Commission for Energy Use and Climate Change

Meeting Minutes March 14, 2018

Somerville City Hall, 93 Highland Avenue., Somerville, MA

Attendees:

Ramon Bueno - Commissioner

Joshua Hodge – Commissioner

Eliza Johnston – Commissioner

Michelle Melton – Commissioner

Stephen Moore-Commissioner

Julie Wood – Commissioner

Oliver Sellers-Garcia – (member ex-officio) Director of Office of Sustainability and

Environment

Dana Clawson

Larry Yu

Jocelyn Newhouse

Adam Pollack

Lindsay Lucke

Mary Mangan

Michael Walsh

Maria Morello

Leigh Meunier

Review and adopt the minutes from the February 14, 2017 meeting

Approved

Background discussion on sustainability/zoning overlap

- Dan Bartman from the Planning Department. The overlap between sustainability and the scope of zoning is small; zoning is not able to address many aspects of sustainability in the built and natural environment. The Planning & Zoning Division has a fact sheet on this, <u>available here</u>. Where there is overlap, there is much sustainability built into the 600+ page zoning draft document. After the proposed zoning overhaul is formally submitted to the Board of Aldermen, a 90-day clock starts for action on the Zoning revision this year.
- Dan attended Arizona State University where planning is embedded with sustainability. He is committed to advancing sustainability through zoning, where possible. He has been working with the Office of Sustainability & Environment (OSE) for several years.
- Zoning and new development are only part of what the city can do, and does, for sustainability.
- Sustainability related-features in proposed citywide zoning
 - o "Green score" is new term used to award points to different issues relating to landscape, drainage, green space, etc.

- LEED requirement will also be included. Somerville is proposing same approach as is currently required in Cambridge. LEED certification is assigned at the end of project construction, so the requirement is for "certifiability."
- o There is no solar panels requirement, as not all roofs are suitable for solar.
- o There is an incentive for green roof through the requirement on reducing "I and I" (inflow and infiltration) and water retention; so, for example, a green roof can provide alleviation that reduces that fee. The fees collected are used to upgrade sewer system.
- o Cities can regulate the reflectivity of materials and the permitted albedo; looking also at requirement for permeable surfaces.
- o Environmental performance standards, mainly for high-rises, require proof that a building doesn't cast shadows, redirect winds or sun glare.
- o New update on parking, in tandem with mobility management plan on large buildings that incentivizes public transport (vs. driving).

From questions/discussion:

- Zoning code hasn't had pushback on sustainability-related matters. It is written to accept new
 modules easier than the current one. Last code originates from 1925, modified over time in hodgepodge manner; resulting in the confusing current status. The new one is re-written from scratch and
 meant to hold for decades.
- Building codes are state-level decisions in the Commonwealth. There is a statewide base energy code
 for all buildings, but municipalities can require buildings to meet higher energy efficiency standards,
 the "stretch code." However, at this point the stretch code is not significantly more energy efficient
 than the base code. Some differences apply between commercial vs. residential, new vs. renovation
 Through Somerville Climate Forward, the City and stakeholders are looking at regulating GHG
 emissions, which would fall outside of the purview of the building/energy codes/
- Eliza: anything related to Somerville Climate Forward (SCF) planning that we should know about or anticipate? Oliver: There may be a few things from SCF that might make it as possible amendments to the zoning code, e.g., on flooding resilience. Perhaps other small ones, e.g., on public electric vehicle charging. Heat island mitigation and storm water management already are included somewhat in the zoning proposal.
- Eliza: for public awareness, it would be good to make explicit and known the connection on these issues.
- Anything requiring site plan approval now has to fill out a sustainability and resilience questionnaire as part of submittals (which are public documents), indicating how they are addressing vulnerabilities. The Planning Board is supposed to mitigate impacts. There will be fact sheets on topics, then specific guidebooks explaining the methodologies to be considered.
- Oliver: zoning sustainability goals are much better handled in the new overhaul because there is greater consistency and it is easier to amend as technology and policy evolve.

Next steps: Land Use Committee of the Board of Aldermen will review, hold hearings, and refer the proposed ordinance to the Planning Board for a recommendation. Public participation opportunities include: at the BoA public hearing + subsequent comment period open until May 25th. Can e-mail comments (planning@somervillema.gov and/or to alder(wo/)men), or use the very effective online **Civic Comment Page** option at www.SomervileZoning.com.

Land Use Committee of the Board of Aldermen will review, hold hearings, and then send to the Planning Board. It will then return to the Land Use Committee. Public participation opportunities include: at the BoA public hearing + subsequent two-week comment period. Can e-mail comments (planning@somervillema.gov and/or to alder(wo/)men), or use the very effective online Civic Comment Page option at www.SomervileZoning.com. The Union Square process should help pave the way for citywide zoning, since the structure is similar.

• Overlap between Somerville Climate Forward and the zoning overhaul. Zoning can best help sustainability by not putting up barriers, e.g., the code could accept "paved surface albedo [can be flat surfaces instead of only roofs]

Shadow carbon pricing

- Discussion on MIT intern Saritha's document. Its case studies have not been looked at by many commissioners.
- Joshua H: what is the status of recommendations? It will be presented to the mayor or to city staff later in March.
- Michelle: the calculator is useful and can be powerful; the carbon price didn't make a difference (even at high values) in the case studies, but the assumptions and sensitivities need much more explicit analysis and exploration. For example, the price of natural gas assumption was more decisive than even \$100 "per ton of carbon." Properly used, one can track GHG savings via the tool. There is great potential value to city staff; perhaps a pilot case study should be engaged in. Must be explicit with the assumptions and their role.
- Oliver: there isn't anything of this sort used by, say, Capital Projects, Engineering and Procurement. The cooling case study is illuminating in an unexpected way: the carbon price didn't impact the air conditioning decision because it was too late in the design process. It points out that it matters at what point you make the decision (in terms of emissions).
- The framing of the question matters more (cheapest High School vs. Net zero High School).
- Oliver: recall the Mayor's interest: cities are not doing this, try it and illustrate a great pilot that can be touted. Think what we are trying to do: is no-procurement of x-y-z a real option? –answering that question may be the most decisive point. Keep perspective on the big picture of emissions and the Net Zero goal.
- Adam Pollack: for a pilot don't use a specific purchase (e.g. computers) but larger issues, plus engage with vendors on sustainability criteria. Other: that a very high carbon price would be needed to make a difference may simply reflect the actual shadow price of the externality's cost.
- Joshua H: are Capital projects significant enough, in terms of the goals?
- Oliver: we haven't zeroed in on the best decisions that the tool works on, but we are starting to see where it doesn't make a difference. Apply it to decisions where carbon decisions are a big part of what is going on, decisions that the City has a say on.
- Michelle: if the goal is to make city decision-makers conscious of the emissions consequences of choices they make—that's the value.
- Ramón: the key is to tie decisions to the 2050 NetZero goal via the tracked GHG inventory to guide actions plus provide an educational tool to inform and discuss the process.

- Continued discussion: is abatement-equivalent emissions pricing (Microsoft's approach) the relevant approach here? Price could be set to finance mitigation investments or by emission credits purchased to achieve annual neutrality.
- Ramón: heard at a STEP meeting that transportation emissions, not buildings, are the dominant source in Somerville when all transportation is included, not just from city residents (but also pass-though). (Note: this does not conform with current global protocols for reporting GHG emissions.)
- Oliver: we should think about what the good pilot should be, and why; and how to tie it to what is happening at the state level and with city advocacy strategy; best for CEUCC to provide guidance, suggestions, etc.
- The CEUCC should discuss and recommend the directions it prefers.

State legislation and recent state-level developments

- Joshua H: update on the status of the "Northern pass" proposal: Canadian hydro via NH, or Maine, likely one way or another. Michelle: important to check with the city legislative director on carbon bills.
- Governor: introducing resilience legislation
- Boston: "flooding alerts" were branded in the Climate Ready Boston planning. Other/similar ideas for Somerville Climate Forward?

Follow-up on electric vehicle (EV) charging stations

- See data analysis fact sheet Oliver distributed. Commercial areas are dominant; where we really want them is in the neighborhoods.
- Cambridge is looking into installing EV charging stations on light poles.

Follow-up on 2018 CEUCC priorities

Not discussed

Any and all business before the Commission

• This room at City Hall is our default permanent location for meetings for the foreseeable future.