

Windham Regional Commission Energy Efficiency and Conservation Grant Program

Funds for Energy Audits of Public Buildings

*****Round Two*****

January 25, 2010

This is the second issue of a request for information regarding energy use in public buildings. The first round, in December 2009, resulted in awards totaling \$7,080 to fund energy audits for nine buildings in four towns. In most cases, we will be reimbursing the towns a full 90% of the audit cost. Special districts, schools and some private non-profits (e.g., a private library foundation) also may apply.

The WRC has access to federal economic stimulus funding that will allow the WRC to pay up to 90% of the cost of an energy audit for one or more public buildings in your town, and possibly some of the cost of implementing improvements later on. A professional energy audit will not only identify potential savings, but also provide you with information about how you can get the most return on investment in energy improvements, and how long the pay-back would be. An audit also will form the basis for future funding to implement recommended improvements, which we will be supporting in 2010. Please read this over and call Jim Matteau at the WRC if you have any questions.

What we are asking for here:

Right now, we are asking for a little bit of very basic energy information about one or more buildings in your town on which you want to conduct an energy audit, and that you get a cost estimate for an audit. We'll use that information to determine which public buildings would benefit most from an energy audit, and the WRC will underwrite the cost of audits up to 90%. A simple, one page chart is attached and to qualify for a subsidized audit you should return the form to the WRC by March 4, 2010.

After replies are received, the WRC Energy Committee will prioritize facilities based on the energy information, and will approve grants to conduct audits. The more complete your information, the greater the likelihood that your facility will be selected for audit funding. We hope to be able to fund at least one audit in most—if not all—towns.

You will need to obtain cost estimates and schedule an audit for your building. An extensive list of approved energy auditing firms is available from Efficiency Vermont at <http://www.encyvermont.com/pages/Residential/Marketplace/>. Different companies' services

vary widely, so check the list and ask questions when you call them. We expect the audit to be based on blower door tests, infrared imagery, and similar measures in addition to a thorough visual inspection, and that the written report will provide detailed recommendations and advice regarding priorities, payback time, etc. We will require a copy of the report as documentation for the reimbursement.

We realize that audit costs can vary significantly, but we anticipate most audits of small, single family home-type buildings would be in the \$500+/- range. Many municipal offices might be in the \$1,000+/- range, and some more complicated buildings could be higher. We anticipate that most will be in these lower ranges and so the WRC will reimburse 90% of the audit cost per building, up to \$1,200 per building. Towns should contact the WRC if they believe extenuating circumstances exist that require a higher audit cost.

The attached form asks for energy use data for fiscal year 2009 (7/1/08 – 6/30/09) because this should be easiest for most towns to compile; it also captures a complete heating season. Please note that the form requires information about the *amounts of fuel used*, not dollars paid. If you don't have that information readily available, your fuel supplier should be able to provide it to you.

At a later point in time, the WRC will solicit proposals and may provide financial support for energy efficiency and conservation improvements & retrofits, based on energy audits and other information that may be gathered. Towns that had audits done prior to this program will be eligible to apply for those funds.

Some anticipated questions:

1. Should I contact an auditor now?
 - a. *Yes, to get an audit cost estimate to list on the form. Auditors are busy right now and it will take some time to schedule a visit to obtain a cost estimate. Because an audit can be more informative if done during cold weather, tentatively scheduling the audit itself might be a good idea but is not required.*
2. Should I wait to fill out the form?
 - a. *No. You can complete the energy inventory data now, and plug in the cost estimate when it is received. The form is easy to complete but we urge you to move on it quickly.*
3. Can we ask Efficiency Vermont to do an audit for us?
 - a. *Vermont's regional planning commission directors met with a representative of Efficiency Vermont in November, and we were told that they are not yet doing "all fuel" audits. But if you have already have done the thermal work and are looking at electric energy improvements, they might be able to help.*
4. Our building is fairly new, so this probably doesn't apply.
 - a. *We suggest you complete the "Building Energy Estimate" and check the results. Many newer buildings with high insulation values lack a well sealed "thermal envelope" and could still be losing a lot of warm air.*
5. If we are selected for audit funding, does that guarantee later grants for implementation?
 - a. *No, but it is a step in that direction. Implementation measures typically cost a lot more, and we will not have funds sufficient to do all that would be recommended by such a large number of audits.*
6. Are there other benefits to doing an audit?
 - a. *Yes. The audit information will be ready to use for other, future funding opportunities and it will help you explain to taxpayers where and how relatively small investments can*

save tax dollars into the future and improve your “energy footprint”. It also might help you reduce energy use and costs by identifying some simple, low cost improvements you can make right away.

7. Will we receive funds in advance?
 - a. *No, the WRC funds will be a reimbursement upon receipt of a copy of the audit report and documentation of payment. In no case should an audit be done before receiving confirmation of the WRC award.*
8. Do we need to have special insurance?
 - a. *The town does not need any special insurance for the audit, but you will be required to document that you do have basic coverage, and you also will need to ensure that the firm you hire—when the time comes—also has the necessary insurance. Those requirements, taken from the Vermont DPS website, are quoted at the end of this notice. Most if not all firms already meet these requirements, and the certificate of insurance isn’t needed until an award is made, but it must be received before work commences.*
9. Our town office is an historic building. Does that affect this grant?
 - a. *Not for an audit, but federal regulations require approval before physical retrofit work can begin on any public building using these funds. In most cases that will mean a fairly simple checklist for the town to complete and submit, but there may be cases where the historic significance of a structure makes some energy improvements exceptionally difficult or expensive. The audit will provide information that helps you and us to assess that situation.*
10. What about our school? It’s not town-owned but we might want to make improvements there.
 - a. *While our focus is on town-owned buildings, public schools are eligible and you should share this application with your school district if there is interest, and they may apply.*

Complete the form on the next page and return it by March 4, 2010 to:

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| <p>WRC Energy Committee Attn: Energy Efficiency and Conservation Grant Program 139 Main Street Suite 505 Brattleboro, VT 05301</p> |
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Any questions regarding this application should be directed to Jim Matteau, Executive Director, at 257-4547 X-106, or jmatteau@sover.net.

**Windham Regional Commission
Energy Efficiency and Conservation Grant Program**

Applicant: _____

Mail Address: _____

Contact person: _____ Phone: _____ Email: _____

Building name and location: _____

Principal Use: _____ [One building per sheet]

Building description: Building type (wood frame, concrete block, etc.): _____
Number stories: _____

Total area in ft² of all heated or conditioned space: _____

(Basement: _____ First floor: _____ Second floor: _____ Third floor: _____ Other: _____)

Building Energy Estimate

| | A | B | C | D | E |
|------------------|-------------------------|---------------------------------|--------------------------------|-----------------------------------|-------------------------------------|
| Fuel Type | BTUs per Unit | Amount of Fuel Consumed* | BTUs Consumed (A) x (B) | Square Feet of Area Served | BTUs per Square Foot (C ÷ D) |
| Oil | 138,200 BTUs/gallon | | | | |
| Kerosene | 136,600 BTUs/gallon | | | | |
| Propane | 91,600 BTUs/gallon | | | | |
| Electricity | 3,412 BTUs/kWh | | | | |
| Wood | 22,000,000 BTUs/cord | | | | |
| Coal | 24,000,000 BTUs/ton | | | | |
| Wood Pellets | 16,000,000 BTUs/ton | | | | |
| | Total: | | | | |

*Use FY2009 (7/1/08 – 6/30/09) figures. This should be easier to compile and will capture a complete heating season. Please be prepared to submit copies of fuel bills if requested. See calculation example on next page.

Estimated cost for the energy audit: \$ _____

Source of estimate (Firm name): _____

Example for Calculating the Relative Energy Efficiency of a Building

Assumptions:

Size of building: 1,600 square feet

Amount of fuel used: Two cords of wood and 422 gallons of oil

Calculations:

Step 1. Two cords of wood x 22,000,000 BTUs = 44,000,000 BTUs

Step 2. 422 gallons of oil x 138,200 BTUs = 58,320,400 BTUs

Step 3. 44,000,000 BTUs (wood) + 58,320,400 BTUs (oil) = 102,320,400 BTUs

Step 5. $(102,320,400) / (1,600) = 63,950$ BTU/sq ft

Chart and example taken from *Guide to Improving Energy Efficiency in Vermont Municipal Buildings*, Prepared by VT Chapter Sierra Club, revised September 2009. According to that guide, “If your building uses less than 40,000 BTUs of energy per square foot per year, you have a relatively energy-efficient space. If you use over 40,000 BTUs per square foot, you probably have opportunities to improve your building efficiency”

Some Background Information

Program Overview:

The Windham Regional Planning Commission has received economic stimulus funding from the Department of Energy’s *Energy Efficiency and Conservation Block Grant* (EECBG) program¹, and also a smaller portion from the State of Vermont’s allocation under that same federal program. The direct federal award of \$130,800 followed the WRC’s successful appeal of the US DOE’s initial denial of funds for Windham County. We also will receive a small portion of Windsor County funds for the town of Weston. Additionally, a grant award of \$80,000 from the state’s EECBG funding was made to each regional planning commission.

Eligibility:

The \$80,000 state EECBG award is directly to the WRC, and all twenty seven WRC towns are eligible to participate in that funding. It is with part of that \$80,000 award that we propose to fund energy audits for towns. We also will be able to fund some building retrofit work with this award.

The \$130,800 Windham County award is available only to Windham County towns, excluding Brattleboro because it received a direct federal award as one of the state’s ten largest towns. Weston is eligible for some funds that will be passed through to the WRC from the Windsor County award. Bennington County did not receive a direct federal award because it is not one of the ten largest counties. We are making every attempt to use these various funds so that the end result is fair to all WRC member towns.

¹ Department of Energy. *Energy Efficiency and Conservation Block Grant Program: About the Program*. <http://www.eecbg.energy.gov/about/faq.html>

Federal Funding Priorities:

The federal EECBG program also lays out four basic principles, on which the WRC is placing high priority in the use of these funds. They are to:

1. Prioritize energy efficiency and conservation first as the cheapest, cleanest, and fastest ways to meet energy demand.
2. Maximize benefits over the longest possible terms.
3. Invest funds in programs and projects that create and/or retain jobs and stimulate the economy while meeting long term energy goals.
4. Target programs and projects that will provide substantial, sustainable and measurable energy savings, job creation and economic stimulus effects.

For more information on this federal program, visit The U.S. Department of Energy's website:

<http://www.eecbg.energy.gov/about/default.html>

Program Decision:

In order to meet these objectives effectively and efficiently, the WRC will focus on energy improvements, both thermal and electric energy, to county and municipal buildings. This can include facilities that are not town-owned but still serve essential municipal functions, such as schools and special municipal districts. The WRC is attempting to maximize the amount of funding that goes directly into energy audits and improvements to public buildings, and to do so quickly, in order to best meet these goals.

Insurance requirements:

The WRC will require that towns provide a certificate of insurance certifying that these state and federal minimum insurance amounts are met, and towns will be asked to verify that contractors do the same. These requirements are pretty standard and should not be a problem.

Workers Compensation: With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont.

General Liability and Property Damage: With respect to all operations performed under the contract, the Party shall carry general liability insurance having all major divisions of coverage including, but not limited to:

- Premises - Operations
- Products and Completed Operations
- Personal Injury Liability
- Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

- \$1,000,000 Per Occurrence
- \$1,000,000 General Aggregate
- \$1,000,000 Products/Completed Operations Aggregate
- \$ 50,000 Fire/ Legal/Liability

Automotive Liability: The Party shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Agreement. Limits of coverage shall not be less than: \$1,000,000 combined single limit.