

**City of Keene**  
**New Hampshire**

**ENERGY AND CLIMATE COMMITTEE**  
**MEETING MINUTES**

**Wednesday, December 4, 2024**

**8:00 AM**

**Room 22,  
Recreation Center**

**Members Present:**

Zach Luse, Chair  
Paul Roth, Vice Chair  
Councilor Bryan Lake  
Diana Duffy  
Lisa Maxfield  
Gordon Leverage  
Jude Nuru  
Rowland Russell, Alternate (Voting)  
Jake Pipp, Alternate (Voting)  
Charles Redfern, Alternate

**Staff Present:**

Megan Fortson, Planner  
Emily Duseau, Planning Technician

**Members Not Present:**

Clair Oursler  
Kenneth Swymer Jr.  
Annu Joshi Bargale  
Michael Winograd, Alternate

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

Chair Luse called the meeting to order at 8:07 AM. Dr. Rowland Russell & Jake Pipp were invited to participate as a voting member.

**2) Approval of Minutes – November 6, 2024**

Councilor Bryan Lake moved to approve the minutes of the prior meeting. Chair Luse asked for any discussion. Dr. Rowland Russell corrected the food security work group report out, clarifying that it includes Antioch University of New England's Community Garden Connections program, the Monadnock Farm and Community Coalition, and the Cheshire County Conservation District. He also noted that the targeted population is immigrant and refugee populations.

With no other corrections and all in favor, the minutes from November 6, 2024, were approved.

**3) Presentation – Josh Meehan, Keene Housing Executive Director**

Chair Luse noted that Mr. Meehan was invited to share an overview of his work and the achievements made under his leadership at Keene Housing. He mentioned hearing positive feedback about Keene Housing's initiatives, particularly regarding solar energy and heat pump projects. Chair Luse welcomed Mr. Meehan.

Mr. Meehan thanked the committee for the invitation and said it was good timing. The organization has a series of one-pagers on its website outlining its different focus areas, and it recently completed a refresher on energy conservation. He explained that Keene Housing owns and operates around 600 units, primarily of residential housing. They have a few regional commercial units, some in Swanzey and some outside Keene. All of their residential properties are income-specific. They depend on federal assistance to cover operating costs for many of their properties. However, as one might expect, significant funding increases are unlikely. This requires them to strategize and accept that federal subsidies will only partially keep pace with their expenses. Residential contribution through rent is fixed based on income, so Keene Housing's budget is fixed.

To keep 600 units in good shape for the next several generations, Keene Housing has had to consider reducing its operating costs, as that is one of the few things it can control. One of their most significant sources of cost is energy. Mr. Meehan explained that in 2014, they benchmarked their entire portfolio using a third-party consultant they hired and are still working with. This entailed looking at Keene Housing's water and energy consumption and benchmarking against similar properties in the same region. A grade was given for the entire portfolio, which allowed them to identify areas for improvement in their various buildings to improve performance and decrease operating costs. This propelled them along, and in 2014 or 2015, they committed, as an organization, to become carbon-neutral by 2035. The bottom line drove these portfolio adaptations and has served as the most significant catalyst, but they also recognize that multi-family housing has a large carbon footprint.

Keene Housing knew they had to make these improvements and started by pursuing the low-hanging fruit, such as improving building envelopes, installing low-flow toilets, and replacing old lighting with updated LED lighting. He was glad to report that they had made significant progress since 2014 in those areas. By addressing the building envelopes and water consumption, they could start envisioning ways to augment their electricity by generating their own. He noted that there is also a resiliency piece to that, and it helps propel them toward their goal of being carbon-neutral by 2035.

Mr. Meehan said one of the big questions he frequently gets asked is how they find the money for these improvements. He explained that there is a non-profit in New Hampshire called Resilient Builder's Group (RBG). They go between portable housing providers like Keene Housing and other programs available to property owners to green up their properties. He mentioned their Harmony Lane property, noting that many properties will need to be improved in a similar fashion in the future. Several of the residential units use Electric Thermal Storage (ETS) for heating. Electric Thermal Storage (ETS) units are heaters that store heat using rocks stored inside the unit

so that heat can be released during necessary times, such as during the evenings. He explained that this is an antiquated technology that Keene Housing is trying to remove from existing units and replace with mini-splits, which can be used for both heating and cooling. The installation of these units also helps to further Keene Housing's climate resilience initiatives.

When they've made these replacements previously, they used funds from the New Hampshire Saves Commission, which paid for the whole million-dollar conversion of twenty-eight units from ETS to air source heat pumps. It involved significant engineering and the installation of new infrastructure. Following the conversion, they also installed rooftop solar arrays on some of their properties. They aim to convert any properties with the ETS units to air-source heat pumps and add solar. This allows them to generate their own electricity to offset their demand on the grid.

Mr. Meehan explained that they while had been previously successful utilizing the New Hampshire Saves program, unfortunately, the Public Utilities Commission (PUC) seems to have gutted it. It has rebounded, but the program is still in significant flux from their perspective. Keene Housing also has two other big projects involving the replacement of ETS units on their radar. They had the RBG crew out last week, and they are hoping a deal can be struck because Eversource has money for those projects.

This concluded Mr. Meehan's presentation. He stated that he was happy to answer any questions that the Committee may have. Mr. Roth asked if Keene Housing used Energy Star. Mr. Meehan responded yes and explained their consultant uses data from Energy Star to perform their benchmarking each year, which makes it significantly more straightforward. Mr. Luse asked Mr. Meehan what firm they use. Mr. Meehan responded that they use Nova Consulting, which was previously only operating out of Portland, Maine, but which is now a national company. Mr. Luse asked if RBG did any energy audits. Mr. Meehan explained that they also do other assessments and monitoring.

Mr. Meehan explained that the largest source of financing for new income-based housing is the low-income housing tax credit program, administered by the New Hampshire Housing Finance Authority (NIFA) and done through RBG.

Ms. Diana Duffy asked if Mr. Meehan happened to know the combined square footage of all of the Keene Housing properties, to which he responded no. She followed up by asking whether it was online somewhere. While it was unavailable online, he did have the numbers, just not off the top of his head. She explained that it would help to give her some perspective on the numbers he was providing.

Mr. Peter Hansel asked Mr. Meehan to reiterate his previous explanation of the data collection and shared that the ECC needs help with data collection and monitoring. Mr. Hansel said his second question was about using battery storage in the future. Mr. Meehan responded that it all depends on what happens next in Congress. He explained that one of the significant funds coming to New Hampshire is "*Solar for All*," which he believed came out of the Inflation Reduction Act. He explained that a couple of big pieces of legislation brought a lot of potential funding into the green space and renewable energy space, and a large piece of that is the "*Solar for All*" program. He explained that New Hampshire applied and was awarded a decent amount.

After receiving the money, each state then creates a program to distribute those funds, and battery storage is included as an eligible use for Solar for All funding. He understood that if that does move forward, housing authorities are set aside in the Solar for All program as extracted by the state. They would like to pursue some of that funding for battery storage, but he noted that he does not know the technology well enough to feel confident in it.

Mr. Meehan explained that they have found in their family properties with solar, 2/3 of the energy they generate is being sold back to the grid because the residents are away when generating the electricity. It is a net gain for them and a net gain for the grid, but it is not necessarily offsetting their energy consumption in the way they want.

Chair Luse asked if they had demand charges. Mr. Meehan said they pay the demand fee, but do not get it back when they sell electricity. Mr. Luse responded that direct use would save them money, to which Mr. Meehan agreed. Mr. Meehan added that they do not buy default, so they are not getting as much energy. If they sold it back, they would buy everything and must bid out everything as part of a Power Purchase Agreement (PPA), which is new information they just learned and still need to consider. Mr. Luse asked if Mr. Meehan thought there would be opportunities to participate with the Community Power Program.

Mr. Hansel asked Mr. Meehan if they had utilized any funds targeted for Community Solar Arrays as has been done in Illinois. Mr. Meehan explained that RBG is not a part of solar, and as Keene Housing moves more and more to solar, they need to find new financing and funding sources. Solar PPT is in the Investment Tax Credit (ITC) program and is what they have been doing. He explained that a New Hampshire statute previously required benefits to impact Low to moderate-income (LMI) households directly. The Department of Energy's Council interpreted this to mean that if a landlord pays the utility bills, any cost savings or property improvements resulting from those savings do not count as a direct benefit to the tenant.

As a result, they kept applying for the Department of Energy community solar grant and were denied because Keene Housing paid for all of the utilities. He explained that while the federal government recognized this in their program, the state did not. They applied twice. The Department of Energy, Senator Kloka from the seacoast, and Keene Housing worked together to introduce a bill last year that changed the statute to align with the federal law for direct benefit when landlords pay all the utilities. Once that passed, Keene Housing applied again and received a \$400,000 grant to help them with five more rooftop solar arrays slated for 2025.

Keene Housing is waiting to hear back about a study being done about the installation of a potential large ground-mounted solar array at one of their Swanzey, New Hampshire, properties. He added that the other significant funding source for them is the Solar Income Tax Credit Program and explained that the program also changed through the Inflation Reduction Act (IRA). Non-profits with no tax income could not pursue tax credits, such as solar tax credits, because they had no taxable income. A small change in the IRA, which was meaningful, now allows the non-profit to

receive the value of the credit that they otherwise would have been eligible for. He believes Keene Housing might be the first in New Hampshire to go after this and could receive \$770,000 in tax credits. That, plus the DOE Solar Grant, is what they would use to pay for the installation of both rooftop and ground-mounted solar arrays. He noted, however, that they still have a big gap that they need to fill.

Chair Luse asked Mr. Meehan if they had a grant writer to administer all of these grants or if they were getting technical assistance from other organizations. Mr. Meehan explained that it was a combination of the two. Most of their solar work so far has been with ReVision Energy. Keene Housing is publicly funded in part and is subject to the code of Federal Regulations Part 200, which outlines procurement rules. Any time they intend to use federal funds to buy anything, they must submit a request for proposals (RFP). ReVision helped them with the ITC grant because it is familiar to them and is also included in their work for their clients. He explained that they have another person who works for Cheshire County and has been a grant writer in Keene for 40 years who also helps them.

Mr. Bruce Norland wanted to comment on battery technology, saying it has improved dramatically. Mr. Roth asked what the turnaround on the money was. Mr. Meehan responded that the advantage they have is that their grant writer is good, and they have been very successful at finding sources of funding to help offset their costs. Generally, his board has a consensus that ten years is about as far as they want to go out in terms of getting a return on their investment.

Dr. Russell asked Mr. Meehan if they were planning any new properties. Mr. Meehan explained that they are currently redeveloping the old Roosevelt School on Washington Street to turn it into apartments. That property is under construction for phase one. The funding application is in for phase two, which will include the construction of a new building with rooftop solar. The challenge for them is that most of the equity for these deals is produced from low-income housing tax credit programs administered by the Department of Finance.

He explained that these programs tend to be very conservative and have total development cost caps. This requires them to value engineering things you ordinarily would not want to in order to allow for the installation of solar arrays. For each project, they asked for a waiver of the total development cost to allow them to do the solar, and they agreed to it. Mr. Meehan said one area that needs growth is public entities that are helping to finance housing production and thinking about and allowing for additional costs associated with renewable energy.

Mr. Hansel stated that he believes Keene Housing is at the forefront of this and asked if they were being asked to advise other organizations around the state or country. Mr. Meehan said they have been asked a little, but not as much as they would like. In the state, he explained that Keene Housing participates in a federal demonstration program called the *“Moving Toward Deregulation Demonstration.”* He explained that it is a way of saying we have a degree of flexibility with our funding at the local level. They get money from Housing & Urban Development (HUD) Department to run their section eight voucher program.

He explained that they have a degree of flexibility with financing and can use funds in a way that allows them to be much more aggressive than most housing authorities can be. He shared that Congress expanded this program in 2016, and New Hampshire now has more moving-to-work public housing authorities per capita than any state in the country, which means he hopes to start to see more flexibility in the future. Keene Housing has been at it for twenty-five years, and getting the sea legs in that environment takes a little time. He believes more housing authorities will begin to have increasing flexibility to start thinking differently about things.

Mr. Roth asked how Mr. Meehan has dealt with New Hampshire Saves' interest in saving money versus improving energy consumption. Mr. Meehan reiterated that the first time they dealt with them was great, but because of the changes from the PUC, he still feels the program is on its heels. He explained that they have two large ETS conversion projects coming up. One is ready to go with all the engineering having been completed five years ago. If NH Saves agrees to funding, Keene Housing must return to the drawing board because everything has changed in those five years. He keeps darkening their door with these two projects and is hoping to soon hear that they are good to go, but he wants confirmation that they can do what they wanted do before.

He noted that the only costs Keene Housing has been responsible for was the installation of concrete pads on the sides of the building to allow for the installation of mechanical equipment as well as the addition of a fence. NH Saves offered half of the project cost last year, which left Keene Housing with \$500,000 and the need to decide between that or the school project, which would add thirty additional housing units to a community with a significant housing need. He said their responsibility is to choose the housing. Chair Luse thanked Mr. Meehan, and Mr. Meehan thanked the committee for inviting him and having him speak.

Mr. Nuru said he believed Mr. Meehan was humble in asserting that he was not a national leader. He said that in New Hampshire, there is no housing authority with programs they are pursuing, like Keene Housing, and he shared that he knows Mr. Meehan has inspired colleagues across the state. He shared that Dover has taken inspiration from Keene Housing and believes that he was, in fact, a national leader.

Mr. Nuru shared that the company he works for, ReVision Energy, got a grant for a non-profit organization in Nashua that was supposed to build a solar array that would benefit low-income community members. Unfortunately, the Zoning Board did not approve the project, so they are now looking for a site elsewhere in Eversource territory. The non-profit is willing to site the community solar project anywhere in New Hampshire within the Eversource territory and give the power to about five low-income residents. He shared this with the ECC, saying if they can get a parcel of land or something, they can move the project to our community, and maybe the power could go to Keene Housing.

Mr. Nuru noted that there is time to decide, as it only needs to be done in February. This would be for a 500 kW system, which would require approximately ½-acre of land. The award was made

last year, and they have twenty-four months to develop the project. They went through a lot of legal processes, including hiring an attorney. They applied for a variance, but that was also denied. The money is sitting with the Department of Energy. The funds must be returned to the DOE at the end of the time period, if they are still looking for a new location. Chair Luse thanked Mr. Nuru for sharing. Mr. Meehan thanked everyone again and excused himself for the remainder of the meeting.

#### 4) **Meeting Schedule Updates**

Chair Luse asked Ms. Megan Fortson if she had been able to come up with some times. She responded that if they wanted to continue to meet in their new location, it would have to be on a Thursday at 4 p.m. or 4:30 p.m. Chair Luse asked if there were other options, to which Ms. Fortson explained that the second-floor conference room at City Hall was also available, and a Tuesday or Wednesday would likely be the best bet for availability, noting that there is often availability at the beginning of the month.

Councilor Lake asked whether this was for a new meeting time. Chair Luse explained that several people would like to join the committee, but the current meeting day/time is not feasible for them. He said that it often does not work for Mr. Roth, and the day/time has been a challenge for as long as he has been on the committee. As such, they wanted to explore some alternative meeting times.

Mr. Gordon Leverage asked if sending out a scheduling app for people to provide input was possible. Chair Luse explained that Ms. Fortson had tried asking people to offer their available times, which did not work as it was too broad and did not narrow down the times. His idea was to find the available times to use the current room or City Hall and then put those on a poll for people to provide input.

Chair Luse offered to work with Megan on available times and create a poll to send out regarding possible options. Ms. Fortson polled the group and determined that the preference is Monday through Thursday, with no preferences on location. Chair Luse suggested the beginning or end of the day, stating that the middle of the day is hard. Others agreed. Ms. Duffy suggested the end of the day, saying that any time after 3 pm generally works for her.

Ms. Duffy thanked Ms. Fortson for getting the room today, saying it was nice to have the additional space. Ms. Fortson said she would create a list of possible times and send it out.

#### 5) **Adoption of the 2025 Meeting Schedule**

Chair Luse explained that the Committee has to adopt the schedule for next year, knowing there is a good chance it could change and they may have to vote to approve it again. He noted that the only change to the normal meeting schedule was for the month of January. He noted that the meeting will be held the second Wednesday of the month on January 8<sup>th</sup> due to the start of the new year. The remainder of the schedule remains the same.

Councilor Lake moved to adopt the meeting schedule for 2025, which would be on the first Wednesday of the month, except for January, which would be on the 8th. Mr. Jake Pipp seconded the motion. With no discussion and unanimous approval, the motion was approved.

**6) 2025 ECC Retreat Discussion**

Chair Luse asked if a time in April worked for everyone. He said he just needed to avoid the school break and noted that previous retreats have typically been three hours long. Mr. Pipp noted that it always seems like they need more time to finish discussions. With no one voicing dates to avoid besides school break, Chair Luse tasked Ms. Fortson with pulling together some potential dates for the retreat.

**7) Interest in Presentation on Fine Particulate Matter Pollution**

Chair Luse wanted to gauge whether anyone was interested in having a presenter attend an upcoming meeting to discuss fine particulate matter. Chair Luse believed the most significant contributor to this type of pollution in the area is typically from wood stoves. Previously, there was a local a wood stove change out program that offered a rebate for upgrading to a more efficient wood stove.

Chair Luse said Tim Murphy, former Executive Director of Southwest Region Planning Commission (SWRPC), had suggested Henry Underwood, a Senior Planner at SWRPC, as someone with subject matter knowledge. He was unsure if this fell in the ECC's climate and energy space, but he wanted to mention it.

Dr. Russell had another suggestion, noting that an article on this topic in the Sentinel had quoted Ms. Michele Chalice and Dr. Nora Travis. He stated that Dr. Travis knows of and has been working in the woodstove space for some time. He urged Chair Luse to look for that article as it was a source of good information about what is happening in Keene. Chair Luse highlighted that Keene is just below the EPA guidelines due to the geographic bowl it sits in. Ms. Duffy added that she feels like many people need to learn about the attainment levels. She felt that was one of the motivating factors for the college to get in front of it. She has yet to hear much in the world of attainment. Ms. Duffy felt that having a presentation like this in January would be timely. Chair Luse agreed and said his understanding was that much can be gained through awareness. Dr. Russell suggested inviting both to speak.

**8) Work Group Report Outs**

**A) Community Solar**

Mr. Nuru reported that they had one meeting with a reporter from the Keene Sentinel, Elijah de Castro. Mr. Nuru invited him to attend their meeting to discuss ServiceLink. Mr. Nuru felt it would be beneficial to have this talk with the entire group and suggested it to Chair Luse. They also spoke

about contacting the YMCA to see if they would consider solar for their facility. Mr. Nuru invited Mr. Hansel to add to the report out,

Mr. Hansel explained that Elijah is a new writer at the Sentinel and is much more solutions-based than writers they have had in the past. Mr. Hansel believed he attended with some skepticism, but by the end of the meeting, it seemed that the workgroup had something to offer. Mr. Hansel praised Elijah's thoroughness in his article and urged anyone interested to read it. He believed it demonstrated that he was looking to solve problems as much as to record them.

### **B) Grants, Fundraising and Partnerships**

Mr. Charles Redfern said he was still looking for an email and questioned Ms. Fortson about whether she had received the email he sent a few days prior. Mr. Redfern explained that NH Saves has a composition of program offerings. He thought it might be interesting for committee members to receive a categorized synopsis of everything they do and hoped it might spark some ideas. With permission from the Chair, he planned to send the document to committee members.

### **C) Education and Outreach**

Chair Luse shared that they followed up with Mary and Megan, and he believed Emily was going to be working on the ECC brochure. The content was already created, and she will work on putting it into Canva and adding the City's branding. He hopes to have that in the next few weeks.

He explained that they decided to hold off on the Community Power brochure because by the time they put it together, they would be discussing renegotiating the rates for the program, and things would likely change. Mr. Luse shared that Carolyn Jones is stepping down from participating in the workgroup. She still plans to attend meetings when available. Members commented that she is a wealth of information and will be greatly missed.

### **D) Legislative Tracking**

Councilor Lake shared that their schedules did not align this month and that they needed help finding a time to meet. He expects his work schedule to calm down after the holidays and anticipates having an update for the next meeting.

### **E) Food Security**

Dr. Russell shared that their food systems group planned to meet later that afternoon. He shared that the group has been working on administratively supporting two surveys. The feasibility study on commercial composting systems they worked on with Keene State has finished. They have yet to see the data. They want to get the data to include in the assessment report that they plan to start working on. He shared that they applied for a grant for the planning part, but got turned down and have continued looking for more funding.

The other survey, which is for the community garden, closes at the end of this week. He is hoping to get a good response. He added that Albert Diemand, founder of Elm City Compost, met with them for the first of several meetings. He could not attend, but they hope a group of people interested in working to make that happen will emerge and hope that will include involvement from the City. Mr. Russell mentioned that Mr. Diemand is looking for someone to oversee the organization.

Mr. Hansel added that one challenge Mr. Diemand faced was finding storage for his trucks and trailers as well as also maintaining his full-time job. He believed he had solved the storage problem. Mr. Hansel stated that founders of organizations like this tend to get burned out after a while without significant support from the community, and he believed that Mr. Diemand is looking to try to get more support from other people. Dr. Russell added that the new law takes related to commercial composting will go into effect on February 1<sup>st</sup>, which will only ramp this up.

9) **New Business**

There was no new business discussed.

10) **Next meeting: Wednesday, January 8, 2025, at 8:00 am**

11) **Adjournment**

With no further business, Chair Luse adjourned the meeting at 9:05 AM.

Respectfully submitted by,  
Amanda Trask, Minute Taker

Reviewed and edited by,  
Megan Fortson, Planner