

CPAC Meeting

October 14, 2021

Present: Melissa Chan (chair), Steven Nutter (vice chair), Keren Schlomy, David Rabkin, Keith Giamportone, Rosalie Anders, Julie Wormser, Jerrad Pierce, Trisha Montalbo, Lyn Huckabee, Paula Phipps, Ted Live; *staff*: Susanne Rasmussen, Seth Federspiel, John Bolduc

Guests: Ann Stewart, Kanako Iuchi, Melissa Ludtke

ETP Director's Report

1. Blue Bikes
 - a. Seeing their heaviest use to date—primarily due to MIT as bikes are filling up stations near campus.
2. EV charging stations
 - a. Cambridge is currently piloting siting chargers in street locations. Have identified 4 locations, adjacent to parks. There is a lot of interest (and email) on this. The project also involves retrofitting electrical boxes to ensure there's enough capacity and adding bollards around charging equipment
 - b. River Street reconstruction incorporates EV charging stations as part of the project
 - c. Cambridge needs to decide how far city will go to become a 'fuel source' for private cars
 - i. This will be addressed as part of the Net-Zero Action Plan on Transportation—Cambridge is currently working with a consultant to finalize the scope of this analysis
 - ii. Currently, Cambridge provides infrastructure, but charges the cost of electricity, plus a 'session fee', for use of the charger (plus applicable parking fees)
3. Application for ARPA funds
 - a. Cambridge has submitted an application for federal stimulus funds linked to Covid. Proposal is to increase funds for a home improvement program (HIP) to support low-income property owners with renovations. Cambridge is planning to use this to encourage energy efficiency and renewable energy upgrades through grants (as opposed to loans).
 - b. Due to the MA constitution, Cambridge cannot use city funds for "private betterment"—that is, to improve private homes or businesses—but can use federal funds
4. BEUDO amendments
 - a. The City Council has asked that amendments on the Building Energy Use Disclosure Ordinance be submitted; targeting draft language by Nov. Amendments are to address reducing emissions to 0 by 2050.

Net-Zero Action Plan (NZAP) Letter (David, Keith)

David, Keith, Peter, and Tom have been working to draft a letter on the 5-year review and updates to NZAP. The letter is intended to focus on what they think will help Cambridge meet its long-term goals. However, they have encountered a number of questions and are missing some information.

5. BEUDO (Building Energy Use Disclosure Ordinance) is viewed as the single, most important action to help the city reach its targets. Need to better understand what BEUDO is doing on building size and labs, as well as roll-out dates.
6. Open questions
 - a. References to affordable housing need more precise language—for example, need to better define whether affects buildings that are 100% affordable housing, or buildings with affordable housing units but that are < 100% affordable housing
 - b. Need to highlight greening of the electricity supply more strongly, and to note aspect of moving away from RECs (renewable energy certifications) vs. buying green power directly and/or investing in RE (renewable energy) projects
 - i. May need to also address conflicting information whether RECs do or do not lead to reduced emissions
 - c. What are the implications of the adder? How does this differ from RECs vs. direct investing?
 - d. Converting / upgrading equipment to improve efficiency or eliminate fossil fuel use will be challenging, so Cambridge will need to figure out incentives and provide financial support. This can be through Cambridge Energy Alliance programs, but these programs will need support. Otherwise, it will be hard to reach conversion goals.
7. BEUDO
 - a. Cambridge and Boston adopt different approaches. Boston requires a reduction according to the amount of CO2 being emitted. Cambridge requires a continuous reduction by percentage.
 - b. Cambridge uses an average of emissions from 2018 and 2019 as the default baseline; a building can choose an earlier year as its baseline, but will then need to achieve higher reductions from the baseline in order to be on the same trajectory towards zero.
 - c. Within the Massachusetts framework, Cambridge can issue fines for not submitting a report, not meeting a target, etc. Fines are defined by MA as \$300 per offence per day.
 - d. The ordinance amendments are considering alternative compliance payments for those who cannot meet requirements; funds would go to the city to reinvest in GHG-reducing activities (subject to MA constitution constraints).
 - e. Cambridge is considering 7-year (as opposed to 5-year) compliance cycles for affordable housing and labs. This just gives them a longer timeframe to meet targets, but still holds them to the same reduction trajectory and requires that they pay the same non-compliance fines.
 - i. The longer time frame would allow labs to invest in larger, longer projects, and allow affordable housing more time to accumulate funds.
 - f. BEUDO in Cambridge requires renewable energy purchases demonstrate investment in new capacity. RECs associated with past investment / existing generation are not permitted. By contrast, Boston's BERDO (Building Energy Reduction and Disclosure Ordinance) allows MA Class 1 RECs for renewable energy purchases.
8. Aggregation
 - a. Cambridge is currently working on an approach for the city to invest in the construction of new renewable energy capacity through a PPA (power purchase agreement). This would cover electricity consumption by the city's municipal operations.

- b. The plan is to invest the added funds with Cambridge's purchase
 - c. Cambridge is also working on a long-term strategy to wrap aggregation into a RE project, but needs to be cognizant of risks.
9. Carbon fund
- a. This is an investment mechanism to help achieve NZAP goals. Buildings can contribute to fund (e.g. through alternative compliance payments) and enable GHG reductions elsewhere.
 - b. Cambridge is considering merging with the aggregation program, as well as adding community investments in clean energy beyond RE purchasing. This would give individuals opportunities to invest. In the longer term would roll into the Energy Redevelopment Authority.
 - c. NZAP will continue to investigate options. Will eventually vet with legal team to figure out exactly what's permitted within MA laws, but do so later.
10. BEUDO thresholds
- a. BEUDO applies to commercial buildings greater than 25,000 sq. ft. and residential buildings with 50 or more units. Cambridge chose this cut-off because commercial buildings are key contributors to GHG emissions but don't want too many buildings from an administrative standpoint.
 - i. The City of Cambridge applies a 10,000 sq. ft. threshold for its buildings
 - ii. Boston uses over 35,000 sq. ft. for commercial buildings and 35+ units for residential buildings
 - b. This threshold covers ~1,100 out of ~13,000 buildings in Cambridge. Cambridge is updating analysis to determine what fraction of emissions BEUDO will cover. (Previous analysis estimated 70% of emissions.)
 - c. For non-BEUDO buildings...
 - i. Smaller buildings will be targeted at time of sale / renovation / lease (but not on calendar year)
 - ii. New buildings have separate emission requirements
 - d. NZAP also has a provision to review effectiveness of amendment after the first compliance cycle. Requirements, including the threshold, can be adjusted at that time.
 - e. Question: What about 'crappy' buildings that are not worth renovating?
 - i. BEUDO has the option to comply on a campus basis (e.g. university, affordable housing, etc.) rather than on a building-by-building basis. Campus owners would need to demonstrate that buildings meet the target in aggregate.
 - ii. However, there is no virtual campus option
 - f. Question: Is there any support for individual homeowners? Even if they have the funds, they may not know how to renovate.
 - i. Cambridge has programs to give homeowners advice (e.g. the Clean Heating and Cooling Program)
11. Circling back on drafting the letter
- a. Seth needs to deliver BEUDO amendments to the City Council shortly, along with NZAP
 - b. David, Keith (and Peter and Tom) currently don't have what they need, but will sit down with Cambridge staff to discuss the letter.

- c. The letter will likely need to go to the City Council before CPAC's November meeting. Julie proposes giving the proxy vote to the sub-group to complete the letter; Melissa seconds and the committee agrees.

Resilient Cambridge Plan – skipped; will address another week

November CPAC Meeting – Meeting is currently scheduled for Veteran's Day. John will send out a Doodle poll to reschedule.

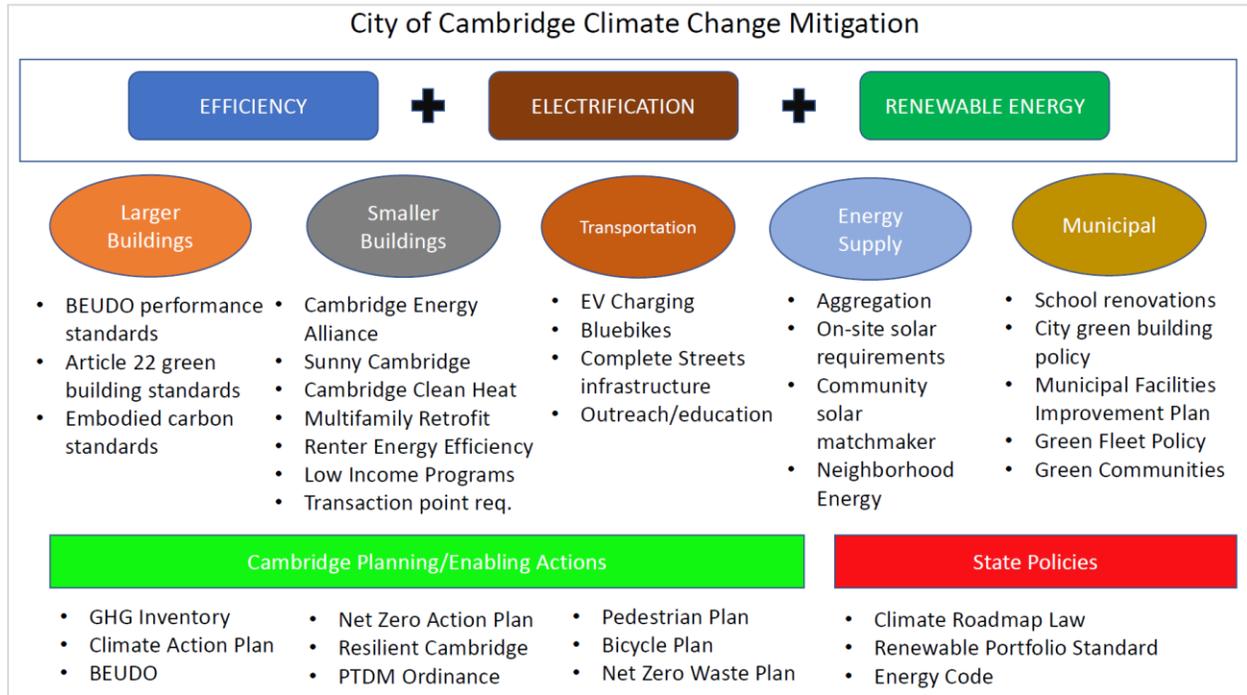
Approval of September Minutes

- 12. Feedback
 - a. Jerrard – one bullet point talked about “closer neighborhoods” to address resilience, but not clear what this means. Denser buildings? More tight-knit communities?
 - i. Answer: It's about social resilience and social connectedness
 - b. Keren – “QC” should be “QZ” for Quinton Zondervan
- 13. David moves to accept; committee approves

CPAC Schedule and Process (John)

- 14. John posted 2021 minutes on-line
- 15. John created slide to show the big picture on climate change-related activities the City of Cambridge is working on; descriptions are in a separate file
 - a. Three-legged approach: increase efficiency, increase electrification, increase renewable energy supply
 - b. Work is broken down into 5 components: larger buildings, smaller buildings, transportation, energy supply, and municipal
 - i. City is aiming to lead by example, even though it represents a small contribution to Cambridge's emissions
- 16. Suggested modifications
 - a. A Gantt chart to show where things stand, what's upcoming, and what else needs to be done would be helpful (although may be hard to put into a single slide)
 - b. Could color code to show what's complete and what is not complete
 - c. Would it be possible to show the importance of the various activities? Some activities can contribute significantly to reducing emissions; others will require behavioral or cultural changes
 - i. For example, could weight by the number of decision-makers involved (e.g. the bicycle plan focuses on infrastructure; larger buildings have fewer decision-makers compared to smaller buildings, etc.)
 - d. Can this be put on Cambridge's website? More generally, can Cambridge's work on climate change be featured more prominently? It's currently hard to find.

- e. Can we export this thinking to help neighboring towns?
- f. What about the Urban Forest Master Plan, green roofs, resilience, and other initiatives?
 - i. The Urban Forest Master Plan wasn't included because Cambridge doesn't count tree canopy toward GHG emissions
 - ii. Could create a second chart on resilience...



17. Climate change communication strategy (Susanne)

- a. Cambridge is working on a communication strategy for both the website and to convey what Cambridge is doing
- b. Recently launched a MassINC poll to ask people about their knowledge and opinions about climate change in Cambridge—so please participate if you receive a phone call! Goal is to gauge what people know and identify their major concerns.
- c. Will use information to inform communication strategy and help city departments

Member Updates

- 18. Paula – Miyawaki forest is planted. Had ~100 volunteers and was a great community-building experience. (<https://bio4climate.org/miyawaki-forest/>)
- 19. Julie – Resilient Mystic Collaborative worked with Cambridge and others to map coastal flooding from a 1% storm and identify 10 spots where renovations can improve flood control. Congresswoman Clark received a \$750k earmark to better understand what renovations are needed

20. Jerrad – Where do things stand on the proposed stretch code language?
 - a. Lyn noted the code should soon be published
 - b. Expected to be 3 options: base, stretch, opt-in net-zero stretch code
21. Steven – Started first phase of the 20k sq. ft. restoration in Alewife reservation, including removal of invasive species
22. Melissa Ludtke – Congratulations to Paula and Biodiversity! The ‘urban microforest’ was the #1 vote-getter for the participatory budget cycle.

Notes by Trisha Montalbo