

ENERGY & CLIMATE COMMITTEE MEETING

Wednesday, March 6, 2019

8:00 AM

2nd Floor Conference
City Hall**Members:**

Dr. Ann Shedd, Chair
 Peter Hansel, Vice Chair
 Terry Clark, Councilor
 Chris Brehme
 Jess Baum
 Jake Pipp
 Ken Dooley
 Larry Dachowski, Alternate
 Aperr Naadzenga, Alternate
 Cary Gaunt, Alternate

Guests:

Nancy Gillard
 Charles Daloz
 Wes Cobb
 Fred Ward
 Bill Bradford Hutchinson
 Scott Malansky

Staff:

Rhett Lamb, ACM/Planning Director
 Mari Brunner, Acting Planner

1. Call to Order and Roll Call

Dr. Shedd called meeting to order 8:05 am and roll call was conducted.

2. Approval of January 24, 2019 Retreat Minutes

Mr. Clark moved to accept the minutes of January 24 with revisions, Mr. Dooley seconded and the motion passed unanimously.

Revisions are as follows:

- Page 4 of 37, fourth full paragraph, lines 4-5 change: "REGGI" to "RGGI."
- Page 4 of 37, fourth full paragraph, fourth line from bottom, state that the Ready for 100 monthly phone call meeting "included" the "Hanover" town manager.
- Page 5 of 37, third paragraph, change: "brad-brushed" to "broad-brushed."
- Page 8, second to last paragraph, third line change: "space" to "C-PACE."
- Page 9, change: "REGGI" to "RGGI."

3. Approval of February 6, 2019 Meeting Minutes

Mr. Clark moved to accept the minutes of January 24 with revisions, Mr. Dooley seconded and motion passed unanimously.

Revisions are as follows:

- Page 20 of 37, first full paragraph, change: "UMASS NH" to "UMASS Amherst."

4. ECC Meeting Schedule

Dr. Shedd stated that there was discussion about changing the meeting times for ECC. She said Ms. Baum suggested at the January Retreat that they work out some alternation of longer, late afternoon meetings with morning meetings. She asked if there are any thoughts from members about how to restructure ECC's meeting times. Vice Chair Hansel asked how changing the meeting times would affect the minute-taker's time and the expense involved with adding

minute-taker hours. Ms. Brunner stated that the overall number of hours would not change; the proposal was to add a two hour, quarterly meeting with a focused agenda topic and change the regular monthly meeting back to one hour (instead of 1.5 hours).

Dr. Shedd asked members if rescheduling meeting times would allow enough time for their tasks. Councilor Clark suggested that it would be helpful to have one item on the schedule to focus on during the late afternoon meeting times. Vice Chair Hansel said they also could consider keeping the time the same and instead shift the focus to one topic. Ms. Baum stated that having a facilitator for the afternoon meeting to guide them through a discussion could be an added benefit. Dr. Shedd asked Ms. Brunner if a staff person could take the role of facilitating the meeting every month or every quarter. Ms. Brunner said she could take on more of a facilitative role instead of just serving as a staff resource. Ms. Gaunt stated that it is beneficial to have focused meetings and more time as long as there is a clear direction of how that time would be used. She suggested identifying discrete meeting topics prior to their monthly meetings and then determine what the Retreat meeting topics will be from those discussions.

Dr. Shedd stated that Councilor Clark had previously suggested taking some of the work and assigning calendar dates to the tasks to guide what topics they want to address at the quarterly extended meetings. She asked for member feedback on that idea. Councilor Clark stated that he does not have a preference for morning or afternoon meeting times and asked what the best time would be for other members. Ms. Brunner stated that the last Retreat was from 4 -6 pm and asked if that would be a good time for their quarterly meetings. Dr. Shedd said it would be helpful if the times were consistent every quarter. Ms. Baum suggested a 2-4 pm time slot. Ms. Brunner said she will send out an online poll so people can indicate their general availability. She suggested booking the meetings every third month and she will book the dates out for the rest of the year. She said the monthly meetings would be an hour instead of an hour and a half. Dr. Shedd said at the first April monthly meeting they will identify the topic of discussion for their April Retreat meeting. Ms. Brunner suggested that the first topic of discussion be centered on the community outreach and engagement.

5. Working Group Updates

a. Communications- Ms. Baum stated that she and Ms. Brunner met and identified that it would be most helpful for the Communications group to create a strategic plan around communications and then bring that plan back to the committee for feedback. Implementation of the communications strategy would be a separate process. She said that one of the items she and Ms. Brunner discussed was creating a project website, or a preliminary landing page, that outlines the scope of what they are doing, before they begin PR work. Ms. Baum said it is a lot for one group to create a strategy and then do the public engagement piece as well. Ms. Brunner stated that they jointly decided more clarity regarding the role of the Communications work group is needed.

Ms. Brunner stated that she reached out to Antioch University to see if there are students interested in interning with the City and there is a potential student who may be interested in helping with community engagement and outreach. Ms. Brunner said she will provide an update to the ECC once she knows more. Ms. Brunner said if an intern does join the City, that person could work with the ECC Communications work group to help with developing a communications strategy. Ms. Baum added that if the April Retreat meeting is focused on communications and outreach, the Communications subcommittee could outline a plan prior to

the Retreat so that it could be workshopped during the Retreat so they could walk away with a plan.

Dr. Shedd asked what the ECC wants communicated to the community. She said a lot of the public engagement around developing the plan is exploring what the different sectors of the community find challenging and find additional ways to achieve those goals. Dr. Shedd stated that there are a number of events in 2019 that would be good opportunities to interact with the public and she would like to take advantage of those opportunities as the year is flying by already. Vice Chair Hansel stated that as discussed in the Retreat, the Radically Rural event will take place in the fall and one of the conference tracks will be focused on Renewable Energy. He noted that this could be an opportunity to communicate a message to the community. Ms. Brunner said the Radically Rural event was scheduled for September 19 and 20, and there will be a session specifically focused on how to reach 100% renewable energy. Since the focus of the conference is on rural communities, it could be a particularly useful session.

Dr. Shedd emphasized that the Radically Rural event is not just a local or regional conference; it draws widespread attention and national-level speakers. Ms. Baum said last year the conference did not necessarily focus on the local community; however, the culmination “Connect” event was focused on local initiatives and perhaps the ECC could debut their plan at that event to engage local citizens. Vice Chair Hansel said each of the conference tracks has a different topic, and one of those tracks could include a presentation on how a community like Keene can move forward on 100% renewable energy. Dr. Shedd said the other two sessions for the Energy track are the Rural Efficiency Challenge and EVs and charging infrastructure (this is subject to change), and increasing the penetrance of renewables.

Dr. Shedd asked the Communications work group to have something firmed up by the April Retreat and asked Ms. Brunner to keep the committee updated on the possibility of an intern to help with implementation.

b. Energy Plan/Data Collection- Dr. Shedd said there is a handout attached to the packet on page 25 of 37 which summarizes data collected by Vice Chair Hansel with help from Tom Webler. Ms. Brunner said it represents a snapshot of solar installations in Keene at the end of 2018, including the municipal installation at 350 Marlboro Street. Ms. Brunner said she also found out that there is a dashboard for the solar installation on City Hall which is a lot smaller than the one on Marlboro Street. Councilor Clark suggested that the link for the 350 Marlboro Street dashboard be posted on the City website. Ms. Brunner said she thinks there is already a link on the City website but the “Environmentally Preferred Purchasing committee” (an internal staff committee) is looking into creating a Sustainability page on the City website that will link to both of the solar dashboards. She said they have started discussions with other departments to design a website and create content to put on the page.

Vice Chair Hansel stated that he, Mr. Webler and Ms. Brunner have been working on identifying and quantifying solar installations in Keene. He stated that through contacting individual contractors that have installed systems, they are confident that they have about 95% of all the data; however, they do not have all of the smaller residential installations. He said as of last year they decided it was important to monitor energy usage for the next 20-30 years. He said the Greenhouse Gas Emissions report from 2015 did not focus on the type of energy and where it is coming from. Vice Chair Hansel said they have identified 77 installations in Keene with a total capacity of almost 2200 megawatts, however, they have not yet figured out a good way of

translating that number into the actual energy produced during the year as that is influenced by local weather, the tilt of the array and other factors. He said it is hard to use a blanket conversion rate because of those factors. He said out of the 77 installations, residential is the largest number of solar installations but not the largest amount of energy being produced in the region. He said the largest are the commercial, industrial and residential sectors which represents about 50% of installations. He noted that the Target store has the largest array.

Vice Chair Hansel said this information is only important as it relates to the percentage of energy that is being consumed in Keene. He said information about what energy comes into Keene has been difficult to obtain from Eversource; however, they have a few new leads that might lead to them learning what number of kilowatts are being consumed in the City and help determine what percentage of that energy usage is coming from solar. He said they may be able to use that information as a baseline to monitor solar usage in the coming years. Vice Chair Hansel said solar is only one component of energy usage and there is still a lot to do in terms of creating a baseline of the types of energy being used in the thermal and transportation sectors so they can monitor their progress.

Dr. Shedd asked Ms. Brunner how energy use by sector was calculated for the greenhouse gas emissions study. Ms. Brunner replied that greenhouse gas emissions were calculated by taking the total amount of energy used per energy source and then multiplying that number by a conversion factor. Each different energy source has a different conversion factor to translate it to greenhouse gas emissions. She said, for example, you estimate how much propane is consumed in the community and then multiply by the conversion factor specific to propane. She said the energy use numbers for the community-wide inventory were all estimates and did not represent actual amount of energy consumed. She said the estimates were based on data from the U.S. EIA and Eversource which was then downscaled to Keene. The methodology treats Keene as an average community in New Hampshire and it was not an accurate representation of Keene as a unique community.

Vice Chair Hansel agreed that past data is based on statewide or regional information and the goal is to find out what is actually happening in Keene. He said the reason they should monitor this is to figure out where the community's energy is coming from. He said each every year each kilowatt can be tracked as to where it is coming from, for example, determining what percentage is coming from renewables, nuclear, natural gas and those percentages change a bit every year.

Councilor Clark stated that the City is getting ready to pass a new ordinance that would increase solar installation by removing the \$30K cap on the property tax incentive for solar and wind installations. He said the new ordinance would remove the cap and make it unlimited so that any solar installations that businesses or homes invest in would not be included in the tax assessment. Councilor Clark shared that the new business owner at the old church on Court Street will be investing \$100K to put two large banks of solar panels on the south side of the building which will power heat pumps to offset the historic costs of ten thousand gallons of heating oil to heat the building per year. He suggested that the ECC could keep track of those types of successes to ensure that homeowners are aware of the new ordinance and the tax benefits. Ms. Gaunt asked for clarification on if the business owner will not be taxed on his \$100K investment. Councilor Clark replied the business owner will have an assessment on the building and the solar installations will not be added to the total of what the building is worth for tax purposes. Dr. Shedd asked if that is specific to the downtown and Councilor Clark replied that the tax incentive is city-wide and not just for homeowners. Ms. Brunner said right now there is \$30K cap which

was originally geared towards residential installations and they had discussed at an earlier meeting that only 29 out of approximately 60 or so people had taken advantage of that tax incentive. She said this is the same tax incentive; however, now it has been increased so it can be utilized by commercial customers or customers with a larger system than \$30K would cover.

6. ECC Energy Vision & Values Statements

Dr. Shedd stated that Ms. Brunner has developed drafts of the values and vision statements from the ECC Retreat discussions. Ms. Brunner said she forgot to include them in the packet for the meeting. Dr. Shedd said she had written up some drafts as well that they can review. Ms. Brunner said she would prefer to send the drafts she created out to the committee as she does not want to have two versions floating out there. Ms. Brunner said she can read them aloud for the committee. Dr. Shedd noted that there is a two page document on page 26 and 27 of the packet presenting a summary of purchasing models in the region and how other communities working towards 100% renewable energy are sourcing their energy for their communities whether is municipally-owned utilities or not. She said it is fairly complicated so she provided links to the sources. Vice Chair Hansel asked if all of the sources are enabled by legislation. Dr. Shedd replied in the affirmative.

Ms. Brunner pulled up the most recent draft of the Vision and Values statement on her computer and the committee revised her drafts together and came up with the following:

Vision Statements – “What we are trying to achieve” (DRAFT)

- ✓ We envision a future where our homes, transportation system, and economy are powered by renewable, clean, and affordable energy sources which promote health and minimize harm to the well-being and resilience of the community and ecosystem.
- ✓ The production and distribution of energy for electricity, heating, cooling, and transportation contributes to a flourishing local economy
- ✓ Everyone, including marginalized and vulnerable populations, has access to affordable and clean renewable energy.
- ✓ Our energy system is able to adapt to changing climate and economic conditions as well as new and emerging technologies.

Values Statements – “How we get there” (Draft)

- ✓ We value everyone’s input, and will actively engage a wide range of stakeholders in the process of achieving and maintaining our vision for a clean and affordable renewable energy future.
- ✓ Goals and actions in the plan will be based on facts and evidence-based strategies.
- ✓ We are not in this alone; we will reach out to peer communities to exchange ideas and inspiration.
- ✓ As we work toward our goals, new ideas and technologies will emerge which may change our approach. The process for achieving our vision must be transparent, flexible, and adaptive.

- ✓ In order to engage everyone, our communications and messaging must be accessible and focus on the benefits to us as a community and as individuals. All should be empowered to take an active role in achieving our vision.
- ✓ We will work towards a paradigm shift from that of “reducing harm” to one of promoting a positive future.

Ms. Gaunt noted the importance of being clear in the wording and distinguishing between human well-being and the well-being of entire systems.

Dr. Shedd said there was emphasis on life cycle impacts. She will take out the “meets the needs” part. Ms. Baum stated that the language around “harm reduction” is tricky because the concept differs between people and a human-specific lens is often used. She recommended talking about net-positive impacts instead of harm-reduction.

Ms. Gaunt agreed that the positive language is important. Ms. Baum emphasized that the words “restore” and “regenerate” are important because they are aiming to not only minimize negative impacts but also to have a net positive impact. Ms. Brunner asked if they want to wordsmith the first sentence to address the net-positive impact or would it be helpful to have another statement that elaborates on that concept more. Vice Chair Hansel said he is in favor of the former as less is more. Ms. Brunner asked if members want to include a statement about “contributing to a flourishing economy” and all agreed. Dr. Shedd suggested being clear about what “thermal” means. Ms. Gaunt asked if they need to be clearer about the life cycle implications and Ms. Brunner replied that she kept “the production and distribution of energy for electricity, heating, cooling, and transportation contributes to a flourishing local economy” in the statement. Dr. Shedd asked how they can incorporate life cycle and safety implications and Vice Chair Hansel replied they need to focus on brevity of the statements. Ms. Brunner stated they should address “cradle to cradle” and safety.

Ms. Brunner said that there were not many changes to the values statements. Dr. Shedd replied that the one change she made was to move the statement about “evidence-based strategies” higher on the list to emphasize that they are working on the basis of facts. Ms. Gaunt suggested adding that they are shifting the paradigm from that of minimizing negative impacts to one of regenerating or restoring place and promoting a positive future. Members agreed with that change.

Ms. Brunner asked members if it is okay to do another iteration of edits and include them in the packet for the next month. Members agreed that they will approve the drafts at the next meeting. Ms. Brunner asked if these statements were intended to be brought to the public and members agreed.

7. Staff Updates – Hanover and Concord approaches to Energy Plan

Ms. Brunner stated that she and Mr. Lamb met with the Town Manager of Hanover, Ms. Julia Griffin, as well as the part-time Sustainability Coordinator they share with Dartmouth College, Ms. April Salas. She said Ms. Salas is energetic and works closely with the Public Works Director. Ms. Brunner said they discussed Hanover’s approach and she learned that they did not want to spend a lot of time developing a plan so they hired a consultant to focus on their most immediate goal which is to reach 100% renewable energy by 2030 for electricity for the entire community. She said they hired a consultant firm called 3Degrees which helped them go through

all of their options and choose projects to move forward with. She said they have now moved into Phase 2 to operationalize a program that was identified in Phase 1 as a priority for implementation. The consultant is helping the Town to set up an electricity buying co-op which would be available statewide. Ms. Brunner stated that they are vetting different companies and estimating how many people will sign up for a 4-6 week long sign-up period. She said individuals who sign up will have their electricity prices locked in for a full year. They are sourcing 100% green-e certified electricity and everyone who signs up will have their electricity supplied by that supplier. She said it is an “opt-in” program (rather than “opt-out”) because that is all that is allowed in NH right now. Historically opt-in programs have a participation rate of about 15%, so they are hoping to encourage as many people as possible to sign up as the rates for customers are dependent on how many people participate. Ms. Brunner stated that their goal is to launch the program this year so she asked them to keep them in the loop so that Keene community members could also sign up. She said they ensured her that the rate is almost guaranteed to be lower than Eversource. Ms. Brunner said she will keep the ECC informed on the status of program. She said Hanover has a committee called Sustainable Hanover that is helping them perform community outreach and neighborhood meetings.

Ms. Brunner said she also reached out to Concord about their energy plan process and their approach is very different. She said they have an Energy and Environment Committee of about 15 committee members who put in about 15-20 hours per month, as well as one staff member who puts in 20 hours per month. She said their plan outline very thorough and it is a committee member-driven approach with staff support. Ms. Brunner said she does not think that the Concord approach is realistic for Keene. She said she and Community Development Director Rhett Lamb spoke to the City Manager, Ms. Dragon, to discuss potential sources of funding to hire a consultant to help the Keene community with this process, however this was a preliminary discussion and it is not guaranteed that the City will be able to hire a consultant for assistance. Ms. Brunner said other options include finding an intern to help them develop the plan. Ms. Brunner stated that Concord also has a Master’s student working with them on writing their plan. She said there appears to be a high level of effort as their plan is due in June.

Mr. Mazlanski, member of the public, stated that he is involved on the Concord process and said they are conducting three large stakeholder meetings, one of which he attended with about 60 people from a diverse group of community entities that they pulled together to provide input into their plan and process. Mr. Mazlanski asked if Hanover is implementing their plan through a municipal aggregation project and Ms. Brunner replied that she believes they are using a different model because a municipally-managed aggregation program would put too much of a burden on staff. She said her understanding of the buying co-op is that it would run on its own after the consultant gets it off the ground and from that point on they will not need much staff time to keep it running. She said one of Hanover’s goals is to be a mentor and inspiration for other communities and they would be happy to answer any of his questions about the specifics of the program.

Ms. Brunner concluded that the City is looking into a consultant option and aim to avoid putting too much burden on the committee. She said they have not yet figured out their approach and for that reason they do not yet have a formalized scope of work with dates. Vice Chair Hansel asked if the Concord committee is appointed by the Council like the ECC and Ms. Brunner replied that it is a Concord committee and is subject to all of the same public meeting requirements as the ECC. Dr. Shedd said that Concord’s committee did include some staff members. Ms. Brunner

said their committee is lot larger and they have also split into topic subgroups and their intern is pulling that information together and writing the plan.

8. Upcoming Dates of Interest

a. *NH Saves Button Up Workshop* – Dr. Shedd said the ECC is co-sponsoring a home weatherization workshop on Tuesday, March 26, 2019 at the Blastos Room at Keene Ice. The doors open at 6:30 p.m. and presentation starts at 7:00 p.m. She said the presenter is Mr. Ted Stiles who is an energy auditor. She thanked the Clean Energy Team for taking the lead on the logistics and outreach.

b. *Monadnock Earth Festival* – Dr. Shedd said the ECC needs to decide at their April 3rd meeting whether or not they will be tabling at the Earth Festival event on Saturday, April 20, 2019. She said they have tabled for the last several years but they will need to zero in on the topic for this year’s tabling. She said there will also be an electric vehicle expo at the Festival this year.

c. *Radically Rural* – Dr. Shedd noted that the committee already discussed this event earlier in the meeting. It will take place September 19 & 20, 2019.

9. Legislative Updates

a. SB 122 “Relative to expenditures from the energy efficiency fund”- Dr. Shedd said Ms. Brunner included information in the packet about SB 122 which will redirect RGGI funds to funding for school districts which will be used wisely by the Keene School District and provide good savings for the community. She thanked Mr. Dooley for including the written summary of his presentation from last month in the packet.

b. HB 365 “Relative to net energy metering limits for customer generators” - Dr. Shedd stated that the bill was supposed to go to an Executive Session today but it was moved and they will know more next month. Ms. Brunner said the ECC’s motion from last month will be going to City Council next week and then to committee and she will let the committee know more about the result.

Dr. Shedd said Councilor Hansel had asked if the ECC could consider SB165 which is about net-metering credits for low and moderate income community solar projects. She said she will add SB165 to the agenda for next month.

Dr. Shedd encouraged members to stay abreast of energy-related legislation. She asked Mr. Dooley if there is a way to make SAU Energy Savings information available to the interested public. Mr. Dooley said he can put the summary on the School District website.

10. Communication from Fred Ward regarding clean energy

Mr. Ward stated that all renewable energy is weather-driven and there has been a lot of discussion about renewable energy; however, there are too many limitations on solar and wind because they depend on weather conditions. He stated that if you could ever get to 25% renewables you would be doing well and the 100% renewable idea is not realistic. He asked how many members support nuclear energy and members did not raise their hands. He said that is the only way to meet energy needs without using fossil fuels, along with using time-of-day meters

and encouraging people shift when they use electricity from when there is high demand to when there is low demand. He said the curve of electric energy is twice as high during the daytime peak than at night and until people change their behaviors we are stuck with gas powered plants. He said he would be happy to talk and work with the ECC in the future. Dr. Shedd thanked Mr. Ward and said his statements will be accepted as informational for the record.

11. **New Business**

No new items were raised for the April meeting agenda.

12. **Next Meeting: Wednesday, April 3, 2019**

The meeting was adjourned at 9:32 am.

Respectfully submitted by,
Ayshah Kassamali-Fox, Minute-Taker

Reviewed and edited by Mari Brunner, Acting Planner