

Energy-related Internet Resources for Essex Residents

updated Apr 2014 by DB

- The present document has been compiled by Dennis Bouldin of the Essex Town Energy Committee to help individuals deal with specifics of their own situations and to inform regarding the wide range of energy-related resources and activities at the local, state and national levels.
- The listing and description of resources here are for informational purposes only and do not necessarily imply endorsement by the author or the Energy Committee.
- The mission of the Town Energy Committee is to provide leadership, advocacy and outreach in the areas of conservation, efficiency, and renewable energy. The committee welcomes your feedback on this document and, even more, your participation. Committee meetings are ordinarily at 6:30 pm, the 3rd Wednesday of the month at the Town Office. To email feedback on this document or to be kept informed of Committee activities, [click here](#). Meeting scheduling, Agenda, minutes, etc. are available on the [Essex Town website](#) (follow “Local Government” link to “Boards and Committees”, then to “Energy Committee”).

I. Home & Business Energy Assessments / Improvements

Save money AND save energy. Who can pass that up?

- Vermont Gas System customers may qualify for a free audit plus some incentives for fixes. This may be applied for [online](#). You will need to supply the square footage of your home. (They already know how much gas you use!) If you don't know the size of your home you can get it from the Town Assessor's Office (878-1345). To get a rough idea if you qualify, the Vermont Gas Systems formula works out to a yearly bill of about 900\$ per 1000 ft². So, for example, if your home is 1500 ft² and your yearly bill is anywhere near or over 1,450\$ you should give it a try.

If for whatever reason you don't qualify,...

- [Efficiency Vermont](#) is the place to start for guidance for both [homes](#) and [businesses](#) in Vermont. Note: Efficiency Vermont encourages (including cash incentives!) home owners to have *professional* home energy audits, but does recognize that many Vermonters are do-it-yourselfers. The one caution: *if you are a DIYer make sure you've done your homework re. safety concerns.*
- The US Dept. of Energy has many links related to [energy saving](#). In particular, take a few minutes to go through their [home energy checklist](#). These are mainly “common sense” items, but it's very useful to have them listed systematically.
- [Energy Star](#): is the EPA (Environmental Protection Agency) website for homes and businesses. They have a nice on-line [home assessment](#) (though does not include wood pellet users). To use this you will need your home's heated area and totals of your utility and/or heating bills for the past year.

- **Renters...** Admittedly, much of the available information is directed to home owners. However, you are not entirely forgotten. Check out these renter-oriented pages from the organizations above: [EV renters](#), [DoE renters](#)
- **Making Your Own “Quick and Dirty” Home Energy Assessment...**

You'll need your yearly energy expense and the area (square footage) of your house – at least the portion you're trying to heat.

<u>Type of Energy</u>	<u>Cost Alarm</u> [\$/yr-1000ft ²]	<u>Type of Energy</u>	<u>Cost Alarm</u> [\$/yr-1000ft ²]
Fuel Oil	1670	Electricity(resistive)	2170
Propane	2030	Wood (green)	730 (3.7 cords @ \$195/cord)
Natural Gas	915	Wood (pellets)	942 (3.8 tons @ \$250/ton)

(based on avg. fuel costs, Nov. 2013 and 50 MMBtu/1000 ft² cost alarm limit)

Using the table, for the type of energy you use for heating, multiply the “cost alarm” number by your area, expressed in 1000's of square feet. For example, if your area is 1500 square feet and you use fuel oil, multiply 1670x1.5 to get about 2500\$.

Here's what this number means for this particular example (1500 ft² house w/ oil heat).

If you spent 2500\$/year or more for oil, you *really* need to understand what's going on. You're spending a lot, even by Vermont standards.

Why are you spending a lot? Could be you're burning too much, either because your furnace is old and inefficient or because your granny lives with you and has to have the temperature at 78 day and night. Could be because your house isn't very tight and you're trying to heat the great outdoors. Possible, but not so likely, you're paying too much for oil (check http://publicservice.vermont.gov/publications/fuel_report for state averages). Or a combination of the above.

How do you fix it? That's up to you. You may want to get expert help. You might be able to save \$500-\$1000 a year, which might warrant buying a new furnace or at least have a technician check out the one you have. Or cutting your home's airflow gaps or putting in a programmable thermostat or remembering to turn down the manual one you have already when you go to work. Etc., etc.

Say in the example above you're spending 80% of the “alarm” amount: 2000\$/year. Based on “quick and dirty”, that's not gross. But it isn't great. A lot of people are doing better. Take a few minutes to take one of the on-line assessments referred to above. Say for an hour's attention and a 100\$ outlay you can save 200\$/year. That's a pretty good investment.

II. Vermont State Agencies and Public Interest Groups

Now you've got your home and business straightened out, you'll be ready to join the public discourse.

Vermont has a remarkable amount of activity associated with energy and the environment. Following is a summary that will help you to sort it all out. BTW, if you do, please submit your name for Energy Committee membership – we could definitely use you.! Also, please pay attention to all of the acronyms. You will be tested at the end . ;)

- (As mentioned above) [Efficiency Vermont](#) is the primary state-wide resource for energy efficiency.
- The [Public Service Board](#) (PSB) is the state agency that regulates utilities. Click [here](#) to access their “portal page” leading to discussions on a utility-by-utility basis.
- The [Public Service Department](#) (PSD) is responsible for representing the public in matters that come before the PSB. The PSD is responsible for the state's [Comprehensive Energy Plan](#) (CEP) and [Clean Energy Development Fund](#) (CEDF).

The CEP is the state's very ambitious plan to have 90% renewable energy sources by 2050. Click [here](#) for a one page summary.

The PSD is undertaking [2014] a [Total Energy Study \(TES\)](#) to identify the most promising policy and technology pathways to employ in order to reach Vermont’s energy and greenhouse gas goals.

- [Renewable Energy Vermont \(REV\)](#) is a nonprofit, nonpartisan trade association representing nearly 300 businesses, individuals, colleges and others committed to reducing our reliance on fossil fuels and expanding the availability of sustainable sources of power in Vermont. REV's 2 page outline, [Vermont's Energy Future](#), outlines REV's views on what must happen by 2020 to get us on track for the CEP 2050 goals. They also have [a link that's a good starting point about solar in Vermont](#).
- The [Energy Action Network \(EAN\)](#) is an active network of nonprofit, business and government leaders working to transform Vermont's energy economy -- in particular, develop realistic scenarios of how the CEP 2050 goals can be attained: Dec. 2013, [full report](#) (34 pages) or [summary](#) (4 pages).
- The [Vermont Sustainable Jobs Fund](#) is an organization with mixed public and private funding whose mission is to “promote the development of Vermont's green economy.” In particular it sponsors the remarkable [Vermont Energy Atlas](#).

Want to check out solar homes in Essex? All but the most recently outfitted are in the Atlas!

- Building a new house? Check out [Passive House Alliance Vermont](#), a chapter of the Passive House Alliance US, a non-profit corporation dedicated to the advancement and education about the Passive House Standard in the US.

- Issues related to climate change overlap various state government agencies and departments. The governor's "[climate change cabinet](#)" has been formed to coordinate activities.
- The Vermont Agency of Natural Resources (ANR) has responsibility for issues effecting the state's environment. This includes updates on meeting [emission goals](#) and [climate change adaptation](#).
- The [Vermont Energy Education Program](#) (VEEP) is a non-profit with numerous education activities and resources. VEEP partners with Efficiency Vermont to sponsor the [Whole School Energy Challenge](#) in which Essex High and Essex Middle School participated (2012-2013).
- The [Vermont Sustainable Heating Initiative](#) (VSHI) is a non-profit organization "dedicated to the establishment of affordability and sustainability in Vermont's home heating economy." Essex resident and Energy Committee member Tom Tailer is a principal driver.
- The [Vermont Energy and Climate Action Network](#) (VECAN) is very active, in particular working to provide information, coordination and networking among the more than 100 town energy committees in the state. They sponsor a very dynamic yearly conference (e.g., [Dec. 2013, including videos](#)) and a [newsletter](#).
- The [Vermont Energy Investment Corporation's](#) (VEIC) is a non-profit corporation with the mission "to reduce the costs — both economic and environmental — of energy use." Among its many activities, VEIC is the parent company of Efficiency Vermont. [To sign up for its newsletters](#): *VEIC News & Updates* and/or *Transportation Efficiency*.
- UVM's energy-related activities include: [the Gund Institute for Ecological Economics](#) and the [Extension Service](#).
- The [Vermont Natural Resource Council](#) (VNRC) is a non-profit which "for more than 40 years has pursued the mission to protect and restore Vermont's natural resources and environment for present and future generations through research, education, collaboration and advocacy." The VNRC serves as the state affiliate for the [National Wildlife Foundation](#).
- The [New England Grassroots Environment Fund](#) (NEGEF) "seeks to energize and nurture long term civic engagement in local initiatives that create and maintain healthy, just, safe and environmentally sustainable communities."
- The [Lake Champlain Committee](#) (LCC) for over 50 years has been "dedicated to protecting Lake Champlain's environmental integrity and recreational resources for this and future generations through science-based advocacy, education and collaborative action."
- [Lake Champlain International](#) (LCI) is a non-profit organization actively involved in "shaping the future of Lake Champlain's water and fisheries health."
- The [Vermont Public Interest Group](#) (VPIRG) is active on several energy-related fronts at the state level.
- Several of the well-known national environmental conservation organizations have Vermont chapters, including the [Sierra Club](#). The Nature Conservancy has a [portal page](#) with several links related to local climate change.

III. Other Resources

Vermont Fuel Price Updates & Comparisons

- [VT Public Service Dept. Monthly Fuel Price Reports](#)

Heating / Cooling Degree Data

- To really understand your energy use, you have to factor in how hot or cold it's been.

[Weather Data Depot's](#) got the info you need.

Chittenden County Regional Planning Commission

- In 2013 the [CCRPC](#) coordinated a project to define a regional plan ([ECOS](#): Environment Community Opportunity Sustainability) with the theme of a sustainable future for the county. Of particular interest to the energy community are various environmental and energy analysis reports that can be accessed [here](#).

The state-wide organization that coordinates the regional planning organizations is the [Vermont Association of Planning & Development Agencies \(VAPDA\)](#).

Regulated Companies (Natural Gas and Electric)

(Each business has Essex customers and some info on efficiency, usage statistics, rates, etc. Please do an internet search or check yellow pages for general customer support for other fuel suppliers.)

- [Vermont Gas Systems](#)
- [Green Mountain Power](#)
- [Vermont Electric Coop](#)

National Energy Data

- If the [US Energy Information Agency](#) hasn't got it, it probably doesn't exist.

Individuals of Note

- [Bill McKibben](#) and his [350.org](#) organization.
- "[Bob the Green Guy](#)"