

PROP 39: CREATING JOBS AND SAVING ENERGY BY LEVERAGING THE IOUs' INFRASTRUCTURE

A Joint California Investor-Owned Utility Proposal

January 17, 2013



**Pacific Gas and
Electric Company**



Southern
California
Gas Company



SOUTHERN CALIFORNIA
EDISON

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Executive Summary

Approved by California voters in November 2012, Proposition 39 (Prop 39) establishes a new Clean Energy Job Creation Fund (the Fund). Prop 39 is expected to accrue roughly \$2.65 billion in taxpayer dollars for investment in energy efficiency and clean energy job creation in California. In a meeting with legislative staff, California’s Investor Owned Utilities (IOUs) – Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), Southern California Edison (SCE), and Southern California Gas Company (SCG) – were asked questions on how the State could most effectively invest the Fund to meet the goals of Prop 39 and the California State Legislature. The IOUs have prepared this proposal to answer the State Legislature’s questions and provide recommendations that focus on energy efficiency improvements in California’s K-12 schools, colleges, universities, and other public facilities.

The IOU proposal draws upon the organization and existing infrastructure of California’s IOUs to:

- Leverage IOUs’ existing energy efficiency programs and infrastructure to extend the reach of Prop 39 dollars for program participation, particularly in K-12 schools,
- Drive meaningful clean energy job creation and job skills training,
- Identify, prioritize, and maximize the number of public education and other facilities assisted, and
- Ensure Prop 39 funds are being spent responsibly and cost-efficiently.

Leveraging Existing Programs

The IOUs currently partner with local and state government agencies, the University of California/ California State University/ California Community Colleges (UC/CSU/CCC) systems, community based organizations, various contractors, and others to offer large, cost-effective energy efficiency, demand response, and distributed generation programs for the State of California. Many of these programs focus on schools and colleges, energy efficiency financing, and workforce education and training initiatives. The IOUs support the Legislature in further investing in these initiatives, as significant energy savings and job creation potential exists—potential beyond that which will be captured through the IOUs’ planned 2013-2014 portfolio of programs. The IOUs believe Prop 39 funds will be most successful if investments leverage these existing programs and IOU infrastructure approach to:

Partnering with the Calif. IOUs to Maximize Prop 39’s Effectiveness

Leveraging the IOUs’ existing program infrastructure would minimize—and in some cases completely avoid—spending money to set up program administration, data collection processes, and other infrastructure.

- Expand the reach of IOU Direct Installation programs by opening participation to all eligible and interested K-12 schools, and the larger MUSH market
- Go beyond low-hanging fruit to identify and implement deeper measures like HVAC and controls that have a direct impact on classroom comfort improving the learning environment
- Draw on the existing network of third party vendors, local government partners, and trade allies to implement Prop 39 initiatives, creating jobs throughout California from day one
- Expand existing IOU financing options to pay for measures not currently authorized under our existing program structure, maximizing the reach of Prop 39 funds
- Reduce market confusion by expanding existing IOU programs, rather than creating new program delivery channels

Leveraging the IOUs’ existing administrative infrastructure means Prop 39 initiatives can be implemented immediately.

- Prioritize facilities based on State-determined criteria for energy projects. IOUs have expertise and data tools ready to prioritize projects with the ability to prioritize disadvantaged K-12 schools, colleges, and other facilities that demand immediate attention for modernization
- Pinpoint “shovel ready” projects to quickly scale up, and build the capacity of, Prop 39 initiatives using our comprehensive and deep data sets
- Facilitate responsiveness and accountability for Prop 39 funds, drawing on IOUs’ existing administrative structures and tools
- Reduce Prop 39 associated administrative and transactional costs by leveraging the IOUs’ systems, processes, and partnerships

- Reduce administrative burden and investment costs,
- Minimize duplication of effort, and
- Reduce market confusion.

Most importantly, the State could **execute Prop 39 initiatives immediately** by leveraging the resources – the people, processes, tools, data, and technology – that IOUs currently have in place. With the current regulatory and energy policy direction given the IOUs by the CPUC, CEC, CARB, the Legislature, and others, the State and taxpayers can have confidence that Prop 39 funds are well spent and carefully documented.

Proposition 39 Sec. 2. Division 16.3, Clean Energy Job Creation

“26201. This division has the following objectives:

.... (e) **Supplement, complement, and leverage existing energy efficiency and clean energy programs** to create increased economic and energy benefits for California in coordination with the California Energy Commission and the California Public Utilities Commission.”

Allocation and Prioritization

To ensure the success of Prop 39 initiatives, the Legislature has shown interest in taking a phased approach to the annual allocation of prop 39 funds. The IOUs’ proposal outlines a phased approach where first year funds are allocated to the segments the Legislature has indicated are a high priority:

- **Year 1:** K-12 schools, colleges and universities (UC/CSU/CCC)
- **Years 2 and beyond:** Expand the reach to the broader Municipal, University, School and Hospital (MUSH) segments, and other high priority energy consumers such as Business Improvement Districts (BIDs) and low-income housing

The IOUs herein provide the Legislature with criteria that can be used to create an “Opportunity Score” to prioritize projects within a given segment. The Opportunity Score is a combination of the following three weighted categories: **Need, Capacity, and Performance**. The IOUs have designed this methodology to draw on IOU-proprietary data, as well as publically available data. The IOUs would internally leverage the State-mandated, confidential customer information to maximize Prop 39 funds, while still preserving customer confidentiality.

The IOUs suggest that some of Prop 39 funds be allocated to each IOU and Publically Owned Utility (POU) territory, and then, within each utility territory, the Opportunity Score could be used to identify schools that should be served first.

Workforce Education and Training

The IOUs recognize the crucial role workforce education and training plays in creating and accommodating the growth in demand for energy efficiency and clean energy projects. Our proposal focuses on both adult workforce training and K-12 classroom-based training to expand the capacity of, and start building the foundation for, a clean energy jobs workforce. To expand the reach of Prop 39 funds, the IOUs recommend the Legislature build on the existing IOU/CPUC programs, apprenticeship trusts, and IOU partnerships with organizations such as California Conservation Corps, Greenlining, Certified Community Conservation Corps, and YouthBuild, among others.

Using Prop 39 Funds to Expand Energy Efficiency in K-12 Schools

With the influx of Prop 39 funds, K-12 schools can take advantage of increased levels of technical assistance, more access to much needed capital and broadened financing options, and a mix of measures that includes more complex retrofits like HVAC upgrades and controls. In addition, Prop 39 funds would allow IOUs to use energy efficiency to reach more schools, more consistently bringing a package of measures that truly maximizes energy savings and occupant comfort.

Financing

Financing programs are playing an increasingly important role in the installation of energy-efficient equipment and current efforts are likely to be significantly expanded under a pending CPUC ruling. The IOUs offer financing and products that are “instantly deployable” alongside Prop 39 implementation. Prop 39 funds can be used to augment existing financing by further addressing clean energy, demand response and other demand-side management measures.

Streamlined Process for Program Administration

Each IOU would staff an internal Program Administrator to act as a single point of contact (SPOC) for, and resident expert on, Prop 39 initiatives. The SPOC would lead Prop 39 initiatives internally, ensuring frequent collaboration and communication with the State. This streamlined approach is designed to:

- Reduce market confusion
- Simplify the process for and reduce a number of observed barriers to participation (e.g. awareness of energy savings options, transactional cost of obtaining/contracting for energy efficiency products and services)

Stakeholder Collaboration

The success of Prop 39 initiatives hinges on the involvement of all key stakeholders, including:

- **Municipal Utilities:** They play an active role in their communities’ energy efficiency efforts and have existing energy efficiency/demand-side management programs in place that, much like the IOUs, should be leveraged. We envision the municipal utilities participating with similar roles and responsibilities, in collaboration with the IOUs.
- **Local Government Partnerships and Third Party Programs:** The IOUs can draw heavily on support from our large existing network of local government partners (LGPs) and third party programs to implement programs, as appropriate, reaching out to the communities to drive increased participation in Prop 39 initiatives.
- **Prop 39 Advisory Committee:** We also recommend the State create a Prop 39 Advisory Committee, responsible for promoting energy efficiency coordination, communication and outreach within each sector, developing “best practices,” ensuring all key players have a “seat at the table” and advising the Legislature, the Governor, and relevant State agencies on Prop 39 expenditures.
- **State Partners:** The IOUs would continue to work closely with State partners and collaborators, including State agencies with which we have a regulatory or other relationship, such as the California Energy Commission (CEC), California Public Utilities Commission (CPUC), California Air Resources Board (CARB), Division of the State Architect, Office of New School Construction, California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), and many others.

The recommendations set forth in this proposal position the State for successful and meaningful implementation of Prop 39 initiatives.

Ready Day One with a Strong Network of Boots on the Ground

Calif. IOUs bring a **robust infrastructure**, existing Direct Installation programs, and a large network of **boots on the ground**. The IOUs can pinpoint “**shovel-ready**” **projects**. We know how to design and manage these projects leveraging our **network of industry partners**. We have the right tools to identify key opportunities and systems to track and report results. And we have in-house experts to offer our customers the most current and innovative technologies to maximize their energy savings.

1.0 Introduction

Due to the passage of Prop 39, the State is now expected to have up to \$2.65 billion in new funds to improve the economy and create jobs across California through funding energy efficiency and clean energy efforts. California's IOUs appreciate the responsibility legislators now face ensuring that these funds are applied responsibly, that they are far-reaching, and that they successfully achieve the goals as set forth in Prop 39.

The Legislature faces crucial questions to consider as it devises the means to implement Prop 39, including the key task of prioritizing and allocating funding:

1. Does an infrastructure exist currently that allows for the immediate deployment of energy efficiency expenditures in the most effective fashion, with full accountability for the funds and confidence in the dependability for results?
2. How to identify and prioritize eligible projects that save energy, cut energy costs, and create quality jobs at the pace California needs?
3. How best to reach the sectors with the greatest need including public schools, universities and colleges, public facilities, and other entities?
4. Are there energy programs in place that we can tap with "shovel-ready" projects to immediately reach multiple school facilities simultaneously?
5. How can we assure the funds are being spent efficiently and monitored consistently?
6. What lessons can be learned about energy efficiency in general, and in California schools in particular, from current activities and from the available data and analyses – and how can that information best guide Prop 39 implementation?

The California IOUs developed a framework for the Legislature that answers these fundamental questions, as well as the questions posed to us during a meeting with legislative staff in December 2012. The IOUs' proposal provides the State with a smart forward to implementing Prop 39, creating jobs in California and improving our education infrastructure while saving energy, cutting energy bills and reducing harmful emissions.

1.1 Energy Efficiency and California's Investor-Owned Utilities

Utilizing the State's existing utility infrastructure and programs will amplify the impact of Prop 39 funds for investment in energy efficiency and clean energy jobs, while increasing the likelihood of success.

Through the utility network and channels of local government partners, third party implementers, contractor relationships, and energy training centers, we manage ratepayers' investments in energy efficiency and clean energy job creation, with State-audited accountability for both results and actions. California's utilities have an experienced staff of energy efficiency experts whose knowledge can be utilized to optimize design and delivery, reduce barriers to specific markets and bring the right market actors together.

The IOUs' current infrastructure allows for rapid response to scaling up energy efficiency and clean energy initiatives within K-12 schools, universities, colleges, and municipal facilities, as well as other sectors throughout the State. The utilities have the ability to create a full queue of "shovel-ready" projects, providing a means for

Proposition 39 Sec. 2. Division 16.3, Clean Energy Job Creation

"26206. The following criteria apply to all expenditures from the Job Creation Fund: ... (h) All programs shall be coordinated with the California Energy Commission and the California Public Utilities Commission to **avoid duplication and maximize leverage** of existing energy efficiency and clean energy efforts."

the quickest way to create energy savings projects that yield quality clean energy jobs. The IOUs are able to provide knowledge, existing tools and technology, and established processes to bring sustained energy savings in any market sector.

Our objective is to serve in the State’s energy delivery infrastructure to help Prop 39 funds be deployed in the right places, for the right projects, and in the right ways to maximize and extend the reach of these investments in alignment with the State’s energy policies.

1.2 Guiding Principles of Our Framework

The IOUs are following several principles to guide the design and implementation of the framework presented in this document:

- Best use and leverage of existing energy efficiency delivery and workforce training infrastructure to maximize and expand end users’ opportunities.
- Aggressively coordinate existing utility energy efficiency programs, partnerships and activities with Prop 39 initiatives to prevent market confusion and duplication of effort.
- A focus on K-12 and higher education in the initial year of funding, adding other sectors in the following years.
- Leverage data tools to prioritize facilities based on opportunity and demographics, with disadvantaged schools taking precedence.
- Create market demand for new clean energy jobs by expanding the reach of Prop 39 funds.
- Assure highest quality control and reporting to maintain accountability and safeguard taxpayer dollars.
- Ensure that key players, including state agencies and regulators, IOUs, municipal utilities, local governments, CCC/UC/CSU systems, third party implementers, non-profit experts and others, work closely and collaboratively.

Training the Next Generation for Efficiency

IOUs offer a full mix of free curriculum materials, lesson plans, online classes, scholarships and internships for K-12 students and teachers, all the way up to college students. Additionally, the IOUs have a history of partnering with the California Conservation Corp, training their members on identifying and installing energy efficiency measures.

2.0 Program Scope

Meetings with legislative staff indicate that initial legislative focus for Prop 39 funding aligns with the CPUC’s Municipalities, Universities, Schools, and Hospitals (MUSH) focus. In particular, K-12 schools, colleges and universities receive significant attention for much of the Prop 39 funding. In response to requests from legislative staff, this proposal explores how to address K-12 schools, colleges and universities in depth. However, the IOUs recognize that other sectors would also benefit from Prop 39 funding. Therefore, we suggest a phased approach in which K-12 schools, colleges and universities could be the main focus for Prop 39 funding in the first year with other sectors phased-in in subsequent years. Should the legislature broaden its focus and fund other market sectors, the IOUs remain positioned to effectively leverage our existing infrastructure and our broad portfolio of programs.

Partnering with IOUs to Extend the Reach of Prop 39 Funds: Program Scope

- Phased approach targeting K-12 and higher education in Year 1
- Expanding to broadened MUSH market and other hard-to-reach sectors in Years 2-5
- Prioritization methodology that draws on IOU and publically available data to pinpoint facilities with the most need

K-12 schools, colleges and universities do present a great opportunity for Prop 39 funding. Inexperience, budgetary constraints, lack of appropriate capital, limited expertise and skilled resources, and minimal interest from key school stakeholders hinder the implementation of energy efficiency projects in K-12 schools and some community college facilities. The addition of Prop 39 funds creates greater opportunity for K-12 schools, colleges and universities to explore a more inclusive measure mix, from lighting, HVAC, and controls, to building envelope, retro-commissioning/monitoring-based commissioning opportunities, and rooftop and parking lot solar arrays. Incorporating Prop 39 funds into existing programs allows K-12 schools, colleges and universities to focus on projects that provide deep, long-lasting energy savings.

The IOUs' current energy efficiency delivery channels present an opportunity for the legislature to expand the reach of Prop 39 funds by using Prop 39 funds when IOU funding is not sufficient or is not available for specific energy projects. Use of the IOU energy efficiency administrative structure would allow more Prop 39 funding to go to actual building improvements for K-12 schools, colleges, and universities, or other qualified sectors.

California's Aging Schools Need Energy Efficiency

There are approximately 11,000 K-12 and charter school facilities across California. According to the California Department of Education, over 70% of K-12 schools are over 25 years old and about 30% are over 50 years old. The aging infrastructure of California's K-12 schools presents a tremendous opportunity for energy efficiency upgrades and renewable energy projects in schools throughout the State.

Energy Intelligence in Action. The IOUs have programs designed to improve K-12 facilities with a measure mix that reduces energy bills, improves student comfort, and reduces GHG emissions. Incorporating Prop 39 funds into existing infrastructure allows us to grow our footprint in these schools, extend the reach of the programs and produce sustained savings that translate to more money for student learning.

Creating Good, Sustainable Jobs throughout California

Prop 39 could result in clean job creation of approximately 6,000 jobs per year for \$550M in annual investment, based on job creation estimates from the White House Council of Economic Advisers, which instructed federal agencies to use \$92,000/job for federal investment under the American Recovery and Reinvestment Act (ARRA) of 2009. The Prop 39 estimate is consistent with the Green Collar Jobs Council estimate of ten to twelve jobs per million dollars of annual investment.²

² "Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009," Council of Economic Advisers, May 2009, <http://www.whitehouse.gov/administration/eop/cea/Estimate-of-Job-Creation>.² "Prop. 39 Green Collar Jobs Council (DRAFT) Guiding Principles and Strategies," as outlined in the November 27, 2012 meeting notice: http://www.cwib.ca.gov/res/docs/special_committees/gcjc/meeting_materials/2012/GCJC27Nov2012v3.pdf

The IOUs manage a portfolio of programs that reach diverse market sectors, including K-12 schools, colleges, universities, local governments, Business Improvement Districts (BIDs), hospitals, small businesses, and multi-family low income housing. Our experience with these sectors has created solid relationships with key stakeholders and has given us a strong understanding of the barriers that exist in these markets, how to reach these markets and how to encourage maximum participation. What's more, we know how to incorporate an array of diverse portfolio offerings like on-bill financing and workforce development to offer our customers a holistic approach to energy management.

2.1 Recommendations for Prop 39 Funding Allocation

The IOUs have been asked by the Legislature for input on how to allocate funding. One of the approaches could be use of a phased approach for allocating annual Prop 39 funds. Below, the IOUs provide an example that may assist the legislature in realizing a phased approach to funding. The proposal helps K-12, colleges and universities assist schools, while still addressing clean energy upgrades in other sectors that merit Prop 39 funding. We recognize that the K-12 schools, colleges and universities provide ample opportunities for energy efficiency, clean energy upgrades such as solar, and other integrated demand side management (IDSMD)

initiatives. As such, Year 1 could focus on public schools, specifically K-12, colleges and universities. To guide Prop 39 expenditures, the IOUs suggest closely following the State’s prescribed “loading order,” first tackling energy efficiency projects, then followed by demand response opportunities and distributed generation projects.

The IOUs have developed a rigorous prioritization methodology that could be used to determine which schools the legislature targets first for efficiency and clean energy projects. *Section 2.3, Facility and Project Prioritization* describes this methodology. The IOUs’ existing state partnerships with UC, CSU and CCC already have rigorous campus and project prioritization processes that can be immediately utilized.

The IOUs have the capacity to quickly build a full queue of schools that present “shovel-ready” projects to fit the prioritization criteria. In addition, our strong working relationships with schools, colleges and universities would allow the IOUs to create jobs and energy and financial savings from day one. The existing programs and relationships with K-12 schools, colleges and universities enable the IOUs to spur more immediate job creation and energy savings than other entities which may not have these established relationships and evaluative work already completed.

Using Prop 39 Funds to Expand Energy Efficiency in K-12 Schools

With the influx of Prop 39 funds, K-12 schools can take advantage of increased levels of technical assistance, more access to much needed capital and broadened financing options, and a mix of measures that includes more complex retrofits like HVAC upgrades and controls. In addition, Prop 39 funds would allow IOUs to reach more schools, more consistently bringing a package of measures that truly maximizes energy savings and occupant comfort.

Additionally, the IOUs have been working with the California Community Colleges’ Chancellor’s office to assist in the drafting of a proposal for the use of Prop 39 funding. Like ours, the current proposal focuses on leveraging existing programs to achieve solid reductions in energy use, campus wide.

In parallel to prioritizing K-12 schools, community colleges, and UCs/CSUs in Year 1, the IOUs would expand workforce education and training programs to maximize the reach of Prop 39 funds. This investment is critical in Year 1 to position California’s workforce with the knowledge, skills, and abilities required to scale-up efforts in the MUSH market, and beyond. The IOUs have also identified ways to extend the reach of Prop 39 dollars with creative financing mechanisms, which could be employed during Year 1. *Section 4.1.3 Financing* describes these financing ideas.

2.2 Future Considerations

2.2.1 Expanding into the Larger MUSH Market

In subsequent phases (Years 2-5), the IOUs would continue to serve K-12 schools and CCCs/UCs/CSUs, ensuring that each one of the K-12 schools in our respective service territories has been evaluated for energy efficiency and clean energy project potential. Once Year 1 is complete, we would address opportunities for clean energy project potential in the remaining MUSH markets.

2.2.2 Moving Beyond the MUSH Market

Reducing energy demand in our K-12 school facilities is of great importance. Redirecting resources to enhance students' educational opportunities greatly contributes to strong, economically viable communities. However, we recognize that opportunities for energy efficiency and demand response exist beyond the K-12 and MUSH markets.

2.3 K-12 Facility and Project Prioritization

The right prioritization of facilities and projects is the key to maximizing job creation, energy savings, and geographical and economic equity. Using customer data and publicly available information detailing performance and demographics of California schools, the IOUs have devised an illustrative scoring methodology for consideration that is based on needs of the school, energy performance and capacity for implementation to prioritize schools and identify those that present the highest opportunity for energy efficiency projects. The IOUs' proposal would leverage the State-mandated, confidential customer information, while still preserving customer confidentiality.

This proposed approach allows a transparent approach to achieve common understanding of which schools represent the highest priority for allocation of Prop 39 funds for energy efficiency projects. Utilizing this methodology, the IOUs can quickly identify those schools that demand immediate attention, and provide a basis for ongoing evaluation of program effectiveness. **Figure 1** details the elements that shape each of the four categories.

Broadening the Reach of Prop 39

Magnifying Energy Efficiency throughout California's Municipalities

All of the IOUs partner with local governments to leverage and coordinate energy efficiency improvements to municipalities. San Diego Association of Governments Partnership, the Coachella Valley Association of Governments Partnership, and the East Bay Local Government Partnership are just three of the successful partnerships that could be leveraged and enhanced with Prop 39 funds. The partnerships that exist between the local governments and IOUs provide an opportunity to deliver energy efficiency funds to private hospitals, small businesses, and low-income multi-family residential properties without the added costs of establishing a new bureaucracy to administer and regulate the allocation and use of these funds.

Improving Energy Efficiency in Hospitals

In-patient healthcare is a 24/7, 365 days-a-year, business with vast complexity and tremendous cost pressure. Continual energy usage presents an opportunity for small efficiencies to yield big results. Leveraging existing programs and local government partnerships would help implement these improvements more cost-effectively and efficiently.

Drawing on Successes: Small Business Energy Makeover

Leveraging existing local government partnerships, IOU infrastructure, and resources with Business Improvement Districts (BIDs) could increase the impact and reach of Prop 39 funds in the small business arena. BIDs offer strong member relationships, know their neighborhoods and needs, and can jump start and encourage greater participation in the program. The success of SDG&E's North Park Small Business Energy Makeover is a strong model for this approach.

Delivering Higher Energy Savings to Low to Moderate Income Residential Properties

The low to moderate income residential market continues to offer significant opportunities for energy savings, as well as diverse opportunities for clean energy job creation. There should be some consideration of the IOUs' existing programs and the local governments that serve this market. The IOUs could expand our energy efficiency and demand response offerings to explore more comprehensive measures such as windows, copper plumbing, water heater and HVAC, and insulation replacements as well as address the landlord-tenant split incentive challenge by offering free equipment replacement.

Category	Possible Criteria	Criteria	Description	Data Source
Need	<ul style="list-style-type: none"> The age of the school facilities Whether the facilities have been recently modernized Economically disadvantaged Proportion of students receiving free and reduced-price meals Whether the facilities are operated as a year-round school 	Facility Modernization Does the facility meet student needs?	<ul style="list-style-type: none"> Age of school facilities (this data unavailable at time of analysis) Condition of current facilities 	CA DOE
		Student Demographic Do characteristics of students qualify school for special attention?	<ul style="list-style-type: none"> High percentage of K-12 age school children qualify as poverty High percentage of K-12 receiving reduced price meals 	CA DOE
		Year Round Schools Is school operated year round?	<ul style="list-style-type: none"> Year round school 	CA DOE
Performance	<ul style="list-style-type: none"> The school's score from an energy rating system such as the United States Environmental Protection Agency's Energy Star system 	Energy Efficiency Projects per school customer	<ul style="list-style-type: none"> School participation in CPUC programs (PG&E, SCE, Sempra) 	Utility
		Audit Audit results	<ul style="list-style-type: none"> Has school received general or specific audit from IOU? 	Utility
		Energy Star Score on EPA Energy Star	<ul style="list-style-type: none"> High Energy Star Score(>60 average) 	Utility /EPA
		Energy usage Trends	<ul style="list-style-type: none"> Significant increase or decrease in energy usage since 2009 	Utility
Capacity	<ul style="list-style-type: none"> The potential for demand reduction 	Benchmark Benchmarked	<ul style="list-style-type: none"> School participating in ABS 	Utility
		DG DG installed	<ul style="list-style-type: none"> School DG installed 	Utility
		Engagement Has school participated in programs that indicated willingness to engage in EE activities	<ul style="list-style-type: none"> Participation in IOU school non-EE program 	Utility

Figure 1 - Sample prioritization methodology to consider all key factors for Prop 39 K-12 funding

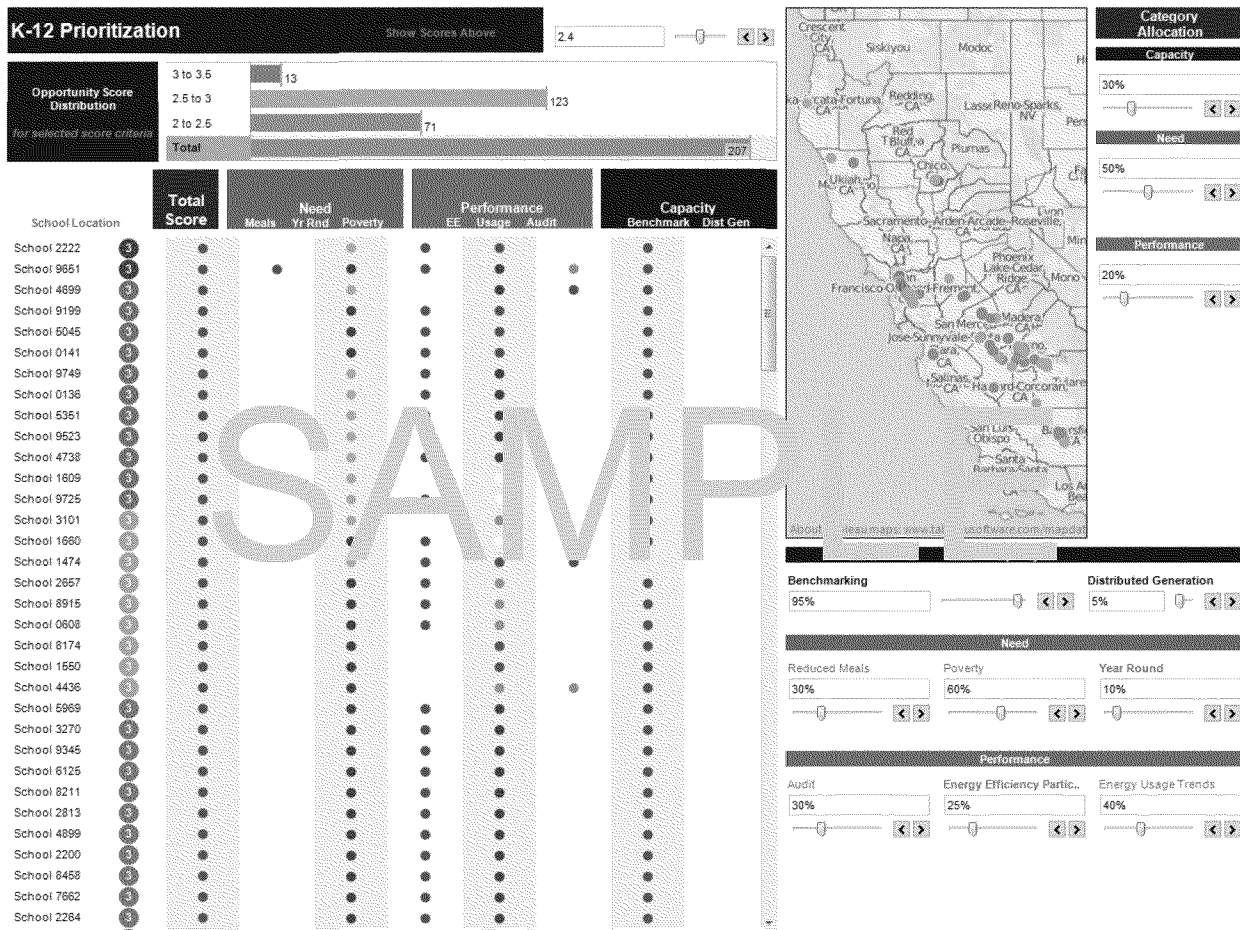


Figure 2 - This example is for illustration purposes only and should be used only to understand the potential of our prioritization methodology

The proposed Opportunity Score has three general categories based on a facility level analysis of each school: 1) Need: Based on school demographics and facility condition, which schools demonstrate need for attention; 2) Performance: Based on actual energy usage implemented projects, which school have opportunity for energy reduction, and; 3) Capacity: which schools have shown a capacity to implement energy related projects.

To facilitate initial market sizing and understanding of opportunity in the K-12 market segment, we have developed a sample tool based on the described Opportunity Score. As noted above, IOU customer information has been combined with publicly available information from California Department of Education to assess each school’s opportunity for project implementation. (Note, this analysis was done quickly for purposes of illustration in this document; it will need refinement and some additional data gathering before using for Prop 39 funding distribution. Missing from the current analysis is information on individual school facilities, their condition, and any recent modernization effort, and distributed generation not interconnected to the IOU grid, information we will work with the State to incorporate into the analyses.) IOUs will perform the analysis using the IOU-culled and publically available data and prioritization methodology, and share our findings with the Lead Agency to guide and inform the Prop 39 fund allocation. This approach will avoid confidentiality issues surrounding sensitive facility data.

Once projects have been implemented, the same tool can be used to track and analyze results and re-prioritize remaining funds, as necessary.

In the example below, **shown for illustration only**, we weighed priority based on 50% to Need, 40% to Performance and 10% to Capacity. Within each category, we ranked each criterion from one to five, and weighed each within the Need, Performance and Capacity criteria. Based on these criteria, we were able to identify 530 K-12 facilities in Northern California alone that represent good opportunity for initial allocation of Prop 39 funds.

We consider the State’s electricity “loading order” the primary driver in the types of projects prioritized first. California loading order lists energy efficiency and demand response first, renewable resources second, and clean and efficient natural gas-fired power plants third.¹ Accordingly, Prop 39 should fund all cost-effective electric and natural gas energy efficiency and demand response projects as the highest priorities, followed by funding for renewable resources and other clean energy options. As part of our approach, once a district has expressed interest in participating in the Prop 39 initiative via completion of the Participation Application, a comprehensive audit would be performed at their school facilities to determine energy projects to consider. Projects would be prioritized based on the State’s loading order, as described below in *Section 4 Implementation Recommendations*, to focus on energy efficiency and demand response upgrade.

3.0 Program Administration (Fund Flow)

To successfully implement Prop 39, the State would need to develop an effective and efficient means to direct funds to energy efficiency upgrades where they are most needed and will be most effectively spent. The IOUs have extensive experience in designing, managing and implementing energy efficiency and other DSM programs – including in schools, colleges and universities, and other public, and hard-to-reach commercial and residential sectors. The IOUs also have significant analytical resources and detailed energy efficiency data that could be used to optimize the use of Prop 39 funding. With this experience and analytic resources, the IOUs can advise the Legislature how to most effectively prioritize market sectors. To pursue the goals of generating energy savings, clean energy job creation, accountability, transparency and the other goals of Prop 39, the following approach may be used:

Partnering with the IOUs Can Extend the Reach of Prop 39 Funds: Program Administration

- Place Prop 39 funds into Clean Energy Job Creation Fund
- Designate a Lead State Agency to oversee administration of Fund
- Contract with IOUs to put Prop 39 funds to work
 - Allocate Prop 39 funds using prioritization methodology
 - K-12 funds allocated at the school district level
 - Colleges and universities: leverage the existing successful UC/CSU/CCC state partnership infrastructure, and the CCC Chancellor
 - WE&T funds allocated at the community level
- Require one consolidated Program Participation application for Prop 39 and IOU program initiatives

1. Prop 39 funds are placed in the Clean Energy Job Creation Fund (Fund) and the Fund administrator allocates monies by year among the broad categories of energy efficiency activities described in Prop 39 and subsequent legislative action, e.g. K-12 Schools; colleges and universities; public facilities; job training and workforce development; and public-private partnerships (see section 2.1 above).

¹ See “Energy Action Plan: 2008 Update” jointly issued by the California Public Utilities Commission and California Energy Commission, February 2008, page 1.

2. A Lead State Agency is assigned by the Legislature for one or more of each of the broad categories. For ease of operation, coordination, and implementation the Legislature would avoid duplication of regulatory oversight.
3. The Lead Agency contracts with utilities (and potentially other parties) to, under the guidelines set by the Legislature and the Lead Agency, administer Prop 39 funds, leveraging existing infrastructure and contracts with energy efficiency contractors, and leveraging IOUs' existing framework of implementing energy efficiency/DSM, workforce education and training, and financing programs. IOUs and Lead Agency (Planning Committee) would work collaboratively to guide yearly allocations, using IOU & publically available data to pinpoint facilities to target.

The optimal program administration may vary somewhat for the different market sectors selected. The IOUs would work with the Lead Agency for each market sector to optimize the program administration and process flow once the market sectors have been selected. **Figure 3** gives an example of the Contracting Process for K-12 Schools.

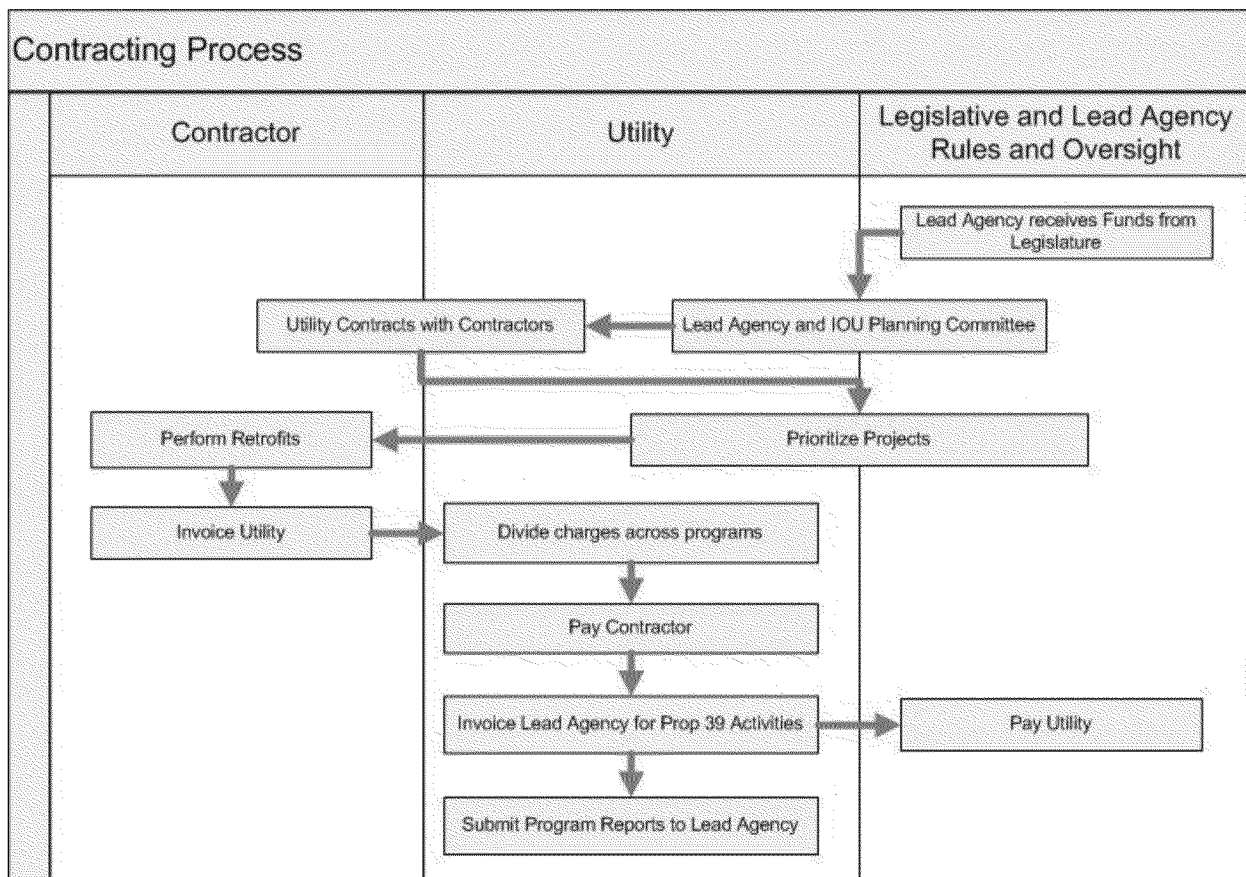


Figure 3 - We recommend an effective and efficient means to direct funds to energy efficiency upgrades where they are most needed and will be most effectively spent

3.1 K-12 Schools

1. The Lead Agency determines allocation on a school district (or county education office) level based upon a “prioritization formula” established by legislation and/or rulemaking. See Section 2.3 above for a discussion of the prioritization formula for K-12 schools.
2. The funds are assigned on behalf of a school district to the lead energy utility company that serves them.²
3. With the assistance of utilities, as required, the school district will prepare and submit a “Prop 39 Program Participation application.” To facilitate ease of use, we propose to use a single application and application process for participating facilities that addresses participation in both IOU programs and Prop 39 funded programs.
4. The school district and lead IOU would coordinate and work with all of the utility company/ies that serve them and other energy efficiency implementing partners (under the rules established by the Lead Agency) to develop, implement and maintain the energy efficiency improvements.

3.2 Colleges and Universities

As above except that the existing prioritization process specific to the existing IOU partnerships with California Community Colleges, California State University and University of California be utilized; and the Prop 39 activities here will leverage the existing successful UC/CSU/CCC state partnership infrastructure and process for rapid deployment of Prop 39 funds. Additionally, funds for the CCCs would go directly to the Chancellor.

3.3 Job Training and Workforce Development

As above except that allocation would be made at the community level. A “prioritization formula” specific to clean energy job training and workforce development will be developed and used. The Prop 39 activities here would augment existing utility training curriculum (by working with organizations like YouthBuild and CCC to provide job skills to low income and disadvantaged youths). Utility training centers will be optimally leveraged to provide training.

3.4 Public-Private Partnerships (PPP)

Public-Private Partnerships is a potentially broader category than the others listed (unless the Legislature narrows the PPPs permissible under Prop 39). Accordingly, the Lead Agency, within statutory constraints, could establish a competitive grant regime (either for all public-private partnerships, or by category of partnership), with explicit and transparent criteria for selection among proposed projects. The grantee would work with all of the utility company/ies that serve them or their clients, and other

K-12 Retro-commissioning Program: A Case Study of Success in Clovis

Clovis Unified School District (CUSD) leveraged PG&E’s retro-commissioning program to address the two most energy-intensive applications in the eight schools – HVAC and lighting. Participating in the program, Clovis witnessed annual savings of ~600,000 kilowatt hours and ~ 9000 therms, with a 1.2 year simple payback and a PG&E rebate of \$105,115.

“...by better controlling our energy use with these changes, we’re saving money on our energy costs – money that can be put into the classroom where it belongs...I would recommend PG&E’s programs to anyone.” *John Poytress, Director of Plan Operations, Clovis Unified School District*

² This may be an electric or gas utility at the discretion of the Lead Agency.

energy efficiency implementing stakeholders, under the rules established by the Lead Agency³, to develop, implement and maintain the energy efficiency improvements. (For PPPs that are principally innovative energy efficiency financing see *Section 4.1.3.*)

4.0 Implementation Recommendations

Leveraging the IOUs’ existing infrastructure provides the State with greater confidence that Prop 39 funds can be distributed to the most needy facilities, and allocated to maximize job creation and energy savings.

Our proposal to maximize the reach of Prop 39 funds focuses on the following priority elements:

- Leverage existing IOU programs for energy efficiency retrofits, workforce training and education, and financing
- Establish a streamlined “one-stop” K-12 program management approach
- Reduce market confusion
- Include all key players
- Ensure program integrity and accountability

4.1 Leverage Existing Utility Programs

The IOUs have mature energy efficiency programs and delivery channels that can – and should – be utilized to maximize Prop 39’s success. The IOUs can offer the State an infrastructure by which to help administer and implement Prop 39 initiatives, and provide our experience of serving as our customers’ energy advisors. By leveraging existing programs and relationships, the IOUs would reduce administrative burden and investment costs, minimize duplication of effort, reduce market confusion, and perhaps open access to IOU funds that schools cannot currently utilize due to matching funds that schools must provide. Most importantly, the resources – the people, processes, tools, and technology – we have in place position us to execute Prop 39 initiatives from day one.

4.1.1 Engagement Process

As discussed in *Section 2.0 Scope*, K-12 schools, colleges and universities take precedence for the initial year (Year 1) of Prop 39 initiatives. Drawing on our prioritization findings, the IOUs would present this data to the Lead Agency, and work in close coordination to identify the school districts and schools, colleges and universities that demand attention first, identify and prioritize energy projects, allocate Prop 39 funds to those districts, and colleges and universities, gauge interest in participating in the Prop 39 initiatives, and fill the queue with projects for Year 1. The IOUs would optimize all available resources to propose a funding sequence that makes the most sense for the school district, the campus, and the facility. We recommend that school districts, colleges and universities be allowed to use both utility and Prop 39 funds for different project components. But importantly,

³ Due to the potential wide variety of Public-Private Partnerships, the Lead Agency can distribute the funds for the grantees through the lead utility company that serves them.

Prop 39 Funds: An Implementation Approach

- Leverage existing IOU program and administrative infrastructure, and network of industry partners to implement Prop 39 initiatives, thereby reducing market confusion
- Establish a streamlined program management approach to include a single point of contact within each IOU for Prop 39 initiatives, and a single Project Manager for each participating school district
- Include key players
 - Could establish an Advisory Committee for each market sector to advise Legislature, develop best practices, and promote Prop 39 initiatives
 - Involve Municipal utilities in the design and implementation of Prop 39 initiatives
 - Draw on existing network of local government partners and third party vendors to implement Prop 39 initiatives and serve as Prop 39 ambassadors
- Ensure program integrity and accountability by leveraging IOUs administrative protocols and reporting mechanisms

as stewards of ratepayer and taxpayer dollars, IOUs would ensure that no dollar expended in an energy efficiency project may receive funding from both sources for the same expenditure.⁴

As school districts and colleges and universities are identified, the IOUs would perform benchmarking of these facilities, engage the facility operators and management, and discuss the potential that exists in the respective school facilities. To ensure full cooperation and support of the school district and school facilities, we would require that districts submit a combined CPUC and Prop 39 Program Participation application to demonstrate their commitment and engagement. With this application, we would collect the necessary information for participation in both Prop 39 funded programs, and IOU funded programs. The IOUs' state partnerships with colleges and universities utilize an application process that, with little modification, can be immediately implemented.

Highlights of our Approach for K-12 Schools

- Model energy project delivery on IOU Direct Installation (DI) programs
- Use existing network of DI contractors to implement Prop 39 initiatives and to create more clean energy jobs
- Go beyond low hanging measures like lighting to include HVAC, controls, retro-commissioning, O&M
- Expand IOU financing options by using Prop 39 funds to finance larger, more complex retrofits and renewables

The Prop 39 program itself is modeled on, and aligns with, the IOUs' current direct installation (DI) energy efficiency programs, which we believe is the best model to use to overcome many of the barriers we face in the K-12 marketplace. Aligning with our current DI structure, the Prop 39 program involves an initial benchmarking assessment, a comprehensive audit to identify specific energy efficiency and demand response measures, installation of those measures, and monitoring and verification of those measures, as shown in **Figure 4**. This type of technical assistance is critical to surmount knowledge barriers and amplify energy efficiency initiatives.

⁴ The IOUs would work with the Lead State agency and CPUC to develop implementation protocols including controls to assure that no project receives more funding than total costs incurred.

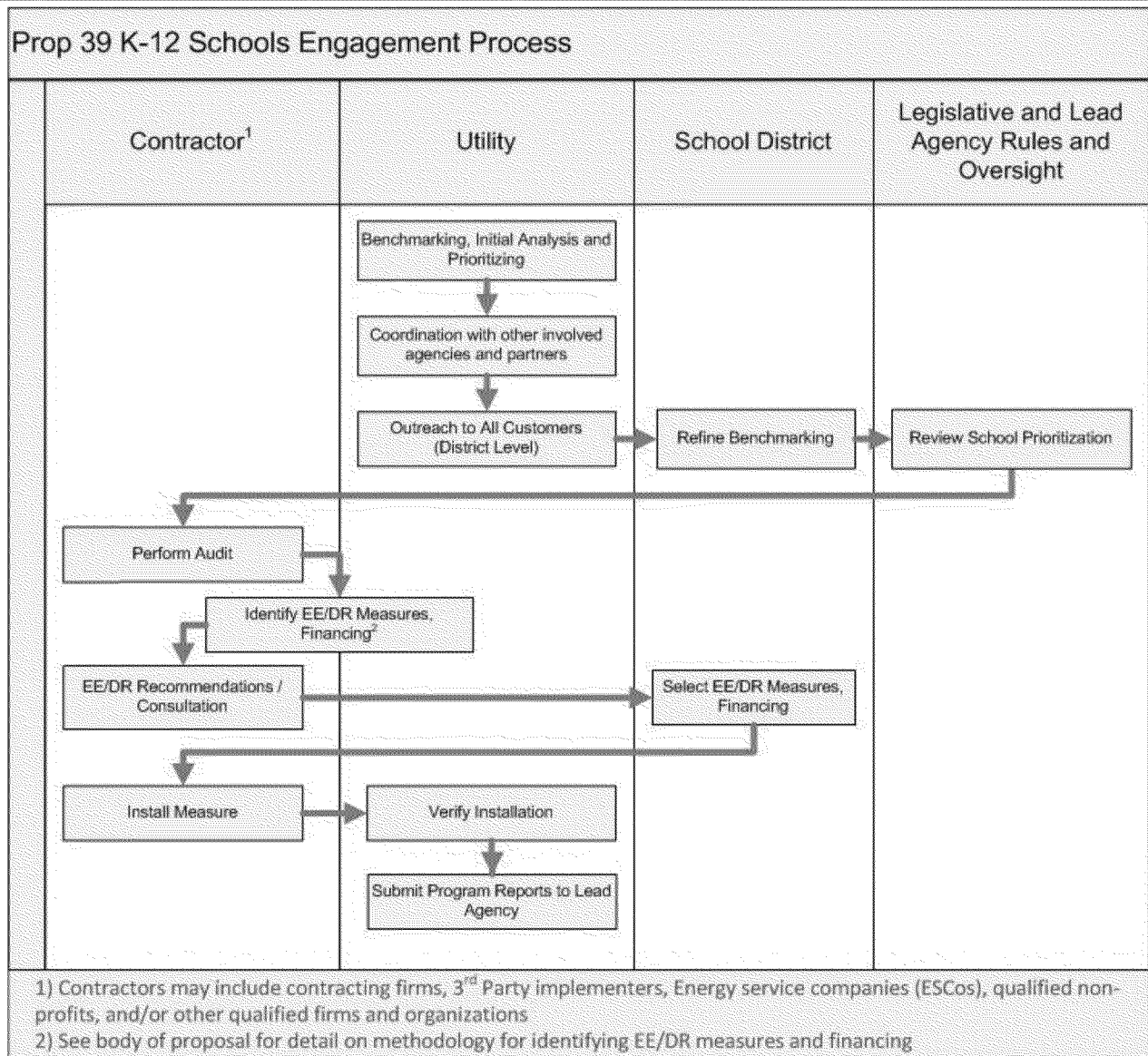


Figure 4 – Leveraging and aligning with existing IOU DI programs, we are able to facilitate deep, lasting savings, concomitantly bringing into play the full spectrum of clean energy jobs

Prop 39 funds expand the reach of IOUs’ programs. Thanks to the flexibility the Prop 39 funds, IOUs would be able deliver an enhanced package of measures. This package could include lighting upgrades, HVAC, controls, retro-commissioning, monitoring-based commission, operations and maintenance (O&M) staff training, and building envelope such as fenestration – measures that go beyond what IOU programs can currently offer. With the influx of Prop 39 funds, K-12 schools can take advantage of increased levels of technical assistance that they need to make smart decisions about energy projects. In addition, with Prop 39 funds, K-12 schools have more access to much needed capital and broadened financing options to fund larger, more complex energy efficiency and clean energy projects that significantly improve facility performance and create a better learning environment for our students. For years, schools have concentrated on “low hanging fruit” or fast payback measures due to lack of funding. Higher capital cost measures like controls, HVAC replacement, and windows, have been elusive even at time of school modernization. Targeting these measures would make a direct impact on classroom comfort and improving the learning environment. Importantly, Prop 39 funds would allow IOUs to reach more schools, more consistently. The IOU approach targets all energy efficiency and demand response opportunities, first “low-hanging fruit” measures, then more complex HVAC and controls system upgrades.

Utilizing Prop 39 funds to bring this package of measures to every K-12 school facility enables the State to go beyond the IOUs' current capacity and truly maximize energy savings and occupant comfort, while creating good clean energy jobs at the same time.

For those schools that want to explore more complex retrofits, the IOUs would tie in a financing option or co-pay scenario. Especially in areas where a Property Assessed Clean Energy (PACE) financing program does not exist, a loan option for renewables, supported by Prop 39 funds, makes good sense.

Our approach is designed not only to identify and implement deep energy savings retrofits, but also to reduce participation barriers, making it easy and simple to engage in the process. What's more, we are able to capitalize on clean energy job creation opportunities by relying heavily on the participation of contractors for a vast majority of technical assistance and all of the project installation, as shown in **Figure 4**. For colleges and universities we will follow a similar model, but will coordinate with and utilize the procedures and processes that are already in the IOUs' state partnerships with the colleges and universities.

Leveraging IOUs' proven outreach channels, the IOUs can assist the State with publicizing Prop 39 initiatives, positioning K-12 schools to take full advantage of this important funding. As energy advisors, we work closely with our K-12 customers to navigate our large portfolios of offerings and catalogue of measures so that they take advantage of the right projects that maximize and sustain their energy savings. To educate schools on Prop 39 initiatives, the IOUs would continue to use proven outreach channels, engaging large network of Account Representatives, local government partners, third party program implementers, and contractors to encourage schools' participation, providing them with the tools they need to take full advantage of Prop 39 funds.

4.1.2 Workforce Education and Training

IOUs have a long history of workforce development within our own organizations in the context of the more conventional "wires and pipes" world. Using Prop 39 funds, the IOUs can build the capacity, and extend the reach of existing workforce education and training initiatives and leverage existing partnerships with programs such as California Conservation Corps, Greenlining, Certified Community Conservation Corps, YouthBuild, Urban Corps, and the Maximizing Access to Advance our Communities (MAAC) Project. Our focus for Prop 39 workforce education and training initiatives includes both adult workforce training and K-12 classroom-based

The IOUs' Lessons Learned Working in K-12 Schools

- Schools, like most customers, need help on a variety of fronts, including:
 - Direction on how to proceed with projects
 - Analyzing energy efficiency/clean energy options regarding savings, performance and interactions
 - Identifying funding sources
 - Internal staff support and proper training and education
- Working with Schools' Business Officers is the key as their support spurs project implementation. School boards look to them to vet a project for financial soundness
- Schools need to be able to act quickly once approval has been granted (some schools have small, summer-only window of installation opportunity)
- Schools need an easy way to access capital – preferably prior to construction – and generally strongly prefer not having to go to local voters for new moneys
- School districts are often hesitant of using their "General Fund" to fund energy efficiency improvements. New financing sources and mechanisms are needed to spur investment in energy efficiency projects
- Most school districts will receive board approval to sign a loan agreement once the "substance" of the project is determined
- If financing guidelines allow for better rate or longer payback for comprehensive projects schools will seek to do multiple measures

Highlights of Approach for WE&T

- Expand IOU partnerships with California Conservation Corps, Greenlining, Certified Community Conservation Corps, YouthBuild, Urban Corps, and others
- Include adult, veterans, and K-12 classroom based training opportunities
- Develop community college and K-12 curricula that involves energy project implementation

training to expand the capacity of, and start building the foundation for, our clean energy jobs workforce. We anticipate a “braided approach” to funding workforce education and training support that incorporates existing funding from CPUC programs, apprenticeship trusts, federal funding, and new Prop 39 funding support. Fundamental to our approach is to eliminate duplication of efforts, and simply build upon our existing successful initiatives.

Adult Workforce Training

With our adult workforce education and training initiatives, the IOUs propose increasing the momentum to create high quality, long lasting jobs in California by moving beyond the limiting “program cycle” to longer-term clean energy job initiatives. Workforce education and training initiatives that will be expanded include, but are not limited to:

- Enable Pathways to Apprenticeship with Pre-Apprenticeship programs that articulate with established, state certified Apprenticeship programs is a smart way to reach minority, local low-income, disabled, displaced, and other disadvantaged communities
- Build upon current apprenticeship programs and take a Sector Strategy (e.g., HVAC) approach to matching the supply of Prop 39 clean energy jobs with the true demand by employers for particular knowledge, skills and abilities
- Integrate “First Source” hiring practices for paid internships to strengthen the bridge between training and employment, and reach low-income, minority, veteran and at-risk workers
- Train and fund a professional “Sustainability Manager” at each community college district to champion and manage campus retrofits
- Expand Statewide California Community Colleges CCC Developing Energy Efficiency Professionals (DEEP) internship program to all interested campuses
- Expand Sustainable Green Building Pathways project that provides participants from the California Conservation Corps (CCC) career exploration opportunities through in-class training and hands on work experience
- Leverage the IOUs’ eight training centers to provide entry-level and advanced energy efficiency training

The IOUs’ Lessons Learned with Workforce Education and Training

- WE&T needs to be designed to reach and be delivered to the right training at the right time for the right audience. Training should not be offered without a direct, immediate demand by people for the knowledge, skills, and abilities to be provided.
- Assessment of actual needs must be conducted before designing and delivering training so that competency- based instructional objectives are fully developed based on real, specific requirements.
- A “sector strategy” approach brings suppliers of training together with the employers in need of the support to fill the right gaps.
- Training and education is not always the answer to a performance deficit. A root cause analysis should be performed to determine if training is the issue or if other forces are the culprit like an organizational culture that rejects desired performance, incentivizes the wrong behavior, or provides poor supervision.

Veterans Education, Training, and Transition Services (VETTS)

Using Prop 39 funds would allow the IOUs to develop and implement a clean energy training and education program to help veterans find employment. The goal of this program is to place each veteran on an initial education curriculum while concurrently completing on-the-job training with a project execution team. Our veterans need training, skill sets, and education to facilitate their transition into civilian life. Pre-apprenticeship training at community colleges and other sources and established, certified apprenticeship training options will be suggested and facilitated when possible.

K-12 Classroom Education Training

Much like the approach to adult workforce education and training, the IOUs would leverage their current K-12 education programs. At this level, the focus is on early intervention, enabling our students with the tools and opportunities they need to develop a passion for clean energy jobs. In addition, we believe opportunity exists to engage and educate students during energy project installations. Specialized curricula could be developed to take advantage of Prop 39 initiatives at the school facility level. K-12 workforce education and training activities include, but are not limited to:

- Continue grants for “Green Career Exploration” for K-12 Students
- Expand “Connections Programs” such as PEAK, Energenius and Green 360
- Create a learning lab for workforce education and development by developing math and science curriculum tailored to leverage the energy projects implementation happening on their campus
- Develop an Energy Champions program at each participating school to promote behavioral changes of energy usage
- Develop training for students and teachers on benchmarking and auditing for students and teachers leveraging web-based tools, whereby students are involved in the planning, design, implementation and tracking of ongoing energy savings

4.1.3 Financing

Prop 39 expressly calls for the use of revolving loan funds, reduced-interest loans, Property Assessed Clean Energy (PACE) and other financial assistance for energy efficiency retrofits that include repayment requirements, presumably in recognition that many cost-effective energy efficiency opportunities are stalled or never undertaken because of an energy end user’s lack of up-front capital.⁵ IOU financing programs are likely to be significantly expanded under a pending CPUC rulemaking.⁶ The IOUs are able to offer financing programs and products that are “instantly” deployable and are also able to provide incentives, data analysis and technical assistance to support other financing programs, such as PACE.⁷ Prop 39 should take advantage of the IOUs’ new financing programs and infrastructure to allow financing of longer payback measures, provide loan loss reserve at reduced interest rates, and increase the pool available to a given school district, college or university.

Highlights of Approach for Finance

- IOUs offer instantly deployable financing programs and products
- Increase pool of loan dollars for K-12
- Allow inclusion of longer payback measures
- Provide loan loss reserve to reduce interest rates
- Provide construction financing (i.e. a revolving loan fund)
- Supplement financing for renewables and complex retrofits

⁵ Prop 39, Section creating PUC 26205.

⁶ See CPUC D. 12-11-015 (November 8, 2012) , Under this Decision, and the underlying CPUC Rulemaking, the CPUC is addressing IOU financing programs, including On-Bill Financing and On-Bill Repayment.

⁷ Some financing options, including General Obligation Bonds and Certificates of Participation (<http://ceres.ca.gov/planning/financing/chap6.html>), are currently available to school districts who are traditionally easily underwritten. Structures such as PACE or Energy Service Agreements/Managed Energy Service Agreements may be options for school districts in the future. These models are cost effective and the IOUs’ programs would assist schools in accessing these loans by providing funding for audits, technical assistance, and other program enhancements.

4.2 Establish a Streamlined Program Management Approach

To facilitate responsiveness and accountability, the IOUs propose a management approach with set roles and clear lines of responsibility.

Each IOU would staff an internal Program Administrator that would act as the single point of contact (SPOC) for, and resident expert on, Prop 39 initiatives. The SPOC would lead Prop 39 initiatives internally, ensuring frequent collaboration and communication with the State/regulatory agencies. In addition, the SPOC would manage communication between internal IOU teams, the other IOUs, and the appointed Project Manager for school districts, colleges and universities, and other MUSH customers; and would assume contract management duties with the State and Prop 39 initiative contractors. The IOUs envision the SPOC as an existing utility program management staff member to take advantage of our existing administrative structure.

The IOUs recommend a *single* Project Manager for each participating school districts (and other MUSH customers as the program continues) that would be assigned to aid end users in understanding their full range of opportunities, options and programmatic support. The single Project Manager would be responsible for the full scope of interactions with the school district and school facilities, as well as the actual implementation of the Prop 39 initiatives. The Project Manager will ensure continuity and drive greater participation for the school districts.

4.3 Reduce Market Confusion

It has long been recognized that one of the key barriers to energy efficiency uptake is that end users are not aware of energy-saving options and/or are confused about the energy and energy efficiency market. The implementation of a new set of energy efficiency options under Prop 39 runs the risk of exacerbating that confusion. To avoid that, the IOUs recommend:

- Leveraging existing utility energy efficiency/DSM programs to advocate and amplify Prop 39 initiatives. In particular, consistent communication and coordination among IOUs and Prop 39 stakeholders is critical to reduce market confusion and any duplication of effort.
- Using IOUs’ outreach channels to share information about Prop 39 initiatives ensuring K-12 schools understand how Prop 39 can be used to further their energy goals.

The IOUs would coordinate closely with numerous State agencies in the implementation of energy efficiency and clean energy projects to ensure they align with their goals and objectives. Key state agencies include:

- Division of the State Architect
- California Department of Education
- CCC/UC/CSU systems
- Office of Public School Construction
- CPUC
- CEC
- And others as appropriate

4.4 Include Key Players

4.4.1 Prop 39 Advisory Committee

An ambitious and complex initiative such as Prop 39 requires the participation and cooperation of key governmental and market actors. The IOUs recommend the creation of a *Prop 39 Advisory Committee*. The Advisory Committee may set up sector-level Advisory Sub-Committees for each of the key Prop 39 end-user sectors (such as K-12 schools/districts; colleges and universities; other educational institutions; etc.). If established, each Advisory Sub-Committee would include representatives of key stakeholders in each sector. For example, the K-12 Schools Advisory Committee would include representatives of: school districts, utility companies, energy efficiency engineering and management firms⁸, appropriate state agencies, school energy

⁸ These are often part of existing utility energy efficiency programs and are known as “Third Party Implementers”.

efficiency experts, trade unions, the Collaborative for High Performance Schools, and School district professional organizations like Collation for Adequate School Housing, and others. The Advisory Committee’s and sectoral Sub-Committees’ responsibilities could include:

- Promoting Prop 39 and energy efficiency coordination, communication and outreach within each sector
- Developing “best practices” and other guidance for optimizing effectiveness
- Ensuring that end users, implementers and all other key players have a “seat at the table”
- Advise the Legislature and relevant state agencies on Prop 39 progress, needs and recommendations

4.4.2 Municipal Utilities

Crucial to a successful framework for Prop 39 initiatives includes the involvement of key stakeholders, particularly the municipal utilities. They play an active role in their communities’ energy efficiency efforts and have existing energy efficiency/DSM programs in place that, much like the IOUs, should be leveraged. As part of our approach for Prop 39 initiatives, the IOUs envision the municipal utilities having similar roles and responsibilities, collaborating with the IOUs. In addition, as energy advisors to the State, the IOUs would work in close coordination with municipal utilities. Synchronizing our efforts and collaborating with the municipal utilities will maximize the reach of Prop 39 funds and ensure consistency of approach.

4.4.3 Third Party Programs and Local Government Partnership Programs

The IOUs’ success in delivering energy efficiency and demand response to our customers is due in large part to the strong network of third party program vendors and local government partnerships who work closely with us to implement our programs. As a way to ensure the success of Prop 39 initiatives, the IOUs intend to draw on our network of partners to support program implementation, where appropriate, and also to serve as ambassadors, reaching out to the communities they serve and providing the resources needed to drive increased participation in Prop 39 initiatives. **Appendix A** illustrates the extensive list of partners from which the IOUs are able to draw. This list continues to grow as we add to our catalogue of energy efficiency and demand response services and solutions.

IOUs’ infrastructure provides for evaluation and accounting safeguards to ensure Prop 39 funds are spent appropriately and effectively

Existing delivery structures: IOUs do not require a build-up of program infrastructure, and have the required delivery channels to maximize the reach of Prop 39 funds. Using the existing IOU administrative mechanisms and delivery channels avoids having to use these limited duration funds for the creation of new administrative mechanisms.

Existing accountability: IOUs are highly accountable to the CPUC. This accountability already exists and can be used for the implementation of Prop 39 funds. Accountability structures would need to be created if other entities implement Prop 39, using valuable funds to create accountability structures rather than implementing clean energy improvements.

4.5 Ensure Program Integrity and Accountability

4.5.1 State-Level Governance Committee

The IOUs recommend the establishment and authorization of a state-level Governance Committee comprised of at least the CPUC, CEC, CARB, CAEATFA, utilities, and other relevant stakeholders. This Committee’s charge requires them to report to the Legislature within 60 days⁹ describing the steps they will take to ensure full and aggressive coordination of Prop 39,

⁹ All references in this document to deadlines without specific calendar dates are subsequent to enactment of Prop 39 governing legislation.

utility programs and other closely related state energy efficiency programs.¹⁰

4.5.2 Program Administration

Administrative activities are necessary to well-functioning programs, and are an essential component of implementing energy efficiency programs. Currently, the CPUC caps administrative costs at 10% of program costs. Leveraging the IOUs' existing administrative, oversight, and program delivery structure not only reduces the administrative costs that would need to be expended should new administrative structures be created, it also lends itself to a more synergistic and cost-effective way to creating good jobs for Californians, and modernizing facilities to increase our energy savings potential. Typically, IOUs' administrative duties, as they relate to delivering our portfolio of programs, entail reporting to the State agencies and internal management controls to assure fiscal management, program monitoring, and accurate reporting, all of which we can leverage for Prop 39 initiatives.

4.5.3 Program Reporting

The IOUs track and report all program data as required by the CPUC, and can draw on the existing administrative infrastructure to develop protocols and procedures to meet the reporting requirements and ad hoc reports for Prop 39 initiatives. This will ensure an auditable process and a means to remain fully accountable to the State. Reporting data can include, to the extent applicable:

- The number of jobs created
- The amount of energy saved and/or new clean energy generation installed
- The number of trainees
- The portion of financial assistance provided that was used for administrative costs
- The amount of time between awarding of the financial assistance and the completion of the project or training activities

¹⁰ This report should include administrative steps (such as coordinating program cycles and reporting requirements), program regulation steps (such as modifying programs run by regulated utilities and/or Prop 39 programs, within statutory boundaries), and any recommendations for legislative or gubernatorial action.

Appendix A: IOU Third Party Programs and Local Government Partnership Programs

A.1 Pacific Gas and Electric PG&E 2013-14 Local Government Partnerships

Local Government Partnerships	Partners
California Community Colleges	California Community Colleges
University of California/California State University	University of California/California State University
State of California	State of California
Department of Corrections and Rehabilitation	Department of Corrections and Rehabilitation
Strategic Energy Resources	Association of Monterey Bay Area Governments
Local Government Energy Action Resources (LGEAR)	Quantum Energy Services and Technology, Inc.
Association of Monterey Bay Area Governments (AMBAG)	City of Fresno, Economic Development Corp. serving Fresno County
East Bay	Kern Economic Development Foundation
Fresno	Madera County Resource Management Agency
Kern	County of Marin Community Development Agency
Madera	Community Development Commission of Mendocino County
Marin County	Sustainable Napa County
Mendocino County	Redwood Coast Energy Authority
Napa County	County of San Luis Obispo
Redwood Coast	City/County Association of Governments
San Luis Obispo County	Santa Maria Valley Chamber of Commerce
San Mateo County	Sierra Business Council
Santa Barbara	County of Sonoma
Sierra Nevada	City of San Jose Environmental Services Department
Sonoma County	City and County of San Francisco Department of the Environment
Silicon Valley	Various
San Francisco	County of Lake, County of Yolo, City of Yuba City, San Joaquin Valley Clean Energy Organization, etc.

PG&E 2013-14 Third Party Programs

Third Party Programs	Partner
California New Homes Multifamily	Heshong Mahone Group, Inc.
Enhance Time Delay Relay	Proctor Engineering Group
Direct Install for Manufactured and Mobile Homes	Synergy
Air Care Plus	PECI, Inc.
Boiler Energy Efficiency Program	Enovity, Inc.
EnergySmart Grocer	PECI, Inc.
Enhanced Automation Initiative	DNV KEMA
Monitoring-Based Persistence Commissioning	Enovity, Inc.
LodgingSavers	Ecology Action
School Energy Efficiency	Resource Soutions Group
Energy Fitness Program	Richard Heath and Associates
Energy Savers	The Energy Alliance Association
RightLights	Ecology Action
Small Business Commercial Comprehensive Refrigeration	DNV KEMA
Energy-Efficient Parking Garage	EFM Solutions
Furniture Store Energy Efficiency	Matrix Energy Services
LED Accelerator	Energy Solutions
Monitoring-Based Commissioning	EnerNOC, Inc.
Casino Green	Ecology Action
Healthcare Energy Efficiency Program	Wildan Energy Solutions
Ozone Laundry Energy Efficiency	EnerNOC, Inc.
California Preschool Energy Efficiency Program	Low Income Investmet Fund
K-12 Private Schools and Colleges Audit Retro	Matrix Energy Services
Innovative Designs for Energy Efficiency Approaches (IDEEA)	TBD
California Wastewater Process Optimization	Quantum Energy Services & Technologies, Inc.
Energy Efficiency Services for Oil Production	EnerNOC, Inc.
Heavy Industry Energy Efficiency Program	Lockheed Martin Energy Solutiond
Industrial Compressed Air Program	Ecova, Inc.
Refinery Energy Efficiency Program	Nexant
Industrial Recommissioning Program	Nexant
Dairy Energy Efficiency Program	Ensave, Inc.
Industrial Refrigeration Performance Plus	Vacom Technologies
Light Exchange Program	Richard Heath and Associates
Wine Industry Efficiency Solutions	Resource Soutions Group
Comprehensive Food Process Audit & Resource Efficiency Pgm	EnerNOC, Inc.
Dairy Industry Resource Advantage Pgm	Resource Soutions Group
Process Wastewater Treatment EM Pgm for Ag Food Processing	BASE Energy, Inc
Builder Energy Code Training	ConSol
Green Building Technical Support Services	Build It Green

A.2 San Diego Gas & Electric

SDG&E 2013-2014 Local Government Partnerships

Local Government Partnerships	Partners
City of Chula Vista	City of Chula Vista
City of San Diego	City of San Diego
County of San Diego	County of San Diego
Port of San Diego	Green Business Network program touches the Port tenants - businesses large & small - located along the Port tidelands in the following cities (Coronado, Chula Vista, National City, San Diego)
SANDAG	Energy Roadmap Program is offered to the 18 jurisdictions within San Diego County, which include: Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista
Statewide Energy Efficiency Collaborative (SEEC)	Collaboration between three non-governmental organizations (Institute for Local Government, Local Government Commission, ICLEI for Local Governments. Provides free tools & resources to local governments to assist with their climate planning efforts.
Emerging Cities	Can provide energy efficiency related programs or services to the smaller jurisdictions within our service territory that do not have a direct partnership.

SDG&E 2013-14 Third Party Programs

Third Party Programs	Partner
SW-COM-Customer Services-Audits Healthcare Energy Efficiency (HEEP)	Willdan
SW-COM-Customer Services-Audits Lodging Energy Efficiency (LEEP)	Willdan
SW-COM-Calculated Incentives-RCx	PECI
SW-COM-Deemed Incentives-HVAC Commercial	CSG
SW-IND-Customer Services-Audits CIEEP	Onsite
SW-Com-Customer Services-Pump Test Services	OPUS
Continuous Energy Improvement	Enovity
Commercial Direct Install	Matrix
Commercial Direct Install	Synergy
PEAK	The Energy Coalition
ARP (Appliance Recycling Program)	Appliance Recycling Centers of America
Comprehensive Mobile Homes	Synergy
Res HVAC Tune-up/Quality Installation	KEMA
K-12 Energy Efficiency Education Program	San Diego County Office of Education
Middle Income Direct Install	Richard Heath and Associates

A.3 Southern California Gas

SCG 2013-14 Local Government Partnership Programs

Local Government Partnerships	Partners
LGP-LA Co Partnership	County of Los Angeles - ISD
LGP-Kern Co Partnership	Kern Council of Governments
LGP-Riverside Co Partnership	County of Riverside
LGP-San Bernardino Co Partnership	County of San Bernardino
LGP-Santa Barbara Co Partnership	County of Santa Barbara, City of Santa Barbara, Goleta, Carpinteria, Santa Maria Valley Chamber of Commerce.
LGP-South Bay Cities Partnership	South Bay Cities Council of Governments
LGP-San Luis Obispo Co Partnership	County of San Luis Obispo
LGP-San Joaquin Valley Partnership	San Joaquin Valley Clean Energy Organization (SJVCEO)
LGP-Orange Co Partnership	Huntington Beach, Westminster, Fountain Valley, Costa Mesa and Newport Beach
LGP-SEEC Partnership	ICLEI, ILG, LGC
LGP-Community Energy Partnership	The Energy Coalition
LGP-Desert Cities Partnership	Coachella Valley Association of Governments
LGP-Ventura County Partnership	Ventura County Regional Energy Alliance
LGP-Regional Energy Efficiency Pilots	SoCalREN (County of Los Angeles)
LGP-New Partnership Programs	TBD
LGP-LG Regional Resource Placeholder	TBD
Local Institutional Partnerships	
LInstP-CA Department of Corrections Partnership	CA Department of Corrections & Rehabilitation
LInstP-California Community College Partnership	CA Community Colleges Chancellor's Office
LInstP-UC/CSU/IOU Partnership	University of California, California State University
LInstP-State of CA/IOU Partnership	State of California

A.3.2 SCG 2013-14 Third Party Programs

Third Party Programs	Partner
3P-Energy Challenger	EnVinta Corporation
3P-Small Industrial Facility Upgrades	Global Energy Partners
3P-PREPS	Integrated Resource Solutions Group DBA Resource Solutions Group
3P-On Demand Efficiency	Benningfield Group
3P-HERS Rater Training Advancement	Conservation Services Group
3P-MF Home Tune-Up	Ecova
3P-CLEO	Global Energy Services, Inc.
3P-MF Direct Therm Savings	Honeywell International
3P-LivingWise	Fan Fi International, Inc. DBA Resource Action Programs
3P-Manufactured Mobile Home	Synergy Companies
3P-SaveGas	EDC Technologies, Inc.
3P-CA Sustainability Alliance	Navigant Consulting Inc.
3P-PoF	Navigant Consulting Inc.
3P-PACE	Pacific Asian Consortium in Employment

A.4 Southern California Edison

SCE 2013-14 Local Government Partnership Programs

Local Government Partnership	Partner
Adelanto Partnership	City of Adelanto
Beaumont Partnership	City of Beaumont
Community Energy Partnership	The Energy Coalition - Cities of Brea, Corona, Irvine Moreno Valley, San Bernardino, Santa Clarita, Santa Monica
Desert Cities Partnership	Coachella Valley Association of Govts - Cities of Blythe, Desert Hot Springs, Cathedral City, Indian Wells, Palm Desert, Palm Springs, Rancho Mirage, Agua Caliente Band of Cahuilla Indians
Eastern Sierra Partnership	High Sierra Energy Foundation - Cities of Bishop, Mammoth Lakes, and Counties of Inyo and Mono
Kern County Partnership	Kern Council Of Governments - Cities of California, Delano, McFarland, Tehachapi, and Kern County
Long Beach Partnership	Long Beach
Orange County Cities Partnership	Cities of Costa Mesa, Huntington Beach, Fountain Valley, Newport Beach, Westminster
Redlands Partnership	Redlands
San Gabriel Valley Partnership	San Gabriel Valley COG - Cities of Alhambra, Arcadia, Baldwin Park, Bradbury, Claremont, Covina, Diamond Bar, Duarte, El Monte, Glendora, Industry, Irwindale, La Canada - Flintridge, La Puente, La Verne, Monrovia, Montebello, Monterey Park, Pomona, Rosemead, San Dimas, San Gabriel, San Marino, Sierra Madre, South El Monte, South Pasadena, Temple City, Walnut, West Covina
Santa Ana Partnership	Santa Ana
Santa Barbara Partnership	Cities of Carpinteria, Goleta, Santa Barbara, and Santa Barbara County
Simi Valley Partnership	Simi Valley
South Bay Partnership	South Bay Council of Governments - Cities of Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Redondo Beach, Rolling Hills, Rolling Hills Estates, Torrance
Gateway Cities Partnership	Cities of Downey, Norwalk, South Gate
Ventura County Partnership	Ventura County Regional Energy Alliance - Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Thousand Oaks, Ventura, and Ventura County
Valley Innovative Energy Watch Partnership (VIEW)	San Joaquin Valley Clean Energy Organization - Cities of Hanford, Lindsay, Porterville, Tulare, Visalia, Woodlake and Tulare and Kings Counties
Western Riverside Council of Governments ELP	Western Riverside Council of Govts. - Cities of Calimesa, Canyon Lake, Hemet, Lake Elsinore, Menifee, Murrieta, Norco, Perris, San Jacinto, Temecula, Windsor
Westside Partnerships	The Energy Coalition - Culver City
Los Angeles County Partnership	County of Los Angeles
Riverside County Partnership	County of Riverside
San Bernardino County	County of San Bernardino

SCE 2013-14 Third Party Programs*

Third Party Program	Partner
Non Residential Direct Install	California Retrofit, Inc.
Upstream HVAC Program	Cohen Ventures, Inc.
Mid-Market Peak Plus	Ecology Action
Management Affiliates Program (MAP)	Energy Innovation Group, LLC.
Monitoring Based Commissioning	EnerNoc, Inc.
Non Residential Onsite Audit Program	Enerpath
Monitoring Based Persistence Commissioning MBPCx	Enovity, Inc.
Non Residential Direct install	FCI Management Consultants
Non Residential Direct Install	FESS Energy Inc.
Comprehensive Beverage Manufacturing Resource Energy	Global Energy Partners, LLC (GEP)
Comprehensive Chemical Products Energy Efficiency Program	Global Energy Partners, LLC (GEP)
Comprehensive Petroleum Refinery Energy	Global Energy Partners, LLC (GEP)
Oil and Gas Production	Global Energy Partners, LLC (GEP)
Sustainable Communities	KEMA Services Inc.
Food and Kindred Products and Plastics and Rubber Products Manufacturers Energy Efficiency Program	Lockheed Martin Services, Inc. (LMCO)
Industrial Gas Manufacturing Energy Efficiency Program	Lockheed Martin Services, Inc. (LMCO)
Primary and Fabricated Metals and Electronics Energy Efficiency	Lockheed Martin Services, Inc. (LMCO)
Entertainment Centers	Matrix Energy Services, Inc.
Private Schools	Matrix Energy Services, Inc.
Public Schools	Matrix Energy Services, Inc.
Enhanced Retro-commissioning (RCx) Program Design and Implementation Services (Program)	Nexant, Inc.
Chemical Products Efficiency Program	Nexant, Inc.
Refinery Energy Efficiency Program	Nexant, Inc.
Minerals, Wood, and Paper EE Program	Onsite Energy Corporation (OEC)
Dairy Energy Efficiency Program (DEEP)	Resource Solutions Group
Retail Energy Action Program (REAP)	Southern California TRANE Service
Commercial Utility & Building Efficiency Program (CUBE)	Southern California TRANE Service
Cool Schools Program	Southern California TRANE Service
Cool Planet	The Climate Registry
IDSM Food Plot	TRC Environmental Corporation
Savings By Design Alternative Delivery Model	VCCT Inc. (Vacom Technologies)
Data Centers	Willdan Energy Solutions
Healthcare Energy Efficiency Program (HEEP)	Willdan Energy Solutions
Lodging Energy Efficiency Program (LEEP)	Willdan Energy Solutions
Green Campus Program	Alliance to Save Energy
Green Schools	Alliance to Save Energy

Multi Family Rebate Programs	Ameri Lights
Multi Family Rebate Programs	American Power Solutions
Appliance Recycling Program	ARCA California, Inc.
Multi Family Rebate Programs	Bottom line Utility Solutions
Multi Family Rebate Programs	Coast to Coast Lighting Inc.
California Integrated Customer Energy Audit Tool	Efficiency 2.0
Mobile Energy Unit	Enerpath
Appliance Recycling Program	Enerpath
Community Language Efficiency Outreach Program (CLEO)	Global Energy Services, Inc.
Customer Facing Outreach Program	Global Energy Services, Inc.
Appliance Recycling Program	Jaco Environmental, Inc.
Multi Family Rebate Programs	Utility Incentive Corp.
Home Energy Efficiency Surveys Program	KEMA Services Inc.
Whole House Customer Facing Outreach Program	KEMA Services Inc.
Multi Family Rebate Programs	Monterey Energy Inc.
Residential Behavior-Based Program	Opower
Multi Family Rebate Programs	Optima Energy Inc.
Torchiere and Plug In Lamp Exchange Program	Organizational Support Services
Living Wise Program	Resource Action Programs
Comprehensive Mobile Home Program	Synergy Companies
PEAK Program	The Energy Coalition
Multi Family Rebate Programs	Utility Incentive Corp.

* As of January 2013.