



# OLR RESEARCH REPORT

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## **ENERGY EFFICIENCY PROGRAMS FOR CHURCHES**

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You asked for a description of programs that can help improve the energy efficiency of houses of worship and buildings such as rectories.

### **SUMMARY**

Electric and gas companies typically consider churches and other houses of worship to be commercial customers, while rectories and similar buildings are often considered residential customers. There are a variety of energy efficiency programs available through the utilities for both rate classes. The most relevant for houses of worship is the Small Business Energy Advantage (SBEA) program. The program assesses opportunities for energy savings in buildings. Participating customers can receive rebates that cover part of the cost of the measures. They can finance the remaining costs with interest-free loans that can be repaid on their electric bills. The loan amount can be from \$500 to \$100,000. Larger projects can be financed under the Small Commercial and Industrial Energy Efficiency Loan program.

The Home Energy Solutions program is the primary utility residential energy efficiency initiative. Among other things, the program offers rebates for qualifying central air conditioning systems and for replacing inefficient appliances with qualifying energy-efficient models, as well as incentives for insulation upgrades in some cases. The state's Energy Efficiency Fund provides up to 100% financing for energy-efficiency measures recommended through the Home Energy Solutions program costing \$2,500 to \$20,000 in single-family homes. The loan program

provides loans with 0% or 2.99% interest rates, depending on the type of project.

The federal Energy Star program offers technical assistance, including a guide that describes how congregations can identify, prioritize, and manage energy efficiency projects, find funding, and choose contractors.

In addition to these programs, congregations may want to consider energy performance contracting. In an energy performance contract, an energy services company (ESCO) provides customers with a comprehensive set of energy efficiency measures and often arranges for long-term project financing from a third-party. The ESCO often guarantees that the project's savings will be sufficient to cover the cost of project financing for the life of the project. One common performance contracting approach is a shared savings agreement under which the customer and the ESCO share the value of the energy savings based on a distribution specified in advance in a contract. OLR Report [2011-R-0067](#) gives examples of the use of performance contracting in Connecticut.

## **UTILITY PROGRAMS**

### ***Houses of Worship***

By law, the electric and gas companies must develop and implement, with Department of Public Utility Control approval, conservation programs using the Connecticut Energy Efficiency Fund. The fund is financed from a surcharge on electric bills and other sources.

Utilities typically consider churches and other houses of worship to be commercial customers that are eligible for energy efficiency programs that serve the commercial and industrial (C&I) rate classes. The most relevant of these is the SBEA program, which is open to C&I customers with an average 12-month peak demand between 10 kilowatts (kW) and 200 kW.

Once the utility determines that a customer is eligible, an SBEA contractor assesses the customer's facility at no cost. The utility reviews the assessment and, if accepted, the contractor presents a proposal. The proposal includes all possible energy-efficiency measures, their costs, and estimated energy savings. The proposal can include heating, ventilation, and air conditioning (HVAC) and lighting measures, among other things.

The proposal also includes program incentive and financing options. Eligible customers can receive rebates that cover part of the cost of the

measures. They can finance the remaining costs with interest-free loans that can be repaid on the customer's electric bill. The loan amount can be from \$500 to \$100,000. The maximum term for loans is 36 months in CL&P's service territory and 48 months in UI's service territory. Loans are not available to customers or projects participating in certain other efficiency programs.

Larger projects can be financed under the Small C&I Energy Efficiency Loan program. The program is open to all C&I customers in business for at least three years with good credit standing. All efficiency projects undertaken by C&I customers qualify, except for new construction, major renovation projects, and projects that participate in the SBEA loan program described above. If an SBEA project only receives rebates under that program but does not obtain a loan, it can apply to participate in this low-interest loan program.

The low-interest loan must be used to upgrade or replace existing equipment with high-efficiency equipment. The loans are for \$2,000 to \$250,000, with subsidized low-interest financing offered on the first \$100,000 of the loan. The balance can be financed at market rates. The maximum loan term is 60 months. In 2010, the subsidized loan rate for electric company customers was approximately 7%.

Further information about the fund and its programs are available at <http://www.ctsavesenergy.org/programs/business.php>

### ***Rectories and Similar Buildings***

The electric and gas companies typically treat rectories and similar buildings as residential accounts. The Home Energy Solutions program is the primary utility residential energy efficiency initiative. The Core Services component of this program can reduce the customer's bill through a variety of energy efficiency measures performed by a company-authorized contractor. The contractor normally performs a blower-door test to pinpoint drafts and air leaks, which the contractor then seals. The contractor may also:

1. conduct a test to assess air leaks within the ductwork,
2. install hot water-saving measures such as low-flow showerheads and faucet aerators,
3. offer rebates for qualifying central air conditioning systems and for replacement of inefficient appliances with qualifying energy-efficient models,

4. incentives for insulation upgrades in electrically heated and natural gas heated homes, and
5. install compact fluorescent light bulbs.

The contractor will review the work that was done and tell the customer about additional resources that can help save energy and money.

The program's [home performance component](#) is designed to provide assistance with major upgrades and custom measures. If a customer plans multiple upgrades such as insulation and heating and cooling systems, the customer can submit the project to the companies and it may qualify for an Energy Efficiency Fund rebate. The financial incentive is determined based on the cost and energy savings of the project.

The Energy Efficiency Fund also provides up to 100% financing for energy-efficiency measures recommended through the Home Energy Solution program costing \$2,500 to \$20,000 in single-family homes. The loan program provides loans with 0% or 2.99% interest rates, depending on the type of project. The loans are unsecured and can have terms of up to 10 years, with no prepayment penalty. Among the types of measures that can be financed are high efficiency insulation, HVAC equipment replacement, water heating systems, and in some cases replacement of single-pane windows. Further information about this program is available at <http://www.ctenergyloan.com/index.php>.

## **FEDERAL ENERGY STAR PROGRAM**

The federal Energy Star program offers a variety of resources to help consumer improve their energy efficiency cost-effectively, including a guide, *Putting Energy into Stewardship*, that describes how congregations can identify, prioritize, and manage projects, find funding, and choose contractors. It identifies smaller projects that are likely to save energy and money, in the areas of lighting, maintenance of heating and cooling equipment, and water heating. The guide is available at [http://www.energystar.gov/index.cfm?c=small\\_business.sb\\_congregations](http://www.energystar.gov/index.cfm?c=small_business.sb_congregations)

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