



**Hingham
Climate Action
Planning Committee**

Minutes of meeting July 13, 2022

DATE: July 13, 2022
PLACE: Remote meeting via Zoom
MEMBERS PRESENT: Brad Moyer (Chair), Elliott Place, Beth Porter, Gary Tondorf-Dick, Alyson Anderson, Tom Morahan, Nancy Wiley, Kathy Reardon
MEMBERS ABSENT: Bob Hidell
INVITED GUESTS: Brianna Bennett, Virginia LeClair, Tanya Bodell, Madison Collins (HNZ intern), Carlos DaSilva
ATTACHMENTS: Energyzt Hingham Climate Action Plan Buildings Discussion

Agenda Item 1: Discussion of commercial/industrial and residential buildings: possible grants and incentives, alternative approaches for building decarbonization.

Energyzt's Consultant, Tanya Bodell, outlined 6 primary categories used in most Climate Action Plans:

Transportation, Buildings, Energy, Natural Resources, Community and Waste

In the previous meeting we discussed Transportation. This meeting focuses on buildings.

Tanya pointed out that decarbonization of buildings is the biggest challenge we face. She also reminded us that we need to consider feasibility (social, political and commercial) in making Hingham's Climate Action Plan.

A **property chart** showed that Hingham buildings currently are heated primarily with oil, some with natural gas, fewer with a combination of oil and gas and very few with all electricity.

A MassCEC: Clean Energy Home slide depicted ways that buildings can be decarbonized.

Tanya noted two categories of decarbonization: **thermal electric** (e.g., heating and cooling of buildings) and the **building envelope** (building materials, weatherization etc).

Three potential CAP recommendation categories: Energy Efficiency (building envelope), Appliances/HVAC (electrification or other technologies), and Building Codes (for full summary of ideas for each category, based on CAPC discussion, see attachment)

Energy efficiency (reducing the existing carbon load) Discussion:

The role of the Mass Save energy assessments (only for houses with gas) vs Energy New England (HMLP is a partner) which does assessments for gas and oil. Gary asked how could energy assessments be converted to an implementable plan for house owners. Tanya commented that this is important but CAP is not a technical document.

Brad: What efficiency standard we want to reach & how can we coordinate standards with Mass Save & HMLP?

Madison Collins: CAP should consider the manufacturing process for building materials (embodied carbon output) as well as operational carbon out from building use.

Gary recommended a **checklist scoring building materials** for their carbon impact. Gary also recommended **education for building options**: upcoming specialized stretch code and passive house design certification for which Mass Save has incentives.

Maria: Homeowners of old houses need guidance to find feasible means to reduce their carbon load.

Tanya: suggested a **table of Hingham houses categorized by age** with different efficiency expectations for each category. Gary also mentioned that there are a lot of teardowns and the rebuilds involve new materials with embodied carbon output.

Gary: We need educational resources, seminars and information possibly through a Town website. He also noted existing programs in the building industry that include checklists.

Brianna: HMLP has a contract with Abode that includes access to a participating contractor list. The CAP could recommend continuing this program.

Ginny: Noted that the Rocky Mountain Institute has collected data for communities in MA including incentives and policies for sustainable buildings.

Nancy Wiley: Townhouses with gas cannot use Mass Save. Need more information to take advantage of this program.

John Borger: Recommended organizing a Homeowners Association and find out how to qualify through this organization. **Nancy Wiley will look into this further.**

Gary recommended a **resource directory of design & engineering professionals** to inform building owners about costs and alternatives. Beth added that perhaps these professionals should apply to qualify for this list.

Tanya: Does HMLP have a surcharge to help fund information programs or it is considering one? Brianna commented that this idea needed refining: may need a “willingness to pay survey”

and considering Opt-in option vs. Opt-out option. Brianna also said that legally there needs to be explanation on the electric bills. Brad voiced **concern for equity** in this decision (raised rates for everyone, but the benefit might go to wealthier homeowners with larger houses).

Appliances and HVAC (alternative technologies etc) Discussion

John Borger: There are 7212 houses in Hingham. It would take 17.5 years at the rate of 412 heat pumps per year to reach full conversion by 2040.

Outreach to contractor community: John Borger: emphasized need for outreach and education for the contractor community, including handouts when HVAC permits requests are submitted. Contractors should be prepared to offer their customers non-carbon alternatives. Suggested collaboration with Mike Clancy and inviting him to a CAPC meeting (**Gary will call him**). John (?) also recommended joining with regional and state initiatives in a Contractor Outreach Program. **Nancy:** agrees for the need for outreach & education for contractors.

Brianna: HMLP pays Abode for a contract list and is working with Abode to add to the list. Abode also checks in to make sure they are doing a good job.

Brad: Recommends we continue with Abode for this service.

John: We need much more information available specifically about heat pumps.

Discussion of Solar Arrays:

Tanya: Asked about HMLP's current thinking about solar arrays: encouraging installations of solar arrays, net pricing and back-up storage? Is HMLP ready to play a larger role?

Tom Morahan: HMLP offers a rebate up to \$6000 (\$.60 per kwh) for solar installations and pays customers for energy (\$.09 per kwh for systems under 20 Kw). A typical system installation costs around \$20,000.

Brad: We need to reduce initial costs. Noted that investor-owned utilities are required to pay the going price to solar energy sources. Asked also about the "right to generate power" – solar company installs a solar array for nothing and sells the power.

Tom: HMLP can now buy green power at 7 cents per kwh.

Tanya: Is a solar developer precluded by law from selling power through a power purchase agreement? Tom's answer is "yes".

John B: Sees rebates and incentives as an ongoing discussion between CAPC, the Town & HMLP. Also notes that the federal government is the largest purveyor of solar incentives. Uncertain this will last if not renewed.

Brianna: The State of Mass. has the option to adopt the PACE (Property Assessed Clean Energy) program to finance clean energy. HMLP sees advantages in this program because it allows long

term financing for homeowners. The CAP could include a recommendation to adopt that program. Hingham is hopefully going to adopt a commercial version of that program.

Kathy: Given the need for increased electrical capacity as more and more vehicles and buildings become electrified, shouldn't we also focus on local renewable energy production within the town as well as purchasing green energy from outside?

Battery Storage:

Tanya: What about battery storage? Tom: HLMP has no current program for this. A Demand Response Program is being considered through Energy New England (would include fossil fuel generation as well).

Tanya: CAPC will need have further detailed conversation to determine a recommendation.

Overall, HLMP, the Town and CAPC will need to continue to work together to reach our goals.

Building codes – Discussion

Tanya: Hingham is a Green Community and adopted the 2018 Stretch Code

John Borger emphasized that there is relatively little new development vs. existing houses in Hingham and that the current Stretch Code applies only to new construction. However, a phase 2 more stringent Stretch Code is in the works for Green Communities to consider adopting.

CAP could recommend tracking the code. Or could recommend that the Town adopt a more stringent code at next Town Meeting in 2023. **John B. will provide more information to the Committee.**

Gary: Hingham needs information about impact of a stricter Stretch Code particularly on older houses. The current Stretch Code is difficult to meet already. A stricter code should apply just to new construction. CAP should provide technical information. Tanya: concerned about too much technical information that can go out of date. Maybe a link? **Gary will provide more information.**

Madison: can we limit house sizes since they lead to more energy consumption?

Tanya: maybe include this in our survey? Controversial.

Gary: Commercial buildings are subject to a lot coverage by-law, so far residential buildings are not. This has been discussed and rejected but will be brought up again by the Planning Board.

Kathy: Are we creating a staged plan with 5 or 10 year goals?

Tanya: Makes sense to have milestones and use a gas inventory to assess progress.

Brad: Need short, mid and long-term goals to react to changing technology and regulations.

Discussion of impacts on historic houses.

Kathy: At some point we need to deal with the challenges for historic houses.

John B: It is important to consider the historic house inventory and assess impacts & debate tradeoffs and perhaps include historic inventory data in the plan

Maria: Historic house owner may want to modernize.

It was noted that many historic homeowners are not wealthy and need realistic options.

Brad: There could be preapproved realistic climate friendly options for historic houses.

Gary will send Brad contact information to invite representatives from the Historic District Commission and Historical Commission to attend the next CAPC meeting.

Other items under Building Codes were postponed to next meeting. However, there was discussion regarding the question of **new gas hook-ups and oil tank installations:**

John B: Hingham does not now have authority to prohibit new fossil fuels installations

Gary: There is no current technology to meet the temperature requirements for hot water.

Tom: Electric heat is too expensive and requires too much power.

Tanya: Recommends a phased approach. Focus on fixing gas leaks in the short term.

Ginny: Mentioned Green New Deal BlocPower (Ithaca NY) as a comparison.

John B: Need to focus more on “carrot” than “stick”. Make options attractive and economically feasible.

Tanya: Suggested we consider incentives for multi-unit building? Maybe in the survey?

Brianna: Has been charged with looking into per unit incentives and increasing new technology accessibility for renters.

Tanya: Mandates appear not to be the way for Hingham to go. Hopefully survey will help us build consensus.

Agenda Item 2: Topics for media outreach: Resolution approved unanimously by voice vote on Zoom

Resolution: Resolved, that the Committee authorize the Hingham Community and Regional Engagement Working Groups, on behalf of the Committee and in the Committee's name, to oversee, develop, approve, and publish, after consultation with the Chair of the Committee, engagement and outreach pieces in whatever media channels the Working Groups deem desirable, relating to the following four topics:

- 1. Ten Things to Know About How Hingham is Currently Addressing the Climate Crisis*
- 2. What is Hingham's Climate Action Planning Committee?*
- 3. What Is a Climate Action Plan? The Essentials*
- 4. Why Is It Important for You to Contribute to Hingham's Climate Action Plan?*

Agenda Item 3: Planning for next public engagement session: targeting September. Program and Date will be set at the next meeting.

Agenda Item 4: Report on Gary's conversation with A.W. Perry

Gary reports that he had a very substantial discussion with A.W. Perry owner, Susan O'Day, and A.W. Perry's commercial and residential property managers regarding A.W. Perry's efforts to reduce carbon emissions from its commercial and residential operations.

A.W. Perry's Master Plan is being reevaluated because of COVID and a 3-year planning project is underway to initiate sustainable energy conservation. Most efforts so far relate to building envelope and system upgrades. Meeting Stretch Code requirements is a challenge especially in weatherization of buildings 50 or 60 years old. Most progress can be made when buildings are re-tenanted. Other challenges are the cost of heat pumps, and rewiring buildings. As a major land and building owner in Hingham, A.W. Perry is interested in more information and discussion. **Gary will invite representative from A.W. Perry to next CAPC meeting.**

Brad: Hopefully A.W. Perry can serve as a conduit for information to other businesses.

Agenda Item 5: Review of updated HMLP benefits and partnering with Abode Energy for air source heat pumps. Presented by Brianna.

HMLP has an annual contract with Abode. Satisfied with their service.

HMLP's current heat pump rebate is \$750 per ton of capacity up to \$4,500. Then, we have two adders. Customers can get a \$500 adder for weatherization and another \$1,000 adder for a whole home heat pump system (which is when they would attest that their heat pump can meet 100% of the building's load).

Brad: how do we translate these rebates and costs to apply to specific houses?

Brianna: Costs and benefits vary according to individual houses (particularly by age). HMLP is focusing also on weatherization and solar energy to reduce energy use.

MassSave agrees incentives that go up to \$10,000 for a whole house conversion are enough to influence a switch. HMLP continues to solicit feedback and provide information.

Abode has offered to participate in a public meeting or attend a CAPC meeting. Brianna also suggests that Abode put on a webinar that would focus on heat pumps. Bill Branton might also speak on energy assessments.

Question asked re: HMLP relationship to Energy New England? HMLP already is a part owner.

Agenda Item 6: Updates from various working groups created by the committee. None

Agenda Item 7: Other Business. None.

Agenda Item 8: Review of Minutes of Previous Meetings: postponed to next meeting.

Agenda Item 9: Discussion of possible agenda items for next meeting and scheduling of that meeting.

Plan next public engagement meeting

Finish Buildings discussion,

Invite A.W. Perry

Invite Historic Districts Commission and Historical Commission representatives.

Also invite Mike Clancy, Building Commissioner.

Next Meeting: August 3 at 7pm on Zoom:

Meeting adjourned at 9:45pm

Respectfully submitted, Kathy Reardon (CAPC member)