

Pacific Gas and Electric Company
2010-2012 ENERGY EFFICIENCY
PORTFOLIO

Pilot Program Target Updates
For Program Year 2011

May 1, 2012



**PACIFIC GAS AND ELECTRIC COMPANY
2010-2012 ENERGY EFFICIENCY PORTFOLIO**

**Program Year 2011
Pilot Program Target Updates
Submitted May 1, 2012**

PG&E is submitting its 2011 Pilot Program Target Updates in conjunction with the 2011 Program Performance Metrics Report, at the request of Energy Division.

ZERO NET ENERGY – PGE2112

The Zero Net Energy (ZNE) Pilot Program is a Pacific Gas and Electric Company (PG&E) specific local non-resource program that supports the Strategic Plan by initiating research development, and demonstration (RD&D) projects that have aggressive energy efficiency goals and that plan to include on-site clean distributed generation. The ZNE Pilot Program focuses primarily on residential and commercial new construction. An update for program year 2011 for each of the program's four subprograms is provided below.

The program budget and targets were revised as detailed in Advice Letter 3235-G-A/3901-E-A and approved by disposition letter dated February 27, 2012. These revised targets are reflected in the updates provided below.

1) ZNE Communities Subprogram

ZNE-1a. Consultation to at least 3 project teams

PG&E issued a Request For Proposals (RFP) to teams to deliver design and technical assistance on November 1, 2010. PG&E closed the RFP on December 2, 2010. The RFP requested that teams note the category of project for which they had the expertise to provide design and technical assistance – community-scale projects, commercial projects, and/or residential projects. Teams could apply in more than one category.

In 2011, the ZNE team reviewed proposals from the teams of firms with expertise in the design and performance analysis of low energy and zero net energy projects. Three “ZNE Consultant” teams were chosen with specific expertise in community-scale, three teams with expertise in commercial new construction, and two teams with expertise in residential new construction. The program put the ZNE Consultant teams under Master Service Agreements. On January 4, 2011, the ZNE Pilot Program posted a Request for Ideas (RFI) for the competitive selection of community-scale, commercial, and residential projects with aggressive energy efficiency and zero net energy performance goals. The program chose to move forward with four projects total (including community-scale, commercial, and residential), matched them with the “ZNE Consultant” teams selected in 2010, and began to scope the design and technical assistance to be provided to each project.

ZNE-1b. EM&V on projects selected.

As approved in Advice 3235-G-A/3901-E-A, there is no target for this element. It is unlikely that any projects selected for consultation will be suitable for EM&V prior to the end of the 2010-2012 cycle.

ZNE-1c. Quarterly coordination meetings

As approved in Advice 3235-G-A/3901-E-A, this target was removed,, but the program will participate in ongoing champion meetings as scheduled.

The first coordination meeting of the external advisory committee and PG&E staff was held at the PG&E Pacific Energy Center on October 29, 2010.

No further meetings of the external advisory committee were held in 2011.

ZNE-1d. Integration with resource programs; report

ZNE Pilot Program worked with Emerging Technologies, Codes & Standards, Savings by Design, California Advanced Homes Program, and other resource programs to coordinate technology assessments, research efforts, and the delivery of consultations to projects.

2) ZNE Demonstration Showcase Subprogram

ZNE-2a. Design, technical and financial assistance to at least 4 residential buildings

See ZNE-1a, above, for progress towards this metric. The consultation specifications, selection of service providers, and solicitation of projects for 1.a, 2.a and 2.b were done with a single process.

ZNE-2b. Design, technical and financial assistance to at least 2 commercial buildings

See ZNE-1a, above, for progress towards this metric. The consultation specifications, selection of service providers, and solicitation of projects for 1.a, 2.a and 2.b were done with a single process.

ZNE-2c. Technology studies on at least 4 advanced technical areas under-represented in ZNE areas

In 2010, the ZNE Pilot Program identified five preliminary technical areas under-represented in zero net energy policy and research for technology studies and has drafted problem statements.

In 2011, the ZNE Pilot Program established work statements for four technical areas under-represented in zero net energy policy and research. One of these studies is under contract with Rocky Mountain Institute and the study is scheduled to be complete in early 2012.

ZNE-2d. Resource web site on key information on projects and technologies

In 2010, the ZNE Pilot Program established initial specifications for a program website and the website went live.

In 2011, the ZNE Pilot Program added information about several program activities, including the residential and non-residential ZNE workshop series, the forum held in June, and the Architecture at Zero 2011 design competition and competition winners.

3) ZNE Technology Advancement Subprogram

ZNE-3a. Assessment of 5 technologies

In 2010 the Zero Net Energy Technology Advancement Subprogram completed five technology assessments. The assessments are:

- Report #PGEZNE2010-01: Heat Pump Water Heater
- Report #PGEZNE2010-02: Evaporative Condenser
- Report #PGEZNE2010-03: Ground Coupled Heat Pump
- Report #PGEZNE2010-04: Electrochromic Windows
- Report #PGEZNE2010-05: Energy-Recovery Ventilators

No further technology assessments were completed in 2011.

ZNE-3b. *Establish roadmap and market characterization by building type for ZNE*

In 2010, the ZNE Pilot Program worked with staff from the PG&E EM&V group to compose statements of work and initial timelines for the two major reports to be conducted in coordination with EM&V. The first statement of work was for a report that will be a roadmap to zero net energy residential and commercial new construction in California. The second statement of work was for a report that will be an assessment of the technical potential for achieving zero net energy buildings in the commercial and residential sectors in California. Both statements of work were shared with CPUC Energy Division and CPUC EM&V staff for review and comment at the end of 2010.

In 2011, the Zero Net Energy Technology Advancement subprogram worked with staff from the PG&E EM&V group to draft a Request for Proposals (RFP) for the report on the roadmap to zero net energy residential and commercial new construction in California and another RFP for the study to assess the technical potential for achieving zero net energy buildings in the commercial and residential sectors in California. The studies are being conducted in close coordination with CPUC EM&V staff, and the RFPs were reviewed by CPUC EM&V and ZNE staff before they were released. The project teams for each study were selected in coordination with other IOU EM&V staff, and contracts for each project team were in negotiation at the end of 2011. A team headed by Arup was selected for the study on the assessment of the technical potential, and a team headed by Heschong Mahone Group was selected for the roadmap study.

4) ZNE Design Integration Subprogram

ZNE-4a. *Contribute to the creation of at least one community, planning, decision-making and code-review tool*

As approved in Advice 3235-G-A/3901-E-A, this target was removed.

ZNE-4b. *Coordination and facilitation of at least 2 forums of key ZNE players*

On June 30, 2011, the PG&E Zero Net Energy (ZNE) Pilot Program hosted over a hundred attendees at a forum on zero net energy, “Innovative Funding Mechanisms to Drive ZNE Projects in California,” at the David Brower Center in Berkeley, CA. The forum consisted of three sessions in a panel format. Speakers included:

- Jeanne Clinton, Demand-Side Programs Branch Manager with the California Public Utilities Commission (CPUC)
- Panama Bartholomy – Deputy Director, Energy Efficiency and Renewables Division, California Energy Commission

- Nancy Wallace – Professor and Chair of the Real Estate Group, Co-Chair of the Fisher Center for Real Estate and Urban Economics, Haas School of Business, University of California, Berkeley
- Peter Morris – Director, Davis Langdon
- Saul Zambrano (Moderator) – Acting Senior Director, CES Customer Products, PG&E
- Paul Frankel – Managing Director, CalCEF Innovations, California Clean Energy Fund
- Mark Mitchell – Senior VP and General Manager, SeriousEnergy, Serious Materials
- Chris Pawlik – Founder and CEO, Energy-Producing Retail Realty
- Stephania Wong Kaneda – Principal, Chief Financial Officer, Integrated Design Associates, Inc.
- Steve Glenn – Founder and CEO, LivingHomes
- Jonathan Livingston (Moderator) – President, Livingston Energy Innovations, LLC

ZNE-4c. *Present at least 25 educational workshops on key ZNE topics*

During fall 2010, this Subprogram collaborated with staff from the PG&E Pacific Energy Center to develop a nine part non-residential zero net energy class series to be offered in collaboration with the San Francisco chapter of the American Institute for Architects (AIA SF) in spring 2011. The Subprogram also collaborated with staff from the PG&E Energy Training Center to develop a six part residential zero net energy class series to be offered in spring 2011.

In 2011, a total of 14 workshops were presented.

The “Zero Net Energy for Nonresidential Buildings Series” was offered at AIA SF (San Francisco):

- ... Improving Energy Performance Through Integrated Design, presenters include Scott Shell, AIA – EHDD, Peter Morris – Davis Langdon, Peter Rumsey – Integral Group
- ... Know Where You’re Going – Setting Targets and Understanding Loads, presenters include Brad Jacobson, AIA – EHDD, Peter Rumsey – Integral Group
- ... Design with Climate – A Bioclimatic Approach to Architectural Regionalism, presenters include Bill Burke, AIA – Pacific Energy Center, Sam Jensen Augustine, Assoc. AIA – Pacific Energy Center, Scott Shell, AIA – EHDD
- ... Very High Performance Building Enclosures for Nonresidential Buildings, presenter John Straube - Building Science Corporation
- ... Doing It “Old School” – Passive and Near-Passive Design Approaches and Building Systems for Load and Demand Reduction
- ... Daylighting and Electric Lighting
- ... Simple, Robust, and Properly Sized: Victorian Engineering, Proper Equipment, and Controls for Super-Efficient Mechanical and Plumbing Systems, presenter Peter Rumsey – Integral Group
- ... Site Power: Renewable Energy, Solar Thermal, Co-Generation, & Grid-Supplied Renewable Energy, presenter Pete Shoemaker – Pacific Energy Center
- ... Creating a Culture of Sustainability Among Building Inhabitants, presenters include Scott Shell, AIA – EHDD, Brad Jacobson, AIA - EHDD

The residential series was offered at the ETC (Stockton), with lead instructors Ann Edminster, Design AVEnues, and Rick Chitwood:

- ZNE Homes Part 1 – Design Fundamentals
- ZNE Homes Part 2 – Integrated Planning
- ZNE Homes Part 3 – Enclosures and Assemblies
- ZNE Homes Part 4 – Mechanical Systems
- ZNE Homes Part 5 – Occupant factors
- ZNE Homes Part 6 – Renewable Power

ZNE-4d. *Conduct at least 2 design competitions among the architectural and student communities*

In early 2011, the Zero Net Energy Pilot Program established a contract with the American Institute of Architects San Francisco chapter (AIA SF) to coordinate and manage the 2011 ZNE design competition. Using a real site in the City of Emeryville, the Architecture at Zero competition invited participants to present ZNE design solutions for redeveloping the site with multi-family residential and retail elements. The competition was open to students and design professionals from around the world. The 2011 competition jury included:

- Bob Berkebile, FAIA - Principal, BNIM Architects
- Lawrence Scarpa, FAIA - Principal, Brooks + Scarpa Architects
- Stephen Selkowitz - Building Technologies Department, Lawrence Berkeley National Laboratory
- Susan S. Szenasy - Editor in Chief, METROPOLIS magazine
- Allison G. Williams - Design Principal, Perkins+Will

A total of 17 entries was received, including both professional and student entries. On December 7, 2011, the jury announced awards to 2 student entries and 2 professional entries. The jury also awarded a “jury recognition” award to a professional entry.

ZNE-4e. *Develop 2 best practice guidelines for the design, commissioning, operation and maintenance of ZNE buildings.* There is no activity to report for 2011 related to this target.

ZNE-4f. *Investigate, via stakeholder meetings, white papers, or other methods, the development of at least 2 market based financing mechanisms to create Zero-Net development for residential and commercial buildings*

In 2010, the ZNE Pilot Program compiled a list of financing mechanisms. Research into these financing mechanisms prompted the topic of financing ZNE projects for the first forum (see ZNE - 4.b).

There is no activity to report for 2011 related to this target.

The Green Communities (GC) program is designed to provide data, tools, and training to local government customers to enable them to better understand and manage their municipal and community-wide energy usage in order to develop and implement climate action plans. PG&E's staff will work with at least seven different non-government organizations (NGOs) and government organizations to provide the GC Program services and products. Major program activities described in Advice Letter 3082-G-A/3598-E-A, approved in March 2010, fall into the three sub-programs listed below:

Subprogram 1

Statewide Assistance for Local Governments (Statewide Program): PG&E, Southern California Edison (SCE), Southern California Gas (SCG), San Diego Gas and Electric (SDG&E) have entered into co-funded contracts with ICLEI, the Institute for Local Government (ILG) and the Local Government Commission (LGC) to provide a coordinated statewide program of workshops, technical assistance, and other means to allow local governments to share best practices associated with energy management. This statewide program is called the Statewide Energy Efficiency Collaborative (SEEC). Work performed in this program is coordinated with the statewide local government energy efficiency best practices coordinator, Pat Stoner, whose contract is also co-funded by the four IOUs. The four contracts are described below. The major SEEC accomplishments specific to PG&E for 2011 were:

1. In 2010, PG&E issued a contract with ICLEI to conduct a series of workshops and trainings for local governments about taking key steps to reduce GHG emissions including: conducting a local government operations inventory; conducting a community-scale inventory; developing an emissions reduction target; and developing and implementing a climate action plan. During 2011 ICLEI began developing and delivering a suite of resources to aid local governments with the implementation of energy efficiency measures, reducing related greenhouse gas emissions. As of December 31, 2011, ICLEI had conducted 18 in-person workshops and 2 webinars; and has completed the following tools and/or guidance documents: guidance on municipal and community-wide GHG inventories, an online municipal GHG inventory tool, an online community-wide GHG inventory tool, guidance on emission forecasting and target setting, a Climate Action Planning guidebook and template, a sample Climate Action Plan with measures, the Climate & Air Pollution Planning Assistance (CAPPA) tool, and the City Planners' Energy Action Handbook.
2. Other IOU Contracts: In 2010, SCE issued a contract with ILG to fund the Beacon Award, a program to recognize cities and counties for their greenhouse gas (GHG) emission reductions and energy savings. SDG&E issued two contracts with LGC to provide webinars, an annual statewide conference, and networking opportunities for local government partners regarding greenhouse gas reduction and energy efficiency best practices, and fund the statewide local government energy efficiency best practices coordinator. In 2011, 33 local governments began participating in the Beacon Award, 10 were recognized for interim achievements; 6 webinars on best practices and energy efficiency financing were offered through LGC; and the second annual Statewide Energy Efficiency Best Practices Forum occurred in San Jose.

Subprogram 2

Climate Planning Assistance for Local Governments (Climate Program): This sub-program provides funding, training, and energy usage data to local governments, regardless of whether they are part of a Local Government Partnership, to help them complete GHG inventories and climate action plans. Work performed in this sub-program is coordinated closely with the Local Government Partnerships to leverage LGP Strategic Plan Menu work with the Climate Program efforts. No specific metrics are defined for GHG inventory or climate plan development elements of this sub-program, but benchmarking and fluorescent lamp recycling metrics were defined and are noted below. The major Climate Program accomplishments for 2011 were:

- **Forty-Three GHG Emissions Inventories Completed in 2011:** Our local government partners completed one Community-Wide GHG Inventory and 42 Municipal GHG Inventories in 2011 as part of contracts with PG&E. These completed inventories analyze GHG emissions for cities and counties throughout the Sierra Nevada region, northern Central Valley, San Francisco Bay Area, and Monterey Bay Area. This brings the cumulative total as of the end of 2011 to twenty Community-Wide and sixty-one completed Municipal inventories. The following regional and local partners completed the inventories:
 - **Great Valley Center** – 10 municipal GHG inventories in Stanislaus, San Joaquin, Merced, and Kern Counties.
 - **Sierra Business Council** – 16 municipal GHG inventories in the northern Sierra region.
 - **Association of Bay Area Governments (ABAG)** – 16 municipal GHG inventories and 1 community-wide inventory in the 9-county San Francisco Bay Area.

- **Ninety-nine Greenhouse Gas Inventories Initiated in 2011:** PG&E issued contracts for 39 Community-Wide GHG Inventories and 60 Municipal GHG Inventories in 2011. These inventories will analyze GHG emissions for cities and counties throughout our service territory. The following regional and local partners completed the inventories:
 - **Association of Monterey Bay Area Governments (AMBAG)** – 19 community-wide GHG inventory updates in Monterey, San Benito, and Santa Cruz Counties.
 - **City of Fresno** – 19 municipal GHG inventories and 1 community-wide GHG inventory in Fresno, Madera, and Tulare Counties.
 - **County of Yolo** – 2 community-wide and 2 municipal GHG inventories in Yolo County.
 - **Great Valley Center** – 14 additional municipal GHG inventories in San Joaquin, Stanislaus, and Merced Counties.
 - **Joint Venture Silicon Valley** – 18 municipal GHG inventories in Santa Clara and San Mateo Counties.
 - **Redwood Coast Energy Authority (RCEA)** – 6 municipal GHG inventories in Humboldt County.
 - **Sierra Business Council** – 17 community-wide GHG inventories and 1 municipal GHG inventories throughout the Sierra region.

- **Forty-six Climate Action Plans Initiated in 2011:** PG&E issued contracts for 36 CAPs specific to community-wide and municipal energy usage and 10 CAPs specific to municipal energy usage. These CAPs will include long-term policies and strategies to

reduce energy and GHG emission in cities and counties throughout PG&E service territory. The following regional and local partners completed the inventories:

- **Association of Monterey Bay Area Governments (AMBAG)** – 19 CAPs in Monterey, San Benito, and Santa Cruz Counties.
 - **County of Yolo** – 2 CAPs in Yolo County.
 - **San Luis Obispo County Air Pollution Control District (APCD)** – 6 CAPs in San Luis Obispo County.
 - **San Mateo City/County Association of Governments (C/CAG)** – 6 CAPs in San Mateo County.
 - **Santa Barbara County** – 1 CAP for the unincorporated County.
 - **Sierra Business Council** – 2 CAPs as part of a pilot in the Sierra region.
 - **The Energy Alliance Association (TEAA)** – 10 municipal CAP updates for Sonoma County jurisdictions.
- **In Summary, as of December 31, 2011, the Climate Program has Completed or Initiated 226 GHG Inventories and/or CAPs:** In total, the Climate Program completed or initiated the following number of GHG-related work products before the end of 2011:
 - **180 GHG Inventories:**
 - 59 Community-Wide GHG Inventories
 - 121 Municipal GHG Inventories
 - **46 Climate Action Plans:**
 - 36 Climate Action Plans (Comprehensive)
 - 10 Municipal Climate Action Plans

Benchmarking Support: The Benchmarking element of Green Communities was completed in Q4 of 2011. ABAG trained 99 local government staff in 47 communities in seven counties within the nine-county ABAG area. Five local government staff from the North Coast area received training. In the 4th quarter of 2011 the program welcomed 5 new jurisdictions to the trainings.

Advice Letter (AL) 3082-G-A/3598-E-A includes 2 metrics for benchmarking. PG&E's Automated Benchmarking Service (ABS) uploads historical energy usage data into Energy Star Portfolio Manager (ESPM) and was used to monitor these metrics. At the end of each quarter, the cumulative list/number of ABAG jurisdictions and associated facilities were extracted from an ABS report. Those jurisdictions which had not previously used ABS and were listed for the first time in the report were compared against the list of jurisdictions that took the ABAG benchmarking training. It was assumed that there was a direct relationship between the workshops and ESPM registration for those jurisdictions that appeared on both lists, and those jurisdictions were counted toward the metric. Since the Green Communities program began offering services in 2011, PG&E used ABS records through the end of 2010 as the baseline for these metrics.

Metric #1: Over the program cycle, the percentage of local governments in ABAG region participating in ESPM benchmarking increased by 20%.

Baseline: 29 jurisdictions (22 cities, 7 counties) were registered in ESPM via ABS as of the end of 2010. (Goal: 6 new jurisdictions by end of 2012).

Exceeded goal: 8 new jurisdictions that took the ABAG training were registered in ESPM as of Q3 2011.): At the end of Q3 2011, 48 jurisdictions (41 cities and 7 counties) in ABAG region were registered in ESPM via ABS which is an increase of 19 jurisdictions.

Of the 19 additional cities, 8 (San Mateo, Napa, Yountville, Fremont, Pleasant Hill, Oakley, Union City and Sunnyvale) participated in ABAG's training.

Metric #2: Over the program cycle, increase % of LG facilities in ABAG region benchmarked with ESPM by 20%.

Baseline: 264 facilities (155 in cities, 109 in counties) were registered in ESPM via ABS at the end of 2010. (Goal: 53 new facilities by end of 2012).

Exceeded goal: 227 new facilities associated with governments that took the ABAG training were benchmarked as of Q3 2011: At end of Q3 2011, 877 facilities in ABAG region were registered in ESPM via ABS (753 in cities and 124 in counties), which is an increase of 613 facilities. 227 of these additional facilities were associated with the 42 ABAG communities that received the ABAG training.

Data tools: PG&E has collaborated with ICLEI to develop standardized reports to provide local governments with data on the GHG emissions associated with their electricity and natural gas use at the municipal level and aggregated non-customer specific data at the community-wide scale. PG&E also collaborated with local jurisdictions to develop more detailed residential and non-residential aggregate reports with data on zip code and NAICS codes. Through 2011, PG&E has provided inventory reports to 82 percent of cities and 79 percent of counties and more detailed reports to 29 percent of cities and 23 percent of counties.

Advice Letter 3082-G-A/3598-E-A includes the following metrics for providing data to local governments over the 2010-2012 program cycle. The cumulative percentages as of the end of 2011 are shown in parentheses for each metric.

100% of cities in service area receive energy usage data for:

- municipal inventories (69%, up 33% from 2009's 36% cumulative total)
- community-wide inventories (79%, up 28% from 2009's 51% cumulative total)

100% of counties in service area receive energy usage data for:

- municipal inventories (68%, up 51% from 2009's 17% cumulative total)
- community-wide inventories (77%, up 35% from 2009's 42% cumulative total)
- 30% of cities in service area receive enhanced community-wide energy usage data by zip code or NAICS. (29%, report not available prior to 2011)
- 30% of counties in service area receive enhanced community-wide energy usage data by zip code or NAICS. (23%, report not available prior to 2011)

Subprogram 3

Fluorescent Lamp Recycling Program (FLR Program): This sub-program builds on an earlier FLR pilot to develop a standard menu of marketing, education and outreach tools to be tested by a limited number of local governments to educate their residents about the necessity and options for appropriately recycling fluorescent lamps to protect public health and the environment. The menu of tested and refined tools will ultimately be made available to local governments throughout the state. Additionally, the FLR Program will provide program resources to assist local governments with actual implementation of fluorescent lamp collection infrastructure, such as recycling kits. In 2010, the FLR Program activities focused on scoping and awarding a contract with KEMA to develop education and outreach tools based on lessons learned from PG&E's prior FLR pilot and identifying new local governments to participate in expanded activities in 2011 and 2012. The

KEMA contract was awarded in October 2010. Upon completion of the KEMA work, several contracts with FLR pilot participants were issued in 2011.

Advice Letter 3082-G-A/3598-E-A includes the following metrics for providing data to local governments over the 2010-2012 program cycle:

1. Stretch goal will be determined for each participant. Recovery rate goal must exceed the 2009 rate.
2. At least 20% of bulbs in each new community.

The counties of Humboldt, Sonoma, Napa, Alameda, Santa Clara, and Santa Cruz have established retail partnerships for fluorescent lamp drop-off and collection. At present, over one-hundred retail collection sites are participating in the programs and in the coming months we expect this number to reach 128 sites in total. As of the end of 2011, the FLR program had collected 57,747 fluorescent bulbs from residents.

INNOVATOR PILOTS (Local Government Program) – PGE21251

The Innovator Pilots Program provides competitive funding to local, regional and sub-regional governments leading the effort in energy efficiency and GHG reduction activities through innovative and creative approaches to deliver energy savings. Projects are selected based on the likelihood of being scalable and replicable throughout the service territory.

Approved as of June 1, 2010, in accordance with Advice Letter 3081-G-B/3597-E-B, the first solicitation for Innovator Pilot project proposals resulted in seven projects being selected for the program. Contracts were signed for these seven projects in 2010-2011 and are now being implemented. Eight more projects were solicited and selected in 2011, for a total of 15 Innovator Pilot projects. Of these eight projects selected in 2011, three contracts were executed in the fourth quarter of 2011.

See table for brief summaries of each of the pilots and contract status for each, as of first quarter 2012.

Innovator Pilot Projects

Local Government	Projects	Contract Status
Projects Selected During the 2010 Solicitation Appear Below		
Alameda County Office of Education	The Alameda County Office of Education (ACOE) Leadership in Energy Efficiency Program (LEEP) seeks to develop a new, replicable model for improving energy efficiency in an especially hard-to-reach and financially constrained sector: Public school districts. By providing energy efficiency expertise and management assistance at the office of education level, the LEEP Program leverages internal resources and relationships unique to school districts in order to actualize results. The LEEP energy managers will test their hypothesis in 36 school districts.	Contract executed in 2010.

<p>City of Chico</p>	<p>The pilot plans to help moderate-income households not eligible for low-income programs but cannot typically afford to install energy savings measures on their own. The pilot will achieve measurable energy savings by bringing their homes into compliance with Chico's Residential Energy Conservation Ordinance (RECO). This pilot has two primary goals: 1) to identify the most cost-effective path of coming into RECO compliance and achieving significant energy savings in moderate-income homes, and 2) to test the impacts of access to different types of energy consumption information (e.g., in-person; telephone, online) on influencing customer behavior. The pilot not only promotes the local green economy by hiring nearby businesses to provide the audits, but also helps our customers achieve significant energy savings in their home.</p>	<p>Contract executed in 2011.</p>
<p>Sierra Business Council</p>	<p>This project includes three components: 1) establishing an Energy and Climate Leadership (ECL) Institute for the purpose of developing grassroots leadership; 2) providing an Energy Efficiency Training Program (EETP); and, 3) enhancing energy use information and management for small businesses and municipalities using sMeasure. Overarching goal is to demonstrate that climate change, with its expected environmental impacts, also presents regional economic opportunities to respond to the imperative to mitigate those expected impacts by decreasing energy usage. The ECL Institute is designed to develop and support collaborative leadership across key members of Sierra communities for the purpose of driving projects which reduce greenhouse gas emissions in their communities. The EETP component provides a paid training for local contractors to increase the suite of services offered to potential customers to include energy audits, solar plumbing, energy retrofits, and other installations in areas where local capacity is lacking. The third component assesses the success of implementing no-cost energy-monitoring software (sMeasure) aimed at SMBs to determine the extent to which it drives energy efficiency savings through the identification of achievable solutions and lower overall energy costs. This tool uses data from My Energy to analyze a customer's energy usage and compare it to similar users in similar weather zones.</p>	<p>Contract executed in 2010.</p>
<p>QuEST/Cities of Oakland, Berkeley, and Emeryville</p>	<p>Owners of multi-family properties do not reap a direct financial benefit from energy improvements; and tenants have no equity interest in making investments. In the case of master metered buildings, tenants have little direct benefit to conserve. This project proposes to develop policies and programs that the utility and local governments can use to address this split incentive. Several core approaches will be pursued.</p>	<p>Contract executed in 2010.</p>
<p>QuEST/Cities of Oakland, Berkeley, and Emeryville</p>	<p>It is more cost-effective to provide commercial customers with a single, comprehensive audit than the current model where direct installation contractors audit only the specific technology that they sell, leaving customers uninformed about all of their options and creating lost opportunities. This will ease customer confusion about which energy savings investments are best for their situation, ultimately leading to increased project implementation and deeper energy savings compared to historical utility funded energy efficiency programs.</p>	<p>Contract executed in 2010.</p>
<p>Santa Clara County (Silicon Valley Energy Watch)</p>	<p>Pilot expands the ability of municipal housing departments to incorporate Whole House energy efficiency measures into standard rehabilitation work. The City of San Jose Housing Department provides a range of affordable housing programs and services to San Jose residents, including financial and technical assistance. This pilot will provide homeowners with financial assistance in the form of loans and grants to make repairs and improvements to their homes. The program will serve low- and moderate-income, hard to reach residential communities. The pilot coordinates outreach education and energy savings projects across Santa Clara County in order to ensure a maximally comprehensive, innovative, and strategic approach to energy savings.</p>	<p>Contract executed in 2011.</p>

Santa Clara County (Silicon Valley Energy Watch)	Program is funding 17 public and nonprofit agencies in Santa Clara County with “mini grants” to conduct 18 innovative energy efficiency outreach and education programs with targeted communities. The program supports small, local, and innovative social marketing campaigns designed to achieve significant and lasting behavior changes surrounding energy efficiency in limited, targeted communities. To qualify for funding, projects had to define a specific target population, situate energy efficiency within a broader framework of environmental sustainability, and include tangible incentives for behavior change towards energy efficiency. Funded projects include energy-focused business outreach, an educational television series, youth classroom education, and creation of an energy efficiency module for low income home rehabilitation volunteers.	Contract executed in 2011.
Projects Selected During the 2011 Solicitation Appear Below		
City of San Francisco	This pilot is studying opportunities for transforming the market so that newer, more efficient refrigeration equipment can provide a more cost-effective option for small and medium business (SMBs). The City will do this by collecting accurate estimates of the energy savings associated with the targeted equipment and show results of how permanent retirement and disposal of inefficient commercial refrigeration from the marketplace may help improve the efficiency of refrigeration programs for SMBs.	Contract negotiations being finalized
Mendocino County	The Community Development Commission of Mendocino County is developing a program to assist Public Housing Authorities (PHAs) in facilitating market transformation within their internal operations and in hard to reach communities by embedding energy efficiency practices into its policies and procedures. This pilot program will create a new procurement and purchasing policy for PHAs that incorporates long-term energy savings into cost analyses while aligning with local, state and federal rules and regulations.	Contract executed in first quarter 2012
Humboldt County	This pilot will test the Redwood Neighborhood Energy Challenge (RNEC) concept, which will engage neighborhoods and individuals to reduce energy consumption on behalf of a local school. To encourage participation and residential energy reductions, the RNEC will utilize concepts from community based social marketing. Regardless of energy saving outcomes, the RNEC will evaluate social marketing based outreach strategies, behavioral change strategies, and the assumption that awareness, knowledge and attitudes towards energy efficiency are associated with energy use.	Contract executed in fourth quarter 2011
Santa Clara County	Correctional facilities and campuses are traditionally high consumers of energy and pose special challenges for implementing efficiency and conservation. This category of buildings is often not effectively addressed with efficiency retrofits because there are no comparable benchmarks. Successful results require specialized equipment and changes in operational procedures. To address this particular niche need, Santa Clara County will develop a program to create benchmarking standards specifically for various types of correctional facilities.	Contract executed in first quarter 2012
Cities of Albany, Benicia, El Cerrito, Moraga, Orinda, Piedmont & San Pablo	This Pilot is focused on increasing energy management activity in small local governments in California. The Program will be implemented by Strategic Energy Innovations (SEI) and will pilot a model partnership of small cities backed by a technical support team composed of AmeriCorps volunteers and a retired energy professional serving as an Encore Fellow. Program aims to determine if Partner Cities can effectively and efficiently identify and implement energy management systems and practices that have been challenging for small cities to set up and maintain.	Contract executed in fourth quarter 2011
San Luis Obispo County	This pilot seeks to prove the concept that “group purchasing of energy efficiency” for small and medium businesses is cost-effective. Group purchasing is the collective participation in a regional account of products and services by a group of independent facilities; in this case, SMBs. By pooling the buying power of more than one facility, SMBs can save time and resources obtaining and implementing products that reduce their energy costs while improving facility quality.	Contract negotiations being finalized
Napa County	To realize long-term impacts from physical improvements requires changes in	Contract

	behaviors of the people using those systems. The capacity to make those changes varies from organization to organization. This pilot will develop, test, and evaluate strategies to educate building maintenance staff and occupants about systems, procedures and day-to-day behaviors that will improve energy efficiency, assure comfort, reduce operating costs and reduce GHG emissions.	executed in fourth quarter 2011
Alameda County (StopWaste.org)	By enacting the transparency of energy performance for existing single family, multifamily and commercial buildings, energy asset ratings help buyers and renters take energy efficiency into account when making housing decisions. As such, transparency may also stimulate building owners to improve the energy efficiency of existing buildings, assuming higher property values if energy improvements are capitalized in building prices.	Contract negotiations being finalized

The map below shows the areas where the 15 projects are being implemented by PG&E’s local government or non-profit partners.

