Energy and Climate Action Committee Meeting
Solar Panels Working Group

Minutes – 01/09/2023

Virtual Meeting

Meeting Start: 11:03 AM

Committee Members Present: Michael DeChiara, Gail Fleischaker, Nate Heard, Graeme Sephton

Public: None

Gail moved to open the meeting at 11:05 AM.

Public comments

None

Minutes

The working group reflected on the scope of ECAC. There are opportunities to invest in adaptation to climate change and the reduction of carbon emissions. Among these opportunities, how should we prioritize possible investments and the use of limited funds?

The timeframe matters. Climate adaptation and resilience is an ongoing activity that will unfold over hundreds, perhaps thousands, of years. The transition to net zero carbon emissions should take place in the coming years and decades. Given this narrow window, net zero carbon efforts should be a chief focus of ECAC's work.

How should we articulate and apply a prioritization framework to achieve zero carbon electricity supply and use? There is federal, state, and town activity space, as well as needed change at the residential level. There are potential investments, regulatory efforts, and educational activities across all of these levels.

MVP recommendation to consider microgrids

The working group assessed the MVP proposal to create a microgrid for a subset of municipal buildings. With a substantial investment, the town could install a battery bank that would power Town Hall for a period when grid electricity goes down. However, this expense might not be a good use of town funds. First, there is already emergency backup to support continuity of operations, as Graeme reports. Second, the activity wouldn't substantially reduce the Town's use of fossil fuels. Onsite backup generators run for short periods when power is lost.

MVP recommendation to support transition zero carbon for residences

For residents, there is federal and state money available to support energy efficiency gains and the transition away from fossil fuels. Although the federal and state government widely publicizes these programs, there is a role for the committee to place targeted information in the hands of residents.

One approach is to highlight "demonstration households" where people who are happy to talk about the changes they've made to their homes act as a resource for the community. Examples include homes that have had MassSave audits and efficiency improvements, electric car users, air- and ground-sourced heat pump installations, heat pump water heaters, and induction stove users. An advantage of putting neighbors in touch with neighbors is that individuals can offer and learn from real world experience.

The library is an essential community hub and might be a place to host information sessions. The new building will itself be a demonstration project, hopefully exhibiting the latest in energy efficient design.

Another option is for residents to participate in "Green Up" programs. ECAC should continue to pursue Community Choice Aggregation which would provide a similar, non-fossil fuel option to all residents.

MVP recommendation to consider municipally owned solar

The path to municipally owned solar that generates energy for town residents is prohibitively challenging. For example, establishing municipally owned solar through a Municipal Light Plant (MLP), would require Shutesbury to put up its own transmission poles.

An alternative way to think about solar expansion would be to expand ground-mounted solar on Town-owned land.

Proposal

"All municipal buildings should be run on solar." This objective-driven proposal is simple, addresses the root cause of climate change, and is sufficiently concrete to attach timelines and budgets to the proposal.

Under this proposal, the objective would be for the town to free itself from paying for its energy from the fossil fuel supply offered through the utility. Instead, since the town's five municipal buildings might or might not be situated on land that would be appropriate for solar panel siting, the goal would be to leverage net metering on the better situated sites to achieve net zero carbon dioxide emissions in electricity supply in aggregate. For example, the school is a challenging site for solar panel placements due to shade conditions and the condition of the roof. However, if we calculate the total need for electricity across all five buildings, we would be able to assess how many panels would be needed and where they could best be sited. For the past few years, the town has been budgeting $10,000 for electricity.

Action items

- Continue to pursue zero carbon sources of electricity through Community Choice Aggregation.
- Calculate the total load of electricity at municipal buildings.
- Through map analysis and site visits, explore possible sites for new ground-mounted solar. Potentially seek funding to contract a private firm for a formal solar capacity assessment of Town-owned land.

- Beyond the CCA FAQs, promote household ability to “green up” their electricity.
- ECAC’s website already contains useful tools and information resources on how households can benefit from provisions in the Inflation Reduction Act. We should build on what we’ve done and find new ways to promote household electrification.
- Possible future discussion of bylaw work.

Motion to Adjourn: Nate moved to adjourn the meeting.

Meeting Adjourned: 12:05 PM