

City of Cambridge
Climate Protection Action Committee

Minutes
February 11, 2021

Members Attending: Melissa Chan (chair), Tom Chase (secretary), Emily Pesquera, Paula Phipps, Rosalie Anders, David Rabkin, Fred Hewett, Keren Schlomy, Lyn Huckabee, Nicole Morrell, Peter Crawley, Ted Live, Julie Wormser, Keith Giamportone, Trisha Montalbo; *staff:* Bronwyn Cooke, Susanne Rasmussen, Meghan Shaw, John Bolduc

Guests: Alex Steinbergh, Jade Lu

Approval of minutes – January 14, 2021

- Paula motioned, David seconded, approved unanimously.

ETP Director's Report—Susanne

- Green Roof Ordinance (Mothers Out Front)—has had first hearing at City Council—got a lot of support. Went to Planning Board—voted it down. Going back to Ordinance Committee for a second discussion. Not required to have Planning Board approval.
- Looking to plant trees, prioritize bus lanes, and create separate bike lanes on major streets. This is a priority. Very much into the weeds. Mass Ave from Charles River to Central Square is a very high priority. MBTA really supportive of having a bus lane. River Street also a priority.
- Shout out to Harvard—replacing 1/3 of bus fleet with four battery electric buses. Will be a demonstration of the viability of battery electric buses. Harvard Offices of Transportation and Sustainability took the lead. HU has carbon neutral (2030) and carbon free (2050) goals.
- The Community Development Department website has reports on town-gown efforts.
- Question—green roof ordinance—why didn't Planning Board vote for it? B/c would require that new buildings and major rehabs (needs defining--% building value) to put on a green roof or bio-solar. Objections: climate resiliency zoning task force is considering a different approach and is nearing completion (green roofs one of several options for cooling urban heat islands and buildings). Second, drafting language was difficult or impossible to implement—e.g., have to cover entire roof except mechanicals—but didn't exempt e.g., walkways and chimneys. Also—wanted performance standards over prescriptive standards. Flexibility was preferred.
- Comment: there is very little green roof activity (and solar) in Cambridge—why are we behind other cities? How can we make progress, and how can CPAC help? Performance standard is part of the climate resiliency zoning task force. If the ordinance were passed in the way it's written, could deter more solar. If require both green roof and solar in all instances, can make expense much higher.
- Climate resilience planning—focuses on goal of cooling city, not specific strategies. Need to apply range of strategies in appropriate ways. E.g., for a tall building, ground vegetation might work better than a green roof in cooling off surroundings. Don't want unintended

consequences of making people do ineffective things. Other cities may lead in green roofs, but may not be more resilient than Cambridge. There is a lot happening, in fact. White roofs are actually quite effective, and there's been an increase in them over the last decade. But we're going backward in % tree canopy. Everyone would like to be further along than we are.

- What do we think is the optimal outcome for the projects happening in Cambridge (recent past and near future). Can we weigh in on what the right answer should be? Response: majority of them have white roofs, meet green building standards. We need to focus on improving existing building stock—can't build our way out of this.
- Is there a role for CPAC? Citywide climate action plan will pull everything together—CPAC has role in reviewing that and giving feedback—it's a comprehensive plan that will evolve as science does. One aspect, e.g., is to improve zoning ordinances to design to 2070 precipitation, institute "cool" factors—a performance standard for bringing temperatures down.
- We as a committee should reexamine climate resilience plan and climate action plan.

Cambridge Community Choice Electricity Program—Meghan Shaw

Objective: Meghan Shaw, Sustainability Planner in the Community Development Department, will review the current community aggregation program to contracts electricity supply for most Cambridge residents and future plans for the program. CPAC will discuss the program and how it relates to greenhouse gas emission reduction goals.

- The City just signed a three-year contract for community choice aggregation program for renewable energy. This is part of Massachusetts law—have taken off over the last five years. Had been way to lock in lower prices—now being used more and more for green energy, largely by buying renewable energy credits. Cambridge doesn't do that.
- Cambridge goals—trying to add more renewable energy generation. B/c Mass is deregulated, residents and businesses have lots of choices (and marketing!). Much of that marketing is a bit scammy/greenwashing. Community Electricity Program—working to provide people with highest quality RECs (Class 1), avoid greenwashing, provide consumer protection, so people don't have to vet individual suppliers (e.g., low initial price that goes up soon after). Three-year contract provides some price stability also.
- Since 2017, City's program has been cheaper over time than basic Eversource service, and use highest-quality RECs (wind/solar).
- Questions: price comparison—compared to the same kind of energy generation? Yes—all use same grid mix. Has to do with how energy was procured. Cambridge has flexibility in when it procures energy when the market is low. Eversource has to buy energy on a defined schedule.
- Standard green option under community aggregation—how does that compare to Eversource basic service? It's slightly greener. If the City didn't do a green product, it wouldn't differ from Eversource basic service. City includes \$0.002/kw into a revolving fund—now have \$1.2m in revolving fund. Will use this money to put new solar project on Graham and Parks School—will retire RECs (so no double counting). That's what is making the standard green option greener.
- Standard Green vs. 100% Green plus. Are selling electricity back to the grid as well; will reinvest net metering cash into the revolving fund to build new solar projects.

- Renewable Energy Certificates are issued for 10 years; renewable energy credits can be sold for full length of the project
- Why Cambridge chose this pathway—by choosing small adder (surcharge), adds new renewable energy to the grid and commits long term to renewable energy projects. Meeting city's highest goals on how renewable options should work.
- There are folks who want 100% renewable energy; not entirely possible at this moment (though there is an option involving offsets), but city is going through 100% renewable energy strategy. Looking to see if can get a long term procurement of renewable energy, hopefully will figure this out by fall 2021. Very complex!
- Benefits of Cambridge Community Electricity Program: greener power, choice, predictability, transparency, and consumer protection. Could also choose to administer statewide renewable energy funds.
- Aggregation 3.0—how can aggregations invest in local distributed energy supply, link to financing opportunities so everyone can participate, create green jobs?
- DOER finalizing rules around municipalities automatically enrolling communities in low-income and standard solar programs. Those programs provide steeper cost impacts, improve equity.
- Current 100% option involves renewables and Mass RECs. But that's subject to whims of market, will always be more expensive than baseline. Better is that Cambridge invest in genuine new projects—won't necessarily be more expensive and will provide genuine benefits. Want to see long term renewables procurement for both additive renewables and price stability. Long term contracts are also good for developers—make them more likely to develop projects b/c they know they'll get paid.
- Hard for Cambridge to put City credit on the line for 15-20 year commitment when there's no guarantee that consumers will opt out and Cambridge will have to cover the gap. But maybe bond a small amount as insurance for people opting out and the City having to absorb the cost. This could solve that challenge.
- Presume opt-out rate for base energy option is quite low—could city jointly procure electricity with large users? Not sure that's allowed legally. But we have very few people in 100% renewable option. We have two levels—RPS and 100%. Boston has more variety.
- Skeptical as to whether RECs have an impact, where these projects definitely have both a carbon impact and generate new funds. Using adder funds to create a new solar project on a school may be the first such project in the US. Very innovative.
- Guided by DPU plan on how much can use the adder mechanism. Increasing the adder would require approval of a new plan.

Update on Climate Action Plan and GHG Data – Bronwyn Cooke

Objective: Bronwyn Cooke, Sustainability Planner, will provide an overview of the City's climate change mitigation planning, emission reduction goals, and how the City is measuring progress. CPAC will discuss how the presentation clarifies some questions that have been raised and what questions need further work.

Community wide data on emissions

- Follow the global protocol

- Look at three sectors—buildings, transportation, waste
 - Fossil fuels combusted within city boundaries
 - Energy procurement
 - Emissions from trash disposal
- Buildings data from Eversource
- Transportation much trickier to track (many fuel sources, vehicles from elsewhere driving in Cambridge, MBTA, etc. They look at Cambridge-registered vehicles, wherever they go, plus MBTA movement within Cambridge)

Elements of climate mitigation planning

- Inventory—of GHG emissions vs. 2012 baseline. Don't have complete inventory to measure against baseline yet.
- Analyze and plan—come up with actions to do against analysis of emissions
- Forecast—of business as usual, state and federal trends, impact of Cambridge-specific actions
- Goals—two types—aspirational and achievable
- Implement—taking action to make a difference
- Evaluation—how well did action work?

Note: Not every element is included in every planning process, and it's not necessarily a linear process

Refresher on E&T work

- Did community-wide inventory—GHG inventory, climate action plan, CPAC/RAC subcommittee
- Did detailed sub-sector planning—e.g., net zero transportation plan, zero waste master plan, net zero action plan and 5-yr review

Note: challenge is to connect all this work together. Working to take advantage of windows of opportunity. In FY2020 wanted to do full GHG inventory—didn't have budget for it. Instead did NZAP 5-yr review—creating sector-specific GHG inventory update to feed into community-wide GHG inventory

Kicking off a net zero transportation plan—adding on existing transportation plans to also focus on reducing emissions. Aligning different aspects of planning within a particular sector and bringing them together into a community-wide strategy.

Timeline of upcoming planning milestones

- June 2021—NZAP 5-year review—building sector
- June 2022—NZTP—provide quantitative analysis of emission trends in transportation sector and develop new plan to reduce emissions
- December 2022—compile sector-specific emissions data, actions, and forecasts to update the Community-Wide Inventory and Climate Action Plan

Questions and discussion

- Lag times in data gathering make it difficult to react well. Is part of the strategy to come up with good-enough inventories to speed up this process?
 - We are improving lag times for analyses

- There will be a lag in pulling together sector inventories into community-wide inventories. Need to ID really good proxies.
- What other areas could the city have impact on beyond transportation and buildings? Energy industry = on-site cogen plants. Could e.g., have a congestion charge. Hoping to create a different inventory methodology for transportation emissions based on resident vs. visitor vehicles.

Member Updates

Paula—there's a proposal for food waste composting for restaurants, upcoming presentation at WGBH February 22, 11:30 am Mike Hands, [Alley Cropping & Rattan Lal An Amazing Agroforestry Story: The Inga Model in Central America

Public Comment

Jade Lu described Cambridge Table to Farm, a group formed by young professionals who came together to see what they could do to help on climate change. Landed on food waste and composting in restaurants. Talked with restaurants with interests and barriers—connected them with composters. Too much of an operational hurdle. Now focused on encouraging City to start a restaurant composting program. Seems like pretty low hanging fruit. <https://www.cambridgetabletofarm.com/>

Peter: could we have more of a discussion of Bronwyn's presentation at next CPAC meeting.

Adjournment

Notes by Julie Wormser