletter
- Social Media and Websites
- Special Promotions and Municipal Partnerships
- Marketing tools such as vouchers, coupons, and competitions (Marketing Champions)

ME&O programs are traditionally classified as non-resource programs, activities that do not result in specific and measurable energy savings. Instead, ME&O has been conventionally designed and implemented to raise awareness and influence behavior.

Beginning in 2018, the SoCalREN will allocate certain ME&O funding for deployment of greater analytics that will identify probability, compatibility, and capability targets. Our goal is to evolve ME&O from awareness-building to a call-to-action agenda, by piloting tactics and strategies that can be measured and reliably linked to retrofits and upgrades, and to define circumstances where ME&O might be measured as a quasi-resource activity. This is a modal shift from the opportunistic to the strategic.



Residential Marketing, Education, and Outreach
Residential Marketing, Education, and Outreach



LOW-INCOME SINGLE-FAMILY PROGRAM

Annual Budget



Implementation \$350.000

+

Incentives **\$0**

Total **\$350,000**

Contractors Trained



Presented to



25 Attendees

at the Community Development Block Grant county-wide rehabilitation program



32,000Prospective Applicants
Educated on the Program

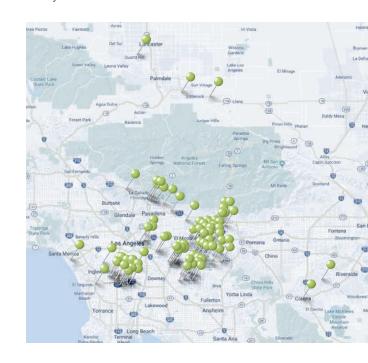
This Low-Income Single-Family Program educates Community Development Commission participants about home energy efficiency opportunities and trains contractors who work with low-income homeowners.

The Low-Income Single-Family retrofit program works primarily with the Community Development Commission (CDC) of the County of Los Angeles to develop and implement business processes that connect CDC participants with Energy Upgrade California Home Upgrade incentives and high-quality Participating Contractors. The Program educates potential participants and coordinates requirements. In 2016, the Program expanded to coordinate with additional local governments within the SoCalREN coverage area.

Another objective of the Program is to educate and train residential building retrofit and rehabilitation contractors from the CPUC Home Upgrade Program and cross-leverage their training and capacities to programs that serve low-income homeowners. Dual program training is expected to lead to the same comprehensive upgrades in low-income homes that occur in standard Home Upgrade residences.

2017 Strategic Program Development

Program objectives may be more fully served through certain strategic adjustments. For example, the County's SoCalREN Administrator is working to assess whether more robust outcomes can be realized through leveraging of this Program with the Workforce Development Program, to expand the eligible building stock for Low-Income Multifamily Buildings, and to cross-leverage this offering with other federal and local incentive and grant programs focused on Disadvantaged Communities. In addition, the SoCalREN Administrator will seek opportunities to supplement County affordable housing initiatives with options under this Program to promote healthy homes and reduced utility costs.





COMMERCIAL PACE

Annual Budget



Implementation \$705.750



Incentives **\$0**

_

\$705,750





3.5 Million kWh Savings



1.3 MillionSquare Feet of Improved Space



5.5 MillionGallons of Water Saved

SoCalREN promotes alternative financing mechanisms, including Commercial PACE (Property Assessed Clean Energy), to stimulate a wider, regional footprint for energy and water efficiency, renewable energy, automated building performance systems, and other measures in the commercial building sector. PACE provides a source of financing, secured by bonds, which is payable over the useful life of the building energy improvements, as a separate line item on Los Angeles County property tax rolls.

In 2017, the OEE commissioned an independent assessment of the County's Commercial PACE Program, together with a comparative analysis against state and national Commercial PACE Programs. These efforts focus on remedies and program design cures with the potential to invigorate Commercial PACE as a retrofit financing option and to capture presently stranded energy savings opportunities.

The Commercial PACE Program serves a class of eligible properties which includes commercial, industrial, agricultural, non-profit, and multifamily buildings with five or more units. Commercial PACE is available in 87 out of 88 incorporated cities, and all unincorporated regions in the County of Los Angeles.

Since active implementation began in 2013, the Commercial PACE mechanism has been used to fund nearly \$25 Million in comprehensive building retrofits. Notwithstanding strong early interest and uptake, Commercial PACE Programs in the County and across the nation yield modest outcomes. In general, the current County

of Los Angeles Commercial PACE option is not competitive compared with other available forms of financing for commercial building owners, and the process is overly-complex and time-consuming. The model does, however, have clear advantages. For example, the PACE assessment is not carried on the books as debt, but as an operating expense, and can mitigate the split incentive tension in commercial and residential rental properties.¹



¹ The "split incentive" challenge arises where building owners are responsible for the cost of building improvements that benefit commercial and residential customers (such as energy efficiency retrofits), but the tenants uniquely benefit, e.g., in the form of lower energy costs.

Commercial PACE

Commercial PACE



2017 Strategic Program Development

During 2017, the OEE worked to identify and mitigate program and market barriers, and also launched efforts to develop deeper, more active regional relationships that might serve as a demonstration model for neutralizing defects in the conventional Commercial PACE model:

- 1. The County commissioned a third-party assessment of the Commercial PACE Program, with the goal of identifying administrative, programmatic, financial, marketing, contractor, and technical barriers that prevent more dynamic uptake. In brief, stronger uptake of the Program is hindered primarily by high transaction and debt-service costs, an overly-bureaucratic and time-consuming process, and disproportionate impact on operating costs without clear identification of counter-balance benefits.
- 2. Recommendations have been developed, beginning organizational alignment, to mitigate or overcome barriers. These include folding the County's communityfacing energy programs (including PACE) under a joint powers authority, streamlining and/or removing direct bonding obligations, building specialized training and resources for participating contractors, and enrolling PACE Projects on an aggregation (rather than a single project) basis.

3. The SoCalREN expanded the regional relationships pilot (with the San Gabriel Valley Council of Governments) to engage more jurisdictions. Direct outreach was performed to specific end-user groups (e.g., commercial building owners and managers, and investment/banking interests) along with leveraging parallel programs administered by the OEE.

Assuming implementation of the above recommendations, as well as other design adjustments and cross-leveraging opportunities, goals for 2018 include:

- Create a resources library and toolkit for commercial contractors
- Establish alternative external bonding options
- Develop an aggregation subscription system
- Launch mid-stream optimization offerings (joint procurement of equipment to gain economies-ofscale discounts)
- Cross-cut data collection with the AB 802 and U.S. Department of Energy benchmarking/market project
- Work with lending institutions to pilot PACE as part of the commercial capital stack, focused on energy efficiency retrofits and retrocommissioning



Commercial PACE

Commercial PACE



CONTRACTOR OUTREACH AND TRAINING PROGRAM

Annual Budget



Implementation \$507.125

+

Incentives

Total

\$507,125



\$502,992

Matching Funds
Disbursed to Contractors
for Co-Op Marketing



490

Energy Efficiency Field Kits Distributed to Contractors





129



The Contractor Outreach and Training Program facilitates contractor professional development through enrollment and participation in the SoCalREN portfolio of programs with a comprehensive menu of training opportunities supported by technical and marketing resources.

The SoCalREN Contractor Outreach and Training Program was developed out of pre-2013 County projects financed under the U.S. Department of Energy's Better Buildings Program and the Energy Efficiency Community Block Grant Program, and was subsequently expanded to integrate contractor training and enrollment in the CPUC's Energy Upgrade California Home Upgrade program.

In addition to training and program recruitment, the SoCalREN Contractor slate includes marketing and outreach support from promotions, collateral, and Program data and information, to training on energy efficiency messaging and outreach to the public. The Program includes an HVAC component, which offers project incentives, contractor events and networking, special marketing channels and resources for contractors, specialized training, and distribution of Energy Efficiency Field Kits to Participating Contractors. In addition, the SoCalREN hosts training and mentoring opportunities that support contractors in broadening their business models to include other energy offerings such as PACE.

SoCalREN maintains a strong network of Energy Upgrade California Home Upgrade Participating Contractors registered through the SoCalREN Contractor Portal. Account Managers and Administrators provided education on energy efficiency upgrades so that contractors can deliver clear, actionable information to customers. Contractor outreach and training supports each single-family program, and every program supports the same contractor pool.

Throughout 2017, the County's SoCalREN Program Administrator engaged a number of local/regional workforce development, training, and economic, jobs, and technical stimulus institutions to facilitate the transition of Program funds to performance measures and strategies that are measurable and provide improved results.



Contractor Outreach and Training Program

Contractor Outreach and Training Program



REGIONAL ENERGY PROJECT AND CLIMATE/ENERGY PLANNING PROGRAM

Annual Budget



Implementation

+

Incentives **\$0**

=

Total

\$395,120



Processed dataset of more than **27,000,000** addresses



Database server that hosts and processes more than

1 billion
records

Aggregated utility consumption data by:

Neighborhoods

AAAAAAAAAA 335

Cities

4444444444 225

Councils of Governments

Counties

3H 3H 3H 3H 3H 3H 3H 3H

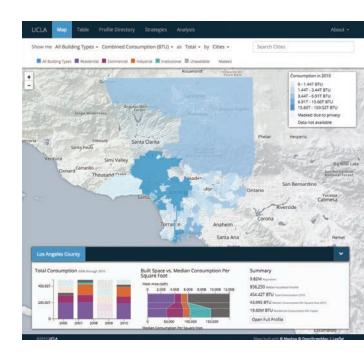
The SoCalREN Portfolio originated and funded a unique and innovative software system—the Los Angeles Energy Atlas—that not only measures energy use and intensity, but is also capable of downscaling from County to neighborhood levels. The Energy Atlas is also designed to cross-link with other information systems to produce energy profiles that support targeted, effective energy efficiency strategies and programs, performance over time, and reliable analysis and reporting.

The Regional Energy Project and Climate/Energy Planning Program was initially developed through the County's ARRA-funded energy programs and formally launched under the SoCalREN's original 2013-2014 Energy Efficiency Portfolio (filed August 2012) in a collaboration with the California Center for Sustainable Communities (CCSC) of the University of California, Los Angeles (UCLA). After two years of data collection and input, the Program produced the Los Angeles Energy Atlas, one of the largest disaggregated sources of building energy data available in the nation.

This innovative software resource was designed to incorporate a wide number of geographic and political data in order to better understand relationships and human drivers of energy use and energy efficiency adoption.

Currently, the Energy Atlas tracks approximately 35 million accounts, mapping energy consumption via kWh, therms, BTUs, as well as associated greenhouse gas (GHG) emissions. In addition to the SoCalREN, users include:

- Individual cities, districts, and offices
- Regional Assembly and Senate offices
- Private-sector consultants
- Academic institutions
- State agencies such as the Strategic Growth Council and the California Energy Commission



- The Governor's Office of Planning and Research
- Councils of Governments (COGs)
- Transportation and congestion management districts
- The Air Quality Management District (AQMD)
- Non-profit institutions

The interactive website currently displays building energy consumption at the neighborhood, city, COG, and Los Angeles County levels from 2006–2010. In 2016, the CCSC expanded Energy Atlas coverage beyond Los Angeles County to include six additional counties in Southern California, and also updated years of available energy data from 2011–2014. We are currently working to update and standardize reporting protocols across the full service territory through 2015.

Customer-level energy consumption data links to parcel data, census information, Los Angeles County rooftop solar potential data, CalEnviroScreen 2.0, and other relevant data sources. The Energy Atlas displays energy consumption and related characteristics across time and

geography to better enable decision makers and stakeholders to view energy consumption and conservation strategies. The Energy Atlas includes a map display of Los Angeles County energy consumption, profiles of energy consumption based on geography, analysis, and strategies for conservation and efficiency. Energy Atlas data also contributes to ongoing research efforts spanning utility grid vulnerabilities, questions of energy efficiency, and advanced energy communities within the County of Los Angeles.

Based on the diverse applications, utility, and reliability of the Energy Atlas, a coalition of local government stakeholders presented a statewide administration model application to the CPUC, predicated upon expansion of the Energy Atlas to capture energy consumption data across the State. The SoCalREN is also working with CCSC to develop a broader 2.0 data field repository that can be used to project and assess impacts of geographic and land development profiles, electrification, and energy efficiency resiliency planning. Among other uses, Energy Atlas 2.0 data diversification and analytics offer a support-spectrum—primarily to the energy sector but also potentially serving crosscutting sectors—to the County's Regional Sustainability Master Plan.





SUCCESS STORIES

ENERGY EFFICIENICY

SERVING DISADVANTAGEI COMMUNITIES





CITY OF CLAREMONT



Established 1887



Incorporated 1907



Population 36,059



Area (Sq. Mi.) 14.14



County of Los Angeles Supervisor District

 1^{st} District



Collectively, the projects completed to date have resulted in more than:



\$40,000+ Annual Cost Savings



380,000 kWh Annual Energy Savings



We have avoided 90+ metric tons of CO_2 (GHG reduction),

which is equivalent to taking **20** cars off the road



The City of Claremont enrolled in the SoCalREN Public Agency Program in late 2014, acknowledging a commitment to work with strategic partners to achieve energy reduction targets outlined in their City Sustainability Plan. Having already established a vision for community leadership, the City was ready to take action to identify and implement energy efficiency projects. The SoCalREN provided the City with the tools and expertise needed to get the job done.

Just this year, the City of Claremont completed two efficiency projects leveraging the SoCalREN's services, including:

- A city-wide LED streetlight retrofit
- Exterior lighting retrofits at several high-use community facilities such as the Alexander Hughes Community Center, Youth Activity Center, Taylor Reception Hall, Police Department, and Metrolink Station (pictured below)

For these and all energy efficiency projects the City of Claremont will enjoy enhanced utility incentives for energy savings achieved, due to their participation in the San Gabriel Valley Energy Wise Partnership. The dedicated project management and technical expertise provided by the SoCalREN have complemented Partnership offerings to drive implementation of smart energy strategies, and the results are winning praise from city staff and community members alike.

According to the project leads within the City, improved nighttime visibility is a widely recognized benefit by residents in areas where LED streetlight retrofits have

occurred. Staff working late and early shifts at multiple City facilities have also reported positive feedback after completion of outdoor area lighting upgrades.

The City will enjoy additional operational benefits from improved illumination, such as greater reliability from LED technologies and reduced maintenance. For years to come, completed projects will continue to help the City save on energy costs while progressing toward its greenhouse gas reduction goal. The City team has commented that these lighting retrofits have paved the way for more complex projects, and they would like the SoCalREN's assistance to conduct deeper evaluation of individual facilities, including City Hall, to identify additional energy saving opportunities.



Success Story: City of Claremont



CITY OF CULVER CITY



Incorporated 1917



Population :

39,364



Area (Sq. Mi.) **5.14**



County of Los Angeles Supervisor District

 2^{nd} District



Collectively, the projects completed to date have resulted in more than:



\$140,000+Annual Cost Savings



27 Jobs Created



1 Million kWh Annual Energy Savings



32,800Therms Annual Savings



We have avoided 300+ metric tons of CO_2 (GHG reduction),

which is equivalent to taking **65** cars off the road



As one of the first agencies to enroll in the SoCalREN Public Agency Program in 2013, the City of Culver City has shown consistent leadership and a commitment to energy efficiency by implementing a variety of lighting and mechanical projects.

The City has completed 14 projects to date including:

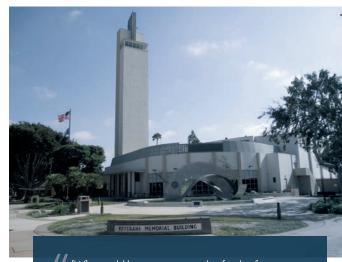
- A boiler replacement at The Culver City Municipal Plunge (aquatic center)
- LED lighting retrofits and the installation of an Energy Management System (EMS) at the Police Department, City Hall, Veterans Memorial building, Senior Center, and Transportation Center
- Optimization of HVAC equipment at the Police Department and City Hall
- More than 1,400 streetlights have been replaced throughout the City

The EMS is designed to reduce energy consumption and improve reliability through optimization of heating and cooling systems at these facilities. This project has been highly anticipated by City maintenance staff who, in the past, were constantly running to various buildings in an attempt to monitor and control HVAC equipment. They can now adjust systems remotely through a central dashboard.

The City has further demonstrated leadership through participation in the Westside Cities Partnership, which earns them additional incentive payments through utility programs for energy savings

achieved. Looking to the future, the City is taking a holistic approach to developing their energy efficiency strategy.

Through action, the City has shown commitment to being environmental stewards of their community. The SoCalREN is proud to provide continued support to their dedicated team.



[W]e would have not gotten this far this fast in such a cost-effective manner without SoCalREN's guidance and technical assistance every step of the way. . . . [T]he SoCalREN Public Agency Program is a fantastic program to assist local governments in energy efficiency that will pay dividends for years to come.

Charles Herbertson, Public Works Director/City Engineer, Culver City

Success Story: City of Culver City



CITY OF SANTA MONICA



Established 1769



Incorporated 1886



Population 92,478



Area (Sq. Mi.) **8.42**



County of Los Angeles Supervisor District

3rd District



Collectively, the projects completed to date have resulted in more than:



\$166,420Annual Cost Savings



10 Jobs Created



1.5 Million kWh Annual Energy Savings



We have avoided 400 metric tons of CO_2 (GHG reduction),

which is equivalent to taking **86** cars off the road



Santa Monica has long championed innovative sustainable leadership, adopting aggressive goals for reducing energy and water resource consumption and increasing efficiency, as well as increasing citywide use of renewable energy and alternative fuels. Since the City's enrollment in the SoCalREN in 2013, the Program has worked with the City to support their aggressive energy reduction goals through multiple energy efficiency projects.

The projects identified through the technical services offered by the SoCalREN include:

- Mechanical project optimizing parking garage exhaust system at the Ken Edwards Center
- Interior LED lighting retrofit at the Big Blue Bus facility
- City-wide LED street lighting retrofits
- Underwater and outdoor lighting improvements at the Santa Monica Swim Center
- LED lighting upgrade projects currently planned for beach parking lots, various public parking structures, and public parks

By implementing these projects, the City is benefiting through reduced maintenance and operating costs. In addition, increasing the quality of street, parking and park lighting can lead to improved safety and reduction in crime.

The savings generated from projects implemented by the City were instrumental in assisting Santa Monica in achieving the

Platinum level within the Westside Cities Energy Leader Partnership. Santa Monica was recognized for reducing overall municipal energy use by 20% since 2006. On the horizon, the City has the goal of retrofitting their library to achieve zero net energy, and is also currently pursuing 12 additional lighting projects at beaches, parks, and parking structures, with expected annual savings of 1.1 million kWh and nearly \$150,000 in energy costs.

Since enrolling in the Program and completing several projects, the community has reached out and expressed their positive feedback relating to the improved lighting quality provided by the new LED street light fixtures. Community members expressed that they can "see more" and feel safer due to the quality of light from new fixtures.



Success Story: City of Santa Monica 5



CITY OF LONG BEACH



Incorporated 1897



Population

470,130



Area (Sq. Mi.) **50.32**





County of Los Angeles Supervisor District

4th District



Collectively, the projects completed to date have resulted in more than:



Jobs Created



William

\$1.2 millionAnnual Cost Savings **8.6 Million** kWh
Annual Energy Savings



We will save **\$15 Million** over the life of the street lights



We have avoided 2,000 metric tons of CO_2 (GHG reduction),

which is equivalent to taking **400** cars off the road



Since enrolling in the SoCalREN Public Agency Program in 2013, the City of Long Beach has taken great strides to move toward energy-efficient solutions that are more resilient and ultimately better for the health of the economy and its residents.

The City recognizes that clean energy and energy efficiency not only mean reducing energy consumption, but also protecting the environment, fostering a safe community, saving money, and improving public health. Working in partnership with the SoCalREN, Long Beach has identified significant opportunities for reducing energy use by focusing on street, parking lot, and park lighting at several facilities. Impressively, the street lighting project is the fourth largest street lighting retrofit on the West Coast.

- Removal of High Pressure Sodium (HPS) streetlights and replacement with LEDs
- Updates to a total of more than 25,000 street lights throughout the City
- Improved lighting around the City and at key locations such as the Airport Parking and multiple beach parking lots
- Upgrades to both standard cobra head streetlights and decorative fixtures

A small portion of the street lights were funded by a Long Beach Port Mitigation Grant, and the remaining streetlights were funded by incentives and 0% interest loans from the local electric utility. Through the City's participation in the Energy Leader

Partnership, they were able to secure enhanced incentives to cover a significant portion of the project cost.

The street light projects have contributed to the City of Long Beach's goal of reducing greenhouse gas emissions, but have also played a major part in improving overall community safety. The Long Beach Police Department will benefit from the ability to install adjustable controls on the new LED lights, unlike the old high pressure sodium lights. This will allow the Department to manage and increase the lighting remotely as needed. This, in turn, will increase the effectiveness of the Police Department and contribute to public safety.



Success Story: City of Long Beach



CITY OF PALMDALE



Established 1886



Incorporated 1962



Population **157,356**



Area (Sq. Mi.) 106.21



County of Los Angeles Supervisor District

5th District



Collectively, the projects completed to date have resulted in more than:



\$151,759Annual Cost Savings



29% Energy Reduction



1.3 Million kWh Annual Energy Savings



20Jobs Created



We have avoided 325 metric tons of CO_2 (GHG reduction),

which is equivalent to taking **69** cars off the road



The City of Palmdale has made significant progress in its quest to become more energy-efficient since joining SoCalREN four years ago. The positive impact of its energy efficiency work with the Public Agency Program cannot be understated, and has benefited the City and community in multiple aspects including annual energy cost savings, improved outdoor environment and health, and increased safety.

The City has completed four projects:

- A two-phase LED street lighting retrofit project
- An exterior lighting retrofit project at three parks
- A mechanical project at six community swimming pools
- An interior lighting project at four facilities

Each project benefits Palmdale in a unique way. The park lighting retrofit project created a safer climate for park visitors and the lighting project at four facilities improved lighting quality for indoor users.

The street lighting upgrade project provided immediate energy and cost savings. In fact, the City was so pleased that it will be working with the Program to upgrade an additional 17,000 street lights, leveraging assistance to apply for and track incentives and On-Bill Financing, in addition to project management support.

Thanks to new variable frequency drives (VFDs) installed as part of the mechanical project at six community swimming pools, the City was able to develop a controls

strategy, allowing it to meet required water turnover rates for public pools while still realizing energy savings.

Throughout its experience with the Program, the City has commented that it sees the project team as an extension of its staff. This successful collaboration has caught attention beyond the City, as Palmdale was recently awarded the 2017 "Best Use of Technology" accolade from the High Desert Branch of the American Public Works Association (APWA) for the lighting and mechanical projects described above.



Success Story: City of Palmdale



CITY OF SANTA BARBARA



Established 1782



Incorporated 1850



Population **91,930**



Area (Sq. Mi.) 19.49



Location

County of Santa Barbara



Collectively, the projects completed to date have resulted in more than:



\$80,000Annual Cost Savings



700,000 kWh Annual Energy Savings



We have avoided 512 metric tons of CO_2 (GHG reduction),

which is equivalent to taking **110** cars off the road



The City of Santa Barbara enrolled in the SoCalREN Public Agency Program in June of 2014. Since this time, the City has been able to steadily increase both the number and the complexity of energy efficiency projects.

After implementing a series of smaller lighting projects as a proof of concept, the City enthusiastically moved forward with several complex parking garage and street lighting projects that have resulted in tremendous energy and cost savings. Building upon this success, the City has agreed to expedite existing efficiency plans and engage new departments in an effort to advance toward aggressive energy saving goals recently set by the City Council.

During 2017, the City completed eight projects that include:

- A variety of street lighting updates
- Lighting retrofits at the Santa Barbara Municipal Tennis Center
- Parking garage lighting retrofits at Downtown/Civic Center
- Exterior lighting retrofit at the Cater Municipal Water Treatment Plant

As the Program's partnership with the agency continues to expand, additional support for the City's water and community services departments, specifically targeting water system pumping and other operational efficiencies, are currently being targeted for the near future.

Since enrolling in SoCalREN, the City of Santa Barbara has implemented projects that have provided the community with safer street lighting, better living conditions, and improved operations and maintenance. The City has found great value in participating in the SoCalREN Public Agency Program which is easily identifiable by their committed actions toward being environmental stewards of their community.



Success Story: City of Santa Barbara Success Story: City of Santa Barbara



CONEJO VALLEY UNIFIED SCHOOL DISTRICT



Established 1974



Location

County of Ventura



Superintendent Mark W. McLaughlin, Ed.D.



Students

18,900



District Offices Thousand Oaks



Collectively, the projects completed to date have resulted in more than:



\$437,500Annual Cost Savings



55 Jobs Created



3.6 Million kWh Annual Energy Savings



We have avoided $\bf 945$ metric tons of ${\rm CO}_2$ (GHG reduction),

which is equivalent to taking **202** cars off the road



After enrolling in late 2013, the Conejo Valley Unified School District (CVUSD) worked alongside the SoCalREN Public Agency Program to identify and implement several energy efficiency projects.

CVUSD is benefiting from the positive impacts these energy efficiency projects have had on their facilities, as well as the people who inhabit them—including the nearly 19,000 students currently enrolled. By implementing efficiency upgrades, the District models smart energy behaviors while creating a learning environment where students and teachers can thrive.

CVUSD relied on the expertise of SoCalREN to help them identify qualifying measures and secure funding allocated by Proposition 39, a State program to fund energy efficiency improvements in California schools. CVUSD has chosen to pursue an even broader efficiency goal, implementing projects beyond their Proposition 39 allocation. Completed and planned projects throughout the District include:

- A range of mechanical and lighting projects at five different CVUSD campuses
- Central plant replacements at Los Cerritos Middle School and Thousand Oaks High School

At the Middle School, the 45-year-old system is inefficient and unable to meet the comfort needs of students and staff. Most system components will be replaced, including the boilers, chillers, and energy management system (EMS). The end result

will be a more efficient system that reduces the need for maintenance and emergency repairs, and more comfortable buildings that provide a better learning environment.

The District has commented that the Program has assisted in ways they never imagined possible.

[T]hey have exceeded all my expectations and then some. They have become not only an integral component of our energy management team, but an extremely valuable asset to the school district as well. Their level of expertise and professionalism has been unsurpassed. . . . They have done significant amounts of work on our behalf that has resulted in substantial savings of both energy and money.

Rick Freed, Energy Educator/Manager, CVUSD



Success Story: Conejo Valley Unified School District



CUCAMONGA VALLEY WATER DISTRICT



1955 Established



190,000 (Customers)



Location

County of San Bernardino



District Offices Rancho Cucamonga



Service Area (Sq. Mi.)

42



Collectively, the projects completed to date have resulted in more than:



\$158,000 **Utility Incentives**



1.7 Million kWh Annual Energy Savings



We have avoided 1,321 metric tons of CO₂ (GHG reduction),

which is equivalent to taking 283 cars off the road



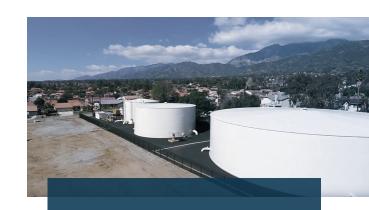
Cucamonga Valley Water District (CVWD) has been able to achieve significant levels of energy savings since enrolling with the SoCalREN Public Agency Program in October of 2014. CVWD is a retail water provider serving City of Rancho Cucamonga, portions of the cities of Upland, Ontario and Fontana, and some unincorporated areas of San Bernardino County.

In taking action to complete a total of nine energy efficiency projects, the resulting environmental impacts are an influential catalyst that inspires other similar agencies to take action to move their communities into a greener and healthier direction. Through SoCalREN, CVWD is serving their community with shared benefits such as greater service reliability, reduced energy costs, and reduced greenhouse gas emissions.

CVWD accomplished an unparalleled level of energy savings and significantly reduced operational budgets by leveraging services through a partnership created between the SoCalREN and Water Infrastructure System Efficiency (WISETM), a Southern California Edison third-party program. By leveraging multiple programs to incorporate energy efficiency improvements within their facilities, the upgrades were completed in only nine months from start to finish.

The projects included water pumping upgrades and sequencing optimization of 47 booster pumps and nine well pumps located throughout the CVWD water distribution system.

The procurement and construction approach used in the pump upgrades project is now being replicated at other water agencies with similar projects with support from the SoCalREN.



The SoCalREN Public Agency Program provided engineering services, project management, and the resources needed to streamline CVWD's energy efficiency projects from start to finish.

> Mike Maestas. Water Production Manager, CVWD

Success Story: Cucamonga Valley Water District Success Story: Cucamonga Valley Water District



The SoCalREN used the 2017 calendar year to make administrative, programmatic, and operational changes designed to reform the Portfolio toward aggressive goals and energy savings.

As earlier noted, we phased out programs and program elements that had either fully realized objectives or, in the alternative, did not demonstrate credible potential to reach certain goals. In addition, we fundamentally changed the administration and management of the Portfolio, even to the extent of releasing an implementer of several programs. The County's Office of Energy + Environment has taken a direct role in day-to-day oversight and direction, and now works closely with productive and effective implementers. Together with these high-performing implementers, and supported by deeper collaboration with the incumbent regional Investor-Owned Utilities (Southern California Edison and SoCalGas), the Portfolio has realized geometric improvement and delivery.

Based on positive outcomes from its 2017 pivot to a performance-based Portfolio, the SoCalREN has developed a number of additional (but not exclusive or exhaustive) strategies to further establish it as a reliable, inventive, generative and cost-effective Program Administrator. The SoCalREN is determined to meet the rigor and maturity necessary to attain permanent Program Administrator status. To this end, the SoCalREN has mapped a number of 2018 Objectives and Strategies:



Objectives

Subject to final CPUC approval of its Business Plan and implementation proposals, in 2018 the SoCalREN will:

- Execute additional improvements to the Multifamily Program, to induce even greater productivity and return in energy savings
- Pilot model(s) that address market barriers in the Single-Family sector, including funding mechanisms
- Engage strategies (e.g., funding mechanisms, outreach, resource development) to expand wholebuilding retrofits among government agency facilities and sites
- Expand training and education especially within underserved communities—to better reflect the integrated grid now under proceeding at the CPUC, i.e., integrating energy efficiency, renewables, storage, electrification, building analytics, and assessments

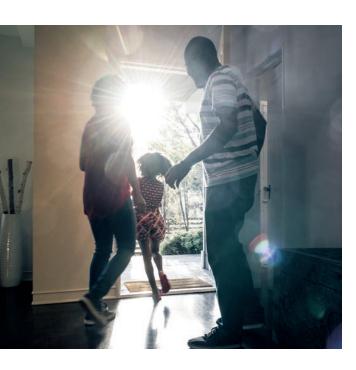
- Reshape and rework conventional approaches to Marketing, Education, and Outreach from awareness-building programs to market identification, market indicators, and calls-to-action
- Continue and expand leveraged funds and efforts, with a focus on Disadvantaged Communities and healthy housing
- Coordinate with other Energy-Sector Administrators, such as Los Angeles Department of Water and Power (LADWP), and regional Community Choice Energy (CCE) Authorities
- Continue active representation in regulatory and legislative proceedings



Rolling Portfolio Key Objectives

Programmatic and Operational Strategies

- Alternative scenario-building with the CPUC
- Longer-term contracts and resolution of gaps in contracting
- Greater emphasis on three-dimensional integration
- Cross-cutting within the Portfolio
- Cross-leveraging with other partners (CCE, LADWP, incumbent utilities)
- Increased funding leverage (e.g., other State and national agencies)



- Continued process toward streamlined programs
- Shift to third-party program innovative solicitations (such as Requests for Abstracts)
- Increased emphasis on pay-forperformance programs
- Expanded relationships with relevant technical and professional associations
- Emphasis on strong new brand
- Cohesive website for SoCalREN in 2018—all programs in one place for improved customer experience
- Streamlined brand applied to all programs
- Improved social media presence in 2018—all programs, not just residential
- Restructure marketing plans to define indicators, identify target customers, and align incentives with end-user priorities



Rolling Portfolio Key Objectives

Rolling Portfolio Key Objectives

SUSTAINABILITY

APPENDICES

EFFICIENCY



BENCHMARK

APPENDICES:

2016 ANNUAL REPORT

Table 1. Electricity and Natural Gas Savings and Demand Reduction (Gross)

Annual Results		2016 Installed Savings ^[1]	CPUC 2016 Adopted Goals (D.15-10-028)	% of Goals (2016)
2016 Energy Savings (GWh) – Annual		Savings	Guais (D.13-10-020)	(2010)
2010 Energy Savings (GWH) - Annual	PG&E			
	SCE			
	SDG&E			
	SCG			
	MCE			
	BayREN			
	SoCalREN	0.867	4.622	19%
ГОТАL Energy Savings (GWh) - Annual		0.867	4.622	19%
2016 Energy Savings (GWh) – Lifecycle[2]				
	PG&E			
	SCE			
	SDG&E			
	SCG			
	MCE			
	BayREN			
	SoCalREN	n/a	n/a	n/a
TOTAL Energy Savings (GWh) – Lifecycle	DO CUITEDI (n/a	n/a	n/a
2016 Natural Gas Savings (MMth) – Annual				
	PG&E			
	SCE			
	SDG&E			
	SCG			
	MCE			
	BayREN			
	SoCalREN	0.059	0.230	260
TOTAL Natural Gas Savings (MMth) – Ann		0.059	0.230	26% 26%

Annual Results		2016 Installed Savings ^[1]	CPUC 2016 Adopted Goals (D.15-10-028)		
2016 Natural Gas Savings (MMth) – Lifecycle					
PG	&E				
S	CE				
SDG	&E				
S	CG				
M	CE				
BayR	EN				
SoCalR	EN n/a	ı	n/a	n/a	
TOTAL Natural Gas Savings (MMth) – Lifecycle	n/a	ı	n/a	n/a	
2016 Peak Demand savings (MW)					
PG	&E				
S	CE				
SDG	&E				
S	CG				
M	CE				
BayR	EN				
SoCalR	EN	0.921	3.53	6	269
TOTAL Peak Demand savings (MW)		0.921	3.53	6	269

^[1] Installed savings are from two resource programs: Multi-Family and Single-Family.

Appendices: 2016 Annual Report 6

^[2] Lifecyle goals not given in D. 15-10-028

Table 3. 2016 Expenditures (including expenditures on past cycle commitments paid in 2016)

	Admi	inistrative Cost	
	Non-IO	U Implementer	
2016 Expenditures[1]	10-12 Committed Funds Expenditures	13-15 Committed Funds Expenditures	2016 Expenditures from 2016 Budget
IOU Programs			
Local Government Programs (Partnership Programs)			
Third Party Programs (Competitive Bid Program)			
RENs & CCA (Non-IOU Programs)	\$ -	\$ -	\$ 3,484,117.43
Subtotal			
EM&V - IOU	-		
EM&V - Joint Staff	_		
Total Portfolio			
SW ME&O*			
OBF/Revolving Loan Pool*			
Energy Savings Assistance Program (ESA)*			
Total Expenditures	_		
<u></u>	•		

^{*}Budget dollars outside Portfolio Total

	1	Administrative (Cost		Direct Impleme	entation		
		IOU Support		Non-Incentive				
2016 Expenditures[1]	10-12 Committed Funds Expenditures	13-15 Committed Funds Expenditures	2016 Expenditures from 2016 Budget	10-12 Committed Funds Expenditures	13-15 Committed Funds Expenditures	2016 Expenditures from 2016 Budget		
IOU Programs	Expenditures	Expenditures	Duaget	Expenditures	Expenditures			
Local Government Programs (Partnership Programs)								
Third Party Programs (Competitive Bid Program)								
RENs & CCA (Non-IOU Programs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,018,897.02		
Subtotal	-							
EM&V - IOU	-							
EM&V - Joint Staff	•							
Total Portfolio								
SW ME&O*								
OBF/Revolving Loan Pool*								
Energy Savings Assistance Program (ESA)*								
Total Expenditures								
Table 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	•							

^{*}Budget dollars outside Portfolio Total

	Direct Impleme Incentives & F		PA Administered ME&O (outside the SW ME&O activities)					
10-12 Committed Funds Expenditures	13-15 Committed Funds Expenditures	2016 Expenditures from 2016 Budget	10-12 Committed Funds Expenditures	13-15 Committed Funds Expenditures	2016 Expenditures from 2016 Budget			
\$ -	\$ -	\$ 2,025,350.00	\$ -	\$ -	\$ 2,469,770.72			
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•	10-12 Committed Funds Expenditures	Incentives & F 10-12	Incentives & Rebates 10-12	Incentives & Rebates (outs 10-12	Incentives & Rebates (outside the SW ME&C 10-12 Committed Funds Expenditures Expenditures			

2016 Expenditures[1]	Adopted 2016 Budget (Decision 14-10-046)
IOU Programs	
Local Government Programs (Partnership Programs)	
Third Party Programs (Competitive Bid Program)	
RENs & CCA (Non-IOU Programs)	21,651,000.00
Subtotal	
EM&V - IOU	
EM&V - Joint Staff	•
Total Portfolio	
SW ME&O*	
OBF/Revolving Loan Pool*	
Energy Savings Assistance Program (ESA)*	
Total Expenditures	

^{*}Budget dollars outside Portfolio Total

Appendices: 2016 Annual Report Appendices: 2016 Annual Report

^[1] Not final 2016 expenditures. Los Angeles County and its PUC appointed fiscal administrator will settle final 2016 expenditures after the Annual Report's due date.

^[1] Not final 2016 expenditures. Los Angeles County and its PUC appointed fiscal administrator will settle final 2016 expenditures after the Annual Report's due date.

^[1] Not final 2016 expenditures. Los Angeles County and its PUC appointed fiscal administrator will settle final 2016 expenditures after the Annual Report's due date.

^[1] Not final 2016 expenditures. Los Angeles County and its PUC appointed fiscal administrator will settle final 2016 expenditures after the Annual Report's due date.

2017 Q1 REPORT

2016 IOU Energy Efficiency Cap and Target Expenditure Performance^{1,2}

		xpenditures			1011
Budget Category	IOU	hird Party + Partnerships	т	otal Portfolio	IOU Budget ³
Administrative Costs					\$ 2,229,863
IOU Non-IOU ⁴ IOU Administrative Cap Exempt Programs ⁵	\$ 492,928	\$ 14,319 137,099		492,928 14,319 137,099	
Marketing and Outreach Costs					\$ 3,199,169
Marketing & Outreach ⁶ Statewide Marketing & Outreach ⁹	\$ -	\$ 304,124	\$	304,124	
Direct Implementation Costs					\$ 16,221,968
Direct Implementation (Incentives and Rebates) ⁷		\$ 731,850	\$	731,850	
Direct Implementation (Non Incentives)	\$ -	\$ 491,745	\$	491,745	
Direct Implementation Target Exempt Programs ⁸	\$ -	\$ 2,383,686	\$	2,383,686	
EM&V Costs (Investor Owned Utilities & Energy Division)	\$ -	\$ -	\$	-	
OBF Loan Pool					
Total	\$ 492,928	\$ 4,062,823	\$	4,555,751	\$ 21,651,000

Notes

- Includes energy efficiency costs authorized in D.12-11-015; does not include costs recovered in IOU General Rate Cases.
- Does not include costs incurred by RENs or CCAs
- 3. The 2013-2014 EE budget was authorized in D.12-11-015; the Statewide Marketing & Outreach budget was authorized in D.13-12-038.
- 4. The Third-Party and Partnership administrative cost target is calculated as a percentage of total Third Party and Partnership expenditures (excluding IOU support).
- 5. Administrative Cap Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Agriculture Energy Improvement, Industrial Energy Advisor, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Financing, and all non-resource Local, Government Partnership, and Thirty-Party programs.
- 6. Statewide Marketing & Outreach expenditures are excluded from the Marketing and Outreach Cost target calculation.
- 7. Direct Implementation (Incentives and Rebates) include: End User Rebates, Direct Install labor activity, Direct Install Materials & Services, and Upstream/Midstream rebates.

 8. Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Commercial Continuous Energy Improvement, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Enancing, and all non-resource Local, Government Partnership, and Third-Party programs.
- Per PUC does not apply to SoCalREN.
- 10. Per D.12-11-015 (p. 15) PUC "will not apply hard caps on these expenditures [Administrative and Marketing and Outreach] at this time"

		Cap & Ta	rget Perfor	rmance 10	Cap/Target %
		Actual	Сар	Target	of Spend
Budget Category	——	%	%	%	(FYI Only)
Administrative Costs					
IOU		10.8%		10.0%	
Non-IOU ⁴		0.3%			
IOU Administrative Cap Exempt Programs ⁵		3.0%			
Marketing and Outreach Costs					
Marketing & Outreach ⁶		6.7%		6.0%	
Statewide Marketing & Outreach ⁹					
Direct Implementation Costs					
Direct Implementation (Incentives and Rebates) 7		16.1%			
Direct Implementation (Non Incentives)		10.8%		20.0%	
Direct Implementation Target Exempt Programs ⁸		52.3%		20.0%	
EM&V Costs (Investor Owned Utilities & Energy Division)					
OBF Loan Pool					
Total					

Notes

- Includes energy efficiency costs authorized in D.12-11-015; does not include costs recovered in IOU General Rate Cases.
- Does not include costs incurred by RENs or CCAs
- 3. The 2013-2014 EE budget was authorized in D.12-11-015; the Statewide Marketing & Outreach budget was authorized in D.13-12-038.
- The Third-Party and Partnership administrative cost target is calculated as a percentage of total Third Party and Partnership expenditures (excluding IOU support).
 Administrative Cap Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Administrative cap Exempt programs include. Codes & Standards, Emerging Technologies, Workdoor Education & Halming, Integrated Defination-Side Management, CALSPREE Energy Advisor, Augmentation Commercial Continuous Energy Improvement, Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Enancing, and all non-resource Local, Government Partnership, and Third-Party programs.
- 6. Statewide Marketing & Outreach expenditures are excluded from the Marketing and Outreach Cost target calculation.
- 7. Direct Implementation (Incentives and Rebates) include: End User Rebates, Direct Install labor activity, Direct Install Materials & Services, and Upstream/Midstream rebates.

 8. Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Commercial Continuous Energy Improvement, Industrial Energy Advisor, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement
- Per PUC does not apply to SoCalREN.
- 10. Per D.12-11-015 (p. 15) PUC "will not apply hard caps on these expenditures [Administrative and Marketing and Outreach] at this time"

Appendices: 2017 Q1 Report

2017 Energy Efficiency Fund Shift Report – First Quarter

					Progra	am E	Budgets & Funds	hifti	ing		
O Program ID	Program / Sub Program	2	016 Operating Budget	20	017 Authorized Budget	E	016 Authorized Encumbered / emmitted Funds	Tr	017 Funds ansferred In umulative for Year)	Tran	17 Funds sferred Out nulative for Year)
	1 SoCaIREN PROGRAMS	s	24,173,425	s	21,651,000	s	3,453,475	s		s	
	SCR-EUC - Energy Upgrade California	*	24,110,420	*	21,001,000	*	0,100,110	*		*	
SCR-FUC-A1	Local Marketing and Outreach	s	1.636.372.00	s	1.636.372.00	s		\$		\$	
SCR-FUC-A2	Green Building Labeling	s	1.005.000.00		1.005.000.00			\$		\$	
SCR-FUC-A3	Flex Path Incentives	Š	2.660.504.00		2.307.155.00		130.100	ŝ	_	\$	_
SCR-EUC-A4	Contractor Outreach and Training	Š	507.125.00		507.125.00		-	\$	-	\$	
SCR-EUC-A5	Multifamily Incentives	Š	6,940,976.00		4,771,900.00		3,323,375	\$	-	\$	
SCR-EUC-A6	Low-Income Single Family Residential SCR-FIN - Financing	\$	350,000.00		350,000.00		-	\$	-	\$	-
SCR-FIN-B1	Public Building Loan Loss Reserve	s	100.000.00	s	100.000.00	s		\$		\$	
SCR-FIN-B2	FUC Residential Loan Loss Reserve	Š	1,737,500.00		1.737.500.00		_	\$	_	\$	_
SCR-FIN-B4	Non-Residential PACE	Š	705.750.00		705.750.00			\$	-	\$	
SCR-FIN-B5	Public Agency Revolving Loan Fund SCR-REC - REC	\$	236,000.00		236,000.00		-	\$	-	\$	-
SCR-REC-C1	Aggregated Regional Procurement	s	3.355.771.00	s	3.355.771.00	s	_	\$	_	\$	_
SCR-REC-C2	Integrated Comprehensive Whole Building Retrofits	Š	3.328.601.00		3.328.601.00		_	\$	_	\$	
SCR-REC-C3	Regional Climate Action and Energy Plan	Š	395.120.00		395.120.00			\$	-	\$	
SCR-REC-C4	Water-Energy Nexus	\$	253,893.00		253,893.00		-	\$	-	\$	-
SCR-REC-C5	Regional Energy Project Tracking and Permitting (CEEPMS)	Š	138.735.00		138.735.00			\$		\$	_
SCR-REC-C6	Marketing, Outreach, Education, and Training	Š	672.078.00		672.078.00			\$	-	\$	-
SCR-REC-C7	Workforce Development	\$	150,000.00	\$	150,000.00	\$	-	\$	-	\$	-
EM&V	2 EM&V ⁶			\$	-	\$	-	\$	-	\$	-
	GRAND TOTAL			\$	21,651,000	\$	3,453,475	\$		\$	

\$ 25,104,475 \$ 3,247,650

					Progr	rogram Budgets & Fundshifting							
category	Program ID		Program / Sub Program	F	Revised 2017 Operating Budget ¹		717 Annual Fund Shift hreshold - t Applicable	Advice Letter Submitted & Approved ³					
		1 SoCalRi	EN PROGRAMS	s	25.104.475	s	3,247,650						
			SCR-EUC - Energy Upgrade California	•	20,104,470	1	0,247,000						
	SCR-FUC-A1		Local Marketing and Outreach	s	1.636.372	s	245.456						
	SCR-EUC-A2		Green Building Labeling	s	1.005.000		150.750						
	SCR-EUC-A3		Flex Path Incentives	\$	2.437.255		346.073						
	SCR-EUC-A4		Contractor Outreach and Training	\$	507,125		76,069						
	SCR-EUC-A5		Multifamily Incentives	\$	8,095,275	\$	715,785						
	SCR-EUC-A6		Low-Income Single Family Residential	\$	350,000	\$	52,500						
			SCR-FIN - Financing	\$	-	1	, , , , ,						
	SCR-FIN-B1		Public Building Loan Loss Reserve	\$	100,000	\$	15,000						
	SCR-FIN-B2		EUC Residential Loan Loss Reserve	\$	1,737,500	\$	260,625						
	SCR-FIN-B4		Non-Residential PACE	\$	705,750	\$	105,863						
	SCR-FIN-B5		Public Agency Revolving Loan Fund	\$	236,000	\$	35,400						
			SCR-REC - REC	\$	-		.,						
	SCR-REC-C1		Aggregated Regional Procurement	\$	3,355,771	\$	503,366						
	SCR-REC-C2		Integrated Comprehensive Whole Building Retrofits	\$		\$	499,290						
	SCR-REC-C3		Regional Climate Action and Energy Plan	\$	395,120		59,268						
	SCR-REC-C4		Water-Energy Nexus	\$	253,893	\$	38,084						
	SCR-REC-C5		Regional Energy Project Tracking and Permitting (CEEPMS)	\$	138,735	\$	20,810						
	SCR-REC-C6		Marketing, Outreach, Education, and Training	\$		\$	100,812						
	SCR-REC-C7		Workforce Development	\$	150,000	\$	22,500						
	EM&V	2 EM&V ⁶		•		l							

GRAND TOTAL

Notes:

[1] Revised Operating Budget, Column M = J+K+L

[2] IOU Fund Shift Threshold set at 15% x H (2012 Authorized Budget). For C&S, ET and ME&O see footnote 5.

[3] An Advice Letter is required for fund shifts greater than 15%.

[4] Funds cannot be shifted into the program; however, funds can be shifted out of the program.

[5] An Advice Letter is required for shifts that would reduce any of these programs by more than 1% of budgeted levels.

[6] Funds cannot be shifted out of EM&V by any amount without assigned ALJ or Commissioner ruling.

									es Exclusive of Car 3 Months Through			
Category	Program ID		Program / Sub Program		Administrative		Marketing	Dire	ect Implementation	EM&V		Total
		1 SoCal	REN PROGRAMS	s	644.346	s	304,124	s	3,607,281		s	4.555.751
		. 0000	SCR-EUC - Energy Upgrade California	ľ	011,010	•	004,124	*	0,007,207		*	4,000,101
	SCR-FUC-A1		Local Marketing and Outreach	s	33.132.37	\$	31.394.34	\$	258.131.25		\$	322,658
	SCR-EUC-A2		Green Building Labeling	Š				\$	197.516.30		\$	232.047
	SCR-EUC-A3		Flex Path Incentives	s	70.004.36	s		\$	299,476,44		\$	369,481
	SCR-EUC-A4		Contractor Outreach and Training	\$	28,874.62	\$	116,599.96	\$	158,061.83		\$	303,536
	SCR-EUC-A5		Multifamily Incentives	\$	102,046.14	\$	10,000.00	\$	924,118.81		\$	1,036,165
	SCR-EUC-A6		Low-Income Single Family Residential	\$	9,274.84	\$	-	\$	7,282.00		\$	16,557
			SCR-FIN - Financing									
	SCR-FIN-B1		Public Building Loan Loss Reserve	\$	3,136.57	\$	-	\$	1,550.00		\$	4,687
	SCR-FIN-B2		EUC Residential Loan Loss Reserve	\$	8,256.67	\$		\$	54,422.75		\$	62,679
	SCR-FIN-B4		Non-Residential PACE	\$	30,621.65	\$	61,347.25	\$			\$	91,969
	SCR-FIN-B5		Public Agency Revolving Loan Fund SCR-REC - REC	\$	6,986.00	\$	-	\$	-		\$	6,986
	SCR-REC-C1		Aggregated Regional Procurement	s	1.863.27	s		\$			\$	1.863
	SCR-REC-C2		Integrated Comprehensive Whole Building Retrofits	Š				s	1.538.559.96		\$	1.803.075
	SCR-REC-C3		Regional Climate Action and Energy Plan	s	10.631.59	s	_	\$	-		\$	10.632
	SCR-REC-C4		Water-Energy Nexus	\$	8,768.32	\$	-	\$	-		\$	8,768
	SCR-REC-C5		Regional Energy Project Tracking and Permitting (CEEPMS)	\$	13,943.91	\$	-	\$	84,320.35		\$	98,264
	SCR-REC-C6		Marketing, Outreach, Education, and Training	\$	8,005.78	\$	84,782.47	\$	38,841.07		\$	131,629
	SCR-REC-C7		Workforce Development	\$	9,754.75	\$		\$	45,000.00		\$	54,755
	EM&V	2 EM&V	,c	\$	-	\$	-	\$	-	\$ -	\$	-
		GRAN	D TOTAL	\$	644,346	\$	304,124	\$	3,607,281	\$ -	\$	4,555,751

				(Inception-To-Date,	rogram Activity 3 Months Through	March 31, 2017)
Prograi	m ID		Program / Sub Program	Energy Savings (Gross Annual kWh)	Demand Reduction (Gross Peak kW)	Gas Savings (Gross Annual Therms)
		1 SoCalR	EN PROGRAMS	2.015.251	426	36.906
			SCR-EUC - Energy Upgrade California	2,010,201		00,000
SCR-FU	IC-A1		Local Marketing and Outreach	0.00	0.00	0.00
SCR-EU	IC-A2		Green Building Labeling	0.00	0.00	0.00
SCR-EU	IC-A3		Flex Path Incentives	99.968.90	175.19	10.534.70
SCR-EU	IC-A4		Contractor Outreach and Training	0.00	0.00	0.00
SCR-EU	IC-A5		Multifamily Incentives	1,915,282.00	251.15	26,371.00
SCR-EU	IC-A6		Low-Income Single Family Residential SCR-FIN - Financing	0.00	0.00	0.00
SCR-FIN	N-B1		Public Building Loan Loss Reserve	0.00	0.00	0.00
SCR-FIN	N-B2		EUC Residential Loan Loss Reserve	0.00	0.00	0.00
SCR-FIN	N-B4		Non-Residential PACE	0.00	0.00	0.00
SCR-FIN	N-B5		Public Agency Revolving Loan Fund SCR-REC - REC	0.00	0.00	0.00
SCR-RE	C-C1		Aggregated Regional Procurement	0.00	0.00	0.00
SCR-RE			Integrated Comprehensive Whole Building Retrofits	0.00	0.00	0.00
SCR-RE			Regional Climate Action and Energy Plan	0.00	0.00	0.00
SCR-RE			Water-Energy Nexus	0.00	0.00	0.00
SCR-RE			Regional Energy Project Tracking and Permitting (CEEPMS)	0.00	0.00	0.00
SCR-RE			Marketing, Outreach, Education, and Training	0.00	0.00	0.00
SCR-RE	:C-C7		Workforce Development	0.00	0.00	0.00
EM&	V	2 EM&V ⁶				
		GRAND	TOTAL	2,015,251	426	36,906

Notes:

[1] Revised Operating Budget, Column M = J+K+L

[2] IOU Fund Shift Threshold set at 15% x H (2012 Authorized Budget). For C&S, ET and ME&O see footnote 5.

[3] An Advice Letter is required for fund shifts greater than 15%.

[4] Funds cannot be shifted into the program; however, funds can be shifted out of the program.

[5] An Advice Letter is required for shifts that would reduce any of these programs by more than 1% of budgeted levels.

[6] Funds cannot be shifted out of EM&V by any amount without assigned ALJ or Commissioner ruling.

Appendices: 2017 Q1 Report Appendices: 2017 Q1 Report

2017 Q2 REPORT

2017 IOU Energy Efficiency Cap and Target Expenditure Performance^{1,2}

			kpenditures			
Budget Category		IOU	Third Party + Partnerships		otal Portfolio	IOU Budget ³
Administrative Costs						\$ 2,229,863
IOU	\$	989,632	\$ -	\$	989,632	
Non-IOU ⁴	\$	-	\$ 55,710	\$	55,710	
IOU Administrative Cap Exen	npt Programs ⁵	-	\$ 289,368	\$	289,368	
Marketing and Outreach Costs						\$ 3,199,169
Marketing & Outreach ⁶	\$	-	\$ 527,526	\$	527,526	
Statewide Marketing & Outre	ach ⁹	-	\$ -	\$	-	
Direct Implementation Costs						\$ 16,221,968
Direct Implementation (Incen	tives and Rebates) 7 s	-	\$ 3,303,430	\$	3,303,430	
Direct Implementation (Non In	ncentives) \$	133,349	\$ 1,038,827	\$	1,172,176	
Direct Implementation Target	Exempt Programs ⁸ \$	-	\$ 4,303,830	\$	4,303,830	
EM&V Costs (Investor Owned Utilities & Ene	rgy Division) \$		\$ -	\$	-	
OBF Loan Pool						
Total	\$	1,122,981	\$ 9,518,692	\$	10,641,672	\$ 21,651,000

Notes

- Includes energy efficiency costs authorized in D.12-11-015; does not include costs recovered in IOU General Rate Cases.
- Does not include costs incurred by RENs or CCAs
- The 2013-2014 EE budget was authorized in D.12-11-015; the Statewide Marketing & Outreach budget was authorized in D.13-12-038.
- 4. The Third-Party and Partnership administrative cost target is calculated as a percentage of total Third Party and Partnership expenditures (excluding IOU support).
- 5. Administrative Cap Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Agriculture Energy Improvement, Industrial Energy Advisor, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Financing, and all non-resource Local, Government Partnership, and Thirty-Party programs.
- 6. Statewide Marketing & Outreach expenditures are excluded from the Marketing and Outreach Cost target calculation.
- 7. Direct Implementation (Incentives and Rebates) include: End User Rebates, Direct Install labor activity, Direct Install Materials & Services, and Upstream/Midstream rebates.

 8. Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Commercial Continuous Energy Improvement, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Enables and Industrial Energy Advisor, Agriculture Continuous Energy Improvement, Energy Improvement, Energy Energy
- Per PUC does not apply to SoCalREN.
- 10. Per D.12-11-015 (p. 15) PUC "will not apply hard caps on these expenditures [Administrative and Marketing and Outreach] at this time"

	Cap & Ta	rget Perfo	rmance 10	Cap/Target %
	Actual	Сар	Target	of Spend
Budget Category	%	%	%	(FYI Only)
Administrative Costs				
IOU	9.3%		10.0%	
Non-IOU ⁴	0.5%			
IOU Administrative Cap Exempt Programs ⁵	2.7%			
Marketing and Outreach Costs				
Marketing & Outreach ⁶	5.0%		6.0%	
Statewide Marketing & Outreach ⁹				
Direct Implementation Costs				
Direct Implementation (Incentives and Rebates) 7	31.0%			
Direct Implementation (Non Incentives)	11.0%		20.0%	
Direct Implementation Target Exempt Programs ⁸	40.4%		20.0%	
EM&V Costs (Investor Owned Utilities & Energy Division)				
OBF Loan Pool				
Total				

Notes

- Includes energy efficiency costs authorized in D.12-11-015; does not include costs recovered in IOU General Rate Cases.
- Does not include costs incurred by RENs or CCAs
- 3. The 2013-2014 EE budget was authorized in D.12-11-015; the Statewide Marketing & Outreach budget was authorized in D.13-12-038.
- The Third-Party and Partnership administrative cost target is calculated as a percentage of total Third Party and Partnership expenditures (excluding IOU support).
 Administrative Cap Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Administrative cap Exempt programs include. Codes a Standards, Emerging Technologies, Worknote Education & Training, Integrated Definances are warranged in the Commercial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Financing, and all non-resource Local, Government Partnership, and Third-Party programs.
- 6. Statewide Marketing & Outreach expenditures are excluded from the Marketing and Outreach Cost target calculation.
- 7. Direct Implementation (Incentives and Rebates) include: End User Rebates, Direct Install labor activity, Direct Install Materials & Services, and Upstream/Midstream rebates.

 8. Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor,
- Direct Implementation Target Exempt programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training, Integrated Demand-Side Management, CALSPREE Energy Advisor, Commercial Energy Advisor, Commercial Continuous Energy Improvement, Industrial Continuous Energy Improvement, Agriculture Energy Advisor, Agriculture Continuous Energy Improvement, Enancing, and all non-resource Local, Government Partnership, and Third-Party programs.
- Per PUC does not apply to SoCalREN.
- 10. Per D.12-11-015 (p. 15) PUC "will not apply hard caps on these expenditures [Administrative and Marketing and Outreach] at this time"

Appendices: 2017 Q2 Report

2017 Energy Efficiency Fund Shift Report – Second Quarter

					Progr	am	Budgets & Funds	shift	ting		
O Program ID	Program / Sub Program	2	016 Operating Budget	20	017 Authorized Budget	Ī	2016 Authorized Encumbered / committed Funds	Tr	2017 Funds ansferred In umulative for Year)	Tran	17 Funds sferred Out nulative for Year)
	1 SoCaIREN PROGRAMS	s	24,173,425	s	21.651.000	s	3,453,475	s		s	
	SCR-EUC - Energy Upgrade California	*	24,110,420	*	21,001,000	*	0,100,110	*		*	
SCR-FUC-A1	Local Marketing and Outreach	s	1.636.372.00	s	1.636.372.00	s		\$		\$	
SCR-FUC-A2	Green Building Labeling	s	1.005.000.00		1.005.000.00			\$		\$	
SCR-FUC-A3	Flex Path Incentives	Š	2.660.504.00		2.307.155.00		130,100	s	_	\$	_
SCR-EUC-A4	Contractor Outreach and Training	Š	507.125.00		507.125.00		-	\$	-	\$	-
SCR-EUC-A5	Multifamily Incentives	Š	6,940,976.00		4,771,900.00		3,323,375	Š	-	\$	-
SCR-EUC-A6	Low-income Single Family Residential SCR-FIN - Financing	\$	350,000.00		350,000.00		-	\$	-	\$	-
SCR-FIN-B1	Public Building Loan Loss Reserve	s	100.000.00	s	100.000.00	s		\$		\$	
SCR-FIN-B2	FUC Residential Loan Loss Reserve	Š	1,737,500.00		1.737.500.00			\$		\$	
SCR-FIN-B4	Non-Residential PACF	Š	705.750.00		705.750.00		_	\$	_	\$	_
SCR-FIN-B5	Public Agency Revolving Loan Fund SCR-REC - REC	\$	236,000.00		236,000.00		-	\$	-	\$	-
SCR-REC-C1	Aggregated Regional Procurement	s	3.355.771.00	s	3.355.771.00	s	_	\$	_	\$	_
SCR-REC-C2	Integrated Comprehensive Whole Building Retrofits	Š	3.328.601.00		3.328.601.00		_	\$	_	\$	
SCR-REC-C3	Regional Climate Action and Energy Plan	Š	395.120.00		395.120.00			\$	-	\$	-
SCR-REC-C4	Water-Energy Nexus	\$	253,893.00		253,893.00		-	\$	-	\$	-
SCR-REC-C5	Regional Energy Project Tracking and Permitting (CEEPMS)	Š	138.735.00		138.735.00			\$		\$	_
SCR-REC-C6	Marketing, Outreach, Education, and Training	Š	672.078.00		672.078.00			\$	-	\$	-
SCR-REC-C7	Workforce Development	\$	150,000.00	\$	150,000.00	\$	-	\$	-	\$	-
EM&V	2 EM&V ⁶			\$	-	\$	-	\$	-	\$	-
	GRAND TOTAL			\$	21,651,000	\$	3,453,475	\$		\$	

				Program Budgets & Fundshifting										
category	Program ID	Program / Sub Program			Revised 2017 Operating Budget ¹	F	D17 Annual Fund Shift Threshold - t Applicable	Advice Letter Submitted & Approved ³						
		1 S	ioCalREN PROGRAMS	s	25,104,475	s	3,247,650							
		•	SCR-EUC - Energy Upgrade California	7	,,,,,,,,	ľ	-, ,000							
	SCR-EUC-A1		Local Marketing and Outreach	s	1.636.372	s	245.456							
	SCR-EUC-A2		Green Building Labeling	Š	1,005,000		150.750							
	SCR-EUC-A3		Flex Path Incentives	\$	2,437,255	\$	346,073							
	SCR-EUC-A4		Contractor Outreach and Training	\$	507,125	\$	76,069							
	SCR-EUC-A5		Multifamily Incentives	\$	8,095,275	\$	715,785							
	SCR-EUC-A6		Low-Income Single Family Residential	\$	350,000	\$	52,500							
			SCR-FIN - Financing	\$	-	ı .	. ,							
	SCR-FIN-B1		Public Building Loan Loss Reserve	\$	100,000	\$	15,000							
	SCR-FIN-B2		EUC Residential Loan Loss Reserve	\$	1,737,500	\$	260,625							
	SCR-FIN-B4		Non-Residential PACE	\$	705,750	\$	105,863							
	SCR-FIN-B5		Public Agency Revolving Loan Fund	\$	236,000	\$	35,400							
			SCR-REC - REC	\$			·							
	SCR-REC-C1		Aggregated Regional Procurement	\$	3,355,771	\$	503,366							
	SCR-REC-C2		Integrated Comprehensive Whole Building Retrofits	\$	3,328,601	\$	499,290							
	SCR-REC-C3		Regional Climate Action and Energy Plan	\$	395,120	\$	59,268							
	SCR-REC-C4		Water-Energy Nexus	\$	253,893	\$	38,084							
	SCR-REC-C5		Regional Energy Project Tracking and Permitting (CEEPMS)	\$	138,735	\$	20,810							
	SCR-REC-C6		Marketing, Outreach, Education, and Training	\$	672,078	\$	100,812							
	SCR-REC-C7		Workforce Development	\$	150,000	\$	22,500							
	SCR-REC-C7	2 E												

GRAND TOTAL \$ 25,104,475 \$ 3,247,650

Notes:

[1] Revised Operating Budget, Column M = J+K+L

[2] IOU Fund Shift Threshold set at 15% x H (2012 Authorized Budget). For C&S, ET and ME&O see footnote 5.

[3] An Advice Letter is required for fund shifts greater than 15%.

[4] Funds cannot be shifted into the program; however, funds can be shifted out of the program.

[5] An Advice Letter is required for shifts that would reduce any of these programs by more than 1% of budgeted levels.

[6] Funds cannot be shifted out of EM&V by any amount without assigned ALJ or Commissioner ruling.

						F			ures Exclusive of Car e, 6 Months Through			
Category	Program ID		Program / Sub Program		Administrative		Marketing	Di	irect Implementation	EM&V		Total
		1 S	oCalREN PROGRAMS	\$	1,334,710	\$	527,526	\$	8,779,436		\$	10,641,672
			SCR-EUC - Energy Upgrade California	١.		_		_			_	
	SCR-EUC-A1 SCR-EUC-A2		Local Marketing and Outreach	\$			43,216.11				\$	511,881
			Green Building Labeling	\$			1,304.69				5	295,077
	SCR-EUC-A3		Flex Path Incentives	\$			10,437.50				\$	909,910
	SCR-EUC-A4		Contractor Outreach and Training	\$			195,993.04				\$	455,573
	SCR-EUC-A5		Multifamily Incentives	\$			7,828.13				\$	3,827,624
	SCR-EUC-A6		Low-Income Single Family Residential SCR-FIN - Financing	\$	16,436.91	\$	4,680.69	\$	146,911.35		\$	168,029
	SCR-FIN-B1		Public Building Loan Loss Reserve	\$	3,414.18	\$	-	\$	14,632.50		\$	18,047
	SCR-FIN-B2		EUC Residential Loan Loss Reserve	\$	54,595.87	\$	210.35	\$	56,001.75		\$	110,808
	SCR-FIN-B4		Non-Residential PACE	\$	35,142.89	\$	77,930.50	\$	473.75		\$	113,547
	SCR-FIN-B5		Public Agency Revolving Loan Fund SCR-REC - REC	\$	6,828.37	\$	-	\$	335.00		\$	7,163
	SCR-REC-C1		Aggregated Regional Procurement	s	84.332.93	s	_	9	5.634.55		\$	89.967
	SCR-REC-C2		Integrated Comprehensive Whole Building Retrofits	Š				S			\$	3,412,628
	SCR-REC-C3		Regional Climate Action and Energy Plan	ŝ				9			Š	246.202
	SCR-RFC-C4		Water-Energy Nexus	ŝ	42.166.47			- 7	\$ -		\$	42.166
	SCR-RFC-C5		Regional Energy Project Tracking and Permitting (CEEPMS)	s				S	2.496.00		s.	86.791
	SCR-REC-C6		Marketing, Outreach, Education, and Training	s				-	S -		\$	228.842
	SCR-REC-C7		Workforce Development	\$				\$	75,250.00		\$	117,416
	EM&V	2 E	M&V ^c	\$	-	\$	-	\$		\$ -	\$	-
		G	RAND TOTAL	\$	1,334,710	\$	527,526	\$	8,779,436	\$ -	\$	10,641,672

			(Inception-To-Date,	rogram Activity 6 Months Through	June 30, 2017)
Program ID		Program / Sub Program	Energy Savings (Gross Annual kWh)	Demand Reduction (Gross Peak kW)	Gas Savings (Gross Annual Therms)
	1 :	SoCaIREN PROGRAMS	5.026.480	1.183	128.809
		SCR-EUC - Energy Upgrade California	-,,	.,	,
SCR-EUC-A1		Local Marketing and Outreach	0.00	0.00	0.00
SCR-EUC-A2		Green Building Labeling	0.00	0.00	0.00
SCR-EUC-A3		Flex Path Incentives	139.752.10	244.04	15.838.70
SCR-EUC-A4		Contractor Outreach and Training	0.00	0.00	0.00
SCR-EUC-A5		Multifamily Incentives	4,886,728.00	939.29	112,970.00
SCR-EUC-A6		Low-Income Single Family Residential SCR-FIN - Financing	0.00	0.00	0.00
SCR-FIN-B1		Public Building Loan Loss Reserve	0.00	0.00	0.00
SCR-FIN-B2		EUC Residential Loan Loss Reserve	0.00	0.00	0.00
SCR-FIN-B4		Non-Residential PACE	0.00	0.00	0.00
SCR-FIN-B5		Public Agency Revolving Loan Fund SCR-REC - REC	0.00	0.00	0.00
SCR-REC-C1		Aggregated Regional Procurement	0.00	0.00	0.00
SCR-REC-C2		Integrated Comprehensive Whole Building Retrofits	0.00	0.00	0.00
SCR-REC-C3		Regional Climate Action and Energy Plan	0.00	0.00	0.00
SCR-REC-C4		Water-Energy Nexus	0.00	0.00	0.00
SCR-REC-C5		Regional Energy Project Tracking and Permitting (CEEPMS)	0.00	0.00	0.00
SCR-REC-C6		Marketing, Outreach, Education, and Training	0.00	0.00	0.00
SCR-REC-C7		Workforce Development	0.00	0.00	0.00
EM&V	2	EM&V ⁶			
		GRAND TOTAL	5,026,480	1,183	128,80

Notes:

[1] Revised Operating Budget, Column M = J+K+L

[2] IOU Fund Shift Threshold set at 15% x H (2012 Authorized Budget). For C&S, ET and ME&O see footnote 5.

[3] An Advice Letter is required for fund shifts greater than 15%.

[4] Funds cannot be shifted into the program; however, funds can be shifted out of the program.

[5] An Advice Letter is required for shifts that would reduce any of these programs by more than 1% of budgeted levels.

[6] Funds cannot be shifted out of EM&V by any amount without assigned ALJ or Commissioner ruling.

Appendices: 2017 Q2 Report Appendices: 2017 Q2 Report

2017 Q3 REPORT

2017 IOU Energy Efficiency Cap and Target Expenditure Projections

				hird Party +		
Line	Budget Category	PA	,	Partnership		otal Portfolio
1	Administrative Costs	\$ 1,562,378	\$	486,163	\$	2,048,541
2	PA	\$ 1,562,378	\$	-	\$	1,562,378
3	Third Party & Partnership	\$ -	\$	59,811	\$	59,811
4	Target Exempt IOU Programs	\$ -	\$	426,352	\$	426,352
5	Marketing and Outreach Costs	\$ -	\$	708,398	\$	708,398
6	Marketing & Outreach	\$ _	\$	708,398	\$	708,398
7	Statewide Marketing & Outreach	\$ -	\$	-	\$	-
8	Direct Implementation Costs	\$ 262,915	\$	11,342,455	\$	11,605,370
9	Direct Implementation (Incentives and Rebates)	\$ -	\$	3,581,830	\$	3,581,830
10	Direct Implementation (Non Incentives and Non Rebates)	\$ 262,915	\$	1,456,179	\$	1,719,094
11	Direct Implementation Target Exempt Programs	\$ -	\$	6,304,446	\$	6,304,446
12	EM&V Costs (Investor Owned Utilities & Energy Division)	\$	\$		\$	
13	Total	\$ 1,825,293	\$	12,537,016	\$	14,362,309
14	2017 Approved Budget	\$ -	\$	-	\$	21,651,000
15	Third Party Program (3P) and Statewide Competitively Solicited Programs	\$ -	\$	-	\$	-

		Cap & Taro	nance	
		Percent of	Con 9/	Target %
Line	Budget Category	Budget	Cap %	7 0
1	Administrative Costs			
١	PA	7.00/	40.00/	
2	Third Party & Partnership	7.2% 0.0%	10.0%	10.0%
4	Target Exempt IOU Programs	0.078		10.076
	2 3			
5	Marketing and Outreach Costs			
6	Marketing & Outreach	3.3%		6.0%
7	Statewide Marketing & Outreach			
	Divert Implementation Costs			
8	Direct Implementation Costs			
9	Direct Implementation (Incentives and Rebates)			
10	Direct Implementation (Non Incentives and Non Rebates)	7.9%		20.0%
10	blied implementation (Non-incentives and Non-Rebates)	7.9%		20.0%
11	Direct Implementation Target Exempt Programs			
12	EM&V Costs (Investor Owned Utilities & Energy Division)	0.0%	4.0%	
13	Total			
14	2017 Approved Budget			
15	Third Party Program (3P) and Statewide Competitively Solicited Programs			

Appendices: 2017 Q3 Report

9/1 BUDGET FILING 2016

Appendix B.1 – Budget by Budget Category

		Total Administrative Cost											
New/Existing Program # Main Program Name / Sub-Program Name		2015 Authorized Budget		2	2015 Budget Spent		2016 Authorized Budget	ı	2017 Proposed Budget				
SCR-EUC	EUC Energy Efficiency Programs Total	\$	1,149,139	\$	1,706,548	\$	1,149,139	\$	1,149,139				
	Local Marketing and Outreach	\$	163,608	\$	361,748	\$	163,608	\$	163,608				
	Green Building Labelinç	\$	159,548	\$	279,787	\$	159,548	\$	159,548				
	Flex Path (EUC)	\$	239,723	\$	514,940	\$	239,723	\$	239,723				
	Contractor Outreach and Training	\$	76,337	\$	77,481	\$	76,337	\$	76,337				
	Multifamily	\$	497,172	\$	471,952	\$	497,172	\$	497,172				
	Low-Income Single Family Residentia	\$	12,751	\$	640	\$	12,751	\$	12,751				
SCR-FIN	Financial Programs Total	\$	477,991	\$	206,378	\$	477,991	\$	477,991				
	Public Building Loan Loss Reserve	\$	17,518	\$	8,318	\$	17,518	\$	17,518				
	EUC Residential Loan Loss Reserve	\$	95,101	\$	55,119	\$	95,101	\$	95,101				
	Non-Residential PACE	\$	278,543	\$	124,388	\$	278,543	\$	278,543				
	Public Agency Revolving Loan Func	\$	86,829	\$	18,554	\$	86,829	\$	86,829				
SCR-REC	REC Programs Total	\$	602,733	\$	1,719,349	\$	602,733	\$	602,733				
	Aggregated Regional Procurement	\$	204,654	\$	747,780	\$	204,654	\$	204,654				
	Integrated Comprehensive Whole Building Retrofit:	\$	206,146	\$	572,644	\$	206,146	\$	206,146				
	Regional Climate Action and Energy Plar	\$	9,339	\$	47,332	\$	9,339	\$	9,339				
	Water-Energy Nexus	\$	15,233	\$	10,284	\$	15,233	\$	15,233				
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	8,324	\$	42,369	\$	8,324	\$	8,324				
	Marketing, Outreach, Education, and Training	\$	9,037	\$	292,941	\$	9,037	\$	9,037				
	Workforce Development	\$	150,000	\$	6,000	\$	150,000	\$	150,000				
	PA PROGRAM TOTAL	\$	2,229,863	\$	3,632,275	\$	2,229,863	\$	2,229,863				
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$, .,				
72.5%	EM&V - CPUC	\$	-	\$	-	\$	-	\$	-				
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-				

PA TOTAL with EM&V \$ 2,229,863 \$ 3,632,275 \$ 2,229,863 \$ 2,229,863

				1	otal Marketi	ng 8	& Outreach	Total Marketing & Outreach							
New/Existing Program #	Main Program Name / Sub-Program Name	20	015 Budget	2	2015 Budget Spent		2016 Authorized Budget		2017 Proposed Budget						
SCR-EUC	EUC Energy Efficiency Programs Total	\$	1,967,668	\$	1,543,740	\$	1,967,668	\$	1,967,668						
	Local Marketing and Outreach	\$	693,707	\$	551,737	\$	693,707	\$	693,707						
	Green Building Labelinç	\$	345,214	\$	431,941	\$	345,214	\$	345,214						
	Flex Path (EUC)	\$	67,686	\$	36,274	\$	67,686	\$	67,686						
	Contractor Outreach and Training	\$	131,500	\$	295,912	\$	131,500	\$	131,500						
	Multifamily	\$	729,561	\$	163,479	\$	729,561	\$	729,561						
	Low-Income Single Family Residentia	\$	-	\$	64,398	\$	-	\$	-						
SCR-FIN	Financial Programs Total	\$	698,688	\$	873,251	\$	698,688	\$	698,688						
	Public Building Loan Loss Reserve	\$	82,482	\$	19,927	\$	82,482	\$	82,482						
	EUC Residential Loan Loss Reserve	\$	39,828	\$	14,464	\$	39,828	\$	39,828						
	Non-Residential PACE	\$	427,207	\$	656,298	\$	427,207	\$	427,207						
	Public Agency Revolving Loan Func	\$	149,171	\$	182,563	\$	149,171	\$	149,171						
SCR-REC	REC Programs Total	\$	532,813	\$	313,386	\$	532,813	\$	532,813						
	Aggregated Regional Procurement	\$	49,765	\$	-	\$	49,765	\$	49,765						
	Integrated Comprehensive Whole Building Retrofit:	\$	41,872	\$	-	\$	41,872	\$	41,872						
	Regional Climate Action and Energy Plar	\$	750	\$	-	\$	750	\$	750						
	Water-Energy Nexus	\$	2,711	\$	-	\$	2,711	\$	2,711						
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	3,873	\$	-	\$	3,873	\$	3,873						
	Marketing, Outreach, Education, and Training	\$	433,842	\$	297,168	\$	433,842	\$	433,842						
	Workforce Development	\$	-	\$	16,218	\$	-	\$	-						
	PA PROGRAM TOTAL	\$	3,199,169	\$	2,730,377	\$	3,199,169	\$	3,199,169						
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$	-						
72.5%	=	\$	-	\$	-	\$	-	\$	-						
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-						

PA TOTAL with EM&V \$ 3,199,169 \$ 2,730,377 \$ 3,199,169 \$ 3,199,169

		Total Direct Implementation (NonIncentives or Rebates)																							
New/Existing Program #	Main Program Name / Sub-Program Name	2	2015 Budget		2015 Budget		2015 Budget		2015 Budget		2015 Budget		2015 Budget		2015 Budget		2015 Budget		2015 Budget		015 Budget Spent	,	2016 Authorized Budget		2017 Proposed Budget
SCR-EUC	EUC Energy Efficiency Programs Total	\$	3,342,706	\$	3,763,321	\$	3,342,706	\$	3,342,706																
	Local Marketing and Outreach	\$	779,057	\$	897,305	\$	779,057	\$	779,057																
	Green Building Labelinς	\$	500,238	\$	499,119	\$	500,238	\$	500,238																
	Flex Path (EUC)	\$	464,916	\$	552,001	\$	464,916	\$	464,916																
	Contractor Outreach and Training	\$	299,288	\$	402,695	\$	299,288	\$	299,288																
	Multifamily	\$	961,958	\$	1,201,418	\$	961,958	\$	961,958																
	Low-Income Single Family Residentia	\$	337,249	\$	210,782	\$	337,249	\$	337,249																
SCR-FIN	Financial Programs Total	\$	325,595	\$	240,462	\$	325,595	\$	325,595																
	Public Building Loan Loss Reserve	\$	-	\$	-	\$	-	\$	-																
	EUC Residential Loan Loss Reserve	\$	325,595	\$	146,511	\$	325,595	\$	325,595																
	Non-Residential PACE	\$	-	\$	16,847	\$	-	\$	-																
	Public Agency Revolving Loan Func	\$	-	\$	77,104	\$	-	\$	-																
SCR-REC	REC Programs Total	\$	7,158,652	\$	8,441,864	\$	7,158,652	\$	7,158,652																
	Aggregated Regional Procurement	\$	3,101,352	\$	387,648	\$	3,101,352	\$	3,101,352																
	Integrated Comprehensive Whole Building Retrofit:	\$	3,080,583	\$	6,994,543	\$	3,080,583	\$	3,080,583																
	Regional Climate Action and Energy Plar	\$	385,031	\$	537,945	\$	385,031	\$	385,031																
	Water-Energy Nexus	\$	235,949	\$	252,769	\$	235,949	\$	235,949																
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	126,538	\$	218,776	\$	126,538	\$	126,538																
	Marketing, Outreach, Education, and Training	\$	229,199	\$	(214,219)	\$	229,199	\$	229,199																
	Workforce Development	\$	-	\$	264,402	\$	-	\$	-																
	PA PROGRAM TOTAL	\$	10,826,953	\$	12,445,647	\$	10,826,953	\$	10,826,953																
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$	-																
72.5%		\$	-	\$	-	\$	-	\$	-																
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-																
	PA TOTAL with FM&V		10 926 953	¢	12 445 647	¢	10 926 953	•	10 026 052																

PA TOTAL with EM&V \$ 10,826,953 \$ 12,445,647 \$ 10,826,953 \$ 10,826,953

Appendices: 9/1 Budget Filing 2016

Appendices: 9/1 Budget Filing 2016

			Direct	lmp	lementation	(Inc	centives & R	eba	tes)
New/Existing Program #	Main Program Name / Sub-Program Name	20	015 Budget	20	015 Budget Spent	A	2016 Authorized Budget		2017 Proposed Budget
SCR-EUC	EUC Energy Efficiency Programs Total	\$	4,118,039	\$	2,294,315	\$	4,118,039	\$	4,118,039
	Local Marketing and Outreach	\$	-	\$	-	\$	-	\$	-
	Green Building Labelinς	\$	-	\$	-	\$	-	\$	-
	Flex Path (EUC)	\$	1,534,829	\$	993,500	\$	1,534,829	\$	1,534,829
	Contractor Outreach and Training	\$	-	\$	-	\$	-	\$	-
	Multifamily	\$	2,583,210	\$	1,300,815	\$	2,583,210	\$	2,583,210
	Low-Income Single Family Residentia	\$	-	\$	-	\$	-	\$	-
SCR-FIN	Financial Programs Total	\$	1,276,976	\$	-	\$	1,276,976	\$	1,276,976
	Public Building Loan Loss Reserve	\$	-	\$	-	\$	-	\$	-
	EUC Residential Loan Loss Reserve	\$	1,276,976	\$	-	\$	1,276,976	\$	1,276,976
	Non-Residential PACE	\$	-	\$	-	\$	-	\$	-
	Public Agency Revolving Loan Func	\$	-	\$	-	\$	-	\$	-
SCR-REC	REC Programs Total	\$	-	\$	-	\$	-	\$	-
	Aggregated Regional Procurement	\$	-	\$	-	\$	-	\$	-
	Integrated Comprehensive Whole Building Retrofit:	\$	-	\$	-	\$	-	\$	-
	Regional Climate Action and Energy Plar	\$	-	\$	-	\$	-	\$	-
	Water-Energy Nexus	\$	-	\$	-	\$	-	\$	-
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	-	\$	-	\$	-	\$	-
	Marketing, Outreach, Education, and Training	\$	-	\$	-	\$	-	\$	-
	Workforce Development	\$	-	\$	-	\$	-	\$	-
<u> </u>	PA PROGRAM TOTAL	\$	5.395.015	\$	2,294,315	\$	5.395.015	\$	5.395.015
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$	-
72.5%	EM&V - CPUC	\$	-	\$	-	\$	-	\$	-
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-

PA TOTAL with EM&V \$ 5,395,015 \$ 2,294,315 \$ 5,395,015 \$ 5,395,015

			Spent Budget Budget 7,460,745 \$ 6,057,636 \$ 7,460,745 \$ 7,460,74 779,057 \$ 897,305 \$ 779,057 \$ 779,05 500,238 \$ 499,119 \$ 500,238 \$ 500,23 1,999,745 \$ 1,545,501 \$ 1,999,745 \$ 1,999,74 299,288 \$ 402,695 \$ 299,288 \$ 299,28 3,545,168 \$ 2,502,233 \$ 3,545,168 \$ 3,545,168 337,249 \$ 210,782 \$ 337,249 \$ 337,24 1,602,571 \$ 240,462 \$ 1,602,571 \$ 1,602,57 - \$ - \$ - \$ - 1,602,571 \$ 146,511 \$ 1,602,571 \$ 1,602,57 - \$ 16,847 \$ - \$ - - \$ 77,104 \$ - \$ -						
New/Existing Program #	Main Program Name / Sub-Program Name	2015 Budget					Authorized		Proposed
SCR-EUC	3 , , ,		7,460,745	\$	6,057,636	\$	7,460,745	\$	7,460,745
	Local Marketing and Outreach	\$	779,057	\$	897,305	\$	779,057	\$	779,057
	Green Building Labelinç	\$	500,238	\$	499,119	\$	500,238	\$	500,238
	Flex Path (EUC)	\$	1,999,745	\$	1,545,501	\$	1,999,745	\$	1,999,745
	Contractor Outreach and Training	\$	299,288	\$	402,695	\$	299,288	\$	299,288
	Multifamily	\$	3,545,168	\$	2,502,233	\$	3,545,168	\$	3,545,168
	Low-Income Single Family Residentia	\$	337,249	\$	210,782	\$	337,249	\$	337,249
SCR-FIN	Financial Programs Total	\$	1,602,571	\$	240,462	\$	1,602,571	\$	1,602,571
	Public Building Loan Loss Reserve	\$	-	\$	-	\$	-	\$	-
	EUC Residential Loan Loss Reserve	\$	1,602,571	\$	146,511	\$	1,602,571	\$	1,602,571
	Non-Residential PACE	\$	-	\$	16,847	\$	-	\$	-
	Public Agency Revolving Loan Func	\$	-	\$	77,104	\$	-	\$	-
SCR-REC	REC Programs Total	\$	7,158,652	\$	8,441,864	\$	6,181,935	\$	7,158,652
	Aggregated Regional Procurement	\$	3,101,352	\$	387,648	\$	3,101,352	\$	3,101,352
	Integrated Comprehensive Whole Building Retrofit:	\$	3,080,583	\$	6,994,543	\$	3,080,583	\$	3,080,583
	Regional Climate Action and Energy Plar	\$	385,031	\$	537,945	\$	385,031	\$	385,031
	Water-Energy Nexus	\$	235,949	\$	252,769	\$	235,949	\$	235,949
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	126,538	\$	218,776	\$	126,538	\$	126,538
	Marketing, Outreach, Education, and Training	\$	229,199	\$	(214,219)	\$	229,199	\$	229,199
	Workforce Development	\$	-	\$	264,402	\$	-	\$	-
	PA PROGRAM TOTAL	\$	16,221,968	\$	14,739,962	\$	15,245,251	\$	16,221,968
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$	-
72.5%		\$	-	\$	-	\$	-	\$	-
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-

PA TOTAL with EM&V \$ 16,221,968 \$ 14,739,962 \$ 15,245,251 \$ 16,221,968

		Total													
New/Existing Program #	Main Program Name / Sub-Program Name	Authorized (aft					2015 Budget (after program fundshifting)		fter program		015 Budget Spent	,	2016 Authorized Budget	20	17 Proposed Budget
SCR-EUC	EUC Energy Επισιένος Programs Τοται	\$	10,577,552	\$	10,577,552	\$	9,307,924	\$	10,577,552	\$	10,577,552.00				
	Local Marketing and Outreach	\$	1,636,372	\$	1,636,372	\$	1,810,790	\$	1,636,372	\$	1,636,372				
	Green Building Labeling	\$	1,005,000	\$	1,005,000	\$	1,210,847	\$	1,005,000	\$	1,005,000				
	Flex Path (EUC)	\$	2,307,154	\$	2,307,154	\$	2,096,715	\$	2,307,154	\$	2,307,154				
	Contractor Outreach and Training	\$	507,125	\$	507,125	\$	776,088	\$	507,125	\$	507,125				
	Multifamily	\$	4,771,901	\$	4,771,901	\$	3,137,664	\$	4,771,901	\$	4,771,901				
	Low-Income Single Family Residentia	\$	350,000	\$	350,000	\$	275,821	\$	350,000	\$	350,000				
SCR-FIN	Financial Programs Total	\$	2,779,250	\$	2,779,250	\$	1,320,091	\$	2,779,250	\$	2,779,250				
	Public Building Loan Loss Reserve	\$	100,000	\$	100,000	\$	28,245	\$	100,000	\$	100,000				
	EUC Residential Loan Loss Reserve	\$	1,737,500	\$	1,737,500	\$	216,093	\$	1,737,500	\$	1,737,500				
	Non-Residential PACE	\$	705,750	\$	705,750	\$	797,532	\$	705,750	\$	705,750				
	Public Agency Revolving Loan Fund	\$	236,000	\$	236,000	\$	278,220	\$	236,000	\$	236,000				
SCR-REC	REC Programs Total	\$	8,294,198	\$	8,294,198	\$	10,474,600	\$	8,294,198	\$	8,294,198.00				
	Aggregated Regional Procurement	\$	3,355,771	\$	3,355,771	\$	1,135,428	\$	3,355,771	\$	3,355,771				
	Integrated Comprehensive Whole Building Retrofit	\$	3,328,601	\$	3,328,601	\$	7,567,187	\$	3,328,601	\$	3,328,601				
	Regional Climate Action and Energy Plar	\$	395,120	\$	395,120	\$	585,276	\$	395,120	\$	395,120				
	Water-Energy Nexus	\$	253,893	\$	253,893	\$	263,053	\$	253,893	\$	253,893				
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	138,735	\$	138,735	\$	261,146	\$	138,735	\$	138,735				
	Marketing, Outreach, Education, and Training	\$	672,078	\$	672,078	\$	375,891	\$	672,078	\$	672,078				
	Workforce Development	\$	150,000	\$	150,000	\$	286,620	\$	150,000	\$	150,000				
	PA PROGRAM TOTAL	\$	21.651.000	\$	21,651,000	ŝ	21,102,615	\$	21,651,000	\$:	21,651,000.00				
EM&V	EM&V (PA & CPUC Portions) Total	\$		\$		\$		\$		\$	-				
72.5%	EM&V - CPUC	\$	-	\$	-	\$	-	\$	-	\$	-				
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-	\$	-				

PA TOTAL with EM&V \$ 21,651,000 \$ 21,651,000 \$ 21,102,615 \$ 21,651,000 \$ 21,651,000

Appendices: 9/1 Budget Filing 2016

Appendix B.3 – Budget, Spent, Unspent, Carryover Details

		2013-2015 Budget, Spent, Unspent and Carryover									
New/Existing Program #	Main Program Name / Sub-Program Name	201	015 Authorized Budget		015 Total Budget ith Commitments & Fundshifts		2015 Total Budget with Commitments, Fundshifts, Unspen 13-14		2015 Total Budget Spent		
SCR-EUC	EUC Energy Efficiency Programs Total	\$	10,577,552	\$	10,577,552	\$	22,516,437	\$	9,307,924		
	Local Marketing and Outreach	\$	1,636,372	\$	1,636,372	\$	1,957,727	\$	1,810,790		
	Green Building Labeling	\$	1,005,000	\$	1,005,000	\$	1,302,542	\$	1,210,847		
	Flex Path (EUC)	\$	2,307,154	\$	2,307,154	\$	5,451,339	\$	2,096,715		
	Contractor Outreach and Training	\$	507,125	\$	507,125	\$	878,114	\$	776,088		
	Multifamily	\$	4,771,901	\$	4,771,901	\$	12,178,519	\$	3,137,664		
	Low-Income Single Family Residential	\$	350,000	\$	350,000	\$	748,196	\$	275,821		
SCR-FIN	Financial Programs Total	\$	2,779,250	\$	2,779,250	\$	5,330,657	\$	1,320,091		
	Public Building Loan Loss Reserve	\$	100,000	\$	100,000	\$	118,815	\$	28,245		
	EUC Residential Loan Loss Reserve	\$	1,737,500	\$	1,737,500	\$	4,239,240	\$	216,093		
	Non-Residential PACE	\$	705,750	\$	705,750	\$	516,246	\$	797,532		
	Public Agency Revolving Loan Fund	\$	236,000	\$	236,000	\$	456,356	\$	278,220		
SCR-REC	REC Programs Total	\$	8,294,198	\$	8,294,198	\$	11,560,956	\$	10,474,600		
	Aggregated Regional Procurement	\$	3,355,771	\$	3,355,771	\$	1,155,000	\$	1,135,428		
	Integrated Comprehensive Whole Building Retrofits	\$	3,328,601	\$	3,328,601	\$	8,591,456	\$	7,567,187		
	Regional Climate Action and Energy Plan	\$	395,120	\$	395,120	\$	597,000	\$	585,276		
	Water-Energy Nexus	\$	253,893	\$	253,893	\$	269,100	\$	263,053		
	Regional Energy Project Tracking and Permitting (CEEPMS)	\$	138,735	\$	138,735	\$	265,500	\$	261,146		
	Marketing, Outreach, Education, and Training	\$	672,078	\$	672,078	\$	390,300	\$	375,891		
	Workforce Development	\$	150,000	\$	150,000	\$	292,600	\$	286,620		
	PA PROGRAM TOTAL	\$	21,651,000	\$	21,651,000	\$	39,408,050	\$	21,102,615		
	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$			
72.5%		\$	-	\$	-	\$	-	\$	-		
27.5%		\$	-	\$	-	\$	-	\$	-		
·	PA TOTAL with EM&V	\$	21,651,000	\$	21,651,000	\$	39,408,050	\$	21,102,615		

		2013-2015 Budget, Spent, Unspent and Carryover							
New/Existing Program #	Main Program Name / Sub-Program Name	Pre-2013 Commitments Remaining as of 12/31/15	2013-2015 Unspent/Uncommited Funds Returned to Ratepayers	2013-2015 Commitments as of 12/31/15	Pre-2016 Unspent/Uncomi itted Funds Available for 201 offset				
SCR-EUC	EUC Energy Efficiency Programs Total			\$ 2,522,425	\$ 10,686,08				
	Local Marketing and Outreach			, , , ,	\$ 146.93				
	Green Building Labeling				\$ 91.69				
	Flex Path (EUC)			\$ 353,350	\$ 3.001.27				
	Contractor Outreach and Training			, , , , , , , , , , , , , , , , , , , ,	\$ 102,02				
	Multifamily			\$ 2,169,075					
	Low-Income Single Family Residential			, , ,	\$ 472.37				
SCR-FIN	Financial Programs Total			\$ -	\$ 4,010,56				
	Public Building Loan Loss Reserve				\$ 90,57				
	EUC Residential Loan Loss Reserve				\$ 4,023,14				
	Non-Residential PACE				\$ (281,28				
	Public Agency Revolving Loan Fund				\$ 178,13				
SCR-REC	REC Programs Total			\$ -	\$ 1,086,35				
	Aggregated Regional Procurement				\$ 19,57				
	Integrated Comprehensive Whole Building Retrofits				\$ 1,024,26				
	Regional Climate Action and Energy Plan				\$ 11,72				
	Water-Energy Nexus				\$ 6,04				
	Regional Energy Project Tracking and Permitting (CEEPMS)				\$ 4,35				
	Marketing, Outreach, Education, and Training				\$ 14,40				
	Workforce Development				\$ 5,98				
	PA PROGRAM TOTAL	\$ -	\$ -	\$ 2,522,425	\$ 15,783,01				
EM&V	EM&V (PA & CPUC Portions) Total	\$ -	\$ -	\$ -	\$ -				
72.5%		\$ -	\$ -	\$ -	\$ -				
27.5%	EM&V - PA	\$ -	\$ -	\$ -	\$ -				

Appendices: 9/1 Budget Filing 2016

		2016 Budget, Fundshifts and Spending to Date								
New/Existing Program #	Main Program Name / Sub-Program Name	2016 Authorized Budget		2016 Fundshifts	Bud	2016 Total dget (includes prior 2016 mmittments)	20	16 Budget Spent as of 06/30/2016		
SCR-EUC	EUC Energy Efficiency Programs Total	\$	10,577,552	\$ -	\$	13,099,977	\$	4,249,726		
	Local Marketing and Outreach	\$	1,636,372		\$	1,636,372	\$	600,266		
	Green Building Labeling	\$	1,005,000		\$	1,005,000	\$	612,433		
	Flex Path (EUC)	\$	2,307,154		\$	2,660,504	\$	1,400,405		
	Contractor Outreach and Training	\$	507,125		\$	507,125	\$	362,210		
	Multifamily	\$	4,771,901		\$	6,940,976	\$	1,127,144		
	Low-Income Single Family Residential	\$	350,000		\$	350,000	\$	147,267		
SCR-FIN	Financial Programs Total	\$	2,779,250	\$ -	\$	2,779,250	\$	299,492		
	Public Building Loan Loss Reserve	\$	100,000		\$	100,000	\$	24,749		
	EUC Residential Loan Loss Reserve	\$	1,737,500		\$	1,737,500	\$	108,980		
	Non-Residential PACE	\$	705,750		\$	705,750	\$	165,369		
	Public Agency Revolving Loan Fund	\$	236,000		\$	236,000	\$	394		
SCR-REC	REC Programs Total	\$	8,294,198	\$ -	\$	8,294,198	\$	4,207,676		
	Aggregated Regional Procurement	\$	3,355,771		\$	3,355,771	\$	54,298		
	Integrated Comprehensive Whole Building Retrofits	\$	3,328,601		\$	3,328,601	\$	3,804,029		
	Regional Climate Action and Energy Plan	\$	395,120		\$	395,120	\$	18,958		
	Water-Energy Nexus	\$	253,893		\$	253,893	\$	3,514		
	Regional Energy Project Tracking and Permitting (CEEPMS)	\$	138,735		\$	138,735	\$	5,391		
	Marketing, Outreach, Education, and Training	\$	672,078		\$	672,078	\$	151,400		
	Workforce Development	\$	150,000		\$	150,000	\$	170,086		
	PA PROGRAM TOTAL	\$	21,651,000	\$ -	\$	24,173,425	\$	8,756,894		
	EM&V (PA & CPUC Portions) Total	\$	-	\$ -	\$	-	\$	-		
72.5%		\$	-	\$ -	\$	-	\$	-		
27.5%	EM&V - PA	\$	-	\$ -	\$	-	\$	-		
	PA TOTAL with EM&V	\$	21,651,000		\$	24,173,425	\$	8,756,894		

			20	jet			
New/Existing Program #	Main Program Name / Sub-Program Name	20	17 Proposed Budget	Off	017 Budget set from Pre- 16 Carryover (Col K)		2017 Funds Requested
SCR-EUC	EUC Energy Efficiency Programs Total	\$	10,577,552	\$	10,686,088	\$	(108,536
	Local Marketing and Outreach	\$	1,636,372	\$	146,937	\$	1,489,435
	Green Building Labeling	\$	1,005,000	\$	91,695	\$	913,305
	Flex Path (EUC)	\$	2,307,154	\$	3,001,274	\$	(694,120
	Contractor Outreach and Training	\$	507,125	\$	102,026	\$	405,099
	Multifamily	\$	4,771,901	\$	6,871,780	\$	(2,099,879
	Low-Income Single Family Residential	\$	350,000	\$	472,375	\$	(122,375
SCR-FIN	Financial Programs Total	\$	2,779,250	\$	4,010,567	\$	(1,231,317
	Public Building Loan Loss Reserve	\$	100,000	\$	90,570	\$	9,430
	EUC Residential Loan Loss Reserve	\$	1,737,500	\$	4,023,147	\$	(2,285,647
	Non-Residential PACE	\$	705,750	\$	(281,287)	\$	987,037
	Public Agency Revolving Loan Fund	\$	236,000	\$	178,136	\$	57,864
SCR-REC	REC Programs Total	\$	8,294,198	\$	1,086,356	\$	7,207,842
	Aggregated Regional Procurement	\$	3,355,771	\$	19,572	\$	3,336,199
	Integrated Comprehensive Whole Building Retrofits	\$	3,328,601	\$	1,024,269	\$	2,304,332
	Regional Climate Action and Energy Plan	\$	395,120	\$	11,724	\$	383,396
	Water-Energy Nexus	\$	253,893	\$	6,047	\$	247,846
	Regional Energy Project Tracking and Permitting (CEEPMS)	\$	138,735	\$	4,354	\$	134,381
	Marketing, Outreach, Education, and Training	\$	672,078	\$	14,409	\$	657,669
	Workforce Development	\$	150,000	\$	5,980	\$	144,020
				\$	-		
	PA PROGRAM TOTAL	\$	21,651,000	\$	15,783,010	\$	5,867,990
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$		\$	-
72.5%		\$	-	\$	-	\$	-
27.5%	EM&V - PA	\$	-	\$		\$	-

Appendices: 9/1 Budget Filing 2016

9/1 BUDGET FILING 2017

Table 4 – Budget, Spent, Unspent, Carryover Details

		2013-2015 Budget, Spent, Unspent and Carryover											
New/Existing Program #	Main Program Name / Sub-Program Name						015 Total Budget th Commitments & Fundshifts	1	2015 Total Budget Spent		Pre-2013 ommitments maining as of 12/31/15	Fur	2013-2015 ent/Uncommited ids Returned to Ratepayers
SCR-EUC	Residential and Business Programs	\$	10,577,552	\$	10,577,552	\$	9,307,924	\$	-	\$	-		
	Local Marketing and Outreact	\$	1,636,372	\$	1,636,372	\$	1,810,790	\$	-	\$	-		
	Green Building Labeling	\$	1,005,000	\$	1,005,000	\$	1,210,847	\$	-	\$	-		
	Flex Path Incentives	\$	2,307,154	\$	2,307,154	\$	2,096,715						
	Contractor Outreach and Training	\$	507,125	\$	507,125	\$	776,088	\$	-	\$	-		
	Multifamily Incentives	\$	4,771,901	\$	4,771,901	\$	3,137,664	\$	-	\$	-		
	Low-Income Single Family Residentia	\$	350,000	\$	350,000	\$	275,821	\$	-	\$	-		
SCR-FIN	Financial Programs Total	\$	2,779,250	\$	2,779,250	\$	1,320,091	\$	-	\$	-		
	Public Building Loan Loss Reserve	\$	100,000	\$	100,000	\$	28,245	\$	-	\$	-		
	EUC Residential Loan Loss Reservi	\$	1,737,500	\$	1,737,500	\$	216,093						
	Non-Residential PACE	\$	705,750	\$	705,750	\$	797,532	\$	-	\$	-		
	Public Agency Revolving Loan Fun	\$	236,000	\$	236,000	\$	278,220	\$	-	\$	-		
SCR-REC	REC Programs Total	\$	8,294,198	\$	8,294,198	\$	10,474,600	\$	-	\$	-		
	Aggregated Regional Procuremen	\$	3,355,771	\$	3,355,771	\$	1,135,428	\$	-	\$	-		
	Integrated Comprehensive Whole Building Retrofit	\$	3,328,601	\$	3,328,601	\$	7,567,187	\$	-	\$	-		
	Regional Climate Action and Energy Pla	\$	395,120	\$	395,120	\$	585,276	\$	-	\$	-		
	Water-Energy Nexus	\$	253,893	\$	253,893	\$	263,053	\$	-	\$	-		
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	138,735	\$	138,735	\$	261,146	\$	-	\$	-		
	Marketing, Outreach, Education, and Training	\$	672,078	\$	672,078	\$	375,891	\$		\$			
	Workforce Developmen	\$	150,000	\$	150,000	\$	286,620	\$		\$			
		\$	-	\$		\$	-	\$					
		\$	-	\$	-	\$	-	\$	-				
	PA PROGRAM TOTAL	\$	21,651,000	\$	21,651,000	\$	21,102,615	\$	-	\$	-		
EM&V	EM&V (PA & CPUC Portions) Total	\$		\$	-	\$	-	\$	-	\$	-		
72.5%		\$	-	\$	-	\$	-	\$	-	\$	-		
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-	S	-		

	2013-2015 B	udget, S	pent, Unsp	ent	and Carryover	2016 Bud			udget, Spent, Unspent and Carryover				
New/Existing Program #	Main Program Name / Sub-Program Name	Commitments as		Pre-2016 Unspent/Uncom itted Funds Available for 201 offset		201	2016 Authorized Budget		2016 Authorized		016 Total Budget th Commitments & Fundshifts	Е	2016 Total Budget Spent
SCR-EUC	Residential and Business Programs	\$	2,522,425	\$	1,500,375	\$	10,577,552	\$	13,099,977	\$	9,466,024		
	Local Marketing and Outreact	\$	-	\$	-	\$	1,636,372	\$	1,636,372	\$	1,224,238		
	Green Building Labeling			\$	-	\$	1,005,000	\$	1,005,000	\$	1,060,504		
	Flex Path Incentives	\$	353,350		0	\$	2,307,154	\$	2,660,504	\$	2,672,156		
	Contractor Outreach and Training			\$	-	\$	507,125	\$	507,125	\$	1,020,062		
	Multifamily Incentives	\$	2,169,075	\$	1,500,375	\$	4,771,901	\$	6,940,976	\$	3,209,386		
	Low-Income Single Family Residentia	\$	-	\$	-	\$	350,000	\$	350,000	\$	279,678		
SCR-FIN	Financial Programs Total	\$	-	\$	-	\$	2,779,250	\$	2,779,250	\$	670,655		
	Public Building Loan Loss Reserve	\$	-	\$	-	\$	100,000	\$	100,000	\$	80,512		
	EUC Residential Loan Loss Reservi					\$	1,737,500	\$	1,737,500	\$	246,945		
	Non-Residential PACE	\$	-	\$	-	\$	705,750	\$	705,750	\$	341,646		
	Public Agency Revolving Loan Fun	\$	-	\$	-	\$	236,000	\$	236,000	\$	1,552		
SCR-REC	REC Programs Total	\$	-	\$	-	\$	8,294,198	\$	8,294,198	\$	8,858,562		
	Aggregated Regional Procuremer	\$	-	\$	-	\$	3,355,771	\$	3,355,771	\$	66,944		
	Integrated Comprehensive Whole Building Retrofit	\$	-	\$	-	\$	3,328,601	\$	3,328,601	\$	7,787,079		
	Regional Climate Action and Energy Pla	\$	-	\$	-	\$	395,120	\$	395,120	\$	66,271		
	Water-Energy Nexus	\$	-	\$	-	\$	253,893	\$	253,893	\$	7,713		
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	-	\$	-	\$	138,735	\$	138,735	\$	344,831		
	Marketing, Outreach, Education, and Training	\$	-	\$	-	\$	672,078	\$	672,078	\$	367,249		
	Workforce Developmen	\$	-	\$	-	\$	150,000	\$	150,000	\$	218,475		
	PA PROGRAM TOTAL	\$	2,522,425	\$	1,500,375	\$	21,651,000	\$	24,173,425	\$	18,995,241		
EM&V	EM&V (PA & CPUC Portions) Total	\$	-	\$	-	\$	-	\$	-	\$	-		
72.5%		\$	-	\$	-	\$	-	\$	-	\$	-		
27.5%	EM&V - PA	S	-	\$	-	S	_	\$	_	\$	_		

Appendices: 9/1 Budget Filing 2017
Appendices: 9/1 Budget Filing 2017

		2016 Budget,	Spent, U	Inspent and	d Carryover	2017	Budget, Fun	dshifts	and Spending
New/Existing Program #	Main Program Name / Sub-Program Name	2016 Unspent/Uncommited Funds Returned to Ratepayers	Commi	2016 itments as 2/31/16	Pre-2017 Unspent/Uncomm itted Funds Available for 2018 offset		7 Authorized Budget	2017	Fundshifts
SCR-EUC	Residential and Business Programs	\$ -	\$	3,677,809	\$ (43,856)	\$	10,577,552	\$	-
	Local Marketing and Outreach	\$ -	\$	-	\$ 412,134	\$	1,636,372	\$	(750,000)
	Green Building Labeling	\$ -	\$	-	\$ (55,504)	\$	1,005,000	\$	(750,000)
	Flex Path Incentives	\$ -	\$	294,950	\$ (306,602)	\$	2,307,154	\$	-
	Contractor Outreach and Training	\$ -	\$	-	\$ (512,937)	\$	507,125	\$	-
	Multifamily Incentives	\$ -	\$	3,382,859	\$ 348,731	\$	4,771,901	\$	1,500,000
	Low-Income Single Family Residentia	\$ -	\$	-	\$ 70,322	\$	350,000	\$	-
SCR-FIN	Financial Programs Total	\$ -	\$		\$ 2,108,595	\$	2,779,250	\$	-
	Public Building Loan Loss Reserve	\$ -	\$	-	\$ 19,488	\$	100,000	\$	-
	EUC Residential Loan Loss Reservi	\$ -	\$	-	\$ 1,490,555	\$	1,737,500	\$	-
	Non-Residential PACE	\$ -	\$	-	\$ 364,104	\$	705,750	\$	-
	Public Agency Revolving Loan Fun	\$ -	\$	-	\$ 234,448	\$	236,000	\$	-
SCR-REC	REC Programs Total	\$ -	\$	-	\$ (564,364)	\$	8,294,198	\$	-
	Aggregated Regional Procuremen	\$ -	\$	-	\$ 3,288,827	\$	3,355,771	\$	(3,325,000)
	Integrated Comprehensive Whole Building Retrofit	\$ -	\$	-	\$ (4,458,478)	\$	3,328,601	\$	3,325,000
	Regional Climate Action and Energy Pla	\$ -	\$	-	\$ 328,849	\$	395,120	\$	-
	Water-Energy Nexus	\$ -	\$	-	\$ 246,180	\$	253,893	\$	-
	Regional Energy Project Tracking and Permitting (CEEPMS	\$ -	\$	-	\$ (206,096)	\$	138,735	\$	-
	Marketing, Outreach, Education, and Training	\$ -	\$	-	\$ 304,829	\$	672,078	\$	-
	Workforce Developmen	\$ -	\$	-	\$ (68,475)	\$	150,000	\$	-
	PA PROGRAM TOTAL	\$ -	\$	3,677,809	\$ 1,500,375	\$	21,651,000	\$	
EM&V	EM&V (PA & CPUC Portions) Total	\$ -	\$	-	\$ -	\$	-	\$	-
72.5%	EM&V - CPUC	\$ -	\$	-	\$ -	\$	-	\$	-
27.5%	EM&V - PA	\$ -	\$	-	\$ -	\$	-	\$	-
	PA TOTAL with EM&V	\$ -	\$	3,677,809	\$ 1,500,375	\$	21.651.000		

	2017 Bud	get, I	Fundshifts and	Sp	ending to Date		20	18 Proposed Budget											
New/Existing Program #	Main Program Name / Sub-Program Name	2017 Total Budget		2017 Budget Spent as of 06/30/2017		Spent as of		Spent as of		Budget Spe		2018 Proposed Budget		Spent as of		Of 20	2018 Budget ffset from Pre- 017 Carryover Col J + Col P)		2018 Funds Requested
SCR-EUC	Residential and Business Programs	\$	10,577,552	\$	6,167,943	\$	10,553,000	\$	(43,856)	\$	10,596,856								
	Local Marketing and Outreact	\$	886,372	\$	477,981	\$	500,000	\$	412,134	\$	87,866								
	Green Building Labeling	\$	255,000	\$	272,477	\$	28,000	\$	(55,504)	\$	83,504								
	Flex Path Incentives	\$	2,307,154	\$	956,897	\$	-	\$	(306,602)	\$	306,602								
	Contractor Outreach and Training	\$	507,125	\$	467,063	\$	250,000	\$	(512,937)	\$	762,937								
	Multifamily Incentives	\$	6,271,901	\$	3,814,551	\$	9,400,000	\$	348,731	\$	9,051,269								
	Low-Income Single Family Residentia	\$	350,000	\$	178,974	\$	375,000	\$	70,322	\$	304,678								
SCR-FIN	Financial Programs Total	\$	2,779,250	\$	249,565	\$	2,347,000	\$	2,108,595	\$	238,405								
	Public Building Loan Loss Reserve	\$	100,000	\$	8,102	\$	100,000	\$	19,488	\$	80,512								
	EUC Residential Loan Loss Reservi	\$	1,737,500	\$	90,375	\$	1,497,000	\$	1,490,555	\$	6,445								
	Non-Residential PACE	\$	705,750	\$	136,082	\$	675,000	\$	364,104	\$	310,896								
	Public Agency Revolving Loan Fun	\$	236,000	\$	15,006	\$	75,000	\$	234,448	\$	(159,448)								
SCR-REC	REC Programs Total	\$	8,294,198	\$	4,222,481	\$	8,751,000	\$	(564,364)	\$	9,315,364								
	Aggregated Regional Procuremen	\$	30,771	\$	10,194	\$	150,000	\$	3,288,827	\$	(3,138,827)								
	Integrated Comprehensive Whole Building Retrofit	\$	6,653,601	\$	3,702,062	\$	7,193,000	\$	(4,458,478)	\$	11,651,478								
	Regional Climate Action and Energy Pla	\$	395,120	\$	201,808	\$	395,000	\$	328,849	\$	66,151								
	Water-Energy Nexus	\$	253,893	\$	1,073	\$	25,000	\$	246,180	\$	(221,180)								
	Regional Energy Project Tracking and Permitting (CEEPMS	\$	138,735	\$	4,604	\$	138,000	\$	(206,096)	\$	344,096								
	Marketing, Outreach, Education, and Training	\$	672,078	\$	204,430	\$	650,000	\$	304,829	\$	345,171								
	Workforce Developmen	\$	150,000	\$	98,310	\$	200,000	\$	(68,475)	\$	268,475								
	PA PROGRAM TOTAL	\$	21.651.000	\$	10,639,989	\$	21,651,000	\$	1,500,375	\$	20,150,625								
EM&V	EM&V (PA & CPUC Portions) Total	\$,	\$	-	\$		\$	-	\$									
72.5%	EM&V - CPUC	\$	-	\$	-	\$	-	\$	-	\$	-								
27.5%	EM&V - PA	\$	-	\$	-	\$	-	\$	-	\$	-								
	PA TOTAL with EM&V	\$	21,651,000	\$	10,639,989	\$	21,651,000	\$	1,500,375	\$	20,150,625								

New/Existing Program #	Main Program Name / Sub-Program Name	Program Type	Market Sector	Resource or Non-resource	Program Status	Utility Grouping
SCR-EUC	Residential and Business Programs	REN	Residential	Resource	Existing	Residential Programs
	Local Marketing and Outreach	REN	Residentia	Non-resource	Existing	Marketing Education and Outreacl
	Green Building Labeling	REN	Residential	Non-resource	Existing	Marketing Education and Outreach
	Flex Path Incentives	REN	Residentia	Resource	Existing	Calculated Incentives
	Contractor Outreach and Training	REN	Residential	Non-resource	Existing	Marketing Education and Outreach
	Multifamily Incentives	REN	Residentia	Resource	Existing	Calculated Incentives
	Low-Income Single Family Residentia	REN	Residential	Non-resource	Existing	Calculated Incentives
SCR-FIN	Financial Programs Total	REN	Cross Cutting	Non-resource	Existing	Financing Programs
	Public Building Loan Loss Reserve	REN	Commercial	Non-resource	Existing	Financing Programs
	EUC Residential Loan Loss Reservi	REN	Residential	Non-resource	Existing	Financing Programs
	Non-Residential PACE	REN	Commercial	Non-resource	Existing	Financing Programs
	Public Agency Revolving Loan Fun	REN	Commercial	Non-resource	Existing	Financing Programs
SCR-REC	REC Programs Total	REN	Commercial	Non-resource	Existing	Public Agency
	Aggregated Regional Procuremen	REN	Commercial	Non-resource	Existing	Public Agency
	Integrated Comprehensive Whole Building Retrofit	REN	Commercial	Non-resource	Existing	Public Agency
	Regional Climate Action and Energy Pla	REN	Commercial	Non-resource	Existing	Public Agency
	Water-Energy Nexus	REN	Commercial	Non-resource	Existing	Public Agency
	Regional Energy Project Tracking and Permitting (CEEPMS	REN	Commercial	Non-resource	Existing	Public Agency
	Marketing, Outreach, Education, and Training	REN	Commercial	Non-resource	Existing	Public Agency
	Workforce Developmen	REN	Commercial	Non-resource	Existing	Public Agency
	PA PROGRAM TOTAL					
EM&V	EM&V (PA & CPUC Portions) Total					
72.5%	EM&V - CPUC					
27.5%	EM&V - PA					

PA TOTAL with EM&V

Appendices: 9/1 Budget Filing 2017

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CREDITS

The Southern California Regional Energy Network (SoCalREN) is administered by the County of Los Angeles and funded by California utility ratepayers under the auspices of the California Public Utilities Commission.

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City of Santa Barbara Emerald Cities Collaborative

City of Santa Monica

To Enrich Lives through Effective and Caring Service.



The color palette used in the SoCalREN logo and this document was inspired by the natural beauty of Southern California, specifically the succulent varietal pictured above. Succulents are water-preserving plants found throughout the region. They present a perfect example of sustainability and making efficient use of resources.



