



SUSTAINABLE ENERGY COMMITTEE

TOWN HALL • 525 WASHINGTON STREET • WELLESLEY, MA 02482-5992

Sustainable Energy Director: Marybeth Martello

SEC@wellesleyma.gov

SEC Analyst: Janet Mosley

jmosley@wellesleyma.gov

Laura Olton, Chair

Susan Morris, Vice Chair

Cindy Mahr

Ellen Korpi

Martha Collins

Fred Bungler

Lise Olney

SEC Project Updates

December 4, 2020

Green Communities

Work began on the following Green Communities-funded projects. Janet is coordinating invoices and keeping an eye on the timeline.

- \$25,128, Exterior LED lighting in municipal parking lots
- \$98,500, Interior LED lighting in the High School auditorium and gymnasium
- \$10,000, Two hybrid police cruisers
- \$4,292, Administrative assistance to support LED lighting projects

On November 16, Marybeth Martello and Janet Mosley met with Meghan Jop and staff from the Department of Public Works (DPW), Municipal Light Plant (MLP), and Facilities Management Department (FMD) to review progress towards Wellesley's Green Communities commitment to reduce municipal energy use by 20% and to identify potential projects for Green Communities 2021 grant funding. Several projects were suggested by FMD and DPW. Janet is working to follow up with each department on next steps.

Climate Action Plan

Significant progress on the two-pager, community engagement plan, contact list and presentation content.

- The CAP Steering Committee met on 11/10, 11/19 and 11/23 to discuss a variety of CAP elements.
- Marybeth and Pam had multiple meetings to discuss and work on community engagement.
- Marybeth and Roopa had multiple meetings to discuss and work on the two-pager
- On 11/13 Marybeth met with Mike Thompson and Stephanie Hawkinson to continue to develop the CAP web pages
- On 11/18, Marybeth met with Rich Freeh of USDN to discuss CAP development.
- On 11/30, Marybeth met with Lindsay Freeh of Climate Nexus to discuss CAP communication

Town Budget

Marybeth drafted an SEC capital budget in consultation with Meghan Jop.

Marybeth has spoken with Finance and has reached out to Human Resources to understand a discrepancy in the SEC's FY22 budget template.

SEC Annual Report

Marybeth submitted the SEC Annual Report to Stephanie Hawkinson

Open Position on SEC

The recommendation for Martha Collins to fill the vacant position on the SEC was approved by the Select Board on November 16.

Gas Leaks

The Multi-Town Gas Leaks Initiative will meet on Thursday, December 3 at noon to 1:15 pm. HEET will provide an overview on geothermal micro-districts and the criteria for identifying a pilot location in MA in National Grid territory. National Grid will also provide their quarterly report on leak repair.

The Gas Leaks Allies have formed a Gas Leaks Kill Trees group which Lise Olney (Select Board) and Brandon Schmitt, Natural Resources Commission (NRC) Director, have joined. The group is working on recommendations for municipalities on gas leaks and trees, and is also drafting potential legislation to address gas leaks near trees. [A recent study in Chelsea](#) indicated that dead or dying public shade trees were 30 times more likely to have been exposed to methane leaks than healthy trees.

Brandon Schmitt and Mike Thompson (IT) have been working on maps for the [Town mapping hub](#) that would allow residents to see gas leak locations and how they compare to locations of public shade trees.

3R Working Group project update

From Sue Morris:

A few weeks ago the 3R Working Group ran a promotion strongly encouraging residents to recycle their newspaper and cardboard because of the high demand and high value in the secondary recycling market right now. There were positive comments on social media about the campaign so we hope it translates into increased volume of newspaper and cardboard recycling at the Recycling and Disposal Facility (RDF). We are planning to do another Catalog Choice promotion similar to the one we did last year to try to reduce the volume of catalog and junk mail residents are receiving and taking to the RDF.

We have ongoing discussions with Sustainable Wellesley and Jamie Manzolini about how residents and/or landscape companies can best dispose of gas-fueled discards. Sustainable Wellesley is encouraging people to shift from gas to electric equipment but want to let people know where they can get rid of their old equipment. Some towns are referring residents and landscapers to specific scrap yards. We would like to give Wellesley residents and landscaping companies guidance on this.

We are discussing the possibility of doing a large scale promotion and/or rebrand of the RDF in 2021. It is the 50th anniversary of the RDF and a good time to underscore the importance of recycling to the town and to the environment, especially in Wellesley due to favorable economics from our recyclables.

Rocky Mountain Institute (RMI) Building Electrification Accelerator (BEA)

Resolution on Net Zero Building: The Wellesley BEA team has prepared a draft resolution urging the State Legislature to approve legislation that would address the challenge of greenhouse gas emissions in the building sector and to allow municipalities greater latitude in establishing energy efficiency standards. The Town cannot meet its climate change goals without emissions reductions in the building sector. All 15 towns in the RMI program are considering proposing similar resolutions to their Town Meetings.

Seminar: At the November 19 RMI seminar Lindsay Hamilton of Climate Nexus presented a public opinion survey on natural gas in MA. Media strategies were discussed. A follow-up media training is scheduled for January 14. Claire McKenna of RMI reviewed the RMI study on building electrification economics. First cost for heat pump heating is now less expensive than gas. Peter McPhee of Mass Clean Energy Center discussed electrification strategies including district geothermal pilot projects.

Zoning Change Proposals: At the November 17 meeting with Planning Department staff, the BEA team was tasked with providing recommendations for sustainability into the Zoning Bylaws. Red-line drafts were prepared & sent to the Planning Department on November 23 to amend:

- Yard Regulations and Definitions to simplify adding heat pumps to existing residences.
- Project Approval to include energy consumption, MSBG comparison and LEED checklists
- Design Review to include AIA Framework for Design Excellence
- Large House Review to include energy consumption and LEED checklists

The Planning Department has requested discussion of proposed changes at the December meetings of the Planning Board and Design Review Board, dates to be determined.

Board of Building Regulations and Standards (BBRS)

At the November 10 BBRS public hearing, Fred Bunger, representing Wellesley SEC, and Ellen Watts testified in support of the Commercial E-Z Stretch Code, a zero net energy building code developed by Northeast Energy Efficiency Partnerships (NEEP). A follow-up letter was sent.

Wellesley Housing Authority (WHA)

Fred reviewed WHA's long term plan to upgrade Wellesley subsidized housing presented by Tise Design Associates. Fred is working with the WHA director to calculate baseline energy efficiency calculations for all 234 WHA housing units.

Mobility Committee

Martha Collins attended the Thursday, November 19 mobility committee meeting and provided the following meeting highlights:

- Presentation by Safe Routes to School (SRTS)
 - Need to activate this program at Fiske, Hunnewell, and Hardy.
 - An active program triggers funding eligibility

- Catherine Mirick accepted action item to bring this to Green Schools
- Discussion of Shared Streets and Community Connection funding
 - Floated 135/Central Ave temporary bike lane to Natick line. Idea put on hold due to Bacon Street Bridge/intersection project
- Discussion of Complete Streets – Dave Cohen of DPW requested prioritization
- Discussion of Trail Committee request to build trail path connection between Hancock 128/9 complex to DCR land near Hemlock Gorge
 - Meghan drafted letter of support
- Next meeting will be December 17 and will include a discussion of micro-transit option to replace MWRTA route 8.
 - Martha provided feedback to Select Board liaison Colette Aufranc

On Friday, November 20 Martha met with Collette Aufranc (Select Board), Catherine Mirick (School Committee), Allison Burson (NRC) to review, discuss and form prioritized recommendation of Complete Streets projects to Dave Cohen of DPW. A primary consideration for prioritization was which items were most likely to receive funding based on the specific grant eligibility definitions. Collette is summarizing the recommendations and will bring them to the next Mobility meeting or share them with Dave Cohen directly.

The Town received three responses to the Sustainable Mobility RFP. Meghan Jop formed a working group within the Mobility Committee to evaluate the responses and select a consultant. The working group members are Meghan, Colette Aufranc, Amy Frigulietti, Lieutenant Showstead, Valerie Oorthuys, and Allison Burson.

Upcoming Changes to MBTA Service

Martha attended the *MBTA Forging Ahead Public Meeting (Metrowest Region)* meeting via webinar. MBTA Fiscal and Management Control Board (FMCB) [meeting](#) will vote the following proposed changes into effect on December 7 at 11 am.

Commuter Rail (Framingham/Worcester line, changes go into effect January 2021)

- No evening service after 9 PM
- No weekend service (except for the Fairmount Line, which will be bused).
- Decreased weekday peak service and some midday service, reducing from 505 trains (as of Fall 2019) to 430 trains.
- Close six (out of 141) stations based on low ridership, operational impacts, and availability of alternatives.
- Specific service levels by line will take into account ridership patterns from adjusted Fall 2020 schedules with more balanced service throughout the day.
- <https://cdn.mbta.com/sites/default/files/2020-11/2020-11-09-forging-ahead-commuter-rail.pdf>

MBTA (Green D line@Woodland and Riverside, changes go into effect in the spring)

- Stop all service after midnight
- Reduce frequency by 20% across all lines (detail shows going from 6.5 minute to 9.5 frequency at peak / 9 minute to 13 frequency off-peak)
- Stop E Line Service at Brigham Circle, diverting riders to Route 39, which will have increased service
- <https://cdn.mbta.com/sites/default/files/2020-11/2020-11-09-forging-ahead-rapid-transit.pdf>

"Most service changes are not intended to be permanent. We will bring back higher levels of service when demand and travel patterns change, and there is durable revenue to support it. In some cases, particularly for non-essential bus routes and Commuter Rail, changes to pre-COVID service may be appropriate in order to reflect post-COVID changes in commuting and other travel patterns. We will restore service in response to ridership and in line with our planning to transform these services."

Provide feedback: <https://www.mbta.com/forging-ahead#feedback>

Boston Region MPO Community Connection

Martha attended a Boston Region MPO Community Connection information session on Monday November 16. This program offers \$2 million total in funding for eligible municipal projects. The proposed covered bike rack at Wellesley Middle School will likely to be submitted for consideration for Community Connections funding. Several items under consideration for Shared Streets (Winter) including a pedestrian crosswalk at Peck Ave. @Seaver St. by the high school, but additional discussions need to take place before item(s) will be submitted.

MAPC Shared Streets Grant Funds

Martha was unable to attend the Tuesday, November 24 MAPC COVID-19 Webinar: Shared Streets 2.0 Funding. However, the Mobility Committee is aware of the funding criteria, and the Complete Streets prioritization will drive what the town puts forward for possible funding.

Municipal Light Plant Update

From Francisco Frias:

Voluntary Renewable Energy Program (VREP):

The VREP working group ("Group") continues to meet, at least once a month, to discuss projects, initiatives, and strategies. During the month of November, the working group met on the 19th and on the 24th. Both meetings were primarily focused on discussing recommendations for the Municipal Light Board ("MLB"), regarding the Wellesley Electric Customers Accelerated Reduction of Emissions ("WECARE") program. The main recommendation points for this program, associated with the Opt-Out program discussed during the April Town Meeting, will include a starting program date, opt-out program entry percentage, customer rates to be included, and specific destination of the funds. In the process of coming out with a sound recommendation to the MLB, the Group is also focusing on being sensitive to the impact the pandemic has had on residents and businesses, the need to have a clear path before the program starts, and the goal to have a successful program with a low opt-out rate. Another topic of discussion, during the meetings, was focused on the substantial gap between the rate at which the MLP is purchasing RECs and the rate at which customers in the VREP program get billed. In addition to all these discussions, updates were given on the status of existing MLP programs and on where things are for the solar and battery storage RFP.

The existing group participants include MLP Board members Jack Stewart and Scott Bender, SEC Chair Laura Olson, and from the MLP: Don Newell, Joanne Scannell, Terry Connolly, and Francisco Frias.

Electric Vehicles (EV) Program:

The MLP is working with Energy New England (“ENE”) on the EV Education and Awareness program. The “Your Future Vehicle Choice” survey given in September indicates that at least one-third to over half of customers in MA public power territories are likely to purchase their first EV by 2030. ENE and WMLP can become the trusted resource for upcoming new EV ownership. The goal is to provide a user friendly education and shopping tool to customers and learning about what they are most interested in when looking for a new vehicle. ENE is launching an improved EV selection experience tool, Drive & Save Wizard. This is offered to ENE EV programs in partnership with Cleanpower. With this tool your customers can more easily find and compare EVs best suited to their lifestyle and preferences through a more intuitive and seamless experience. In addition, customers will be made aware of the growing number of EV models available in the market, along with their increasing electric ranges and more affordable price points. WMLP team members participated in a webinar previewing the improved EV selection experience.

Solar Rebate Program:

Our solar rebate program has been in effect for approximately 18 months. We have 14 completed installations. We have 11 more that are in progress. These 25 installs add up to 209.025 kW DC allocated against the 192 kW DC approved by the WMLP Board and reevaluated by the board in the September MLB meeting. After 17 months we are at 109%. The deadline for program approval is December 30, 2020. That leaves roughly one more month. We’re at “mile marker” 18 out of 19 months. That’s ~89% along and we’ve allocated ~109% of the funds. The “overrun” in rebate dollars presently stands at \$20,826 of which the WMLP is responsible for half, \$10,413. As of the end of October, there were two applications in the ENE portal for which the MLP has not officially received the applications. These are not included in these numbers presented.

Incentive/Rebate Programs:

The new Incentive Redesign Working Group has met to discuss redesigning the Incentive Program of the MLP. They held a meeting on November 13, 2020 and viewed a presentation from Abode Energy Management regarding their Municipal Light Plant Heat Pump Program. Their program aims to achieve the goals of electrification while mitigating risks through customer and contractor engagement and education regarding the installation of air source heat pumps. The focus is to support projects on the front and back end of the install process. The group is reviewing the proposal and fee structure of the program and assessing the cost/benefit for the WMLP to participate. The group continues to work on taking a closer look at the existing rebate program and preparing recommendations for a revised incentive program that aligns with the values of the community and has a greater impact on emission reduction. The MLP staff is continuing the “Go Green Go Paperless” push for electronic billing and payments.

Home Energy Audits:

The EnergyXpert Self Service Home Energy Assessment Program has currently 79 Wellesley residents participating. The number of participants increased by 17 from October. The MLP will concentrate on promoting this tool through email promotions as well as on our webpage and with our monthly billings.

Large Scale Solar and & Battery Storage Projects:

Wellesley Sports Center:

The MLP staff has made significant progress in the process of negotiating the Purchased Power Agreement (PPA) and the Interconnection Agreement (IA) for this project. The staff expects negotiations to be completed in the next couple of weeks.

Municipal Way:

Responses for the RFP for a battery storage system, next to Station 41 (Building next to the MLP Office), and for the installation of solar panels at various locations within the MLP/DPW site, were opened on November 17th. There were eight responses submitted, which are currently under review by the staff. The review process will most likely include requests for clarification from some of the responders, before the RFP's shortlisted is created.

Other Locations:

The MLP's Director and Assistant Director are in the process of scheduling a meeting with the Town's Executive Director Meghan Jop and the Director of Facilities & Grounds Joe McDonough to discuss their interest in adding solar on the roof of some town buildings and other sites controlled by the Town.

Webinar Summaries and Other Sustainability News

Electrifying Space Heating in Existing Commercial Buildings

On November 2, the American Council for an Energy Efficient Economy (ACEEE) held a webinar to introduce a report: Electrifying Space Heating in Existing Commercial Buildings.

Steve Nadel of ACEEE spoke on the commercial sector energy use showing 54% of fossil fuel is used for heating. Replacing fossil fuel heating systems with heat pumps show a 0-10 year payback when done at the time of replacement and with proper policies and incentives. Electrification of commercial space heating will proceed more quickly with policy support such as incentives, mandatory building performance standards, and requiring alternate bids for heat pumps upon replacement.

Chris Perry of ACEEE analyzed heat pumps replacing existing fossil fuel systems:

- a) Packaged rooftop units - pay back > 50%
- b) Furnace + central AC - pay back ~ 60%
- c) Boiler or space heater- pay back < 10%

Charlie John of Trane provided details on heat pump design and performance. He described heat pump systems tied to building exhaust air, wastewater, and water storage tanks that increase efficiency.

Joshua Morejohn, Energy Manager at University of California, Davis described the carbon neutrality initiative at the 120 building, 12 million square foot campus district heating and cooling systems. The plan is to be carbon neutral by 2025 using roof top solar and a 60 acre solar farm. Steam systems were converted to hot water.

Webinar recording:

https://www.youtube.com/watch?v=WWPai_Rppm8&feature=youtu.be&ab_channel=ACEEEDC

Webinar visuals: https://drive.google.com/drive/folders/1f7-1CLC7UYp_f4ZQfiLJYivFTk-zCCSn

Report: <https://www.aceee.org/press-release/2020/10/report-electrifying-heating-existing-commercial-buildings-could-cut-their>

MCAN Green Zoning Webinar

On November 10, Massachusetts Climate Action Network (MCAN) conducted a webinar on green zoning.

Dan Bartman, a senior planner for Somerville, reviewed the limits of zoning and talked about the ways Somerville is working within those limitations to promote more sustainable development.

Somerville will:

1. Eliminate parking requirements in new developments and force market rate parking spaces as they see free parking as the #1 determinant of vehicle ownership.
2. Establish landscape standards and a “green score” to promote green space and reduce heat islands.
3. Provide density bonuses for meeting LEED qualifications and Net Zero design.
4. Require sustainability on project submittals: LEED certifiability and Net Zero narrative.

Tori Antonino and Renee Scott of Green & Open Somerville spoke on the non-profit efforts to engage the city leadership and encourage the green zoning and landscape standards.

Kathryn Wright of the Urban Sustainability Directors’ Network (USDN) presented briefly on emerging trends in building energy policy. USDN represents 234 communities and 96 million US and Canadian residents. In new construction, improved codes and stretch codes are including provisions to be “ready” for EV, solar, battery storage, or electrification. In zoning, trends are to have incentives, prescriptive requirements, and performance metrics to encourage sustainability.

Recording: <https://www.youtube.com/watch?v=ay5iqnW5OHA>

Slides: <https://docs.google.com/presentation/d/1Wmls0xE24xVZQ2esK6hs6Q1TXOW2xjW9Y-otq05qMSk/edit#slide=id.p>