Partnering with Utilities and Other Ratepayer-Funded Energy Efficiency Program Administrators

May 2013

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

OAK RIDGE NATIONAL LABORATORY
Managed by UT-Battelle for the Department of Energy

RECOVERY.GOV

This work has been performed by the Vermont Energy Investment Corporation (VEIC) under the contract 4200000341 with Oak Ridge National Laboratory, which is managed by UT-Battelle, LLC under Contract with the U.S. Department of Energy No. DE-AC05-00OR22725.

This document was prepared in collaboration with a partnership of companies under this contract. The partnership is led by the Vermont Energy Investment Corporation (VEIC), and includes the following companies: American Council for an Energy Efficient Economy (ACEEE), Energy Futures Group (EFG), Midwest Energy Efficiency Alliance (MEEA), Northwest Energy Efficiency Alliance (NEEA), Northeast Energy Efficiency Partnerships (NEEP), Natural Resources Defense Council (NRDC), Southeast Energy Efficiency Alliance (SEEA), and Southwest Energy Efficiency Project (SWEEP). In addition, contributions were made by Lawrence Berkeley National Laboratory (LBNL).

FOR MORE INFORMATION

For additional resources and more information visit the DOE Technical Assistance Program's State and Local Solution Center at www.eere.energy.gov/wip/solutioncenter.

Table of Contents

Introduction

The American Recovery and Reinvestment Act of 2009 (ARRA) was established to spur economic activity and invest in long-term growth in the United States. As ARRA dollars entered the market, there were expectations that recipients would leverage additional funds to increase the impact of the federal grants. One of the possible sources of these contributing resources was anticipated to be ratepayer-provided energy efficiency program funds that are administered by utilities and other parties. Although some state, tribal, and local governments (referred to as "governments" throughout the remainder of the document) have worked with these energy efficiency Program Administrators (PAs), many more could do so. Particularly as communities are winding down their ARRA work and looking for new resources and structures for sustaining their efficiency work, partnering with PAs is a good potential solution.

The objective of this document is to help state and local governments understand the role of PAs and assist them in developing successful partnerships with utility and other energy efficiency PAs. For state and local governments that want to do more in terms of energy efficiency, working with efficiency PAs presents a way to streamline work and take advantage of opportunities to have a greater impact. The majority of this paper presents information on partnering and leveraging current energy efficiency activities. However, it also includes information for governments in areas without active PAs, as well as an appendix with a case study describing how state and local governments can fill gaps and administer programs in the absence of a PA. More detailed information on many of the topics can be found within the resources listed at the end of the document.

Understanding the Opportunities

Types of Energy Efficiency Program Administrators

Energy efficiency programs can be administered by entities determined by each state's utility regulatory commission and / or legislature. These entities are given goals and metrics for success that are usually defined and evaluated by the state utility regulatory commission. They might also be eligible to receive performance incentives. The majority of funding for the efficiency programs offered by PAs comes from utility ratepayers and is collected as a small fee on electric and gas bills. This section provides an introduction to the three different types of efficiency Program Administrators: utilities, state and local governments, and third parties.

Electric and gas utilities are currently the most common administrators of efficiency programs.[1] There are three main types of utilities in the United States.

[1] Alliance to Save Energy. State Energy Efficiency Policies, Options and Lessons Learned. Policy Brief #4: Models for Administering Ratepayer-Funded Energy Efficiency Programs. http://ase.org/sites/default/files/EE_Admin_Structures.pdf

First, *investor-owned utilities* (IOUs) are privately held companies that provide electricity and / or natural gas (e.g., Xcel Energy, PacifiCorp, and National Grid). These private, shareholder-owned companies range in size from small local operations to large multi-state holding companies.

Second, publicly owned *municipal utilities* are part of state or local governments and have governing boards that oversee procurement and rates (e.g., Sacramento Municipal Utility District, Colorado Springs Utilities, Oklahoma Municipal Power Authority). These not-for-profit utilities, because of their relationship to other branches of government, might have existing relationships with other departments of state or municipal government (e.g., public works, economic development, parks and recreation, zoning). In these cases, the lines of communication between the ARRA recipient and the municipal utility might have already been determined, therefore facilitating discussion of future endeavors around efficiency.

Third, *rural electric cooperatives* (coops) are consumer-owned utilities that are locally controlled not-for-profits that are most prevalent in rural areas (e.g., Minnesota Rural Electric Association and Midwest Energy Cooperative). Electric cooperative utilities are often centered on a geographic region—often in an area left underserved when electric service first came to the region. Coops share some similarities to municipally owned utilities—similarities such as fewer regulatory requirements and frequently smaller efficiency mandates to meet. Their administrative requirements might also be less onerous than an IOU, allowing greater flexibility in developing new programs.

Regardless of their type, all utilities that offer efficiency programs provide them within a "service territory"—usually a geographic region that includes all of the grid-connected customers (residential, commercial, and industrial) in that region.

Some **state and local governments** administer efficiency programs directly (that is, not through a utility). This can occur in several ways, including through an energy office or a separate governmental entity. The New York State Energy Research and Development Authority (NYSERDA) and the New Jersey Clean Energy Program (administered through the state Board of Public Utilities) are examples of this administrative structure.

In several states (including Vermont, Oregon, Wisconsin, and Hawaii) the efficiency programs are administered by **third-party entities** contracted to run some, or all, aspects of the programs. These entities can be either not-for-profit organizations (e.g., Vermont Energy Investment Corporation and the Energy Trust of Oregon) or for-profit firms (e.g., Science Applications International Corp. [SAIC] in Hawaii and Shaw Environmental & Infrastructure, Inc., in Wisconsin).

Drivers for Energy Efficiency Programs

Energy efficiency programs can be developed and implemented by jurisdictions for different reasons such as:

- economic development and job creation,
- lowered energy costs to consumers,
- energy security and increased system reliability,
- avoidance of building new generation facilities,
- reduced need for new transmission and distribution investments,
- reduced energy demand and fossil fuel use, and
- public health and environmental benefits.

The entities that are typically involved in energy efficiency program adoption efforts include: advocates that promote energy efficiency programs, state legislatures that pass the enabling laws, Public Utility Commissions (PUCs) that establish rules and issue orders, and PAs that are then responsible for implementation. PUCs in particular play a critical role in that they oversee and direct the programs and are responsible for setting budgets and energy savings targets, as well as approving program designs. This section of the paper explains the various ways in which energy efficiency programs are established, and introduces the concept of cost-effectiveness, which is key to understanding energy efficiency program design and delivery.

In many cases, state regulations can drive the adoption of certain energy efficiency programs. For an example, see the Sustainable Energy Resources Action Plan for Arkansas, adopted in December 2010, which lays out the state's energy priorities and sets an agenda for increasing sustainable energy in Arkansas.[2] States may also adopt an energy efficiency goal, such as an Energy Efficiency Resource Standard (EERS), which requires the establishment of specific energy savings reduction targets. These efficiency goals are usually set in terms of energy consumption (MWh for electricity or Therms for natural gas), peak electric demand savings (MW), or some combination of these. After the goals are set, the energy efficiency Program Administrator seeks to achieve them by offering programs to its customers. Savings are then verified by the PUC.

Alternatively, instead of a state mandating the adoption of an EERS, the PA itself might choose to adopt an energy savings goal. Municipal or cooperative utilities, in particular, might be motivated to adopt such goals in order to minimize their environmental footprint or avoid the need for costly new generation. Touchstone Energy Cooperative of South Carolina, which operates without state-mandated efficiency requirements, offers an aggressive Rural Energy Savings Program for its residential customers—with a goal of saving 20% of residential energy consumption by 2020.[3]

---

[2] http://www.apscservices.info/hottopics/APSCDocketNo08-144-USustainableEnergyResourcesActionGuide.pdf

[3] http://www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/pdfs/conf_whatsworking_7_coop_customer.pdf

Some states or utilities use Integrated Resource Plans (IRPs) that treat energy efficiency as a core resource capable of yielding energy and demand savings, and therefore also able to displace more expensive supply-side generation resources. [4]

Cost-Effectiveness Requirements

A fundamental aspect of the discussion around energy efficiency programs is the degree to which they can be demonstrated to be cost effective. In its simplest form, cost-effectiveness is measured by comparing the benefits and costs of an energy efficiency program. Quantifying cost-effectiveness helps energy efficiency compete with the broad range of other resource options on an economic basis. For example, if a kWh saved through an energy efficiency program is less expensive to procure than a kWh from a power plant, the utility may choose to invest in efficiency and count on it in its load forecasts as if it were a supply resource. Further, because most programs are funded by ratepayers, cost effectiveness screening helps ensure that public benefit dollars are spent prudently.

Program Administrators may have the option to use five different cost-effectiveness tests, depending on regulatory guidance.[5] These are the Participant Cost Test, the Program Administrator Cost Test, the Ratepayer Impact Measure, the Total Resource Cost Test, and the Societal Cost Test. There is no single best test; each of the tests provides different information about the impacts of energy efficiency programs and provides insights from distinct vantage points within the energy system. Typically, proposed measures (i.e., an ENERGY STAR qualified dishwasher or air conditioner) for efficiency programs are "screened" for cost-effectiveness using one or more of these tests, as determined by the PUC or energy efficiency program enabling legislation.

Common Energy Efficiency Programs

Energy efficiency programs are often grouped by type of building / consumer (also known as market sector) as a way to simplify program delivery and focus on the needs of the customers in each sector. The three market sectors typically used by Program Administrators to group their efforts are residential, commercial, and industrial sectors. This section provides an overview of common programs for each market sector. Knowing each of the common program types will help state and local governments identify commonalities with their own energy-related initiatives and ensure that the governments and PAs are speaking the same language during discussions about partnership opportunities.

All efficiency programs seek to reduce market and technical barriers and to increase the rate of adoption of energy-efficient products, services, and practices, regardless of the sector targeted

[4] http://www.epa.gov/cleanenergy/documents/suca/resource_planning.pdf and http://www1.eere.energy.gov/seeaction/pdfs/utility_motivation_irpportfoliomanagement.pdf

[5] National Action Plan for Energy Efficiency, Understanding Cost-Effectiveness of Energy Efficiency Programs, http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf

by the program. They do this through advertising and public relations campaigns, incentives or rebates, financing, education and training, and behavior changes to reduce energy use (e.g., competitions to lower consumption, prompts to remind people to save energy throughout their daily routines, information feedback programs, etc.).[6]

It is important to note that the budgets and energy savings impacts of individual energy efficiency programs can vary greatly based on a number of factors. The Consortium for Energy Efficiency publishes an annual report that provides budgets and energy savings by market sector (residential, commercial, and industrial) for efficiency programs in the United States and Canada.[7]

Residential Market Sector

Equipment Focused Rebate Programs

Energy efficiency Program Administrators offer many programs focusing on lighting, appliances, electronics, and heating and cooling. The majority of these programs offer financial incentives for the replacement of the existing items. Almost all PAs require high efficiency / ENERGY STAR®-qualified products.[8]

Table 1: Ranges for typical rebate amounts

Lighting (varies by bulb and fixture type)	$1-$25
Clothes washers	$40-$75
Refrigerators	$30-$75
Dishwashers	$25-$50
Room air conditioners	$20-$50
Programmable thermostats	$25
Heating systems (furnaces, water heaters)	$100-$1150
Central air conditioners	$100-$525
Dehumidifiers	$25
Heat Pumps	$175-$525

Source: DSIRE USA database. Accessed February 14, 2013.

[6] More information on behavior-based program approaches can be found at this website, which captures the outcomes of the State Energy Efficiency Action Network's Customer Information and Behavior Working Group: SEE Action Customer Information and Behavior Working Group http://www1.eere.energy.gov/seeaction/customer_info.html.

[7] Consortium for Energy Efficiency, Annual Industry Report, 2011. http://library.cee1.org/sites/default/files/library/8000/2011_CEE_Annual_Industry_Report_0.pdf

[8] Program summaries published by the Consortium for Energy Efficiency list the specifications promoted by energy efficiency programs across the United States and Canada. http://www.cee1.org/content/cee-program-resources

New Homes Programs

Many PAs offer some type of incentive-based residential building program, tied either to the ENERGY STAR New Homes Program or a PA-developed program. The ENERGY STAR New Homes Program is one of the most common program models offered by PAs for both consumers and builders.[9] This program is based on performance standards that deliver energy efficiency savings of up to 30 percent when compared to typical new home.

Comprehensive Existing Homes Programs

There is a wide variety of retrofit programs that provide incentives for improving the efficiency of existing homes. These programs typically focus on improvements to insulation, air sealing, heating and cooling system upgrades, and controls. A common model is the Home Performance with ENERGY STAR Program. Incentives for these programs vary by region, as climatic zones strongly affect energy use.

Low-Income Programs

Many Program Administrators target low-income populations to help reduce their energy bills by making their homes more energy efficient, while also improving health and safety for the residents. These program designs can range from whole-house energy improvements to product-specific programs (e.g., light bulb give-aways) to bill assistance programs.

Financing

In some cases, PAs also offer loan programs that provide financing for the purchase of energy-efficient equipment. Loans are typically either low-interest or zero-interest, and may be repaid on the customer's bill or through a participating lender.

Commercial Market Sector

As with the residential market sector offerings, PAs offer many programs for increased energy efficiency in commercial buildings (e.g., business and government offices, schools, hospitals, hotels, restaurants, stores, and warehouses). These programs offer differing levels of incentives and financing based upon the amount of energy saved per project. The incentive amount is typically greater than those in residential programs, because of the higher energy savings potential in commercial buildings.

Retrofit Programs

Commercial retrofit programs typically focus on widely used types of equipment (e.g., lighting, water heaters, air conditioning and heating), building automation systems, and "envelope" measures (e.g., insulation, windows). In addition, comprehensive commercial programs include initiatives targeted at energy savings opportunities within specific types of commercial

[9] Consortium for Energy Efficiency, New Homes Program Summary, October 2012. http://library.cee1.org/sites/default/files/library/9592/CEE_WholeHouse_NewHomesProgramOverview_Oct2012.pdf

businesses. For example, supermarkets take advantage of programs that include a focus on supporting the retrofit of refrigeration systems and refrigerated case display lighting.

New Construction Programs

New construction programs often offer an incentive and / or financing package for new building project owners. In addition to equipment incentives, the program might provide incentives that offset a portion of the design team expenses and / or construction costs that arise from energy efficiency improvements. Many of these incentive programs are tied to a target that is set well above existing local energy code.

Custom Programs

In addition to standard offer programs, PAs also offer custom programs where they work with the project owner or builder to maximize energy savings through specific efficiency measures appropriate to the project. In these cases, the PA offers incentives, financing, and / or training as needed. For example, a data center has a similar set of energy end uses as a commercial office space. However, the presence of large server farms in a data center (as opposed to a small bank of servers in a conventional office) provides a different opportunity for the PA, and requires a tailored approach when working with each business.

Industrial Market Sector

The industrial sector encompasses a broad range of buildings including those that focus on manufacturing, high tech, food processing, water and wastewater systems, metal processing, and pulp and paper firms. Due to the unique nature of this sector's energy use, many of the programs are customized (see description of custom programs, above). Industrial facilities can realize many savings opportunities, including efficient lighting, high-efficiency motors and drives, HVAC equipment, and process heating. There is a wide variety of program options for industrial users of all sizes, including continuous energy improvement programs, where savings are realized through changes in business operations rather than from new pieces of equipment.

Pilot Programs

PAs develop and implement pilot programs to determine the feasibility of, or to improve the design of, programs prior to making them widely available. Many pilot programs are under way around the country to test program concepts on a small scale and to determine cost-effectiveness. For example, the Northwest Energy Efficiency Alliance offered a pilot program for ductless mini-split air conditioners in 2008-2009 that has led to broad acceptance of this technology in the region. In 2012 and 2013, the New Jersey Clean Energy Program administered a pilot program for boiler controls, with a goal of supporting the broader adoption of the technology. Other recent pilot programs have related to heat pump water heaters, multifamily building efficiency, behavior change, and financing.

Partnership Types

There are many reasons that state or local governments may find it valuable to partner with PAs. One reason is that partnerships offer an opportunity to leverage existing government initiatives by bringing more attention, support, and funding to them. Another is that partnerships may help state and local governments realize goals set out in energy strategic plans or help better align PA incentives and programs with public policy goals.

To achieve those benefits, governments can work with PAs to develop successful relationships in several ways presented below. All partnership types discussed in this paper require that the government understand: (1) if efficiency programs are currently offered, and (2) the nature and goals of the programs that are being offered. Before deciding on an approach, a government should first assess the specific situation in its jurisdiction and understand the PA's openness to partnering. More detail on how to go about this process is provided in the Getting Started section below.

Partnership Types

If there ARE local efficiency programs:

- Add value to existing programs
- Help refine programs based on policy direction
- Fill a gap in program offerings

If there ARE NOT local efficiency programs:

- Administer a program
- Provide information to regulatory agencies on the benefits of efficiency

If There ARE Local Efficiency Programs

If efficiency programs are currently offered in a state or local government's jurisdiction, there are several potential partnership approaches. One overarching consideration for governments to keep in mind is that it would be detrimental to the advancement of efficiency to create new, competing programs. Any program activity that the government pursues should be done in collaboration with existing programs. Below are some ways governments can partner with PAs where energy efficiency programs already exist.

Add Value to Existing Efficiency Programs

Even when efficiency programs are in place, PAs often welcome additional support to promote existing programs. Governments can bring their resources and relationships to bear to promote a program to the community. For example, government entities might be able to leverage funding vehicles to support energy efficiency marketing, training, or events that are not open to PAs. Trainings could target builders, contractors, architects, real estate professionals, and other key market actors. Governments could also promote low-interest efficiency loan or mortgage programs offered by the PA.

In addition, there are some cases where governments might be better suited than the PA to play particular roles, such as coordinating energy efficiency outreach and implementation. For example, a government might encourage low-income customers to use the efficiency programs in place, or might promote small business energy efficiency programs at a Chamber of Commerce event. The activities could also include installing electric measures such as advanced

power strips during government-sponsored home weatherization visits.[10] By partnering to add value to an existing program, the government can meet its own objectives, while helping the PA meet its energy savings goals. To be successful, the government must ensure that there is alignment with the PA around program goals and objectives.

Help Refine Programs Based on Policy Direction

Depending on the state or local government's role related to setting policies related to energy efficiency, there are several partnership opportunities that could be pursued. For example, if a state government is adopting a new building code, government staff could coordinate with the efficiency PA to ensure that training and incentives offered to builders through a new construction program are consistent with the upcoming code change. Or, if a local government sets an aggressive energy efficiency target, partnering with a PA could provide an opportunity to discuss ramping up efficiency programs in support of the new savings goal.

Fill a Gap by Administering a New, Complementary Program

In some cases, PAs do not offer programs for all customer types or efficiency opportunities. The reasons for this can include a lack of available funding, a lack of regulations mandating the activity, mismatch around fuel type (e.g., available funding is limited to electric efficiency programs when improvements are needed in gas heating), or other barriers preventing outreach to a specific market. When such a gap is identified, governments can collaborate with the PA to offer a program targeted at this underserved market segment. For example, if the efficiency program does not extend to residential customers or low-income customers, the government could do so in partnership with the PA.

If There ARE NOT Local Efficiency Programs

Even in states with active energy efficiency programs, it is possible that there are some jurisdictions without programs. For example, some states have adopted electric and natural gas efficiency programs that are administered by the investor-owned utilities. However, customers served by municipal utilities or cooperatives might not have access to the efficiency programs because they do not pay the utility bill surcharge that funds them. In other areas, municipal or cooperative customers may be able to participate in efficiency programs, whereas IOU customers may not. In areas where efficiency programs are lacking, governments can administer a program on their own or provide information that supports the establishment of such programs to regulatory agencies. Below is more detail about these two ways governments can consider moving forward when energy efficiency programs do not already exist.

[10] *Weatherization* refers to the process of tightening up homes, adding insulation, and generally making them more efficient. The term is commonly used in association with the Weatherization Assistance Program (WAP), which is led by the Department of Energy and administered on a local level by state, territory, and tribal governments. More information is available at: http://www1.eere.energy.gov/wip/wap.html.

Administer an Efficiency Program

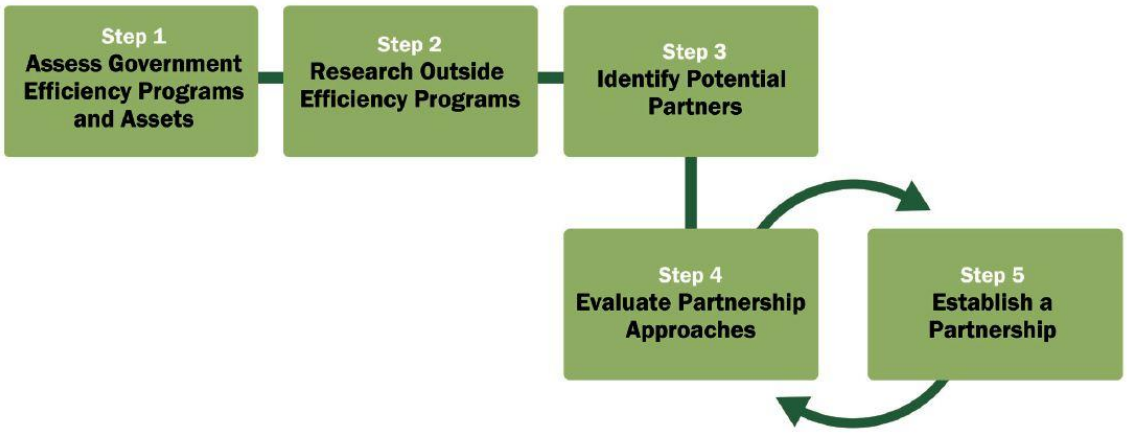
Governments can design and implement a program to increase market penetration of efficient technologies and to promote best practices for all stakeholders in the energy sector. Designing and implementing a successful program is a large endeavor. Programs support the development of energy efficiency best when they are offered continuously over time. Stop-and-go approaches might be detrimental to the development of energy efficiency markets. Therefore, governments that want to start their own programs should bring a long-term focus to their efforts. See the case study in the Appendix for an example of administering an independent efficiency program.

Provide Information on the Benefits of Efficiency to Regulatory Agencies

Governments can provide information and recommendations on the benefits, goals, and design of energy efficiency programs to regulatory agencies, the legislature, or advocacy groups. These recommendations are most effective when they build upon real-world examples and link the legislative and regulatory processes to local success stories. Recommendations could include establishing a funding stream for efficiency programs, creating a PA, or broadening the programs (or increasing funding) of an existing PA. This type of effort may require a significant period of time to establish, but it has the potential to have a long-lasting impact.

Getting Started

While the previous sections of the paper have presented background information and ideas on the different ways to partner with utilities and other ratepayer-funded efficiency PAs, this section provides more concrete guidance about creating partnerships. Most of the information below is tailored for state and local governments operating in environments where there ARE local efficiency programs. As mentioned above, for additional suggestions on steps to take if there ARE NOT efficiency programs in a jurisdiction, see the case study in the Appendix.



1. Assess Government Efficiency Programs and Assets

The government should assess its own current goals, offerings, and assets prior to beginning a conversation with a potential efficiency program partner. Such an assessment includes a listing of:

- government-run programs for low-income residents,
- other efficiency programs currently offered by the government (identifying what sector and / or market segment these programs target),
- the energy building codes currently in place or planned for the jurisdiction,
- the government's energy use projections or climate action plan targets, and
- any administrative assistance or funding that might not be readily accessible by the PA.

2. Research Outside Efficiency Programs

The government will then want to become more familiar with the energy efficiency programs offered locally, whether through a utility or other PA. This information will assist in the assessment of how the efficiency program offerings might fit within an existing or future government initiative.

The Resources section of this document includes links to reports and databases that will help a government identify efficiency programs that are active in its jurisdiction. Searching the DSIRE database is a good first step for an overview of efficiency PA activity in a state or municipality. Then, reviewing the annual industry reports from the Consortium for Energy Efficiency can provide additional granularity on PA budgets and program goals, including savings targets.

3. Identify Potential Partners

To understand which PAs may be most interested in partnering, governments should then look for more details about the programs being offered. Efficiency program websites are a good place to begin, as they often include details on the programs, incentive structures, qualifications required to meet the program objectives, and contact information for the program representative. Assessing similarities with government programs is important.

At this stage, governments can also begin to assess the PA's openness to partnering by screening for the existence of current programs that are delivered in cooperation with other entities. For example, knowing that an electric utility already delivers a comprehensive existing homes program in conjunction with a gas utility bodes well for a partnership with a government because it means that the electric utility has already established systems that support partnerships with outside organizations.

4. Evaluate Partnership Approaches

Next, the government will need to consider the potential partnership approaches (i.e. Add Value, Refine Programs, Fill a Gap, etc.) and ascertain how a partnership with the PA can benefit both the PA and the government. The government should seek opportunities to improve the effectiveness of its own current programs and better align them with the PA's programs. Identifying ways to expand or enhance both entities' existing programs to reach

more participants and / or increase savings opportunities is a good place to start a partnership with the PA, before moving on to developing new programs. Whichever partnership framework a government chooses to pursue, when approaching the PA, the government should be ready to present concrete options.

5. Establish a Relationship

To establish a relationship, the government should first contact the manager of the efficiency program. Other good contacts could include the government staff person responsible for liaising with utilities, the community affairs manager, or other specialist who works to create joint energy efficiency programs.

Agenda for First Meeting

- Review common objectives
- Promote value of collaboration
- Review current program offerings
- Identify specific opportunities and goals
- Confirm PA's planning and implementation cycle
- Establish timeline
- Identify concrete next steps

During the first meeting with the PA, there are many points to discuss. Research completed prior to the meeting should have revealed the common programs under way, and the government should identify commonalities to be explored during the meeting. State and local governments can bring the written results of their research and their suggestions for collaboration to the meeting. This is the time to denote what value each party can bring to a collaboration and why the two organizations should work together. During the meeting, all participants should identify their common goals and how they can leverage each other's resources and activities.

The government should also seek to understand where the PA is in the planning and implementation cycle. For instance, if the state regulatory agency is involved in overseeing the programs, it is helpful to know when the PA will be filing its next program plan or updating its current plan with the agency. Some PAs may not be able to make changes outside a normal program cycle, while others may be able to launch new programs as "pilots," outside the standard timeline. Other important next steps to identify include any timelines required to flesh out new program objectives, requirements, and roles for each partner within the collaboration.

Case Studies

The case studies presented here provide examples of several of the partnership types outlined above. They are not the only such examples; there are many other efforts under way across the United States. These case studies were chosen for inclusion because they highlight a range of partnership options that governments can explore with their local Program Administrators, they are geographically diverse, and they are already showing promising results.

Case Study 1: Colorado ENERGY STAR Homes *Adding Value to the Existing Efficiency Programs*	
Location	State of Colorado
Lead	Colorado Governor's Energy Office
Program Launch Date	Began in 2007 and significantly expanded in 2010 with ARRA funding; entered a new phase in 2013
Program Description	From 2007-2012, the Governor's Energy Office (GEO) led a statewide ENERGY STAR Homes Program in collaboration with 142 partner organizations including cities, utilities, counties, not-for-profits, home builders, private companies, and real estate professional groups that provided seamless delivery of energy efficiency services to builders constructing new homes in many regions in the state. The collaborative structure and need for this program was originally identified by Fort Collins Utilities (a municipal-owned utility)—in conjunction with sustainability advocacy groups and housing agencies in the city. Fort Collins' work spread organically to other like-minded Colorado communities that also subsequently received GEO grants. These programs were not just collaborations with utilities, but with the broad range of partners listed above. The Colorado ENERGY STAR Homes Program quickly became the primary vehicle for providing ENERGY STAR Home services in Colorado. Each year the program conducted more than 50 training and outreach events to increase awareness and understanding of the ENERGY STAR Homes Program, technical standards, partner rebates, and technical resources. Program partners received the following support from the GEO: • Overall program management and tracking tools

	• Assistance in increasing regional homebuilder participation • Resources to develop regional Home Energy Rating System (HERS) Raters • Training on efficient construction practices for homebuilders • Creation of regional homebuilder ENERGY STAR marketing and advertising groups • Resources and training support for real estate professionals The GEO also provided incentives paid to homeowners in the form of a 1% interest rate buy-down for a subset of ENERGY STAR-qualified homes. In addition, many utilities in the state paid incentives to cover both the cost of the HERS rating and provide incentives to the builder for achieving ENERGY STAR certification. In 2013, the program is entering a new phase to build on its previous success and respond to changes in the market, such as the launch of the ENERGY STAR version 3 new homes specification. While the model of delivering the program through partnerships will continue, several technical changes are being considered, including tracking participation based on HERS score rather than ENERGY STAR certification and shifting incentives away from builders and toward consumers.
Funding	In 2010, the American Recovery and Reinvestment Act provided $739,000 to support this statewide ENERGY STAR Homes initiative. These funds were combined with $246,000 from the GEO and more than $2 million in funding from Xcel Energy.
Forming the Partnership	The program was initiated as a grassroots effort among Fort Collins Utilities, community housing agencies, and sustainability advocacy groups in the city. Given the requirement from the GEO's office that the cities obtain matching funds for any grants, Fort Collins staff successfully approached other utilities in the region for financial support. Since that start, the program spread throughout nearly all communities in the several counties and has gained cooperation from both of the municipalities and utilities in the region.
Results	Started in 2007, when only 8% of the homes in the state earned the ENERGY STAR qualification, this initiative quickly established industry partnerships that were responsible for driving market penetration for ENERGY STAR Homes to 19.4% in FY 2008, 33% in FY 2009, and 47% by FY 2010 (ending June 2011). In addition, the average HERS rating for new homes that went through the program was 63, which is a significant achievement. The results demonstrated by the Colorado ENERGY STAR Homes program have garnered national recognition, earning ENERGY STAR Partner of the

	Year awards in 2009 and 2010. The Colorado Governor's Energy Office has demonstrated a successful statewide approach to promoting the construction of efficient homes.	
Utility Partners	Colorado Springs Utilities Delta Montrose Electric Association Empire Electric Fort Collins Utilities Glenwood Springs Electric Headwaters Energy & Finance Holy Cross Energy La Plata Electric Association Loveland Water and Power	Longmont Power & Communications Platte River Power Authority Poudre Valley REA Sangre de Cristo Electric Association San Miguel Power Association SourceGas Xcel Energy
Resources	For program resources, see http://www.colorado.gov/energy.	
Contacts	Peter Rusin Colorado Governor's Energy Office Peter.Rusin@state.co.us 303-866-2343	

Case Study 2: Silicon Valley Energy Watch Program *Adding Value to the Existing Efficiency Programs*	
Location	Santa Clara County, California
Lead	The City of San José, California
Program Launch Date	Began in 2010 – 2012; New cycle 2013 - 2014
Program Description	 In September 2008, the California Public Utilities Commission (CPUC) adopted a Long Term Energy Efficiency Strategic Plan that established strategies, actions, and a framework for maximizing energy efficiency in the state through 2020.[11] Government Partnership Programs—first launched in 2004—were recognized as part of this planning effort as an opportunity for communities to take a larger role in saving energy. Prior to the CPUC's Strategic Plan, the San José community had identified an opportunity for a community effort to address a gap within the existing utility programs. The large Vietnamese- and Spanish-speaking communities (each comprising one-third of the total population) were not being reached by Pacific Gas and Electric's (PG&E) programs. However, many of these communities had neighborhood revitalization programs that provide effective platforms for implementing energy efficiency education programs. After the adoption of the CPUC's Strategic Plan, which formally endorsed community programs, the City of San José was able to significantly expand its programming and funding, offered under the Silicon Valley Energy Watch (SVEW) banner. SVEW delivers energy efficiency education, outreach, rebates, and energy savings services to residents, businesses, and organizations throughout Santa Clara County. While San José took the lead because it houses 50% of the population in the county, the city performed extensive outreach to include all of the communities in the county. Prior to 2008, the program was focused on marketing, education, and outreach. Starting in 2009, SVEW was expanded to provide turnkey audit

[11] For more information on the California Long Term Energy Efficiency Strategic Plan, see http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/.

	and direct-installation (direct install) energy efficiency services for the municipal and not-for-profit sectors. The services and incentives that Energy Watch provides to these two sectors are comparable to those that PG&E provides to the other sectors covered by their programs. However, SVEW has been effective due to its grass roots approach, community engagement, and familiarity with the needs of these sectors. There is extensive coordination between SVEW and PG&E in operating these parallel programs. By the end of 2012, this program reduced electricity demand by 1,833 kilowatts (kW) and save 10,663,370 kilowatt-hours (kWh) in electricity consumption in the municipal, non-profit, and moderate-income residential sections. SVEW also received two grant awards worth a combined $901,000 from PG&E's Innovator Pilots Program. One of these awards funded the Community Energy Champions Grant, in which SVEW staff provided funding and technical assistance to 17 community agencies during the course of the program June 2011 - November 2012. This program makes awards to support innovative projects that include energy efficiency as an integral component of targeted climate action and environmental education.
Funding	The program is funded at a level of $11.9 million for the period 2010-2012 (this includes the $901,000 for the Innovator Pilot grant). The funding is collected at the direction of the CPUC; it is provided by ratepayers via a system benefits charge that is collected by PG&E. This funding is renegotiated at each three-year planning cycle.
Forming the Partnership	This program is one of 19 local government partnerships with PG&E, as mandated by the CPUC, to provide energy efficiency services. There has been widespread recognition that although the utility is successful reaching some audiences, a municipal program might be more effective in engaging some hard-to-reach communities.
Results	One of the successes of the program is PG&E's Innovator Pilots awards, particularly the Community Energy Champions Grant. To date, this grant program has disbursed 16 awards totaling $314,700 to not-for-profit organizations and local municipalities to conduct innovative energy efficiency education, outreach, and targeted assistance for community members. The projects selected for funding take innovative approaches to energy efficiency outreach, including • student video production, • public broadcasting, • language-specific after-school education in communities, • teaching and assessing energy use within artist communities, • using animation and social media to deliver energy efficiency messages to youth,

	• energy-focused green business outreach and incentives, • faith-based environmental outreach, and • neighborhood energy reduction competitions. These Community Energy Champions grantees started programs in September 2011 and by the end of 2012 had enrolled 1,900 new participants in programs including direct installation of energy efficiency measures, home retrofits, and business energy audits. In addition, the grantees have established a network of 57 paid staff, 761 adult volunteers, and 15 youth volunteers. As of the end of 2012, 15 of the 17 grantees were meeting or exceeding their targets for enrollments and staff/volunteer time spent on the project. The program has also played an integral role in connecting its customers with $922,000 in PG&E rebates. SVEW has developed goals for its 2013 – 2014 program cycle that build on these successes. The other notable success has been to broaden the program from a marketing and outreach-only effort to a turnkey operation for audit and direct install services for municipal and not-for-profit entities. The coordination with PG&E has been so successful that the program's budget has been significantly expanded with each subsequent program cycle.	
Partners	Pacific Gas & Electric City of San José Santa Clara County Santa Clara Country Municipal Governments (15)	Joint Ventures Silicon Valley Sustainable Silicon Valley Silicon Valley Leadership Group
Resources	www.pge.com/energywatch www.energyupgradeca.org/county/santa_clara/overview	
Contacts	Silicon Valley Energy Watch (408) 975-2531 www.svenergywatch.org Shayna Hirshfield (408) 666-4850 Shayna.hirshfield@sanjoseca.gov	

Case Study 3: Connecticut Neighbor to Neighbor Energy Challenge *Filling a Gap by Administering a New, Complementary Program*	
Location	State of Connecticut
Lead	Connecticut Clean Energy Fund
Program Launch Date	Launched in March 2011 and will operate for 3 years
Program Description	 The Connecticut Neighbor to Neighbor (N2N) Energy Challenge seeks to engage 10% of residents in 14 towns and to reduce energy use by at least 20% in each participating home. The program is administered by the Connecticut Clean Energy Fund and draws resources from a unique partnership of not-for-profit, for-profit, and academic organizations. Residents who choose to participate have many ways to reach their 20% energy reduction goal. The program offers comprehensive support, including web-based tools that homeowners can use to understand how their home uses energy, free lighting retrofit services, and a home weatherization program called Home Energy Solutions (HES). N2N is intended to complement currently established utility programs by filling gaps in contractor engagement and community outreach. N2N works most closely with the HES and Clean Energy programs. HES is a Connecticut Energy Efficiency Fund program that provides home energy saving measures and pinpoints other actions that will reduce home energy consumption. HES includes both a direct install program component and a full home performance component. N2N has been able to fund non-traditional efforts outside the constraints of regulatory cost-effectiveness tests. These include: innovative social media marketing, community-based outreach, and the development of a new IT platform for energy use and cost data tracking and analysis. The IT platform has been critical in providing a broad range of data to numerous stakeholders, including N2N program managers, contractors, homeowners, and the utilities themselves. This platform tracks energy use and runs payback analyses that educate homeowners. It also facilitates energy efficiency contractor business development by providing a customer tracking system to bridge the previous gap

	between them: a home assessment and follow-up to convert that assessment into a sale where the homeowner commits to making additional investments. The target conversion ratio is 20%—significantly larger than contractors have previously been able to achieve. The N2N Energy Challenge created an on-the-ground outreach team, the Clean Energy Corps, to educate homeowners and engage community groups and civic leaders. The approach also relies on community competition and behavioral changes to save energy. Residents earn points for their towns that can be redeemed for energy-related technology, such as LED lighting or electric charging stations. The challenge also encourages homeowners to compare their energy bills to similar homes in their neighborhood and thereby change behaviors to use less energy. N2N has added to its program a critical contractor liaison team that works very closely with the contractors in the towns. It recently added an Energy Advisor to act as a bridge between homeowners and contractors. N2N has demonstrated a successful model in engaging the community and using social media to promote energy efficiency.
Funding	The N2N Energy Challenge is made possible by a $4.17 million grant from the U.S. DOE as part of the Better Buildings Neighborhood Program. In addition, N2N leveraged approximately $10 million in commitments from Connecticut ratepayer funds for the first three years of the program. The 2012 budget for HES for Connecticut's two investor-owned utilities is approximately $30 million.
Forming the Partnership	N2N did not approach the utilities directly, but instead received commitments of support from the two ratepayer funds (the Energy Efficiency Fund and the Connecticut Clean Energy Fund) managed by two independent boards of directors. In Connecticut, the Energy Efficiency Fund provides collected ratepayer funding to the utilities to administer efficiency programs. N2N worked closely with Northeast Utilities to provide the IT links to enable sharing of customer bill data and program data—a first for this utility.
Results	Almost two years after the launch, the program has achieved an 8% conversion rate for the 14 participating towns. For program participants, the average savings from the assessment / direct install portion of the program is 10.5% in energy and $358 in energy costs. For those that then choose to make additional home upgrades, the average participant achieves additional energy savings of 24.7% and additional cost savings of $837. Additional benefits have resulted from developing sales trainings for contractors, as well as assisting small to medium-sized contractors in significantly improving the management of leads and improving their

	businesses through use of the IT platform. N2N has been successful in establishing partnerships with more than 120 community groups in the 14 communities. As of February 2013 (two years into the program), N2N has obtained 4,502 sign-ups for HES and held 800 outreach / workshop events.	
Partners	Connecticut Clean Energy Fund Connecticut Energy Efficiency Fund Department of Energy Clean Water Fund Earth Markets EMpower Devices and Associates Massachusetts Institute of Technology Mobile Genius SmartPower Snugg Home Student Conservation Association Town of Bethany	Town of Cheshire Town of East Haddam Town of East Hampton Town of Glastonbury Town of Lebanon Town of Mansfield Town of Portland Town of Ridgefield Town of Weston Town of Westport Town of Wethersfield Town of Wilton Town of Windham
Resources	See www.ctenergychallenge.com for customer release forms, contractor guidelines / participation agreement, and other resources upon request.	
Contacts	Kerry O'Neill (203) 956-0813 kerry@earthmarkets.com Bob Wall (860) 257-2354 bob.wall@ctcleanenergy.com	

Conclusion

Partnerships between efficiency Program Administrators and governments can be mutually beneficial, as they draw upon the strengths of each partner. Creating such partnerships takes planning, effort, and commitment by each organization. Governments should approach partnerships with PAs knowing their own strong points, having identified the ways they could add value, and being able to articulate these as reasons for collaboration. PAs might already be seeking partners to assist them in meeting energy savings targets or Energy Efficiency Resource Standards.

It is important for governments to understand the PA's business model (e.g., IOU, cooperative, municipality, government, or third-party) and their energy efficiency drivers, since this will affect the PA's prioritization of objectives, how it will respond to market trends and policy changes, and the type of partnership it will most value. The partnership will be strengthened if the PA understands the government's structure and interests.

Some local, regional, and national resources are presented below for governments seeking more information in understanding their local utility and energy efficiency program landscapes, and in identifying the most appropriate contact to discuss future collaborations.

Resources

Federal Government Initiatives

Department of Energy, Better Buildings Neighborhood Program, Business Models Guide
http://www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/getting_started_business_model.html
The Better Buildings Neighborhood Program produced a Business Models Guide describing ways for grantees to consider financing and operating their programs after grant funds are expended. The models and insight provided can be constructive for non-grantees as well. The Guide includes a section on utility partnerships.

Department of Energy, Better Buildings Neighborhood Program, Partnership Evaluation Framework
http://www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/pdfs/partnership_evaluation_framework.pdf
In addition to the Guide, the Better Buildings Neighborhood program also produced a partnership evaluation framework that governments might find useful in considering which local efficiency programs to approach about working together.

Department of Energy, Solution Center
http://www1.eere.energy.gov/wip/solutioncenter/default.html
The Solution Center is the home for the federal Energy Efficiency and Conservation Block Grant (EECBG) Program and State Energy Program (SEP) technical assistance resources. The goal of the Solution Center is to help communities develop and implement successful energy efficiency and conservation projects and programs that meet the conditions and guidelines of the EECBG and SEP programs.

National Action Plan for Energy Efficiency
www.epa.gov/eeactionplan
The National Action Plan for Energy Efficiency has published several documents that might be helpful to governments, including its *Guide to Resource Planning with Energy Efficiency* and *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers*, Both documents are available at the website.

State Energy Efficiency Action Network
http://www1.eere.energy.gov/seeaction/
The State and Local Energy Efficiency Action Network is an effort facilitated by the federal government that helps states, utilities, and other local stakeholders achieve all cost-effective energy efficiency by 2020. This initiative has resulted in the development and implementation of eight energy efficiency roadmaps across the residential, commercial, and industrial sectors.

Energy Efficiency Program Organizations

Consortium for Energy Efficiency

www.cee1.org

The Consortium for Energy Efficiency, a membership organization of energy efficiency Program Administrators, produces an annual report on efficiency budgets, common programs offered, and the amount of energy saved. The report covers electric and gas efficiency programs in both the United States and Canada.

Institute for Electric Efficiency

http://www.edisonfoundation.net/iee/

The Institute for Electric Efficiency (IEE) is an Edison Foundation program that focuses on advancing energy efficiency, demand response, and customer-side solutions among electric utilities. IEE's archives include many articles, presentations, and studies regarding effective partnerships between utilities and municipalities, as well as studies on the effectiveness of energy efficiency programs.

Midwest Energy Efficiency Alliance

http://www.mwalliance.org/

The Midwest Energy Efficiency Alliance (MEEA) is a leading source and champion for advancing sound energy efficiency policies, programs, and priorities in the Midwest. MEEA has a diverse group of members, including utilities, local and state governments, not-for-profits, manufacturers, retailers, and consultants, all working together toward a shared vision for energy efficiency in the Midwest.

Northeast Energy Efficiency Partnerships

http://www.neep.org/

Since 1996, Northeast Energy Efficiency Partnerships (NEEP) has been facilitating regional partnerships to advance the efficient use of energy in homes, buildings, and industry in the Northeast and mid-Atlantic states. Its core values are advocacy, collaboration and expertise, all used to advance energy efficiency goals.

Northwest Energy Efficiency Alliance

http://neea.org/

The Northwest Energy Efficiency Alliance (NEEA) works in collaboration with its funders and other strategic market partners to accelerate the innovation and adoption of energy-efficient products, services, and practices in Oregon, Washington, Idaho, and Montana.

Southeast Energy Efficiency Alliance

http://www.seealliance.org/

The Southeast Energy Efficiency Alliance (SEEA) promotes energy efficiency for a cleaner environment, a more prosperous economy, and a higher quality of life in the Southeastern region of the United States.

Southwest Energy Efficiency Project
http://www.swenergy.org/
Southwest Energy Efficiency Project (SWEEP) promotes greater energy efficiency in Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. SWEEP has been advancing energy efficiency in this high-growth region since 2002.

Touchstone Energy, TogetherWeSave
www.TogetherWeSave.com
Touchstone Energy is the national marketing / branding organization for electric cooperatives. This organization has developed a TogetherWeSave campaign focused on encouraging efficiency programs by electric cooperatives. Touchstone Energy also offers information to understand where the service territories lie within a region and with whom to start a collaborative relationship.

Information on Energy Efficiency Policy and Regulations

Alliance to Save Energy
http://ase.org/
The Alliance to Save Energy (ASE) is a not-for-profit organization that promotes energy efficiency worldwide through research, education, and advocacy. It encourages business, government, environmental, and consumer leaders to use energy efficiency to achieve a healthier economy, a cleaner environment, and greater energy security.

American Council for an Energy-Efficient Economy
http://www.aceee.org
ACEEE advances energy efficiency policies, programs, technologies, investments, and behaviors. It also offers information and studies on energy-saving technologies, efficiency programs, and policies.

National Association of State Energy Officials
http://www.naseo.org/
NASEO improves the effectiveness and quality of state energy programs and policies and provides policy input and analysis to governor-designated energy officials from each state and territory. It is very active in energy efficiency..

Regulatory Assistance Project
http://www.raponline.org/
The Regulatory Assistance Project is a team of regulatory experts focused on the long-term economic and environmental sustainability of the power and natural gas sectors, providing assistance to government officials on energy and environmental issues. It has produced a guide to electricity regulation in the United States and a guide for regulators and legislators on energy efficiency programs, both of which are helpful for understanding utility motivations and how energy efficiency integrates with other utility objectives.

Utility Trade Associations

American Gas Association
http://www.aga.org/our-issues/energyefficiency/Pages/default.aspx
The American Gas Association is a membership organization of investor-owned natural gas utilities. It has developed resources around energy efficiency programs. These resources can assist governments in understanding the role they can play in a successful partnership with a natural gas utility.

American Public Gas Association
http://www.apga.org
The American Public Gas Association (APGA) represents the gas municipal utilities and, similar to the American Public Power Association (see below), has been active in efficiency.

American Public Power Association
http://www.publicpower.org/
The American Public Power Association (APPA) represents the electric municipal utilities. APPA's research program, Demonstration of Energy-Efficient Developments (DEED), coordinates member utility efforts on the implementation of energy efficiency technologies and programs. Information on DEED can be found at:
http://www.publicpower.org/DEED/index.cfm?ItemNumber=31245&&navItemNumber=20949.

National Rural Electric Cooperative Association
www.nreca.org
The National Rural Electric Cooperative Association (NRECA) provides information on electric cooperatives and the energy efficiency programs offered by its members. Through NRECA's Cooperative Research Network, the association has developed tools for electric cooperatives to implement efficiency programs at the local level.

Information on Rebates

Database of State Incentives for Renewables and Efficiency
http://www.dsireusa.org
This database provides information on energy efficiency programs and incentives, as well as the policies and legislation behind them, throughout the United States. The database is searchable online, by state.

Appendix

Case Study A1: The Home Energy Rebate Option (HERO) *Administering a New Program in the Absence of PA-Run Programs*	
Location	State of Louisiana
Lead	Louisiana Department of Natural Resources (DNR)
Program Launch Date	Launched in 2009 and concludes in June 2013
Program Description	Louisiana does not have active energy efficiency programs for utility customers outside New Orleans, where Entergy (an Investor Owned Utility) offers a portfolio of programs for different customer types. The lack of efficiency programs for customers in other parts of the state led the Department of Natural Resources to develop its own program to fill the gap. When the DNR introduced the program, Louisiana residents could receive up to a $2,000 rebate for making their homes more energy efficient. Since its launch, the program was restricted to retrofits of existing homes. With funds from ARRA, the Home Energy Rebate Option (HERO) program expanded to encompass new home construction, existing home retrofits, and commercial building retrofits. The *HERO-New Homes Program* was developed to encourage the building of energy-efficient new homes. Achieving a HERS score of 70 qualified the new home for a $2,000 incentive. For homes that went further, DNR provided a $3,000 rebate for achieving a 50% energy savings for heating and cooling over the 2004 International Energy Conservation Code (IECC 2004), including supplements to that code, where at least 20% of the energy savings came from building envelope improvements. The two incentives were not able to be combined and the maximum rebate per home was $3,000. The *HERO-Existing Homes Program* encouraged energy efficiency by providing a cash incentive to Louisiana residents who improve the energy efficiency of their existing home by a minimum of 30%. The incentive was based solely on energy savings expressed in kilowatt-hours (kWh). The incentive was $0.02 per kWh saved, compared to the pre-improvement home across 15 years, as determined by a HERS rating. The maximum potential rebate per home was $3,000. The *HERO-Commercial Buildings Retrofit Program* was designed to encourage business owners to retrofit their existing commercial

	buildings. The program required a 10% reduction in annual kWh, and awarded an incentive of $0.01 per kWh saved, compared to pre-improvement building. The maximum potential rebate was $5,000.	
Funding	With ARRA funding, the expanded HERO Program made $15.2 million available to support energy-saving improvements in homes and commercial buildings. The program was designed to support homeowners and businesses seeking to save money on energy bills and / or reduce their environmental impact through cash incentives for energy efficiency improvements.	
Forming the Partnership	In Louisiana, Entergy is the only utility that offers efficiency programs, and those are focused on its customers in New Orleans. Therefore, the HERO program was run as a stand-alone effort.	
Results	Even prior to HERO, DNR had established a long history of delivering energy-saving programs to residents of Louisiana. It has achieved additional energy savings through the HERO program. Since the ARRA-funded program began in 2009, it provided services to 1,287 new homes, 1,529 retrofit homes, and 168 commercial retrofits. Total savings reached 8,257,705 kWh for new homes, 19,421,228 kWh for retrofit homes, and 5,474,982 kWh for commercial retrofits. In total, the ARRA-funded program saved over 113,121 MMBtus of energy for Louisiana residents.	
Partners	Louisiana Department of Natural Resources Department of Energy The Shaw Group Builders	Homeowners Commercial building owners Energy auditors Weatherization and electrical contractors
Contacts	Louisiana Department of Natural Resources, HERO Program (877) 319-1368 lahero@shawgrp.com Buddy Justice (225) 342-4498 buddy.justice@la.gov	