Bill Dwight moved and Gordon Meadows seconded a motion to put all the Climate Resiliency and Regeneration Plan (CRRP) feedback documents received by the Energy Office into the minutes of this meeting. Unanimous approval. Adele Franks submitted feedback some time ago and it will be included in the minutes for this meeting.

Public Comment Period:
Lilly Lombard: Thanks for this discussion. It is exciting to see NESC energized. We are in a very dangerous time. Headline in the Washington Post: UN says drastic action is the only thing to address the dire situation. These are unprecedented times. NESC must act in an unprecedented way. Urgency needed. Clear roadmap needed. A plan with metrics and goals needed. People stood in support of Lilly’s comments. Cooperation by the Mayor and City Council are required. We have your backs.
Wave: climate change is a result of human behavior and it is beyond our control. Small stuff: gas leaf blowers, too-wide mowers. The environmental quality has gone bad. Personal choices, if toxic to others, like laundry fragrances, needs to be addressed.
Noah Casis of the Northampton mayor’s youth commission and representatives of the Sunrise Movement (Saraphina Forman, Eli, Elijah, Willa Sippel): Climate emergency, climate crisis. We urge the Commission to revise the Plan: change the name, use emergency language, look at 2030 as target for carbon neutrality, add specific metrics, create a timeline for the long haul, increase the resources to implement the Plan, support frontline communities, include youth voices in developing and monitoring the Plan.
Denise Lello: Mothers Out Front statement. I don’t envy you your job. There are not unlimited resources. How do we get regeneration out of our efforts? Aggressively going after the resources required. Focus on impactful actions—regional battery storage, housing stock, commercial stock, building code for zero emissions, time frame to match the urgency, action to change behaviors. Emphasize the regeneration.
Ed Olmstead: It’s not just the climate emergency we are in, but also the war on facts and science. This is an opportunity to talk to each other.
James Lowenthal: Fantastic to have the commission. A model to develop. I teach climate change at Smith. An exercise in class to keep within the 2 degree temperature limit. It is hard work. We have to do it.

Review/approve minutes of 10/10/19 meeting: Bill Dwight moved and Gordon Meadows seconded a motion to approve the minutes of the 10/10/19 meeting of the NESC. Unanimously approved.

Climate Resiliency and Regeneration Plan:
Gordon, on behalf of NESC small group (Ashley, Adin and Gordon): The introduction and synthesized feedback from all Commission members will be included in the minutes. The group proposed forming working groups. The CRRP is a work in progress. 55% cut in emissions by 2030 now required. Intensive planning and resources required. Model an urgent pace. Recommends not adopting the CRRP now. Forming working groups: energy transition, urban farms and forests, waste, transportation and mobility. All groups will address equity issues. Recommendations will go to the Planning Office. Composition of working groups will include at least one NESC member. Working groups: 3-6 members. Working groups will be formed 11/15-25. We need to be ambitious to match the urgency of the work. We must be significantly more aggressive in meeting goals. Stretch our goals. Move goal of net zero back from 2050 to 2030. Sunrise movement agrees. Mothers out Front says the city must move faster than 2050. In the next ten years the required changes must happen. The intention is to vote on the document in this meeting. Then form working groups. NESC must step up.

Wayne: I have nine slides I want to share. We agree there is an emergency. What’s the purpose of the plan? How will this fit in Northampton Sustainability Plan? These recommendations will slow the process of doing something now. I appreciate the work of the subgroup. We need a plan to get us to our goal by 2030. Timeline: What kind of plan do we want? Carbon Neutrality for city buildings by 2030 – yes. We need a roadmap now. Regeneration Framework slide. We don’t need working groups to work on these items. What are things we should be moving on immediately? Let’s outline steps the City can commit to right now. Yes, we need more brain power. We need open meetings. Can we get started?

Bill: the process of getting things implemented needs to be followed. Council creates law. Ordinance proposed. Mayor has the ultimate authority related to departments. Council votes on budgetary issues. NESC can make recommendations. Recommend to the mayor: appoint a working group who will speak to the mayor. Make a modified plan with goals. Working group fleshes it out. Subgroup is not ready to recommend that the Plan as is should go forward. A plan is best as a consensus builder. Cut out parts of plan that are not useful. Adopt a framework for moving forwards.
Alisa: difference bet policy and legislation. Take high level ideals, codify them and then figure out how to implement them. Have a Councilor propose that 2030 be the goal for carbon neutrality. Use legislation as a tool.

Bill: if we vote carbon neutral by 2030, then if you don’t meet the goal you violate the law. What does carbon neutrality mean? What’s wrong with adopting the Plan as is? We are picking out a destination. The details about how to get there is all that stuff we are working on. It’s the political dilemma. There needs to be a cultural shift. The Plan gets us started. What the subgroup is suggesting is exciting. The commission is engaged.

What is the subgroup’s concern about this plan? Adin: it’s not a framework. It’s not specific. It’s broad. Not aligned. We need a functional framework. Sections of the Plan don’t have content.

Bill: dilemma is addressing the urgency and following the process. Timeline is ambitious. I want the cultural shift. We are getting to work. Can we move forward soon? Put something into the Mayor’s hand. Change the language to emergency. Wayne what do we want to do?

Ashley: the tone of plan has to change. Change the Plan before it is adopted. This plan does not carry the weight of law. It is a guidepost.

Bill: we agree on the urgency. We agree on the timeline. Specificity not important to the plan. The conversation is engaged. Express the urgency. Change the language.

Wayne: two ways forward: 1) provide a vision and framework but not details. Have the working groups flesh it out. Or 2) wait for a more complete Plan before we move forward.

Chris: by calling it a plan it feels comprehensive. That’s not the purpose. Commission should focus on the framework. Where do you set priorities? Urgency, timeline, areas to address--look at the plan through these lenses. Strategic plan, but not specific.

Alisa: example is pesticide reduction process. A committee formed. Set a 4-month timeline. We came up with a plan. Now creating legislation for the plan. If we set carbon neutral by 2030 as goal, then work on how to meet that goal. Which pieces are legislative pieces, which will require mandated policies? Within the next 6 months to a year we have a roadmap.
Adin Maynard moved that the NESC endorse the intent and sentiment of the first page of the subgroup’s Introduction. Bill Dwight seconded the motion. Discussion: Wayne stated that if the motion is passed as is stating that the working groups must complete their work before the CRRP advances to City Council all work by Planning & Sustainability on this will have to stop until the working groups are done. Amendment: Edit the last bolded sentence of the introduction to read: “NESC will form a series of working groups to add, rework, and enhance several key pathways for action.” Further discussion: Chris is tasked with asking the City Solicitor how open meeting law will effect NESC working groups. Vote: Motion as amended unanimously approved.

Next meeting: December 12. Agenda: forming working groups. Chris will talk to legal resources about open meeting law issues. The Mayor working on how the chair of the Commission will be determined.

Adjournment: Bill Dwight moved and Richard Parasiliti seconded a motion to adjourn. Unanimously approved.

Voting Members: William Dwight • Wayne Feiden • Louis Hasbrouck • Alisa Klein • Adin Maynard • Gordon Meadows • Ashley Muspratt • Richard Parasiliti • David Pomerantz • Tim Smith • Ben Weil

Ex-officio, non voting: Chris Mason
Northampton Energy & Sustainability Commission Comments on the 2019 Climate Resilience and Regeneration Plan
November 14, 2019

Introduction
The Northampton Energy and Sustainability Commission (NESC) recently completed a review of the city’s 2019 Climate Resilience & Regeneration Plan (CRRP), a planning document commissioned to provide a roadmap for Northampton’s response to the climate change emergency as well as inform an update to the Sustainable Northampton Master Plan.

NESC finds the CRRP document wanting in several respects. Though well-meaning, the CRRP lacks ambition, fails to delineate measurable outcomes, and leaves several critical policy gaps. NESC therefore considers the CRRP as it now stands “a work in progress” and not ready for adoption by the City Council or Mayor’s Office.

In 2018, the Intergovernmental Panel on Climate Change (IPCC) issued a warning that in order to limit temperature rise to 1.5 C - and to avoid the most dire consequences of climate change - net human-induced carbon emissions must fall by 45% from 2010 levels by 2030. Since global emissions have continued to rise since 2010, today’s emissions now need to be cut by more than half – 55% – in order to meet the 2030 target, at a minimum.

In the face of widespread climate in-action – at many levels of government – NESC believes that climate-conscious cities like Northampton must dedicate intensive planning and commit a new level of resources in order to take towards preparing for and mitigating climate change. We believe Northampton possesses the public will to take such action, and must do so at a pace that serves as a model for what is possible.

This call for action is intended to burden the city, but as an opportunity to demonstrate both local and global leadership in building a thriving post-carbon economy and community. We recommend that we take this opportunity to prove that decarbonization is achievable in mid-sized cities and across socio-economic strata. This is an opportunity to assert a legacy Northampton can be proud of, and one that reflects the values and creativity of this city’s population.

NESC’s review of the CRRP (below) includes detailed comments, recommendations, and suggested language insertions aimed at bolstering the document’s scope and efficacy. While believe as a Commission that the incorporation of these comments alone is insufficient. As the body responsible for advising and assisting the City in identifying, developing, implementing, and managing programs and policies that combat climate change, NESC will form a series of working groups to add, rework, and enhance several key pathways for action. NESC recommends against the CRRP’s adoption and instead recommends our Commission form a series of working groups to add, rework, and enhance several key pathways for action in the CRRP before it advances to the City Council.
The form, function, and timeline for the envisaged working groups is detailed below.

**CRRP working groups**

**Proposed working groups:**

- Energy Transition
- Urban Farms and Forests
- Waste
- Transportation and Mobility

The Commission believes that *Equity* should be incorporated as an integral and natural component of each pathway for action and not segregated as its own “other” pathway to action.

**Role of the Working Groups**

- Research best practices from other city’s climate action plans and activities;
- Recommend specific actions, targets, and metrics for achieving the city’s climate mitigation and resilience goals, and for measuring progress against them;
- Solicit feedback and input on the proposed actions, targets, and metrics from relevant city departments, including the Energy Office; and
- Deliver comprehensive recommendations to NESC for review and ultimately submission to the Planning Office. Once recommendations are sufficiently incorporated, the enhanced CRRP will be advanced to the City Council for adoption.

**Composition of the Working Groups & Recruitment**

Each working group will be overseen by one or more NESC commissioners. Working groups will comprise a minimum of three members and a maximum of seven, all of whom are recruited on a volunteer basis. Any citizen of Northampton or city employee is eligible to be a member of a working group.

The opportunity to volunteer for a working group will be advertised through media coverage in the Gazette, through social media, and through direct outreach to target expert participants.

**Timeline for the Working Groups and Adoption of Enhanced CRRP**

- Formation of working groups: November 15-25, 2019
- Working groups return recommendations to NESC: January 31, 2020
- NESC votes to submit recommendations to the Planning Office: February 13, 2020
- NESC reviews Planning Office’s incorporation of recommendations: March 12, 2020 and votes to advance to City Council

**Resources**

While NESC proposes volunteer-staffed working groups, the Commissioners recognize that, going forward, the level of mobilization and action required of Northampton to pursue an impactful climate mitigation strategy will take significant human resources (a point on which the CRRP is silent). The Energy Coordinator’s office should serve as the hub for activities falling...
under the CRRP and as such, is in critical need of additional staff and resources whose role it is to track and facilitate Northampton’s climate mitigation and resilience activities.

Detailed Comments on the CRRP

In light of NESC’s recommendation that working groups be formed to take deep dives into key elements of the CRRP, the following comments serve to demonstrate the extent to which the Plan has gaps and omissions. NESC does not consider these comments sufficiently comprehensive, rather, they and comments submitted by other groups, shall serve as a starting point for working groups.

I. Executive Summary and Introduction

- The title of this document needs to include the term “mitigation”, as reducing carbon emissions is the highest priority. Suggested title: “Northampton Climate Mitigation and Resilience Plan”. We don’t know what “regeneration” means. All subsequent titles would be similarly updated, adding the term “mitigation” and removing the term “regeneration”.
- Executive summary should mention the urgency of cutting global GHG emissions by 45% of 2010 levels by 2030 in order to keep temperature from rising >1.5C (pp 5-6)
- Building on past success (p 8): Add call-out box of successful urban forestry program.
  2nd paragraph citing past successes, add “planted over 1000 public shade trees”
- Figure 2 (p 9): Collective Actions for GHG Emissions Reductions, should include more emphasis on the following:
  - Getting around. Expanding public transportation needs to be addressed here.
  - Our lifestyle. Expanding the urban tree canopy; improving public shade tree protections.
  - Waste & Wastewater. Reduce waste generation should be added to “Reuse, recycle and compost more”
    - Actions should include educating commercial entities and residents about waste prevention strategies, especially food waste (N.B. 40% of the food grown in the US is wasted, about 50% of that waste is generated by households)
- Summary Table
  - Energy (pp 11-12): 1A) Need to look at energy storage; Add planning for energy storage; 2A) Add education around use of non-toxic building materials; possibilities for promoting green roofs; 2) Add: “Target shade tree plantings around municipal buildings to reduce energy consumption”; 3A) Add programs that promote organic land management for private homes, businesses, municipal areas; 3B) “Continue to protect...city’s forestland (add and urban forest) and its capacity to ...”; 3C) “...agricultural systems, including agriculture (add organic systems)...”; 3E) Encourage carbon pricing at the state level
  - Water 1C (p 13): Produce a green infrastructure (add including a street tree planting) plan...
- **Waste** (p 14): 1) The “Waste Reduction” section doesn’t address reduction at the source; 2) Initiatives related to food waste prevention and food rescue/donation are missing (e.g., establishing food rescue/donation programs in schools and commercial entities)

- **Transportation** (p 14): Improving bike safety of streets is missing (e.g., improved bike lanes on King, Elm, Main Streets)

- **Human Experience 1** (p 15): Plant trees in EJ zones to promote walking

- **Education** (p 15): Today’s youth are already engaged in working toward a sustainable future for themselves. This section should create a plan for how to support their advocacy efforts.

- **Health & Safety 2** (p 16): Build out the city’s “cooling capacity” through (add street trees), parks and recreational sites. Insert: Map, identify and protect existing and potential cool microclimates in urban residential zones

### III. A Plan Crafted by Northampton

Nearly 10 pages about how this document was created doesn’t belong in the middle of the Plan itself. It is a distraction and creates a disconnect between the executive summary and substance of this document. This should be moved to an appendix.

### IV. Pathways for Action: Our path to a carbon neutral and regenerative city

**Pathway 3** (p 42):
If this section is about Energy Efficiency and Conservation, then in this section we must discuss the pathway towards energy conservation and efficiency, as opposed to focusing on benchmarking.

**Suggested language:**
The City of Northampton will take action to increase the efficiency of its buildings to the maximum extent possible and at the same time switch all of its Heating, Ventilation, Air Conditioning and any other fossil fuel usage over to electrically driven systems by the year 2030.
While undertaking efforts to increase efficiency and electrifying its HVAC systems, the city will work with the utility companies to quantify the electricity demand of the City post electrification, and develop generation and storage assets to match that and future demand.
The city will work not only on its own buildings, but also work with all available organizations, businesses, and the utility companies to drive the conversion of privately owned buildings within city limits to electrify their fossil fuel using systems (HVAC, transportation, other), and to build out their own private electricity generation and storage assets.

**Pathway 4** (p 42):
The goal of Zero Energy buildings should be inclusive of both new and existing building stock. Note the recent report from the US Green Building Council, *Zero Energy Buildings in MA:*
Saving Money from the Start, which found positive ROI in a matter of years for existing buildings.

Suggested language:
All city buildings will be made Net Zero by 2030. This will be accomplished through energy efficiency and the conversion of fossil fuel burning systems to electric. The city will then couple renewable generation and storage assets with the buildings to match their energy demand with zero emission sources, thus making the buildings Net Zero.

Pathway 5 (p 43):
The end goal of electrification is of course to be procuring energy from renewable sources; this should be noted.

Suggested language:
The City will work with the utility companies to ensure that all electricity being supplied to the City of Northampton is generated by renewable energy sources by 2030.

Pathway 7 (p 43):
Sentence beginning with, “Northampton has made the use of sustainable transportation modes…; investing in "complete streets" that make room for walkers and cyclists within city roads; (add planting shade trees that improve the experience of walking and biking)…and helping to launch ValleyBike...In order to make further progress...further expand the bike share program, (add plant more street trees)...as well as focus…

Pathway 8 (p 44):
This section talks about transportation but does not address the best use of land to decrease carbon emissions.

Suggested language:
The siting of Solar PV generation assets as well as battery storage on land owned by the City of Northampton will be planned for in order to meet the electricity demand of the city as well as its residents. We recognize that we as a city must be prepared to produce enough renewable electricity by 2030 to meet the electricity demand of the City and its residents as we convert to electrified HVAC and Transportation systems.

Pathway 9 (pp 44-45):
Carbon Sequestration and Offsets--this section strangely minimizes the role of woody plants, notably mature trees, in storing and sequestering carbon. Yes, soil stores carbon, but the way soil draws carbon from the atmosphere (which it needs to do, we all agree) is when photosynthesizing plants take root and break down into it.

Second sentence “Urban areas, in particular, retain significant percentages of soil cover that can positively contribute to regenerative land practices and climate change mitigation,” does not make sense to us.

The sentence “…these practices will likely become much more important strategies as the city’s emissions approach zero” seems to ignore the reality that 1) mature urban trees take a human lifetime to grow, so delaying action on carbon sequestration through tree planting is a poor...
strategy; and 2) mature urban trees are not only stores of carbon, but offer numerous co-benefits that also lead to reduced carbon emissions (stormwater, building cooling, wind block, walking/biking promotion, etc). Therefore, the urban tree’s net capacity to reduce carbon emissions is greater than a tree of the same size in a stand in the forest.

Northampton Low-Case, Mid-Case, and High-Case GHG Emission Projection Graphs (pp 45-47):
The current “low-” and “mid-cases” should be removed from the CRRP and the current “high-case” should become the “low-case”, representing the City’s least aggressive path toward carbon neutrality. Two new cases should be added, each representing increasingly aggressive paths toward carbon neutrality.

Net zero must be applied to existing buildings as well.

Our path to climate adaptation and a resilient city
Pathway 1 (p 48): To what extent does the “Northampton Designs with Nature for stormwater” include well-sited shade trees?

Pathway 3 (p 49): This paragraph is very general and confusing. What specifically is it recommending, especially in relation to urban shade trees? Why are Energy 3A-3D all focused on soil health?

Pathway 4 (p 49): The "discouraging Solar PV" is counterproductive to our urgent need to address climate change.

Suggested language:
Preserving open space is critical, however, the City shall seek a pathway forward with land management that both encourages the use of land as habitat for critical species, and a carbon sink through preserved forests, but also promotes non forested land as a place where we can generate sufficient renewable energy to power our city’s transition away from fossil fuels. A portion of open space in the City must be dedicated to the production of renewable energy if we are ever to become carbon neutral. This portion can best be determined through the study of the full electricity demand of the City after converting all buildings and transportation to electricity, and then determining the size of the renewable energy generation assets needed to produce this amount of power, and then dedicating that much of our open space to that production. This is our pathway to Net Zero.

Pathway 5 (p 50): In line with the existing language in this section we would like to see a few specifics. Smith Voc could be an excellent place to site renewable generation and storage assets with the purpose of using these assets as training tools. We believe that this could be stated in this section. Students can be trained in installation, system maintenance, and grid interface. This is an opportunity to change the future. We can train the workers that will be needed for the economy of the next 40 years, which will be based upon converting our energy
infrastructure from one that is based in carbon fuels to one that is based in renewable generation, distribution, and storage.

Second column, in the sentence, “These could include job training or career development in areas such as…” replace: “climate-resilient street tree care” with “urban forestry”

Northampton framework for resilience and regeneration
- **Regeneration** (p 52)
  - The *Respect Resource Limits* component should replace “reuse waste” with “...emissions, and material reuse, repurposing, and upcycling”.
  - In *Stewardship* add “protect natural ecosystems”.
- **Resilience**. The “Strong & Healthy Community” component should do more to address local social issues such as houselessness, food insecurity, and aging in place among others. There should be a plan for working cross-sector and with local organization to tackle these issues in a holistic way.

V. Action Plan: The Resilience and Regeneration Strategies
- We recommend this section open with an overarching strategy for implementing mitigation and resilience goals, including:
  - Dedicated staff for orchestrating, measuring, monitoring progress
  - A plan for measuring and monitoring progress (metrics specified for each category and a minimum frequency at which they will be measured)
  - A plan for establishing a local carbon market to mobilize investment in carbon offset/reduction projects, particularly with an emphasis on using it as a tool to achieve equitable climate mitigation and resilience. A local carbon market should be elevated as a tool and strategy for achieving cross-cutting climate mitigation goals, not buried in “Energy 3E” as a tangential possibility and as something tied strictly to energy.
- Each thematic area (e.g., Energy, Water) should open with a summary of clear, time-specific commitments and targets. For an “Action Plan” we feel it is extremely weak on goals and actions. This plan needs to shift from “consider” to “do”.
- “Urban Food and Forestry” should be its own dedicated category, inserted between “Water” and “Waste”

All Categories 1A (p 56): We strongly support the concept of setting “long term and annual carbon budget with allowed carbon emissions allocated to each department and the community…”
- We would like to see this concept elevated in the CRRP by referencing it elsewhere, including the Executive Summary, in the “Northampton Framework for Resilience and Regeneration” pie chart under *Resilience* as “Carbon-budgeted operations”
- Even if specific details are omitted, we would like to see acknowledgment of the steps and resources required to implement and operate a city-wide carbon budget
Energy 1A (p 57):

- In the sentence, “Program goals also include incorporating energy storage and other tactics to reshape the load profile to reduce peak energy periods.” we suggest extending the sentence to say “…energy periods, and to enable deployment of PV generated power at night.”

Energy 1B (p 58):

- Explore public-private partnerships to expand renewable energy on private property.
- Ground-mounted installations are typically more economically viable than building canopies and should be explored as a priority.
- PV mounted parking structures, and other approaches higher cost, should be considered after the more cost-effective ground mount options have been exhausted.

Energy 1C (p 58): The Microgrid for the hospital and emergency services: Is $3.1M enough?
That sounds like a very low number.

- Perform public outreach and awareness of the distributed energy resources, to build support for this public investment

Energy 2A (p 60):

- Edit Title and scope of 2A to be more encompassing, to include evolving the real-estate market to value building energy performance.
  o Recommended new title: *Evolve the real estate market to encourage greater investment in building energy retrofits and high-performance new buildings.*
  Language focusing on building energy disclosures must include building types that, city wide, account for more energy waste than large buildings. Note that a disclosure policy does not change energy itself, but is a tool that moves the market, which encourages greater private investment in building energy retrofits.
- Encourage the real-estate market to include/require:
  o Energy performance metrics on MLS listings
  o Energy assessments at time of property sale (building upon state-wide efforts).
- Disclosures:
  o 1-4 unit residential should be included in the energy disclosure ordinance. These building types are largely underserved by energy efficiency programs.
  o Establish a public opt-in database of historical heating and cooling costs to feature and celebrate good performing housing units.
  o As a disclosure policy may be difficult politically and legally, establish a reward system (carrot not stick) approach to gaining buy-in from property owners.
  o Use established tool kits for shaping a disclosure ordinance, such as the one published by ACEEE
  o Engage Columbia Gas and National Grid to provide energy consumption data at a resolution useful for driving public participation in a disclosure act.
- Work with regional lenders and the DOER (State) to develop a local PACE Financing tool for commercial and residential buildings.
● Work with regional lenders to design user friendly ‘green financing’ tools, including EEM (Energy Efficiency Mortgages). These must be user friendly and easily marketable.
● References to job training should include leveraging existing state funded clean energy internship programs. Suggest moving this to Education action section, so it is inclusive of all Actions.
● Remove reference to Energy Star Portfolio. For Northampton’s building types (no high rises), this is excessively complex and not especially helpful.
● Annual Awards reference - have a more encompassing reference to a rewards system to encourage building retrofit investments. Use rewards as a motivator for participation in voluntary energy disclosure with an ultimate goal of motivating greater investment in energy retrofits.

Energy 2B (p 61):
● There is an opportunity to broaden this strategy to be inclusive of programs beyond the Heat Smart model. Programs modeled after the Solarize program (which Heat Smart was modeled after) are characterized by being well planned, community driven, targeted marketing, promotional pricing, bulk buying, gamified, strong public/private partnerships. Though more difficult, this model can expand to additional components of building energy retrofits, such as advanced energy assessments, insulation, weatherization, indoor air quality (ventilation/moisture management), residential EV charging, domestic hot water, etc.
   ○ Recommended edit name: Launch more programs, based on the ‘Solarize’ model, to encourage building energy retrofits and electrification.
● Add: Compared to previous Heat Smart program, establish stronger partnerships with existing rate-payer funded energy efficiency incentive programs, including the new Mass Save Renovations & Additions program.
● Greater focus on ease of participation and bundling of incentives.
● Job trainings, internships, and school partnerships should be encompassed in the Education strategy section.
● Remove reference to GSHP (ground source). In our market they are simply not competitive for the far majority of building types. Poor recommendation.

Energy 2C (p 61):
● Reference previous zoning-based efforts that require high density to be more efficient than code.
● Quotient system should reference HERS index, as it is already required by code.

Energy 2D (p 62):
Title- remove ‘net’ from title, change to ‘all new buildings to be zero energy ready. ’(no ‘standard’)
● Building energy codes are not under the jurisdiction of the City.
• Phased approach of 5-10 years is not aggressive enough: Zero energy ready homes are very close to the current code built home in many respects.
• The CRRP should identify the established DOE Zero Energy Ready Home (ZERH) certification program as the NZE building standard.
  o ZERH is a logical step above current energy code required HERS requirements.
  o As we cannot change the building codes, explore ways to incentivize ZERH certified projects, including awards, competitions, tax abatements, and recognition.
• Advocate for utility incentive programs that are above code
• In addition to NZE standards, include encouragement of well-placed shade trees near building to reduce energy needs.

Energy 2E (p 62):
This strategy is vague and includes items that fall under additional sections (financing, Solarize programs). Recommended to move all financing/real estate market references to section Energy 2A.

Edit this strategy to focus on leveraging and partnering with utility and government incentive programs to grow a culture of energy retrofits using available incentive programs. Resources supporting energy retrofits are an import precursor to building electrification.
• leverage private/public partnerships to encourage the local home performance contracting workforce
• Propose tailored energy efficiency pilot programs to utility companies
• Use existing City sets and GIS capabilities to map opportunities for retrofits, and renewable energy system development and to identify neighborhood scale targeted marketing opportunities
• Leverage the new market-based Mass Save Renovations & Additions rebate program to streamline HEAT loan and utility rebates

Energy 3B: Open space acquisition should include land to be purchased for the purpose of installing Solar PV, and Grid Scale Storage.

Expand the first right of refusal to include open space/agricultural to support PV until we hit net neutrality.

How can we work together to come up with an agreed upon balance between the need for carbon sink, and the need for renewable generation. If all of our land was kept for carbon sequestration how much could we sequester? Would it be enough for us to be carbon neutral without producing renewable power? If not, is it really enough? How much carbon dioxide does the city produce as a whole? Do we have that number?

Until we get the City’s CO2 emissions down to a level that our forests can sequester, we must be committed to reducing emissions.

Commented [1]: I disagree with the sentiment of these comments (they are also in contrast to Rich’s comments) and don’t think they belong in a section about “protecting forestland and its capacity to store carbon”

Commented [2]: I stand by everything I say here. It is an important point in how we use out land. We cannot plant enough trees to stop our contribution to global warming. We can however, put up enough solar panels.
• Continue to protect, grow and enhance the city’s (add urban canopy), forestland and its capacity to store carbon, while also allocating enough land for clean energy generation.

• Add 1-2 paragraphs here on urban tree canopy including the importance of preserving existing mature urban trees. This especially includes stands of trees that not only store carbon but create micro-climates whose cooling effects ripple out in otherwise hot zones. See recent research on wide variance of temperatures in cities due to presence/absence of trees.

Energy 3C (p 66):
• Change title to “Support education and training in urban forestry, regenerative agriculture systems,...”

• Here, there could be an entire paragraph on urban forestry. UMass Stockbridge has an urban forestry program that could be highlighted

• If we are allowed to mandate Riparian Buffers, we suggest that they city does so.

Water (p 68): What is the plan for capturing water so that it can be used in periods of drought? Is there a plan for storing water for times of drought that can be supplied to our farms?

Waste 1. Waste Reduction (p 73): This section doesn’t actually address reduction it addresses diversion of the same volumes of waste from disposal. There should be explicit actions toward reducing the waste people and businesses generate in the first place. This section could target single-use plastic and food waste in particular. Reduction in food and other types of waste are where real GHG emissions reductions are achieved.

• The content of the current “Waste Reduction” section should be re-titled: “Waste 2. Waste Diversion”, and should come after the insertion of a new waste reduction section.

• As part of the CRRP, Northampton should strengthen regulations around construction and demolition debris and mandate or incentivize deconstruction and recovery of building materials.
  o Several contractors in the area perform deconstruction and residents/contractors have ready access to EcoBuilding Bargains in Springfield for donating recovered building materials (e.g., doors, windows, flooring, cabinets, sinks, toilets, fixtures, etc).

• Cities across the country are adopting Zero Waste Plans, including Boston, Philadelphia, Austin, Seattle, Oakland, San Francisco among others. A plan for achieving Zero Waste should be in the CRRP.

• Massachusetts already has an organics waste ban for commercial entities generating more than 1 t food waste/week. It’s going down to 0.5 t/week by 2021. Northampton should actively encourage all commercial entities to participate in organics diversion; shared food waste totes and service would help make it more affordable.
Waste 1A (p 73): Diversion programming in schools should also include food rescue and donation, both internally using share tables, and externally to food banks/non-profits serving food insecure individuals.

Transportation 1A (p 75):
- Safer biking conditions on main roads throughout the city are necessary for making a larger portion of the population feel comfortable with bike commuting. There's no mention of improved bike lanes in the CRRP.
- The CRRP should address expansion of public transportation and the role the city/Mayor can play in that.
- Second paragraph, second sentence revision: “Invest in sidewalks, (add street trees), and complete streets…”

Transportation 1C (p 76): If allowable, Northampton should mandate that “all” new construction includes EV Charging.

Education 1 (p 80): Expand education strategy to include job training, and leveraging state funded internship programs.
- Include vocational training for high school students in the clean energy and energy efficiency industries.

Health & Safety 2A (p 86): Title: Build out the city’s cooling capacity through (add street trees), parks and recreational sites

Note here tree planting zones that are identified high public benefit/high priority by the Public Shade Tree Commission:
- High traffic corridors
- Environmental justice areas
- Retail districts
- Parking lots
- Walking/biking corridors
- Bus stops
- Community centers such as schools & health facilities

Health & Safety 3B (p 88): Conduct a tree and forest ecosystems vulnerability and adaptations assessment

It is unclear whether street trees are included but it sounds like it's only referring to "stands" of trees, which are not defined. Please define.

This assessment should include forest microclimates within urban residential zones (especially those at risk of conversion) that provide vital function to surrounding neighborhoods including reducing heat island effect, violent storm buffering, and storm water mitigation.
COMMENTS ON DRAFT
CLIMATE RESILIENCE & REGENERATION PLAN

The draft CRRP is an impressive compilation of the many consequences that climate change will have, whether mild or grave, on the life of Northampton. The list of actions proposed for the mitigation of these consequences is similarly comprehensive and, though well thought out, strikes me as largely aspirational at this point. Numerous, commissions, committees and working groups--involving both city personnel and volunteers--are envisioned and the cost of many of the proposed actions is high, yet the draft plan says little about whether new city staff positions will be required to accomplish the stated goals and how money will be raised to fund the many initiatives. According to the Action Plan, Planning and Sustainability will bear an enormous share of the leadership and it is not clear how this will be managed.

While I have a passing acquaintance with many of the issues raised in the draft plan, I have little expertise in any of them. That said, as the draft itself explains, the lion's share of the green house gas emissions that are slated for reduction result from buildings and transportation, and it is these two sectors that must receive the most attention. Community electric aggregation seems like a very productive avenue, as does improving public transportation based on non-fossil-fuel-using vehicles. Other initiatives are important though lacking in large-scale effects. Overall, as others have already noted, there is too little attention in the draft plan on the timelines and metrics which should be spelled out in much greater detail, i.e., how long do we have and how are we going to measure success? To achieve a 50% reduction in green house gas emissions will take a tremendous effort and I fear that a target of 50% reduction by 2035 is too leisurely to achieve the goal of carbon neutrality by 2050.

A few items in the Action Plan drew my particular attention.
- Management practices to enhance soil carbon storage in parks and agricultural lands are surely worth pursuing, though they will not have a very large effect on mitigating climate change within the next 30 years (Energy 3A, 3C).
- As the draft plan notes, the city's forestland affords many benefits: water retention, cleaner and cooler air, and, of course carbon sequestration (Energy 3B). Unfortunately, the importance of forest land as wildlife habitat seems not to have made it onto the list. In this regard, the further acquisition of forested land, especially in wildlife corridors, is an important goal.
- The re-forestation of open land should be treated with caution as the state as a whole, and Northampton in particular, is deficient in undeveloped grassland and shrubland which provide critical habitat for many animal and plant species that do not use forests. Grasslands and shrublands must be included in the mix alongside forests.
- Planting trees in the urban landscape, which des not appear to have received much attention in the draft plan, definitely improves esthetics, provides cooling, and aids carbon sequestration; it's a very good move. Nonetheless, the beneficial effects of such trees will take time given their slow growth and may not be significant within the 30-year time scale of the plan.
In the Health and Safety Action Plan, assessments of ecosystem vulnerability, the maintenance of habitat connectivity for both plants and animals, and the control of invasive plants are important measures to take in the face of climate change. The development of educational material on the management of vector-borne diseases also makes sense, though the conduct of research on these matters by the city doesn't.

These comments reflect my personal reactions to the draft CRRP and do not necessarily represent the views of Broad Brook Coalition, of which I am President. Moreover, they are based on a rather hurried reading of the draft CRRP and have not benefited from more thoughtful consideration of the many actions proposed in this document.

Bob Zimmermann
November 25, 2019
To: Mr. Chris Mason
From: George Kohout, President
Friends of Northampton Trails
Date: November 25, 2019
Re: Northampton Climate and Resiliency Plan

I am writing on behalf of the Friends of Northampton Trails (FNT) with comments on the draft climate plan (NCRRP). Our Board of Directors and approximately 250 members are very appreciative of the time, energy and creativity applied to this plan by volunteer residents and city staff. The stated goal of making Northampton carbon-neutral by 2050 is wonderful … but of course the devil is in the details of this NCRRP.

Our comments are focused primarily on the Transportation and Human Experience sections of the plan. Please consider incorporating these suggestions into the appropriate sections:

- There is a lack of specific metrics for many of the activities and projected outcomes detailed in the plan. The City developed a similar planning report in 2006 titled Sustainable Northampton that incorporated metrics for long-term & short-term goals. A review of this plan by the committee could inform the development of relevant metrics aligned to each category in the NCCRP. Adding metrics to the Summary Tables (pages 11-17) might be appropriate.

- In the Transportation section (page 77) more emphasis could be placed on promoting alternative transportation options beyond the Valley Bikes (which are great!). There should be a greater incentive to build separated bike lanes on our connector streets, collaborations with businesses to develop employee incentives that reward alternatives single occupancy vehicle commutes and creative strategies, starting with city employees, to limit car-centric commutes to work.

- The incorporation of a Climate-smart curriculum into the K-12 system is a great concept. An added component of the curriculum could be focused on alternative transportation systems and awareness e.g. using public transportation (PVTA) and bicycle safety guidelines. These discussions and hands-on activities would legitimize the options of alternative transportation at an early age.

Thank you for drafting this NRCCP and incorporating input from Northampton residents in this review and other stages of the process.
Driving to a meeting as the BBC Newshour played on the radio, I listened to Anne Olhoff, one of the original drafters of the Climate Paris Accords talk with exhaustion. She noted how, yes, it's fantastic to see both government and the business markets beginning to pay attention to climate change but that their sense of urgency is still far behind where it needs to be. She described this as a cognitive dissonance as politicians and business leaders try to tell the world they're fighting for us while simultaneously not listening to our cries for urgency in addressing this climate crisis. We're not making a sacrifice by focusing our resources on protecting the environment; we're making an investment in our future so we have a future.

I'm proud to see Northampton taking steps to address the climate crisis. When I was chair of the Northampton Mayor's Youth Commission, one of our priorities was the plastic bag ban. With Northampton's Climate Resilience and Regeneration plan now before us, it's important to take into consideration the points I noted above: we must approach this like a crisis and we must be clearer in how we will meet our goals.

While the climate plan includes many many steps Northampton must take to counteract climate change, there is a lack of urgency. Without strict deadlines and timelines for how those goals will be achieved, we're kicking the can down the road. We need to set actual dates on these projects. Without those dates pressing down on us, we will not be pressured with the urgency needed to take action.

I would also like there to be metrics tied to how we are determining we've met these goals. For example, community aggregation plans vary widely and without metrics determining what counts as success, we're leaving too much room to institute weak plans that don't achieve our goals.

Lastly, I believe it is important to note how urgent this truly is while simultaneously showing the pathway towards hope. By only instilling fear, we lose but by showing the urgency and what we need to do, we instil hope.

When we implement this plan, let's not pat ourselves on the back for just taking action but let's put together a plan which leads the way for other cities and towns. Let's make this a blueprint for guiding the way. A plan which doesn't recognize the urgency, lacks clear metrics, and doesn't have deadlines will not lead the way.

We're Northampton. We don't want to fall in line with making progress; we want to lead that progress. We may be small but we're loud and leaders in progressive policies. Let's ensure this policy follows that same mindset and make the changes necessary to make this a successful climate plan for the future.
Thank you,
Jonathan Goldman
Northampton Area League of Women Voters comments on
Northampton Climate Resilience and Regeneration Plan

Dear Mr. Mason,

I am writing on behalf of the Northampton League of Women Voters with comments on the draft climate plan (NCRRP). Thank you to all who contributed to this comprehensive plan to reach climate and resiliency goals for 2050. We applaud the deep commitment and dedication of our community leaders to making Northampton carbon neutral by 2050, while growing the economy, and providing equity.

The efforts by Northampton to work regionally is commendable, particularly with the Community Choice Aggregation 3.0 Program. We urge the town of Northampton to take leadership in launching this program within the next year. It is very encouraging that Representatives Mindy Domb, Lindsay Sabadosa, and Senator Jo Comerford are champions of this program and want to hold it up as a model to be used across the state. Now is the time to put it into action!

We offer the following recommendations to make the NCRRP more powerful.

· 1. Add to the introduction a statement that acknowledges that from this day forth, everything the city does will be to reduce the severity and speed of our climate crisis. This plan directs how Northampton will take actions that reflect the immediacy of the situation and make it a resilient city.

· 2. Declare that all actions will be made on evidence-based, current climate science. The excellent comments submitted to you by the Tree Committee are based on current science, specifically the latest report on the major role of forests to sequester carbon, and provide many ecosystem services. The Tree Committee recognizes the important role of trees in cities and their plan should be incorporated into this plan and the Master Plan.

· 3. Without a roadmap, this plan is powerless. It is critical that this plan be built on a strong, clearly defined roadmap with a detailed timeline that describes when measurable outcomes will be assessed, whether goals were met, and adjustments made based on new science and technology, and falling prices. How and when will data be collected to track carbon emissions? In what year will the city:

  · begin to transition to zero-emission vehicles in its municipal fleet?
  · will all school buses be zero emission vehicles?
  · will all Northampton properties operate with 100 percent renewable energy?

  How aggressively will the city find state grants for these and other clean energy projects? What is the specific timeline for improving building efficiency and all net-zero construction?

The good news for the committee writing this draft plan, is that they can build a powerful roadmap and timeline using the excellent format found in the climate plan for the city of Evanston, IL Climate Action and Resilience Plan.

Creating a strong roadmap for climate action should be done at all levels of government. Representative Sabadosa and
Senator Comerford are champions of a bill to create a state-wide roadmap and timeline for reaching our climate goals for 2050. The League of Women Voters are strong supporters of this bill - H. 832.

With the addition of these changes, the Northampton climate plan will be a very effective tool for guiding Northampton in the energy revolution, meeting it’s climate goals, and making it a resilient, prosperous community.

Thank you for considering our comments.

Nancy Polan
nancypolan@gmail.com
Legislative Director
Northampton Area League of Women Voters
Mothers Out Front Comments on draft *Northampton Climate Resilience and Regeneration Plan* (NCRRP)

These comments are submitted on behalf of Mothers Out Front, Northampton Chapter

First, we applaud the effort to engage community members in this process and appreciate the opportunity to have served as a Community Stakeholder workshop participant. We look forward to the 2020 Sustainability Planning effort and to specific guidelines for implementation of the NCRRP’s land use elements.

While the 2050 goal for a 100% carbon neutral city is laudable, the City of Northampton can and must move faster and should specify priorities for funding of the many pathways identified in NCRRP. Regeneration should take precedence in planning and financing efforts, and should be listed before Resilience, since carbon emissions reduction is the most critical immediate need. Fossil fuel free electrical energy is in reach as is fossil fuel free space-heating and cooling, particularly in new construction.

Particular elements of the draft NCRRP that we support are:

- Community Choice Aggregation
- Energy 2D: Require that all buildings be built to NetZero standards and 2E: Clean Energy transitions for buildings, especially participation in the PACE program.
- Maximizing carbon sequestration through the soils treatments outlined as well as increasing urban forestry efforts and permaculture where appropriate on city farms.
- Transportation 1C: Foster city-wide transition to electric vehicles
- Transportation 2A: Encourage development that is dense, mixed-use and transit oriented
- Strong and Healthy Neighborhoods Initiative
- Climate Champions program
- Design with Nature for flood control
- K-12 and adult climate change education programs

We would like to see more emphasis on Regeneration with an early push to transition away from fossil fuels through immediate investment in renewable alternatives for all city buildings and fleets. This could move the transition toward the “High Case” scenario in which we achieve carbon neutrality faster. Because there are few specifics about implementation of the strategies in the action plan, we can only be general in our comments. Actions must accelerate as benefits become apparent.

Efforts that we believe should receive priority attention and funding include:

- All Energy categories, especially:
  - 2C: Apply Resilience and Regeneration quotient system in site plan review process. **This should be a short-term process**
  - 2D: Require that all new buildings be built to net zero standards
  **This should be accelerated to a mid-term process, short-term for developing policy**
• Focus immediately on efficiencies and carbon emissions reductions from Commercial and Multifamily residences, using the PACE program and other new initiatives that reduce the financial burden of deep energy retrofits
• Relaunch and expand the HeatSmart Program to convert from fossil fuels to heat pumps
• Reduce business carbon emissions
  Encourage restaurants to move away from gas cooking
  Encourage energy savings through installation of point-of-use or tankless electric hot water heaters
• Speed up public building greening including school heating systems and solar system installations
• Speed up transition to electric school buses and other city department fleets
• Incorporate battery storage units by block or community for short term power during storms and eventually as sources of energy to charge vehicles, etc., similar to those at the Fire Department and Cooley Dickinson mentioned on page 58. By establishing neighborhood charging centers, we avoid unnecessary gas-powered generators, duplicative battery purchase (and associated manufacture and distribution emissions.)
• Use gray water for watering municipal gardens, school yards, etc. to reduce demand on the water treatment system as well as the wastewater treatment plant.
• Expand recycling options such as repair stations and free pickup of unwanted items. Materials disposal options such as using trash compacters to reduce volumes that can reduce pickups and trips to transfer station and dumps.
• Emphasize development of flood storage capacities that encourage multiple use strategies and reduce demand for maintenance. For example, removal of dikes and dams and replacement with more modern flood control methods such as flood overflow basins that serve multiple uses (recreation, wildlife and plant migration corridor areas in addition to flood control).
• We also support maximizing carbon sequestration through the soils treatments outlined as well as increasing urban forestry efforts and permaculture where appropriate on city farms.
• The city can model landscape maintenance using electric-powered mowers etc. Imposing limits on hours during which gas-powered mowers and leaf blowers can operate could encourage private landscape operators to move toward electricity powered equipment.

We look forward to continuing our support of Northampton carbon drawdown actions as it leads efforts to address our climate emergency.

Respectfully,
MOF, Northampton
Denise Lello
Sarah Partan
Tina Cornell
Leida Barman
Paula Garcia
Dear Chris,

I am unable to come to the Thursday meeting of the Energy and Sustainability Commission, so I would like to register a couple of comments to pass along to the Commission, in any form that works for you and the Commission.

First, I did attend one of the community workshops several months ago and was pretty unimpressed with the workshop facilitators who were contracted for this effort. So I was very gratified to see the very detailed and comprehensive report. Great work on the part of everyone. Some comments:

1. Unless I am misreading the graph on page 47, it appears that the actual reduction in GHG by 2030 in the high-case projection is only 41%, as acknowledged on p 45, somewhat below the 45% recommended by the IPPC. I think the solid black line in the graphs is misleading, in that it has a steady negative slope. In reality, it needs to 'sag' in the middle, with more than half of the necessary reductions being achieved by the halfway point. None of the strategies could be considered 'low hanging fruit', but it seems intuitive that it will get harder to reduce GHG emissions as time passes and the early adoption of strategies and technologies is passed.
2. I think that more attention to metrics over shorter timelines would be useful. We need to see how the city is doing over 5, 7, 10 years to keep our noses to the grindstone.
3. To make these monumental changes, Northampton will need many resources that are not fully explored in the document.
4. I do agree with CAN that it would be valuable to indicate the gravity of the problem by using words like 'crisis' and 'emergency' at key points in the document. The weighty compiling of facts and strategies may turn off the casual reader, without the crucial nature of this endeavor being called to our attention.
5. Likewise, I agree with the Tree Commission's comments about urban trees. The tension between development, urban infill, and preservation of mature trees needs more attention and strategies for resolution.

Again, I am very impressed with this document and hope that the Thursday meeting will help provide guidance in going forward.

Sincerely,

Nick Warren
Message for the Energy and Sustainability Commission
1 message

Katharine Baker <bakerkg@comcast.net>  
To: cmason@northamptonma.gov  

Mon, Nov 11, 2019 at 1:46 PM

To Chris Mason and the Energy and Sustainability Commission:

I understand that you will be discussing the City’s draft climate plan at your upcoming meeting. As I am unable to attend, I wish to submit this written comment:

In looking at the plan, I notice that Northampton Neighbors is listed as a community partner. I am also surprised to see Northampton Neighbors identified on page 78 of the draft plan, Human Experience 1A, Engaged Communities, Launch a Strong and Healthy Neighborhoods Program, as an organization whose members will “assess what it takes to enhance the resilience of particular neighborhoods.” We are also expected to “identify specific actions” to implement this component of the plan.

I believe that a City-wide Climate Resiliency plan, including action steps, is an excellent idea, and the City certainly needs one. However Northampton Neighbors and its Board of Directors will need to be involved in planning any tasks our organization may be expected to implement. Currently we are a two-year-old non-profit, with a small annual budget, and just one part-time Administrator, so we will need funding to expand her hours or hire an additional employee who can create, manage, and coordinate the Neighborhood Teams described on page 78 of the draft plan.

At this time I request that the draft plan be rewritten in a way that does not include expectations for Northampton Neighbors which we may not be able to fulfill without considerable consultation with the City.

Katharine Baker, President, Board of Directors  
Northampton Neighbors
Comments on Climate Resilience and Regeneration Plan

1 message

**Sunrise Northampton <sunrisenorthampton@gmail.com>**  
To: Chris Mason <cmason@northamptonma.gov>  
Thu, Nov 14, 2019 at 11:15 AM

Dear Members of Northampton's Energy and Sustainability Commission,

As the Sunrise Movement Hub of Northampton, we unfortunately cannot attend the meeting this afternoon, but we have a few comments on the Climate Resilience and Regeneration Plan.

Sunrise is a movement of young people fighting the climate crisis. We care about combating climate change because we are scared for our futures. Failing to adequately address the climate crisis is just not an option. In the last year, Sunrise Northampton has hosted a Green New Deal Town Hall with Rep McGovern, Claire Higgins, and Mayor Narkewicz; held an action at the August Democratic National Committee meeting where the DNC unanimously passed a resolution supporting a climate debate; planned the May 3rd and May 24th climate strikes in front of city hall; and helped to bring 13 buses from Western Mass to the September 20th Climate Strike in Boston. We have also created and helped pass a Northampton Green New Deal resolution, and hosted watch parties for the presidential debates. We would love to see the Climate Resilience and Regeneration Plan back up the Green New Deal resolution [bit.ly/noho-gnd](http://bit.ly/noho-gnd) that the city council has passed.

First of all, we think that the plan does not sufficiently acknowledge the severity and urgency of the climate crisis. As Greta Thunberg says, our house is on fire. We do not see this kind of emergency language in the resiliency plan. For example, even calling it a “Climate Resilience and Regeneration Plan” suggests a future security that we cannot expect. While a balance between mitigation and adaptation is critical, we think there is an overemphasis on the latter. The truth is that adaptation is but a short term solution that will not address the climate crisis and will not save our futures or future generations. Emphasizing mitigation and how we can help prevent the climate crisis before it’s too late, rather than just lessening its impacts, is important to us. We think language such as “Climate Emergency Action Plan” or at least “Climate Mitigation and Resilience Plan” would be much better. The plan should explicitly contain language that indicates climate emergency.

We also think that the plan must explicitly contain much more aggressive goals and actions. We noticed a lack of specificity in the plan, and as youth, we can’t afford to gamble on the will of future politicians to carry out a vague plan. Specific metrics are necessary. Also, some of the points in the plan are not aggressive enough. In order to protect our futures, carbon neutrality by 2050 is not enough. If, as the 2018 IPCC report mandates, we achieve carbon neutrality by 2050, we will have only a 50% chance of stopping the worst effects of climate change. For young people who are facing these effects, a 50% chance is not enough. In addition, carbon neutrality by 2030 must be on a global level, which means that when equity (developing countries) are taken into account, highly developed places like Northampton must cut carbon emissions even more. For these reasons we would like Northampton’s goal to be carbon neutrality by 2030. We understand that people have called this goal unachievable or aspirational, but the truth is that we must do whatever it takes to hit that goal, whether it currently seems achievable or not, because the goal is what we must meet in order to fight extinction. We want Northampton to lower its pledge of carbon neutrality to 2030, and have actions to support that goal in the plan. We would like to see a timeline detailing the specific steps that will be taken.

In addition, the plan must recognize that we need new resources in order to reach the high goals mentioned in the previous paragraph. For example, the report should recommend an expansion of the current Energy Office...
staffing. The goals that we need are ambitious, and the response should not be to lower the goals to those that we think are “achievable,” but rather to mobilize and raise our ability to achieve goals that will save lives. With the current system, this does not seem possible, so considerable new resources must be allocated.

Finally and possibly most importantly, we think that the current plan fails to adequately acknowledge climate justice. For instance, the words “frontline community” or “frontline communities” are mentioned 0 times in the entire 97-page document, and “people of color” are only mentioned twice. People of color, low-income folks, disabled people, and other disenfranchised groups are disproportionately affected by the climate crisis and yet have contributed to it the least. Climate justice needs to be a top priority of any climate action plan. While we were glad that these groups were addressed in the current plan, we would like to see more of an emphasis on frontline communities and more explicit actions taken to support them.

We are grateful to grow up in such a great city as Northampton, and we hope it will continue to live up to its progressive reputation by protecting our futures. As young people scared for our lives, we are lucky to live in a community that is fighting alongside us. Northampton is in a position to take a leadership role and show other cities how to treat climate change as a crisis and take effective action. However, we still have not seen the city acknowledge the urgency of this crisis.

Moving forward, we’d really appreciate it if we could be looped in and involved in revisions of this plan and future climate-related projects. The youth provide a perspective that can be valuable to this process, and really need to be heard and listened to. We understand that we’re coming to this from a position of less experience with this work, but we also, as you know, are the ones who will be experiencing the worst effects of climate change. Sunrise is an organization that is founded on representing youth voices, and us all working together is an opportunity to begin an intergenerational dialogue that is invaluable to the cause. It’d also be an opportunity for Northampton to be a leader in comprehensive and inclusive climate resiliency.

Best,

Saraphina Forman, age 16
Willa Sippel, age 17
Jordan Winsor, age 17
Co-coordinators of Sunrise Northampton
sunrisenorthampton.org
November 21, 2019

Dear Members of the Northampton Energy and Sustainability Commission,

We are part of the Northampton citizens group Succeeding Without Additional Pipelines (SWAP) that has worked over the past several years with a larger Valley-wide coalition, the Columbia Gas Resistance Campaign, to oppose all new Columbia Gas infrastructure, raise alarm over dangerous gas leaks in our community, and advocate for a swift and just transition from reliance on dangerous fracked gas to the adoption of efficiency measures, clean energy, and conservation. We wish to weigh in on Northampton’s draft climate plan which is currently under review by the Northampton Energy and Sustainability Commission.

First, we commend NESC for taking its role very seriously in reviewing the draft plan at this critical moment in human & climatic history when dramatic reduction of global greenhouse gases over the next 10 years will determine whether or not we avoid catastrophic and irreversible tipping points for climate change. This advisory work is perfectly consistent with your mission described in the City’s charter; your diligence in developing a plan that reflects our city’s clearest and most urgent climate priorities has never been more important.

From our perspective, the current draft plan does not adequately acknowledge the outsized contribution of natural gas to Northampton’s total carbon emissions, or provide aggressive, research-based solutions including specific goals and timelines for swiftly moving our community away from its single biggest source of atmospheric pollution.

Natural gas has an outsized contribution to greenhouse gas (GHG) emissions

On p. 39/40, the Plan states, “Natural gas used in building heating and hot water is the primary source of emissions from stationary sources” creating 128,770 metric tons of CO2 in 2016. This in fact represents 45% of the city’s entire CO2 emissions according to the chart on p.40.

However, the GHG emissions of natural gas in Northampton are likely significantly greater. The Plan does not mention the well-documented, widespread existence of underground gas leaks in our community that emit unburned methane, CH4, a far more potent GHG than CO2. According to public records provided by Columbia Gas and mapped by the organization HEET, there have been over 500 gas leaks in Northampton reported by Columbia Gas between 2014-2018 alone, many left unrepairred for years, even decades. Worse, a Fall 2019 professionally conducted, independent survey of gas leaks in the South St. neighborhood of Northampton found twice the number of gas leaks as reported by Columbia Gas, indicating that gas leaks are far more prevalent than public records indicate.

A 2015 peer-reviewed study of gas leak rates in the Boston area--with similarly aging gas infrastructure as Northampton--found that 40% of its gas pipelines were leak-prone, creating an
average leak rate of 2.7%, and with emission levels 2-3 times higher than that reported in the state GHG inventory.

All this suggests that pollution from natural gas may very well exceed 50% of all of Northampton’s GHG emissions. Given this reality, we believe that addressing our gas pollution problem merits much greater attention in our city’s climate plan.

Bolder solutions needed for transitioning from gas

Northampton requires solutions that would markedly transition our building stock away from natural gas dependence. We strongly support energy efficiency measures mentioned in the Plan on p.62 such as Net Zero Energy (NZE) requirements for new buildings and strengthened building codes, but are concerned that a 5-10 year “phased approach” is not aggressive enough given the urgency of our climate crisis. Following the lead of other communities around the region, nation, and world that are adopting strict NZE by-laws, we recommend that Northampton study these examples and swiftly pass its own NZE ordinance that would take effect in a shorter timeline.

On p. 61, the Plan states with enthusiasm “Underway!” regarding the 2017 HeatSmart Northampton which utilized volunteers to encourage homeowners, landlords, and businesses to acquire air source heat pumps as a way to reduce gas consumption. It continues, “Consider building off and expanding the existing HeatSmart Northampton program”. However, the level of the program’s success is not quantified in the Plan, and the steps, timeline, and partnerships for expanding the program are vague. Finally, we question whether this one-by-one approach is sufficiently scalable to manifest dramatic, widespread conversion of heating and cooking systems away from gas.

Recommendations

We believe that Northampton needs to be actively studying, lobbying for, piloting, and preparing our community for a much grander transition from gas while continuing to expand HeatSmart. For example, a recent study to examine the feasibility of replacing aging gas infrastructure in MA with street-scale, geothermal systems found the concept extremely promising from a technical and economic perspective. Consequently, one MA gas supplier, Eversource, has agreed to pilot the “GeoMicroDistrict” heating and cooling system in three locations. We believe Northampton should approach Columbia Gas to explore similar piloting in our service area. If, for example, gas utilities themselves shifted from supplying gas to installing and maintaining ground-source heating and cooling systems, this would have a massive impact on our emission levels.

We believe Northampton’s climate plan must recommend creation of a Gas Transition Task Force that works doggedly and speedily to 1) create replicable, municipal policy and protocols to hold gas suppliers responsible for fixing all gas leaks in our community, 2) research, pursue, and lobby for viable options, including legislation, to assist, above all, in the equitable, systems-level
transformation away from natural gas, and 3) present recommendations to the City for transitioning Northampton from gas that includes metrics, goals, and timelines.

Sincerely,

Lilly Lombard
Marty Nathan
Susan Theberge
Reed Schimmelfing
Susan Voss
Molly Hale
Renna Pye
Chris Pye
Bill Diamond
Vivienne Simon
Nick Warren
Elliot Fratkin
Maureen Flannery
Grow Food Northampton’s mission is to promote food security by advancing sustainable agriculture in the Northampton, Massachusetts area.

November 22, 2019

Grow Food Northampton appreciates the opportunity to submit these comments on the draft Northampton Climate Resilience and Regeneration Plan (NCRRP). In general, the plan is comprehensive in scope but short on specific strategies for implementation, with many instances of plans to make plans. We believe this plan will remain an abstraction without the inclusion of specific targets, metrics, and evaluation strategies. We are also concerned that the City’s stated goal of carbon neutrality by 2050 is not adequate to address the urgent climate emergency, in which drastic cuts to emissions must occur in the next ten years to sustain any hope of avoiding the most dire climate-tipping scenarios.

We would like to see concrete activities and the commitment to strategic partnerships spelled out in this report. Grow Food Northampton sees ourselves as a key partner in Northampton’s work to build climate resilience; in that spirit, we offer the following proposals to foster a more resilient and just local food system:

**Increase local food production:**
- Promote more local food production through home gardening and community gardening.
- Create more opportunities for “help yourself” gardens or other forms of public access gardens and food forests.
- Support development of community kitchens that can support small entrepreneurs, and offer opportunities for community residents to learn food preparation and preservation skills.
- Develop school/community gardens that function as teaching and learning spaces during the school year, and that are cared for by local residents who will benefit from the produce during the summer.

**Increase use of, and access to, local food**
- Continue to support and grow Northampton’s robust Farmer’s Market and CSA scene by increasing access to city land, promoting the markets, and reaching out to residents to
ensure that they are aware of SNAP and HIP subsidies that increase their buying power and support local farmers at these venues.

- Create supports and incentives for government agencies, schools, churches, and businesses and other institutions to use local food as much as possible.

**Foster access to land by food growers:**

- Assess available open land for possible agricultural use that is congruent with the goals of this plan.
- Develop supports, incentives and opportunities for new farmers to acquire land.

**Promote sustainable land care practices:**

- Sustainable land care adds to pollinator health and diversity that is critical for our local food system.
- Encourage/incentivize homeowners and homeowner associations to transform lawns into food gardens, meadows, pollinator habitats, or native plant gardens. This can reduce or end the use of polluting leaf-blowers and lawn mowers, and other unsustainable and damaging practices and products that harm native species.
- Manage disturbed land threatened by non-native species that threaten to overwhelm food-producing land.
- Commit to sustainable, organic methods to care for public land.

**Engage in productive conservation:** Grow Food Northampton, Sawmill Farm and the Regenerative Design Group planted elderberry along a section of the Mill River. Elderberry is an underutilized crop that can stabilize floodplain soils and be processed into several value-added products. This is an attempt to develop cost-effective methods of establishing farm-scale elderberry plantings by addressing the four main costs: weed suppression, fertilizer, irrigation and labor. If successful, these projects will provide regional farmers with perennial models that are economically and ecologically sustainable.

**Offer educational opportunities:** Supported by a state earmark, Grow Food Northampton provides workshops and field trips to K-3 public school students in Northampton. Kids learn where the food comes from, and learn skills to both grow food and prepare dishes using local, sustainably grown produce. Many adults in our community would benefit from the same opportunity. Grow Food Northampton can envision many fun and productive strategies to bring folks together to learn about local food and the local food system.

**Build community.** One of the most powerful lessons in starting a community garden is that staking the plots and preparing the land is the easy part, and building community is the most important part. Community Gardens are microcosms of cooperation, support, information and skill-sharing, and cooperation around local food that could be a useful model for this plan. We see many opportunities in the plan for grass-roots participation and collaboration by neighbors at the block and neighborhood level, within local institutions like schools and churches, as well as in the community at large.

**Decolonize the food system.** Our current corporate food system is rooted in a capitalist paradigm that privileges those with wealth and access, and punishes those without it. This system is built on the labor of poor people, often people of color, and on land stolen from
indigenous people. It is a system rooted in profit for a few, not health or community well-being. It reduces biodiversity and employs methods with among the highest carbon footprints of any industry, leading to many negative health impacts, especially for those who work in that system. It is a system that has erased the knowledge, skills, histories and cultures of people who farmed local land in ways that maintained the health of people and the environment. Food justice and environmental justice are inextricably linked. Our hope is that the City of Northampton will center the voices of those who are most marginalized and harmed by climate change.

Thank you for the opportunity to comment on this draft plan. Grow Food Northampton looks forward to the opportunity to partner with the City of Northampton in the work of building climate resilience in the Pioneer Valley.

Pat James
Interim Executive Director, Grow Food Northampton
413-320-4799 EXT 103
pat@growfoodnorthampton.com
These comments on the draft Northampton Climate Resilience and Regeneration Plan (NCRRP) are submitted on behalf of Climate Action Now, Western Massachusetts (CAN).* Specific comments by section are inserted into a pdf copy of the NCRRP draft separately provided (see document named “CAN comments on NCRRP draft plan 8 20 19.pdf), with general comments and other suggestions provided below in this document.

The NCRRP draft (hereafter referred to as the “Plan”) presents an admirable set of aspirational goals for Northampton and reflects a great deal of time and dedication on the part of city staff. The Mayor’s proclamation that Northampton will become carbon neutral by 2050 is inspiring and consequential.

However, the Plan should acknowledge that we are in a state of climate emergency with the IPPC having announced the next 11 years as the most critical in reducing carbon emissions to avoid tipping points after which we face much more grave consequences. The Plan therefore needs to establish targets for achieving rapid progress, with scheduled assessments to assure that we are achieving them. If the goal is carbon neutrality by 2050 (in 30 years) then we should be well over half way to our goal by 2035. The IPCC recommends overall emissions elimination of 45% by 2030, which is acknowledged in the Plan on page 45. The Plan then presents “Low-Case, Mid-Case and High-Case” GHG emissions projections on pages 45-47 but disappointingly does not commit to achieving the “High-Case” scenario, which is the only one that achieves the necessary 45% reduction by 2030. We recommend that a firm commitment be made to achieving this goal.

The Plan needs to specify what metrics will be used for measurement of our progress in each sector. For each proposed measure, the timeframe for achievement should be given in years (rather than the short, medium and long-term designations). The absence of clear metrics and timeframes gives the impression of weak commitment to the achievement of these goals.

In addition, the plan should give recognition to the fact that achieving our ambitious goals will take massive commitment and coordination at the municipal, state, regional & federal levels, and that a municipal action plan is an incomplete but necessary piece of a larger campaign.

The current draft of the Plan does not distinguish between actions that a municipality can undertake under current laws and regulations, and those that require advocacy to change state policy to achieve. The categories for action that require changes in state law or state building codes should clearly acknowledge that municipal strategies need to consist of persuasive and determined advocacy. In those cases, the Plan should specify what mechanisms for advocacy will be explored (municipal resolutions, letters to state...
officials, communication with legislators, endorsement of legislation, communication with the Governor, efforts within regional agencies, efforts within the Massachusetts Municipal Association etc.)

Those categories for action that are possible to achieve municipally (e.g. via zoning changes) should be clearly delineated.

In the Summary Table (pages 11-17) the column that includes categorization of ‘policy, program, capital improvement’ etc. should be replaced with one containing information about what categories of actions are needed e.g. city council ordinance or order, zoning change, advocacy for change in state law or regulation etc.

Regarding the health of shade trees and forest, we wholeheartedly endorse the comments of the Shade Tree Commission and have refrained from making many other comments in these sections.

Other specific suggestions:

In the Energy section we suggest adding a strategy of outreach to community members and landscapers to eliminate the use of gas-powered leaf blowers and mowers.

In the Energy section we suggest adding a strategy of requiring energy audits as part of permit applications for any building renovations/additions.

In the Energy section we suggest adding a strategy of providing city incentives for farmers in the floodplain to plant perennial crops, minimize tilling, and use other methods to stabilize soil and increase its ability to absorb flood waters. This would decrease flood danger and provide an example for other farmers.

In the Waste section, we suggest adding a strategy of reducing the source of waste by eliminating disposable plastic bottles, packaging and Styrofoam via ordinance. We suggest a 1-year timeframe for eliminating Styrofoam and single use water bottles, and 2-3 years for packaging.

*The CAN Steering Committee members who are residents of Northampton include: Marty Nathan, Adele Franks, Susan Theberge, Sharon Moulton, and Tina Ingmann.*
November 26, 2019

Dear NESC Commissioners,

As concerned citizens of Northampton, we wish to bring to your attention a greenhouse gas that is not addressed in Northampton’s draft climate plan: Nitrous oxide (N2O) that is primarily emitted by the agricultural sector with the application of synthetic fertilizers.

According to the EPA here and here, N2O has a global warming potential 265–298 times that of CO2 for a 100-year timescale. It represented 6% of total global greenhouse emissions in 2017, and N2O emissions from soil in the US grew 5.8% since 1990. According to the 2019 IPCC Climate Change and Land Special Report, agriculture, forestry and other land use activities accounted for 82% of human-made N2O emissions between 2007-2016, with “anthropogenic N2O emissions from soils primarily due to nitrogen application including inefficiencies (over-application or poorly synchronised with crop demand timings) (high confidence).”

It is generally assumed that the majority of agricultural land in Northampton (eg “the Meadows”) is farmed with, among other things, the application of nitrogen fertilizers for annual crops. Educating, training, and incentivizing farmers to reduce synthetic fertilizer, and employ methods such as nitrogen-fixing cover crops, long fallows, and compost application--all of which help sink carbon into soil, as well as build soil health and integrity--could help reduce our contribution of atmospheric pollution.

Because Northampton farmers will likely continue to grow annual crops, we believe that transitioning to more sustainable crop-growing practices will help forward our urgent climate goals by 1) requiring less energy in production, harvesting and delivery 2) sinking carbon in soil and improving soil health, and 3) avoiding ecologically devastating eutrophication (algal blooms) in our waterways and N2O pollution due to overapplication of nitrogen fertilizers.

We recommend that, before the plan is finalized, Northampton form a task force that includes farmers and studies the myriad positive and negative impacts our farms have on greenhouse emissions; pursues best practices, innovations, and solutions; and recommends policy, partnerships, and timelines for transitioning our community to viable, low-carbon, ecologically sound farming methods.

Sincerely,

Dale LaBonte
Dave Roitman
Susan Roitman
Seth Wilpan