

Power to the People: Using Community-Based Approaches to Deliver Efficiency and Sustainability to Hard-to-Reach Populations

Meghan G. Bean and Marjorie McRae, Research Into Action

ABSTRACT

Traditional energy efficiency programs tend to serve a predictable demographic, despite efforts to broaden their reach among program administrators, regulators, and stakeholders. Based on a review of diverse energy efficiency programs from across the United States and abroad, this paper provides evidence that taking a more collaborative, community-based approach to program design and implementation through partnerships with community-based organizations (CBOs), non-governmental organizations (NGOs), and local governments (LGs) can help bridge the gap between efficiency programs and traditionally underserved or hard-to-reach populations.

CBOs, NGOs, and LGs can help programs identify targeted or underserved groups, identify community needs and priorities as they relate to a program's objectives, and serve as trusted program messengers within communities that may not trust traditional program administrators. Further, programs may be able to leverage existing momentum and community interest generated by community groups with similar missions. CBOs, NGOs, and LGs themselves can also benefit from and extend the reach of program funds by combining them with other funding sources and by partnering with one another to share resources. Findings indicate that partnerships with CBOs, NGOs, and LGs are most effective when these community-based partners are able to dedicate resources, such as staff time, to the program and have access to the groups programs most want to reach. Further, program administrators and implementers should be prepared to support community partnerships through training on program elements and by providing clear expectations about roles and responsibilities.

Introduction

Traditional energy efficiency programs are limited in their scope and reach by constraints on program funds, staff time, the behaviors or end-uses eligible for funding, and the customers they can reasonably reach through marketing and outreach efforts. While efficiency programs across the nation expend their budgets year after year—and even face demand that outstrips the available funding—most incentivized equipment and upgrades continue to reach a predictable demographic: upper-middle income, educated urban residents and commercial buildings owned by institutions or larger businesses.

Against this backdrop, some administrators and implementers have begun to overcome barriers inherent to traditional energy efficiency programs by taking a collaborative, community-based approach to program design and implementation by partnering with community-based organizations (CBOs), non-governmental organizations (NGOs), and local governments (LGs). These partnerships can help bridge the gap between efficiency programs and traditionally underserved or hard-to-reach populations.¹ This paper draws from evaluation literature, academic

¹ The foundation of all such community-based efficiency efforts was laid by the 1964 Community Action Program, part of the War on Poverty. The program established Community Action Agencies (CAAs) to coordinate poverty relief programs, including Weatherization. CAAs continue to deliver weatherization upgrades to their communities, funded by primarily by DOE's Weatherization Assistance Program (WAP) and the Low-Income Home Energy

research, and real-world case studies to highlight the opportunities CBOs, NGOs, and LGs may present for energy efficiency programs to expand their depth and reach. We also provide lessons learned for program administrators and implementers interested in taking a more community-oriented approach. Specifically, we discuss how such partnerships provide opportunities for programs to:

- Reach underserved customer groups
- Leverage local grassroots efforts and energy champions
- Extend the reach of energy efficiency funding by combining it with other related missions and funding sources
- Overcome barriers to efficiency, sustainability, and resiliency activity by supporting networked collaboration among communities

This paper also includes real-world success stories and lessons learned from programs across the nation and abroad that have sought to engage CBOs, NGOs, and LGs, including:

- Los Angeles County Better Buildings Neighborhood Program
- North Park Main Street Small Business Energy Makeover Program
- Sustainable Urban Neighborhoods Guided Group Purchases
- RePower Bainbridge Program
- Green and Healthy Homes Initiative
- New York State Energy Research and Development Authority's (NYSERDA's) Agriculture Disaster Energy Efficiency Program
- California's Statewide Energy Efficiency Collaborative
- City Energy Project

Table 1 presents key characteristics of these programs. While the organizations involved in delivering these diverse programs play a broad variety of roles, the table groups them by three primary functions:

- “Initiator” is the organization that launched the program and funded it or provided seed money. In most cases, the initiators are traditional sources, such as utilities, public benefit/ratepayer funded organizations, and US DOE (described in the table as “traditional”).
- “Administrator” is a broader form of program administrator, broadened to include a case study of a collaborative that conducts a variety of initiatives.
- “Partnerships” describes the role of organizations that extend the reach of programs beyond that of the administrator; the case studies in this paper focus on the use of such partnerships.

Assistance Program (LIHEAP), as well as by state, local, and utility funds. Independent of WAP, some utilities also offer low-income programs. For the most part, this paper does not discuss these efforts. DOE recently commissioned a comprehensive, peer-reviewed evaluation of WAP that resulted in a 21-volume study (Tonn et al. 2014) that devotes one volume to CAAs (Tonn, Rose, and Hawkins 2014).

Table 1. Characteristics of Profiled Programs

Program/Initiative	Initiator	Administrator	Partnerships	Sectors Served
Los Angeles County Better Buildings Neighborhood Program	Traditional	LG	CBOs	Residential
Small Business Energy Makeover Program	Traditional	NGO	LG & Traditional	Small business
Sustainable Urban Neighborhoods Guided Group Purchases	NGO	CBO	CBOs & LG	Residential
RePower Bainbridge Program	Traditional	NGO	LG & Traditional	Residential
Green and Healthy Homes Initiative	NGO & Traditional	NGO, CBO, LG*	CBOs, LGs & Traditional	Residential
Agriculture Disaster Energy Efficiency Program	Traditional	Traditional	NGOs & CBOs	Agricultural
Statewide Energy Efficiency Collaborative	Traditional	NGO	NGOs	LG
City Energy Project	NGOs	LGs	NGOs & Traditional	Commercial & LG

* Administrator varies by location

Reaching Underserved Customer Groups

Traditional efficiency program marketing and outreach efforts may fail to reach beyond the typical demographic for a variety of reasons. Messaging may not address the unique needs of a diverse customer base, program implementers may not have a sense of which community members they should target or how to reach those customers, or customers may be unresponsive to program messages due to a lack of trust for or familiarity with the organization offering the program. CBOs, NGOs, and LGs can help utilities and other organizations reach customers and constituents by identifying community needs and priorities, identifying and providing access to targeted groups, and serving as trusted messengers for the program.

CBOs, NGOs, and local or regional agencies may have a better understanding of their constituents' needs than large-scale efficiency program administrators. These organizations can serve as useful program partners by helping tailor messaging, and even program elements, to fit the needs of individual communities. An evaluation of the Better Buildings Neighborhood Program (BBNP)² found that residential upgrade programs that engaged CBOs in their outreach processes reported the benefits of letting CBOs design program messaging to address the needs and priorities of their unique constituents (Research Into Action 2015b). The Silicon Valley

² The Better Buildings Neighborhood Program was an American Recovery and Reinvestment Act-funded program that provided grants to 41 programs across the United States to support efforts to conduct residential and non-residential energy efficiency retrofits. <http://energy.gov/eere/better-buildings-neighborhood-program/better-buildings-neighborhood-program>

Energy Watch Program, a Local Government Partnership³ with Pacific Gas and Electric Company (PG&E), also reported that “a deep understanding of their target populations” helped CBOs engage and develop lasting relationships with constituents through its Community Energy Champions Grant program (Hirshfield and Iyer 2012).

CBOs, NGOs, and LGs can also help administrators determine appropriate program targets and provide access to those targets. For example, CBOs helped BBNP grantees target specific neighborhoods for their outreach and program efforts and found that access to those target groups was a key benefit of CBO partnerships. In addition, an evaluation of the Local Government Partnership program found that LG leaders, like mayors and city council members, increased the reach of commercial retrofit programs by identifying target businesses and municipal buildings (Evergreen Economics and Navigant Consulting 2013; Research Into Action 2015b).

Further, partnerships with organizations embedded in their local communities can help garner constituent trust in programs. The Silicon Valley Energy Watch Program reported that its partner CBOs had “natural trust from communities underserved by other programs” (Hirshfield and Iyer 2012). Further, BBNP grantees reported that CBOs helped them reach underserved constituents due to “their position of trust” within those communities. The involvement or support of elected officials may also increase interest in and the perceived credibility of programs (California Statewide Energy Efficiency Best Practices Coordinator 2012). CBOs’ role as trusted messengers is particularly important for hard-to-reach communities, such as residents whose native language is not English, because these groups may not be aware of or trust utilities or other involved organizations, such as banks (Kan et al. 2013; Madrid and James 2012; Research Into Action 2015b).

The BBNP evaluation found that partnerships with CBOs are most effective when they are *components* of a broader outreach approach and noted that “CBO outreach alone is unlikely to generate sufficient volume to sustain a program.” BBNP grantees learned through experience that CBO success necessitated having the time and resources to reach hard-to-reach populations and that the program administrators needed to “temper [their] expectations for CBO productivity.” Further, the grantees learned that CBOs were most successful when the program administrators provided support to the CBOs throughout the program cycle.

Example: Los Angeles County Better Buildings Neighborhood Program

Los Angeles County, one of the BBNP grantees, sought to get homeowners involved in the Energy Upgrade California program.⁴ The county worked with 103 different CBOs in an effort to reach diverse constituents with its services. These CBOs had a wide range of missions, including “minorities or immigrants, youth, community development, housing, education, art, faith, and the environment” (Research Into Action 2015b). Los Angeles County encouraged CBOs’ outreach efforts by offering an incentive for participant referrals and providing support in the form of program information, technical support, and marketing materials (Cadmus and

³ Through the Local Government Partnership program, California’s four investor-owned utilities support LGs’ efforts to reach the state’s energy goals through partnerships between LGs, their utility or utilities, and third-party technical assistance providers.

⁴ Energy Upgrade California is a state initiative to “motivate and educate California residents and small businesses about energy management concepts, programs and actions that can help them better manage their energy use.” <https://energyupgradeca.org/en/>

Research Into Action 2013). While some CBOs were able to generate substantial interest in the program, the program also experienced some challenges in using CBOs for outreach, particularly when it came to explaining the program's complex structure to constituents. In the end, 19 of the CBOs successfully recruited homeowners into the Energy Upgrade California program (Moran, Dunn and Kan 2014).

Example: North Park Main Street Small Business Energy Makeover Program

Small businesses are often difficult to engage in energy efficiency programs due to the many competing demands on business owners' money and time (EnergySavvy 2016), but existing special business districts can serve as effective outreach partners for commercial and industrial programs because they have established relationships with their constituents (Evergreen Economics and Navigant Consulting 2013). A case study prepared by the California Statewide Energy Efficiency Best Practices Coordinator reported that San Diego's North Park Main Street business district successfully drove small business participation in a commercial retrofit program because the business district "has strong relationships with its members and was able to get the word out quickly and encourage higher participation rates" (California Statewide Energy Efficiency Best Practices Coordinator 2012). North Park Main Street was also able to market the program in a manner that was appealing to its unique neighborhood businesses, such as art galleries.

Example: Sustainable Urban Neighborhood Guided Group Purchases

The Sustainable Urban Neighborhood (SUN) project developed a Guided Group Purchases (GGPs) program, whereby it contracted with a handful of contractors to conduct energy audits and install weatherization measures at fixed prices in a deprived urban neighborhood in Liège, Belgium (Ruelle and Teller 2014). The program was implemented by a CBO, and partnered with a team from the City of Liège and the local Neighborhood Association (a smaller CBO). The GGPs were part of a broader set of actions in the neighborhood, including an energy challenge to raise awareness about energy, encourage household behavior change, and improve the neighborhood's image. The NGO leading the program concluded that the partnering CBOs and LG "all made intensive efforts to engage their respective network of contacts in the neighborhood" and contributed to the success of the program (Ruelle and Teller 2014).

Leveraging Local Grassroots Efforts and "Energy Champions"

While traditional upgrade programs encourage energy efficiency through their use of various advertising campaigns, grassroots movements and local energy champions spur change through individual contacts and relationships. Grassroots efforts have been critical components of change for a number of efficiency initiatives, including community solar (Cadmus 2010) and home energy retrofits (Henschel and Corsetti, 2014; Research Into Action 2015b). Energy champions (individuals who push for the prioritization of efficiency within their LGs or businesses) also serve as key drivers of efficiency activity within both communities and organizations (Evergreen Economics and Navigant Consulting 2013; Navigant Consulting 2010; Seickert, Wickes and Dias 2007).

As discussed above, programs benefit from partnerships with individuals or organizations who can help them understand the needs of their target communities and who can serve as trusted messengers for the program. Grassroots movements and energy champions serve as another potential source of insight into community needs and priorities and have existing relationships with the members of their local communities (Seyfang and Smith 2007). Grassroots volunteers or energy champions may also be able to lend valuable time and resources to a program's efforts within a given target community. For example, an evaluation of the Solarize Southeast Portland program, which began with a grassroots movement among Portland residents, found that the existing volunteer base committed to the cause created a "critical mass of support" and served as a "conduit" for reaching the program's goals (Cadmus 2010).

Multiple evaluations have found that energy champions are particularly important components of community- and LG-focused programs. For example, an evaluation of the Local Government Partnership program found that the "lack of a motivated, results-oriented champion" was a common characteristic among low-performing LGs (Evergreen Economics and Navigant Consulting 2013). Further, a study on effective approaches for increasing communities' energy-saving capacity suggests that, "having a dedicated energy manager or another 'energy champion' to plan and implement energy efficiency projects is essential" (Navigant Consulting 2010).

Example: RePower Bainbridge Program

Bainbridge Island has a community of about 25,000 residents in Washington State's Puget Sound, that, in 2009, faced a dilemma: reduce their energy use or allow Puget Sound Energy to build an electrical substation and additional power lines on the island (Conservation Services Group 2014). Thus began a grassroots effort called RePower Bainbridge that sought to reduce energy consumption through residential efficiency retrofits. RePower Bainbridge received BBNP funding, which enabled the program to increase the scope and reach of its work through the use of a professional program implementer and partnerships with Puget Sound Energy and LG agencies. By capitalizing on the community's dedication to reducing energy use and by leveraging BBNP funds, island residents were able to reduce energy consumption to the degree where new electrical infrastructure was no longer needed to meet the community's needs.

Combining Missions and Funding Sources

CBOs, NGOs, and LGs provide opportunities for implementers to use energy efficiency program funds in conjunction with funding from other sources to increase the breadth or depth of their services. Funding from varied sources enables programs to offer a more diverse mix of services to constituents with complex needs. Miller, Pollack and Williams (2011) found, for example, that pilot programs that addressing diverse community health needs benefited from collaboration between organizations including program implementers, neighborhood associations, and local and national philanthropies. Further, CBOs and NGOs may combine energy efficiency objectives with other, related objectives, such as health and safety, to provide upgrades that address more building components than could have been done cost-effectively through an energy efficiency program alone. An EPA publication also suggests that participating in national programs, such as ENERGY STAR, can help local governments garner community support for energy efficiency projects in water and wastewater facilities (U.S. Environmental Protection Agency 2013).

While efforts to combine funding sources allow for greater reach and flexibility, program administrators should ensure that efforts to support and promote the program are coordinated across stakeholders. As we discuss in the Agriculture Disaster Energy Efficiency Program (ADP) example below, program constituents may be confused if they are exposed to materials or program offerings from different sources. Similarly, program implementers should ensure that program marketing efforts are consistent across stakeholder groups, as market confusion could serve as a barrier to participation.

Example: Green and Healthy Homes Initiative

“Poor conditions in homes and neighborhoods tend to cluster together, compounding the risks for adverse health consequences” (Miller, Pollack and Williams 2011). To address these compounded risks, the Green and Healthy Homes Initiative (the Initiative) provides older homes, especially rentals, with both energy efficiency retrofit services, like insulation, and health-related interventions, such as lead abatement and mold removal. The Initiative is implemented by the Coalition to End Childhood Lead Poisoning, a nonprofit organization that began the Initiative when it received funding from the Council on Foundations and the White House Office of Recovery (<http://www.greenandhealthyhomes.org/about-us/history-and-mission>). The initiative has “braided” funds from diverse sources, including American Recovery and Reinvestment Act funds, federal housing funds, and private donations, among others, which enables it to provide a holistic approach to serving its constituents needs (Miller, Pollack and Williams 2011).

Example: NYSERDA’s Agriculture Disaster Energy Efficiency Program

NYSERDA’s ADP provided farmers with funding to incorporate energy efficiency components into the replacement or repair storm-damaged electric or gas equipment. NYSERDA was one of many organizations that offered disaster assistance to farms damaged by Hurricane Irene and Tropical Storm Lee. While program participants were typically satisfied with the support they received through ADP, an evaluation of the program yielded a number of lessons learned for programs that offer funding designed to be one piece of a larger support effort. First, agency stakeholders recommended that NYSERDA work with other local entities to capitalize on existing infrastructure, coordinate damage assessment activities, and integrate outreach activities. Further, participants reported confusion with the many funding sources available to them, particularly when it came to the various qualification and application processes. “[I was] frustrated because you are dealing with a disaster, but also trying to fill out all these forms,” reported one farmer. To address this issue, NYSERDA partnered with other organizations to provide farmers with a letter describing the specifics of different funding sources. Nonetheless, evaluation participants believed that “a unified program delivery mechanism...would decrease market confusion, and streamline assessment processes and program administration” (Research Into Action 2012).

Encouraging Networked Collaboration

Individual LGs, particularly small, resource-constrained, or rural communities, may lack the funding, staff time, or technical capacity necessary to engage in large-scale efficiency, sustainability, and resiliency planning efforts or projects. Programs that provide resources for

municipalities to partner with one another or with relevant CBOs or NGOs can help communities overcome these barriers by enabling them to:

- Share resources, such as funding and staff time
- Engage in coordinated efforts
- Learn from one another’s experiences and make use of existing infrastructure

An evaluation of the Local Government Partnership program found that limited staff time and limited technical expertise hindered communities’ efforts to conduct California’s Long Term Energy Efficiency Strategic Plan activities (Opinion Dynamics Corporation 2015). Some LGs overcame these barriers by making use of resources available through the third-party organization or government that administered their partnership. In these cases, partnership administrators acted “as an extension of government staff to help to move strategic plan projects forward.” Indeed, one respondent reported, “As a small community with very limited staff resources, [we] would have been unable to complete its Energy Action Plan, or begin implementing it, without the additional services provided by [the administrator]” (Opinion Dynamics Corporation 2015).

Cross-jurisdictional planning efforts or projects require significant financial and time investments from participating communities, which serves as a barrier to resource-constrained or geographically isolated communities. Programs can help provide funding to support municipal staff engagement in such large-scale coordination efforts. NYERDA’s Cleaner, Greener Communities (CGC) Program, for example, provided 10 economic development regions across New York State with funding for regional greenhouse gas inventories and the development of regional sustainability plans. The rural North Country region reported that, “The CGC grant funding provided the opportunity for the North Country to take a comprehensive and consolidated approach to sustainability and resiliency planning which until this grant program has been undertaken in smaller, less focused efforts around the region” (North County Planning Consortium 2013).

Programs that support coordination between communities also enable stakeholders to benefit from the lessons learned and existing infrastructure of other communities, reducing the time and resources individual communities must spend to understand the nuances of funding opportunities, test novel approaches to achieving efficiency goals, or engage in complex sustainability efforts like adopting reach codes or conducting greenhouse gas inventories. Indeed, BBNP grantees reported that one of the most valuable resources made available through the program were workshops and conferences that enabled participants to meet face-to-face and hear about one another’s challenges and accomplishments (Research Into Action 2015a).

Example: California’s Statewide Energy Efficiency Collaborative

California’s IOUs partner with three non-profit organizations (ICLEI – Local Governments for Sustainability,⁵ the Institute for Local Government, and the Local Government

⁵ ICLEI was founded in 1990 by 200 LGs from 43 countries who convened for the first World Congress of Local Governments for a Sustainable Future at the United Nations. Operations started in 1991 in Toronto, Canada, and Freiburg, Germany. ICLEI’s first global initiatives included a program promoting participatory association in 2003, renaming the association ICLEI – Local Governments for Sustainability. <http://www.iclei.org/about/who-is-iclei.html>.

Commission) to offer the Statewide Energy Efficiency Collaborative (SEEC), which seeks to build expertise among LGs by providing resources, technical support, and workshops and by creating a space for LGs to share best practices and lessons learned. An evaluation of the Local Government Partnership program found that SEEC is “critical to disseminate the lessons learned and resources developed by more advanced LGs to those that lack energy expertise and resources” (Evergreen Economics and Navigant Consulting 2013).

Example: City Energy Project

The City Energy Project (CEP) is a national initiative to create healthier and more prosperous American cities by improving the energy efficiency of buildings. CEP is working with 10 major American cities to increase the effectiveness of their existing sustainability plans by offering them a menu of integrated policy and program options, technical assistance, and support developing project financing. CEP helps cities capture energy savings by benchmarking building energy use, setting aggressive targets for municipal buildings, and creating challenge programs to motivate the private sector. CEP encourages the cities to learn from each other and share best practices, based on the philosophy that the cities will attain results that were they to “go-it-alone.” CEP is the joint effort of the National Resources Defense Council (NRDC) and the Institute for Market Transformation (IMT), with support from Bloomberg Philanthropies, Doris Duke Charitable Foundation, and the Kresge Foundation (www.cityenergyproject.org).

Discussion

The diverse programs and partnerships discussed in this paper suggest a number of recommendations for how programs can engage CBOs, NGOs, and LGs in a manner that meets both program needs and the needs and interests of the partnering organizations. Findings indicate that partnerships are most effective when CBO, NGO, or LG partners:

- Are driven by a mission or missions that are consistent with those of the program
- Are stable and are likely to commit to the program for the duration of the partnership
- Are willing and able to devote resources, such as staff time, to supporting the program
- Have access to the groups that programs most want to reach
- Are comfortable with program elements, such as the specific technology or financial approaches utilized, or are willing to be trained on program elements

Program administrators and implementers should also be prepared to support their community partners. This may include hands-on, individualized support of both staff and program participants to ensure that program elements are implemented correctly. Program administrators should also be clear about their expectations for the CBO, NGO, or LG’s role in the program and, where appropriate, invite partners to contribute actively to program design, such as when developing targeted marketing or outreach materials. Finally, administrators should be open to ceasing partnerships that are not meeting the needs of the program or the needs of

partnering institution so that neither group needlessly invests further resources in work that is not driving energy efficiency within the target market.

Conclusions

CBOs, NGOs, and LGs provide valuable opportunities to engage underserved populations in the crucial work of making their communities more efficient, sustainable, and resilient. These organizations offer channels for energy efficiency programs to reach and better serve diverse customer bases, and they can constitute an extension of program staff and provide valuable in-person support. Further, funders can help small, rural, and resource-constrained communities overcome significant barriers to efficiency and sustainability by encouraging and supporting cross-jurisdictional efforts. Program administrators or implementers who want to extend the reach of their programs through community partnerships should seek out organizations that have the resources and connections needed to engage actively in the partnership and, in turn, should plan to invest time, energy, and resources into their partners, providing both support and opportunities for collaboration.

References

Cadmus. 2010. *Evaluation of Energy Trust of Oregon's Solar Programs: Solarize SE Southeast Portland and Solar Energy Review*. Prepared for Energy Trust of Oregon.

Cadmus and Research Into Action. 2013. *Retrofit California Process Evaluation Final Report*. Available by public request to Los Angeles County's Internal Services Department: <http://www.lacounty.gov>.

California Statewide Energy Efficiency Best Practices Coordinator. 2012. "North Park Main Street Small Business Energy Makeover." *Local Government Energy Efficiency Best Practices*. <http://eecoordinator.info/wp-content/uploads/2012/01/NorthPark.pdf>. Accessed March 9, 2016.

Conservation Services Group, Inc. (2014). *Bainbridge Energy Challenge Final Report*. <http://www.osti.gov/scitech/servlets/purl/1120149>. Accessed March 14, 2016.

EnergySavvy. 2016. *The Forgotten Middle: Engaging Small-to-Medium Businesses*. http://assets.cdnma.com/7083/assets/White_Paper_Engaging_SMBs.pdf. White paper accessed March 17, 2016.

Evergreen Economics and Navigant Consulting. 2013. *Program Assessment Study: Local Government Partnership Programs-Final Report*. Prepared for Itron, the California Public Utilities Commission, and the California Investor-Owned Utilities.

Henschel, R. and N. Corsetti. 2014. A Behavior Program for Everyone: Moving Beyond the Opt-out Home Energy Report. *ACEEE Summer Study on Energy Efficiency in Buildings*. 7-124 – 7-132.

Hirshfield, S. and P.J. Iyer. 2012. The Community Energy Champions Grant: Building Local Organizational Capacity to Catalyze Community Energy Behavior Change. *ACEEE Summer Study on Energy Efficiency in Buildings*. 6-105 – 6-120.

Kan, C., A. Lee, L. Dethman, B. Mabee, and K. Thomsen. 2013. *PY2010-2012 Community Language Education and Outreach Process Evaluation Report*. Prepared for Southern California Edison.

Madrid, J. and A. James. 2012. “Power for the People Overcoming Barriers to Energy Efficiency for Low-Income Families.” *Center for American Progress*.

Miller, W. D., C. E. Pollack, and D. R. Williams. 2011. “Healthy Homes and Communities: Putting the Pieces Together.” *American Journal of Preventive Medicine*, 40(1). S48 – S57.

Moran, D., A. Dunn and C. Kan. 2014. “Mining for Community-Based Gold: Striking it Rich in California. *ACEEE Summer Study on Energy Efficiency in Buildings*. 10-209 – 10-221.

Navigant Consulting. 2010. *Local Government Strategic Energy Action Report*. Prepared for the California Public Utilities Commission Energy Division.

North County Planning Consortium. 2013. Our Economy: North County Regional Sustainability Plan. <http://www.nyserda.ny.gov/-/media/Files/About/Statewide-Initiatives/CGC-Plans/North-Country-CGC-Plan-Report.pdf>. Accessed March 18, 2016.

Opinion Dynamics Corporation. 2015. *PY 2013-2014 Local Government Partnership Value and Effectiveness Study Draft Report*. Prepared for the Energy Division of the California Public Utilities Commission.

Research Into Action. 2015a. *Process Evaluation of the Better Buildings Neighborhood Program*. Volume 4. Prepared for the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy.

Research Into Action. 2015b. *Spotlight on Key Program Strategies from the Better Buildings Neighborhood Program*. Volume 6. Prepared for the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy.

Research Into Action. 2012. *Process Evaluation of the Agriculture Disaster Energy Efficiency Program*. Prepared for the New York State Energy Research and Development Authority.

Ruelle, C. and J. Teller. 2014. Guided Group Purchases of Energy Renovation Services and Works in a Deprived Urban Neighborhood. *International Energy Program Evaluation Conference Proceedings*.

Seickert, H.J., G. Wickes, and S. Dias. 2007. Catalyst for Change: Creating an Energy Awareness Culture. *ACEEE Summer Study on Energy Efficiency in Industry*. 6-147 – 6-157.

Seyfang, G. and A. Smith. 2007. Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics*, 16(4). 584 – 603.

Tonn, B., D. Carroll, S. Pigg, M. Blasnick, G. Dalhoff, J. Berger, E. Rose, B. Hawkins, J. Eisenberg, F. Ucar, I. Bensch, and C. Cowan. 2014. *Weatherization Works – Summary of Findings from the Retrospective Evaluation of the U.S. Department of Energy’s Weatherization Assistance Program* (ORNL/TM-2014/338).

Tonn, B., E. Rose, and B. Hawkins. 2014. *Weatherization Beyond the Numbers: Case Studies of Fifteen High-Performing Weatherization Agencies – Conducted May 2011 through July 2012* (ORNL/TM-2014/317).

U.S. Environmental Protection Agency. 2013. Local Government Climate and Energy Strategy Guides: Energy Efficiency in Water and Wastewater Facilities. <https://www.epa.gov/sites/production/files/2015-08/documents/wastewater-guide.pdf>. Accessed May 23, 2016.