

## Regional EV Strategy Working Group Meeting Notes

### December 5, 2024 Meeting

#### **Overview of State Contract for Battery Powered Landscaping Equipment**

- Agnes Wierzbicki (Operational Services Division or OSD) provided an overview of the benefits of Battery Powered Landscaping Equipment (BPLE):
  - Landscaping equipment contributes significantly to the greenhouse effect and is less efficient than vehicles. The cumulative impact of landscaping equipment emissions adds up quickly.
  - A public interest research group conducted a study in 2020 and found that, in the United States, lawn and garden equipment powered by gasoline released over 30 million tons of CO<sub>2</sub>, equivalent to the annual emissions of the city of Los Angeles.
  - The benefits of BPLE include:
    - Environmental: decarbonization, zero pollutants, cleaner air
    - Health: reduced noise and vibration for users, reduced risk of hearing loss, reduced harmful fuels and particulate matter for users, smoother, no need to store hazardous chemicals like gasoline in trucks
    - Financial: reduced fuel costs, reduced maintenance costs (no oil changes, replacement of air filters, replacement of fuel filter, gas cans, etc.)
  - Check out the BPLE Savings Calculator available on [COMMBUYS](#) & the [LBE website](#). Select equipment and see savings in terms of cost and emissions.
  - Agnes Wierzbicki then provided an overview of some of the incentives available for BPLE:
    - Rebates through Mass Save, for both residential and commercial BPLE.
    - Green Communities also matches rebates for municipalities (can save up to \$7,000).
    - A number of Municipal Light Plants offer rebates on electrified lawn equipment as well.
    - The American Green Zone Alliance (AGZA) offers training to help workers transition from gas to battery equipment, outlining the safety, benefits, and other important information. The training is available in Spanish and English.

- See slide 9 in OSD’s Power Point for additional resources.
- Sean Corbin (OSD) presented on how to navigate the [COMMBUYS](#) website to access contract FAC116.
  - Contract terms: May 2021 – April 30 2027
    - On the [COMMBUYS](#) website, select “contract user guides” then select “LND - facility landscaping” category, select it again and then access “FAC116 FOR LAWNS AND GROUNDS EQUIPMENT, PARTS AND SERVICES.”
  - This contract is for equipment which is intended for the maintenance and care of lawns and grounds as well as for the parts, repair, and leasing of this equipment. The vendors on this contract are manufacturers and local dealers who offer percentage discounts on equipment and published hourly service rates. Buyers are encouraged to negotiate additional discounts.
  - Benefits:
    - Statewide contracts are an easy way to obtain benefits for your organization by leveraging the Commonwealth’s buying power, solicitation process, contracting expertise, vendor management and oversight, and the availability of environmentally preferable products.
    - Competitive pricing and discounts including volume discounts, dock delivery, and prompt pay discounts.

### **Battery-Powered Landscaping Equipment in Wellesley**

- Cricket Vlass (Town of Wellesley) and Timothy Bania (Town of Wellesley) presented on the Town of Wellesley’s experiences with BPLE.
  - In 2020, the Wellesley DPW purchased an EGO riding mower and other [EGO cordless outdoor equipment](#) for smaller projects. The equipment was well-received by residents and staff so the town bought more and larger equipment. The town received \$30,000 in funding, and an additional \$30,000 this year. The next major purchase was a zero-turn 60-inch lean green rider.
  - The machines get about 8 hours of mowing on one charge. Wellesley doesn’t use the machines to cut leaves and the town has found that the machines are not as effective on tall wet grass. Another limitation is the need to switch out the batteries. Wellesley has a power cell to charge the batteries.
  - Overall, the town is very satisfied and has received only positive feedback from residents. Wellesley plans to purchase additional equipment, including a John Deere Gator. The town also uses backpack blowers and weed whackers on backpacks.

- Wellesley currently doesn't have any restrictions on landscaping equipment, but anticipates there will eventually be a bylaw for electric blowers.

### **Lexington Bylaw on Use of Landscape Maintenance Equipment**

- Maggie Peard (Town of Lexington) spoke about electric landscaping equipment from a regulatory perspective. The Town of Lexington recently passed a bylaw on the use of landscape maintenance equipment.
  - In November 2021, Lexington residents petitioned for a landscape maintenance equipment bylaw.
  - The adopted bylaw calls for a phase out of gas-powered leaf blowers. By March 2025, there will be a full ban of gas-powered leaf blowers by commercial landscapers. An exemption allows for the continued use of wheeled leaf blowers powered by four-stroke engines on lots larger than one acre. Residents will not be allowed to use gas powered blowers on their property after March 2026.
  - Maggie discussed how enforcement is a challenge. The Police Department is responsible for enforcement as outlined in the bylaw, but there is a capacity issue due to the level of enforcement required. The bylaw includes fines for repeat offenders starting at \$50, increasing to \$100, and then \$200.
  - Lexington is working with landscapers. The town purchased 100 handheld electric blowers, 100 spare batteries, and six backpack blowers and distributed them to local landscapers from a \$75,000 state earmark. Lexington also partnered with AGZA and Quiet Communities to host a workshop for commercial landscapers in spring of this year. AGZA conducted a detailed walkthrough of what would be required of businesses and provided a demo of landscape equipment at the workshop.
  - Maggie identified the following challenges with transitioning to battery operated landscaping equipment:
    - Upfront expense - Battery powered equipment is currently more expensive than gas powered equipment.
    - Charging - Multiple batteries are needed to operate equipment for a full workday. Landscapers may need to modify their business operations to account for charging and swapping out equipment.
    - Real or perceived performance of equipment.
    - Supply chain – availability of equipment.
    - Limited capacity for enforcement. Lexington is hiring a part-time Code Enforcement Officer.

- Education for residents, businesses, contractors, and landscapers.
- Balancing the different interests of residents, businesses, contractors, and landscapers.

### **Battery-Powered Landscaping Equipment and Electric Rubbish Packer Update**

- John Nardone, Irina Sidorenko, and John Keeter from the City of Cambridge shared an update about the city's battery powered landscaping equipment and recently acquired electric rubbish packers.
  - Cambridge has had a leaf blower ordinance since 2008 which imposes restrictions on time of day and decibel levels. In 2018, the city updated its leaf blower ordinance by requiring the use of electric leaf blowers. Similar to Lexington's approach, there were meetings with the City Council, landscapers, and advocates from both sides.
  - The use of electric lawn equipment has been successful, and from a performance standpoint, the city's employees like them. Like Wellesley, Cambridge faces similar performance challenges, such as needing more time in wet conditions or with higher grass.
  - It is challenging when each municipality has a different bylaw. A state-imposed regulation would simplify matters by creating a uniform standard.
  
- Irina Sidorenko and John Keeter provided an update on the city's new electric rubbish packers. While these vehicles have not been operational long enough to share comprehensive information and data at this time, they shared that Cambridge is leading a fleet electrification effort and has updated its clean fleet policy by setting a robust target to electrify the sanitation fleet by 2035. Currently, the city has 18 rubbish trucks, 13 operate daily and five are spares. Cambridge is on track to meet its sanitation fleet electrification target with two BEV trucks being delivered, another awaiting order, and funding secured for a fourth. By next year 1/3 of the fleet will be all electric.
  - Cambridge learned from New York City and reviewed trucks and specifications before deciding to go with MACK LRs.
  - When Cambridge ordered the MACK LRs, the city initially believed they could be charged using a Level 2 charger. It was learned later that MACK LRs require DC power with a minimum of 50kW. This unexpected challenge required Cambridge to quickly and creatively address the need for fast charging, especially given the existing power limitations at the DPW site. As a solution, the site now uses demand power: the trucks are plugged in during

the day but only start charging later in the evening. Charging takes 3-4 hours, and the trucks operate for 4-5 hours daily.

- Another challenge is the size of the trucks, which are quite large compared to Cambridge's narrow streets, which often have parking on both sides. The city needed to invest time in training staff to use the trucks and make slow turns to avoid damaging equipment or property.
  - Bill Deignan of the City of Cambridge noted in the chat that these trucks have sideguards to protect cyclists. All city trucks are required to be equipped with sideguards.
  - Cambridge is finalizing a contract with a recycling company, Save that Stuff, and is actively encouraging them to procure electric packers. Cambridge recommends other municipalities to also encourage their contractors to procure electric vehicles.
  - To assist with procuring the electric rubbish packers, the city received grants and funding from the following sources: MOR-EV Trucks, DERA, and VW Open solicitation.

## **Q&A**

- The session then opened for Q&A.
  - Will Lexington's new code enforcement official also be issuing tickets for parking in an EV charging space and not charging?
    - We haven't discussed that as part of the job scope. The town is currently focused on its noise bylaw which is where the gas blower regulations fall.
  - Does OSD have plans to support municipalities with the implications of the Advanced Clean Truck rule?
    - It's not something we're currently planning, but it might be considered in the future.
  - What were the costs for Cambridge's substation, building upgrades, and DC fast chargers?
    - The cost of the substation is not yet available as it is still in the design phase. We expect to have a clearer understanding of the costs in the coming months. In the meantime, feel free to contact Irina Sidorenko for more detailed discussions about costs at [isidorenko@cambridgema.gov](mailto:isidorenko@cambridgema.gov).
  - Were there battery incentives for the battery-operated landscaping equipment?

- If there are, Cambridge hasn't taken advantage of them. This sounds like a perfect Green Communities grant project which could be supported by DOER.
- Lexington mentioned changes commercial landscaping companies will need to make to comply with the town's seasonal and eventual full gas leaf blower ban. I thought it was mentioned that some companies may need to return to their shops during the day. Is this related to charging batteries? If so, could you clarify why they couldn't simply bring additional batteries to swap out during the day and charge them all overnight?
  - The ideal set up would be to have charging infrastructure in a trailer. My understanding is that the cost of acquiring enough batteries to last an entire day could be prohibitive if there's no opportunity to recharge some during the day.

### **Procurement Updates**

- Marjie Weinberger (MAPC) shared a recent procurement win from the last legislative session. An amendment to Chapter 30B of the general laws now allows for combined procurement of both electric vehicles (EVs) and charging infrastructure. Previously, municipalities were required to purchase infrastructure separately, which was time-consuming and costly. This legislative change recognizes that infrastructure is just as crucial as the vehicles themselves. The combined procurement process is more streamlined and cost-effective.

For questions about this new procurement rule, please email Marjie Weinberger at: [mweinberger@mapc.org](mailto:mweinberger@mapc.org).

### **Updates and Resources**

- Emma Zehner (MAPC) shared updates of new rebate programs related to EVs, including:
  - A new **On-Street EV Charging Program** available through MassCEC for municipalities. Through this program, 15 municipalities will receive EV chargers and infrastructure at approximately 3 on-street parking locations at no cost. 25 municipalities will receive EV charging planning support and feasibility studies, also at no cost.
  - The US EPA has opened a new round of funding for the **Clean School Bus Rebate Program**. The deadline is January 9th, and applicants can request up to \$325,000 per bus for up to 50 buses.