

Vermont Housing & Conservation Board

**POLICY ON THE
CONSERVATION OF ENERGY AND WATER IN RESIDENTIAL PROPERTIES**

The Vermont Housing and Conservation Board is concerned about the conservation of natural resources as well as the creation of housing that is perpetually affordable to lower income households. In order to assure such affordability, it is important to keep operating expenses, including utility expenses, as low as possible. Energy improvements and devices that conserve water have been shown to be cost effective in that capital costs can be paid for over time in savings to the operating budget. Therefore, the Board adopts the following policy related to the conservation of energy and water in residential properties:

I. Energy and Water Conservation Goals for Buildings Receiving VHCB Funding

- A. Achieve a level of energy and water efficiency that will result in maximum long term housing affordability
- B. Provide for flexibility in future choices of fuel
- C. Give preference to projects that use renewable energy resources

II. Energy and Water Conservation Related Objectives in VHCB Funded Buildings

- A. Grantees should select systems with consideration for:
 - 1. economy
 - 2. future flexibility
 - 3. installation, building operating and maintenance issues
 - 4. impact on the environment; favor renewable resources where possible
- B. Grantees need to maintain indoor air quality and control moisture while reducing air leakage to achieve energy conservation goals
- C. Grantees should develop incentives, mechanisms, and/or education to encourage energy and water conserving practices by residents

- D. Grantees should keep records of energy consumption by fuel type and on an individual building basis and are encouraged to keep such records on a residential unit basis (where metering permits).
- E. Grantees are encouraged to periodically re-evaluate the energy and water using systems of each building under their ownership for cost effective improvements

III. Energy Analysis and Specifications

- A. During the pre-development of a housing project, VHCB grantees shall examine potential energy usage and ways to minimize such usage. They are encouraged to have an energy audit or analysis undertaken by a professional including energy auditors or professionals, architects and rehab. specialists, including but not limited to the Efficiency Vermont program. Such analysis shall:
 - 1. Examine historic energy consumption in existing buildings; projected energy consumption in new buildings
 - 2. Describe the building, its current energy status, and make recommendations in the following areas: building envelope, heating system and hot water plant, electrical usage, potential for use of alternative and renewable energy sources, and water consumption
 - 3. Make recommendations for improvements be based upon an analysis of the cost of energy and water efficiency improvements relative to their impact on long term operating costs and housing affordability. Projects should seek to include all cost effective energy and water saving measures. If such measures cannot be implemented, applicants should explain to VHCB staff why not.
 - 4. Provide a description of the status of utility sponsored demand side management programs as they may apply to the project and the extent of likely participation in the project by the utility. A letter from the utility regarding services to be provided shall be required as part of the application to the Board for project funding.

VHCB will generate two checklists, one for new construction and one for rehab., to be used by applicants or their consultants in the energy analysis. The checklists will present the types of measures that should be considered as part of an analysis, no matter who undertakes it.

If another energy system review process is being used such as 4 star for rehab. or 4 star plus rating for new construction by Energy Rated Homes of Vermont, compliance with Act 250 standards, or compliance with the Council of American Building Officials Model Energy Code for new construction, this other process may be substituted for part of the analysis described above upon approval of VHCB staff.

- B. The energy analysis will be part of the application materials submitted to the Board.
- C. Specifications for construction or rehabilitation shall include the energy and water use aspects of the work and shall specifically address: the building envelope, the heating system, hot water plant, lighting, and appliances, and any water saving devices to be installed.
- D. Grantees may be required to employ an energy professional in the development of specifications and to supervise the energy related portion of construction work.

IV. Energy Concerns in Ongoing Project Management

Project management plans should include ongoing energy management including: bulk purchasing of fuel, cooperative purchasing of fuel, competitive bidding for fuel purchase, seasonal maintenance schedule, routine maintenance of heating plant, tenant education, and in cases where the owner pays utilities, discussion of whether or not any restrictions will be placed on what type of appliances residents will be allowed to install or utilize (e.g. air conditioners).

VI. Funding

Grantees are encouraged to use multiple resources or programs to pay for implementation, including but not limited to utility Demand Side Management programs and the State Economic Opportunity Office/Community Action Agency weatherization programs.

VII. Education

- A. VHCB will continue to work with other housing agencies and the Public Service Department to continue to educate housing developers about energy and water consumption issues.
- B. Grantees are encouraged to make residents aware of energy and water consumption and to educate them about ways to reduce such consumption.