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**Town of Middlebury
Energy Committee Meeting Minutes
Wednesday, May 16, 2018**

Present: Ross Conrad, Chris Robbins, Howard WidELITZ, Steve Maier, Larry Bailey, Van Barth (entered at 9:10). Absent: Hannah Hurlburt, Lindsay Fuentes-George. Guest: Jack Byrne.

Ross convened the meeting at 8:45 am.

(Note: all votes are unanimous unless otherwise indicated.)

Minutes: Minutes for March were approved on a motion by Howard, seconded by Steve. Minutes for April were approved on a motion by Steve seconded by Howard. Larry abstained from both votes.

Middlebury College Sustainability Office Presentation. Jack Byrne, director of sustainability integration, joined us. He described the college's Sustainability Solutions Lab, which is focused on improving sustainability of the college campus. They are looking for ways to cooperate with the town so we can support each other. There are currently 18 students participating in the lab. 12 are working on energy and 6 on waste/recycling and transportation. Since the college became carbon-neutral in 2016, they have a new goal called "Middlebury Energy 2026." They are asking the trustees to approve a 25% decrease in use and to go to 100% renewable energy responsibly – responsibly meaning carbon-neutral, transparent, resilient to climate change, equitable, and educational. Resilient might mean, for example, designating the field house as an emergency shelter. The proposal currently covers the in-town campus and the Breadloaf campus; Monterey and the other college schools will be included later. Right now the school at Yunan University in China is a pilot.

Chris asked if travel by students and faculty is included in the greenhouse gas inventory. Jack said it is if the college pays for it. Larry asked if the method of inventory is scalable, since we are trying to do this with town buildings. This led to a conversation about the difficulty of measuring energy use in individual buildings, especially with a college-wide steam system. Some buildings have better data than others. In the new Ridgeline dorms, each suite has its own electric meter. A student designed a system that shows a red light when the tenant is using more energy than the average for the building. Ross asked if the inventory includes buildings off campus that the college owns; Jack said they have some data for them, but they are not a major part of the whole. Ross encouraged them to improve those where needed. An energy audit of Bi Hall (science bldg.) indicated that 30-40% savings could be achieved with behavioral changes such as making sure laboratory hoods are down and powered off when not in use. Creating a culture of conservation, and preserving it as students come and go, is a challenge. They are thinking of including something in first-year orientation.

We updated Jack on our projects including town energy audits, button-up, proposed purchasing policy, and the climate economy task forces.

We discussed electric vehicles and how to account for life-cycle costs. Solar energy was another topic. The college is a partner in the solar array at South Ridge and another one in Pittsford. Right now solar produces about 5-7% of the college's electricity use. Other possible locations for solar installations on college land were mentioned – either on fields or over parking lots. Jack said 2-3 MW could be produced over the parking lots.

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The majority of the steam produced at the college is from wood chips, with natural gas providing a portion of the energy. The wood comes from forests that have net growth and thus is considered carbon-neutral. The forests at Breadloaf have been protected with conservation easements and have been registered on the American Carbon Registry, so they are considered to be carbon absorbing.

Chris asked about the Goodrich Farm gas project, which would bring gas from a manure digester through the VT Gas pipeline to the college. Jack said the permits have been obtained and an outside company (Vanguard) is planning to lease the facility and put in a phosphorus removal system before exporting the gas. The college would use about 100 mcf out of a total of 180 mcf of gas produced (of course, all the gas is mixed together in the pipeline.)

We agreed to keep each other updated and exchange email addresses.

Introductions. We introduced ourselves to our newly appointed member, Larry Bailey, and he explained that he and his wife (a nurse) have moved here from Medford, NJ and bought the 13 acre Bushey property on Washington St. Ext. He has experience in finance and mortgage banking and rehabbing houses, and he helps companies around the country find efficiencies in their processes – something he thinks will be relevant to our efforts. Another member, John Schneider-White, has also been appointed but was not in attendance.

Town Renewable Energy Policy Proposal. Ross met with the department heads about our purchasing proposal and they had some ideas for changes, particularly to allow more flexibility. Ross will rewrite it to require life cycle analysis and comparison of fossil fuel vs. renewable energy options.

Follow up on Energy Audits. The audit for the police dept. is not finished, but the audit for the teen center has been completed. Howard read the 32 page report and said the greatest return on investment would be turning the thermostat down when no one is in the building – perhaps by installing a smart thermostat. There are other needs such as better insulation and siding. When the police station audit is complete, hopefully at our next meeting, we can decide how we want to spend the \$10,000 for the next fiscal year, which starts July 1.

MEC member Appointments/Officers for 2018. The following slate of officers was nominated and approved, moved by Chris and seconded by Steve: Ross Conrad, chair; Howard Widelitz, vice-chair; Steve Meier, treasurer; Chris Robbins and Larry Bailey, rotating secretaries.

Gro-Solar project. Steve reported that the town is negotiating the MOU with Gro-Solar (which has since changed its name). The company will pay the town \$40,000/year, and will include an additional \$40,000, as our committee requested, to build a small solar project for the town. That size project would generate about 15 kw. Steve thinks the \$40,000 annual payment should go toward energy projects also. He will write up a proposal for the next meeting.

The meeting was adjourned. Next meeting will be June 20 at 8:45 am.

Respectfully submitted, Chris Robbins