

## Weatherization is a Winning Play for Wisconsin

For devoted fans, part of the thrill of watching the Green Bay Packers play at Lambeau Field is suffering through the winter weather. While temperatures on the field can drop well below zero and blinding snow cuts visibility, the Packers consider these conditions a competitive edge. Spectators endure the legendary cold, knowing a warm home awaits at the end of the game. For low-income families, however, a warm home is luxury that many cannot afford. To address this situation, Wisconsin partners with the U.S. Department of Energy (DOE) to deliver the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes even more unmanageable when energy prices soar or winter temperatures plummet. Low-income families often have to cut back on other necessities to pay their energy bills. Weatherization measures reduce home energy consumption, which provides a permanent boost to the household's budget.

### TECHNOLOGY RAISES THE SCORE

Lambeau Field was constructed in 1968 and is showing signs of age. A redevelopment effort has been launched to modernize the stadium, while preserving its unique look. The plan highlights the use of new technologies to improve the safety and efficiency of the original structure. Similarly, the Weatherization Program continues to evolve and integrate new technologies and techniques to achieve greater energy savings and safeguard client health and safety. Wisconsin's Department of Administration operates the Weatherization Program and a network of 22 local agencies delivers energy efficiency services to eligible residents in every county.

#### NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000

#### WISCONSIN

Homes weatherized in 1999 (with DOE \$)	3,566
DOE funding in 1999	\$5 million
Clients served in 1999	1,550
Elderly	25%
People with disabilities	23%

Wisconsin crews use a computerized energy audit to determine the most cost-effective measures for each home. Additional diagnostic tools, like a blower door, manometer, and infrared camera, are used to detect air infiltration, pressure imbalances, and duct leaks. Weatherization crews also test heating units and appliances for gas leaks and carbon monoxide, an odorless, colorless gas that can be deadly in large quantities. Typical weatherization services include installing insulation; sealing ducts; repairing and tuning heat systems; and mitigating heat loss through windows, doors, and other infiltration points. Clients are also educated on the proper use and maintenance of the installed measures.

**A TEAM VICTORY**

Creative partnerships are an effective way to enhance Weatherization Program capabilities. Often, these partnerships provide additional funding to weatherize more houses. In 1999, Wisconsin weatherized an additional 1,933 homes with leveraged funding. Creative partnerships also provide opportunities to participate in pilot projects and to explore new energy efficiency and safety measures.

Weatherization partnered with the Wisconsin Energy Bureau and the Energy Center of Wisconsin to implement the Simple Solar pilot project. Simple Solar sought to prove that renewable energy was a practical solution for low-income families. Local weatherization agencies installed passive solar works, like solar warm air collectors and a sun space, into homes as supplemental heating sources. After tracking several years of data, Simple Solar proved to be an effective energy source for homes by decreasing energy consumption and reducing energy bills.

Wisconsin partnered with the U.S. Department of Housing and Urban Development (HUD) to address the serious issue of lead poisoning. Weatherization used HUD funding in low-income homes with children to treat exterior surfaces and replace deteriorated windows to reduce lead dust. Crews used lead-safe practices to clean the interior and exterior windows. After cleaning, these surfaces were re-glazed and painted. Severely damaged window surfaces were replaced. After the homes were treated, studies showed that lead dust was considerably reduced and children's blood lead levels decreased.

**CHAMPIONSHIP RECORD**

Weatherization creates important and immediate economic benefits for low-income families. The measures installed also provide a long-term buffer against future energy price increases. Weatherization measures create benefits for the entire community by keeping money in the community that would typically be exported out to pay for energy. This spurs local economic growth and creates additional jobs. Every \$1 retained in the community produces an estimated \$3 in multiplier benefits.



*Wisconsin installed solar panels in this low-income home to reduce the household's energy bills.*

In addition, reducing residential energy demand decreases electricity generation and avoids emissions of nitrogen oxides, sulphur dioxide, and other pollutants. This improves local air quality and reduces adverse health effects, particularly asthma. Weatherization measures also mitigate residential and power plant emissions of greenhouse gases. Weatherization reduces annual carbon dioxide emissions by an

average of one metric ton per weatherized home or one-third the emissions of an average automobile.

**WEATHERIZATION WORKS!**

Weatherization produces an impressive range of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization mitigates greenhouse gas emissions and stimulates the local economy. Weatherization measures reduce national energy consumption and dampen demand for imported oil. Weatherization works for Wisconsin and America!

**TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:**

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Visit the Weatherization Web site at: [www.eren.doe.gov/buildings/weatherization\\_assistance](http://www.eren.doe.gov/buildings/weatherization_assistance)  
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732

