

Draft

Middlebury Energy Committee (Virtual) Wednesday, October 19, 2022 at 9:00 am Town Offices (small conference room)

Minutes

Present: Howard WidELITZ, Diane Munroe, Steve Maier, Mike Roy, Bill Cunningham, Dan Rafferty, Richard Hopkins, Ross Conrad

Absent: Lindsey Fuentes-George, Liv Herdman

Guests: John Barstow, Jonathan Miller, Dexter Lefavour (Tate and Howard engineering), Roger White

Reviewed meeting agenda:

- Modified order slightly, but topics remained the same

Approved meeting minutes from September 21, 2022 mtgs

- Steve moved, Mike seconded, Ross abstained.
- Approved with minor edits

Anaerobic Digester Analysis / Committee Recommendation – Richard led discussion

- Economic and Engineering for all 4 scenarios had 4–5-year paybacks so all economically favorable
- Richard then dug into GHG implications of all scenarios (see document Richard shared) + 3 additional scenarios: current state, biogas burned and not used, and biogas released to atmosphere
- Anaerobic digester will generate new methane, so anything of this released is damaging from a GHG standpoint
 - Generate electricity and sell back to GMP = replacing essentially zero carbon electricity with methane, so worse as compared to baseline situation and should be a non-starter.
 - Two options linked to feeding purified biogas back into VGS pipeline are basically neutral in Richard's calculation. Replacing fossil gas with digester gas and net effect is neutral in terms of GHGs
- Are there other technologies to consider instead of digester since digester options are either negative or neutral in terms of GHGs?
- Current plan at treatment plant is a combination of options #1 and #3
- Dexter: current processes at plant use quite a bit of ammonia and how does that influence GHG calculations? Also questioned if electricity option would be negative, rather suggested it would also be neutral.
- Mike: what are the alternatives out there that wouldn't create methane?
- Steve: need more information around the questions of whether--from GHG and broader environmental standpoints--there are important differences in the dried cake being applied to farmlands in terms of what currently is produced and what would be produced by a digester.

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- Proposed upgrades are changing from Sequence Batch Reactors (SBRs) to a more advanced multi-stage biological process; emissions from these processes shouldn't change
- Also changing processes to create a pasteurized sludge with lime and electric heat energy additions. Transportation requirements for lime, but also countered by 30-40% reductions in sludge, so less transportation load here...lots of variables!
- Richard has questions around gas product of reaction of lime and organics. Dexter started researching, but didn't have a decisive answer, though ammonia likely a part of this.

<conversation paused when Jen Murray joined>

Returned to conversation at 10:18:

- Richard will talk with Dexter to discuss additional complexity
- Is plan to still attend November Infrastructure Committee? If we want a recommendation from the full committee, we would need an interim meeting. Should we defer to December? Steve suggested doing both – educational update at November meeting and formal recommendation at December meeting (allows us to finalize this at *our* November meeting).
- Mike: if possible, could we put a scale to what any GHG increases of the different scenarios would be? Richard has this, e.g., one scenario is the equivalent of 150 cars on an annual basis
- Trade-offs of GHG emissions vs. economic benefits. Ideally, we can find a scenario that hits both
- Wastewater Treatment Plant (WWTP) upgrades were planned for 2024, but some sense of urgency might push this to 2023

Role of Energy Committee in Planning Commission decisions - All w/ Jen

- Steve: As a result of the Climate Economy Action Center (CEAC) Climate Action Plan process and open conversations with Summit, there are references to the Town's current requirements associated with new construction that are not, in general, aligned with the stretch building codes that have been suggested by green builders and are updated every three years and will be made even stronger in their next iteration.
- Could we engage with the planning commission to build these stretch building codes into zoning updates planned for the spring? How can the energy committee have a role in this process?
- Jen: once town compiles a list of things that need to be changed in bylaws, we can have this conversation. Conservation commission also wants to get some changes into zoning amendments. They did a conservation plan first that will guide this process. Keep coming back to town master plan because that has reasonable public support and buy-in.
- Howard: What is the status of energy plan? Is it correct that the Energy Committee should work to develop an energy plan that could incorporate building codes and then have planning commission facilitate the discussion? Jen – yes, in theory. Best to keep all balls moving forward.
- Jen: Revisit some of the standards and have some public meetings to get public buy in and substantiate where we want to head with this.
- 2025 is next town plan update.
- John B.: Some of the delay in energy plan process has been waiting to hear back from college for three representatives. Recently heard back and Ted Redmond can soon

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- begin some public outreach to see how town and college could collaborate around a comprehensive climate plan. Hope the full process gets underway next year.
- Jen – Could be good to have a meeting with Ted with Energy Committee, CEAC, and Planning Commission and Selectboard members. This could happen before the end of the year. May or may not figure out collaboration with college....
 - Steve: Hopes we can build some of the key needs into the codes before the 2025 updates and hopes that several of these types of things would be in the “no brainer” category vs. things that need more public engagement and conversation.
 - Ross: Right now there are good grants available for town planning – should we look at these? Jen said that they already use municipal planning grants, would focus this more toward master planning
 - Jen – lots of this not even realistic to be in zoning codes, so she could maybe provide us more information on what is feasible to be regulated by zoning and what isn't. Danger of overregulating developers – many aren't willing to jump through all of these hoops in this part of the state.
 - John B.: Quite a bit of urgency, so how can we prioritize and phase things in? We need to do everything we can to move things forward that can move forward now.
 - Jen: No code enforcement in Middlebury related to even state building energy codes.
 - Steve: Goal for these state standards that are updated every three years is to work towards zero energy development by 2030 but this process still has no enforcement behind it, so towns need to be proactive.
 - Jonathan Miller: Main goal is to put tools in the hands of the Selectboard for decision making around sustainability goals.
 - Richard: What would have to happen to have the town adopt a building code and have inspection. Jen: would need to write a local code or adopt existing codes and hire a staff member to inspect/enforce.
 - Bill – Our committee must get a lot more public input, otherwise selectboard won't easily change things.
 - Howard: There are things that can happen in parallel. If we do things in sequence, might take years.
 - Jen – Still need a reality check about how much we should focus on building code. This is just a small piece of puzzle.
 - Steve: We need clarity around whether and how the energy committee can have an agreed upon role in the process that is related to what we discussed today and in the future. Mike seconded and talked about looking at our charge and how we might become advisory to several boards / commissions.
 - Jen wondered why we felt like we might get cut out of the discussions. Development Review Board (DRB) example was brought up in response.
 - Howard: Need an additional meeting both around role changes and what we are trying to promote. Jen doesn't want this to happen without her.
 - Jen parting idea – Ted could lead a focus group for builders and developers to think about code.

Public Outreach (20 minutes) - Mike

- Initial draft of communication spreadsheet (audience and approach)
- Communications Design elements (Sunday Night Environmental Group support)
- **No time to discuss** – see and comment on what Mike drafted at:
<https://docs.google.com/document/d/11kP8EIGSR1U5WoxRKE8EJV1z-ulHTOtrLcgImM-Doal/edit#>

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<general question: should we move meetings to 2 hours or meet twice a month – send preferences / thoughts to Howard>

10:20 – Updates and other news (10 minutes) – All

- House Bill H.518 – no updates from Dan
- Amtrak Platform Solar – Status update: Howard inquiring how much electricity is being used by lights, so we know what the solar needs are. Bill asked to confirm that VTrans will be one paying electricity bill
- Climate Economy Action Center – reminder of Environmental Justice forum this afternoon at 5:30pm at the UU Church. John Elder will be leading a CEAC sponsored book group around book The Ministry for the Future sometime in November.
- Other news

10:34 – Adjourned – Ross moved, Mike seconded.