

## **Commission for Energy Use and Climate Change**

Meeting Minutes

September 13, 2017

Tufts Administration Building, 167 Holland St., Somerville, MA

### **Attendees:**

Bueno, Ramon –Commissioner

Melton, Michelle – Commissioner

Moore, Stephen – Commissioner

Rooney-Varga, Juliette – Commissioner

Wood, Julie – Commissioner

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

Nathalie Beauvais, Kleinfelder

Amruta Sudhalkar, AECOM

Larry Yu

Jocelyn Newhouse

Michael Walsh

Stanton Cady

Seth Berkman

Lindsay Luke

Jeffrey Shwom

Carling Hay

Melissa Lowitz

Mary Mangan

Dan Flynn

Molly Shanley

### **Review and adopt the minutes from the August 9, 2017 meetings**

- Approved

### **Somerville Climate Forward – discussion with consulting team**

#### *Overview*

Nathalie Beauvais, project manager from Kleinfelder, presented a status summary, along with Amruta Sudhalkar from AECOM. Consultants from this team are also working on MEMA statewide emergency preparedness plan), and considering synergies regionally on issues that are cross-city concerns (e.g., Amelia Earhart Dam).

- Subconsultants
  - John Snow Research & Training Institute is also helping on all phases, as well as health
  - The Trust for Public Land - looking at metro area green infrastructure, heat island effects, sewers, etc.
- Task A: City staff led this task, kicking off the project and leading stakeholders in visioning and goal-setting. Consulting team focused on a memorandum, summarizing where we stand, building on prior

work on the Greenhouse Gas (GHG) Inventory, the Carbon Neutrality Pathways Assessment, the Climate Change Vulnerability Assessment, and the city's SomerVision Comprehensive Plan.

- Next, they will be moving to Task B: Research, Evaluate, Prioritize. This task is led by the consulting team. The team is currently conducting research on best practices and potential technical solutions, as well as reviewing and digesting inputs from all the Climate Forward working groups (WG) as they progress.
- The goal: creating a living document that can evolve. The research + feedback from working group meetings, city department meetings, CEUCC meetings, etc. are all being blended into the document.
- Juliette R-V: is external input also being gathered from the network of peers to our Office of Sustainability and Environment (OSE)?

### *Mitigation*

- An Excel worksheet is being organized by sectors that most contribute to warming emissions, with subgroups, via granular data on the sources of such emissions
- Blend of presentation and discussion points brought up in discussion:
- Broad categories:
  - Electricity Generation: more renewable energy, other decarbonization measures
  - Fuel switching: heating conversions to biofuel or to electricity (which over time will be greener from increased renewables in its generation)
  - District energy and its higher overall efficiency, mitigation/adaption synergies, balancing resilience, carbon footprint and efficiency, BUT keeping an eye on natural gas lock-in potential; can biofuels really replace it?
- Question about district system: would this natural gas? Yes, but this is a shorter term solution but we would need to think about how realistic it is to make these renewable by 2050. Example: Berkeley is doing a feasibility assessment of solar microgrid.
- Wastewater energy (and from food waste) as renewable energy source (anaerobic digestion), e.g., Deer Island does that, can more be done? This is less feasible because of very high efficiency of our current system, but wastewater for thermal capture is an option.
- Energy Efficiency ideas will be included. Energy efficiency is a good short term strategy; but medium to long-term you need to think about decarbonizing electricity and building thermal needs.
- Similar pattern with Transportation: need to start with efficiency and reducing VMT, but ultimately need to decarbonize with electric vehicles, biofuels (for trucks, larger vehicles)
- Waste (recycling, organic waste)
- Considering incentives and requirements/regulations
- Is Passivhaus standards feasible in Somerville: yes, even in a place that has a long cold winter
- Suggestions: add column on disadvantages
- Where do costs considerations come in? qualitative assessment mainly
- Is the cost to fall on residents, owners, the city?
- Provide a sense of the scale of the share of the GHG inventory that a measure reduces.
- What is the payback scale?
- First consideration: look at technical feasibility and maturity

- Discussion on how to include transportation sector. Transportation has perhaps less potential than buildings, therefore we should focus on them to get the most in emissions reduction, combined with strong advocacy regionally and at the state level for transportation.
  - But still with 30% of the inventory, much of it from single occupancy trips within and across the city.
  - Much can be done with road design, biking infrastructure, public education.
  - Transportation considerations should be tied to neighborhood development.
  - Need to find ways to engage people in the city.
  - Prepare for when there are more electric vehicles (but also push regionally, advocacy)
  - Include solutions we can act on and pair them with those we can call others to work on (advocacy)
  - Transportation issues are a great way to engage people.
- “Bundling of solutions”: the final plan will have implementation strategies that bundle multiple solutions. We are not yet at this phase of the project
- Boston looking at many of the same issues, from different angles, time scales, sectoral interventions per categories, etc.
- Any discussion on how solutions impact equity? Being tracked in spreadsheets, but always a struggle; different questions and aspects (e.g., equity vs affordability: who gets to pay, who *has* to pay?)
- Measures will be scaled by “resilience” potential, considering both mitigation and adaptation
- Will identify what needs further study, and look from a cost-benefit perspective
- Keep an eye out for not locking in natural gas.

#### *Adaptation:*

- Similar methodology being applied for handling and organizing the options for solutions
- How to use examples (from other cities) when shaping options
- Some of the issues that need to be addressed
  - Cooling
  - Flood protection for new and existing buildings
  - Electric system resilience (overlap with mitigation)
  - Transport resiliency, multimodal (Hurricane Sandy demonstrated importance of the bicycle network)
  - Green infrastructure (consideration of biking conditions or desirability in very hot summers; tree cover); same considerations for walking and waiting for buses
- Juliette R-V: Don’t count out very ambitious measures.
- Preliminary adaptation measures do not seem as ambitious as the mitigation measures.
- Winter issues: how to enable walkability year-round?
- Incentives for individuals, households, businesses to remove paved surfaces.
- Incentives for buy-outs of highly vulnerable lands
- “Beyond the borders” - think regionally; if sea level rise (SLR) paralyzes Kendall Square, for example, what is the loss of work and business continuity *here* in Somerville; need to consider intergovernmental, cross-sectoral collaboration (“San Diego model”); Umbrella ask: “strengthen regional network;” how to use the plan to advance the traction & transparency with regional institutions and the Department of Conservation and Recreation (DCR)?
- Conversely, consider non-City (DCR, DOT) activities that run through Somerville.

- Identify critical green infrastructure in the City that is not under its control (e.g., like Foss Park),
- Many of the solutions are “hardscape.” We should consider small scale wetland, raingardens, pervious surfaces (e.g., in parking areas)
- Consider some measures that won’t address “the BIG event” further in the future, yet will matter in the shorter term, like smaller events (prevent 2-10-year flooding)
- How consultants & working groups interact: OSE has been feeding them all the Working Groups’ notes. Using consultants’ time for technical specialties rather than meeting facilitation.
- The Plan will be informed by options within SomerVision’s goals for growth, development, housing, open space agenda, i.e., insert new options when/for opportunities that arise from future climate considerations...Have program(s) in place to make zoning change when emergencies, catastrophes arise.

#### *Next steps*

- Complete the research, add feedback from tonight’s meeting as well as from the rest of the working groups (first round of meetings)
- Complete the evaluation as a document and the prioritization (as draft) - October
- Process on feedback from CEUCC and WG’s – November & December
- Next Working Group meetings in November, with their final meetings in early 2018, in time for the Plan
- Outreach, dissemination and public discussion in Spring 2018. Think sooner on outreach and ways to get maximum buy-in.

#### **HeatSmart/CoolSmart program**

- Molly Shanley, program coach
- Kickoff on Aug 22: 65 people attended.
- Installers so far have gone to 111 site visits, but so far only 1 contract has been signed; visits have been mostly educational (despite much Website info)
- Need more volunteers for outreach: contact [Somervilleheatcoolsmart@gmail.com](mailto:Somervilleheatcoolsmart@gmail.com)
- Several upcoming outreach events: October 4 workshop in the West Somerville Community School (Eliza J. speaking)
- Considerations becoming apparent: complexity of configuration issues, clarity on pricing (and the price itself), financing, etc.
- More outreach needed: Facebook. How to help: suggest groups, networks to contact, including formal/informal groups,
- Oil, electric baseboards, profiles – mailing went out to residents with these systems.
- Improved price transparency seems to be important and needed, but it is difficult because there are many different ways to do each project. It’s not as straightforward as solar.

#### **Tracking state legislation**

- Joshua Hodge put together a tracking spreadsheet. .
- Will aim for updates on regular basis. Discuss: What’s helpful in the updates?

- Comments from local state senator Pat Jehlen at public meeting: hearing from actual constituents is helpful (vs. from out of district; but consider that their inboxes are flooded; few things work better to focus them than an invitation to come to meet, speak and listen to constituents (forces them to prepare).
- Next Tuesday 9/19 State House Joint hearing on these renewable energy bills. [post 9/19: massive turnout, many unable to enter the hearing room; visits then encouraged to offices of local representatives, senators]
- Role with the city: advise the Mayor, Board of Aldermen (BOA) on the stakes the city has on particular bills, getting things on their “radar”
- Consider the value of talking points even of bills that never “make it”
- How it all comes back to *the narrative*, avoid communication failures. Weave a narrative that builds on Somerville’s own resiliency of working class history.

#### Any and all business before the Commission

- To discuss at a future meeting: build tools for tracking GHG data online in real time.
- Community Choice Electricity (CCE) price calculator built by Somerville resident Dan Flynn will be added to somevillecce.com.