



CLIMATE ACTION COMMITTEE

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Susan Morris, Chair

Laura Olton, Vice Chair

Catherine Mirick

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Lise Olney

Climate Action Committee Project Updates

November 2, 2022

Climate Action Plan (CAP) General Communication and Outreach

- Coordinated, developed, and sent outreach materials for Green Collaborative meeting – Great Hall and on Zoom, Nov. 16, 9-11am
- Invited community organizations to Green Collaborative
- Met with Wellesley Library and Phyllis Theermann to discuss CAP-related events and display cases
- Discussed potential spring climate action events with Phyllis and Chief Pilecki
- Responded to several phone calls from the Boston Globe

Green Communities

Wellesley received a grant for \$200,000 for municipal energy efficiency projects from the Department of Energy Resources. The projects and amounts covered by this grant are listed below.

- \$60,000 – Air source heat pumps at Wellesley Ave. water treatment plant (WTP)
- \$60,000 – Air source heat pumps at Morses WTP
- \$60,000 – Air source heat pumps at Longfellow WTP
- \$10,000 – LED lighting in the Department of Public Works' Water and Sewer garage
- \$10,000 – Two hybrid electric police cruisers

DOER sent initial feedback on the two heat pump systems recommended by DPW's engineering consultant Wright-Pierce. Once the best alternative is selected, Wright-Pierce will develop system specifications that DPW will use to put out an RFP.

Janet completed the Green Communities Annual Report. After review by the Select Board, Janet will submit the report to DOER before the November 4 due date.

Governance

Reviewed and provided feedback on Hazard Mitigation Plan materials.

Buildings

From Fred Bunger:

Buildings Working Group (BWG) of CAP

Update of BWG activity using CAP action items as a guide:

B1 Regulatory:

- CAC proposal to adopt Opt-in Stretch Energy Code warrant for Town Meeting presented at 10/18 Select Board. CAC asked Select Board to co-sponsor the warrant article. Follow-up with Select Board in November.
- Assist Planning Board in sustainability amendments to PSI or Design Review process and Large House Review. Target Spring Town Meeting
- Fred attended MA Executive Branch Public Hearing on Clean Energy and Climate Plan for 2050 on 10/11 and testified on need for EUI standards for buildings. Recommended that building efficiency improvements must occur before electrification. Also strongly recommended that MassSave administration be moved out of the hands of the utilities.

B2 Promote net zero

- Janet put together a list of the top ten HVAC contractors in Wellesley for 2021-2022 using sheet metal permit data from Building Inspector Michael Grant. Fred reviewed 2021-2022 building permits and has assembled list of contractors for ducted heat pumps, mini-split heat pumps and air sealing and insulation. Working on survey for contacting contractors.

B3 Municipal Action

- Police Station audit: Chief Pilecki is on board with the audit moving forward. Janet and Marybeth will consult with FMD on how best to carry out the audit.

B4 Residential conversion

- Discussed WMLP incentive programs and outreach to oil users.
- Working on developing “case studies” of home energy upgrade and electrification using Building Department database. Publish a series of climate action suggestions in WMLP monthly bill.
- Preparing presentation for 11/16 Green Collaborative

B5 Commercial/Institutional

- Contacted MassDevelopment to plan meeting with Assessor’s Department, Treasurer’s Office, and other Town staff regarding adoption of commercial PACE.

New Buildings Institute Decarbonization Code for Existing Buildings

Attended webinar introducing nbi recommended overlay to existing code specific to decarbonization of existing building stock.

NEEP Heating Electrification Workshop

Participated in 2 day workshop 10/19 & 10/20 on heating electrification. Summary e-mailed.

Buildings Energy Tracking and Reporting (BETR) and Building Energy Roundtable

From Janet Mosley:

The next roundtable will be early in 2023. Janet, Marybeth, and Fred are working to develop an agenda and identify speakers.

156 Weston Road and Center for Eco-Technology Decarbonization Audits

From Marybeth:

Lisa Wolf and Marybeth met with the Center for Eco-technology (CET) to discuss the decarbonization audit of 156 Weston Road and the general strategy for these audits.

From Lise Olney:

MCAN/BEA/HEET “Panel on Municipalities: Identifying Priorities and Barriers to Building Retrofits”

Oct. 25, 2022

This webinar was highly informative – I recommend watching the recording.

Resources from the event:

1. [The slide deck](#) (including additional informational slides provided by Beverly Craig)
2. [The recording](#)
3. [The chat text](#)

Topics discussed included:

- **Equitable Home Electrification Toolkit** designed to help communities develop their own equitable housing electrification roadmap through an equitable process, with a commitment to equitable outcomes <https://rmi.org/equitable-home-electrification-toolkit/> Includes a Process Guide and Roadmap Template to help municipalities “plan a plan.” Community engagement is essential to ensure that you actually address the needs and priorities of your community not just those things you *think* the community needs and prioritizes. Reminder to stay flexible with your electrification plan since building electrification is a rapidly changing field.
- **Retrofits without Displacement: 5 Easy Images** – Guidance on anti-displacement efforts and how they relate to our efforts to retrofit/electrify.
- **Mass Buildings: Meeting Net Zero by 2050 Goals** – Unprecedented incentives available for deep energy retrofits for multi-family housing – affordable *and* market rate.

Some key take-aways:

- Municipalities should be planning according to what we know right now about state incentives and work on identifying gaps in your community so those can be addressed as more funding becomes available.
- Bottom line: We must increase the supply of multifamily housing however we can, e.g. through ADUs, allowing single family homes to be made into duplexes, MBTA communities projects. Think outside the box – e.g. maybe make it easier to convert a single family home to a duplex if property undergoes a deep energy retrofit.
- IRA regs haven’t been written yet. Will need more information going forward about how this money will roll out. Built Environment Plus will be holding a forum on **December 8** to dive deeper into federal resources.
- Community First partnerships are important to engage residents in low income housing and help them participate in the retrofit process.

<https://www.masssave.com/learn/partners/community-partnership>

- Municipalities should work to identify where and who hasn't yet benefitted from retrofits and energy efficiency efforts, e.g. people who aren't considered low-income but who don't have a lot of personal resources and aren't first adopters. Need a lot more outreach from municipalities to these people to help connect them to Mass Save resources and incentives. A lot more services and incentives are available than in previous years. Also need to go back to households that have *already benefitted* - appliances are MORE efficient now. Low income programs do MUCH deeper work than previously. A letter from the municipality and/or trusted non-profit groups gets more attention than outside groups. Partnering with local orgs will help you get the word out to those struggling with high energy bills. Municipalities better positioned to know who/where greatest impacts are. Tenants and owners may not know that they are eligible.
- Environmental Justice communities - some areas have blanket eligibility according to EJ census blocks. Check to see if your municipality includes EJ census blocks: <https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=1d6f63e7762a48e5930de84ed4849212>
- Mass Save program needs hundreds of millions of dollars more to reach their goals - there is not enough money available to achieve electrification that needs to happen or even the weatherization that needs to happen.
- ZeroCarbon Renovation Fund needs way more money - need to go further to completely decarbonize our buildings and need to start with our low-income buildings — communities that have been neglected.

Many written resources and funding search tools were referred to during the event – organizers plan to send a complete list in the next two weeks. Meanwhile, here is what I captured:

- **Mass Save Low Income Energy Assistance Network (LEAN)** Put any project with more than 50% low income into this program NOW. <https://leanmultifamily.org/>
- **Mass Save Passive House New Construction Multifamily** - \$3000 per unit and pre-development funding - for ANY KIND OF HOUSING OVER FIVE UNITS . **Developers need to know this exists for any residential project!** <https://www.masssave.com/saving/residential-rebates/passive-house-incentives>
- **IRA** - many provisions that include incentives including **solar cash rebate** for non-profits and government entities that previously were not eligible for tax credits. From USDN: https://www.usdn.org/uploads/cms/documents/ira_for_members.pdf
- **Mass Save Commercial New Construction Incentive:** <https://www.masssave.com/en/saving/business-rebates/new-buildings-and-major-renovations/net-zero-and-low-eui-buildings>
- **Mass CEC Municipal Toolkit** - coming in Nov.
- **Clean Energy Lives:** <https://goclean.masscec.com/>
- **Mass Save Community First Partnerships:** <https://www.masssave.com/learn/partners/community-partnership>
- **BEA Resources on Federal Funding & Search Tools:** <https://docs.google.com/document/d/1EBPdCTKXWaZXJmJ1EDqQNQ3RLWnkvl0rkApjmuisUSk/edit?usp=sharing>

Mobility

From Martha Collins:

The third EV event, and the second to include test drives in dealer vehicles, was held on October 16 at MassBay Community College, sponsored by the Wellesley Municipal Light Plant, Climate Action Committee and Sustainable Wellesley.

- There were 11 dealer EVs available for test drive and 14 residents showcased their EVs and answered questions.
- There were 164 registrants, and approximately 100 test drives were taken at the event. The majority of attendees were able to test drive their first or second choice EV. A post-event survey to gauge whether these events influence purchase intent is being conducted.
- The next EV Test Drive & Owner Showcase is tentatively scheduled for Thursday May 11 from 4 to 7 p.m.
- Martha Collins provided a letter of support for the nomination of the Town of Wellesley's Sustainable Mobility Plan for American Planning Association – Massachusetts Chapter (APA-MA) Sustainability and Resilience Award.

The Council on Aging (CoA) is now leasing a new ADA accessible bus from the MWRTA.

MWRTA Catch Connect ridership has increased, largely among college students and employees. This has caused longer wait times. Select Board member Colette Aufranc and Executive Director Meghan Jop met with Babson about their apparent transportation needs.

Safe Routes to School (SRTS) is now at all Wellesley Schools, including the High School. Select Board member Colette Aufranc and School Committee member Catherine Mirick have been working with Safe Routes to School (SRTS) to improve routes.

Idling throughout town, but particularly in school carlines, is an ongoing challenge. Select Board member Colette Aufranc discussed with police Lieutenant Scott Showstead. Colette asked whether Sustainable Wellesley could provide communications support to reduce idling.

MBTA commuting behavior has changed, so all day, on-the-hour (clockface) service is being targeted to meet demand. Demand is at approximately 50% of pre-pandemic levels, with weekend ridership up 300%, to pre-pandemic levels.

There is a strategic move away from an electrification strategy that requires continuous electrification through overhead catenary lines (OCS) to a hybrid of continuous electrification and on-board electrification through batteries at the MBTA. OCS is expensive, takes a long time to proceed through permitting, and the power grid is poor in some locations. Phase 1 is targeted at the Providence Stoughton Fairmont line. The Worcester-Framingham line is next. Colette expressed an interest in connecting with Ellen Korpi and Lisa Wolf of the WMLP on power grid and battery storage questions.

From Marybeth:

Shared draft EV First Policy with the EV Working Group.

From Janet:

GIS Manager Michael Thompson developed a list of 1,009 battery electric and plug-in hybrid vehicles registered in Wellesley. He also paired this list with addresses to produce a map of EVs throughout town to assist the MLP in load management (see more details in MLP update below).

Gas Transition

From Lise Olney:

HEET/MAPC charrette, “The Municipal Pathway to Renewable Thermal Networks”

Oct. 18, 2022

Purpose: To provide municipalities with a toolkit to facilitate the transition from gas to networked geothermal.

Presenters reviewed examples of existing geothermal systems at Colorado Mesa University and a geothermal community system in Toronto that includes 312 homes (mixed single family and town homes). The Toronto system has no supplemental heating or cooling. Network of pipes was installed in the right of way in the streets, and two pipes go into each home to service a heat pump. The system is a fully integrated, utility grade system with everything located in the street and nothing on private property.

Travis Anderson of the Boston Planning & Development Agency discussed what Boston is doing to prepare for networked geothermal, including:

- Boston Smart Utilities Program
- Smart Utility Steering Committee (cross agency coordination group that meets bi-weekly)
- Smart Utility Design Standard (developed for new developments for planning and creating mini “Complete Streets”)
- Considering how to pre-plan for geogrid boreholes
- Continuing to build data on existing systems and review capital improvement plans to evaluate energy conservation measures and upgrades
- Looking at building diversity (residential and commercial) to create diversity of load profiles within an area
- Aiming for equity – reducing existing health and energy burdens
- Working to resolve technical challenges of multiple owners and users.

Tony Amis of Endurant, GSHP subject matter expert, reviewed feasibility studies on geo solutions in densely developed urban areas where building footprints extend across the whole site.

Brooks Winner of MAPC moderated a discussion of who should own the networked geothermal system – the municipality, utility, or third party.

3R Working/Waste Group

From Sue Morris:

We are working with Wellesley High School Climate Action Club, an elementary school environmental group, and a recent Boston College graduate who did his Wellesley High School senior project on analyzing and making recommendations on how to reduce litter around Wellesley High School and the Brook Path to help strategize on a better system for trash and recycling on the Hunnewell Fields. We gave a report to the 3R Working Group and have been pushing Dave Cohen and the DPW to make some of the simple changes in the report such as having all trash barrels paired with a “Plastic Bottle only”

barrel and having the trash and recycling containers more strategically placed and with better labels. I can share the report with anyone interested in reading it. If we are using the Hunnewell Fields as a pilot I think this is a great opportunity to rethink the whole trash and recycling disposal system there. It is clear the current system is not working as much of the recycling from the parks and fields is being landfilled due to contamination. We have also been working with the DPW and RDF on the new RDF app and have suggested some changes to improve the app.

Wellesley MLP Sustainability Initiatives

From MLP Staff:

Heat Pump Promotions

Our continued efforts to promote heat pump conversions has resulted in 126 consultations and 15 rebates for heat pumps since June 1st as documented by Abode. Our goal is for 80 oil-heated homes to convert to heat pumps each year, to reach 100% conversion by 2045.

In collaboration with Abode, Sustainable Wellesley and Green Energy Consumers, a webinar titled *Heat Pumps: What's New* is planned for January 16. Topics will include current technology and IRA benefits.

The Green Collaborative on November 16 at 9 am will be the next opportunity to promote heat pumps and describe WMLP initiatives and incentives that forward climate action goals.

MAPC Grant

Grant submitted October 14. The goal is to develop a model to employ residential batteries to flatten demand, increase resiliency, and deploy more renewable (solar) energy to the grid. Initially targeting households that require backup power for medical equipment or other social vulnerability, this pilot will potentially serve as a foundation for expanding residential storage town-wide.

Expectation of WECARE matching investment of ~\$50,000. Awards announced in December 2022.

GIS map of EV addresses

Thanks to the fantastic efforts of Town staff Janet Mosley and Michael Thompson, and cooperation of the Treasurer's Office, Wellesley now has a GIS map of all EVs registered in Wellesley.

This means WMLP can now identify addresses of over 750 EV owners who are not participating in the SageWell, bring your own charger program, and direct mail an appeal to enroll. WMLP can also now overlay a circuit map onto this EV GIS layer to identify and manage potential overload situations.

These are the results: BEV: 690 PHEV: 319 TOTAL EV: 1,009 Leased: 300 (no local address)
Enrolled in BYOC: 259