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

WEATHERIZATION ASSISTANCE PROGRAM

A weatherization crew member blows dense pack insulation into the attic and wall cavities of a client's home.
Photo from Simonson Management Services

Saving Money by Saving Energy

The U.S. Department of Energy (DOE) saves low-income families money by making energy efficiency upgrades to their homes, while ensuring their health and safety. Through the Weatherization Assistance Program (WAP), DOE makes home energy upgrades in about 100,000 low-income homes each year. The $5 billion investment in WAP through the 2009 Recovery Act bolstered DOE's efforts. As a result DOE expects to weatherize nearly 600,000 additional homes over a three year period.

- For every $1 invested, the WAP returns $2.51 in benefits, including $1.80 in savings on energy bills.
- Non-energy benefits to ratepayers, households, and communities comprise the remaining returns.

Eligible Households

More than 38 million households are eligible for weatherization assistance services nationally.

- Any household at or below 200% of poverty is considered eligible for the WAP.
- Just under half of all eligible households are good candidates for the program's services. Some eligible households may require services that are outside the program's energy efficiency work scope and need to be referred for additional rehabilitation prior to receiving weatherization services.

Helping Low-Income Americans

The program alleviates the heavy cost burden that energy levies on low-income households and helps them become more self-sufficient.

- Household energy use comprises 22% of total energy consumption in the United States. Americans spend more than $230 billion each year on home energy, with low-income households spending a disproportionate share on energy bills.
- In 2010, low-income families served by the program saved a total of $2.1 billion in energy and other related expenditures.
- In 2010, low-income homes spent on average 14.4% of their total annual income on residential energy costs, compared with 3.3% for other households.
- On average, low-income families spend about $1,800 annually on energy bills. The program's energy upgrades save families an average of $437 annually in heating and cooling costs, with additional energy and cost savings from lighting and appliance upgrades. That means families have more money for other necessities, such as food, groceries, medicine, clothing and other essentials.
- After weatherization services, the typical low-income home saves an average of 35% on energy consumption.
- Home energy upgrades continue to save money and energy every year after they are made.
- Weatherizing low-income homes improves health and safety by eliminating energy-related hazards.

Uplifting Communities

The Weatherization Assistance Program:

- Helps revitalize communities by spurring economic growth and protecting the environment.
- Has served more than 6.9 million homes and leveraged funding since 1976.
- Provides tens of thousands of direct jobs and indirect employment nationwide.
- Keeps more money in the community.
- Makes homes more affordable; this reduces homelessness and frequent forced mobility, while lowering demand for public assistance.
- Decreases pollution from dirty energy generation, which in turn improves local air quality and decreases adverse health effects, particularly asthma.
- Protects the environment by reducing national residential and power plant emissions of carbon dioxide (CO2), by 2.65 metric ton/year per home.
- Saves the nation an equivalent of 24.1 million barrels of oil annually.
- Saves 53 metric tons of CO2 emissions per house over 20 years, which is equivalent to taking 13 passenger cars off the road for a year.

Weatherization technicians use the blower door test to diagnose air leakage problems in a home. *Photo from New River Center for Energy Research and Training*

Serving Low-Income Families

Professionally trained weatherization crews use computerized assessments and advanced diagnostic equipment, such as a blower doors, manometers, furnace efficiency testing devices and infrared cameras to determine the most cost-effective measures appropriate for each home.

- Typical measures may include installing insulation, sealing ducts, tuning and repairing heating and cooling systems, select base load measures and mitigating air infiltration.
- Weatherization crews also perform health and safety tests that may include assessing heating units and appliances for combustion safety, carbon monoxide, and gas leaks; assessing moisture damage; checking electrical system safety; replacing unsafe heating and cooling systems; and installing smoke and carbon monoxide detectors.

A weatherization crew trainer demonstrates the correct way to adjust a protective mask. *Photo from North Central West Virginia Community Action Association*

History

The Weatherization Assistance Program provides funding to all 50 states, the District of Columbia, and some Native American Tribes through formula grants. As of Program Year 2009, funding has been allocated to the five U.S. territories—American Samoa, Guam, Northern Mariana Islands, Puerto Rico and the Virgin Islands. Once DOE awards grants, Grantees contract with more than 1,000 subgrantees nationwide. Typical subgrantees include community action agencies, other non-profits, and local governments, who deliver services to low-income families using either direct hire crews or private contractors.

Over the last 10 years, Congress has funded the WAP at an average of approximately $235 million each year. The 2009 Recovery and Reinvestment Act provided an additional $5 billion in funding.

Many Grantees leverage additional funding sources, such as utility programs, property owner contributions, state revenues, and rehabilitation grants. Money received from the program covers training and technical assistance and administrative needs of the agency. By leveraging additional dollars, the state and local programs increase the services delivered to a home or the number of homes served.

Learn More

weatherization.energy.gov

Sources: ORNL/TM-2010/66, EIA February 2010 Short Term Energy Outlook

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