



## **ENERGY & CLIMATE COMMITTEE MEETING AGENDA**

Wednesday, January 8, 2020, 8:00 AM

2<sup>nd</sup> Floor **Committee** Room, City Hall

### **Members:**

Dr. Ann Shedd, Chair  
Peter Hansel, Vice Chair  
Terry Clark, Councilor  
Chris Brehme  
Jake Pipp  
Ken Dooley

Cary Gaunt  
Anna Schierioth  
Rod Bouchard  
Andrew Dey  
Zach Luse

### **Staff:**

Rhett Lamb, ACM/Community Development Director  
Mari Brunner, Planner

1. Call to Order and Roll Call
2. Election of Chair and Vice Chair
3. Approval of December 4, 2019 Meeting Minutes
4. Welcome and Introduction from Mayor Hansel
5. ECC Membership
6. 2020 Meeting Schedule
7. Presentation & Discussion on Community Choice Aggregation, Freedom Energy Logistics
8. Energy Plan
  - a. Institutional Focus Group
  - b. Commercial & Industrial Focus Group
  - c. Consultant Status and progress
  - d. Timeline
9. Solarize Monadnock 2020
10. Spring 2020 Outreach Events
11. New Business
12. Next Meeting: Wednesday, February 5, 2020
13. Adjourn

City of Keene  
New Hampshire

**ENERGY & CLIMATE COMMITTEE MEETING AGENDA**  
**MEETING MINUTES**

**Wednesday, December 4, 2019**

**8:00 AM**

**2nd Floor Committee Rm.**

**Members Present:**

Dr. Ann Shedd, Chair  
Peter Hansel, Vice Chair  
Rod Bouchard (until 9:07 AM)  
Terry Clark, Councilor  
Ken Dooley  
Andrew Dey  
Carey Gaunt

**Staff Present:**

Mari Brunner, Planner

**Members Not Present:**

Zach Luse  
Christopher Brehme  
Anna Schierioth  
Jake Pipp

**1) Call to Order and Roll Call**

Chair Shedd called the meeting to order at 8:03 AM. Roll call was conducted.

**2) Approval of November 6, 2019 Meeting Minutes**

Mr. Hansel made a motion to approve the meeting minutes of November 6, 2019. Councilor Clark seconded the motion.

Mr. Bouchard noted corrections to be made –

A. The words “Mr. Bouchard” should be changed to “Mr. Weed” in the following locations:

- Bottom of page 2 (“Mr. Bouchard stated that there was a...”)
- Third paragraph of page 3 (“Mr. Bouchard stated that there was some...” and “Mr. Bouchard replied that he...”)
- B. On page [5], in the second paragraph, “...who spoke at Radically Rural, has left for a more private sector” should be changed to “...who spoke at Radically Rural, has left for a position in the private sector.”

Chair Shedd added the following corrections:

- Page 2, first paragraph: “Mr. Tom Webler” should be “Dr. Tom Webler.”

- Page 8, second paragraph: Mr. Pipp's term expires in 2021 (as stated on the City's website), not 2020 (as stated in the minutes).

Mr. Hansel added the following corrections:

- Page 3, third paragraph: the text "...it could solve another problem in Keene, for example, Beaver Brook as they could potentially put a reservoir there in Northfield," should say, "...it could solve another problem in Keene, for example, Beaver Brook, as they could potentially put a reservoir there as they did in Northfield."
- Page 4, second line: the text "...for example, the report from the community power aggregation process" should be changed to "...for example, the report from the consultant."

The motion to approve the meeting minutes (as corrected) passed by unanimous vote.

### **3) Presentation: Northeast Energy Efficiency Partnerships (NEEP) –**

[www.neep.org](http://www.neep.org)

John Balfe and Samantha Caputo introduced themselves and gave a slide show presentation. Mr. Balfe stated that NEEP is a regional nonprofit committed to improving energy efficiency in the business sector, covering a big territory. He continued that they try to share lessons learned, and find best practices from one area to share with another, and they give resources and technical assistance.

Mr. Dey asked where NEEP's funding comes from. Mr. Balfe replied that they get funding in a few different ways. He continued that this work is funded through a grant from the Department of Energy (DOE), Achieving Community Efficiency. The State of NH is a project partner. NEEP also gets funding from the private sector and other various foundations and grants. Ms. Caputo stated that they have state partnerships, too, with NH, VT, and ME. They try to keep a diverse mix of funding sources. Mr. Balfe stated that NEEP used to be mainly funded by the DOE but that has changed.

Mr. Balfe asked what Keene hopes to get out of the energy plan. He continued that two key areas he sees are the need to be proactive and strategic. It is best to think ahead (say, ten years out) and plan milestones along the way, so they are not just reacting to things on an annual basis.

Ms. Gaunt stated that she is the Director of Sustainability at Keene State College (KSC). She continued that KSC is doing a comparable planning effort to the City's, and what has been beneficial to KSC is having a clear implementation strategy, not just lofty goals. They need to lay out a plan for the decision-makers. Ms. Caputo replied yes, working out how to actually achieve the plan is key.

Mr. Hansel stated that also important is to hear how the plan will be funded. He continued that a big objection they will hear, from various sectors in the community, is that the plan is not affordable. Mr. Bouchard agreed that people need to know the return on investment based on various elements of the project – if the payback is too far out in

the future, that could be tough. Chair Shedd stated that she agrees that the plan needs to be specific, actionable, and cost-effective with diverse funding streams. She continued that it also needs to be adaptable. Technologies will evolve over time and the plan will need to be revisited periodically.

Continuing with the slide presentation, Mr. Balfe displayed a graphic depicting the community energy planning cycle. He stated that it is a high-level outline of how to think about these things. He continued that he and Ms. Caputo put checkmarks on the areas Keene has already worked on. Ms. Caputo stated that many of the goals people just mentioned are parts of this cycle, such as determining the funding sources, determining the specific goals and strategies, and methods to evaluate and measure the plan's progress.

Mr. Balfe continued that it is great to have long-term goals, but they need to understand how to achieve them. They need to determine what can be accomplished, say, next year – what are the short term “wins”? He gave examples of those. He continued that what is critically important to success is asking, “What do we need to be thinking about to make sure we are hitting our longer-term goals?”

Mr. Balfe stated that key strategies to achieve Keene's goals include those that have been successful elsewhere. He continued that some are policy-level. Regarding the cost of the plan, there are more behavioral or operational things they can be doing to understand energy usage. The foundational step NEEP always talks about is energy benchmarking, which involves tracking building energy use and comparing it to the energy use in the same building at a different time. It helps build an understanding of the baseline energy use for buildings and setting goals. Facility directors can see where they might be able to save energy and identify priorities in their building stock. For example, is one building an energy hog? What operational changes can be made to reduce usage? Benchmarking is a critical step for everyone, whether in the private or public sector. Starting with municipal buildings is a way to lead by example. NEEP has statistics, reports, and results of studies done over the years that show actual energy savings coming from the benchmark process. It has been shown that just uncovering energy usage data leads to savings over time.

Mr. Balfe continued that leading by example is a good first step, and recommends benchmarking all public buildings in the community and displaying that data to the public. It is important for the City to show that it is “talking the talk” and “walking the walk,” and to show the community the benefits. Understanding that it might be challenging to implement an ordinance mandating benchmarking, they could have it be voluntary. However, if it is voluntary, people might ignore it. There is the option of having a mandatory ordinance requiring buildings of a certain size or in a certain area to benchmark their energy use and disclose it to the public. Then they could craft programs and plans along the way to get at improvements for the building stock here. This is a great way to start engagement with the building owners in the city.

Mr. Balfe used South Portland, ME as an example – at the time, it was the smallest community to adopt a benchmarking ordinance. The best part that has come from it: engagement with local business owners. The owners impacted by the ordinance have been really engaged with the Sustainability Office in the community and direct improvements to buildings have been made. The ordinance pertains to the core business district. That is different from how other cities have gone about this. First, it was just municipal and school buildings and then it bumped up to the core business district. This is kind of a pilot program and they are looking to expand it.

Mr. Hansel asked how such ordinances are enforced. Mr. Balfe replied through penalties, such as fining businesses for not getting their data in on time. At first, it is lenient. Or, the City can offer incentives to businesses that report their data and show a good score. For example, maybe such a business would get a lower cost or an expedited process when applying for a permit or loan. There is room for creativity in coming up with benefits and incentives to give building owners or to make sure they are reporting their data.

Mr. Balfe continued that South Portland adopted the benchmark ordinance in 2017 and last year was the first required reporting year. He continued that they did not disclose all the data for commercial buildings that were reported. Sometimes commercial buildings do not want their data reported. Therefore, in year one they just reported compliance rates, and energy data for municipal buildings only. There was about a 6% reduction in emissions since 2014, which they were able to show. There was a 96% compliance rate for year one, which is high. The Sustainability Office did a great job with helping business owners, hosting workshops, and showing people how to do the reporting. It can be time consuming but helps build relationships. They offered a Portfolio Manager training and people liked it to the point where, when the town offered another private software free of charge, people did not want that and continued with Portfolio Manager.

Ms. Caputo stated that another key strategy to discuss is home energy labeling. She continued that the residential sector can be difficult to engage with in terms of getting people to understand and come along with the transition the City is trying to see. Home energy labeling is a way of improving transparency and engaging with residents to help them understand how they can reduce energy and costs. It provides a label or scorecard regarding the energy efficiency of a home, similar to an energy guide sticker that you see on appliances on your house. This can be done in various ways – there are automated models that can be used, or you can use a specific scorecard that is available in the market.

Home energy labeling can provide recommendations on how homeowners can reduce energy usage, such as incentives and rebates from utilities, or community programs that you can implement through this action plan. In addition, it provides an indicator to the market and can spur workforce development, creating jobs to have these energy assessments done, and provide opportunities for retrofits and measures to be adopted in the residential sector. Home energy labeling is a behavioral tool. It can help drive further savings – it says to people, “This is where you are now, and this is where you could be in the future.”

Ms. Caputo continued that home energy labeling is particularly helpful with existing buildings. NEEP is seeing mandatory time-of-listing or time-of-sale ordinances, which is when an audit is triggered, to give a baseline understanding of energy costs to incoming homeowners or renters. She noted that, next to a mortgage, energy use is the second highest cost for homeowners. Thus, you can look at home energy labeling as a consumer protection measure, making sure people understand and can afford the costs of the home they are going into.

Ms. Caputo continued that it is transparency-informed decision making, similar to the stickers on cars that show miles per gallon. Buyers expect to see this sticker and it helps one understand the operation and maintenance costs. If a pickup truck gets 11 MPG and a sedan gets 26 MPG, that gives you an idea of the cost of gas for each vehicle. The person who needs a truck will still buy the truck, however they will know up-front how much they can expect to pay for fuel. When you put labeling on homes, it is the same thing. Studies have shown that a lower score on a house (if you are using a scorecard option) does not necessarily deter people from purchasing that house; it just provides information to help people understand what their costs will be. Typically, the first two years is when homeowners do significant work on their house. When a home turns over in ownership you are providing information on rebates and incentives at that time, that is, what can be done to achieve energy savings.

Ms. Caputo continued that Montpelier is an example of a community that is doing this, and is the smallest city that has enacted an energy efficiency disclosure ordinance. Instead of using one of the nationally available tools, they are using an automated energy model. It takes tax assessor information, information about certifications homes have, information from homeowners, and so on and so forth, and runs a model, and provides the estimated energy cost based on fuel used in the home. This method is low cost and does not involve getting an assessor into the home. Montpelier only has about 100 homes that turn over a year. They are using this as a tool toward their energy goals. It helps activate people in the community.

Councilor Clark asked how to get the residential sector to comply with such an ordinance. Ms. Caputo replied that there are different ways. She continued that with time-of-sale ordinances, the requirement is for audit/scorecard results to be included in the home's listing within a certain number of days and to make the information available to potential buyers. Councilor Clark asked if that means homeowners have to get an audit before listing their homes for sale. Ms. Caputo replied yes, if that is the mechanism being used to generate the scorecard or label. Councilor Clark asked if there is a way to have the utilities tied in. Ms. Caputo replied yes, for example: in MA they have the Mass Save energy audit, and the state is adding a scorecard, on a voluntary scale. So in MA, if a community wants to enact an ordinance and require it, they can use the state's scorecard. For a state that does not have a scorecard associated with the audit, they can look to other providers, and this is where funding and costs come into play. There are great tools but they can be expensive, such as \$200 to \$300 per audit, so then you would need subsidies for low-income homeowners and a plan for foreclosures, and so on and so forth. There are more considerations that come into play when you craft an ordinance,

using a tool like that that has an associated cost. Then there are models like what Montpelier is doing, with an automated model that does not have the cost associated because you do not need the in-home assessment.

Ms. Caputo continued that there are different pathways for compliance. The compliance requirement is typically to have the information available within a certain amount of days with the MLS listing, or to make it available physically at an open house, too. Thus, you would have to consider the average amount of time a home is on the market. For example, if there is typically turnover in 50 days, and you require the home energy labeling to be done within 90 days, that does not work.

Mr. Balfe stated that for green buildings, there are different options, if a municipality wants to require things for new construction or major renovations. They could establish standards for new buildings, such as building schools to a high performance criteria (like Keene Middle School). There are ways to go about it through creating zoning and having building performance standards. He is happy to chat more about it later.

Mr. Balfe continued that he wanted to highlight an operations and maintenance guide developed by NEEP, which can be used to improve the operations of existing buildings. It touches on a number of sections, more than just energy efficiency. There are plenty of low- to no-cost measures that can be taken, like behavioral changes.

Ms. Caputo stated that NEEP has a renter's checklist, which they can share as-is, or they could co-brand it and make it more specific to Keene. She continued that it gives a checklist for potential renters to know what they should be asking before they rent a place, like "Is it drafty?" or "Do I have control of the thermostat?" College students, especially, love this checklist. There is also a homebuyer's checklist, which is very similar. If a municipality does not have an ordinance, they could make this checklist available, so people understand the baseline energy usage and the cost of the home.

Mr. Balfe stated that the Achieving Community Efficiency (ACE) grant is what allows them to do this work, ranging from benchmarking to piloting an on-site shared energy management model so smaller communities can pool together resources and utilize one person working across towns to look at different energy management practices. He continued that finally, he wanted to highlight other resources NEEP has available, such as Community Action Planning for Energy Efficiency (CAPEE), a tool for communities to use. NEEP also has a lot of information and guidance on air source heat pumps, for both consumers and installers. The information is on NEEP's website.

Mr. Balfe continued that regarding ongoing technical assistance from NEEP, they could come and do more presentations, or do a deep dive on certain topics, like crafting an ordinance. Or, they could come and provide insights/help out with certain sections of Keene's energy plan. They are happy to review things and give feedback.

Ms. Caputo added that they just hit the tip of the iceberg today. She continued that they have a lot of resources and are happy to share and be a resource to Keene. A final

thought, which the presentation did not touch on, is: as Keene is thinking about its 2030 and 2050 plans for decarbonizing, they should think about what energy efficiency efforts they want to do and to integrate it all, so they are not waiting for 2030 to start working on the 2050 goals.

Mr. Hansel stated that the presentation talked about air source heat pumps. He asked, what about water source heat pumps? Ms. Caputo replied that they are expanding their resources and looking at renewable thermal energy. She continued that they could put the ECC in contact with NEEP team members that are working on that directly.

Mr. Hansel asked if the presentation will be available to the ECC/emailed to Ms. Brunner. Mr. Balfe replied yes.

Scott Maslansky asked if Montpelier is typically getting multiple years of data and weather normalizing it. Ms. Caputo replied that the ordinance has not been enacted yet, but they are looking to get a year's worth of data, to get all seasons, and it would be normalized for everything. That would take the behavior out of it. She continued that a home profile is more useful than knowing the behavior of various occupants, because various occupants' behaviors differ – for example, in how each occupants set the thermostat.

Chair Shedd asked if Ms. Brunner had questions. Ms. Brunner thanked Ms. Caputo and Mr. Balfe. She continued that after this meeting, she and a few City staff members will be meeting with Ms. Caputo and Mr. Balfe to talk about how the City might use this technical assistance moving forward. She met Ms. Caputo and heard about this organization and was excited to learn about it. Chair Shedd replied that some of the information is in the ECC's shared drive, such as the renter's checklist.

Mr. Dey stated that the goals for 2030 and 2050 are stated in terms of renewable energy, so energy efficiency is implicit in that, but it tends to short shrift because people like to talk about renewable energy more, so it is great they are doing this work. It is harder to get people engaged in these energy efficiency methods than it is to get people on board with renewable energy. Ms. Caputo replied yes, this definitely helps with the cost-effectiveness aspect – if you were to just take energy usage now and try and replace that with all renewable energy, it is not a cost-effective method at all to achieve the goals. Trying to make energy efficiency more visible is important. Chair Shedd stated that the City, County, school district, and KSC are all represented on this committee, and have done great energy efficiency strategies.

Ms. Caputo stated that NH just adopted a cost effective test that is specific to NH's state policies, the Granite State Test. It includes participant and societal benefits, things like greenhouse gas emissions, economic development, and so on and so forth. Hopefully by broadening the scope of the cost effectiveness test at the state level and for utility programs it will help create more offerings that communities can use, and a partnership with Eversource will build up and they will be a strategic partner in the planning process.

Chair Shedd and the group thanked Mr. Balfe and Ms. Caputo for their presentation.

#### **4) Energy Plan**

##### **a) Consultant Status and Progress**

Chair Shedd stated that at the last meeting they talked about challenges with getting baseline data from Eversource. She asked for an update from Ms. Brunner about where Cadmus is in its process. Ms. Brunner replied that later the same day as that EEC meeting, Eversource gave the City some of the requested data. She continued that Cadmus provided the City with everything in the electricity context except for the electricity baseline. Once the baseline is complete, the next step is to start working on strategies and comparing them to the City's "business as usual" trajectories. Ms. Brunner continued that she does not have specific dates for when deliverables will be due because they are off schedule due to the delay in Eversource giving them the data. She noted that the consultant is also working with the City on the SolSmart program. Cadmus recently sent draft solar zoning recommendations, but staff have not yet had a chance to review.

Chair Shedd asked when consultant deliverables can be shared with this committee. Ms. Brunner replied probably at the next meeting. Chair Shedd replied that it would inform the committee's discussions to be somewhat up to date on what Cadmus has put together.

Chair Shedd asked, regarding the SolSmart program, and coming up with an ordinance and looking at codes, if Cadmus will be able to outline a document for consumers and installers. Ms. Brunner replied yes, that is one of the requirements of the program. She continued that staff is working on that right now. Chair Shedd replied that making the City's regulations readily accessible to installers is an important part of implementation, and to the development of a workforce around energy efficiency. She continued that there are contractors doing the work, but none in the immediate area are certified through NH Saves.

##### **b) Institutional Focus Group: Wednesday, January 8, 2020, at 8:00 AM**

Chair Shedd stated that they talked about using the January 8 meeting to pull together at least a preliminary version of this. She continued that the ECC has representation from several of the stakeholders. They have not put together in a significant way what that meeting would look like.

Ms. Brunner stated that one thing she was hoping to get from the ECC today is any contact information people have for representatives from these organizations. She continued that she would like contact information for people at Cheshire Medical Center, Southwest Community Services, and River Valley Community College, for starters. Chair Shedd added that Hillside Village should be on the list. She continued that she passed around a document she created of who the stakeholders should be, and a draft of questions they might take to the focus group. She thinks they should have stakeholders submit a basic information sheet before the meeting, to make efficient use of the time.

Chair Shedd asked if it is correct that River Valley no longer has its own campus and is using the KSC campus. Ms. Gaunt replied yes. Mr. Hansel asked if that means they

have no control over what happens with the buildings. Ms. Gaunt replied that they have a voice, and should be there.

Chair Shedd asked Ms. Brunner to put the contact list and the information they have so far into a spreadsheet in the ECC's shared drive. Ms. Brunner replied that she thought it was there, but she will double check. Chair Shedd replied that they should have a spreadsheet for just the institutional stakeholders, because they have one for all stakeholders. Ms. Brunner stated that if anyone has more names of institutional stakeholders, and/or emails or phone numbers for the contact people, they can email that information to her.

Chair Shedd asked if it is realistic to have the meeting in January or if they should wait until February. Ms. Gaunt and Mr. Bouchard replied that February would work better for the college and the County. Ms. Brunner stated that the date of the February ECC meeting is February 5th.

Chair Shedd stated that regarding the content of the meeting, she is not sure if people had a chance to look at her draft of questions. She asked for other thoughts on what they should be addressing at the gathering of stakeholders. Mr. Hansel replied that they should ask the stakeholders what kind of benchmarking they have and what programs they are using. Chair Shedd replied yes, the question is not so much about the benchmarking results, but to share experience using the benchmarking tools. At some point it would be great to ask about the data.

Mr. Bouchard asked Mr. Dooley if the school district is using Portfolio Manager. Mr. Dooley replied no, they are using School Dude, which they use for other things as well, and it is working well. He continued that there is also Facility Dude for non-school buildings. Ms. Brunner asked if that costs money. Mr. Dooley replied yes, it is expensive.

Ms. Gaunt stated that regarding the questions, when in focus groups, people often have good ideas they want to share. She continued that they could ask, "What do you want to achieve? What have been the barriers to success? Where have you found success in overcoming those barriers?" Chair Shedd replied that she is especially interested in hearing from the representatives of the institutional sector what would be useful information to share among the institutional sector representatives that would advance the goals the City has set.

Mr. Bouchard left at 9:07 AM.

Chair Shedd stated that it will be helpful in January to revisit where they are with the timeline and in engaging the different sectors. She asked: if Cadmus will be recommending strategies sometime in February, will the ECC, having been tasked with community engagement, be providing them with enough Keene-specific information to help inform their process?

Ms. Gaunt stated that she has contacts for Ms. Brunner from Antioch and River Valley. Ms. Brunner replied that that would be great. Ms. Gaunt asked how many people from each institution they want to have for the meeting. Ms. Brunner replied one or two, three maximum, to keep the conversation manageable. She continued that it would be great to have the facilities person from each institution.

Chair Shedd stated that they will work on having a draft outline for that gathering, to bring to the ECC's January meeting for the ECC to add to. Mr. Hansel asked about getting the word out. Ms. Brunner replied that she can do a "save the date" – once the contact list is filled out, she will send everyone an email with an invitation. She continued that Chair Shedd had brought up trying to have people share some data ahead of time. Chair Shedd replied yes, finding out basic information (such as a one-page sheet) about each institution ahead of time could save them 30 or 40 minutes during the meeting. Ms. Brunner replied that maybe an online survey format would be best.

**c) Community Energy Conversations (meeting-in-a-box activity)**

Chair Shedd stated that there have been 5 or 6 Community Energy Conversations so far. She asked Nancy Gillard and Carolyn Jones, from the Clean Energy Team, to share about what their experiences have been like.

Ms. Gillard and Ms. Jones replied that there was a great group of six people at the library last night, who had great questions, concerns, and ideas. It will be interesting to see how the feedback helps the consultants, but these groups are getting the conversation going more and more in the community. People respond enthusiastically. Young people who were not aware of the extent of the program were excited about it and wanted cards to share with their friends.

Chair Shedd stated that she has been a part of two faith-based groups and one at the library. She continued that themes that have come up are education, awareness, and cost-effectiveness. There was a lot of enthusiasm. The church groups wanted to meet and talk again.

Ms. Brunner stated that one group in November had good participation, and a lot of energy. She continued that students who attended are excited to bring this to their school and they will be working on a project with the City. There is another group meeting on Friday, December 6, and there is still room, so everyone can spread the word. The groups are open to folks who are not Keene residents as well. Ms. Gillard and Ms. Jones added that next week they have one at the Senior Center and one at the Community Kitchen.

**d) Success Stories: [www.ci.keene.nh.us/sustainability/success-stories](http://www.ci.keene.nh.us/sustainability/success-stories)**

Chair Shedd stated that two success stories are up on the website. Ms. Brunner replied that she has a backlog of four or five more to get posted. She continued that there is an excellent one from Bensonwood. Chair Shedd added, and some from the non-profit sector, such as the Keene UU Church, and MoCo.

Ms. Brunner stated that there was one from Michele, who asked her to wait until she (Michele) sent more data. Chair Shedd replied that they do not need more data, just the story. Ms. Brunner replied that she will ask Michele if it is okay to post it as-is. Discussion continued and other names shared were the Monadnock Food Coop, Keene Housing, Community Kitchen, and Hannah Grimes.

Chair Shedd stated that the Solarize 2020 Keene and Monadock Campaign is meeting tomorrow night to finalize the RFP that will go out to potential contractors, hopefully within a week. She continued that the proposals will be due January 10, and will be reviewed in January. They are aiming to have the Keene kick-off on Wednesday, March 4. There is no City Council meeting then so they hope to have some Councilors there.

**5) New Business**

Mr. Maslansky asked if anything has come up regarding the Eversource divestiture funds and Keene's interest in speaking up about that. He continued that Eversource put together a \$5 million Clean Energy Fund. There is a recommendation from the Public Utilities Commission and other initiatives on what to do with that funding. There is a stakeholder meeting on December 18. There is interest in discussing what should be done. CDFA is looking to have longer-term leverage of the funds. If the City or this group is interested, he can talk with them and get them more information.

**6) Next Meeting: Wednesday, January 8, 2020**

**7) Adjourn**

Hearing no further business, Chair Shedd adjourned the meeting at 9:19 AM.

Respectfully submitted by,  
Britta Reida, Minute-taker

Reviewed and edited by Mari Brunner, Planner

## ENERGY AND CLIMATE COMMITTEE

Active Members as of January 8, 2020

	<b>First Name</b>	<b>Last Name</b>	<b>Type</b>	<b>Term</b>	<b>Term Expires</b>
1	Kenneth	Dooley	Regular	First	12/31/2021
2	Jake	Pipp	Regular	Second	12/31/2021
3	Terry	Clark	Regular	Exempt	12/31/2019
4	Ann	Shedd	Regular	Second	12/31/2020
5	Peter	Hansel	Regular	First	12/31/2019
6	Christopher	Brehme	Regular	First	12/31/2020
7	Zach	Luse	Regular	First	12/31/2021
8	Carey	Gaunt	Regular	First*	12/31/2019
9	Anna	Schierioth	Regular	First	12/31/2020
10	Rodney	Bouchard	Regular	First	12/31/2021
11	Andrew	Dey	Regular	First	12/31/2021
12	Position	Vacant	Alternate	Exempt	12/31/2020
13	Position	Vacant	Alternate	Exempt	12/31/2020
14	Position	Vacant	Alternate	Exempt	12/31/2021

*\*Does not count towards term limit*



## Energy and Climate Committee

### 2020 Meeting Schedule

All meetings are on the 1<sup>st</sup> Wednesday of each month at 8:00 AM in the 2<sup>nd</sup> Floor Committee Room

2<sup>nd</sup> Wednesday, January 8

Wednesday, February 5

Wednesday, March 4

Wednesday, April 1

Wednesday, May 6

Wednesday, June 3

Wednesday, July 1

Wednesday, August 5

Wednesday, September 2

Wednesday, October 7

Wednesday, November 4

Wednesday, December 2

## Memorandum

To: Mari Brunner, Rhett Lamb, City of Keene

From: Kalee Whitehouse, Megan Lynch, Zack Wyman, Cadmus

Subject: Electricity Context Memo

Date: December 20, 2019

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### Background

In January 2019, the Keene City Council adopted a goal to source all electricity consumed in the City from renewable sources by 2030<sup>1</sup>. To support the City in achieving this goal, this memo outlines the relevant state, utility, and local electricity market context, as well as key policies, to provide a foundational understanding of Keene's local barriers and opportunities related to increased renewable energy deployment. The findings of this memo will also support the development of an electricity baseline for the City of Keene, and the selection of strategy options Keene could leverage to achieve 100% renewable electricity.

### State Regulatory Context

New Hampshire is one of 17 states in the United States with a deregulated electricity market. In this context, investor-owned utilities are not permitted to own and operate power plants that generate electricity, and retail customers are free to purchase energy from a competitive supplier while the utility continues to provide transmission and distribution services.

There are currently four electric distribution investor-owned utility companies in the State of New Hampshire<sup>2</sup> with Eversource serving as the main electric utility in Keene. Additionally, there are also a number of competitive energy suppliers active in New Hampshire, offering customers a range of electricity sourcing options and prices. There are approximately 15 residential<sup>3</sup> and 25 commercial/industrial<sup>4</sup> energy suppliers currently active in Eversource's territory. Eversource reports that approximately 22% of its residential customers in New Hampshire had migrated to the competitive supply market by the end of the third quarter in 2019<sup>5</sup>. Having the ability to select a competitive supplier provides residents, businesses, and local governments with greater control over their energy mix and the opportunity to increase renewable energy supply.

Governor Hassan signed House Bill 614<sup>6</sup> in 2015, which aims to modernize the grid and draws from the goals outlined in the 2014 NH Energy Strategy<sup>7</sup>. The New Hampshire Public Utilities Commission worked alongside industry experts to develop a report entitled *Grid Modernization in New Hampshire*.<sup>8</sup> The report detailed a number of energy initiatives and an updated 2018 State Energy Strategy,<sup>9</sup> which focused on building a more flexible and efficient grid capable of supporting the State's evolving energy goals more effectively than currently possible given the failing and outdated grid infrastructure in place today. Grid modernization is essential to support the growth of New Hampshire's economy and must rely on the effective integration of distributed energy resources, which promote resiliency, reduce costs, and

encourage further development of clean renewable resources. The PUC has continued their efforts to encourage all stakeholders to actively contribute to grid modernization<sup>10</sup>, with recent efforts focused on increasing the availability of consumer’s utility data<sup>11</sup>.

There are several state policies and programs that both support and limit renewable energy development in New Hampshire. Examples of some key supportive state-level policies can be found below:

- **The New Hampshire GHG Targets and Climate Plan:** In 2009, New Hampshire established statewide carbon reduction and renewable energy goals within its Climate Action Plan (CAP). These goals include an 80% reduction in greenhouse gas emissions by 2050, from the base year of 1990 and 25% of statewide energy to be sourced from renewables by 2025. Additionally, the GHG Targets and Climate Plan called for investment in and incentivization of renewable energy via the state renewable portfolio standard (RPS) and participation in the Regional Greenhouse Gas Initiative (RGGI).<sup>12</sup> As of 2016, New Hampshire reported a 50% reduction in GHG levels from the electricity sector below 1990 levels, 52,000 MWh of solar energy, and renewables comprising 17.1% of the state’s energy portfolio.<sup>13</sup>
- **Net Metering:** Utility customers that generate electricity on-site are eligible for net metering credits when they produce more electricity than they consume in a given month. Within Eversource territory, “each kilowatt hour of Net Sales will earn a monetary bill credit equal to the sum of the Default Energy Service charge, the Transmission Charge, plus 25 percent of the Distribution Charge. Customers who take energy supply service from a competitive retail supplier are not eligible for the Default Energy Service portion of this credit.”<sup>14</sup> The PUC distinguishes between small customer-generators (up to 100 kilowatts) and large customer-generators (greater than 100 kW and up to 1 MW), with slightly varied rules for each. The aggregate statewide capacity limit for all net metered systems is 100 MW, with 50% specifically held for the state’s investor-owned utilities as upheld by HB 1116.<sup>15</sup> There have been recent motions to amend net metering, such as SB 365 (2019) which would have expanded the net metering size limit for eligible customer-generators from 1 MW to 5 MWs.<sup>16</sup> [SB 365](#) was vetoed but a similar bill, [SB 159](#), was passed by the Senate in March of 2019 and is slated to be voted on by the House in early 2020. SB 159 would increase the system size limits for large customer-generators from 1 MW to 5 MW.
- **Group Net Metering:** Group net metering is permissible per SB 98, which allows a customer-generator to act as a group host for non-generator customers and distribute the kWh credits generated by the host system among the group. The group host would then receive compensation from the utility, and pay members based upon their contractual agreement for their portion of the array. The challenge is that group net metering places an administrative burden on the group host, and creates taxable income for members. [SB 165](#), which recently became law in NH, will allow for more traditional community solar through on-bill credits.
- **Interconnection Standards:** Municipal and residential systems guarantee interconnection, without requirement of additional payment in the form of fees, tests, or insurance. The utility provider will usually require a mutual indemnity agreement. Some efficiency and safety requirements must be met. This is upheld by New Hampshire Statutes § 362-A:9.<sup>17</sup>

- State Renewable Portfolio Standard (RPS):** New Hampshire’s RPS requires private electricity providers to utilize renewable energy according to a compliance schedule with a goal of 25.2% by 2025.<sup>18</sup> As of 2016, 17.1% of energy used in New Hampshire was from renewable sources.<sup>19</sup> Eversource currently fulfills their obligations under the State’s RPS primarily through the issuance of periodic RFP’s for the purchase of Class I Renewable Energy Certificates<sup>20</sup> from Burgess BioPower and Lempster Wind.<sup>21</sup>
- Third Party Ownership:** The state permits third party ownership in the form of Power Purchase Agreements (PPAs), pending independent approval. Limitations for approval are listed in New Hampshire Statute Ann. §362-A:4-c.<sup>22</sup> A PPA allows for the procurement of electricity through a private third-party contractor. In this scenario, the private third party pays for the cost of the system and bears the burden of operating and management. The consumer then purchases the energy produced by the system directly from the third party, usually at a discounted rate compared to the default utility. There are several potential benefits to utilizing a PPA. For example, if a public entity wishes to realize some of the Federal Investment Tax Credit (ITC) for solar installations, they can partner with a private third party that qualifies for such lucrative incentives.
- Community Choice Aggregation (CCA):** Also known as Community Power or Municipal Choice Aggregation (MCA), this option allows New Hampshire communities to pool their electricity load and encourages the purchase of clean and renewable energy on behalf of participating customers. Communities may also implement cost-saving measures and reallocate funds towards other renewable energy-based projects as well. With the passing of New Hampshire *Senate Bill 286-FN-Local* in June 2019, New Hampshire municipalities and counties are permitted to develop plans for electric aggregation programs for the first time.<sup>23</sup> In addition, the bill also allows cities and towns to implement community choice on an opt-out basis, meaning customers are automatically enrolled and giving local governments far more bargaining power.<sup>24</sup> Development of CCA programs enables communities to pursue more aggressive renewable energy goals than otherwise possible through default utility providers.
- Financing Mechanisms and Incentives:** The state of New Hampshire offers a number of financial incentives for residents, businesses, and commercial customers interested in installing a renewable energy system. More details on these tax incentives, rebates, loan programs, and other financing mechanisms can be found in [Appendix A](#).

## Utilities in Keene

There are currently four electric distribution companies operating in New Hampshire, with each serving a mutually exclusive franchise territory. Eversource is the primary distributor, serving about 70% of retail customers, Unitil and New Hampshire Electric Cooperative (NHEC) serve 11% each, and Liberty Utilities serves about 6% of customers<sup>25</sup>.

The City of Keene is located within Eversource’s territory for electricity service. Eversource is an investor-owned utility that provides electricity and natural gas service to customers in New Hampshire, as well as Connecticut and Massachusetts. Eversource provides a few programs to help promote renewable energy resources in New Hampshire and comply with the state RPS requirements, such as net metering and the

provision of educational materials. Additionally, Eversource owns a number of renewable generation sources across its service territory, including a 51-kW solar array in Manchester<sup>26</sup>. Eversource also offers a range of energy efficiency-focused programs, including their Residential Energy Efficiency Rebate Program<sup>27</sup>, New Equipment & Construction Schools Standard<sup>28</sup>, and their Commercial New Construction Energy Efficiency Rebate Program<sup>29</sup>. The New Hampshire PUC regulates investor-owned utilities within New Hampshire, including Eversource, and is responsible for ensuring reliable service at reasonable rates.

Eversource customers receive electricity from the New England power grid. As of December 2017, the NEPOOL system mix was approximately 20.58% renewable and 79.41% non-renewable. Of the renewable sources, approximately 7% came from hydropower, with the remainder coming from a variety of wind, solar, biomass, and other sources.

## *Local Policies and Initiatives*

In addition to state-level policies, the City of Keene has taken steps locally to support the deployment of renewable energy. In 2018, Keene passed a resolution setting aggressive community-wide energy goals including 100% renewable electricity by 2030 and 100% renewable energy for the thermal and transportation sectors by 2050<sup>30</sup>. The City of Keene has also developed several planning documents to guide renewable energy and sustainability efforts, including:

- **Adapting to Climate Change: Planning a Resilient Community (2007)**<sup>31</sup>: This climate resilience action plan outlines the expected impacts of climate change in the Northeast and New Hampshire, identifies Keene’s vulnerabilities to these impacts, and lays out key goals and targets for increasing resilience along with implementation steps.
- **Local Action Plan (2004)**<sup>32</sup>: This climate action plan provides an overview of climate change and its impacts, and outlines key municipal, residential, and commercial/industrial opportunities for reducing greenhouse gas emissions to support efforts to mitigate the impacts of climate change.
- **Greenhouse Gas emissions Inventory Report (2015)**<sup>33</sup>: This report provides an inventory of 2015 community-wide and 2015 municipal GHG emissions to help the City track progress against its emissions reduction goals and inform climate action planning.

Furthermore, the City has completed a number of projects to support renewable energy and the reduction of greenhouse gas emissions. Some key highlights include the installation of a solar photovoltaic system on City Hall, the installation of a solar PV system and geothermal HVAC system at the Public Works Department, the installation of hydropower at the water treatment facility, replacing the methane-to-gas system at the transfer station with a biodiesel generator, the conversion of all City lights to LEDs, and providing tax incentives for residential wood, wind, and solar installations<sup>34</sup>. For more information on the City’s renewable energy accomplishments, please see the [Energy and Climate Program Brochure](#).

## *Innovative Action in New Hampshire*

A number of communities in New Hampshire have taken innovative action to support renewable energy deployment. A few key highlights are summarized below:

- The **City of Lebanon** is currently planning a CCA pilot program in hopes of realizing some of the benefits a program of this type can have for a community. This originally was an opt-in pilot program; however, the model may change with the passage of SB 286.
- Several New Hampshire communities have already leveraged their group purchasing power by participating in a Solarize campaign. Communities including **Nashua, the Monadnock Region, and New Hampshire's Upper Valley** have come together to help expedite the adoption of solar in the state. During a Solarize campaign, a community partners with one or several developers, who can offer citizens extremely competitive pricing due to anticipation of a large number of installs in one area over a condensed period of time.
- **Concord**, New Hampshire has also taken action recently, pledging their own commitment to pursuing 100% renewable electricity by 2030 and 100% renewable energy for the thermal and transportation sectors by 2050. In July of 2019, Concord released a strategic plan outlining strategies and action steps to achieve their goals.<sup>35</sup>
- **Energize 360**<sup>36</sup> is a community-led effort in New Hampshire that takes advantage of similar bulk discount incentives as leveraged through Solarize. Energize 360 allows citizens in participating communities to request a free site visit to their home or business, providing them useful information about their energy consumption and opportunities to weatherize their property, install solar or other technologies, and implement energy efficiency measures, among other strategies. The communities currently enrolled in the Energize 260 campaign include Dover, Durham, Lee, Northwood, Portsmouth, Exeter, Hampton, Kensington, Madbury, New Castle, Newmarket, Rye, Somersworth, Strafford, and Stratham, New Hampshire.
- **Vital Communities** is a nonprofit organization that offers a range of economic, environmental, and civic-oriented programs and resources to support in the Upper Valley region of New Hampshire and Vermont. Their energy programs include Weatherize and Solarize Upper Valley campaigns, as well as a Green Real Estate Network to educate home buyers and sellers on energy efficiency<sup>37</sup>.

## *Electricity Baseline*

*This section is forthcoming and will detail the current and projected electricity consumption and sources utilized in Keene.*

## Appendix A: State-Level Incentives

- *Tax Incentives*
  - **Local Property Tax Exemption.** Local property tax exemptions vary by city across New Hampshire. For example, the City of Keene set the solar exemption to “equal the total assessed value attributed to the solar energy system.”<sup>38</sup> Similar local exemptions can also be applied to wood heating and wind systems as well.
- *Rebate Programs*
  - **Residential Small Renewable Energy Rebate Program.** Residential solar customers are eligible for the state rebate program on a first come, first serve basis. They may receive up to \$2,500, granted they complete the pre-approval and final application. This is upheld by HB 1628.<sup>39</sup>
  - **Residential Solar Water Heating Rebates.** Residential solar water heating customers are eligible for the state rebate program on a first come, first serve basis. They may receive up to \$1,900, granted they complete the pre-approval and final application. This is upheld by New Hampshire Statutes, Chapter 362-F:10 and NH PUC Order No. 25,092.<sup>40</sup>
- *Loan Programs*
  - **Enterprise Energy Fund Loans.** Business and non-profit owners may apply for a loan through the New Hampshire Community Loan Fund and the New Hampshire Community Development Finance Authority. Loan amounts range from \$50,000 to \$500,000, with interest rates between 2% and 2.5% for non-profits, and 2.75% and 4% for for-profit businesses.<sup>41</sup>

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<sup>1</sup> City of Keene. Sustainable Energy Planning. <https://ci.keene.nh.us/sustainability/energy%20plan>

<sup>2</sup> New Hampshire Public Utilities Commission. Electric. <http://www.puc.state.nh.us/Electric/electric.htm>.

<sup>3</sup> New Hampshire Public Utilities Commission. <https://www.puc.nh.gov/consumer/Residential%20Suppliers.html>

<sup>4</sup> New Hampshire Public Utilities Commission. <https://www.puc.nh.gov/consumer/Commercial%20and%20CI.html>

<sup>5</sup> Eversource. 3rd Quarter 2019 Customer Migration Report. [https://www.eversource.com/content/docs/default-source/doing-business/migration-nh-2019-q3.pdf?sfvrsn=1d1cd762\\_0](https://www.eversource.com/content/docs/default-source/doing-business/migration-nh-2019-q3.pdf?sfvrsn=1d1cd762_0)

<sup>6</sup> New Hampshire House, An Act implementing goals of the state 10-year energy strategy. <http://www.gencourt.state.nh.us/legislation/2015/HB0614.pdf>

<sup>7</sup> New Hampshire Office of Energy and Planning, *New Hampshire 10-Year State Energy Strategy*, 2014. <https://www.nh.gov/osi/energy/programs/documents/energy-strategy.pdf>

<sup>8</sup> Grid Modernization Working Group, *Grid Modernization in New Hampshire*. [http://www.puc.nh.gov/Regulatory/Docketbk/2015/15-296/LETTERS-MEMOS-TARIFFS/15-296\\_2017-03-20\\_NH\\_GRID\\_MOD\\_GRP\\_FINAL\\_RPT.PDF](http://www.puc.nh.gov/Regulatory/Docketbk/2015/15-296/LETTERS-MEMOS-TARIFFS/15-296_2017-03-20_NH_GRID_MOD_GRP_FINAL_RPT.PDF)

<sup>9</sup> New Hampshire Office of Strategic Initiatives, *New Hampshire 10-Year State Energy Strategy*, 2018 <https://www.nh.gov/osi/energy/programs/documents/2018-10-year-state-energy-strategy.pdf>

- <sup>10</sup> New Hampshire Public Utilities Commission, Staff Recommendation on Grid Modernization. [https://www.puc.nh.gov/Regulatory/Docketbk/2015/15-296/LETTERS-MEMOS-TARIFFS/15-296\\_2019-02-12\\_STAFF\\_REPORT\\_AND\\_RECOMMENDATION.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2015/15-296/LETTERS-MEMOS-TARIFFS/15-296_2019-02-12_STAFF_REPORT_AND_RECOMMENDATION.PDF)
- <sup>11</sup> New Hampshire Senate Bill 284-FN. <https://legiscan.com/NH/text/SB284/id/1878193>
- <sup>12</sup> New Hampshire Department of Environmental Services (2009). The New Hampshire Climate Action Plan. [https://www.des.nh.gov/organization/divisions/air/tsb/tps/climate/action\\_plan/documents/nhcap\\_final.pdf](https://www.des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf)
- <sup>13</sup> Georgetown Climate Center. New Hampshire Climate and Energy Profile. <https://www.georgetownclimate.org/clean-energy/clean-energy-and-climate-data.html?state=NH>.
- <sup>14</sup> New Hampshire Net Metering. Eversource. <https://www.eversource.com/content/nh/about/about-us/doing-business-with-us/builders-contractors/interconnections/new-hampshire-net-metering>
- <sup>15</sup> Database of State Incentives for Renewables & Efficiency. Net Metering Program Overview. <https://programs.dsireusa.org/system/program/detail/283>
- <sup>16</sup> Utility Dive. New Hampshire Gov Sununu vetoes bill that would quintuple net metering cap. <https://www.utilitydive.com/news/new-hampshire-legislators-quintuple-net-metering-cap-by-veto-proof-margin/555117/>
- <sup>17</sup> New Hampshire Statutes § 362-A:9: <http://www.gencourt.state.nh.us/rsa/html/XXXIV/362-A/362-A-9.htm>
- <sup>18</sup> NH RPS: <http://www.puc.state.nh.us/Sustainable%20Energy/RPS/NH%20RPS%20Retrospective%202007-2015%20Report%20-%20FINAL.pdf>
- <sup>19</sup> <http://www.georgetownclimate.org/clean-energy/clean-energy-and-climate-data.html?state=NH>
- <sup>20</sup> Eversource Redacted Testimony. 12.13.2018. [https://www.nhpr.org/sites/nhpr/files/201812/12-13-18\\_-\\_redacted\\_-\\_de\\_18-002\\_eversource\\_energy\\_-\\_energy\\_service\\_solicitation\\_feb\\_-\\_jul\\_2019.pdf](https://www.nhpr.org/sites/nhpr/files/201812/12-13-18_-_redacted_-_de_18-002_eversource_energy_-_energy_service_solicitation_feb_-_jul_2019.pdf)
- <sup>21</sup> Eversource Redacted Testimony. 12.13.2018. [https://www.nhpr.org/sites/nhpr/files/201812/12-13-18\\_-\\_redacted\\_-\\_de\\_18-002\\_eversource\\_energy\\_-\\_energy\\_service\\_solicitation\\_feb\\_-\\_jul\\_2019.pdf](https://www.nhpr.org/sites/nhpr/files/201812/12-13-18_-_redacted_-_de_18-002_eversource_energy_-_energy_service_solicitation_feb_-_jul_2019.pdf)
- <sup>22</sup> New Hampshire Statue Ann. §362-A:4-c: <http://www.gencourt.state.nh.us/rsa/html/XXXIV/362-A/362-A-4-c.htm>
- <sup>23</sup> New Hampshire Senate Bill 286-FN-Local. [http://www.gencourt.state.nh.us/bill\\_status/billText.aspx?sy=2019&id=1053&txtFormat=html](http://www.gencourt.state.nh.us/bill_status/billText.aspx?sy=2019&id=1053&txtFormat=html)
- <sup>24</sup> Conservation Law Foundation on Community Choice Aggregation. <https://www.clf.org/blog/new-hampshire-harnesses-community-choice-for-clean-energy/>
- <sup>25</sup> New Hampshire Public Utilities Commission. <https://www.puc.nh.gov/Electric/electric.htm>
- <sup>26</sup> Eversource. Renewable Generation. <https://www.eversource.com/content/nh/about/projects-infrastructure/projects/renewable-generation>.
- <sup>27</sup> Eversource- Residential Energy Efficiency Rebate Program. <https://www.eversource.com/content/nh/residential/save-money-energy/manage-energy-costs-usage/efficient-products>
- <sup>28</sup> Eversource- New Equipment & Construction Schools Program. <https://www.eversource.com/content/nh/business/save-money-energy/manage-energy-costs-usage/new-building-solutions>

- <sup>29</sup> Eversource- Commercial New Construction Energy Efficiency Rebate Program.  
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- <sup>30</sup> City of Keene, NH *Resolution Relating to Sustainable Energy Goals*.  
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- <sup>32</sup> City of Keene. *Local Action Plan*. (February 2004).  
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- <sup>33</sup> City of Keene. *2015 Greenhouse Gas Emissions Inventory*.  
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- <sup>34</sup> City of Keene. *Energy & Climate Change Program*.  
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- <sup>35</sup> City of Concord. (July 2019). *100% Renewable Energy Goal Strategic Plan*.  
<http://www.concordnh.gov/ArchiveCenter/ViewFile/Item/4713>
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- <sup>37</sup> Vital Communities. *Energy*. <https://vitalcommunities.org/energy/>.
- <sup>38</sup> Keene, NH *Exemption and Credit Information*. <https://ci.keene.nh.us/assessing/exemption-credit-information>
- <sup>39</sup> HB 1628: <http://www.gencourt.state.nh.us/legislation/2008/HB1628.html>
- <sup>40</sup> NH Statutes 362-F10: <http://www.gencourt.state.nh.us/rsa/html/xxxiv/362-f/362-f-10.htm>, NH PUC 25,092:  
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- <sup>41</sup> NHCDFa: <http://www.nhcdfa.org/energy-efficiency/for-businesses-faqs>



December 11, 2019

**TO:** Mayor and Keene City Council  
**FROM:** Planning, Licenses and Development Committee  
**ITEM:** D.3.  
**SUBJECT:** Keene Solarize Campaign – Energy and Climate Committee

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**COUNCIL ACTION:**

In City Council December 19, 2019.  
Voted unanimously to carry out the intent of the report.

**RECOMMENDATION:**

On a vote of 4 to 0, the Planning, Licenses, and Development Committee recommends the City Council endorse the Keene Solarize Campaign.

**BACKGROUND:**

Dr. Ann Shedd, of 59 Greenwood Avenue, Chair of the Energy and Climate Committee (ECC), stated that she hopes there was enough information in the agenda packet about what Keene Solarize is. She continued that to speak to the ECC's support for the City partnering with the campaign, the ECC's mission statement includes the task of "promoting energy conservation and efficiency, and the use and production of renewable energy." The City's January 2019 100% renewable energy resolution certainly needs much action to achieve the goal of having 100% renewable electricity in ten years. Keene Solarize has the opportunity to contribute significantly to these goals. To give one the idea of the scale of the potential impact: over a three-year period in the Upper Valley, a series of Solarize campaigns were conducted in 24 towns, and during those three years there were 370 new residential solar installations, totaling 2.2 megawatts. To give some context: until a couple of Keene's large installations, like 350 Marlboro Street and some of the commercial installations, that exceeded Keene's total solar capacity. Now Keene has the Upper Valley beat. Solarize Kearsarge has run two campaigns, each adding about 40 residential installations, and this year the first Solarize Monadnock was conducted in Peterborough, Fitzwilliam, Sharon, Hancock, and Rindge, and resulted in about 40 residential installations. Records from communities around the country that have done Solarize campaigns suggest that in addition to what can be attributed directly to the campaigns, the public outreach and education also results in a bump in the number of installations done by other installers. Currently Keene has about 70-100 residential solar installations. Based on outcomes from past campaigns, particularly in NH, it is not unreasonable to expect Keene might double that number. This could contribute to the city's long term resilience, which is called for in the Climate Adaptation Plan, the sustainability emphasis in the Comprehensive Master Plan. As storage with small scale batteries becomes increasingly affordable they could see citizens with solar systems getting through extreme weather events much more readily. For example, in California this fall when they were having the public safety power stoppages, to decrease the risk of wildfires, homes with solar systems could keep functioning and help their neighbors get through the power outages.

Dr. Shedd continued that among the advantages for the City, of affiliating with Solarize Keene, the primary one

is that the City would get credit without having to do any work or expend any moneys. In-kind donations of space, and promotion on the City's website, would benefit the outreach in the campaign. The campaign includes significant public outreach and education around not only the benefits of solar, how to access solar, and how to finance it, but will definitely be emphasizing the benefits of energy efficiency as well. The ECC knows that ideally they would have done the weatherize campaign first and then gone to Solarize, but the reality, discovered by other communities that have done both simultaneously, is that more people sign up for solar than weatherization. This is the first year that the Federal tax credits for solar are starting to taper off. Those are scheduled to expire entirely in 2022. So there is a little extra incentive to do solar this year.

Dr. Shedd continued that in regards to how other municipalities have affiliated with Solarize campaigns, there are a couple examples: in Nashua, in 2018 there was a combination weatherize/solarize campaign run by the city and its equivalent to Keene's ECC. The Solarize Hanover campaign is being promoted on the Town's website. Portsmouth's City Council in 2017 adopted a resolution during the solarize/weatherize campaign. She read a portion of it, as an example of how cities have supported a solarize campaign: "Now be it resolved that the City of Portsmouth hereby supports the Energize 360 Seacoast NH program and any other similar organizations that encourage its residents to investigate how this program could help them take control of their energy future. Be it further resolved that the City will request appropriate personnel to assist Energize 360 program officials and city residents in navigating any City codes, ordinances, and permitting that will apply to building improvements made under this campaign."

She continued that when the ECC discussed supporting this staff advised them that they did not have to wordsmith whether they were asking the City Council to "participate," "support," "endorse," or so on and so forth. City staff could determine the wording. There is an installer selection team that is part of the volunteer team working on Solarize Monadnock. A request for proposals went out this Monday to a number of potentially interested partner installers and those proposals will be due back January 10, 2020. A few weeks later the team will be reviewing the proposals and interviewing people who applied and making a decision on who the installers will be. The target is March 4 for a kick off in Keene. All City Councilors are invited, and she hopes to see them there - there are no Council meetings that night.

Chair Richards stated that this is a great idea. He asked if Dr. Shedd could simplify it for him: is it correct to say that Solarize is a consortium of people to do solar installations, and increase public awareness, and that building the consortium will reduce prices, make people aware that the potential is out there, and inform people of the Federal credits they can still get, in order to get as much solar as possible in the city?

Dr. Shedd replied yes, with one correction. She continued that the model they are working with is a proven model that was formalized through the Upper Valley campaigns, which had a diligent, paid staff member who created an online tool kit for how to run a Solarize campaign. Any resident will have the choice of getting estimates and proposals from any installers they want. But part of what makes this process more streamlined for consumers is there has been a vetting process by the team to select a partner installer. There is a provision in the RFP that if smaller installers want to team up, they can do that, but to simplify matters there is one point of contact. It would be like subcontracting to other installers.

Chair Richards replied that it sounds awesome. He continued that the more solar panels there are the better.

Councilor Jones thanked Dr. Shedd. He continued that he knows she likes to see policies implemented, not just put on a paper. He has ideas for some more tools to consider adding to the campaign. A couple months ago the City adopted an ordinance saying that adding solar will not add to a home's assessed value. It will add to home's market value if you are selling your house, but not the assessed value, because it will not add to your taxes.

Dr. Shedd replied yes, the Renewable Energy Property Tax Exemption has been in place for a couple years, but this year the City removed the cap on that, which is good for the bigger installations. Most residential

installations will be 3 to 8 kilowatts.

Councilor Jones asked if it is correct that there are rebates available from Eversource. Dr. Shedd replied yes, from the PUC. She continued that there is a finite reservoir of money for that every year, so not everyone who installs residential solar necessarily gets that rebate, but that is an issue at the Concord level.

Councilor Jones stated that he thinks right now they are at 40% they can sell back. He thinks that is the lowest in the nation. Dr. Shedd replied that it is an ever-changing landscape. Councilor Jones replied that he hopes there is a chance of that increasing.

Councilor Hansel asked if there is an opportunity to educate these new installers about the Renewable Energy Certificates (RECs) they would be generating, and he asked if part of the campaign is going to be consolidating and selling the RECs to an aggregator. Dr. Shedd replied that she does not think there has been a Solarize campaign that has aggregated the REC sales. That would be interesting to explore. Councilor Hansel replied that all of the RECs generated could just get swept up by Eversource, if people are not educated about that.

Dr. Shedd stated that she wanted to clarify one thing. She continued that there was a nice article about this topic in the Keene Sentinel on Monday. It was accurate in many ways but it made it seem like the ECC was going to be running the campaign. The ECC has its hands full helping with the development of the renewable energy plan by December 2020. A couple members of the ECC have volunteered to be on a non-governmental, ad hoc committee that will only exist to run the Solarize campaign. It is getting support from the Monadnock Energy Hub, which has a fiscal sponsor of the Monadnock Sustainability Network, which is a 501c3. In early 2020 they will be rebranding as the Monadnock Energy and Sustainability Hub (MESH).

Nancy Westrate, of 27 Gates Street, stated that she is a member of the Solarize Monadnock 2020 campaign. She continued that she is here to support the idea of the partnership with the City. She hopes they can help each other obtain the goals.

Chair Richards stated that their recommended motion tonight is to “endorse” this, and to him that sounds a little “light.” He asked if the Solarize groups have gotten together with anyone from the City’s IT Department to talk about putting the information on the City’s website. He continued that that is what needs to happen.

The City Manager replied no. She continued that the first step is to find out if the City Council wants to endorse the Solarize campaign, and then they would talk about marketing.

Chair Richards stated that they have heard a lot of information all at once tonight, which can be a lot for the people watching from home. He continued that a lot of information should be put onto the City’s website. The City should do everything they can. Solar panels reduce pollution and are the way of the future and the way to go. This should be on the front page of the City’s website so people have all the information they need.

Chair Richards asked for further comments from the public or committee. Hearing none, he asked for a motion.

Councilor O'Connor made the following motion, which was seconded by Councilor Hansel.

On a vote of 4 to 0, the Planning, Licenses, and Development Committee recommends the City Council endorse the Keene Solarize Campaign.



*PRESS RELEASE*

**FOR IMMEDIATE RELEASE**

**Date: December 30, 2019**

**Contact: Yves P. Gakunde**  
**Environmentally Preferable Purchasing Program (EP3) Committee**  
**Purchasing Office: 603-357-9800**

The City of Keene set a goal that all electricity consumed in the City will come from renewable energy sources by the year 2030 and that 100% of all thermal energy and energy used for transportation come from renewable energy sources by the year 2050. While this goal is set for the entire Keene community and not just municipal government operations, in an effort of moving toward this goal, the City recently contracted for electricity for their municipal operations requirements which supports clean and renewable electricity generation.

The City contracted with Constellation to provide Green-e® Energy certified Renewable Energy Certificates for one account for 12 months and the remaining accounts for 24 months. The City has procured Renewable Energy Certificates, also known as RECs, sourced from wind renewable resources located within the United States. The RECs that will be provided to the City of Keene will promote greenhouse gas emission reduction benefits such as carbon dioxide (CO<sub>2</sub>) reductions.

From 1995 to 2015, emissions from the City's facilities decreased from 5,899 tons CO<sub>2</sub>e to 4,423 tons CO<sub>2</sub>e corresponding to a 25% decrease in greenhouse gas emissions. To achieve this, the City of Keene implemented a variety of energy efficiency and cost savings measures over the past 20 years that have led to significant emissions reductions for municipal operations, including:

- The installation of a geothermal heating, ventilation, and air conditioning system at the Keene Public Works Department,
- The installation of hydroelectric turbines at the Water Treatment Plant,
- Various building envelope and lighting upgrades,
- The installation of a solar photovoltaic system at the Keene City Hall,
- The use of biodiesel for the City vehicle fleets.

Within the same efforts, the City also recently installed a 643.2-kilowatt grid-tied solar electric system on the roof of the Public Works Department and Keene Police Department (350-400 Marlboro Street.)

The purchase of RECs associated with its municipal electric usage demonstrates the City's commitment to renewable energy supply and reducing its carbon footprint. The City's installation of solar PV, the use of biodiesel and reduction in energy use should significantly contribute to a decrease of CO<sub>2</sub>e tons emitted by the city buildings. If you would like to help the community reach its 100% renewable energy goals, there are several ways to get involved:

[City of Keene](http://www.ci.keene.nh.us) • 3 Washington Street • Keene, NH • 03431-3191 • [www.ci.keene.nh.us](http://www.ci.keene.nh.us)

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# City of Keene

*New Hampshire*

- Attend a meeting of the Energy and Climate Committee, which meets monthly on the first Wednesday of the month at 8:00 AM.
- Contact Mari Brunner, staff liaison to the Energy and Climate Committee: (603)352-5440 or [mbrunner@ci.keene.nh.us](mailto:mbrunner@ci.keene.nh.us)
- Attend upcoming community meetings (see the schedule at <https://ci.keene.nh.us/sustainability>)

The EP3 Committee is committed to assisting the City’s Purchasing Division in identifying and procuring products and services that 1) reduce toxicity, 2) conserve natural resources, materials, water and energy, and 3) maximize recyclability and recycled content and reduce waste. This is in response to the City policy stating that The City shall promote the use of environmentally preferable products in its acquisition of goods and services.” Environmentally Preferable Products have “a lesser or reduced negative effect on human health and the environment when compared with competing products which serve the same purpose (including) reusable products, product(s) that can be used several times for an intended purpose before being discarded.”

For more information, call Yves P. Gakunde, Chairman of the City of Keene EP3 Committee at (603)357-9800 or email [ygakunde@ci.keene.nh.us](mailto:ygakunde@ci.keene.nh.us).