Town Energy and Climate Action Guide



Vermont Energy & Climate Action Network

July 2017

Produced by

Vermont Energy & Climate Action Network (VECAN)

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This is a publication of VECAN and a living document. We recognize the network of energy and sustainability efforts underway in communities across Vermont is ever evolving. Your comments and suggestions are welcome on successful community-based activities or resources not presented in this guide.

Please assist us by making this guide a useful tool to help inform and advance energy-saving and greenhouse-gas emission reduction strategies in Vermont communities by sending your comments and suggestions to jmiller@vnrc.org.

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ABOUT VERMONT ENERGY & CLIMATE ACTION NETWORK

The Vermont Energy and Climate Action Network (VECAN) is a partnership of the Energy Action Network, New England Grassroots Environment Fund, Vermont Energy Investment Corporation, Net Zero Vermont, Vermont Natural Resources Council and Vital Communities.

VECAN's mission is to start, support and strengthen town energy committees. VECAN and its project partners are working collaboratively to develop, inform, and strengthen community-based energy and climate action to help Vermonters plan for, prioritize and implement energy-saving, greenhouse-gas emission reduction strategies at the local level. For over a decade, VECAN and Vermont's growing network of over 100 all-volunteer community energy committees have been playing an increasingly meaningful role in Vermont's energy landscape – getting town buildings weatherized, solar installed on schools and homes, advancing transportation options and far more.

Communities play a critical role in planning for and realizing a clean energy future for themselves – and the State of Vermont. In 2016, the Vermont Legislature passed Act 174, which is a planning effort focused on helping communities and regions identify the strategies and solutions they would like to implement to help achieve the state's important 90 percent renewable energy goal articulated in the <u>Comprehensive Energy Plan</u>. At its core, Act 174 empowers towns and requires regions to play a larger role in planning how Vermont transitions to a more efficient, distributed energy system to meet all Vermont's energy needs – heating, transportation and electricity. Act 174 requires communities and regions to craft plans that will support the state's efficiency and renewable energy goals – *if* they want greater deference in regulatory proceedings on projects before the Public Service Board. It's an important process – and one we would encourage you to get involved in by reaching out to your local or regional planning commission. For much more information, visit the <u>Public Service Department's web site</u>.

The greater emphasis on renewable energy and energy efficiency is apparent in the Vermont economy, more specifically in the climate economy. The climate economy is the economic opportunity that arises from combating climate change. Vermont has seen a huge increase in the number of clean energy jobs in recent years. The clean energy sector grew 29% from 2013-2017 resulting in 19,000 jobs. Solar in particular has seen incredible growth. Vermont ranks third in the country per capita for solar jobs. According to the state's 2017 <u>Clean Energy Industry Report</u>, Vermont's clean energy economy accounts for approximately 6 percent of Vermont's workforce. It's one of the fastest growing sectors of the state's economy and 1 out of every 16 Vermonters is employed in the clean energy sector – making our homes and buildings more efficient, installing solar and far more. In short, tackling climate change and transitioning to a cleaner, distributed energy system is a real economic development opportunity for the State of Vermont – and Vermonters.

VECAN developed this *Town Energy and Climate Action Guide* to provide communities with suggested tools and resources to form volunteer town energy and climate action committees. The *Guide* is intended to provide useful information on how to get started, ideas on various energy-saving techniques and suggestions for advancing them in your community. To further support and strengthen grassroots energy efforts, VECAN also creates networking, information sharing, and model projects for communities to advance. Visit <u>www.vecan.net</u> to learn far more about resources, programs, success stories, funding opportunities and far more. Join us!

WHY FORM A TOWN ENERGY OR CLIMATE ACTION COMMITTEE?

Scientists predict that by the end of the century, temperatures in New England will equal those of Virginia or Georgia. That threatens Vermont's valued natural resources and our natural resource-based economy, such as our tourism, ski, maple syrup and other iconic industries.

Most Vermonters are concerned about climate change and ready to take action to reduce energy consumption, increase energy efficiency and develop new sources of clean, renewable, local resources. Many Vermonters also recognize a potentially unparalleled economic development opportunity; one that allows all Vermonters – including the most vulnerable – to participate.

Vermont recently reaffirmed our commitment to tackling climate change and growing a 21st century clean energy economy by joining a growing coalition of other states and cities committed to upholding the goals of the Paris Climate Agreement despite the federal government's decision to withdraw from it.

The State of Vermont has also set some ambitious and necessary goals that would accomplish the Paris agreement targets and more. <u>The 2016 Comprehensive Energy Plan</u> includes a goal of reducing greenhouse gas emissions to 40% below 1990 levels by 2030 and to 80-95% below1990 levels by 2050.

These goals are compatible with the renewable energy goals of sourcing 90% of all energy from renewable sources by 2050. In order to reach 90 by 2050 we have intermediate goals of:

- Reduce total energy consumption per capita by 15% by 2025, and by more than one third by 2050.
- Meet 25% of the remaining energy need from renewable sources by 2025, 40% by 2035, and 90% by 2050.
- Three end-use sector goals for 2025: 10% renewable transportation, 30% renewable buildings, and 67% renewable electric power.

Energy Committees are going to be key to reaching these milestones and saving municipalities and households money and stimulating the green economy.

Promisingly, Select boards are empowered by the state of Vermont to appoint an energy coordinator and energy committee as an official resource to town planners. Energy coordinators and committees can best serve their community by suggesting specific goals, objectives and implementation strategies that foster sustainable development and benefits the community as a whole.

Grassroots energy and climate action committees are an important way to help inform decision makers and voters on how to advance cost-effective strategies to save energy and reduce waste. By implementing new initiatives and strengthening policies in communities throughout the state, Vermont can set a course toward a sustainable energy future for others to follow.

FORMING COMMUNITY ENERGY AND CLIMATE ACTION COMMITTEES AND MOVING FORWARD

Forming a local energy or climate action committee is relatively straightforward. Outlined below and in the sidebar are suggested steps and ideas on how your group might approach the planning and implementation process to help mitigate growth in greenhouse gas emissions.

Helpful Organizations

Municipalities

- Regional Planning Commissions RPCs offer assistance with energy planning and mapping.
- Vermont Natural Resources Council Offers energy, transportation and land use planning technical assistance, organizing support and policy and planning expertise.
- Energy Action Network Provides baseline data on energy use and many resources for municipal level groups to take action through their <u>www.VTEnergyDashboard.org</u>.

Household, School, Business, Congregation, Individual

- Vital Communities A resource for people and energy committees in the Upper Valley working to make their communities a better place to live, work and play.
- Vermont Interfaith Power and Light A coalition of congregations across Vermont, which provides free energy assessment for buildings and initiatives for congregants.
- Heat Squad (Neighborworks of Western Vermont) Provides low cost audits and offers loans for energy improvements in Rutland, Addison and Bennington County
- Efficiency Vermont The state's efficiency utility, offers rebates and technical assistance to individuals, businesses and organizations.

Advocacy – Policy Reform at the Local and State Levels

- Vermont Natural Resources Council Land use, water resources, climate change and smart growth.
- Vermont Public Interest Research Group Energy, climate change, consumer interest.
- Energy Independent Vermont a coalition of environmental organizations and others dedicated to putting a price on carbon pollution.
- Vermont Conservation Voters legislative scorecards, environmental track records of legislators.

Communities have taken a variety of approaches to advance local energy projects and initiatives. Selected models and approaches, including organizations that can help, are suggested in this guide. Committees are encouraged to consider the best structure and approach for their desired project. For example, if your community is interested in conducting a community-wide inventory of greenhouse gas emissions it might want to include a group of municipal officials and volunteers.

Most efforts will include public education, outreach and advocacy. Several statewide organizations can assist in building local support for policy reform at the local and state levels. Explore the 'Resources' section of this guide for an expanded list of helpful references.

Below are suggested steps to help achieve your project goals and objectives.

Getting Started

1. Assemble a great committee -

The first important step is to identify citizens representing various constituencies in your community who are interested in working on energy and climate change issues. Secure their support and establish a coalition of partners who will lend capacity, diversity, and expertise to your efforts.

Energy issues are intrinsically linked with other concerns such as health, housing, food, and economic development. For example anti-idling campaigns have the duel benefit of reducing fossil fuel consumption and improving air quality. What existing groups are already working on these projects and how might you collaborate with them? These groups may also be key resources for what has worked well in your community and what has fallen flat.

As you think about your specific community you might engage in an exercise called power mapping. Power Mapping is a technique to visualize leverage points and networks in your community. You would draw the person or organization that has the power to make a decision you want to influence and then

Take Stock

In taking stock in your community, ask about the energy saving and emission reduction actions that may be underway or planned in your community.

Energy committees are encouraged to check in with community officials and decision makers to identify opportunities and/or problems. Find out who is responsible for decisions and how to plug in to existing or planned processes. Note that municipalities are juggling multiple demands. Furthermore, they are governed and enabled by state statute and the process is quite structured.

Energy committees are encouraged to ask for guidance on how to suggest appropriate actions and project initiatives moving forward.

connect them to potential allies until you find a way to enter yourself on the map. There are many good resources that explain the power mapping technique in more detail. Look at the <u>Bonner Curriculum</u> or <u>350.org.</u>

Take stock of existing plans, since towns have either an energy plan or an energy section of their town plan. A good energy plan will describe the energy needs of the town and possible resources.

Another resource to help you take stock is the <u>Community Energy Dashboard</u>. This online tool has energy data for every town in Vermont. The electrical data comes straight from the utilities and is as accurate as you can get. The developers used a detailed algorithm to estimate heating and transportation data for each town. Energy committees can see hard numbers on their current energy use (renewable and conventional) and compare it to intermediate goals to reach the 90 by 2050 end goal. Soon they will be able to set their own goals and track their progress towards achieving them.

The dashboard also has resources for areas like financing, case studies and suggestions for individual actions. One of the most valuable features of the dashboard is the Vermont Energy Atlas. The atlas shows solar, wind and biomass resources across the state as well as current renewable energy generation sites. The atlas can help town planners evaluate potential renewable energy sites by looking at both the resources and possible constraints such as wetlands or agricultural soils.

2. Select the best structure for your committee

There are numerous ways to approach this process.

Identify the most appropriate group structure that will help advance your town's energy or climate action project. The structure of your group may depend on such factors as buyin from your local government, the municipality's capacity to "staff" the committee, volunteer capacity, the complexity of the project, or the most strategic way to advance your short- and long-term goals. Three basic structures for committees are:

• An ad hoc citizen energy and climate action committee.

Organize a group of concerned citizens with varied expertise and a passion for the issue. Ad hoc citizen committee, the most grassroots type of committee, are commonly formed when communities wish to accomplish finite tasks.

• A subcommittee of an existing municipal committee (i.e. work under a planning or conservation commission)

Vermont communities are currently enabled to plan for their energy future (24VSA, Chapter 117). This statute provides communities with the ability to work with local commissions to help legitimize activities and to encourage adoption of policies that lead to energy-saving and renewable energy opportunities in town plans, bylaws and initiatives. Step 3 provides guidance on elements of an energy plan.

Many communities have established a conservation commission to assist planning commissions with natural resource and conservation matters. If your community does not have a conservation commission, consider forming one and making local renewable energy efforts a primary focus of its work. Climate change will continue to have a direct impact on Vermont's diverse natural resources.

• An independent municipal committee or task force appointed by and responding to the Select Board or City Council.

As noted above, state-enabling legislation allows communities to assess and establish strategies and policies that help chart the community's energy future. In addition, 'Select Boards are further enabled to appoint a Town Energy Coordinator (24 VSA, Section 1131) for a one-year term to help coordinate existing energy resources, study and evaluate sources of energy, make periodic reports to the Select Board, and advance specific project initiatives.'

When considering the best form for your community's energy or climate action committee, weigh the options. For example, an official town-appointed committee may have more legitimacy in the public's eye, more direct access to the Select Board, and funding for initiatives. If the Select Board or City Council is not ready or willing to advance a proposed project initiative, however, it might be more beneficial to form an ad hoc committee. Or, if the planning or conservation commission needs help exploring ways to advance renewable energy solutions, a subcommittee of one of those bodies, which can focus solely on different energy-saving strategies, might be the best fit. Ultimately, any committee structure you choose should help plan and implement projects and lead to rational policies, goals, and objectives for adoption at the municipal and state levels.

3. Do your research and inventory

Conduct some initial information gathering to explore areas where the community might save energy. Some communities choose to conduct an inventory of energy use in the town (i.e., electricity, thermal, and transportation energy usage). Having baseline data can be helpful later to track progress in energy savings and greenhouse gas emissions reductions. Use the Community Energy Dashboard to get a baseline for the entire town. http://www.vtenergydashboard.org

Identify potential creative, cost-effective, and innovative solutions for your community to consider. Look at the town's comprehensive plan to make sure there is an energy chapter and see what it enables. If it needs to be more progressive in its vision, find out when the plan is due to be revised and get involved in the process. Municipalities are required to develop an energy plan. The 'Municipal Energy Plans' sidebar below provides more specifics about what an energy plan might include. With the passage of Act 174 there are very specific requirements for municipalities seeking substantial deference regarding siting decisions of new renewable energy generation. For more details we recommend

visiting the Public Service Department <u>website</u>.

Also, know what projects are planned or soon to be happening that may affect your community's energy use. For example, find out whether the community is planning to purchase any equipment, build a new facility, or start a municipal planning or capital improvement project. This process will help identify opportunities and potential barriers to implementing best practices and use of ENERGY STAR and resource efficient technologies.

It's important to note that successful projects often fit into a broader municipal initiative or sustainability strategy and complement, not burden, those already underway. Projects that don't impose undue financial costs on already strapped local governments

MUNICIPAL ENERGY PLANS

All Vermont towns are required to include a municipal energy plan within their comprehensive plan. The Vermont Planning and Development Act recommends that a town energy plan include, "an analysis of energy resources, needs, scarcities, costs and the problems within the municipality, a statement of policy on the conservation of energy, including programs such as thermal integrity standards for buildings, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy." (Vermont Statutes Annotated, Chapter 117, Section 4382, subsection 9)

Energy plans lay out, in general terms, the direction the municipality should move in terms of conservation, efficiency and renewables. This in turn forms the basis by which the energy committees can act, to develop and implement programs that pursue these goals. Therefore, an important early step in any town energy or climate action process is to review the energy chapter in your town's comprehensive plan and make sure it is pointing in the right direction.

One source for assistance in developing or updating a municipal energy plan is your regional planning commission (RPC). Your RPC should have on file energy plans of neighboring towns and might help in redrafting your plan in accordance with statute. are often easier to advance. That requires creative thinking. And that's where energy and climate action committees come in.

Energy and climate action committees can play a greater role in providing decisionmakers with salient facts and information so that they establish and implement policies that are cleaner, greener, and save money. Offer solutions your municipality might not be considering. Investigate funding sources for projects and paybacks from savings on investments.

Put forward reasoned, well-crafted proposals that integrate opportunities for decision makers. For example, make the case for clean energy alternatives through facts and cost-savings estimates to the Select Board or School Board when they are considering purchasing equipment or making improvements to facilities and operations.

- **4.** Set achievable goals both short-term and long-term and stick to them Keep the list of goals succinct and to the point. As much as possible, align your priorities with the priorities of the governing body you are trying to influence. Finally, it is helpful to make connections to broader sustainable development goals and projects at the regional and state levels.
- **5.** Develop salient messages and a communications plan to disseminate them It is important to develop a clear communications plan. Your plan might be multi-layered and involve several stakeholders and the community. This often results in more legitimacy among the public, more direct connection with Select Boards, and greater access to financial support from the community and beyond.

The most powerful messages that will help your work gain traction are clear, concise, and compelling, Successful marketing connects the message with what people care about most.

Positive, persistent, and proactive messages help too. People respond to and act on different reasons for conserving energy and switching to renewables, including slowing climate change, saving money, increasing comfort of the home, protecting public health, creating "green" jobs, and weaning ourselves off fossil fuels. Know and articulate the different issues so that you can appeal to as broad a spectrum of public concerns as possible.

Decide the best format for your communications. Websites and Facebook pages make your information accessible to large segments of the community. Some committees have found success with Front Porch Forum and others have relied on local listserv email lists. Whatever you choose make sure it is well maintained and up-to-date.

6. Dive in! Implement Strategies and Encourage Action

Now that you've formed your committee, taken stock, gathered information, and established your goals, you can begin to implement your projects and strategies. How?

7. Project Management

Energy committees are made up of people from all walks of life and while some may be familiar with project management techniques, some may not be, so here are some suggestions to make your projects as successful as possible.

- Agree on a brief description of what you want to do and why it's important like how it helps meet the committee's goals.
- Set some high level objectives (i.e. reach 25% of residents or businesses, % energy reduction expected per resident, etc.). Note that no one should feel bad if these aren't met it simply helps you understand what you are trying to achieve.
- Enlist a Champion to guide the overall project (they don't do all the work but coordinate others & help solve problems).
- Define some concrete work products (i.e. marketing materials, creating a website, develop a training program, etc.).
- Set some high level work steps with estimated dates where they & deliverables will be done (i.e. assemble a team of volunteers, sign up partners to support the project, perform training if required, X% of targeted resident reached, etc.).
- Enlist people who at willing to work on each of these work steps.
- Have regular meetings (probably monthly) where everyone involved talks about how they are doing on their piece and if necessary the group looks for ways to pitch in to help when it might be needed. Reset your estimated dates as needed as you go along.
- Celebrate your progress and recognize employers and others who are making great strides toward achieving shared goals.

If you want more information on goal setting and project development we highly recommend the <u>Strategic Energy Action Toolkit</u> from the New Hampshire Local Energy Group.

8. Volunteer Management

Why is volunteer management important? As an energy committee leader you are probably a volunteer yourself. Managing volunteers intentionally is important to reduce volunteer burnout and make your committee more successful. While the relationship among committee members will be different than a traditional organization – volunteer relationship, some of the same best practice apply such as recognition, feedback and the need to demonstrate impact.

Recruitment:

- Targeted recruitment is for people with specific skills that may be useful to your committee like someone in the renewable energy field, a contractor with building experience or someone in communications and web management.
- Recruit new members and broaden your network of partners. Reach out to business owners, the faith-based community, the Chamber of Commerce, Rotary, Legions, and other important stakeholders to advance your projects.
- Youth: Many high schools have environmental clubs, reach out to science teachers or the appropriate school contact to see if one or more of their students would be interested in gaining some real world experience. This benefits both the student and the committee.
- Ask! The number one reason people don't volunteer is because they weren't asked. Beyond a general "new members always welcome" a personalized, direct invitation to someone you know makes a big difference.
- Ways to reach people:

- Do you have an online presence through the form of a website, a page on the town website or a Facebook page? If people don't know you exist they will not volunteer. VECAN strongly recommends some kind of online presence and keeping the contact information up to date.
- Front Porch Forum is a great way to reach people in your town.

Recognition:

- Everyone likes to be recognized for their hard work. Feeling like they are not appreciated in one reason volunteers leave. Recognition can take many forms including volunteer appreciation events, awards, even a direct person to person thank you.

Supervision/ feedback:

- Have someone check in with members, this could be the chair or everyone could take the responsibility to "interview" another member. Make sure the member feels like they are doing something useful and valuable.
- If in person meetings are logistically impossible, consider an online survey. People may be more honest when anonymous as well.

Demonstrating Impact:

- Submit articles to the local paper or give presentations about what your committee has been able to accomplish. This builds support and recognition in your community.
- When you demonstrate impact it is also a chance to recruit more volunteers and attract future funders / maintain current funders.
- In order to demonstrate impact it is important to keep records of volunteer time did you know the average volunteers time is valued at \$20 / hr? Also consider tracking:
 - # of people who received education through a workshop
 - # of homes weatherized or # of solar installations
 - \circ \$ saved

HOW CAN VECAN SUPPORT YOUR COMMITTEE EFFORTS?

VECAN's goal is to create, support, and empower local energy and climate action committees throughout Vermont to reduce the state's dependency on nonrenewable energy sources and move toward a clean energy future.

VECAN provides a framework to help communities advance energy-saving projects. Serving as an information and networking 'hub', VECAN will consult with communities as they form and sustain energy committees. VECAN can help your committee by:

- Offering direct, hands-on technical and organizing expertise.
- Networking support for the sharing of successful examples.
- Adapting and developing useful tools, templates, and tested strategies to help make your community efforts more successful.
- Helping connect local efforts to regional and statewide initiatives to make cleaner, greener energy opportunities more readily available and publicly supported.
- Convening an annual conference largely tailored to energy committees, which includes networking and educational opportunities. This event is often held the first Saturday in December. Sign up for VECAN's newsletter to energy committees at <u>www.vecan.net</u> to get information about the Conference, timely project, program, event and funding opportunities and more.
- Other ways! Connect with us and let us know what kind of help you need: info@vecan.net.

PROGRAMS, STRATEGIES, AND INITIATIVES

The following are brief summaries of strategies and initiatives town energy committees might advance. We have grouped strategies and initiatives into four categories: efficiency, renewable energy, transportation, and education campaigns. We have listed the programs outlined under these categories from easier (i.e., lower cost, less labor intensive, quicker payback) to the more difficult or complicated undertakings. This is a small sample of possible projects. Immediate community needs, resources, and interests should affect project choices.

Please feel free to contact VECAN or those listed with each initiative for more information and details on conducting specific strategies and initiatives.

EFFICIENCY

SMART TOWN STREET LIGHTING: REDUCING COSTS, SAVING ENERGY, PROTECTING DARK SKIES

Street lighting is one of a town's more expensive utility bills. Most cities and towns currently use old, inefficient light fixtures with drop-down lens fixtures that spill and waste light to the sides and upward to the sky. Through a community-wide streetlight initiative, towns can save money, reduce energy use, and cut down on nighttime light pollution. For more information contact Efficiency Vermont.

Smart street lighting strategies towns might consider include:

- Removing unneeded lights, some lights actually decrease safety by causing a glare
- Avoiding street lighting in low-density and rural areas
- Lighting for the task (pedestrian walkways and intersections)
- Upgrading to more efficient lamps and fixtures, especially LED light bulbs
- Installing full cut-off fixtures, with lenses that do not extend below the fixture thereby preventing light spillage to the sides
- Placing lights in low-traffic areas on timers to shut off during the middle of the night
- Considering purchasing municipally owned fixtures, rather than leasing them from the local electric utility. This will expand the town's options for lights, fixtures, and controls and could result in financial savings to the town
- Encouraging adoption of zoning bylaw amendments that achieve shared goals for energy conservation, efficiency, and protection of the night sky

EFFICIENT BUILDINGS — AUDITS AND RENOVATIONS FOR RESIDENTIAL, MUNICIPAL, EDUCATIONAL, COMMERCIAL, AND SPIRITUAL SPACES

Make sure municipal, residential, commercial, and important public spaces, including schools and places of worship, are as energy efficient as possible. This is an important first step. Committees use energy audits and building performance assessments to provide information on cost-effective energy retrofits that can save energy and money. Communities can also form their own Home Energy Assistance Teams of trained volunteers to implement simple weatherization measures in homes of those in need and community buildings. Below is a list of entities and resources that provide energy audits and assessments. Find the contact information for these and other valuable efficiency resources in the "Resource" list at the back of this document.

Entities Providing Energy Audits and Assessments

- Burlington Electric Department (for Burlington only)
- Home Performance with Energy Star Contractors
- Efficiency Vermont
- Vermont Gas Systems
- Vermont High Performance Schools Initiative
- Vermont Interfaith Power & Light
- Vermont Office of Economic Opportunity
- Vermont Small Business Development Center
- Vermont Superintendents Association-School Energy Management Program
- Heat Squad (Neighborworks of Western Vermont)

PROMOTING EFFICIENCY AND CONSERVATION IN NEW DEVELOPMENT

Work with your local municipality in a proactive way to make certain that new development in town is as sustainable and energy efficient as possible. This might begin with amended policies for new development. Planning commissions, development review boards and zoning boards of adjustment can help by first greening their town plan and zoning and subdivision bylaws. Examine the plan and bylaws to remove obstacles and create opportunities for energy efficiency, renewable energy generation, and compact land use patterns. For example consider:

- Promoting the use of climate friendly street trees
- Making water-conserving landscaping mandatory
- Identifying suitable community sites for renewable energy development
- Protecting wind resources
- Increasing height limits for wind turbines
- Advocating for use of biomass, combined heat and power and development of community energy systems to serve several buildings
- Creating effective agricultural zones (i.e. 1 dwelling unit/100 acres)
- Establishing energy criteria for developments and new homes such as:
 - Incentives for developers, including density bonuses
 - Subdivisions which make use of solar orientation
 - Low carbon or net zero energy use homes and businesses
 - Promoting mixed use development

Suggestions for town officials include:

Have the zoning administrator distribute information about the following programs to individuals and businesses seeking building permits. Some towns have instituted a policy where they will not issue a certificate of occupancy without seeing a certificate indicating the building has met the applicable building code.

 Commercial Buildings Energy Standards - All new commercial construction must meet minimum efficiency standards. Contact the Public Service Department at 802-828-4020 for a copy of the Vermont Guidelines for Energy Efficient Commercial Construction or visit <u>http://publicservice.vermont.gov/energy_efficiency/cbes</u> For more information on how to meet or exceed the new commercial standards, visit <u>www.efficencyvermont.com</u>

- Vermont Residential Energy Building Code This code mandates all new construction meet a certain level of energy efficiency. Contact Energy Code Assistance Center at 1-888-373-2255 for more information.
- Energy Star Homes Program Direct new home and commercial building permit applicants in town to this great resource. For more information, call 800-893- 1997, visit <u>http://www.vtenergystarhomes.com</u> or email <u>info@vtenergystarhomes.com</u>.
- Efficiency Vermont EVT provides technical assistance and incentives to promote efficient new buildings. Contact Efficiency Vermont at 888-921-5990 or visit <u>www.efficiencyvermont.com</u>.
- Leadership in Energy and Environmental Design (LEED) building rating system LEED design standards provide architects and contractors with energy-efficient design and green building guideposts. For more information contact the Vermont Green Building Network at <u>www.vgbn.org</u>.

Encourage your local planning commission to adopt basic performance-based standards that will ensure that all new buildings are constructed to a minimum efficiency level. For example, work with your planning commission to adopt language in your town or village plan and bylaws that require "all new construction to be designed and constructed to exceed Society of Heating Refrigeration Air Conditioning Engineers, ASHRAE 90.1, standards by at least 30 percent."

State law mandates that new buildings meet the Vermont Residential Energy Building Code and that a certificate of compliance be posted in the home at completion of the project and filed with the town and state within 30 days of completing construction. To assure compliance, towns can take the proactive measure of requiring receipt of the certificate of code compliance prior to permitting occupancy. For more information contact Energy Star Homes at 800-893-1997 or visit <u>www.vtenergystarhomes.com</u>.

BUTTON UP VERMONT

Button Up Vermont is a multi-media awareness campaign culminating in actions where neighbors help neighbors prepare their homes for winter, and save energy. Throughout the campaign, Vermonters are encouraged to do things large and small to save energy and live more sustainably. Specifically, they are encouraged to generate custom Button Up check-lists online, complete their energy-saving tasks throughout the campaign, and participate in a community event (if applicable). Button Up Vermont partners with retail partners and invites them to participate by stocking weatherization products, lighting, and other efficient products.

How can Efficiency Vermont support you?

Efficiency Vermont is prepared to support your efforts in a number of ways. First, they have a number of educational materials and resources available for you to complement your Button Up efforts. They can provide hard copies of Button Up checklists, Button Up poster, and Button Up business cards. They have also developed a <u>Guide to Community Energy Engagement Activities</u> that includes step-by-step guides for how to organize the following: home energy parties, phone-a-thons, workshops, home energy visits, door-to-door campaigns, and partnerships with contractors.

WEATHERIZE UPPER VALLEY

Weatherize Upper Valley is a project pioneered by Vital Communities, it takes the successful

solarize model and applies it to weatherization. Volunteer teams in each town provide information about weatherization. Interested homeowners fill out a survey with information about their home and their energy use. Qualified contractors then give a free home assessment and provide them with an estimate of weatherization work. Volunteers are with community members in every step of the process to guide them through their decision-making and everyone who has a contract signed by a deadline is entered to win a prize (typically money towards their project). They are currently finishing their fist round and have signed 98 contracts in 14 towns!

RENEWABLE ENERGY GENERATION

Vermont has a goal to get 90% of all Vermont's energy needs – heating, transportation and electric – from renewable sources by the year 2050. The plan – and this important and ambitious goal – is also premised on shrinking the pie; reducing Vermont's total energy needs by about 1/3. While there are many strategies, technologies and policy pathways the state will need to embrace to achieve this goal, the Comprehensive Energy Plan (CEP) has a strong focus on "strategic electrification" to transition our fossil-fuel powered economy to more clean, local, renewable energy supplies to heat our homes (heat pumps, e.g.) and get there we need to go (i.e. electric cars and buses). It will also involve distributed small- and large-scale production of renewable energy resources in our own backvard. The cost of solar panels has fallen dramatically over the past decade and Vermont is home to a plethora of solar companies. You can find them on the Renewable Energy Vermont website (revermont.org) or through your local Chamber of Commerce. For those who cannot or do not wish to have solar on their property, community solar can be a good option. Unfortunately recent changes to the state's net metering program has made community owned solar more challenging but it can still be done. See the Community Solar Toolbox on www.vecan.net for more information. While solar is a great renewable energy resource for Vermonters, it is important not to forget about biomass, wind, hydro, and geothermal.

SOLARIZE UPPER VALLEY

Solarize is a proven model for motivating your neighbors to go solar.

Most towns more than double their number of existing solar homes in less than a year.

- A volunteer team provides outreach and education about solar energy
- A partner installer provides pricing discounts on residential-scale solar installations
- A deadline motivates residents to take action
- As more people sign on to go solar, the price goes down for everyone

Solarize Upper Valley – a project by Vital Communities was able to help 370 households in the Upper Valley of Vermont and New Hampshire go solar over two years (three rounds of Solarize). They had 24 towns participate and installed 2.2 Megawatts of solar. http://vitalcommunities.org/energy/solarize/

SOUTH BURLINGTON LANDFILL SOLAR

The South Burlington Energy Committee worked with the City of South Burlington to create a solar installation on an old landfill. The 2.2 Mw array will be on a closed and capped landfill that has been unused for the past 25 years. It turns an otherwise undevelopable location into a productive solar site. Even when landfills are closed they often present too many risks to develop into other uses. The "cap" of soil over the landfill cannot be breached so large concrete blocks will anchor the panels.

The project was not financially feasible until 2014 when the Vermont Legislature passed Act 99 which expanded the allowable size of net metering on landfills to 5 Mw, thereby helping to bring otherwise unfinanceable projects like this into the realm of the possible. The South Burlington landfill project could then capitalize on the benefits of economies of scale from larger projects, take advantage of attractive net metering incentives and utilize an otherwise unusable location to help bring down the cost of electricity for South Burlington's municipality and schools, while increasing the share of renewable energy in the community's energy use.

The array covers eight acres and is well-sited close to industrial uses such as the wastewater treatment plant and the airport. Landfills are also a preferred site under <u>Act 174 (Energy Planning)</u>, which encourages renewable energy generation on already disturbed sites. The project represents a likely savings of \$5 million over the 25-year life of the project for the city and the school district due to the favorable – and predictable - price the city will pay for the solar power. It will also generate thousands of dollars in new property taxes. All of this is done without any taxpayer investment due to the innovative public/private partnership.

The power is being purchased via a Power Purchase Agreement with Altus Power America, Inc. which is based in Connecticut and will finance the project. As a private entity, they can take advantage of the 30% tax credit of the project, and pass on those benefits in lower electricity prices to South Burlington and its schools. Encore Renewable Energy planned the project, tackling issues of siting, design, permitting, capital and more. Encore specializes in municipal scale projects on underused land such as landfills and brownfields.

The South Burlington Energy Committee learned a lot through this project and have consolidated their thoughts into a helpful guide: <u>Implementing Solar for Your Town or School District</u>. This project is an excellent example of what can happen with thoughtful planning and persistence. Brattleboro has received approval for a 5MW array on their landfill and plans are underway in other towns as well.

TRANSPORTATION

Transportation is the fastest growing greenhouse gas emissions sector, representing almost half of the state's total greenhouse gas emissions generated in 2012. There are many forces at work, including Vermonters' heavy reliance on the single occupant vehicle to travel. To address this challenge, there are several aspects to consider, including legislative/regulatory; infrastructure; alternative fuels; clean vehicles, transportation systems management; policy changes and public awareness.

An important solution to address this problem is to guide future development to downtowns and town centers where a mix of uses allows residents to live, work, shop and play in their community. This will help reduce the use of the single-occupant vehicle and length of vehicle trips. Advocating for dense downtown centers that include a mix of commercial, retail, office, and residential



space is a great goal. Vehicle miles travelled and trip length can be substantially improved with a diverse transportation system that includes a mix of commuting choices, including public transportation and ridesharing.

Energy committees might begin to assess and characterize the transportation sector (e.g., length of vehicle trips, journey to work, number of vehicle registrations and opportunities for alternative commuter choices) to help determine a benchmark and emissions reduction target moving forward. On average, for every mile driven, one pound of carbon dioxide is produced. Vermonters drive an average 11,356 miles per year.

Below are several ideas and approaches to begin to give Vermonters attractive, affordable and convenient transportation options and slow the rate of growth in transportation emissions. Additional actions by category are listed at the end of this document.

Drive Electric Vermont

Drive Electric Vermont (DEV) – <u>www.driveelectricvt.com</u> – is a statewide coalition of policy makers, industry leaders, and interested citizens dedicated to promoting the spread of electric transportation in Vermont. DEV's efforts are focused on four areas:

- Infrastructure, Regulation, Codes and Standards
- Education, Marketing, and Outreach
- Technology and Innovation
- Legislation, Policy, Finance, and Incentives

DEV hosts events around the state to showcase and educate Vermonters about electric vehicle technology and its benefits to our transportation sector. Reach out to DEV if your energy committee or community is interested in electric vehicles and might want to host an educational or outreach event to enable people to test drive an electric vehicle and, perhaps, inspire them to invest and tap into some strong, state- and utility-based incentives.

COMMUTER CHOICES

Promoting and expanding carpooling, ride sharing, and use of public transportation is an important way to help save energy. Vermont Rideshare has four brokers covering the state.

- Advance Transit covering Windsor, Orange and Windham counties;
- Green Mountain Transit (GMT) covering Chittenden, Franklin/ Grand Isle, Capital District, Mad River Valley, Stowe/ Lamoille counties
- Addison County Transit Resources (ACTR) coving Addison County
- Rural Community Transportation (RCT) covering Orleans, Essex, Caledonia, Rutland and Bennington counties.

You can reach any one of them through 800-685-RIDE (7433) or go to the Vermont Rideshare website <u>www.connectingcommuters.org</u>. These brokers will help you work with your communities, employers and committees to provide information on carpool, vanpool and other alternative transportation services and benefits.

Use of park and ride lots should be promoted and committees can help with this. If you don't have a park and ride lot in your community, you might consider identifying an existing lot for temporary use or finding out if one is planned by contacting Vermont's park and ride website for more information a <u>http://vtrans.vermont.gov/highway/parkandrides</u> With specific questions, contact Wayne Davis at 802-828-5609 or <u>wayne.davis@vermont.gov</u>

Encourage businesses to become an Environmental Protection Agency "Best Workplace for Commuters." This is a voluntary EPA program encouraging employers to establish policies and provide incentives to commute other than single-person vehicles. Visit <u>www.bestworkplaces.org</u> for more information about becoming a "Best Workplace for Commuters." Contact Susan Berry 802-295-1824 x14 or <u>sberry@uppervalleyrideshare.com</u>

WAY TO GO! COMMUTER CHALLENGE PROGRAM

Way to Go! Commuter Challenge encourages the use of less expensive, healthier, and more earthfriendly alternatives to driving solo. The program includes two weeks in the fall to give individuals, employers, and schools incentives to try new ways – bike, walk, bus, telecommute, or carpool to work, school, or play. Make it fun to practice alternative commuting choices all year round. Find out more from <u>www.waytogovt.org</u>.

BIKE/WALK TO WORK DAY

This national event occurs on the 3rd Friday of May each year. The goal is to encourage healthier commutes for employees. Ideally a town recreation department or a large employer will take the lead on this event and offer participants a free casual breakfast or lunch, record commuter miles and a chance to win donated items from local business sponsors. Some employers join a summer-long friendly competition to see whose employees can bike/walk the most miles or days. For more information, go to www.bike2work-day.com or www.bikeleague.org or contact the local Vermont Rideshare brokers to learn if they can work with you on this event. For Chittenden County, contact www.localmotion.org for additional project ideas.

EDUCATION CAMPAIGNS

COMMUNITY ENERGY EDUCATION CAMPAIGN

Raising broad public awareness will help create momentum and spur action to tackle energy issues and climate change. Three education outreach ideas are listed below. For further suggestions, information and resources refer to the Resource List.

Help spread the word by:

- Establishing an energy resource section in your community library including information and resources on the following:
 - Energy-saving tips
 - Residential and business emissions calculators
 - Wattmeter to measure appliance efficiency
 - Books and DVDs
 - Resource lists of service contractors and organizational websites
- Organizing viewings and discussions of films that discuss the opportunities and issues related to tackling climate change and transitioning to a clean, renewable energy economy. Contact VNRC for suggestions on timely, compelling films and potential ways to access Call 802-223-2328 or email jmiller@vnrc.org.
- Staffing information tables with literature and selling LEDs at town fairs, town meetings,

and other public gatherings.

SCHOOL AND CLASSROOM EDUCATION PROGRAMS

Weaving energy and climate change into local curriculum is a powerful and important way to get young people involved. Connect to local educators and school administrators to discuss opportunities to share information or collaborate with students on projects. For assistance and great resources contact:

- Vermont Energy Education Program (VEEP)-free in-school energy education curriculum and hands-on learning tools. For more information visit <u>www.veep.org</u> or contact Cara Robechek at 802-552-8674
- Vermont Food Education Every Day—local food, school gardens etc. Email info@nofavt.org or visit www.nofavt.org to learn more.

VERMONT COMMITTEES, PROJECTS, AND CONTACT INFORMATION

For a full list of energy committees, visit: <u>www.vecan.net/energycommittees</u> If your contact info is not up-to-date, please let us know! Send updated info to <u>info@vecan.net</u>.

FUNDING OPPORTUNITIES

While most of the energy initiatives you undertake are cost-effective, resulting in a profitable return on investment, selected projects and initiatives may require modest start-up funds to implement and sustain. Securing funds and resources needed to undertake projects may make your Select Board more receptive to suggested energy saving campaigns, methods, and policies.

There are a wide variety of potential funding sources available to support local efforts. Some are summarized below in three general support areas: government, foundation and other. Committee representatives are encouraged to explore the listed contacts for additional ideas of possible funding sources.

GOVERNMENT SUPPORT

Your local municipal budget – Municipalities have some money to direct toward important community initiatives. Put together a proposal and work with your Select Board to garner local funding support. Demonstrating cost and energy savings to the town will help you "sell" these budget requests to townspeople and officials. Requests for specific project and general committee support from the municipality should be made in late fall for an early spring budget process. Most municipal budgets are passed at March Town Meeting (on the first Tuesday in March) for the new fiscal year which begins the following July.

Regional Planning Commissions – Regional Planning Commissions (RPC) provide resources and technical assistance on a variety of planning and sustainability topics. Local committees should make their RPC aware of planning and project activities and in selected cases ask for assistance in gathering energy information of a regional nature. In addition, RPCs might help find additional resources to advance projects and initiatives that meet shared regional goals. Visit <u>http://www.vapda.org</u> to find the RPC for your community.

Department of Housing and Community Affairs – Provides financial and technical assistance to municipalities to identify and address local needs and priorities in the areas of housing, economic development, public facilities, and public services for persons of lower income. One of their main goals is to promote efficient new buildings. Reach them at 802-828-3211, 800-622-4553, or http://www.dhca.state.vt.us/Admin/Grants.htm.

Renewable Energy Resource Center: Solar and Small Wind Incentives Program – RERC's incentives program helps accelerate and increase market demand for high quality solar and small wind systems. For more information visit <u>http://www.rercvt.org/incentives/index.htm.</u>

Vermont Clean Energy Development Fund – In 2005, the Vermont General Assembly established the VEDF to promote the development and deployment of cost-effective and environmentally sustainable electric power resources - primarily with respect to renewable energy resources and the use of combined heat and power technologies – for the long-term benefit of Vermont electric customers. Funds will soon be available to support such initiatives as Audits and Renovations of Town Buildings and Homes, Promoting Efficient New Buildings, Compact Fluorescent Bulb Sales, or Smart Town Street Lighting. Contact Kelly Launder, Energy Program Specialist at Kelly.launder@state.vt.us or call 802-828-4039. Visit http://publicservice.vermont.gov/ for more information.

Vermont Agency of Transportation: Safe Routes to Schools –Safe Routes to School is a part of the VTRANs bicycle and pedestrian program. It is based on the simple idea that kids should be able to safely walk and bike to school. Visit <u>http://saferoutes.vermont.gov/</u> for more information.

USDA Rural Development – Along with grants and loans for individuals and businesses the USDA Rural Development program also offers Community Facilities Loans / Grants to public bodies and non profits. They offer low interest, long-term financing and grants of up to \$50,000 to install solar power arrays, purchase biomass systems and undertake energy efficiency improvements such as the weatherization of municipal buildings. For more information contact Eric Law, Community Program Specialist: (802) 828-6033 eric.law@vt.usda.gov.

FOUNDATION SUPPORT

Ben & Jerry's Foundation – The B&J Foundation offers competitive grants to nonprofit, grassroots organizations that facilitate progressive social change by addressing the underlying conditions of societal and environmental problems and lead to new ways of thinking and acting. These grants are called Grassroots Organizing for Social Change. Call 802-846-1500 or visit http://benandjerrysfoundation.org/ for more information.

Ben & Jerry's also has a program called "Community Action Team" support. CAT support is less than \$2,000 of funding and is decided by Ben & Jerry's employees who live in the area of interest. This pool of funding offers great starter funds to launch local energy projects. Visit http://benandjerrysfoundation.org/vermont-community-action-teams.htmlfor more information.

New England Grassroots Environment Fund – NEGEF offers a small grants program designed to foster and give voice to grassroots environmental initiatives. They provide seed grants of \$250-

\$1,000 to launch new groups and build projects. They offer grow grants of up to \$3,500 to fuel civic engagement, local activism, and social change for community-directed projects. These grants require broad community involvement. For more information, call 802-223-4622, email leigh@grassrootsfund.org, or visit www.grassrootsfund.org.

New Hampshire Charitable Foundation – The New Hampshire Charitable Foundation is a nonprofit public charity that funds community efforts along the east central border of Vermont and Northern New Hampshire. For Vermont communities in the southeast of the state seeking support for local energy projects, look into NHCF's community-based giving in the Upper Valley region. Find out more about the NHCF's Upper Valley Region giving here: http://www.nhcf.org/page17081.cfm.

Patagonia - Patagonia funds environmental work and offers grants to organizations that work on the root causes of problems, approach issues with a commitment to long-term change, and build a strong base of citizen support. For more information visit <u>www.patagonia.com</u>.

Vermont Community Foundation – A statewide, non-sectarian public charity that builds and manages charitable funds. Check out VCF's web site for more information on their competitive grant rounds that could support town energy committee work. Call 802- 388-3355, email info@vermontcf.org, or visit <u>http://www.vermontcf.org</u> for more information.

OTHER POTENTIAL FUNDING SOURCES

Efficiency and renewable energy businesses in Vermont offer great potential in-kind support opportunities. Creative partnerships with businesses that provide consulting, technical support, renewable energy system installation, and other services could help bring a local project to fruition. Search for renewable energy businesses and experts at Renewable Energy Vermont's web site: <u>http://www.revermont.org/search_result.php</u>.

Local businesses in your community, including banks, grocery stores, and bookstores often provide funding for local initiatives. Contact businesses in your community and ask about their giving.

RESOURCES

American Council for an Energy Efficient Economy – Consumer Guide to Home Energy Savings (including listings of most efficient products), Green Book: The Environmental Guide To Cars and Trucks (yearly), Guide to Energy-Efficient Office Equipment, 202-429-0063, http://aceee.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) – Provides training for staff in proper maintenance and operation of mechanical systems. Blaine Conner, president of the Champlain Valley Chapter, <u>www.ashraevt.org</u>

Association of Vermont Conservation Commissions—A network of conservation commissions working in communities across Vermont to steward the state's natural resources. Visit www.vtconservation.com for more information.

Building Green, Inc.—Authoritative Information on Environmentally Responsible Building Design and Construction. Refer to GreenSpec Directory: Product Listings & Guideline Specifications, February 2006. Learn more at: http://www.buildinggreen.com.

Burlington Electric Department – Burlington's municipally owned electric utility, offering residents and businesses energy efficiency programs. For more information visit http://www.burlingtonelectric.com, email bedwebmail@BurlingtonElectric.com or call 802-658-0300.

Biomass Energy Resource Center (BERC) – Consults on biomass and cogeneration projects. http://www.biomasscenter.org/

Citizen Works – This nonprofit works to strengthen citizen participation in community decision making and has one of the most complete grassroots organizing guides available on the Internet - Introduction to Organizing. Read more about how to structure, build, and sustain a group: http://www.citizenworks.org/tools/town/tools-town.php.

Community Energy Action Teams Intergenerational Energy Education Curriculum – The Island Institute has developed a curriculum for community-based energy education for all ages that helps build local energy literacy and capacity to implement local energy projects. Contact Harry Podolsky, <u>hpodlsky@islandinstitute.org</u> for more information or for copies of curriculum materials.

Community Energy Dashboard – The Community Energy Dashboard is designed to help your community shape its energy future with a powerful suite of free and interactive tools to set goals, track progress, identify and advance comprehensive energy solutions, map action, share stories and hear from trusted neighbors. <u>www.vtcommunitydashboard.org</u>

Energy Action Network – EAN is a diverse group of energy stakeholders working to end Vermont's reliance on fossil fuels and create clean, affordable and secure electric heating and transportation systems for the 21^{st} century. <u>www.eanvt.org</u>

Energy Independent Vermont - Energy Independent Vermont is a growing coalition of environmental organizations, Vermont businesses and business associations, academic leaders,

low-income advocates and Town Energy Committees all dedicated to a simple goal: address the problem of climate change by putting a price on pollution here in Vermont. Learn more at http://www.energyindependentvt.org

Efficiency Vermont – Financial and technical assistance for energy savings for Vermont residents, businesses, and towns, efficient lighting and appliance rebates, EnergySmart home energy analysis CD, list of home energy auditors and weatherization contractors, municipal services, commercial efficiency standards, energy efficiency improvements to school facilities and operations and more. In addition, explore professional development and training opportunities online. For general information, call 888-921-5990 or visit http://efficiencyvermont.org and ask for specific program contact.

Energy Star – Appliance efficiency ratings, <u>www.energystar.gov/products/</u>. And Energy Star "Do It Yourself Guide To Home Energy Sealing." Free. Download from <u>http://www.energystar.gov/index.cfm?c=home_sealing.hm_improvement_sealing</u> or order a copy by calling 888-782-7937.

Go! Vermont – A resource for connecting commuters. www.connectingcommuters.org.

Home Performance with Energy Star Contractors – Provides audits and retrofit services on a fee-for-service basis throughout Vermont. For a list of certified Home Performance with Energy Star contractors, contact Efficiency Vermont at 888-921-5990 or <u>www.efficiencyvermont.com</u>.

New England Grassroots Environment Fund – A small grants program designed to foster and give voice to grassroots environmental initiatives in the Northeast. Visit www.grassrootsfund.org or call 802-223-4622.

Northeast Energy Efficiency Partnerships – Works with press throughout Northeast. Tracks policy changes in energy efficiency. 781-860-9177, <u>www.neep.org</u>.

Renewable Energy Vermont – Trade association for Vermont renewable energy dealers. Contact REV at 802-229-0099, <u>www.REVermont.org</u>.

School Energy Management Program – Provides free assessments of a school's energy efficiency and life-cycle cost analysis for various renewable projects. Contact them at 802-229-1017, semp@vtvsa.org or www.vtvsa.org/energy.

Solid Waste – For tips on managing solid waste disposal, recycling products and how to handle hazardous waste, contact your local solid waste district. Find out more at: http://www.anr.state.vt.us/dec/wastediv/solid/swmdlist.htm

USDA rural development — Community development program—makes loans and loan guarantees for renewable and energy efficiency improvements including grants. For more information visit: <u>www.rd.usda.gov</u>

Vermont Association of Planning and Development Agencies – These regional planning entities provide technical assistance, GIS mapping, and data sources for community and regional planning and economic development. For more information, visit <u>www.vapda.org</u>.

Vermont Green Building Network – Promoting green building in Vermont and the benefits of high performance building design and construction. To learn more and to obtain helpful contact

information visit: www.vtgreenbuildingnetwork.org

Vermont Community Action Programs - There are several Vermont programs that provide low-income weatherization and fuel assistance as well as fee-for-service energy audits to nonincome-qualifying residents. Find out more about these programs from the following organizations (refer to Vermont Office of Economic Opportunity for more information).

Vermont Green Purchasing Contracts – Assists schools and municipalities in obtaining environmentally preferable products, made from non-toxic or recycled materials, at a lower cost. Contact Deborah Demore at 802-828-5784 or visit www.bgs.vermont.gob/purschasing/currentcontracts.

Vermont Department of Housing and Community Development – Provides information on housing, land use, brownfields initiatives, community development, historic preservation, and a downtown program for community growth and infrastructure development. For more information, visit <u>http://www.accd.vermont.gov</u>

Vermont Department of Public Service – Vermont's public advocate on energy and efficiency issues. The DPS works with all Vermonters and many state agencies – including the agencies of Transportation, Natural Resources, Agriculture, Commerce and Community Development, and Buildings and General Services – to put together the Comprehensive Energy Plan. They also undertake policy and other planning, including working with regions and towns on Act 174's enhanced energy planning. Reach them at 802-828-2811or http://www.publicservice.vermont.gov

Vermont Energy Education Program – Works with diverse Vermont partners and schools across Vermont on in-school energy education curriculum and hands on learning tools. Contact: Cara Robechek, <u>cara.robechek@veep.org</u> or 802-552-8674.

Vermont Energy Investment Corp. – VEIC helps communities and individuals reduce the economic, social, and environmental costs of energy consumption through the promotion of cost-effective energy efficiency and renewable energy technologies. <u>www.veic.org</u>.

Vermont League of Cities and Towns – A non-profit, non-partisan membership-based organization serving communities across Vermont. VLCT offers a variety of professional development and services to municipal officials. To learn more visit <u>www.vlct.org</u>

Vermont Gas Systems - Supplies natural gas to customers in Chittenden, Franklin and Addison counties and offers energy efficiency programs and free audits. For more information, call 802.863.4511 or visit <u>www.vermontgas.com</u>.

Vermont Interfaith Power & Light – Promoting conservation, efficiency, and renewables in congregations and communities across Vermont. Learn more about how to undertake an energy audit in your place of worship by calling 802-434-7307 or visiting <u>www.vtipl.org</u>.

Vermont Natural Resources Council – A statewide education, research, and advocacy organization working at the local, state and national levels to promote greater investment in clean, renewable energy supplies and action to combat climate change. VNRC is the coordinator of the VECAN network, focusing on outreach and grassroots organizing. Contact 802-223-2328 or visit www.vnrc.org.

Vermont Office of Economic Opportunity – Low-income weatherization and fuel assistance

programs. For a list of eligibility guidelines and services, contact Jules Junker, 802-241-2452, julesj@wpgate1.ahs.state.vt.us, <u>www.dcf.vermont.gov/benefits/weatherization</u> or refer to office in your area:

- Bennington-Rutland Opportunity Council, Inc. (BROC)www.broc.org (serving Bennington: 802-447-7515; Rutland: 802-775-0878 or 1-800-717-2762)
- Central Vermont Community Action Council, Inc. (CVCAC) www.capstonevt.org (serving Lamoille, Orange and Washington counties) 802-476-2093 or 1-877-919-2299
- Champlain Valley Office of Economic Opportunity, Inc. (CVOEO) <u>www.cvoeo.org</u> (serving Addison, Chittenden, Franklin, and Grand Isle counties) 802-862-2771 or 1-800-287-7971
- Champlain Valley Weatherization Service 802-660-3452-or 1-800-545-1084; Middlebury: (802-388-0373 or 1-800-639-1614 St. Albans: 802-524-6804 or 1-800-639-2319
- Northeast Employment and Training Organization, Inc. (NETO)www.vtneto.org (serving Caledonia, Essex and Orleans counties) St. Johnsbury: 802-748-8935, Newport: 802-334-7378
- Southeastern Vermont Community Action, Inc. (SEVCA) www.sevca.org (serving Windham and Windsor counties) Westminster, VT 05158, 802-722-4575

Vermont Planning Information Center – A clearinghouse of information for planning commissions, zoning boards, development review boards, and their staff and all others involved in land use planning and regulation in Vermont. Offers planning guidance and small education grants. Learn more at <u>http://www.vpic.info</u>

Vermont Public Interest Research Group – Statewide energy and consumer interest advocates. Contact: Ben Walsh bwalsh@vpirg.org, 802-223-522. <u>http://www.vpirg.org</u>

Vermont Sierra Club – Works on environmental and energy issues. Robb Kidd, DRR@Dartmouth.edu, 802-885-4826.

Vermont Small Business Development Center Environmental Assistance Program – Offers energy assessments free of charge for any Vermont small business. Contact Peter Crawford at 802-802-728-1423 or <u>http://www.vtsbdc.org</u>.

Vital Communities - Brings together citizens, organizations, and municipalities in the Upper Connecticut River Valley of Vermont and New Hampshire to take on issues where an independent voice and regional approach are essential. Working together, Vital Communities makes the Upper Valley region a better place to live, work and play. Contact Sarah Brock at 802.291.9100 x 109 or sarah@vitalcommunities.org and www.vitalcommunities.org

Weatherization Assistance Program Technical Assistance Center – Information and resources for professionals and homeowners (especially low-income, elderly and people with disabilities) interested in saving energy by weatherizing their homes or businesses. For more information about the Weatherization Assistance Program visit <u>www.waptac.org</u>

What Works Solutions Library – The Islands Institute's What Works Resource Library offers case studies and practical information about how residents of rural communities have successfully addressed challenges including high energy costs, available at http://www.islandinstitute.org/what-works-solutions-library

MODEL TOWN MEETING DAY RESOLUTION

Whereas, the economic, environmental and health impacts of global warming on our state's unique cultural identify, precious natural resources and diverse economy is a serious concern to Vermonters;

Whereas, the climate destabilization we have experienced, including devastating storms, droughts and floods is costing taxpayers millions of dollars in damages and in lost revenues from the ski industry and other weather-based recreational activities, fall foliage tourist season, and the maple sugaring industry,

Whereas, climate change threatens the health of our forests with increased risk of pests and disease and threatens human health with the increase of infectious diseases,

Whereas, Vermonters now export \$1.4 billion out of state every year to pay for fossil fuel;

Whereas, opportunities for job creation in energy efficiency, conservation and use of

renewable energy will help Vermont's economy, would give us more control over future energy costs and will keep energy dollars in the community,

Whereas, the build-up of greenhouse gasses in the atmosphere can be reduced if everyone conserves their use of fossil fuels including oil, gas and coal;

Whereas, improving land use and transportation policies, creating fuel efficient public and private transportation systems and promoting energy efficiency improvements in residential, commercial and government buildings would strengthen the economy and help protect the environment;

Be it resolved, on this (<u>Day</u>) day of (<u>Month</u>) that the <u>(Town name)</u> encourages every citizen and business owner to participate in the 10% Challenge program to reduce their own greenhouse gas emissions by at least 10 percent and ask community officials to reduce the emissions of town buildings and town fleets by at least 10 percent;

and be further resolved, that the residents of <u>(Town Name)</u> accept responsibility

and urgently call upon municipal, state and federal leaders to put Vermont in the forefront of a sustainable energy future. Specifically, we request immediate and ongoing action on legislative initiatives designed to promote energy efficiency in Vermont's homes, businesses, public buildings and transportation systems, and encourage expansion of modern renewable energy systems in the state of Vermont.

Town Resolution

One of the most tangible ways to make a commitment is to use Vermont's tradition of direct democracy and pass a resolution at town meeting day.

There are several good guides to presenting a resolution at town meeting day. See the Secretary of States <u>Citizen's Guide to</u> <u>Vermont Town Meeting or</u> this <u>online guide</u>.

MODEL BYLAWS OF THE NORWICH ENERGY COMMITTEE

1. Mission

The mission of the Norwich Energy Committee is to promote energy conservation, energy efficiency, and the use of renewable energy resources among the town's residents, businesses, and in municipal affairs. The committee aims to assist the town in addressing the goals laid out in chapter 10 of the Norwich Town Plan, amended and readopted June 26, 2001, for Norwich "to become a model of sustainable energy practices" (10-2). These goals will be accomplished through educational activities and programs designed to encourage people to pay attention to their energy needs, consumption habits, and short- and long-term interests. The committee will make recommendations to and cooperate and communicate with town officials and commissions and groups with similar concerns, and with the appropriate agencies of the state, regional, and federal governments.

2. Membership

The Norwich Energy Committee shall consist of seven members appointed by the Select Board. Each member shall be a resident of the Town. All members shall serve without compensation, but may be reimbursed by the Town for necessary and reasonable expenses incurred in the course of their duties. All vacancies shall be filled by the Select Board within six months. Appointments filling vacancies shall be for the remainder of the term of appointment. Appointments shall be for two years. The Select Board may remove any member if just cause is stated in writing and after a public hearing on the matter, if that member requests one.

3. Officers

The committee shall elect the following officers annually at the first meeting of the group after the scheduled appointments:

A. Chairperson shall preside at all meetings of the committee and when he or she is present and shall direct the work of the committee. The chair may appoint annually chairs of any standing committees from the membership as approved by the committee. The chair shall submit a brief annual report to the Select board and, upon their adoption, to the annual Town Meeting. The chair shall ensure continuing liaison between the committee and the Select Board, Planning Commission, Conservation Commission, and other town agencies.

B. Vice chairperson shall assume all duties and powers in the absence of the chairperson.

C. Clerk shall keep minutes of all meetings and proceedings of the committee and record any action taken. Clerk shall post notices of committee meetings and give notice to members when necessary.

D. Treasurer shall recommend action on all bills received by the committee. Treasurer shall ensure the authorization of payment of any bills, as approved by the committee, for submission to the Select Board for payment. Treasurer shall submit an annual financial statement to the

Town. Treasurer shall attend all meetings of the Trustees of Public Funds of the Town which involve the committee.

4. Meetings

The committee meetings shall be open to the public, and be held at a regular time and place when possible. The time and place of each meeting shall be posted at the Town Hall not less than seven days in advance. All records and minutes of any committee meeting or action shall be filed with the Town Clerk and be available to the public.

Four members shall constitute a quorum. Members shall make every effort to attend all meetings and perform such duties as are assigned. Any member unable to attend a meeting shall notify an officer of the committee and make a report available for that meeting if requested.

5. Operating Expenses

The committee shall have the authority to request appropriations from the Town for its operating, education, and information expenses.

Any other funds appropriated to the committee shall be carried in a public trust fund called the Norwich Energy Committee Trust Fund. This fund shall be under the charge and management of the Trustees of Public Funds. This fund shall accrue from year to year for the use by the committee solely for the purposes set forth in Article 1 of these bylaws. The committee shall have the authority to receive gifts, grants, or money from any sources for these purposes. Any funds from private, state, or federal sources that impose any obligation on the Town shall be accepted only by consent of the Select Board.

6. Amendments

These bylaws may be amended at any regular meeting of the committee by a two-thirds vote of the committee. Written notice of intent to amend must be publicly posted, sent to each member of the committee, and sent to the chair of the Select Board, at least seven days prior to the meeting at which the proposed action is to be taken.