

# Contractor Engagement & Workforce Development – Overview

## Description

### Key Resources

- [DOE Guidelines for Home Energy Professionals](#) include standard specifications for quality work, critical tasks and core competencies for effective training programs, and a framework for professional certifications. The website includes job task analyses that describe the tasks and skills needed for specific jobs, information about accredited training programs, downloadable training modules, and other resources.
- [DOE Building America Solution Center](#) provides home performance professionals with building science resources, integrated energy efficiency tools, case studies, and best practices designed to dramatically reduce energy use in new and existing homes. This website includes expert information on hundreds of high-performance design and construction topics, including air sealing and insulation, HVAC components, windows, indoor air quality, and more.
- [Home Performance with ENERGY STAR Sponsor Guide and Reference Manual \(v1.5\)](#) provides relevant, easily accessible guidance for program administrators to plan, develop, and implement local HPwES programs. The guide includes minimum requirements, recommended approaches, and resources relevant to contractors, as well as templates, checklists, and other tools.
- [Better Building Residential Program Implementation Plan Template - Contractor Engagement & Workforce Development](#) will help you develop a strategy for planning, implementing, and evaluating your workforce activities.

Successful residential energy efficiency programs depend on strong relationships with contractors. Contractors employ home performance professionals who implement energy efficiency measures in homes. These contractors are the face of your program, and are critical partners in your success.

Recognize contractors' critical role and deliberately approach workforce development to maximize your program's impact. Benefits of effective contractor relationships, contractor support, and workforce development efforts include:

- Contractors that actively engage in your program and help meet your shared goals
- Efficient lead generation and sales efforts by contractors in line with their ability to deliver quality installations
- High conversion rates that reflect higher homeowner participation in your program
- High quality of home performance services provided to homeowners
- Homeowner confidence that they will see real energy savings and comfort improvements, due to effective quality assurance and communications
- Growth potential for contractors expanding in or entering the home performance market
- Good job opportunities for local, qualified home performance professionals.

Recruiting, developing, and maintaining enough contractors to work with your program requires ongoing effort. You should engage in a range of contractor coordination and support activities, such as setting quality standards for installed measures, training to address gaps in technical and business skills, and adjusting program procedures based on contractor feedback. Some programs also seek to develop a local workforce through training and employment efforts.

This handbook provides an overview of the Contractor Engagement & Workforce Development aspects of your program. The handbooks in this component provide guidance on a range of topics to meet your specific program goals and needs related to effectively working with contractors to deliver energy efficiency services and to enhancing the local home performance workforce. These topics include:

- [Learning about the contractors and training providers in your local market](#), including contractors working in HVAC, insulation, air sealing, and other trades that could offer home energy upgrade services
- [Designing procedures and standards for contractor participation](#) and [quality assurance](#) to support efficient program-contractor interactions and delivery of high-quality work

- [Developing workforce development plans](#) to train local technicians and help them find employment as home performance professionals
- [Supporting contractor participation and implementing workforce development plans](#) to ensure smooth and effective delivery of program services
- [Rewarding excellence and improving poor performance](#) to lead your program towards ever greater success

These handbooks provide more detail on designing and implementing a cohesive and balanced residential energy efficiency program.

- [Market Position & Business Model – Overview](#)

*Identify your organization's preferred market position by assessing existing market actors, gaps, competitors, and potential partners. Develop a business model that will allow you to deliver energy efficiency services.*

- [Program Design & Customer Experience – Overview](#)

*Design a residential energy efficiency program that integrates marketing and outreach, contractor coordination, incentives, financing, and program evaluation to provide customers with the products and services they want through a customer-centric process.*

- [Evaluation & Data Collection – Overview](#)

*Develop evidence-based insights into your program's performance through third-party process and impact evaluations. Learn how to develop effective data collection strategies and timely evaluations to identify important program achievements as well as opportunities for making program improvements.*

- [Marketing & Outreach – Overview](#)

*Spur consumer demand for your program's services by understanding your target audience and motivating them to act using effective messaging, marketing and outreach tactics, and attractive program offers.*

- [Financing – Overview](#)

*Ensure that your program's customers will have access to affordable financing, so they can pay for the services you offer.*

## Stages

The following are important stages for successful program administrators to follow when implementing Contractor Engagement & Workforce Development activities; however, no two programs are the same, and program administrators need to take into account the unique aspects of their market to create the most effective approach possible. Select each stage to access its handbook.

1. **[Assess the Market](#)**  
*Learn about the capabilities and services of existing contractors and training providers working in your market.*
2. **[Set Goals & Objectives](#)**  
*Establish objectives, targets, and timeframes for your program to support local contractors and the type and quality of service they provide to help meet your program's goals.*
3. **[Identify Partners](#)**  
*Establish relationships with contractors who will deliver program products and services, and with organizations that train and certify workers.*
4. **[Make Design Decisions](#)**  
*Solidify your program strategy and decide which customers you will focus on; what products, services, and support you will provide; and how you will partner with contractors and others to deliver services to your customers.*
5. **[Develop Implementation Plans](#)**  
*Develop contractor engagement, quality assurance, and workforce development plans that include strategies, workflow, timelines, and staff and partner roles and responsibilities.*
6. **[Develop Evaluation Plans](#)**  
*Determine processes for collecting and sharing data about key contractor metrics and workforce development activities.*
7. **[Develop Resources](#)**  
*Develop workforce and contractor engagement procedures, forms, and materials.*
8. **[Deliver Program](#)**  
*Implement contractor coordination and workforce recruitment and training in concert with other program components.*
9. **[Assess & Improve Processes](#)**  
*Monitor the effectiveness of workforce development efforts, motivate improvement, address low performers, and adapt on a regular basis.*
10. **[Communicate Impacts](#)**  
*Communicate program results to contractor partners and workforce development stakeholders.*

## Tips for Success

In recent years, hundreds of communities have been working to promote home energy upgrades through programs such as the Better Buildings Neighborhood Program, Home Performance with ENERGY STAR, utility-sponsored programs, and others. The following tips present the top lessons these programs want to share related to this handbook. This list is not exhaustive.

### Maintain a sufficient workforce from program launch into program maturity

Your program will rely on its contractor base in order to succeed, so take steps to ensure that the capacity of the workforce is sufficient to launch your program and to maintain it as it grows. An [evaluation](#) of over 140 programs found that successful programs fostered and maintained relationships with a large pool of contractors. Many Better Buildings Neighborhood Program partners took the time to learn about contractors' businesses and align program promotions with those needs. Focus on expanding contractors' businesses and avoid interrupting or complicating a sale. Also, remember that it is important not to take contractors' leads to their competitors, as can occur when programs pool all leads and distribute them on a rotating basis. Contractors are protective of leads they generated themselves, so this can become a disincentive for contractors to participate in your program.

If you understand contractors' business processes and align promotions during contractors' periods of greater availability, you can help ensure that your program will retain a reliable workforce into the future. One way that you can attract the contractors you need is to design your program in a way that will benefit contractors. Take steps to ensure that contractors want to work with your program, and to reduce barriers to their ability to do so.

- [Enhabit](#), formerly Clean Energy Works Oregon, created a system to help ensure that the program did not interfere with competition among contractors, or cause contractors' leads to be given to their competitors. Initially, the program pooled all leads and referred them to contractors on a rotating basis, assigning them to the next contractor in line. This led to some contractors' leads being given to other contractors. The program later improved that process by assigning a code to each contractor, and when a contractor generated a lead, the customer would use the appropriate code. In that way, Enhabit would be able to assign the work to the appropriate contractor.
- [Seattle's Community Power Works](#) coordinated with contractors before launching marketing initiatives that were going to drive a spike in demand. Contractors could then prepare in advance for the increase in customer interest, and the program was able to establish required timelines for contractors to follow, to ensure that new customers received an evaluation in a timely manner.

### Design a program that provides value for contractors and considers their seasonal business cycles

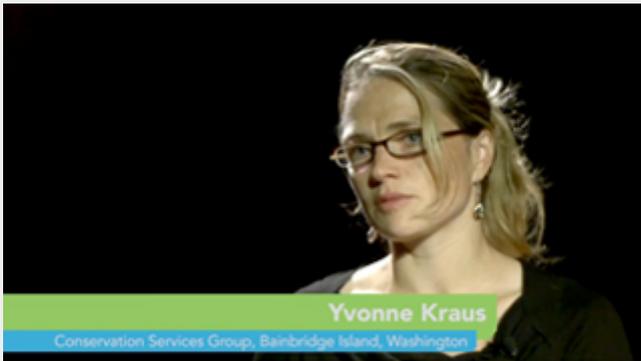
Many residential energy efficiency programs run into challenges maintaining an appropriately sized, well-trained workforce from program launch through maturity, as well as through the fluctuating demand of the seasons of the year. Some programs found that their contractors preferred a smooth annual workload in order to avoid layoffs during the slow off-season months, while others found that they benefited from seasonal fluctuations in demand. By understanding your contractors' schedules and capacity, you can schedule campaigns to generate demand for their services when they want it and pursue innovative strategies to help them manage their workload accordingly. Coordinate with your contractors to identify their needs and preferences and explore ways that you can help drive demand or increase the number of available professionals.

- [Austin Energy](#) acquired an extensive understanding of the existing contractor workforce and gathered key insights into local contractors' schedules and capacity. Austin's hot weather keeps contractors busy dealing with home cooling issues during the warm months of the year. Austin Energy purposely launched its Best Offer Ever promotion in fall 2010 to take advantage of contractor availability and provide more work during otherwise slow contracting months. This approach increased the likelihood that upgrades would be completed in a timely manner, while also helping Austin-area contractors avoid seasonal layoffs.
- [NeighborWorks of Western Vermont](#) realized that fluctuating seasonal demand for home energy efficiency upgrades posed challenges for contractors. Contractors were reluctant to hire additional technicians during peak season because they knew that demand would ebb in the spring and summer. The result was a backlog of projects. The program created a pool of temporary employees to help contractors in need of home performance professionals, including small contractors. This approach helped participating contractors weather the changing demand for home performance upgrades by offering them the flexibility to grow and shrink their workforce as needed. Many contractors expressed enthusiasm for the temporary employee pool, and the extra staffing helped reduce the number of backlogged projects throughout the community.

## Establish collaborative partnerships with contractors and communicate with them early and often

Contractors are more likely to serve as program champions when the program engages with them throughout program design, delivery, and improvement. Your contractors are the primary contact points with your customers, and the quality of their interactions and services strongly influences how customers view your program. Many Better Buildings Neighborhood Program partners found that gathering contractor input during the program's planning phase helped ensure that the program would create value for contractors as well as for customers. The programs built personal relationships with contractors by demonstrating interest in their business concerns and needs. Indeed, an [evaluation](#) of over 140 programs across the United States found that programs were more successful when they fostered relationships with their contractors and communicated frequently with them.

### [In Their Own Words: Engage with Contractors From Day One](#)



Source: [In Their Own Words: Engage with Contractors From Day One](#), U.S. Department of Energy, 2012.

By communicating regularly (e.g., via a monthly breakfast meeting, other outreach events) with a core group of contractors, programs were able to better monitor program implementation and receive suggestions for improvement. These programs elicited feedback from contractors about how customers perceived program offerings, as well as input about what was working and what was not for both contractors and customers. Some programs surveyed contractors to collect a regular stream of information about how program implementation was going and to get feedback before rolling out new offers or program design changes.

- [NeighborWorks of Western Vermont](#) maintained steady lines of communication with its network of contractors to help ensure that barriers to getting work done in a timely manner were identified early and that solutions were collaborative. The program held monthly one-on-one meetings with each contractor to review client status and progress and to identify any problems and potential training opportunities. The program also organized bimonthly group contractors meetings focused specifically on sharing new techniques or products. NeighborWorks used regular contractor communications, performance feedback, and contractor incentives and competitions to help contractors improve their assessment-to-upgrade conversion rates. By engaging contractors and including them from the start on any proposed program revisions or promotions, NeighborWorks was able to improve program delivery.
- [Enhabit](#), formerly Clean Energy Works Oregon, program is charged with saving energy and supporting clean economic growth. Much of its success has come from engaging contractors in a continual learning and improvement process. Enhabit solicits feedback from contractors at meetings every two weeks and uses this feedback to guide improvements. With support from the Energy Trust of Oregon, a few contractors collaborated to create the [Home Performance Contractors Guild of Oregon](#), which enables contractors to organize their opinions into a unified voice and have a more formal role in program and regional policy discussions. When Enhabit engaged a new financing partner, the program asked the Guild to examine the loan product and approval process. Input from the Guild helped ensure that the product was something that contractors would be able to explain and promote to customers.
- In Washington State, the [Repower Kitsap](#) program started in a region where the home improvement market was fragmented and under-developed. Contractors were initially wary of one another, tended to work only in their specialty, and often did not have working relationships with one another. The program established monthly brown bag meetings to discuss program goals and requirements and to gather contractor input on the program. The monthly meetings helped contractors get to know and trust one another and develop productive working relationships. Many contractors even shared leads with other contractors who specialized in the types of projects they could not or did not want to handle.

- The [Long Island Green Homes](#) program began consulting with contractors during program design and continued to do so as the program launched and began full service operations. The program established contact with a core group of contractors it trusted, meeting with them regularly to review program status and direction. In particular, the program made it a priority to engage with contractors when rolling out program changes, asking them about their needs, concerns, and current state of business. In this way, the program ensured that program offerings were adding value for the home performance industry and that program requirements were manageable for contractors. For more information on the Long Island Green Homes' launch and other pilot programs, visit the [October 2011 Better Buildings Residential Network Peer Exchange Call Summary](#).

## Contractors are your sales team – educate and empower them with the skills to sell home energy upgrades

Many home performance programs have confronted the challenge of how to reach out to more customers and to improve conversion rates of customer interest into completed upgrades. Realizing that the contractor is a primary face-to-face link between customers and the program, some Better Buildings Neighborhood Program partners took steps to empower contractors to market program services through co-marketing and sales training. A comprehensive [evaluation](#) of over 140 programs across the United States found that successful programs have contractors who are skilled at helping customers understand the benefits of home energy improvements. Because contractors are often the main point of contact with participants, contractors must be trained to persuade homeowners to move forward with potentially costly projects.

Some programs were able to empower contractors by co-marketing and co-branding with them to reach new homeowners. Co-marketing can help both contractors and programs; a cooperative advertising model allows programs to share the costs to develop and distribute marketing materials. Co-marketing helps programs leverage contractor resources to increase their market presence, and extends contractors' ability to market themselves even if they have limited resources.

### In Their Own Words: Empower Contractors by Building Sales and Business Skills



Source: [In Their Own Words: Empower Contractors by Building Sales and Business Skills](#), U.S. Department of Energy, 2012.

Programs have found that offering sales training to home performance professionals can significantly boost sales and improve customer experience and conversion rates. During sales training, technicians can learn about the program's upgrade process, how to sell it using non-technical communications with customers, and other techniques for transforming assessments into upgrades. Programs saw benefits from offering free or reduced-cost sales training as a partnership benefit for contractors. Taking the resources to offer this training to contractor staff helped programs ensure that technicians understood and could promote program benefits, rebates, and other incentives available to customers. For many programs, contractor sales training resulted in more effective sales approaches, increased rates of conversion from assessment to upgrade, and increased revenues for contractor businesses.

- [Efficiency Maine](#) boosted conversion rates with [sales training](#), which helped contractors communicate with customers more effectively. Through monthly webinars and professional development courses, the program has helped contractors improve their skills in targeted communication and selling program options, thereby increasing home energy upgrade conversions. After conducting a two-day sales training course for contractors, coinciding with additional homeowner incentives and a filing deadline, Efficiency Maine's average monthly rate of energy upgrade conversions increased from 10% before the training to 60% a few months afterward.

- [Energy Upgrade California in Los Angeles County](#) provided marketing materials and sales training to contractors. Having learned that contractors often do not have the time or experience to create marketing tools, the program developed an online resource center with customizable marketing kits for contractors. Frequent networking events for contractors also provided training on specific aspects of marketing. Because contractors had limited budgets, Energy Upgrade California established an online, on-demand print center that contractors can use to print and deliver program marketing materials. The marketing materials raised the visibility of home performance professionals, helped homeowners find qualified contractors, and ensured a consistent message about the program.
- Connecticut's [Neighbor to Neighbor Energy Challenge](#) found that contractors frequently have limited marketing capabilities to sell upgrades. The program hired energy advisers to help contractors move customers through the process from assessment to upgrade. Analysis showed that contractors valued the energy advisers and other program staff who provided small business support and development assistance. This support and assistance included sales training, sales process development, data management, and data analyses. These analyses included a scorecard and online dashboard showing how leads had progressed through the pipeline, contractors' rates for assessment completion and their upgrade rate, and contractors' marketing activity. Contractors benefited from the marketing tools to support home energy upgrades. The program also found value in requiring participating contractors to agree to a whole home performance orientation and well-defined sales process, as conditions to their participation in the program. The Neighbor to Neighbor Energy Challenge found that their upgrade rates improved after implementing these tools and tactics.

## Connect home performance professionals to trainings focused on the skills that employers want and the community needs

Effective home performance contractors require many types of skills and expertise. To help individuals develop those skills, programs can target training on the specific topics and skills needed for successful home performance work. Many Better Buildings Neighborhood Program partners found that they could cost-effectively increase their contractors' access to training by engaging with expert partners to provide training, mentoring, and apprenticeship opportunities. A comprehensive [evaluation](#) of over 140 programs across the United States found that the more successful programs offered multiple training opportunities to contractors, either by delivering training or engaging partners to deliver training. By providing access to training, programs saw enhanced assessment quality, more effective sales approaches, increased rates of conversion from assessment to upgrade, more comprehensive upgrades, more effective and efficient installation processes, improved quality control, and increased revenues for contractors.

Training alone does not create jobs in the community, but you can increase the relevance of your training by using contractor input to select training topics. Several Better Buildings Neighborhood Program partners found that asking contractors what topics would be valuable also helped the program build an engaged and capable workforce. By providing access to the specific training that contractors want, programs can increase their chances of success by ensuring that they have a strong pool of contractors with a deep understanding of building sciences and the ability to install or subcontract a variety of energy-saving measures.

Some programs found success in working with education and training providers, such as community colleges, universities, and weatherization training centers, to offer valuable and appropriate training to their contractors. Apprenticeships, which can be a bridge between classroom training and being hired by contractors, helped some programs ensure that students acquired the skills that employers want. These programs also found that accredited, on-the-job training can be a relevant, less expensive, and more motivating supplement to classroom training.

- [Community Power Works](#) in Seattle piloted a new training approach to meet contractor needs and the requirements of the city's high-road workforce agreement. The program's original training programs relied on an outdated model of training, failed to prepare technicians properly to be hired, and lacked adequate mentorship and job-finding support for training graduates. The new approach included partnering with South Seattle Community College and the nonprofit Northwest EcoBuilding Guild, which offered classes and workshops, as well as participation by contractors to gather their feedback on training options. Training was available to both entry-level and experienced home performance professionals, and contractors were given the flexibility to hire first and train second (e.g., hire a technician who is not fully trained or certified but can begin or is in the process of completing certifications). In this way, the contractor could select from a wider pool of candidates and then provide supplemental training to those who need it. The training was fully subsidized by the program. By establishing these ongoing collaborative partnerships with contractors, Community Power Works helped to ensure that it has a robust workforce of trained professionals for the future. As a result of these partnerships, about 40 training graduates have worked around 23,000 hours on Community Power Works projects between April 2011 and December 2013.
- [Philadelphia's Energy Coordinating Agency](#) collaborated with the Community College of Philadelphia to design an apprenticeship program for energy efficiency and building science. Two one-year programs—"Building Energy Analyst" and "Weatherization Installer and Technician"—led to journeyman credentials and BPI certification. These programs trained home performance professionals with the technical building science skills they needed, while also providing hands-on experience with energy efficiency analysis and installation of energy efficiency measures. Program trainees helped residents save an average of 20% to 30% on utility bills through weatherization and energy conservation services.

- [Austin Energy](#) emphasized making its contractor training locally relevant. The program encouraged trainers to highlight issues that were particularly applicable to the local climate and housing stock, and to focus on regionally-appropriate amendments to energy code. For example, basements are uncommon in Austin houses, so training should avoid seeming out of touch and refrain from discussing basement upgrades. The program also learned that trainers should allow time for participating contractors to raise issues and questions that are specific to their geographic area and most pertinent to the local community in which they work.
- [EnergyWorks Kansas City's](#) program implementer, Metropolitan Energy Center (MEC), provided training and mentoring for home energy professionals, including training for BPI certification. Training courses included residential and commercial energy assessment, healthy homes, and deconstruction. One training session focused specifically on small and women-owned businesses. To follow up on the training, MEC instituted a mentored practicum experience in which each student was required to complete a full complement of diagnostic tests with the instructor in a dummy house. EnergyWorks Kansas City and MEC also worked with seasoned contractors to provide mentoring to newer contractors in the program. From 2011 to 2014, 90 individuals participated in MEC's introductory home performance training program. The training and mentoring program allowed new technicians to enter the home performance market: from 2009 to 2014, the number of certified residential auditors in Kansas City increased from six to over fifty, almost all of whom have received training from MEC.

## Have clear rules and systems for identifying and remedying contractor problems

Even with the best contractor partners, a program may sometimes encounter difficulties that require remediation. Consistent with Home Performance with ENERGY STAR program principles, many Better Buildings Neighborhood Program partners discovered that they could address these difficulties by establishing contractor requirements to set standards for quality work, a transparent remediation process, and measures for dismissing underperforming contractors. They found that the key is to make contractor requirements clear from the beginning of your program. Contractor participation agreements and codes of conduct for interactions with customers can help ensure understanding of standards and provide a rule of thumb for when issues needed to be addressed. Not all contractors are equally skilled or customer-service oriented. These programs learned that, in order to preserve their reputation, they needed to be able to confidently recommend any contractor on their list. It is important to apply corrective actions as needed in response to problems and deficiencies, as well as a procedure to respond to serious or recurring problems such as probation or dismissal from the program. By setting the bar high and dismissing contractors that failed to meet program requirements, these programs helped ensure consistent, quality customer service.

- [Efficiency Maine](#) developed a [Contractor Code of Conduct](#) that contractors sign, stating that they will respect the homeowner's property, minimize disruption to the homeowner, and leave the home in as good or better condition as it was found. It lists 15 things that contractors will and will not do relating to communications, onsite behavior, and work practices. To assure quality in the program, a minimum of 15% of upgrade projects are subject to random and/or targeted onsite inspections, covering the pre-installation, installation, and post-installation phases. [Efficiency Maine's Program Manual](#) outlines clear procedures that program staff will follow in the event that the inspections reveal errors, omissions, or inconsistencies. The manual also outlines procedures for removing a contractor from the program's registered vendor list for repeated failure to correct deficiencies.
- [Omaha and Lincoln, Nebraska's reEnergize Program](#) furnished its contractors with an Energy Upgrade Contractor Protocol and General Scope of Work, which governs contractor work processes and customer interactions. This protocol was intended to serve as a supplement to contractors' technical training. It provided rules that contractors were required to follow to achieve customer satisfaction throughout the upgrade process and also outlined basic safety requirements. Topics covered everything from how to greet the customer to cleanup steps once the upgrade was completed. The protocol was an important tool for ensuring that all homeowners had a pleasant experience with the program through their interactions with contractors. It helped the program achieve over 1,300 residential energy upgrades over a 3 year period that included program launch.
- The [Southeast Energy Efficiency Alliance](#) Better Buildings Chapel Hill WISE program in North Carolina discovered that even though contractors might have met the required program criteria and had qualifying credentials, the quality of their work and their understanding of building science varied substantially. To address these issues, Chapel Hill engaged an external training partner that worked with contractors on the quality of their work and the implementation of quality control mechanisms to improve future work. The program developed and implemented a contractor probationary and debarment policy and corrective action plan. Under that plan, contractors were subject to a [corrective process](#) that included a preliminary review of concerns, probation, specific requirements to return to the pre-qualified list after probation, and dismissal from the program. This policy helped the program systematically approach the issue of alerting contractors whose work fell short of the program's quality standards, and to dismiss contractors who were unable to improve the quality and consistency of their work.

## Examples

The following resources are examples from individual residential energy efficiency programs, which include case studies, program presentations and reports, and program materials. The U.S. Department of Energy does not endorse these materials.

### Case Studies

#### [A Business Case for Home Performance Contracting \(9 MB\)](#)

Author: Pacific Northwest National Laboratory

Publication Date: 2012

This report contains information on the market for home performance upgrades and the opportunities that exist for new home performance contractors; start-up needs and costs for firms entering the home performance contracting industry; home performance business approaches; and how established home performance contractors attract customers. It also contains detailed profiles of eight successful home performance firms across the United States.

#### [Home Performance with ENERGY STAR Contractor Stories](#)

Author: U.S. Department of Energy

These case studies highlight examples of participating contractors who have employed Home Performance with ENERGY STAR to help homeowners improve their home's comfort and lower their utility bills.

#### [LaborWorks@NeighborWorks of Western Vermont Focus Series \(385 KB\)](#)

Author: U.S. Department of Energy

Publication Date: 2012

LaborWorks@NeighborWorks is a nonprofit temporary labor pool developed by NeighborWorks of Western Vermont (NWWVT) to assist professional contractors involved with the NeighborWorks Home Energy Assistance Team (HEAT). In the first of this Focus Series, DOE interviews Melanie Paskevich, HEAT Squad coordinator, to get details on why NeighborWorks set up the temporary labor pool, how workers are recruited, and lessons learned for other programs to consider.

#### [NYSERDA Home Performance Case Studies](#)

Author: New York State Energy Research and Development Authority

Publication Date: 2013

Links to case studies of residential projects and contractors under the New York State Energy Research and Development Authority (NYSERDA)'s Home Performance with ENERGY STAR program.

#### [Spotlight on Austin, Texas: Let Your Contractor Be Your Guide for Big Rewards \(445 KB\)](#)

Author: U.S. Department of Energy

Publication Date: 2011

This case study discusses strategies that Austin Energy, a municipally owned utility, used to collaborate closely with building contractors to launch a new Best Offer Ever promotion quickly and effectively.

#### [Spotlight on Fayette County, Pennsylvania: Developing the Skills and Tools for Workforce Success \(412 KB\)](#)

Author: U.S. Department of Energy

Publication Date: 2012

This case study discusses strategies that Fayette County, Pennsylvania used to provide Building Performance Institute (BPI) certification and business skills training to aspiring energy efficiency contractors.

#### [Spotlight on Maine: Contractor Sales Training Boosts Energy Upgrade Conversions \(411 KB\)](#)

Author: U.S. Department of Energy

Publication Date: 2012

This case study explains how Maine provided contractor sales training to boost upgrade conversions.

#### [Spotlight on Portland, Oregon: Making the Program Work for Contractors \(536 KB\)](#)

Author: U.S. Department of Energy

Publication Date: 2011

As a program charged with saving energy and supporting economic growth, Clean Energy Works Oregon (now Enhabit) balances contractors' work priorities with the program's need to enforce quality standards, track results, and ensure good customer service. This case study discusses Clean Energy Works Oregon's (now Enhabit's) strategies for actively engaging contractors to make the program successful.

## Program Presentations & Reports

### [Building the Workforce for Energy Efficiency Programs](#) (116 KB)

Author: Steve Morgan, Clean Energy Solutions, Inc.

Publication Date: 2010

Courtesy of Clean Energy Solutions. This presentation provides an overview of topics related to building the workforce for energy efficiency programs, including market characterization, stakeholder engagement, training and certification, and community workforce agreements. It includes information on the experience of Clean Energy Works Oregon (now Enhabit) in Portland, Oregon.

### [Community Power Works Better Buildings Conference Presentation](#)

Author: Andrea Petzel, Community Power Works

Publication Date: 2012

This presentation discusses the new approach to training that Seattle's Community Power Works program is using to support its high-road workforce agreement.

### [Contractors as Clients: Data Collection Made "Easy"](#)

Author: Cynthia Adams, Local Energy Alliance Program

Publication Date: 2011

This presentation provides an overview of the process and tools the Local Energy Alliance Program (LEAP) of Charlottesville, Virginia uses to collect and report customer and contractor data on projects.

### [Energy Efficiency Workforce Development in Maryland](#) (447 KB)

Author: Lauren Swiston, Maryland Energy Administration

Publication Date: 2010

This presentation discusses workforce development experiences with residential energy efficiency programs in Maryland, including early successes, work with moderate-income populations, partnerships with utilities and colleges, challenges, and lessons learned.

## Program Materials

### [Efficiency Maine Contractor Code of Conduct](#) (55 KB)

Author: Efficiency Maine

Publication Date: 2012

Efficiency Maine created a code of conduct for contractors to follow when working in homes. The code is available for download on the Efficiency Maine website, and dictates guidelines for respecting homeowners' property and communicating with the homeowner about appropriate information. Users on the Efficiency Maine website can search a list of vendors that have agreed to follow the code.

### [Local Energy Alliance Program Home Performance with ENERGY STAR Contractor Participation Agreement](#) (198 KB)

Author: Local Energy Alliance Program

Publication Date: 2013

This is a contractor participation agreement used by the Local Energy Alliance Program in Charlottesville, Virginia.

### [Community Workforce Agreement Between the City of Milwaukee and the Wisconsin Energy Conservation Corporation](#) (110 KB)

Author: City of Milwaukee, Wisconsin; Wisconsin Energy Conservation Corporation

Publication Date: 2010

This is a community workforce agreement between the City of Milwaukee and the Wisconsin Energy Conservation Corporation.

### [RePower Weatherization Specifications Manual](#)

Author: RePower Kitsap

Publication Date: 2013

RePower in Bainbridge Island and Bremerton, Washington developed this manual as a set of rules and requirements for acceptable materials and installation procedures for energy efficiency measures installed in existing homes.

### [Strengthening the Workforce in Better Buildings Neighborhoods Video](#)

Author: U.S. Department of Energy

Publication Date: 2012

This video shows how Better Buildings Neighborhood Program partners are training and expanding their local contractor workforce and supporting professional jobs in communities across the country.

## Toolbox

The following resources are available to help design, implement, and evaluate possible activities related to this handbook. These resources include templates and forms, as well as tools and calculators. The U.S. Department of Energy does not endorse these materials.

### Templates & Forms

#### [Better Building Residential Program Implementation Plan Template - Contractor Engagement & Workforce Development](#) (2 MB)

Author: U.S. Department of Energy

Publication Date: 2015

The Contractor Engagement & Workforce Development Implementation Plan Template will help you develop a strategy for planning, operating, and evaluating your workforce activities.

### Tools & Calculators

#### [DOE Building America Solution Center](#)

Author: U.S. Department of Energy

Publication Date: 2013

An interactive website that provides residential building professionals with access to expert information on hundreds of high-performance design and construction topics, including air sealing and insulation, HVAC components, windows, indoor air quality, and much more.

#### [Green for All Energy Efficiency Toolkit](#)

Author: Green For All

Publication Date: 2012

This practitioner-focused Toolkit for Residential Energy Efficiency Upgrade Programs was created by Green For All to assist new, established, and future energy efficiency programs launch and scale initiatives that can deliver the full promise of the green economy. It is intended as a practical resource that offers examples, tools, and templates that a program manager can deploy to implement a variety of aspects of their program including best practice briefs and summary documents, RFPs, contracts, and other program design and implementation templates that communities nationwide have used to create their own efficiency programs.

## Topical Resources

The following resources provide additional topical information related to this handbook, which include presentations, publications, and webcasts. Visit [Examples](#) for materials from and about individual programs.

### Topical Presentations

#### [Building Science Academy Best Practices for Sales Support](#)

Author: Sam Flanery; Building Science Academy  
Publication Date: 2012

This presentation describes the qualities and skills of successful home performance sales people.

#### [The Contractor-Participation-Inducing Home Performance Program Design Recipe Part 1](#)

Author: Mike Rogers; OmStout Consulting; LLC  
Publication Date: 2012

Presentation summarizing the important elements needed to induce and sustain contractor participation in home performance programs.

#### [Five Steps to a Profitable Contractor Base](#)

Author: Courtney Moriarta; SRA International; Inc.; Emily Levin; Vermont Energy Investment Corporation; Tiger Adolf; Building Performance Institute; Brad Geyer; Fayette County Better Buildings Initiative; Sammy Chu; Suffolk County Department of Labor; Sam Flanery; Building Science Academy  
Publication Date: 2012

Presentation on five steps to building a profitable contractor base. The steps include sensible program design and administration, certification and credentialing, communicating with contractors, contractor requirements (business vs. trade), and training and sales support.

#### [Residential Contracting Business Boot Camp](#)

Author: Mike Rogers; OmStout Consulting; LLC  
Publication Date: 2013

This presentation provides guidance to contractors on business fundamentals, marketing and lead generation, successful consultative selling and closing, and measuring and improving performance.

#### [Listening to Your Workforce: Lessons From Pilot Programs and Other Approaches For Workforce Feedback](#)

Author: U.S. Department of Energy  
Publication Date: 2011

This peer exchange call summary focused on creating a dialogue between contractors, trainers and jobseekers about program design/implementation and results of workforce feedback.

### Publications

#### [Better Buildings Neighborhood Program Business Models Guide](#)

Author: U.S. Department of Energy  
Publication Date: 2012

This report serves as a resource for program administrators and building contractors who are or may be interested in starting or expanding their services into the residential energy efficiency market.

#### [Building Retrofit Industry and Market \(BRIM\) Market Research Scan](#)

Author: Innovation Network for Communities (Prepared for the Rockefeller Foundation)  
Publication Date: 2011

This research report and slides provide a detailed segmentation of the building energy upgrade market and summarize market research on each segment. Market segments include single-family homes, multi-family homes, and several types of commercial and institutional buildings.

#### [Contractor Blueprint: Getting from HVAC to Home Performance](#)

Author: California Center for Sustainable Energy; Home Performance Resource Center  
Publication Date: 2012

This guide shows HVAC contractors how to get started in the home improvement market. It explains the approach of treating a house like a system and provides step-by-step instructions on setting up a home performance contracting business.

### [DOE Guidelines for Home Energy Professionals](#)

Author: U.S. Department of Energy

Publication Date: 2012

Guidelines for home performance professionals for quality work, effective training, and professional accreditation.

### [DOE Weatherization Assistance Program Technical Assistance Center Website](#)

Author: U.S. Department of Energy

Publication Date: 2013

This website for DOE's Weatherization Assistance Program provides a virtual library of rules, regulations, policies, and procedures for helping low-income families reduce energy costs.

### [Energy Island: A Guide to Creating Your Island Energy Challenge \(26 MB\)](#)

Author: RePower Bainbridge; Conservation Services Group; U.S. Department of Energy

Publication Date: 2014

This guide is designed to serve as a "how-to" reference for island communities (or small, similarly sized, more isolated communities) that want to develop and implement a residential energy-efficiency and conservation program. The purpose of this guide is to help communities chart a course for successful program development based on the lessons learned during implementation and operation of RePower Bainbridge, an energy-efficiency program on Bainbridge Island, Washington.

### [Green For All Minimum Standards for Residential Energy Efficiency Contractors \(104 KB\)](#)

Author: Green For All

This checklist of minimum standards for residential energy efficiency contractors draws from several existing high-performing energy efficiency programs.

### [Home Performance Program Design Recap](#)

Author: Mike Rogers, OmStout Consulting, LLC

Publication Date: 2013

This blog post summarizes key elements of program design that relate to encouraging contractor participation and facilitating contractor and program success.

### [Home Performance with ENERGY STAR Sponsor Guide and Reference Manual \(v1.5\)](#)

Author: U.S. Department of Energy

Publication Date: 2014

The Sponsor Guide was designed to assist with developing an implementation plan for a Home Performance with ENERGY STAR program. It covers key elements of the plan, including the scope and objectives of the program and the policies and procedures that will ensure its success. The Sponsor Guide is divided into seven sections, each covering a specific requirement of the HPwES Program: Use and Management of the Home Performance with ENERGY STAR Mark, Program Design and Development, Workforce Development and Support, The Assessment, Project Installation, Quality Assurance, Tracking and Reporting.

### [New York State Energy Research and Development Authority \(NYSERDA\) Home Performance with ENERGY STAR Contractor Manual](#)

Author: New York State Energy Research and Development Authority

Publication Date: Revised 2015

The New York State Energy Research and Development Authority (NYSERDA) developed this manual for use by contractors participating in their New York Home Performance with ENERGY STAR (HPwES) program. The manual is intended to help contractors understand and navigate the HPwES program. It provides important information about HPwES program rules, opportunities, incentives, and forms. The manual is an example of a comprehensive contractor handbook in which programs will find many useful examples of forms, procedures, and other resources.

### [Reactions to the Residential Retrofit Roundtable Recommendations](#)

Author: Richard Faesy and Chris Kramer, Energy Futures Group (Prepared for the Energy Foundation)

Publication Date: 2013

This report explores the approaches and research needs identified in the Building Retrofit Industry and Market (BRIM) Initiative through in-depth discussion with residential energy upgrade experts including a discussion of Marketing & Outreach and the program/contractor interface.

## **Strategy Guideline: Transitioning HVAC Companies to Whole House Performance Contractors**

Author: U.S. Department of Energy

Publication Date: 2012

This guide discusses the findings of research in moving existing companies, with a focus on HVAC, to deliver more comprehensive energy saving upgrade services. It also helps the industry understand the business processes and strategies for transitioning to such an approach.

## **Webcasts**

### **Concierge Programs for Contractors - They're Not Just for Consumers Anymore**

**Presentation** (1 MB)

Author: Jonathan Cohen, U.S. Department of Energy; Ryan Clemmer, Clean Energy Works Oregon (now Enhabit); Melanie Paskevich, NeighborWorks; Jay Karwoski, ICF International

Publication Date: 2012

This webcast includes slides and information on programs' use of concierge programs to support contractors. It highlights two program examples: Clean Energy Works Oregon (now Enhabit) and Vermont NeighborWorks.

## Quick Links

### [View All Contractor Engagement & Workforce Development Content](#)

The following list provides access to resources with more information on these key topics. Selecting a key topic will return a list of resources related to that topic. If you have suggestions for additional key topics, [please tell us](#).

- **Business Models for Providing Energy Efficiency Services**  
*Every organization or business has a particular set of motivations and revenue generating opportunities that comprise their business model. Typical business models for providing energy efficiency products and services have been documented for utility and non-utility program administrators, remodelers, HVAC (heating, ventilation, and air conditioning) contractors, home performance contractors, home inspectors, utilities, energy service companies, retailers, and others.*
- **Contractor Business and Sales Training**  
*Business operations and sales training can help contractors generate leads, convert them to upgrades, and use processes that ensure quality in their work while promoting customer satisfaction. Training may cover budget planning, marketing, sales, customer service, scheduling, project management, and quality assurance.*
- **Customer Engagement**  
*Customer engagement tactics aim to form a relationship between a customer and a program or contractor to increase the likelihood that the customer will participate fully in the program. From pledges (which provide contractor leads and engage potential customers without requiring a full commitment from them) to testimonials (which encourage homeowners to share their upgrade experience with others), engaging customers in multiple ways can help increase program successes.*
- **Data Exchange Specifications**  
*Data exchange specifications help facilitate the transfer of data between software systems used by a program and its partners or stakeholders. A standard specification for transferring data reduces the need to develop a data transfer protocol each time two systems need to transfer information. One emerging example for transferring data collected during an in-home assessment to a program's software system is home performance XML (HPXML).*
- **Deep Energy Upgrades**  
*Deep energy upgrades aim to save at least 50% total energy use in homes. Work scopes are based on whole building assessments that review all building systems together. In addition to focusing on reducing energy use, deep energy upgrades often also address issues such as moisture control and ventilation which may be affected by upgrade measures.*
- **Energy Advisors**  
*Energy advisors are typically program staff who help customers understand, manage, and successfully navigate the home energy assessment and upgrade processes. Customer services can range from providing independent technical advice to serving as the customer's primary point of contact for all program services. A program's decision to use energy advisors varies by community needs and program resources.*
- **Estimated Energy Savings**  
*To predict energy savings program administrators select among different approaches (e.g., modeled savings, deemed savings, hybrid methods) that use information about the quantity and type of building improvements and engineering estimates of expected energy savings. Energy savings estimates may differ from actual energy use because of weather, home size, number of occupants, occupant behavior, installation quality, or other factors.*
- **Modeled Energy Savings**  
*Energy modeling, or simulation, is the practice of using software to model the energy performance of a home or its systems. Modeling is typically used by contractors or programs to estimate the energy savings that a customer could expect from completing various energy efficiency improvements.*
- **Non-Financial Incentives**  
*Non-financial incentives can entice potential or current customers into taking a prescribed action or changing their behavior at low cost to the offeror. Examples include public recognition, prizes, awards, and other tactics.*
- **Pilot Projects**  
*Many programs run pilot projects to gain direct experience in their markets, while testing and refining program design before full-scale launch.*
- **Policies and Regulations Impacting Energy Efficiency Programs**  
*Public, private, and non-profit organizations often seek to work in partnership with investor-owned and municipal utilities to provide energy efficiency services. Utilities may already be offering energy efficiency services that other organizations can enhance or promote, and utilities typically have access to energy consumption data that helps track program success.*
- **Process Flow Diagrams**  
*Process flow diagrams illustrate key steps, decision points, and interaction points between programs, contractors, and partners from home energy upgrade project inception to completion. They are an important tool for ensuring effective coordination at critical points in the assessment and upgrade process, and identifying opportunities to streamline program processes.*

- **Program Dashboards**

*A tracking tool for programs, dashboards summarize critical metrics for monitoring progress toward meeting program goals, objectives, and efficient program processes. For many programs, they are an important tool for assessing and improving programs over time and communicating results to partners and stakeholders.*

- **Quality Assurance**

*Quality assurance ensures quality work that meets agreed upon standards through systems established by programs, contractors, and/or other partners. Strategies range from requiring certification of contractors, through processes to ensure the technical quality of installed improvements, to soliciting customer feedback once projects have been fully completed. Quality assurance protects homeowners by providing an independent review of work performed by contractors to ensure that it meets program standards. Quality assurance also protects the reputation of a program.*

- **Requests for Proposals**

*A request for proposal (RFP) is often necessary to engage the services of a program implementation partner or third party evaluator. An RFP should have a well-defined scope of work and clear description of how proposals will be evaluated.*

- **Technical Standards**

*Standards define the minimum requirements of home energy upgrades to ensure that the work performed is effective, durable, and safe. Specifying standards helps program administrators meet objectives with minimal confusion among contractors. Standards can include quality installation practices and minimum equipment efficiencies. These requirements should form the basis of training and quality assurance.*

- **Technician and Company Standards**

*Technician standards encompass training, certification, experience, and conduct requirements for home performance professionals. These standards may be combined with company-level requirements such as accreditation, warranties, and dispute resolution policies.*

- **Working with Utilities**

*Public, private, and non-profit organizations often seek to work in partnership with investor-owned and municipal utilities to provide energy efficiency services. Utilities may already be offering energy efficiency services that other organizations can enhance or promote, and utilities typically have access to energy consumption data that helps track program success.*

