

City of Cambridge
Climate Protection Action Committee

Minutes
December 10, 2020

Attendees: Melissa Chan (chair), Steven Nutter (vice chair), Tom Chase (secretary), Keith Giamportone, David Rabkin, Paula Phipps, Steven Nutter, Jerrad Pierce, Fred Hewett, Keren Schlomy, Lauren Miller, Nicole Morell, Rosalie Anders, Ted Live, Trisha Montalbo, Lyn Huckabee,

Staff: Susanne Rasmussen, John Bolduc

Guests: Joel Nogic

Convened at 6:07pm

1. Review and approval of November meeting minutes. A few minor language changes were made. Huckabee moved, Peirce seconded, passed unanimously
2. ET&P Report
 - a. NZAP review session happened today – they were given annual report and CCPAC letter for review by committee and city manager
 - b. Green roof ordinance petition was put before the city council – drafted by Mothers Out Front – referred by Council for ordinance review – would require new buildings to vegetative or biosolar roof – require 100% coverage with 40% exemption for rooftop hvac – payments in lieu of compliance to go into a fund for affordable housing – no exemption for roof deck – adding to existing zoning code – hard to say if current provisions would survive. 20,000 sq ft and larger – special permit process starts at 25k+ so it may need to change.
 - c. Council adopted another petition to require new, large buildings to analyze the cost of development of 100% renewable energy versus what has been proposed
 - d. Cambridge has started story mapping – ways to describe projects online. Consultants story mapped River St reconstruction project and Grand Junction multi-use path (Gore St to the river). We are taking comments on the projects.
3. Tom Chase finishes his presentation on multifamily Passive House projects
 - a. Finch Project on Concord Ave
 - i. Received some passive house design challenge funding from CEC – needs to publish data about costs
 - ii. 0-2% incremental cost from the base design
 - iii. This was New Ecology's first MF Passive House project, but they had done some in other states prior. They are currently at 30.
 - iv. Increased costs included testing, solar shading, extra ventilation
 - v. Rebates were intended to get 1/3 to 1/2 of incremental cost
 - b. Findings:
 - i. Affordability improving incrementally
 - ii. Mass Save incentives have helped and are reevaluating incentives for 2022-2024
 - iii. Incremental Cost

Notes by Lyn Huckabee

- iv. They are seeing dramatic increase in interest
 - v. Passive House performance is 20-30% better than code because MA codes are already good
 - vi. They are currently trying to understand whether the savings can be translated into retrofit. Most of that cost comes from undoing 50 years of disinvesting. New triple decker design challenge is an opportunity to examine costs in retrofit.
 - vii. Larger (midrise) buildings with lower surface to volume ratios are the easiest to get to passive. Winthrop Square development is the first high-rise in Boston. The high-rise issues have less to do with cost than practical considerations
4. Cambridge rooftop albedo mapping
- a. Urban heat island effect due to absorption by hard surfaces. Cambridge has 60% impervious surfaces Managing the effect uses tactics like expanding tree canopy, ground and roof vegetation cover, and increasing albedo (amount of sunlight reflected by a surface back to space).
 - b. Albedo is measured on a scale of 0 to 1, essentially a percentage with 0 absorbing all sunlight and 1 reflecting all. LEED uses Solar Reflexivity Index.
 - c. Cambridge applied to American Geophysical Union's Thriving Earth Exchange to develop methodology to map the city's albedo. John reviewed the methodology.
 - d. The project was focused on change over time and what would happen when we made changed. Eventually, they would want to introduce an albedo indicator of progress in GHG.
 - e. Rooftop albedo increased (improved) over the 3-year period that they analyzed.
 - f. The map can be found [here](#).
 - g. The Committee discussed the policy implications of the mapping project and brainstormed ideas for managing urban heat island effect equipped with the information provided in the map.
5. Member Updates
- a. Huckabee - Boston passed PACE last night – discussed Cambridge's movement on the topic
 - b. Phipps –
 - i. Bio for Climate lecture next week in conjunction with WGBH. It's about oyster restoration for coastal system preservation and rising sea level
 - ii. Idea of turning urban gardens into farms – would like to discuss next month
 - c. Rabkin – Cambridge is implementing stickers on gas pumps to remind people that they are contributing to climate change every time they fill their pumps. This is the first effort of this sort in the country
 - d. Miller – Thanked Susanne for speaking at the [Climate Adaptation Forum](#).

Meeting adjourned at 7:53 pm

Notes by Lyn Huckabee