

# COMPREHENSIVE SUSTAINABILITY & ENERGY COMMITTEE

## *Meeting Minutes*

*Tuesday, August 22, 2019*

Pursuant to a notice duly filed with the Town Clerk, a meeting of the Comprehensive Sustainability & Energy Committee was held on August 22, 2019 at 7:00 pm at the Harvey Wheeler Community Center. CSEC members present were Jerry Frenkil (interim chair), Julie Kleyn (clerk), Janet Miller, Doug Sharpe (chair), Brad Hubbard-Nelson, Karen Gibson and Bob Shatten. Also present was Concord Director of Sustainability, Kate Hanley.

**1. *Welcome***

Jerry welcomed visitor, Kim Slack, a Concord resident.

**2. *Approval of minutes***

A couple edits were discussed and agreed upon. Janet motioned to approve the minutes, Brad seconded.

**3. *Next meeting***

Next meeting will be September 17 (chaired by Doug Sharpe).

**4. *Updates and announcements (Chair's report)***

Brad informed the group that the MA Board of Building Regulations and Standards (BBRS) is developing the Net Zero Stretch Code (as reported last meeting).

In state legislation, the Net Zero Stretch Code bill (H.2864) was referred positively out of the Joint Committee on Telecommunications, Utilities and Energy (TUE) and will hopefully now pass. Brad (with MCAN) recently met with state senator Michael Barrett, who supported this move.

**5. *Heat Pump Working Group (Brad)***

The group, which meets monthly, has expanded and now includes members from Carlisle, Acton, Lincoln, Wayland and Concord. The goal is to have a strong connected presence in the Metro-West.

Jan Aceti (CMLP) hosts the group's meetings (most recently on August 9<sup>th</sup>).

- *Presentation of HeatSmart analysis. (see Attachment 1)*

Data shows a universal uptick in heat pump adoption in all towns analyzed due to the HeatSmart program, state and local rebates, and federal tax credits. Wide-scale promotion and outreach made a sizeable difference to this positive trend.

Brad noted that actual adoption rates are higher than the MASSCEC website data because some homeowners used installers that were not part of the HeatSmart program and therefore not reflected in the official statistics.

Brad concluded that there is still a lot of work to do in order to meet the GWSA 80% reduction targets and that continuing to push deep energy retrofits is critically important.

- *Discussion of goals and potential expansion.*

Promoting electrification in home heating/cooling is an important goal as is providing technical resources for communities as well as adding representatives from other metro-west communities to the Working Group.

Bob asked whether an entire home needed to convert to heat pumps to be included in data, and Brad responded that partial conversions have been included in the data.

Kate asked whether we expect the interest in heat pumps to continue. In Concord the rebate program is still continuing although MassCEC has discontinued their rebate program. Since home heating systems are replaced on average only every 30 years or so, the hope is that spreading understanding and awareness about heat pump technology/benefits will make it more likely that when homeowners are faced with the need to replace their system, they will choose heat pumps.

Brad will be sending a draft of the document shared (Attachment 1: Deep Energy Retrofits as a Priority) to Senator Barrett since switching to heat pumps is a significant contributing factor in achieving the goals of the Global Warming Solutions Act, ie. in order to meet the 80% carbon-reduction goal, the majority of homes must convert from natural gas and oil to heat pumps. Janet said buildings are responsible for 60% of GHG emissions so focusing on buildings is very important. 2.67% of households per year over the next 30 years must convert in order to meet the goal.

Jerry said Senator Barrett needs to be aware of the correlation between household income and adoption of heat pumps. Brad says incentives should be simpler, bigger and significantly bigger for whole home systems so that people are incentivized to convert whole house.

## **6. *Update on MassEnergize (Brad)***

Brad reported that during the summer a great team has been building the web platform which will be ready for demonstrating functionality by September 1. Content supporting Wayland and Concord will be added (photos, text, actions, service providers, events, testimonials) during September.

Policies are also now being drafted and service providers (Solar PV and others) selected. Brad said the project has been discussed with Kate Hanley and he hopes to meet with her and Town Management regarding COI, endorsement and committee involvement. Brad shared a document “MassEnergize Comes to Concord” (Attachment 2). A kick-off Solar PV event is being considered possibly for early October.

Bob asked whether EnergySage could be a potential solar provider but Brad said that tracking prospective customers through the web platform is not possible with EnergySage.

Doug asked how CSEC can support MassEnergize's new solar program. Brad said CSEC should host a community event soon, possibly in October because some rebates will disappear in January but Kate pointed out that many solar rebates and incentives will still be available, and that the program can run beyond January. Doug agreed.

Kim noted that when he met with Laura Scott at CMLP, she expressed concern about Concord overproducing solar at times (more of a concern for commercial rather than residential buildings). Kim said that one solution to this would be if Concord's EV owners permitted the light plant to control their chargers in order to offload the excess power.

**7. *Update on Electric Vehicle promotions (Janet's report)***

EV working group is today making a presentation of programs.

Currently only 2% of cars are plug-in, Concord seeks to convert many more to electric. Charging stations for multi-unit dwellings (MUDs) – 25% of Concord's dwellings -- are more complicated than for single family homes. A new pilot program involving 3 MUDs will run soon (with CMLP providing resources and financial assistance). Each MUD has a different garaging option: indoor and attached to dwellings, covered but separate from dwellings, and outdoor. The pilot will seek to address whether shared charging or individual charging stations would work best. CMLP will have engineering and construction designs for the MUDs.

Janet says it's proving challenging to get this program operational, CMLP has not worked out all the wrinkles yet.

**8. *Further discussion about CSEC goals for future***

Kate reminded the group of the committee's charge and told us that Concord's emissions are:

Residential buildings 30%

Municipal buildings 30%

Transportation 37%

Water, waste etc 3%

Jerry said there's an economic argument to reducing emissions, businesses and residents can save money.

Kate said it's important that energy audits be easily actionable. It's all too easy for people not to take steps after receiving the audit report.

Doug mentioned that at a recent CAAB meeting, he learned that they are frustrated that they do not have the power to do anything and Doug asked whether CSEC should be supporting them. Kate says yes, adding that a consultant is being hired to help CAAB work towards the new Climate Action Plan.

Doug/Brad asked whether Emerson Umbrella's recent renovations could be used as a case study against which new projects could be measured. But Kate said a better focus is to work out how to do energy projects in Concord's historic district, where there are

significant building restrictions. She proposed that the Orchard House, which has recently installed a ground-source heat pump, could be a case study.

Doug stressed that sealing ducts is important and audits need to be emphasized as there is no point installing heat pumps if a building is leaking air.

Bob says hybrid/HP water heater systems should be focused on.

Bob shared a document about battery storage systems (Attachment 4). Bob said Fenn School should have a large array/storage facility. Doug said he knows that Fenn is interested in this, but it is not a priority with them right now. Jerry said there are regulatory issues regarding who can sell power to whom. Brad noted that a large array cannot be built at CCHS because of storage challenges.

Kate shared that we have a meta grant from DOER right now to evaluate town facilities for battery storage. Kate said we'll hire a consultant to do the analysis.

Kim asked whether Concord receives grants for climate adaptation and Kate responded that, through the Municipal Vulnerability Preparedness (MVP) program, (Concord is now an MVP-certified community) we now qualify for grants for adaptation and resilience projects.

Additionally, Concord has received another grant for tree reforestation and resilience in partnership with DPW. Brad said this is good but has low impact on the Town's goal for reductions in carbon emissions.

Jerry summarized the group's ideas:

- Developing strategies for future building based on commercial buildings with case histories
- Energy efficiency in historic districts (existing stock)
- Heat pump water heaters
- Battery storage and solar
- Duct sealing
- Supporting MassEnergize's solarize program, possibly in spring of 2020.

Bob added that he and Kim have been looking at anaerobic digestion waste0-water plants burning sludges. Janet noted that food waste in land fill produces methane. Bob suggested focusing on food waste and Kim added that a feasibility study could be undertaken assessing waste-water treatment plants along the Assabet River.

## **9. *Liaison reports***

CAAB: Jerry said at the CAAB meeting, the Town's summer intern, Kortni, gave a presentation on commercial sector emissions and this has led to Jerry being interested in CSEC focusing on commercial emissions.

CMLP: Brad said at the CMLP meeting, the new Town Manager, Steven Crane, was present who is also the CMLP General Manager.

A new CMLP Assistant Director has also been hired: Joe Repoff.

The Director David Wood reported on REC purchases, at \$23 per REC (\$0.023/kwh)

This year, CMLP purchases with \$419k amount to 65% carbon-free power in 2019 (compared to 54% in 2018)

CMLP is embarking on a Cost of Service and Rate Design Study, important in energy conservation. 6 proposals will be submitted to the Town Manager for final decision.

Brad summarized current legislation that was discussed:

H.2863 – Greenhouse Gas Emission Standards for Municipal Light Plants

(CMLP not supportive because of double-counting of RECs, Brad suggested that CMLP could write a letter to make this more widely known)

H.832 – Creating a 2050 Roadmap to Clean and Thriving Commonwealth (the Board was somewhat supportive but not taking a position). The Town Manager is planning to meet with Tami Gouveia who is a sponsor of H.832.

#### ***10. Public comments***

None

#### ***11. Adjourn***

The meeting adjourned at 9:06pm. Brad motioned to adjourn and Bob seconded.

Attachments:

1. [Deep Energy Retrofits as a Priority](#)
2. [MassEnergize comes to Concord](#)
3. [Lease/Buy/Choose a Solar Installer](#)
4. [NEC Rolls Out 20MW Storage in New England](#)