Newton Citizens Commission on Energy

City of Newton

Halina Brown (Chair), Michael Gevelber, Stephen Grody, Philip Hanser, Asa Hopkins,

https://www.newtonma.gov/government/climate-and-sustainability/citizens-commission-on-energy



Jonathan Kantar, Jon Klein, James Purdy (Vice Chair), Puja Vohra, Ann Berwick, William Ferguson (*ex-officio*) ^{Iller} Advisory Members: Cory Alperstein, Fred Brustman, Edward Craddock, Ira Krepchin

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Minutes of the Meeting of November 17, 2021

The meeting was held on Zoom.

Attending: Halina Brown, Michael Gevelber, Stephen Grody, Philip Hanser, Jon Kantar, Jim Purdy; Cory Alperstein, Jane Hanser

Agenda:

- 1. Pilot project for Residential EUTP (Energy Use and Tracking Program)
- 2. Working with the City Council on EUTP ordinances

Halina said she is worried about attendance and participation in the Commission. Puja has said that she'll come back on January 1 after her family duties are taken care of. Jon Kantar has been in touch with Jon Klein in the past, and he will call Klein – who also talked of reactivating in January. As a is on sabbatical for a year. Halina wonders if she should fill his slot temporarily? Or get alternate members or replacements in general. Suggestions included Bob Persons, who is an Energy Coach. Phil supports asking Bob to join the NCCE. We should ask Mayor's office to sponsor candidates.

Jon said it would be good to get an engineer on board; he thinks adding developer is not a good idea, owing to potential conflict.

Residential EUTP (Energy Use and Tracking Program) and Coordination with City Council

Halina said there is strong interest among some of the city councilors in seeing EUTP on the City Council docket. Before going to the Council Halina is refining the proposal;

Jon said we need to demonstrate the ease of use of the app to councilors.

Halina said we should get 50-70 people to pilot the use of the tool.

Stephen said one use case would be the City Council endorsing EUTP, including agreeing to post results to the Assessors database. The second use case would be the actual interaction with homeowners.

Jon said the initially we should be getting data from a group of homeowners and computing Energy Use Intensity (EUI) from that data.

Stephen used a screen share of the Before 2050 app to demonstrate that the numbers can be gotten.

Halina said it is important to post results so citizens can compare themselves to others

Phil asked, are we going to provide for comparisons other than at point-of-sale of the house? On a more regular basis, how do we get the information to people?

Jon said there are a number of points when people might be interested in this data – e.g., when they plan remodeling ("How would different HVAC systems affect my score?" "How do I compare with my neighbors?")

Phil said, but to do that they need to look at a bunch of other households' results. We know that there is an impact on behavior when people can com[are their information.

Halina said people can look at results of other houses on the Assessors database. We could also provide guidelines to characterize low, medium, and high performance.

Jon suggested that we could define create cohorts with comparable situations to compare one's results with.

Jon also said he is not sure that even the point of sale information is relevant – it depends in part on the behavior of the previous owner, e.g. their thermostat settings.

Cory said, from point of view of someone looking at a result from the app, just seeing some numbers is very passive, so we should provide interpretation regarding what you can do actively to improve your score. And how much will people care about these results? We need to link the tool to something that motivates and connects them to their potential next steps.

Jon said we can use this information to target the outreach, so the consumer doesn't need to take the initiative to find out. He said we should keep separate a City Council mandate. The base case would be like BERDO 1.0 for residences, i.e., reporting only.

Phil said to convince the Council, we need to give them enough examples to demonstrate its potential usefulness. E.g., "Here's where you rank."

Halina said, to convince the Council to adopt an ordinance, we need to demonstrate (1) that we have a tool that is easy to use and generates the data; and (2) illustrate how having the data will motivate citizens to make needed improvements.

Phil suggested that many groups around Newton would get their members to participate and provide their data.

Jon suggested ways to do this: send letters, make contacts with Green Newton, Mothers Out Front, 350, etc., and recruit a thousand people to try it.

Jon added that this would be analogous to the way the City uses Mass Energy Insight to collect data automatically, and then use the data it to analyze performance of each building and program improvements,

Halina suggested that we follow Jon's suggestion; break it down to specific tasks and responsibilities.

Cory volunteered to reach out to Green Newton and 350.

Jon volunteered to do the needed writeup of how to use the tool.

Jim suggested that there should be three steps: (1) beta test using the app with a small group; (2) pilot with larger group of people to use the tool and then evaluate how it was, and (3) wider use with Newton residents. If the tool is put into wide use, the results can be presented in two ways: (a) look at data for specific houses on the assessors data base, and (b) also provide a statistical analysis and summary so people can see how their results compare.

Phil said the standard way it is done is to compute EUIs - annual energy consumption per sf by fuel/energy type and summarize the results.

Stephen suggested that we use the past three years of data on electricity, gas, and oil – which the app will provide.

Halina asked, what about EVs? We want the performance of the household, and energy for EV charging should be accounted for separately [from heating/cooling and appliances.]

Stephen said that all uses are included in utility data; the utility data doesn't allocate use to different types of loads. Knowing if there is an EV is insufficient. Stephen suggested that we, outside government, cannot, but the City of Newton can get vehicle miles travelled and presence of an EV for each household, and then subtract a portion of the electricity that is attributable to the EV.

Halina added, or ask the user for their estimated miles travelled.

Phil said, there are coarser data [i.e., presence or absence of an EV] to segregate the power EVs use.

Michael suggested, why not include a button that says "I have an EV" or "I have a heat pump?"

Halina asked, how do we introduce this pilot?

Jon said we can demonstrate that it is easy to use and gets the data we want; and we can show how the data can be analyzed in a useful way.

We should try to get a yield of 100 participants.

Stephen said he talked with MOF leaders, who said they weren't interested in participating, because of privacy concerns.

Jon said, we have to be able to explain why we need to do this.

Halina pointed out that this is a whole new territory for most people.

Cory said, for committed people, they will understand that the goal is to reduce carbon emissions.

Jon said we need to explain why we're doing this, e.g., start with the GHG inventory and explain how using the tool will provide part of the solution.

Phil said we need a rationale for making it public.

Halina proposed that Stephen, Jon, and Cory should work on developing a pilot with 100 participants; while Halina and Phil develop a rationale to convince people

Michael asked if we are also going to get data on the participant household's level of aggregation? We can use the cost per kwh on their electric bill [or supplier identified as a third party] to determine the level of aggregation. This is needed to compute the GHG emissions.

Cory suggested that in the overall process, we should incorporate what MassSave they are doing.

The meeting was adjourned at 8:45 pm.

The next NCCE meeting will be on December 15.

From the chat:

Cory Alperstein to Everyone (8:43 PM)

https://www.capelightcompact.org/the-sponsors-of-mass-save-submit-three-year-electric-and-natural-gas-energy-efficiency-plan/

For the first time ever, this plan assigns a social cost of carbon value to greenhouse gas emissions (GHG) to measure climate impacts—and the damages avoided through avoided CO2 emissions. The Sponsors' plan projects a GHG emission reduction of 845,000 tons, which puts Massachusetts on a path to achieving mandated 2030 and 2050 emission reduction targets, including, for the first time, support through gas energy efficiency programs for customers who want to transition to high-efficiency forms of electric heating.

Respectfully submitted by Jim Purdy