



ENERGY & CLIMATE COMMITTEE MEETING AGENDA

Thursday, May 3, 2018, 8:00 AM

2nd Floor **Committee** Conference Room, City Hall

Members:

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

Staff:

Rhett Lamb, Planning Director
Michele Chalice, Planner
Mari Brunner, Planner Tech

1. Call To Order and Roll Call
2. Approval of April 4, 2018 Meeting Minutes
3. Committee Meeting Date Change for July's Meeting
4. Follow-up on EarthFest Tabling
5. Working group reports
6. Sustainability Coordinator Request Status
7. Renewable/Sustainable Energy Plan Status
8. Process for Setting New Targets for City/Community
9. Follow-up on Ready for 100% Renewable campaign
10. Additional Public Information/Engagement around Greenhouse Gas Emissions Report
11. Monadnock Energy Hub update
12. Communication from Charles Daloz (attachment)
13. Next Meeting, Wednesday, June 6, 2018

Resources:

Sierra Club Ready for 100 Campaign: <https://www.sierraclub.org/ready-for-100>,
<https://www.sierraclub.org/ready-for-100/campaign>

DOE document on Energy Planning Process:
<https://energy.gov/eere/slsc/guide-community-energy-strategic-planning>

CITIES FOR CLIMATE PROTECTION COMMITTEE MEETING AGENDA

Wednesday, April 4, 2018, 8:00 AM

2nd Floor **Committee** Conference Room, City Hall

Members:

Dr. Ann Shedd, Chair
Peter Hansel, Vice Chair
Terry Clark, Councilor
Jess Baum, Member
Jake Pipp, Member
Larry Dachowski, Alternate
Aperr Naadzenga, Alternate

Staff:

Michele Chalice

Members not Present:

Chris Brehme, Member

Guests present:

Nancy Gillard
Caroline Jones
Shaylin Salas
Charles Daloz

1. **Call to Order and Roll Call**

Dr. Shedd called meeting to order at 8:03 am and roll call was conducted.

2. **Approval of March 7, 2018 Meeting Minutes**

Vice Chair Hansel moved to accept the March 7 minutes, Terry Clark seconded and motion was passed unanimously.

3. **Referred from City Council: letter re. launch of Monadnock/Keene “Ready for 100” Campaign**

Chair Shedd stated that on March 15 the Clean Energy Team’s “Ready for 100% Renewable Energy” campaign letter was presented to Council as an invitation to the Earth Fest’s coordinated launch for the “Ready for 100% Renewable Energy” campaign and the referral came from Council to CCP and they will make their recommendation. Shaylin Salas asked permission to video record the group discussion as she is interested in videography and making a promotional video about the launch of the campaign. Mr. Naadzenga entered the meeting.

Ms. Gillard thanked committee for inviting the Clean Energy Team to discuss their mission. She began by stating that the group was originally the Climate Action Team through the Monadnock Progressive Alliance and has since been renamed the “Clean Energy Team” and are focused on addressing global warming. She said they are a diverse group of people from Keene and surrounding areas, including a bright engineer, Shaylin Salas from Antioch, six Keene State College students from a Future of Energy course so they feel very well supported. She said they started with a Climate March last year and that was very successful and they were part of the

Earth Day Festival. Last May, Hanover the Town voted in a Town meeting to commit to the 100% Renewable Energy campaign with the Sierra Club with Allyson Samuelli organizing and guiding the campaign which fit with their mission to support global warming, greenhouse gas emissions and energy efficiency as their focus.

Ms. Jones stated that Concord brought the campaign to their City Council and they are working on clean, renewable energy. She said that Keene is also progressive in terms of getting clean renewable energy, therefore, they have decided to take Keene on as a group as part of their goals. Ms. Jones stated that their goals for the City of Keene is to implement a community wide campaign to meet:

- all electric needs from 100% clean, renewable energy by 2030, and
- all transportation, heating and cooling needs by 2050.

She said they are joining over 60 communities in the United States and the state of Hawaii, including 5 cities in the U.S. that have already switched to 100% clean, renewable energy: Burlington, Vermont, Aspen, Colorado, Greensburg, Kansas, Kodiak Island, Alaska and Rockport, Missouri and they are focused on working together to make the dream a reality in Keene.

Ms. Gillard announced that the campaign launch will be on Earth Day (flyer will print today) behind the Monadnock Co Op tabling at the Earth Day Festival and between 1-1:30 pm they will have a launch announcement with speakers. She said they are coordinating with Keene State College Solar Fest that same day and have people tabling there announcing their launch with Keene State College. She passed around a flyer showing 10 groups or organizations that have endorsed the launch. They are building their coalition partners and they will be posting flyers and sending them out to start their public relations list. Ms. Salas stated that coalition partners include Regional Energy Hubs, energy committees, local businesses, residents, landlords, colleges and universities, and they hope to reach residents, landlords, colleges, universities, hospitals, school districts, businesses, elected officials as we are all affected by the City's choice of energy system and how that choice impacts climate change. They aim to accomplish these goals through promoting and supporting energy efficient programs, facilitation of educational outreach programs that increase access to this type of information, via panels, forums, neighborhood groups, and by selecting elected officials who support campaign goals.

Ms. Gillard said they are doing this to address global warming and it makes sense in the City of Keene to compliment work that is already being done, and work together to spread it out to the region. They are very optimistic that an Energy Hub can be developed. She stated they brought that case study report which is also available online and has since changed since being published. She invited questions or comments.

Ms. Chalice asked if Lebanon is included on the list. Dr. Shedd said Portsmouth is launching its campaign yesterday. Ms. Gillard said Cornish and Plainfield voted this year in town meeting, and Concord has presented it to City Council, and Hanover voted it in at their Town meeting. She said there are also 7 counties in addition to the 5 cities that are operating and have met the target.

Vice Chair Hansel asked Ms. Gillard if the campaign includes the entire community and not just the municipal side for the groups who have met their targets. Ms. Gillard replied yes, and said that when they met with Mr. Webler's Future of Energy students they were tasked with meeting with the team and describing their vision and biggest challenges and they identified that resident to resident impact was one of the biggest challenges. Mr. Pipp thanked the group for their work

and for sharing with the committee. Dr. Shedd clarified that the letter is not asking the City for an endorsement for the proposal but it is an opportunity for the committee to take a closer look at how the Clean Energy Team's goals can tie into the City's goals. She said eventually the Clean Energy Team will come with a formal request to the Council to endorse the goals. Ms. Chalice clarified that the committee can endorse the Clean Energy Team's Ready for 100 campaign goals and could recommend their goals as aligned with their own. Dr. Shedd said she first learned that the campaign was coming to the City of Keene on the same day last summer that the Mayor, the former City Manager, Councilor Jacobs, Vice Chair Hansel and herself were meeting about their request for the committee to develop a Renewable Energy Plan, therefore, the Ready for 100 initiative dovetails very nicely with the committee's goals. Dr. Shedd thanked the guests and suggested that the committee may consider writing back to MSFI that they have accepted the invitation, and they will look into the proposal in the coming months, and she encouraged members to attend the launch. Dr. Shedd said Councilor Hansel will be one of the speakers at the launch, as well as Councilor Clark, Ms. Karen Fisher from Antioch, and a student from Keene State College who is the head of Campus Ecology, and Reverend Cindy Bagley of the United Church of Christ in Keene.

Chair Shedd moved to write a letter to MSFI on behalf of CCP, accepting as informational the invitation to the launch event for the 100% Renewable Campaign, Councilor Clark seconded the motion and it passed unanimously.

4. **Membership Update**

Dr. Shedd stated that they have some feelers out to Ms. Diana Duffy, the Energy and Utility Coordinator at KSC, who has a background that would be helpful in the committee's process for coming up with an energy plan; however, they have not yet gotten a commitment from her. She encouraged members to apply any other avenues of leverage in getting a response from Ms. Duffy.

5. **Status of Name/Purpose Change Request-**

Dr. Shedd stated that the committee's name change request was very positively received by the PLD committee. *She said the committee's focus for now will be on energy as it is something that cuts across all sectors of the community.* She said the formal mission statement was tweaked a bit in the Functions and Guidelines to further emphasize the advisory role of the committee. Dr. Shedd said as of tomorrow night the committee will be named the "Energy and Climate Committee."

6. **Steps Towards a Renewable Energy Plan**

Dr. Shedd stated that they have floated a working group on the Sustainability Coordinator but have not yet put together a working group to establish steps towards developing a Renewable Energy Plan. She said there have been some documents from the EPA in the packet pertaining to the steps involved in putting together an energy plan. She said she sat in on Peterborough's Energy Commission' meeting with a potential consultant for putting together a plan, and she asked to be cc'd on the cost and scope of hiring a consultant to learn more about the inventory of the renewable potential of Keene (e.g. wind, solar, ground water sources). She said there are a lot of technical aspects they would need professional help with to come up with an Energy Plan. The speaker at the Peterborough meeting was on the schedule to speak about microgrids which she said is another piece in terms of adaptation to have local generation that can be cut off from the

grid in the event of a power failure for critical services and all of that, along with energy efficiency, would be a part of a plan and it is a big task. Dr. Shedd asked who would want to work on it along with herself and Vice Chair Hansel and Ms. Baum volunteered to be part of the working group to see what it would entail to develop an energy plan. Dr. Shedd said there are elements of the energy plan scattered in the Climate Action and Adaptation Plans and allusions to it in the comprehensive Master Plan but those have not been pulled together yet at a level that the City could help. She pointed to the Greenhouse Gas Report presentation to Council featured in the local newspaper.

Mr. Naadzenga asked for the time frame for the task and Dr. Shedd it would be a lengthy process.

Vice Chair Hansel stated that coming up with a schedule is first step. **Mr. Naadzenga said ???.** Dr. Shedd said Mr. Lamb asked about the financial resources that will be needed to steer different pathways through City funding and she said they will keep trying to work with the system on access to funding to do further research. Ms. Chalice asked if the consultant already had a sample proposal for an energy plan or for developing a microgrid. Dr. Shedd replied that the consultant had a meta-plan approach and has done work in a variety of fields, and he would not necessarily be the consultant, but instead would demonstrate what a proposal would look like for a local community.

7. **Status of Committee Request for Sustainability Coordinator Assistance**

Councilor Clark shared that he and Mr. Pipp met several weeks ago to discuss strategies to pursue time from the planning staff to apply towards sustainability. He said Planning Department already has plans for sustainability and they might not get additional time towards that task. Dr. Shedd said despite their best efforts addressing the letter request to the Mayor and the Council, staffing decisions are administrative and they did not direct the request in the right direction and it was forwarded over to the City Manager. Councilor Clark clarified that the City Manager has purview over staff and the Council cannot micromanage the City Manager.

Mr. Clark stated that he and Dr. Shedd pulled together 5 general duties for the Sustainability Coordinator based in part on Councilor Clark's meeting at the PLD committee and the input and support he received from PLD committee members. Dr. Shedd clarified that Councilor Clark attended the PLD committee meeting and he had some thoughts on how to channel more staff support for the endeavors of the committee so she followed up with him to get his thoughts. Councilor Clark said several members of the PLD committee chimed in with support for the Sustainability position and he later had coffee with Chairman David Richards and he indicated that he is in full support and would like to help shepherd the request through the process.

Councilor Clark stated that the scope of the Sustainability Coordinator could appear as follows:

- **Current City Energy Policies for Internal Coordination:** Pull together current City policies on sustainability and research future opportunities. The Coordinator could gather information and put it into context in an effort to remind departments that they should include sustainability matters into their projects. Research other cities to see what they are doing to keep City policies current.
- **Coordination with Other Local Organizations:** Coordinate with other entities like school district and businesses to collaborate initiatives to get efficiency of scale.
- **Communicating Current Energy Legislation:** Track legislation; go through bills that are in crossover, bills such as raising the cap from 1 to 5 to allow people to be involved that are not

using the energy directly as that is the major stumbling block now. Keep an eye on energy and climate legislation and convey that information to departments. Dr. Shedd said that City staff does already do some legislative tracking; however, the Sustainability Coordinator could facilitate the process. Mr. Clark said City Clerk, Ms. Patty Little, gathers all the bills, but she can only pay attention to so many things, and this would serve to hone more attention on CCP's charge.

- Community Outreach: talk to other organizations, coordination, share information and ideas, resources, collaborate, network on energy plan, expertise. Dr. Shedd said community outreach can include promotion of programs like NH Saves to members of the community and if there was dedicated staff time to keep regular things out in the public eye, regular public awareness of some of the energy efficiency and renewable energy options, recycling, composting, agriculture, etc.
- Coordination of Local Transportation Efforts: Councilor Clark said the Greenhouse Gas Report demonstrated a need for Transportation work and the Sustainability Coordinator could focus on the transportation piece of the report to keep it on task.
- Ongoing Greenhouse Gas Emissions Tracking: verses trying to play catch-up every 5-10 years.

Dr. Shedd stated that this is a brainstorming beginning and invited ideas from committee. Vice Chair Hansel added that CCP's presence on the City website could be managed better by the Sustainability Coordinator. Ms. Baum agreed that the social media could be focused on more and that would reach a different crowd.

Mr. Naadzenga suggested tying the Sustainability Coordinator position into an economics point of emphasis because no policy maker wants to do anything outside the realm of economics. He suggested gearing the job description towards economics. He shared that he is studying the work of Peter Cook who is working on Community Based Social Marketing. Mr. Cook has researched over 600 grocery stores, sustainability of supermarkets and figures in annual profits and he found that less than 10% is the net profit. Mr. Naadzenga said the cost benefit of the Sustainability position is not seen right away, however, he is confident that emphasizing the future savings and cost avoidance is very important and the economic case for this position should be made clear.

Dr. Shedd shared that at the Council meeting that the Greenhouse Gas Report was presented, there was also a presentation from Honeywell, which has an energy services contract from the City for a 15 year interval and this was the 5 year update. They have a 1.9M contract and projected to have avoided costs (cost savings) of 160K per year by changing out lights in municipal buildings, public lighting, water treatment plant, energy efficiency and generation, and in fact has saved over 250K per year in cost avoidance, so payback will be in fact 7-8 years. She stated that including economic analysis in the role of sustainability, especially tax impact of the measures being promoted, could be a big selling point.

Ms. Baum cautioned that showing the economic case is important, but leading too heavily into that realm can be problematic, for example, the economic services of ecosystems are also investing in a future for everyone, and it is important to not overemphasize the economic case and instead emphasizing the role of the City as taking responsibility for its own impact in an effort to create a shared enduring future for the world. Vice Chair Hansel shared that the word "sustainable" means a lot of different things to different people, however, "economic development" is a buzz word in the City, and a case can be made that a Sustainability Coordinator can improve economic development for the community and beyond.

Mr. Pipp stated that the several items on the list were great for the Sustainability Coordinator position description and he agrees that the economic emphasis is hugely important in making a strong case to the City as it is very focused on economic development. He said he has contracted with Mr. Cook on the grocery store studies and the community-wide behavior changes could be done economically. Mr. Pipp stated that he and Mr. Clark shared ideas about transportation and creating collaboration for a position between the City, the County and the Keene School District to have one person oversee and help coordinate transportation issues and asked for thoughts from the committee. Mr. Clark said the idea is great but has practical problems in organization, for example, who will that person work for, where would the loyalties lie, however, if they could overcome those logistical hurdles it would be a great idea. Mr. Pipp suggested splitting time between locations.

Mr. Clark reiterated that the economic argument is a necessity in order to get the number of Councilors on board to pass a position.

Dr. Shedd asked if Vice Chair Hansel is still on Monadnock Area Sustainable Transportation committee (MAST), he replied yes, and that at present there is no Transportation Coordinator even as part of any City staff role.

Ms. Chalice recommended cautiousness in promising cost savings because the City has already accomplished many of the low-hanging, cost-avoidance, energy efficiency targets on the municipal side. She said asking a City staff person to implement cost savings in the community is a harder sell because it is outside municipal operations. She said one item that was not listed on list of responsibilities is the cost avoidance and competitive element of keeping track of numbers (metrics) for efficiencies that ultimately affects a resident's monthly bills. Ms. Baum stated that there are a number of online platforms that live stream and measure city environmental metrics that can be put on City website. She said she has some interesting statistics about the importance of business' sustainability and social intentions for attracting and keeping talented young people that she sourced from the Deloit Millennial Survey and other data banks. Ms. Baum said that the economic analysis does not have to be quantitative, and it is perhaps more important to say that to increase the prosperity of the community it is critical that the City keeps young people here. She said she will send the data to Ms. Chalice and Ms. Chalice said she would send it around; perhaps CCP could create an informational sheet at the upcoming Earth Day events.

Chair Shedd stated that the community's energy use and solid waste do impact the City's investment and infrastructure, therefore a Sustainability Coordinator could help decrease the community's demand on services and ultimately the City's infrastructural demands. Chair Shedd said that the budget cycle is coming up in May. Ms. Chalice said she sent around position descriptions. Mr. Pipp suggested reaching out to Burlington to see what positions they have and what those people are tasked with, for example, Hanover, Portsmouth, Keene State College. Ms. Baum said she sent her description to Ms. Chalice. Dr. Shedd said both Salt Lake City and Park City, Utah have Sustainability Coordinator positions. Vice Chair Hansel said he would look into Portsmouth, NH. Mr. Pipp suggested Ms. Chalice ask about Madison, Wisconsin as she has connections there.

Dr. Shedd said she emailed the NH Sustainability Energy Association to ask if they had a database of which towns have sustainability officers, but they said they do not because the tasks are often rolled into other positions. Ms. Chalice said she would send position description to Mr. Pipp and Ms. Baum. Dr. Shedd suggested that they formalize the description by next month. Mr. Clark said they would need to have it completed by May's meeting for the current budget cycle,

although they could forewarn the City Manager that they are working on it. He said there will be public hearings and opportunity to amend the budget although this is not done very often. However, the process allows for the possibility. Ms. Chalice said a “justification” for the position is extremely important, perhaps more so than the position description. Vice Chair Hansel asked if there is no budget change is there a back-up position? Dr. Shedd replied that the letter they sent in March cited the 2004 and 2007 plans that stated that 25% of staff time be assigned to the task of sustainability and as savings are accrued, gradually increase the time allocated. She said that is the fallback that they referred to in their last communication with City Council. Mr. Clark said there are always unexpended budget items in each budget from staff who have retired or other means, and a former City Manager was able to get a full time police dispatch supervisor through using those funds and often it is a just a matter of shifting the money. Ms. Chalice said the coming/future budget year is the another option. The request could be for a position to be built into the larger municipal system for more greater viability. Mr. Clark stated that in any case, bringing the idea forward is important in emphasizing the importance of the position and even if it does not go through this budget year, it will make an impact on people’s minds and make it easier in the future.

Ms. Gillard said her team asked the City Manager if they would consider creating a Sustainability position and she replied that her vision was to integrate sustainability into other projects. Dr. Shedd thanked Councilor Clark for working on this issue and Ms. Chalice for offering her perspective.

Dr. Shedd asked Councilor Clark what form would be needed to go into the budget process. Mr. Clark said it would be a request to amend the budget to add a position, job description and justification. Dr. Shedd asked if the letter could allude to the request from the PLD committee and Councilor Clark said the Chairman would help them with that. Ms. Chalice said the idea of building support within City Councilors is important on all of these energy issues. She asked if the Clean Energy Team will meet with individual Councilors as building knowledge and awareness can create future advocacy.

8. **CCP Participation/Poster at the April 21, 2018, Keene EarthFest**

Dr. Shedd stated that Keene EarthFest will be held from April 21st from 12-4 pm at the Monadnock Co Op, with special attention to the 1-1:30 time slot for “Ready for 100” launch. Vice Chair Hansel, Mr. Brehme and Dr. Shedd will be tabling at the event and will figure out their own schedule. Ms. Chalice said having two people present is more inviting to visitors at tabling events. Dr. Shedd said Ms. Chalice had sent out an email with a photo of the event last year, as well as an updated professional looking Agriculture Committee poster. She suggested perhaps working offline on an updated poster that includes Greenhouse Gas Emissions report as she has some thoughts on what could be included on the poster. Dr. Shedd asked if anyone has access to a canopy. Ms. Gillard said someone in the Clean Energy Team might have one. Mr. Pipp said a friend might have one.

9. **Energy Hub Conversations/Status**

Dr. Shedd stated there is a group who has met 3 times with an increasing number of towns represented in the conversation--Chesterfield, Keene, Marlborough, Rindge, Alstead, Langdon, Westmoreland, Fitzwilliam and Jaffrey-- to address what can be done collaboratively, and seems to be gravitating toward structuring under the umbrella of the Monadnock Sustainability Network, which is already a 501C(3) and has a track record of receiving grants and using them

wisely. She said the two general areas of the hub would work would be periodic, informal gatherings of members of local energy committees to update on what communities are working on to foster the creation of new energy committees in towns that do not have one (such as Swanzey and Harrisville), shared learning opportunities, how to write an energy plan and sharing frameworks for plans. Dr. Shedd said that is the easy piece of getting together from time to time. She said that the Upper Valley is having their annual meeting next month and perhaps members of the Southwest hub will try to attend that. However, the more challenging piece will be coordinating actual projects, there is interest in weatherizing or solarizing campaigns, and the sense of the group was that solarizing is “sexier” and more marketable. There is a prospect that an individual may be willing to fund a part time staff for the weatherized and/or solarized campaign which would be phenomenal for organizing and getting things done. She said the next meeting is April 16th at Antioch University New England and Christa Daniels has attended as well as Mr. Murphy from Southwest Regional Planning. She said there are encouraging things happening.

Ms. Chalice shared that there is a video about the exciting projects happening that was first presented at Scores, and she could present it in City Hall as a lunch time event if members who were also unable to attend would like to see it. She would send an invitation out if people are interested.

Chair Shedd shared there was an article in the Sentinel featuring Keene Housing as they have acquired funding to do solar installation in a 105 kilowatt hour array at Harbor Acres, a senior housing facility on Castle Street, which will provide 10% of electrical needs of that community offsetting nearly 121,000 pounds of carbon pollution. She said it was great that they were able to come up with funding for low and middle income for that type of installation.

Vice Chair Hansel completed NH Saves program at his personal house. He said it was worthwhile, the entire project is roughly \$5,000, and 2/3 of that figure is paid by the program and the remainder is personal cost. Ms. Chalice said she thought it was 50% and Vice Chair Hansel said they are paying more than that. He said they did a good job and he recommends people who have houses that qualify to look into it. Dr. Shedd said HB559 which is one of the bills they had asked Council to comment on is now before the Senate, and in its current version it would direct all of the REGI funds towards energy efficiency. She encouraged members to send letters to local senators.

Mr. Pipp gave an update on Local Solutions Conference in Manchester at the end of the month, April 30-May 2. He said the one day rate is \$115 per day for anyone from a local municipality. Ms. Chalice said she will be at the conference for next month’s meeting. Dr. Shedd said she would not go to conference in order to attend the next CCP meeting. Ms. Baum said she would attend another conference so she will not attend next month’s meeting either. She said she would still be interested in giving input on Sustainability Officer Position. Dr. Shedd said they need to make sure they have quorum, she said if Mr. Brehme, Councilor Clark, Vice Chair Hansel and Mr. Dachowski that would allow for a quorum.

Next meeting scheduled for **Thursday, May 3 at 8 am** for an alternative meeting date.

Chair Shedd stated that Mr. Webler’s class on Energy Futures is doing poster presentations on **April 26 from 10-11:45 am in Student Union building** (ground floor), which include some version of an energy plan for Keene with a justification and visions for a renewable energy future.

Ms. Baum said on May 11 from 2:30-4 pm she will be giving a presentation on will send out a sign up for a free workshop for Moving towards Zero Waste for businesses which can also be applied to residential and she can send out the sign-up. Dr. Shedd said Geography Professor Chris Cusak is putting together a capstone project for Fall 2018 that is likely to include some mapping of Keene's existing renewables. Ms. Gillard asked if Mr. Brehme will have a map ready for sustainability projects.

10. **Working Group Reports**

11. **Next Meeting, Wednesday, May 3, 2018 at 8 am**

Chair Shedd meeting adjourned at 9:34 am

Respectfully submitted by,

Ayshah Kassamali-Fox, Minute Taker

TO: Climate Resilience Committee
FROM: Charles Daloz, member Agriculture Commission
RE: Incorporating Agriculture Into Keene Climate Resilience

This is a free-lance essay to stress the importance of agriculture in a climate resilient Keene in, say, 2080. Amend or edit as needed, with the goal of providing, for the city, a direction for the future which is prosperous, productive, and self resilient.

The vision includes a vibrant landscape of healthy forests and farms. The city gathers, concentrates, markets, finances, and provides infrastructure for the region's productivity, and the whole ecosystem is prosperous and well tended. A strong agriculture sector can be the connection to a strong economy of industry, transport, tourism, recreation, and aesthetics.

With a prosperous and attentive rural population, the ditch and mound flood control systems of the valley can be maintained and actively managed; the food system can be stabilized and made more resilient; and distributed, local energy sources will be developed.

For the food sector, the vision includes a healthy, well-fed and exercised population, fed on fresh, tasty, nutritious foods from healthy and productive soils. The growers are farmers, condo dwellers, elderly, disadvantaged, student, refugee, athletes, and the general public. Community gardens, backyard gardens, rooftops, vacant lots, floodplains, and larger, commercial, ventures provide fresh, well-tended, vegetables, fruits, berries, flowers, and forest products to all residents.

Home landscapes produce prodigious supplies of fruits, berries and medicines from tree and perennial plantings. Animals graze the mound and swale flood control grasslands along the Ashuelot, and the Public Service electric corridors to connect animals with surrounding farms. Pastured woodlands, mixed with conservation and educational forests, provide more conscious land management, economic productivity, and employment. Orchards of myriad diversity manage and protect the surrounding hilltops, and fruit processing is an industry. Diverse orchards and berry yards could be scattered across many homeowner lots and city flood control pathways.

There is no "hunger problem" for our city, and the food abundance lasts throughout the year. Farmers are innovative, well-educated and compensated, and maintain the rural environment. The homeless and wanderers are well-tended, and are dispersed widely in the agrarian economy. Communities absorb, rehabilitate, and assist the mis-fortuned.

And agriculture is more than food system. Our forests abound with lumber, fuel, and unique forest products, and have a high environmental value in recreation, biodiversity, and water quality even now, but there is a need for creative entrepreneurship regarding forest products, with local needs, world-wide markets, and market infrastructure all topics for innovation. The basis of a forest economy is already here—the fields are already delineated, the forest biomass is extensive, and technical know-how is available.

The resilience of Keene's society and economy, a fresher, more ecologically tuned food system, and better energy and landscape management is found in agriculture.