

Climate and Energy Committee Meeting
Sept 22, 2023 4:30 pm

Present: Rowland Davis, Judy Raven, Arthur Friedman, Chloe Nathan, Karen Baron, and Liz Weir
Community Members: Samara Ashooh, Linda Wellings, Marleen Moore, Jim Wick, and Matt Bernhardt

- 1) Call to order
 - a. Linda Wellings, a current employee and former educator at Shelburne Farms, is interested in joining the committee. She is filling out the paperwork.
 - b. Shelburne Forward Together – update: Climate resiliency did not end up in the top 3 priorities, perhaps because our committee is working on the issue. That being the case, we have the responsibility to keep the community members informed and engaged. Front Porch Forum and the Shelburne News are two avenues to use, providing examples of what we're doing and why it's important.
 - c. Electric school buses – update: The school district has 2 with plans to purchase 6 more.
- 2) Approval of agenda
- 3) Minutes of our last meeting were approved.
 - a. Last meeting's minutes are not yet posted on website
 - b. Rowland will contact Betty Marcher to get the minutes posted.
- 4) Public comments – There were no formal comments. Those in attendance provided input throughout the meeting.
- 5) Input to Town Manger upcoming budget, capital planning and ARPA funds
 - a. Operating budget: Our committee was launched without an operating budget. We need to set goals for the next year and develop a budget to cover outreach and basic operating expenses so we have the funds to support our work. For example, for public engagement, we might need money for fliers, boosting social media, etc. Also consider a supplies budget. It's due in December.
 - b. Capital budget: We also need to develop long-term goals for the next 5-years. What does the town need to purchase for us to make progress on our goals? When are the purchases needed? In late October the planning commission reviews and approves the capital plan aligning it with the town plan. From there it goes to the Select Board and, if necessary, to the voters at town meeting. We have probably missed the deadline for this year, but we should be prepared to submit our capital budget requests next October.
 - c. MERP Funds:
 - For this year, there is \$4K in the Municipal Energy Resiliency Program (MERP) grant that we can use for outreach.
 - We have been awarded MERP funds for an energy assessment of the Town Office Building and Shelburne Rescue building. Ann Janda of the Chittenden County

Regional Planning Commission will arrange for the assessment. Our Town Manager will get the report and share it with us. Rowland is working with Town Manager to collect data to complete the application.

- Once the assessments are complete we'll be eligible to apply for a further grant to do the work. Note that of the 20 largest municipalities in VT, Shelburne has the highest property value per person, and so our getting the grant may be problematic. We can also consider using ARPA funds for the work.
 - d. Guidance from our committee to the Select Board for ARPA funds (\$200,000 for municipal building efficiency) is welcome.
 - e. Ideas to push for this year
 1. Police are interested in electric pickup truck for utility work
 - Rowland will help with developing the Total Cost of Ownership (TCO) numbers for their proposal.
 - Williston has a full time staff person working on energy and climate issues. They have developed a plan of the lifetime of all their vehicles and when they should be replaced with electric vehicles. Their research is ongoing. We should tap into their research where appropriate.
 2. Public outreach:
 - Help to answer "What can I do?"
 - Develop strategies to get people engaged.
 - Reach out to HS/college students.
 - Rowland – we'll see this as we prioritize our goals
 - Develop an ongoing energy column for the Shelburne News
 - Once we've established subgroups of our committee, reach out to community members to work with them.
- 6) Updates & continued brainstorming on projects
- a. MERP applications & municipal building efficiency - see above.
 - Application for an EV charging station – we've passed the first round. There's a second round. The goal is charging for town employees. There is currently a post for 2 cars at the library which is well-used.
 - b. Window Dressers - Judy
 - We were unable to get applicants for the program this year. We will work toward more engagement next year.
 1. Promote the program at the food shelf
 2. Target those living in trailers
 3. Do we want to have a Shelburne site next year (as opposed to working with Charlotte)?
 - Shelburne Farms and Shelburne Craft School were mentioned as possible sites
 - But, be aware - It is a lot of work to host the program. We might do better to continue to work with Charlotte.
 - People can still sign up for 4-hr shifts to help create the windows. This is a good way to learn about the program. Sign up at WindowDressers.org

c. Climate Action Plan (20 min) – Develop a List of our Priorities

I. Review and discuss **2019 Town Plan Actions**. We split these into several sections:

i. Municipal Buildings:

1. Conduct a baseline energy study of how much energy municipal buildings (including schools) use. Consider offering this effort to students at area colleges as a case study or thesis.
2. Implement weatherization/energy efficiency programs in municipal buildings
3. Upgrade older fossil-fuel fired heating systems in municipal buildings with high-efficiency, cold-climate heat pumps, geothermal heat or advanced wood heating systems (including wood-fired district heat)
4. Seek all available grants and rebates available to help finance the cost of updates to Town owned facilities.
5. Identify municipal buildings that would be good candidates for cold-climate heat pumps and develop a plan and schedule to add the heat pumps to those buildings
6. (From Actions – Generation) Explore the installation of solar thermal or photovoltaic systems on Town buildings or parcels, where practicable, to offset municipal electric use.
7. (From Actions – Generation) Enter into a net metering credit purchase agreement with a renewable generation facility for municipal electricity use.

Discussion:

- MERP is helping to address these actions.
- Solar was explored for the town hall, but it was not feasible.
- Waste water plant:
 - Solar is being considered for the waste water treatment plant.
 - Methane collection was explored, but we won't have the scale at the plant for this to be feasible.
 - Would it be feasible if we added food scraps to the plan? Rowland was doubtful that this could happen
- Consider a PV solar canopy of the library parking lot
- Vermont requires any new buildings to be solar ready with the necessary structural support and good solar orientation.

ii. Zoning

8. Encourage patterns of development and redevelopment that prioritize compact mixed use development through mechanisms such as Form Based Zoning in Growth Areas 1 and 2 which promotes walking/biking and transit use.

9. Implement low-impact development and/or green infrastructure practices/ strategic landscaping to shade buildings and reduce temperatures, thereby increasing overall efficiency.
10. Ensure that all new construction and renovations meet high levels of energy efficiency.
 - i. Make available the State Energy Code manuals when applicants apply for zoning permits.
 - ii. Provide space in town facilities to host State Energy Code Education workshops.
 - iii. Consider adopting the Residential Building Energy Standard Stretch code for all development [http://publicservice.vermont.gov/energy_efficiency/rbes]
 - iv. Promote the use of Vermont's residential building energy label/score.
 - v. Promote the construction of net-zero ready buildings by including a discussion of such buildings in the plan and identifying educational opportunities as an implementation action.
11. Provide incentives (e.g. density bonuses) to developments located in an area identified as appropriate for growth.
12. Co-locate EV charging stations with existing development nodes.
13. (From Actions – Generation) Update zoning regulations to require the integration of renewable energy sources (microgrids), net zero energy building design, and passive solar siting principles for new construction and major renovations.

Discussion:

- Item 10 – stretch code:
 - We have not adopted the stretch code (a stretch code is a locally mandated code or alternative compliance path that is more aggressive than base code, resulting in buildings that achieve higher energy savings).
 - Rowland feels that this is an easy win.
 - Art volunteered to research the issue.
- There are no building inspectors in Vermont, so codes are not necessarily enforced.
 - Consider working with other towns to hire a building inspector.
- Land use and building ordinances are separate.

iii. Efficiency

14. Work with utilities to identify large energy usage customers (e.g., manufacturers, commercial, and municipal properties) and encourage participation in energy efficiency programs.

15. Enhance the Residents and Businesses webpages on the Town Website to include links to efficiency programs (e.g., those offered by organizations such as Efficiency Vermont, Green Mountain Power, etc).

Discussion:

- The Vermont Energy Action Network report (<https://www.eanvt.org/wp-content/uploads/2023/09/EAN-APR-2023-web.pdf>) shows Vermont in last place in terms of making climate changes. Heating and transportation are now each contributing about 50% of greenhouse gas emissions. There are actions that can be done on a local level. It's nitty-gritty stuff that we can work on. This will be a sub group.
- How do we change our practices for keeping warm in the winter. Heat pumps need to be front and center. Technology is improving.
- Mandate that new construction be solar ready,; have no gas stoves, have electric set up in garages for cars.
- Burlington was the first VT town to require that new construction be fossil-fuel free. S. Burlington has followed. Hinesburg looked at the issue and rejected it because it would add \$5k to the cost of new home. The pull is between affordability and climate.
- How can we help with existing structures?
- Art proposed that the town allocate money in the budget to help cover the cost for new and existing building modification. To do so:
 - Work with the select board and show them the committee is doing good things.
 - Educate the select board and the public.
 - Get testimonials from those who have converted

iv. Alternative Energy

16. Determine if District Wood Heating is appropriate for areas of dense development in the Town of Shelburne.
 - a. Identify potential locations for wood-fired district heating. For example, locations with a high concentration of buildings (two or more buildings) with space for a central heat plant and/or where there is a large building that could be an anchor for a district heating system that also supplies heat to neighboring buildings.
 - b. Identify managed forest lands closest to the identified potential district heat locations that could supply wood chips to the project.
 - c. Identify town businesses that make, sell, and/or transport wood chips and/or wood pellets that could be used in a district heat system.
17. Explore feasibility of biomass for homes and business.

- a. Encourage new construction to install advanced wood heating equipment. i. e.g., <https://www.encyvermont.com/products-technologies/renewable-energy/modern-wood-heating>
 - b. Identify municipal buildings that would be good candidates for wood pellet or chip heating and develop a plan and schedule to convert those buildings to wood heat.
 - c. Participate in education campaigns to provide best practices on cordwood and wood pellet selection, storage, and combustion to promote the most efficient, clean, and cost-effective use of wood heating technology while protecting human and environmental health.
18. Explore the use of biogas.
- a. Consider upgrading the wastewater treatment facility to capture recovered methane for electric and heat generation with combined heat and power.
 - b. Vermont Gas is planning to launch a new voluntary green pricing program for Renewable Natural Gas (RNG). Promote enrollment in this and similar programs.
 - c. Identify potential producers of food and farm waste (farms, food processors, restaurants/schools/institutions with food waste) that could potentially host a farm or food waste digester.

Discussion:

- The committee agreed that these ideas are no longer relevant, and should be taken out of the plan.

v. Generation

- 19. Structure policies and promote incentive programs that support installation of sustainable energy projects where there is electric demand, and in locations where the land has already been built (e.g. roofs, parking lots, landfills) to minimize adverse impacts.
- 20. Support sustainable energy systems sited on the built environment by participating in Section 248 proceedings when appropriate projects are being proposed for preferred areas.
- 21. Investigate options for integrating solar generation with agricultural lands.
- 22. Expand search for locations within Town that are suitable for renewable energy generation facilities, so long as concerns related to natural and scenic resources are adequately addressed. Identify preferred sites for renewable energy generation facilities. (See Map 12).

23. Encourage the development of community led and/or locally controlled renewable energy projects as a way to strengthen community support for otherwise challenging to-site projects.

Discussion:

- Some of these items are important. Some may have already been done – for example, site suitability for solar is now available on maps on the internet.
- We will revisit these items in the future through a subgroup to do further research on what’s been done and feasibility.

vi. **Other**

24. Appoint a Town Energy Committee to monitor energy conservation opportunities and activities, to educate Town residents regarding energy conservation opportunities, and to make recommendations as to renewable energy sources that might be developed in the Town.
 - a. Work with the Chittenden County Regional Planning Commission and utilities to track progress achieved by the town towards meeting local and State energy goals.
 - b. Host an annual workshop with utilities to educate residents and business on energy and efficiency programs. Include all current programs such as Efficiency Vermont, Vermont Gas, Weatherization Assistance Programs, Renewable Energy Vermont, Drive Electric Vermont and Green Mountain Transit, etc. Workshops should include relevant topics such as sustainable energy, conservation opportunities, efficient technologies (e.g., heat pumps), etc.
 - c. Advocate for the recommended actions in this plan.
25. Request Selectboard to adopt resolution supporting Shelburne’s participation in the Vermont Climate Action Communities (VCAN) Program.
 - a. Join the Vermont Climate Pledge Coalition.
 - b. Track energy reduction progress on the Community Energy Dashboard.

Discussion:

- Our committee has been formed, and we are part of VECAN
- Invite Ann Janda to a future meeting to talk about the work of the Chittenden County Regional Planning Commission
- Assign annual workshops to education subcommittee:
 - What workshops are currently happening in the region
 - Does it make sense to have one for just Shelburne, or should we join with others?
 - Use existing workshops as a template

- Advertise ongoing programs in Shelburne News, Front Porch Forum, etc – for example Green Mountain battery storage options.

II. Possible additions

Marleen suggested that the committee research topics, then have the town implement them, and then educate residents to do the same. Provide the information that gives the buy-in to local residents to follow suit. Two examples:

1. Lawn care for town property: leaf blowers, how much lawn, what is done now and what can we do better
 - a. Shelburne farms is using electric tractors
 - b. Wake Robin is all electric (mowers and blowers)
 - c. Churchill is a contractor that is electric.
 - d. The Energy Action Network report has a graph with the TCO of electric vs gasoline mowers
2. Town: Paper products need to be recycled or bamboo –
 - a. Work with the Town Manager on this

III. Prioritization

- i. There is now a statewide dashboard for towns to monitor their energy work. Matt and Rowland are working on this. Don't want to lose all our energy recording data baseline data and monitoring are important.
- ii. We will prioritize the list from today at our next meeting

7) Topics for future meetings (10 min)

10/13: Review list, prioritize, sign up for sub groups

- Note: We've moved the next 3 meetings to the 2nd Friday of the month.

On "The Board" Priority List

Education Subcommittee:

- Engage with schools
- Ongoing education to residents – through periodic articles in the Shelburne News and Front Porch Forum.
- Look into an annual workshop
- Lawn care; green paper products

Municipal buildings:

- Consider a canopy of the library parking lot

Zoning:

- Adopt Stretch code – Art volunteered to do this.
- Fund a building inspector in town budget – perhaps shared with another town.

Efficiency Subcommittee::

- Use data from the Energy Action Network.
- In new planning commission by-laws try to have as much climate issues we can have – Rowland will take lead on this.
- Look at weatherization and electrification.
- Allocate some benefit to offset and incentivize these – prioritize our tax dollars here.

Generation: Form a subcommittee

Police Truck TCO - Rowland

Respectfully Submitted,
Karen Baron