

Commission for Energy Use and Climate Change

Meeting Minutes

March 8, 2017

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

Attendees:

Bueno, Ramon–nominated Commissioner

Johnston, Eliza–Commissioner

Melton, Michelle–nominated Commissioner

Moore, Stephen–Commissioner

Rooney-Varga, Juliette–Commissioner

Wood, Julie–Commissioner

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

Hannah Payne – Sustainability Coordinator

Rashaan Keeton

Frtiz Holznagel

Mary Mangan

Melissa Lowitz

Leigh Meunier

Seth Berkman

Garrett Anderson

Andrea Yoder

Jerrad Pierce

Review and adopt the minutes from the February 8, 2017 meeting

- Approved

Community Choice Aggregation update

- Still no update from DPU, except that the communities in National Grid territory have been approved. These towns had their hearings around the time that towns in Eversource territory had their hearings, so there is no longer a total block on aggregation petitions. DPU commissioner has said they don't expect to have any more questions, but the timeframe for approval is still uncertain.
- Need to think on whether the timing is right to bid on electricity as soon as it is approved. We want to think about how many winters we are going to cover, because that lowers the overall bid in comparison to the default rate. But we are hopeful it will be soon. Once we get the go ahead we can delay it by as long as we want. If the timing is right in the market then we could theoretically be ready to go in six weeks.

Carbon Neutrality Pathways Study recap

- The Carbon Neutrality Pathways Study is a follow up analysis to the 2014 GHG inventory, and comprises an analysis that our GHG accounting firm AECOM did that shows what it will take and how the city can meet its 2050 carbon goals. Oliver provides an overview using slides that were presented to about 60 city staff in January. The pathways analysis was

something that a lot of leading cities have done using different models. It's not a prescription, but an informed look at technologies that are available and putting very aggressive penetration and adoption rates on these to see how far they can get us. But this is policy agnostic. This is just by the numbers, what would it take. We understand it is transformative but in what sectors, etc. it is helpful as a planning tool to help target certain sectors. This is not a plan, but a way to understand what the goals mean practically.

- Definition of carbon neutrality: they looked at various definitions from cities that have such goals to see what the options are. We ended up where we started: a net-zero emissions goal, on an annual basis. Whatever emissions can't be reduced would be offset through purchasing of credits, excess renewable energy. Offsets, not zero emissions. That is the basis for this modeling. This is not net zero on a ten year average basis, and not net zero on a daily basis (slide 4)
- This data counts all Somerville activity, including residential and commercial. Question about what is included—it includes all trips that begin and end in Somerville, and half a trip originating or ending in Somerville. Used MPO's transportation model. If something was driving straight through on 93, that is not captured (trains and cars).
- The final output is contained in slide 14. Assumptions were relatively conservative growth projections. Using a model that they have used with a number of other cities, it was fine tuned to the energy mix in NEISO and how much energy was being used by type of building. Then emissions reduction by sector were factored in. There are remaining emissions.
- Slide 15 details the remaining emissions, the vast majority of which was a result of natural gas leakage. It is very hard to think of how that can stop just in Somerville.
- Slide 17: workshopped in detail, but for example: in every sector, we took a different technology or practice and set targets for adoption by 2020, 2030, and 2050. Even with the most wonderful aggregation program, we could still be above where we are now, GHG emissions wise. Some of these are dependent on each other, others not. Energy efficiency for example—LED light efficacy is taken out later on because we assume that we are all renewable by 2050.
- Another question was how much we could do with district energy, because of the resiliency benefits.
- Waste: our wastestream goes to an incinerator, and on the CO2 side it doesn't reduce that much.
- In transportation, there is an interesting transit oriented and mixed use development. The truth is we already do have a transit built form, so we didn't see a huge gain here. Mode shift we made some aggressive goals and it did make a huge difference. The biggest difference comes from fuel switching in passenger vehicles.
- Finished with a recap reminding everyone about where we get the most bang for our buck in terms of targeting. Electricity could make up almost 30% of the reductions we need to make by 2050. Building energy efficiency, etc. are others. We also looked at other top practices at other places. And we reminded people that decisions we make now can lock in carbon and the curve is not possible based on some decisions we are making right now.
- Question about land use/green space into changing this picture. Oliver says that it is not exactly modeled but it would fit into the closing the gap area, and would be considered an offset.
- Next steps: The climate change plan that we are interviewing consultants for this week. It will start with looking at all analysis with technical experts and community groups and public meetings to say 'this is the situation we are in' and let's start talking about what projects we might want to do.
- There were 7 proposals from teams of consultants. That information is publicly available from the Purchasing Department.

- There will be a 2016 inventory this summer so that we will have a sense of where we compare relative to 2014.
- Question about why CNG is included as a strategy included in the strategy, as well as biofuels policy.
- Have discussed this modeling with other cities? Yes, have discussed this with our neighbors. Cambridge is looking at this, doing a low carbon energy study. They are looking at all the things they could do that are beyond known technologies. They haven't done a community wide GHG inventory until now. We are in a more similar situation with Boston, which is working with BU and Siemens to do similar modeling. We are in a better place with Boston and Cambridge than a few years ago.

Addressing transportation GHG emissions

- Question of what commission has done in the past, and how it would like to advise the city in the transportation arena. There is a lot going on in Somerville on transportation, and interested to see how the Commission can plug in.
- There used to be a transportation planner on the Commission, but she was mostly interested in bike-ped. She represented the bike-ped component of Somervision. So, the short answer is the Commission has not done a lot.
- Is that something we're interested in doing more of? A lot of what we've taken on has been driven by our own areas of expertise, or what the city has been doing. Would be interested in doing more. Could be worth reaching out to STEP. There is a lot of work going on in Somerville around that. But it is obviously important. And it seems like it is well aligned with community engagement. Philip Groth, Somerville resident and MBTA employee, could provide expert insight.
- What is Somerville's relationship with MBTA? It is very complicated. There isn't municipal representation on the MBTA board and there is no official mechanism between cities and MBTA. Because of the green line extension, there is more contact between MBTA and Somerville in the past. Was green line extension considered in mode shift in pathways analysis? Yes. What we didn't do is call out the green line as its own thing. We could probably calculate the benefits otherwise.
- We need to be able to reducing commuting in general.
- It would be great to bring in more/bring together what the city and community groups and activists are doing in transportation with awareness of what that does to overall carbon emissions. Not just so there is a nice footnote attached to that, but so that we can actually influence a further decrease in emissions. Not sure yet on how that turns on commission's advice to city. The other thing in general is to be aware of what is going on above the city level. That could be with modal transit, that could be with electric vehicles.
- City fleet: a few EVs, a hybrid trash truck, working on a more ambitious fleet policy. The City has received a few grants from DEP to buy down the cost difference between EVs and others but we don't have a lot of money in general so just don't buy the new vehicles at all. Not enough turnover in the city fleet to really allow us to lead by example. There are currently 3 level 2 chargers and have put in a grant for more. They have been pretty well used. The de facto policy is that they are offered with free parking and free charging.

Update on Climate Change Vulnerability Assessment

- The City is currently reviewing the latest draft of the assessment. A draft has been shared with the advisory committee, and received good comments. Other city staff are looking at it. Hoping to release it soon. Still trying to figure out the timing.

- What happens once it is out? Is this going to be the beginning of a citywide conversation? Thinking about ways to use the report at the level of community organizations would be good to talk about. Issue of using this as a springboard for engaging people in the climate strategy.
- Question of how it will be disseminated. It should be coupled with the climate plan, to encourage people to engage and be able to take action. Working right now on a targeted roll out plan. Makes sense to link this with planning and things that are already underway. Want to put it out there when the City can tell people how they can engage further, but also don't want it to be a surprise for people. Leaning toward putting it out there at some point in the spring along with our timeline for the climate change plan and how to get involved. Key information about all the work that is happening in our area that will improve some of these risks. Makes sense to talk to community groups and aldermen in those areas to see if it makes sense to have more meetings. It is worthwhile to be creative about how to disseminate the information (suggestion about Spanish language newspapers etc). There may be other ways to get it out. There is a language community liaison for Haitian community, and her contacts are the ones we can use.
- Has the rest of the city staff been engaged in the process/what is the plan to disseminate it to city staff? There was a 30 person meeting 1/3 of the way through the vulnerability project. Asked what issues it raised for the city, but haven't yet done anything for the city on getting the information back out to them. Will have internal meetings on this info in the Spring.

Somerville High School: preparing for March 22 Net-Zero Goals Meeting

- Stephen is coordinating with Rob King. He is going to provide materials before they went public. Stephen has not received those yet so haven't reviewed the drawings. The architect is in the design development phase, so he is pushing that. But the idea is that, going forward, for March 22, this is not a referendum on what we lost but where we are, and this is what we should be focused on moving forward. Rob and Stephen are planning to meet again before the 22nd. As he becomes informed he will update the commission. [Note: Meeting was moved from March 22 to March 29.]
- Even though there are lots of people who have ideas on how to do these things because of technical background, the onus is not on anyone who shows up to solve this problem. it's good to have informed opinions, but it would be good to walk out of there with questions to answer in addition to good ideas on what it would be great to redirect the architect to do. The right questions are "how long do you think this system will last" "what will the transition to electric look like" etc.
- The bond authorization is on the agenda of the board of aldermen, and it will go through the process to approve the financing soon. We are in the home stretch, but there is not a signed check yet.

Update on renewable thermal multi-city project and outreach campaign

- We had a great kickoff meeting with the 4 other cities that are being funded through carbon neutral cities alliance to do this project. Kristine Andrews in the housing department has gotten involved. Glad that the housing division and OSPCD are committed to this. Basically looking to use our portion of the grant and the consulting help from Meister Consultants Group to structure an outreach campaign focused on air sourced heat pumps. This is sort of like Solarize for air source heat pumps. There is a MA CEC incentive. Got some useful analysis done with assessor's data and other data to look at building types and different types of heating systems and demographic information to see how to have a more targeted

campaign. Will try to give regular updates on this. It's not as flashy as solarize. But it could be impactful. We will target people who participated in solarize.

- Is it possible to get a common vendor? If there was a vendor that would be willing to be a one stop shop, it would cut out a lot of confusion for people. This is something the city is trying to figure out how to do it right. Solar installers are different from heating system and air source heat pump installers. Not clear that there is one, but we might try and get a few, or a big group. We don't know if the value add is bringing down the value or spending the money on marketing. The big thing different from solar is that 75% of heating systems are replaced in an emergency system. Trying to think how to do this both from messaging perspective but also outreach with installers. Finding the bank, and someone who will sit down and walk you through the paperwork is huge. But figuring out two banks who will help finance this. Tons of installers do it, but the question is what installer is willing to handhold the resident through the process.
- Another issue is that most modern air source heat pumps require a modern electrical unit. This will be a big issue, and the big barrier you will hit with the emergency installation. A lot of the housing here in Somerville will not have the electrical unit necessary. So the timing is big—if it's winter and you can't wait to replace the boiler and you might be interested in an air source heat pump but can't wait for the electrical replacement, that is going to thwart a lot of installations.
- Think doing this in May/June/July is the way to go to capitalize on air conditioning issue.
- This is probably a one-time program.

Tracking state-level legislation

- It would be of value for us to keep the mayor informed on a more frequent basis of what is happening through the lens of his environmental goals. This has come up in the last couple of meetings, and commission's feedback has been useful and would like to continue to work with commission to see how the mayor can best leverage his voice within the state. The mayor periodically comments on legislation at the state level. Tracking relevant state-level legislation would help us contextualize the city's goals and help the commission advise the mayor on positions to take on these issues/bills. We talked about this in the context of the 100% renewable bill, which seems to be garnering a lot of press coverage. This is the kind of thing would like to know more about, and maybe making this a standing agenda item, where people track different bills. Maybe someone is assigned to it, or people look at specific areas/committees. As part of speaker series, could have local legislator give us an update.
- Michelle volunteers to create a google doc and work with state legislative team. Will also add tracking on the MA DPU.
- The state's own climate planning process is now underway. It would be a good forum for us to engage with some state policies, and to keep tabs on DOER.
- Juliette doing a legislative briefing on march 29.

Any and all business before the Commission

- Trying to find dates to make up meeting with mayor.
- The nominations are for the board tomorrow and it will then go to the appointments committee.