

Town of Concord
Climate Action Advisory Board
Meeting Minutes
March 17, 2021

Pursuant to a notice duly filed with the Town Clerk, a virtual public meeting of the Climate Action Advisory Board (CAAB) was held on March 17, 2021 at 6:00 pm via Zoom.

Attendees: Jake Swenson (chair), Brian Crouse, Michael McAteer, Courtney Eaton, Warren Leon, Ruthy Bennett, John Bolduc

Staff: Kate Hanley

Guests: Martine Dion-SMMA, Matt Root-Chair of Middle School Sustainability Subcommittee, Stephen Moore-SWA, Kristen Olsen-SMMA, Ian Parks-Hill International, Laurie Hunter-Superintendent, Brian Foulds, Brad Hubbard-Nelson, Andy Puchrik, Pamela Dritt

1. Welcome and Zoom reminders

The Chair reviewed the rules of public meetings on Zoom.

2. Meetings and minutes

Due to April 21st falling during school vacation, the board agreed to meet instead on April 28th.

Warren Leon moved to approve the minutes from February 24th. Courtney Eaton seconded. Minutes were approved.

3. Chair's Update

Jake noted that he would be giving a presentation on home energy scores later in the meeting.

4. Director's Update

Kate Hanley shared that Concord launched a new program, Concord Clean Comfort. The program is run by CMLP and provides heating and cooling coaching to residents. Kate also highlighted a few upcoming events related to water conservation and a League of Women Voters climate policy discussion.

5. Middle School Committee Presentation

Kristin Olsen, project manager from SMMA, presented an overview of the Concord Middle School project's process to-date. The project is currently in feasibility study phase. The process includes community and building committee feedback.

The school will be roughly 143,000 gross square feet, net zero energy ready, have an all-electric HVAC and kitchen, an energy use intensity (EUI) target of 25 or better, be highly-insulated, LEED Silver certifiable, and have high indoor air quality. The project will also include high efficiency lighting, controls systems, and plug load management. Energy modeling will support a 50-year life cycle cost assessment.

The presentation provided an overview of the Sustainability Subcommittee's recommendations that were accepted by the full building committee. These include all-electric, solar and storage ready, focusing on energy efficient design and construction, reducing embodied carbon during construction, and complying with the EZ code version 2.0 as proposed to the state. The committee is supportive of and committed to the building being a net zero building, but the decision has been made to not include the solar PV and storage in the building project and have CMLP manage the installation and financing.

Warren Leon asked about the square footage in comparison to the two schools it's replacing. The new school is smaller by 10,000 sf than the combined sq ft of the existing schools.

There was also a question about embodied carbon.

The focus will building materials as it relates to embodied carbon, focusing on exterior and structure usually. Steel buildings have lower embodied carbon than a concrete building. Reducing cement in concrete by reusing recycled content helps to reduce embodied carbon. The project will likely also look at insulation, staying away from foam-based insulation.

Michael McAteer asked if the project is considering a dashboard in the school as part of the learning curriculum.

Laurie Hunter replied that the school will be a learning lab for the students. It's about the human behavior and students incorporating this behavior into their day at school and outside school. She added that connection to nature is great at this site.

John Bolduc asked about water systems, how much of a commitment from CMLP to install panels, and commented that LEED silver seems unambitious.

The design team replied that the project is not pursuing full LEED certification because of cost and that they likely could achieve higher than silver but the new version of LEED is much more stringent. They noted that the zero energy component does not bring that many more points to the rating.

The hot water systems will be all electric and that will likely mean a heat pump hot water option.

Kate is taking the lead on coordinating solar design with CMLP and design team. There is a commitment to have the solar PV installed as close to when building opens as possible.

Brian Crouse asked how significant the solar related is related to emissions reduction in the project. He also noted that the high school considered solar PV and it was completed 11 years ago and still doesn't have solar.

Courtney Eaton noted that concrete has high embodied carbon. Other projects have had success using a less carbon intensive mix and recycled content has been included for a long time. There are different recycled components that can be used that do not affect performance, but some of those come from fossil fuel production. Courtney also suggested that the project consider how stormwater could be captured and treated on-site rather than going into the stormwater system.

Pamela Dritt asked why a generator is planned and not use battery storage for back up power. The design team noted that this will be discussed in schematic design.

Brian Foulds asked for more information on landscaping plans and the plans to capitalize on the bike path located behind school.

An eco-charette will be planned for the next phase of the project where community members can provide more detailed input on the sustainability elements of the site and building.

6. Biomass Resolution

Brad Hubbard-Nelson shared that CSEC approved a resolution on biomass urging the state to not include it in the state's RPS.

CSEC asks if CAAB's approval as well before going to the Select Board.

Biomass is not renewable as other renewable fuel and emits more CO₂ than fossil fuel power plants per unit of energy generated. Most objective studies find that a biomass plant is a net emitter.

Warren Leon made a motion to support the resolution. Michael McAteer seconded the motion. CAAB voted unanimously to support the resolution.

7. Home Energy Score Programs

Jake share a presentation on Home Energy Scores programs as potential option for Concord to help reduce GHG emissions from residential buildings. Residential buildings make up over 30% of Concord's emissions. CAAB agreed to discuss further at the next meeting.

8. Public Comments

Brad Hubbard-Nelson asked whether the Home MPG pilot included homes with delivered oil heat. Jake noted that it probably did include those homes.

Brian Foulds suggested looking at Concord Light's smart hub in their billing system for a data breakdown of patterns of electricity usage.

9. Adjourn

Minutes prepared by Ruthy Bennett.