

# Chapter Four

## EXAMPLES OF JOINT HOUSING ENERGY PROGRAMS

**S**upport for joint housing-energy programs can come from many places—public utility companies, nonprofit corporations, for instance. Below are examples of some of the types of programs currently being offered.

### PUBLIC UTILITY COMPANY CONSERVATION PROGRAMS

Many public utility companies sponsor energy-related programs, either on their own or in collaboration with public and nonprofit agencies. These programs range from payment-assistance plans to free or low-cost home weatherization. One interesting feature is that utilities are the sponsor of some programs—in others, they are participants under a public agency's lead. The programs described below were selected from *An Index of Joint State-Utility Energy Programs*, published by the Alliance to Save Energy (Washington, DC). They were chosen because they include a home repair/rehabilitation component, but are meant only to provide examples of program types and sponsors.

#### Community Weatherization Fund (Washington, DC)

Created by the Potomac Electric Power Company and the Community Foundation of Greater Washington, Inc. in 1987, this fund coordinates the delivery of weatherization and rehabilitation services for single- and multifamily low- and moderate-income housing.

CWF receives municipal funds from the two agencies, U.S. Department of Energy (DOE) funds through the District of Columbia Energy Office, and Community Development Block Grant (CDBG) funds through the District of Columbia and Montgomery County Departments of Housing and Community Development. The funds are used to pay contractors to provide conservation

services to buildings owned or leased by nonprofit organizations. Energy efficiency services include energy audits, counseling, audit reviews, general technical assistance, assistance in contractor selection as needed, and grants and loans for weatherization of nonprofits.

**Sponsors:** Potomac Electric Power Company  
District of Columbia Energy Office  
District of Columbia Department of Housing and Community Development  
Montgomery County Department of Housing and Community Development

#### Furnace Retrofit Program (State of Montana)

The Department of Social and Rehabilitation Services (SRS) trains technicians to perform complete overhauls of residential heating systems. These technicians then spend an average of \$300 per home to bring heating systems up to a set minimum level of efficiency. The State pays half of the costs and the utility provides a zero-interest loan to cover the consumer's remaining costs. The program is administered by SRS.

**Sponsors:** Montana Department of Social and Rehabilitation Services  
Utilities  
Community action agencies  
Local tribal agencies

#### King County Housing Program and County Weatherization Program (State of Washington)

The State's Department of Community Development provides CDBG and Federal weatherization funds to the housing and weatherization departments (respectively) of the King County Housing Authority. The two departments have arranged to cooperate on evaluating needs and executing a

joint workplan whenever a household needs assistance with repair and weatherization. In addition, if the household is a Puget Sound Power and Light customer and uses electric heat, the utility company, through an agreement with the County weatherization department, will pay up to 100 percent of the costs of weatherization.

**Sponsors:** Washington State Department of Community Development  
King County Housing Authority  
Puget Sound Power and Light

### Company-Sponsored Programs

An example of a purely utility company-sponsored program is Pacific Gas & Electric's (PG&E) Energy Partners Weatherization Program. This program provides attic insulation, weatherstripping, minor home repair (up to \$200), and a number of other no-cost minor modifications to reduce energy usage. The program's income guidelines range from \$14,900 for a single individual 59 years of age or younger to \$34,900 for a family of eight whose head of household is 59 years or younger, or \$19,900 and \$46,500, respectively, for an individual household and a family of eight whose head of household is more than 59 years of age.

PJs should consider working with utility company-sponsored programs and joint utility company-government programs because these programs have operational advantages over Federal programs. In particular, the company programs establish their own loan/grant limits and do not have to follow Federal energy program guidelines. In addition, they can set their own eligibility and operating rules to address the needs of their particular communities, and so might be particularly capable of operating with HOME Program rules.

### OTHER ENERGY CONSERVATION PROGRAMS

PJs should also look to the nonprofit community. Because of their public orientation, many nonprofits participate in energy conservation

programs. One example is the Citizens Conservation Corporation (CCC) of Boston, Massachusetts. The CCC was initially capitalized by another nonprofit, the Citizens Energy Corporation, and by the Massachusetts Executive Office of Energy Resources. Since then it has received additional funding from the Massachusetts Housing Finance Agency and the Bay State Gas Company.

CCC offers "one-stop" energy services to landlords of low- and moderate-income multifamily buildings. It provides an energy audit and low-cost financing for conservation modifications. CCC also offers tenant energy education, which is often the first step toward getting landlords to participate in the program. Finally, it helps landlords and tenants monitor their subsequent energy use to improve their conservation efforts.

The Energy Resource Center (ERC) in St. Paul, Minnesota, offers services similar to CCC's, but for one- to four-unit buildings as well as multifamily units. Unlike CCC, ERC was founded as a public-private effort, by the City of St. Paul and Northern States Power Company. ERC provides flexible financing to landlords for conservation repairs and modification. The landlords then make payments to ERC based on what their utility bills would have been in ERC's absence, and ERC pays the building's utilities and applies the remainder to debt service and equipment maintenance. Any remaining funds (total landlord payment less charges for utilities, debt service, and equipment maintenance) are shared between ERC and the landlord or tenants. Capital for ERC loans comes from two local utilities, the Minnesota Department of Economic Security, and the Minneapolis-St. Paul Housing Fund. (See Appendix D for a further discussion of energy program resources.)

# Endnotes

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1. Properties may receive additional HOME assistance for up to 1 year after project completion, provided that the total HOME investment in the project does not exceed the maximum per-unit subsidy.
2. The HOME Program also permits rents for very low-income households to be set based on 30 percent of a particular family's adjusted income. Because of the difficulties of underwriting properties using this option, few projects structure rents in this manner.
3. When FHA mortgage insurance is provided for a HOME project, however, the term of affordability for the property must be at least the length of the FHA insured mortgage. For example, if an FHA-insured loan provides the financing for property acquisition and the loan term is 40 years, the period of affordability and low-income tenancy is at least 40 years, regardless of the HOME funds spent per unit.
4. The maximum HOME limits are adjusted by HUD for high-cost areas.
5. HOME requires the PJ to have and use *written* housing standards.
6. For housing with four or more stories above grade, the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standard 90.1-1989 should be used.
7. For example, the Code includes the following standard, §502.3.2.1:  

Walls: A building [over three stories] that is mechanically cooled shall have an overall thermal transfer value,  $OTTV_w$ , for the gross area of exterior walls above grade, not exceeding the values given in Table No. 502.3.1. Equation 3 shall be used to determine acceptable combinations to meet these requirements.
8. Indexed for inflation.
9. WAP also allows the grantee to set aside a maximum of 10 percent of its allocation for low-cost/no-cost weatherization activities and materials, such as furnace filters, water flow controllers, caulking, etc. The maximum per-unit expenditure for these materials may not exceed \$50, and these funds cannot be used for the allowable expenditures discussed above.
10. Therefore, a four-person household would be eligible for LIHEAP if its income did not exceed \$20,038 (150 percent of the poverty level), compared with \$16,699 for WAP or (based on the median household income) \$34,836 for HOME. If the LIHEAP provider used 60 percent of the State median income level as a benchmark, the income eligibility limit would be higher. This 60 percent requirement is compatible with HOME's requirement that 90 percent of HOME funds spent on rental housing benefit families at or below 60 percent of the area median income (see page 6).
11. Typically, minimum outdoor air ventilation rates of 0.25 to 0.45 air changes per hour are required by building codes. This ventilated  

To determine the actual OTTV, someone needs to calculate the gross wall area above grade, the thermal transmittance of all elements of the opaque wall area, the thermal transmittance of the fenestration area, the solar factor value<sup>2</sup>, and a number of other figures, and apply them to an equation contained in the code.

For many PJs it may be cost-effective to contract with an architect, engineer, or experienced weatherization provider to perform this analysis. Alternatively, the PJ's specifications may require the project architect or engineer to certify that the building will conform to the Model Energy Code when completed.

air can be provided by natural ventilation, mechanical ventilation, or some combination of the two methods.

12. Concerns about moisture from condensation have led to a move away from storm windows. To ensure that condensation could be avoided, the space between the storm windows and the original window units had to be well ventilated. This ventilation allowed air leakage and significantly reduced the thermal benefit of the storm windows. For this reason, storm windows are rarely recommended today.
13. The one exception to this rule of thumb is a heat pump, which transfers heat from the exterior to the interior of a house (or from the interior to the exterior, to cool the house) without generating heat itself. Thus, it is a very cost-effective electric system.
14. WAP and LIHEAP funds do not count as matching funds for HOME because they are Federal funds. Any *local* dollars used for energy efficiency programs that are used in a HOME rehabilitation project, however, would count as match.
15. See *Home Repair/Modification Programs for Elderly Homeowners*, published by the Office of Affordable Housing Programs, HUD, for additional details on the subrecipient's role and responsibilities.