

Bristol Energy Committee
March 23, 2022
Zoom meeting notes

Members: Sally, Richard, Stephen, Carl, Ben, John, and UVM intern, Patrick Ladd
Guests: Maddison Shropshire, Jim Quaglino
Recording available at NEATV

Matt's presentation - summarizes how the library is using energy currently and what options there are to reduce cost/energy use and to electrify the heating system of the building. 1. Windows are the #1 area to address: possibly indoor inserts (especially for the small upper windows) either Window Dressers or commercial polycarbonate windows that would last longer, cost more. And repairing/refurbishing some windows. 2. Some insulation is needed in random areas of the Attic. 3. Heat transfer plates need to be installed above basement ceiling for better transfer to main floor. An alternative would be to raise the temperature of the buffer tank so hotter water flows through the radiant floor system. The carpet also hinders heat transfer. Heating options: Install 2-4 mini-split heat pumps that would replace 20% to 50% fossil fuel. Or replace 100% of the fossil fuel with air source heat pumps. A third option, if even possible, is ground source heat pumps. It's expensive, it's the best for performance and grants would definitely be needed.

Basement ventilation is possible using the ceiling space under the main floor.

Switching to LED lighting or other economic possibilities would help reduce the high electric load for the library. An electric audit is needed to learn more about how best to reduce baseload electricity. Matt will be present at the April 19 library board meeting to answer questions. Sally or Carl will call contractors for quotes on insulation and heating system work.

Electric vehicle charging station- Richard reached out to Valerie about creating an account for a GoFundMe campaign. We need to discuss further and make a recommendation to the select board. There may be other funds coming thru ARPA or Infrastructure. Stephen suggested that once created, the GoFundMe campaign could be put out to the county, and then to Bristol to create seed money for further outreach. Sally will talk to the treasurer about an account, along with Patrick. Patrick will help launch the GoFundMe Campaign if it happens before the end of his internship. Maddi will put the campaign in the Regional Planning Commission newsletter when ready.

Maddison Shropshire, ACRPC Energy Planner, is assisting in implementing projects with energy committees by helping with facilitation and getting funding. Maddi is: 1. collaborating on EV events, one in Bristol with BEC, GMP and Drive Electric for education and demos of EV's, bikes, tools and mowers. 2. collaborating county wide for weatherization education and inspiration for municipalities, farmers and others. Funding and training for contractors is needed. 3. will keep BEC members up to date with county energy and efficiency news.

John McCormick reminded us of smart technology. Commercial and industrial users may draw electricity during off peak hours to save money. Residents may use programmable thermostats to save on heating costs.

Ben Skolozdra's presentation on water pumping station. Comparison of off-peak/on peak hours and rates and a long conversation with Jill Marsano of VTUMS, who manages the pump system, revealed that it's not a sophisticated system. When the tank gets down to 20 feet, the pump goes on. When it reaches 25 ft, the pump shuts off. Peak cost is at least 4x off-peak cost and is creating a high pumphouse bill. Using a low-flow device could help. And if Bristol signed up with GMP agreeing to not pump during "actual peak events" that would save money. GMP would pay Bristol for that service.

Ben noticed that the Town Capital Fund has info about another project update (the Wastewater system), and funding isn't sufficient for a sophisticated upgrade. This could be an opportunity for looking into an Infrastructure Bill request for the wastewater system, and rolling in an upgrade for the control panel of the water pump house system so that both become more efficient.

Ben will reach out to Valerie about letting us know the date for the annual water dept meeting to be held during a selectboard meeting in the spring.

Next BEC meeting April 20th.

Notes submitted by Sally Burrell