



Clean Energy Future Committee

Date: October 27, 2023

Time: 8:15 – 9:30 a.m.

Hybrid Format Meeting

Minutes

Attendance:

- Members Remote: Aimee Graeber, Amos Meeks, Eric Helmuth, James DiTullio, Nellie Aikenhead (left @ 9am), Pasi Miettinen, Shelly Dein, Ryan Katofsky (as Chair),
- Members in Person: David Morgan, Jim Feeney (Town Manager), John Alessi, Talia Fox
- Members Absent: Marc Breslow
- Also attending: Bruce Moulton, Michael Walsh, Damon Bosetti, Parke Wilde, Pat Hanlon

R. Katofsky convened the meeting at 8:15 am.

• **Virtual Meeting Reminders**

- If there is a technical failure, we will try to relaunch the meeting three times.
- If we are unable to relaunch and there are more than 20 minutes left in the meeting, the CEFC will reconvene the following Friday.
- If there are fewer than 20 minutes left, the CEFC will carry the remaining agenda items forward to the next meeting.

• **Review and Approve 9/22/2023 Meeting Minutes & Update**

- September 22, 2023 Meeting Minutes not yet prepared. CEFC will plan to review them at the November meeting.
- Quick update: both the updated Fossil Fuel Free (FFF) Bylaw and the MBTA Communities Act were passed with a strong majority vote by Fall Town Meeting, with only minor amendments made from the floor. There are a few steps left for the full approval, primarily related to state level requirements.

• **2023 Electrification and Air Quality Master Plan**

- The Town has completed a study of electrification in school buildings. The study includes a number of key components, including:
 - A focus on the six oldest of our schools - Bishop, Brackett, Dallin, Hardy, Pierce, and Ottoson. The other five schools are relatively new or already electrified;

- An existing conditions inventory that evaluated HVAC, building management systems, kitchen appliances, hot water, and electrical service;
- Extra consideration for maintaining good interior air quality;
- An evaluation of solar capacity; and
- A timeline and budget analysis.
- Three types of HVAC systems were evaluated: air source heat pumps, ground source heat pumps, and traditional HVAC systems.
- All price estimates were based on a complete replacement of existing systems, plus the addition of air conditioning, with both upfront costs and the anticipated full life cycle of expenses considered. This was done for all six schools.
- As an example, the Bishop life cycle (30 years) costs for the systems were \$8M, \$10M, and \$7.7M, respectively.
- These figures are significantly reduced when Mass Save and Federal IRA rebates and benefits are considered.
 - Geothermal then becomes least expensive, primarily because of the Direct Pay option offered through the IRA, and air source heat pumps shift closer in price to the traditional HVAC option.
- This is a broad brush study. When it comes time to renovate or replace, each building would have a tailored plan, which could include other items as technology changes.
- A long-term financing strategy will be needed if Town intends to implement these electrification options and achieve net zero. Federal and state incentives typically are provided upon completion of installation, after forms are filed, so the Town will need to fund the costs upfront and while obtaining the rebate, which may take a substantial amount of time.
- Financing would not be traditional borrowing. The Town would need the funds upfront in order to enter into a contract, but then as rebates and tax benefits come back to the town, the town would pay a portion back quickly, rather than paying back the bond over the typical 20 or 30 years.
- The study is useful partly because it helped us to understand we cannot implement this electrification plan all at once due to the substantial price tag. And we cannot fit it into the Town's capital plan as it exists; we would need to a debt exclusion in order to fund it.
- Potential next steps:
 - Do a full electrification pilot program for one school building, working over a two-year period so students don't have to be relocated. This will spread out the expenses in the capital plan as well.
 - The Town will also need to replace parts of systems over time due to natural wear and tear; we might want to establish a policy that as individual items are replaced over time, they be switched to electric.
 - This will take time. Electrifying one school, moving to the next, and then to the next, etc. will take a decade or more.
 - Suggestion to consider "Network Ground Source Heat Pumps", in which more than one building runs off the same system. Network Geothermal is less expensive than geothermal for a single building because it reduces the number of wells that have to be drilled, provides economies of scale, and enables sharing of resources.
- **Update on Legislation on Community Choice Aggregation (ACE)**

- The Town is actively engaged in an effort to change the rules related to the way that DPU regulates the program and allows updates to be made. Currently, DPU has a backlog, and the rules have become onerous, hampering the ability of municipalities to make changes. Arlington and our energy broker, Good Energy, have provided written and oral testimony, and many other communities have done the same. Our energy contract ends in November 2024, and likely we will go out to bid in the spring, by which point we would ideally have more flexibility to innovate.
- **Other Updates**
 - The Town is applying for a \$50,000 grant for a feasibility study of a potential networked ground source heat pump project in East Arlington. An RFP has been issued. The deadline for the application is in December 2023 and we are ready to go. The study would focus on Menotomy Manor, which is a Town of Arlington affordable housing property, the Thompson School, an apartment complex that is nearby, and smaller units owned by the Housing Corporation of Arlington.
 - Arlington received a Green Communities grant for \$100,000. The Town will use this money to 1) put in the 2nd phase of heat pumps at ACMI, which will make that building fully electric, 2) finish the last phase of LED lighting at the Dallin school; and 3) install heat pumps at the Jarvis House.
 - The Town has launched its two new electric busses and are working on trouble shooting a few things.
 - All CEFC members complete the Conflict of Interest training program, which can be found on the Town website.
 - The Commonwealth is offering a new certification program, Climate Leader Community, that is similar to the Green Communities program, but focused more on climate change. Arlington is planning to apply and is currently looking into the details and requirements. If we are certified as a Climate Leader Community we will be eligible for grants and funding opportunities.
 - We have an ongoing relationship with a Bentley College professor who works with students on greenhouse gas inventories. The students did a great job on their first inventory, and we are hoping to be able to work with them to update the data in the future on a regular basis.
- **Next Meeting Date November 17th**
P. Miettinen moved to end the meeting and S. Dein seconded. Unanimous vote by show of hands.

Submitted by Nellie Aikenhead 12/12/2023