STATE CLEAN ENERGY - ENVIRONMENT TECHNICAL FORUM
Call #19: Opportunities for Energy Efficiency in Low-Income Housing
December 14, 2006, 2:00 - 3:30 pm EST
BACKGROUND

I. Introduction

The “energy burden” for low income households can be three to six times greater than that of median income households\(^1\) and is a key driver for state and federal energy efficiency measures. Additional public benefits include improved environmental protection, health benefits, enhanced local economic development and greenhouse gas reductions. For utility companies, low income energy efficiency and the related bill savings, can help lower credit, collection and shut-off costs and reduce account write-offs. Low income energy efficiency efforts range from weatherization programs that involve insulation, cool roofing materials, and efficient windows, doors, and appliances to whole-building systems integration, and building orientation and tree placement for optimum passive solar heating and cooling.

II. State Efforts

Recognizing the multiple benefits of low-income energy efficiency programs, many states have had policies and programs in place to promote low-income energy efficiency for several decades; recent increases in energy costs make such efforts even more important. Successful low-income energy efficiency programs come in various shapes and sizes, ranging from well-funded, comprehensive, programs to smaller, targeted programs (e.g., energy audits, refrigerator replacements). Despite program diversity across states, effective programs often share common traits, including:

- An emphasis on partnerships and leveraged funding;
- The involvement of community action agencies in providing the services; and
- Innovative services and approaches for hard to reach customers (ACEEE 2005).

While there are a many examples of successful low-income energy efficiency programs, states with notable approaches/programs include:

- Massachusetts, Rhode Island, New Hampshire – Appliance Management Program:
  Developed in 1995 through a partnership with National Grid and numerous community action agencies, the program delivers home appliance surveys, customer education, and energy-saving measures to low-income customers; the program has average funding levels of $5.6 million per year across the three states and has delivered cumulative lifetime savings of more than 425,000 MWh across 31,000 customers.
  - See p.11 of ACEEE 2005 (below) for full program description.

\(^1\) A 1993 study found that the energy burden for median income families was 4 percent; for low income families it ranged from 12 to 26 percent (percentage of income that goes to energy costs) – with the majority of these costs for low income families going to electricity (64 percent). See: http://www.arkansas.gov/psc/EEInfo/Low-Income_Cons_Issues_Nat_Persp.pdf
• Vermont – Low Income Single Family Service: A program run by Efficiency Vermont (VT’s “energy efficiency utility”) that provides electricity efficiency measures (e.g., CFLs, hot water conservation, education) to low-income customers and utilizes the program infrastructure developed through Vermont’s Weatherization Assistance Program (i.e., the weatherization auditors and installers also look for and install other energy efficiency measures).  
http://www.efficiencyvermont.com/pages/Residential/BuildingEfficiently/YourMultifamilyProperty/FreeServices/

• California:
  o Southern California Edison’s (an electric-only utility) Energy Management Assistance program, which provides comprehensive energy audits of qualified customer homes and a wide range of measures (e.g., efficient refrigerators and air conditioners, CFLs, in home energy education); in 2004, the program achieved annual energy savings of 15.3 million kWh with a budget of $16 million (funded through the public benefits charge).  
http://www.sce.com/RebatesandSavings/LowIncome/emaprogram.htm
  o Pacific Gas and Electric’s Energy Partner’s Program, a comprehensive program offering a wide range of measures that has made a special effort to access hard to reach customers; the program resulted in energy savings of 20,900 MWh and 1,572,000 therms in 2004 with a budget of $56.5 million (funded through the public benefits charge) and reaches almost three quarters of eligible customers.  
http://www.pge.com/energypartners/
http://www.fypower.org/feature/lowincome/

• New Jersey: New Jersey regulations require all state financed affordable housing units to be certified under NJ ENERGY STAR guidelines. Also, New Jersey’s Comfort Partners program, designed and implemented by state agencies and funded through societal benefits charge, offers a comprehensive package of clean energy services. During 2004, the program resulted in energy savings of 6800 MWh and almost 600,000 therms with a budget of $14.2 million.
http://www.njcleanenergy.com/html/assistance_programs.html

• Utah: The state of Utah administers the Low-Income Refrigeration Replacement Program that initially focused on analyzing refrigerators and replacing all those with a savings-to-investment ratio greater than 1; it expanded in 2004 to include some lighting and air conditioning replacements. The program is funded through a combination of ratepayer, federal, and other sources, and is administered in conjunction with the state Weatherization Assistance Program.
http://community.utah.gov/housing_and_community_development/weatherization_assistance_program/index.html
III. Resources For Further Information

Partnerships for Home Energy Efficiency 2006 Annual Report
This report describes how the U.S. Department of Energy (DOE), the U.S. Department of  
Housing and Urban Development (HUD), and the U.S. Environmental Protection Agency (EPA)  
are working jointly with state and local partners in implementing Home Performance with  
ENERGY STAR®, a retrofit program that promotes whole-house improvements and aims to save  
10 percent on residential energy bills and consumption by 2015. Promoting energy efficiency in  
affordable housing is one of the partnership's four key strategies and is discussed throughout the  
report, particularly in descriptions of HUD's role in building the market for energy efficient  
products and services.  

ENERGY STAR Qualified New Homes
This site provides information on energy-efficient features in ENERGY STAR qualified new  
homes.  
http://www.energystar.gov/index.cfm?c=new_homes.hm_index

ENERGY STAR Home Improvement
This site provides information on analyzing home energy use, air-sealing and insulation, efficient  
heating and cooling, and the whole-house approach to home energy performance, as well as  
ENERGY STAR energy-efficient home improvement products.  
http://www.energystar.gov/index.cfm?c=home_improvement.hm_improvement_index

ENERGY STAR Bulk Purchasing Tool with this description:

The website links institutional purchasers (e.g., housing authorities, universities, government  
agencies, etc.) to ENERGY STAR partners (product manufacturers and vendors) offering bulk  
procurement arrangements. Registered ENERGY STAR vendors are notified by e-mail  
whenever purchasers submit requests for bids on products. Vendors can offer a bid via the  
website, and purchasers can contact vendors directly or continue to communicate through the  
website to negotiate a contract. At this time, the ENERGY STAR Online Bulk Purchasing Tool  
covers ENERGY STAR qualified refrigerators, dishwashers, clothes washers, room air  
conditioners, dehumidifiers, light bulbs, and fixtures.  
http://www.bulkpurchase.net

Meeting Essential Needs: The Results of a National Search for Exemplary Utility-Funded  
Low-Income Energy Efficiency Programs
This report was built around a national search for exemplary utility-funded low-income energy  
efficiency programs intended to provide models of best practices for meeting the home energy  
needs of low income households.  
http://www.aceee.org/pubs/U053.htm
LIHEAP Clearinghouse
Since 1988, the National Center for Appropriate Technology (NCAT) has operated the Low-Income Home Energy Assistance Program (LIHEAP) Clearinghouse through a training and technical assistance contract from the U.S. Department of Health and Human Services (HHS), Administration for Children and Families, Office of Community Services, Division of Energy Assistance.
http://www.liheap.ncat.org/

Building America Program
This website offers several links and publications on low-income energy efficient housing programs funded the Department of Energy's Office of Energy Efficiency and Renewable Energy. http://www.eere.energy.gov/buildings/building_america/affordable_housing.html

Identifying Programs that Support Energy Efficiency
HUD's website portal to government and nonprofit sponsored programs to promote energy efficiency in housing rehabilitation.
http://www.hud.gov/offices/cpd/affordablehousing/training/web/energy/programs/

Affordable Housing Laws and Regulations
An overview of the laws, regulations and other policy information that govern HUD Affordable Housing programs.
http://www.hud.gov/offices/cpd/affordablehousing/lawsandregs/index.cfm

HOME Investment Partnerships Program Final Rule
The HOME Investment Partnerships Program underlies HUD's allocation of funds to state and local governments to strengthen public-private partnerships and to expand the supply of decent, safe, sanitary, and affordable housing, with primary attention to rental housing, for very low-income and low-income families.

HOME Cross Cutting Federal Requirements
Access to information about HUD and Federal laws and regulations that apply to the use of HOME Investment Partnership Program funds
http://www.hud.gov/offices/cpd/affordablehousing/lawsandregs/fedreq/