**American Recovery and Reinvestment Act (ARRA)**

**Grantees Guide to Insulation Programs and Partnerships**

**INSULATION** is an important common element in the ARRA’s effort to improve energy efficiency in America’s homes, businesses, institutions and public buildings. This guide provides ARRA grantees information on program and partnership approaches they can launch and manage directly, or augment in partnership with other program sponsors.

Insulation upgrades are one of the most common measures needed to solve the energy efficiency problems in our homes and businesses. This guide outlines two of the most commonly-used program models for home energy retrofits—Home Performance with Energy Star, and a simpler home energy audit and retrofit program approach.

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**program option 1**

**Home Performance with Energy Star (HPwES)** – This program model motivates homeowners to use highly skilled home energy analysts and contractors that offer a whole-house approach for reducing energy use. These contractors provide comprehensive energy audits for qualified homeowners and provide incentives from the program sponsor (often either rebates and/or low-interest loans) for qualifying energy efficiency projects. Typical projects might include: insulation, duct sealing and repair, high-efficiency HVAC systems, windows, lighting, and appliances. Energy analysts and contractors may focus their business model on specific services (e.g., just providing audits, or also providing installation of the efficiency improvements). However, to be certified under the Home Performance label they are required to adhere to strict training, engineering, reporting, quality assurance, and other requirements set forth by the EPA, DOE, and the program sponsor.

**Establishing a HPwES program requires some basic infrastructure:**

- A process for recruiting and screening qualified contractors to participate in the program
- A process for training, certifying, and monitoring the performance of contractors
- A standardized process for conducting the audit and calculating and reporting energy savings to the homeowner and to the program
- A process for marketing the program to homeowners
- A process for disbursing incentives
- A process for ensuring that work performed and contractor business practices meet the quality standards of the program
- A system for tracking and accounting for program results
- A process for conducting EM&V
- Customer support, including a call center and a program Web site
Depending on the size of the program, HPwES requires at least 2-4 full-time employees. At a minimum, the program requires one manager, one part-time staff member for conducting contractor trainings (typically available from existing consultants), and one staff member for providing contractor mentoring and verifying projects. Initial phases of the program may require an additional 2-3 staff for a period of 6 months to perform start-up activities. As the program grows over time the need for additional technical staff for quality assurance purposes and administrative staff for processing jobs and incentives will increase.

Initial roll-out of the program (typically the first 6 months) involves recruitment of 3-5 contractors, who have or can quickly attain the appropriate certifications from the program. While implementation models vary, it might be expected that by the end of the first program year, approximately 15 certified contractors will be needed (experience suggests that approximately one third of contractors will be very active, a third moderately active, and a third relatively inactive) for each million dollars of program budget. However, this assumption is sensitive to the scale of individual contracting organizations and the size of the market.

EPA estimates that in addition to the direct jobs associated with implementing the program, additional jobs are created for contractors and others through the incremental equipment, supplies, and installation induced by the program, as well as through economic effects resulting from homeowner spending of those dollars that would otherwise go toward utility bills. In total, it is estimated that approximately 18 to 25 jobs will result per million dollars spent by the program.
program option 2

Simplified Home Audit/Retrofit Programs – Some states and utilities have opted to pursue a somewhat simpler program approach to home retrofits. While many aspects of the program look like HPwES, the simpler approach does not use instrumented diagnostics, does not require specific training and accreditation of providers, and does not require as comprehensive a treatment approach. Easing these requirements can reduce the cost and administrative complexity of the program, and make it more attractive to trade allies and customers. In the ARRA federal stimulus environment where speed and scale are important, the simplified audit and retrofit approach offers the advantage of being easier to launch and to scale up.

HOW STATE ENERGY OFFICES CAN WORK WITH THE INSULATION INDUSTRY ON HOME AUDIT/RETROFIT PROGRAMS:

- Private sector can provide additional contractors via partner networks
- Industry can help promote simple retrofit programs in concert with program sponsors via additional media, retailer promotions, other approaches
- Some companies may be able to loan staff with expertise in home efficiency technologies, training, certification, quality control, etc.

This program model requires many of the same basics as HPwES:

- Recruiting and screening qualified contractors to participate in the program (though much simpler process)
- Training and monitoring the performance of contractors (much more limited training and no special certification)
- Standardized process for conducting audits and reporting energy savings
- Marketing the program to homeowners
- Process for disbursing incentives
- Ensuring that work performed and contractor business practices meet the quality standards of the program (much simpler than HPwES)
- A system for tracking and accounting for program results
- Other administrative and management support

For more information, please contact NAIMA at (703) 684-0084 or visit our Web site at www.naima.org.