Minutes of the Cambridge Climate Protection Advisory Committee (CCPAC) Meeting

May 8, 2014 Cambridge City Hall Annex, 344 Broadway

Attendees: Quinton Zondervan, Susy Jones, Marguerite Reynolds, Lauren Miller, Sue Butler, Tom Page, Bill Zamparelli; Staff: Susanne Rasmussen, Bronwyn Cooke

Guests: Paula Phipps

There was no Quorum.

Susanne Rasmussen reported on the recent Cambridge City Council meeting where the proposed climate protection goals and objectives were introduced and expressed disappointment that no one from CPAC attended or spoke on the matter. Councillor Carlone expressed concern that the goals actually were weakened over time and was somewhat surprised. Susanne explained that the total GHG emissions were difficult to measure and the Committee was uncomfortable defining total GHG emission goals since we only really have accurate electric and gas usage and it is very difficult to capture usage and related GHG emissions for oil, VMT limited, and only partial waste stream (no C&I numbers) numbers. Susanne noted there was no opposition testimony to the goals and objectives at City Council.

Susanne also reported on the "Living with Water" charrette held by the Urban Land Institute, which used the Alewife Quadrangle area as one of the four sites. Alewife, the Innovation District, Revere waterfront, and the Back Bay were featured. She noted that flooding was going to be an ever greater issue moving forward in the Alewife area and that the ground water table is extremely high in Alewife and has little ability to allow any absorption. An Alewife developer spoke about his experience developing property in this area.

Susanne indicated Deputy City Manager Lisa Peterson traveled to Chang Rai, Thailand to look at city planning issues, which are similar to those experienced in Cambridge. A contingent from Thailand and Malaysia are scheduled to visit Cambridge soon. Susanne noted there might have been a language barrier but all the planning ideas and issues were similar.

Susy Jones spoke about energy efficiency at MIT Sloan School. MIT will be finalizing the Bike Plan for the Bicycle Network and there will be an open house on June 12th, 2014. Susanne noted that bicycle commuting has increased 60% over the past ten years.

Susanne noted the Cambridge Building Energy use Disclosure Ordinance is on the City Council agenda for May 19th, 2014. The ordinance focuses on larger commercial and multifamily buildings.

Cambridge City Council is seeking to establish a solar initiative that would provide incentives for residential solar projects in Cambridge.

The committee reviewed the Paul Gromer (Peregrine Energy) slide presentation that was an energy usage primer for Cambridge net zero task force. It was noted that population in Cambridge was about 120,000 residents in the 1950s and fell over time to below 100,000 through 1990s, but was recently increased to 105,000 due to renovation of aging properties and smaller households living in group quarters. 84% of residences are in family household and 16% are in group quarters (dormitories and multi-unit dwellings). Energy usage has steadily has increased in Cambridge since the 1950s but has actually decreased over the past 3 years (-2% for electricity and -5% for natural gas) due to renovations of energy inefficient structures and energy efficiency improvements.

It was noted that 85% of the CO2 emissions in Cambridge are generated by the commercial and industrial customers, however it was also noted that multi-family residential rental properties are included in this 85% C&I group. The trend of cleaner fossil fuel usage, (i.e., natural gas from coal and oil fired electric generation) has accounted for the emission improvements. Natural gas usage as a percent of

total energy use in Cambridge increased from 6% in 1990 to 15% in 2000, to 46% in 2010 and 52% in 2012.

The 90 utility accounts of 'Large Commercial & Industrial' customers used 40% of the KWH in Cambridge with the remaining 8K accounts divided among all other categories.

The summary conclusions included:

- Usage has been flat for the past 10 years
- CO2 emissions from electricity and natural gas use has fallen
- Reductions in energy use and emissions in commercial buildings is from efficiency improvements and reductions in emissions from electricity generation

Quinton led a discussion on how the Committee could break into working groups to address the 5 priority topics that were identified by the survey of CPAC members.

- B4 -- Reduce energy use intensity in buildings.
- I14 -- Grow community capacity in climate change knowledge, technology and entrepreneurship.
- D -- Runs on renewable and non-fossil fuel energy sources
- J -- Have capacity to effectively mitigate GHG emissions and prepare for climate change.
- F10 -- Increase overall amount of vegetative cover and reduce heat absorbing materials.

The Committee elected to break up into two groups and work on items D and F10 above for three months each and then select two other topics for three months each. It was felt the Net Zero Task Force would deal with B4 and the City Council's desire to address the residential solar incentive program issue might benefit from the working group tackling D. The working groups would then address all the issues over three months for approximately 4.5 hours per issue. Steering committees of each working group would be identified to define deliverables.

Members of the working groups included:

- D -- Quinton Zondervan, Susanne Rasmussen, Lauren Miller, Tom Page, Bill Zamparelli
- F10 -- Marguerite Reynolds, Susy Jones, Sue Butler, Bronwyn Cooke, Paula Phipps

The CPAC adjourned at 8 PM.