



Home Energy Upgrades Project Update



**Tribal Community
Development National
Workshop**

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**Weatherization and
Intergovernmental
Program**

Program Update: Overview

1. What Is the Weatherization Assistance Program?

- The Program Mission
- The Program Numbers
- The Program Structure

2. New Initiatives: Updates

- Job Task Analyses and Certification
- The Program Building Blocks
- Accrediting Training Programs
- Worker Certification
- Standard Work Specifications
- The Training Platform
- Performance-based Testing

3. Getting Involved

WAP: The Mission

Program Mission

To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, and children, while ensuring their health and safety.

Why weatherize?

Low-income households typically spend 17% of their total income in energy vs. 4% for other households

Low-income families often choose between heat and other necessities

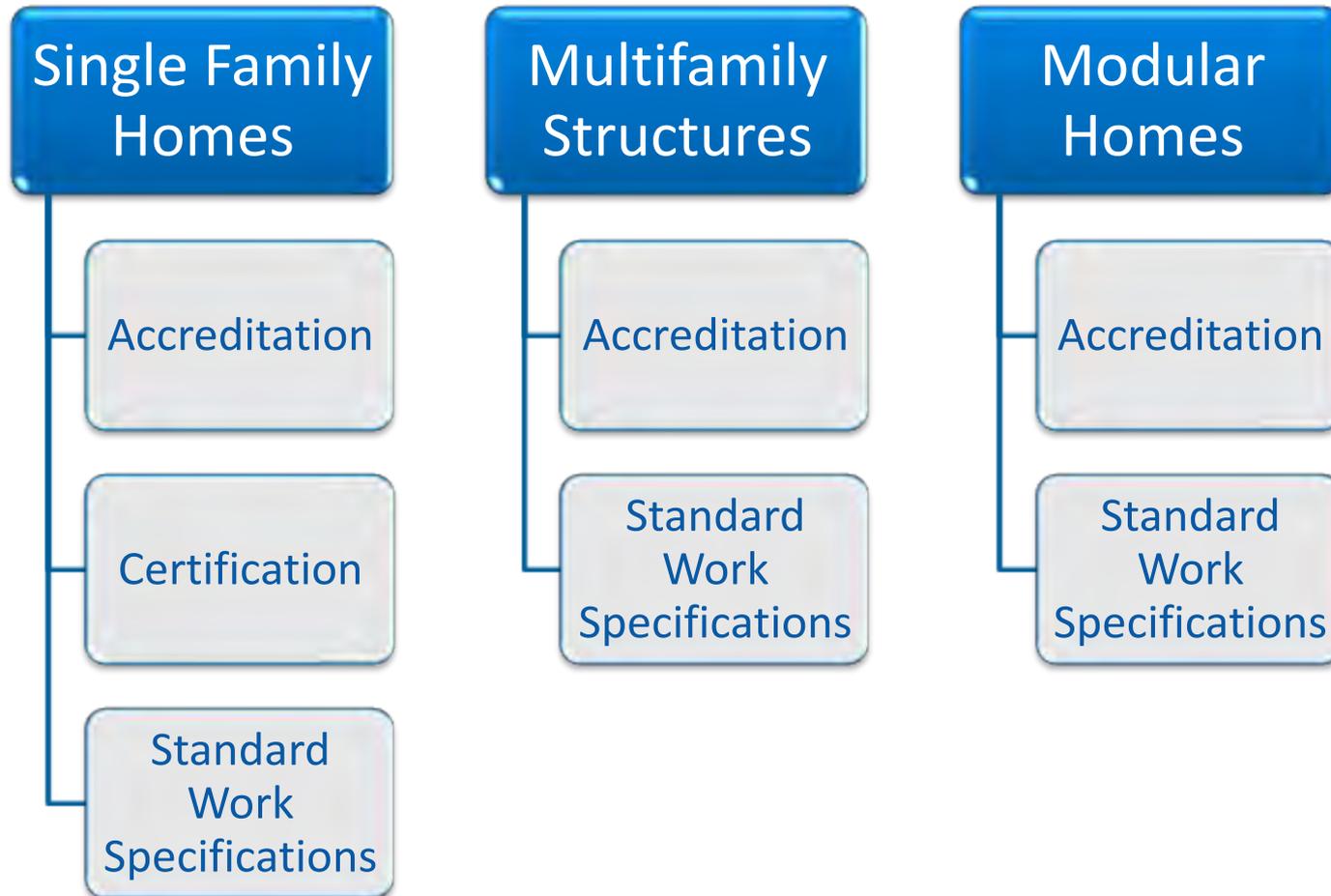
Weatherization increases energy efficiency of the home

Home Energy Upgrades: The Numbers

- The 2009 Recovery Act Goal: weatherize **600,000 homes**.
- Production milestones
 - End 2009 (July-December) – **37,000 homes weatherized**
 - August 2010 – **200,000 homes weatherized**
 - April 2011 – **377,000 homes weatherized**
- **25,000 homes** are being weatherized a month.
- The program employs more than **15,000 workers** nationwide.
- Weatherization assistance results in a **35% reduction** in energy consumption for low-income families. On average, this saves families more than **\$400** on their heating/cooling bills in the first year alone.

Home Energy Upgrades: The Structure

Workforce Guidelines for Home Energy Upgrades



Home Energy Upgrades: Job Task Analyses and Certification



Energy Auditor

- Professional conduct ; Establish client relations ; Represent program or organization
- Collecting data energy consumption, building history
- Testing the building ; health and safety
- Evaluating audit data ; math skills



Crew Leader

- Safe work practice skills
- Federal, State, and Local codes
- General knowledge, skills and abilities ; building science, materials and techniques



Retrofit Installer

- Safety
- Preparing for the job ; tools and materials on site
- Prepare and maintain job site



Quality Control Inspector

- Conducting quality checks
- Ensuring worker professionalism
- Ensuring program or project compliance

Home Energy Upgrades: The Program Building Blocks

Accreditation

- Is given to the **training program** (Weatherization Training Center or other qualified program)
- Verifies that the training program meets a standard in both its operations as well as facilities

Certification

- Is given to individuals (**workers**)
- Certifies that an individual has the knowledge, skills, and abilities to perform a certain job
- Is issued by an independent third party
- Tests out on capabilities

Standard Work Specifications

- Are followed by individuals (**workers**)
- Provide the minimum requirements for high-quality work
- Describe the necessary conditions to achieve desired outcomes for each energy upgrade measure

Home Energy Upgrades: Accreditation

Challenges:

1. The proliferation of training and certificate programs for WAP and the Home Performance workforce (industry, labor, government, educational institutions, NGOs)
2. Major infusion of federal and state training dollars with no standards.
3. No objective, third-party measure of training program effectiveness.
4. No uniform way for workers seeking training to assess the quality of the program or provider.

Overcoming barriers:

1. Uses ISPQ International Standard 01022 for consistent accreditation.
2. IREC will use the *Workforce Guidelines JTAs and KSAs* as the foundation for accreditation.
3. Voluntary, third-party assessment of training provider quality.

* *Other Accreditations may also be recognized.*

Benefit from Accreditation

- **Workers:** Develop necessary skills in reputable, proven training programs
- **Industry:** Consistent, quality training for workers across different programs/regions
- **Training Providers:** Marketable baseline for offering industry curriculum

Home Energy Upgrades: Certification

Challenges:

1. The many different credentials and certifications are not always transferable across programs and geographies.
2. Competencies (JTAs and KSAs) used for certifications are all different, and have different levels of effectiveness.
3. Certification exams do not effectively address field capabilities.
4. Many credentials are too expensive and are not always available in all locations.

Overcoming barriers:

1. Consistent, program-based certification will be transferable and applicable across the entire United States.
2. As the foundation for accreditation, the *Workforce Guidelines JTAs and KSAs* will ensure consistent work quality and effectiveness.
3. Certification exams are proportionately based on essential knowledge, skills and abilities.
4. Certification testing will be more universally available.

Benefit from Certification

- **Workers:** Certification provides for worker mobility and career ladder opportunities
- **Homeowners:** Certified workers give homeowners more confidence in work quality/ effectiveness
- **Industry:** Fosters job creation
- **Training Providers:** Metrics of workers who successfully complete training programs

Home Energy Upgrades: Standard Work Specifications

Challenges:

1. There is no comprehensive set of technical standards, work protocols, field guides, and best practices covering the range of whole-house energy upgrade interventions.
2. The WAP community, home performance industry, consumers, financiers, manufacturers, and retrofit program administrators all want consistent national standards.
3. There has not been consistent federal leadership and industry partnership.

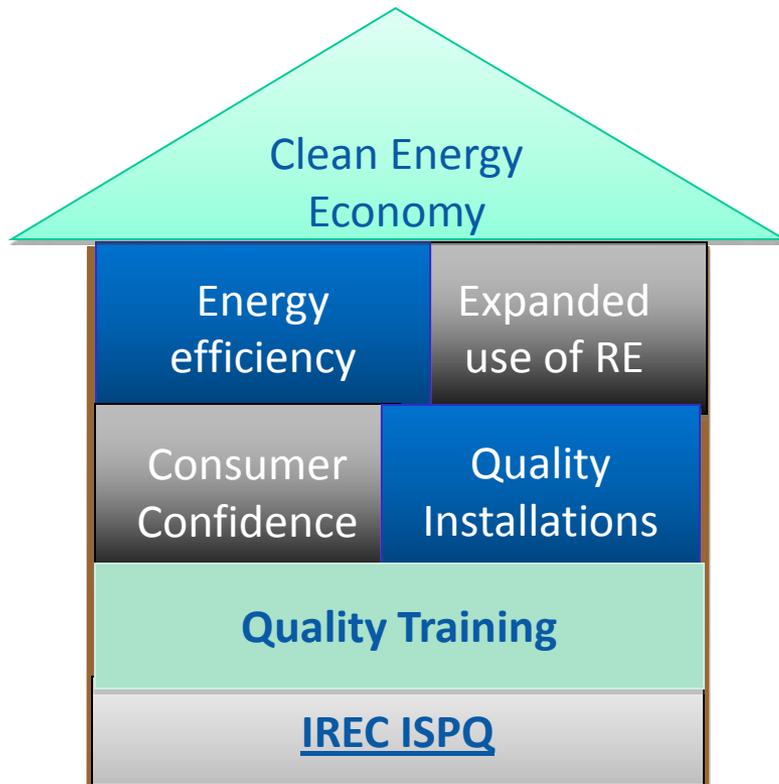
Overcoming barriers:

1. The guidelines are based on the minimum requirements and conditions required to achieve a high quality energy efficiency upgrade measure.
2. The Standard Work Specifications are based on existing technical standards, and are outcome driven, not prescriptive.
3. DOE collaborated with national laboratories and leaders in the home performance industry to develop the SWS.

Benefit from Standard Work Specifications

- **Workers:** Clear rubrics for achieving necessary, recommended health, safety, and energy efficiency measures
- **Homeowners:** Consistent health/safety/energy efficiency measures
- **Industry:** Strong, effective standards improve industry reputation for reliability
- **Training Providers:** A baseline for consistent, up-to-date curriculum

Home Energy Upgrades: Training Platform



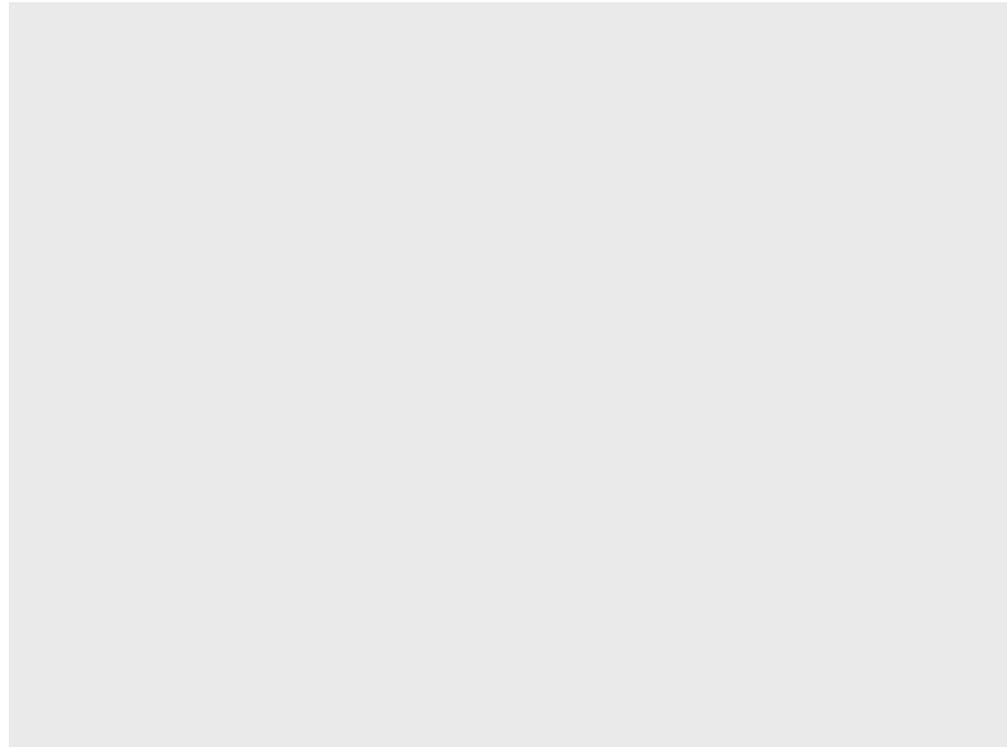
A well-trained workforce with the skills to perform competently on the job:

Protects the consumer

Protects our investment

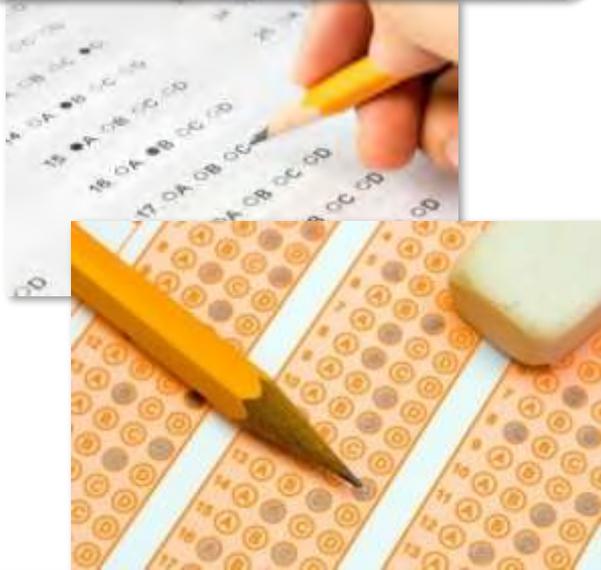
Sets the stage for achieving real results

Home Energy Upgrades: Training Platform



Home Energy Upgrades: Performance-Based Testing

Trading this....



Leaky, recessed light fixtures can cause:

- Electrical problems
- Ice dams
- Furnace malfunction
- All of the above
- Poor light quality

Submit Answers

For meaningful, performance-based assessment

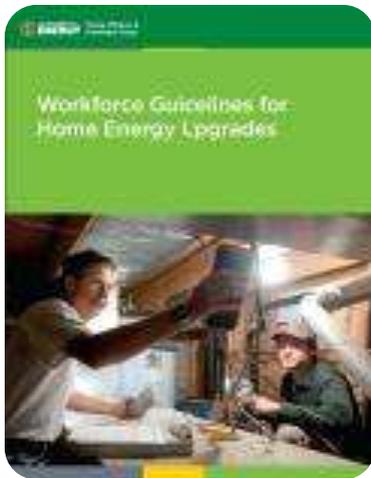


“Correctly install the proper type of wall joint to complete the structure.”

Home Energy Upgrades: Getting Involved

Two Pathways to Get Started:

1. Start your own Weatherization Agency.
2. Partner with the Closest WX sub-grantee.



To Coordinate with the Effort:

1. Review the Wx Training Center Map.
2. Visit the WAPTAC website to review the standardized curriculum.

NOTE: In Sept. 2011, There will be a new training module for Program Administrators (the basics of running a Wx program).

3. Align your new program to the Standard Work Specifications.

Home Energy Upgrades: Resources

WAP Training Centers

<http://waptac.org/WAP-Training-Centers/WAP-Network-Verified.aspx>

Standardized Curriculum

<http://waptac.org/Training-Tools/WAP-Standardized-Curricula.aspx>

EERE WAP Program

<http://www1.eere.energy.gov/wip/wap.html>

Home Energy Upgrades

http://www1.eere.energy.gov/wip/retrofit_guidelines.html