



SHAKER HEIGHTS

Sustainability Committee Minutes

Thursday, March 9, 2023

8:00 A.M.

VIA ZOOM PURSUANT TO CHAPTERS 113 AND 115 OF THE CODIFIED ORDINANCES (AS AMENDED IN ORDINANCE 22-28), AND RESOLUTION 22-29, ENACTED ON MARCH 22, 2022

Members Present: Nancy Moore, Council Member
Sean P. Malone, Council Member
Anne Williams, Council Member
Julia Larouche, Citizen Member
Norman Robbins, Citizen Member

Others Present: David Weiss, Mayor
Jeri E. Chaikin, Chief Administrative Officer
Jeff Isaacs, Shaker Heights School District Board Member
Michael Peters, Sustainability Coordinator

The meeting was called to order by Committee Chair Nancy Moore at 8:01 A.M.

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Approval of the February 9, 2023 Meeting Minutes

It was moved by Anne Williams and seconded by Sean Malone that the minutes of the February 9, 2023 meeting be approved as recorded; unanimously passed.

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Presentation and Discussion on 2022 EV Charging Costs

The City currently has seven AC Level 2 charge ports at four locations throughout the City: Thornton Park, City Hall, Larchmere Public Parking, and The Dealership. The first full year of operation was 2022, and the expenses for operating the Thornton Park, City Hall, and Larchmere stations was reported (The Dealership is not separately metered).

In 2022, the City’s chargers delivered 4,321.25 kWh of electricity in 307 charging sessions. This represents approximately 13,000 miles driven on renewable electricity, displacing approximately 520 gallons of gasoline. The average amount of electricity delivered during a charging session was equivalent to roughly 42 miles of range, with the largest session delivering roughly 190 miles of range. The total amount of time spent charging was 809 hours, with the average being 2.6 hours and the longest charging session lasting 12 hours. This represents utilization (the amount of time the chargers were being used divided by all available hours) of 1.3 percent.

The City’s electric vehicle, in the Recreation department, consumed 87.8 kWh or roughly 2 percent of the total electricity delivered through the chargers.

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The costs to operate the chargers are composed of supplier costs and transmission and distribution charges. The supplier costs are the amount paid for each kWh of electricity delivered while the transmission and distribution charges are the cost to deliver those kWh to the chargers. The costs in 2022 for Thornton Park, City Hall, and Larchmere Public Parking were \$5,948.64. The Dealership is not separately metered but included in the much larger consumption of the building. It was also noted that the costs for City Hall include all electricity for the Annex building, so overstates the amount actually delivered through the chargers.

The average cost per kWh was \$1.38, ranging from \$1.16 for City Hall to \$3.08 for Larchmere Public Parking. These costs are impacted by the total amount of electricity delivered as some of the transmission and distribution charges are fixed costs that decrease per kWh as more kWh are delivered. Other chargers are based on the kilowatts (kW) delivered – or the speed at which the electricity is consumed, versus the kilowatt hours (kWh) which is more of a measure of the total amount delivered.

An example was presented of a monthly bill from the utility. This showed that on a typical bill the supplier costs account for approximately 10 to 12 percent of the total bill, with the remainder the transmission and distribution charges. The bill showed that the kW demand was 13.8 kW, meaning that at some point during the billing period both chargers were used as each is capable of delivering a max kW of 7.2.

This bill showed a total per kWh of \$0.76 for distribution charges (one of the components of the transmission and distribution charges). Of that amount, \$0.11 was composed of fixed fees, \$0.65 in demand charges related to how fast the electricity was delivered, and less than \$0.01 for kWh-based charges.

Cost recovery and bypassable charges were \$0.41 per kWh with \$0.36 related to demand charges and \$0.05 related to per kWh charges.

Overall, the analysis predicted that a dual-port charger (a charger allowing two cars to charge at once) would have a minimum cost of roughly \$250 per month. This consists of \$31.96 in fixed costs, \$219.63 in demand charges (although this has been lower on actual bills), and the supplier charges that are a per kWh cost (which ranged over the year from \$0.06 to \$0.12).

A question was asked by Norman Robbins about the number of users it would require to breakeven between the costs that are collected from drivers and the billed costs. A subsequent analysis found this to be roughly 125 charging sessions per month.

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Acceptance of Cuyahoga County Solid Waste District Grant

The City was notified of an award of a Special Projects grant from the Cuyahoga County Solid Waste District for \$16,344. A grant request was submitted in February and the City was notified of the award shortly before the Committee meeting. The grant was requested to pilot a neighborhood-level composting program that would make access to composting more widely available (currently there is a cost to residents to participate) and include the neighborhood school. The Lomond neighborhood and Lomond School were proposed in the grant request for this pilot.

The grant will cover the costs for approximately one year for Rust Belt Riders to provide and service the bins used for the collection of food waste and a portion of the costs to educate the public and increase awareness about the program. Supplemental funds that were allocated within the Sustainability budget are expected to provide additional education and marketing resources and project management of the program.

The motion to recommend the grant acceptance to City Council was made by Anne Williams and seconded by Julia Larouche and passed unanimously.

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Subcommittee Updates

Stormwater & Greenspace (presented by Nancy Moore and Michael Peters)

- A recommended pesticide policy was presented as advisement of best practices for public and private lands in the City.
 - It was spurred by the use of glyphosphates, which numerous studies have linked to increase cancer risk, but is still being applied.
 - In light of this scientific information and the availability of alternative best management practices, the policy is recommended to be adopted by the Committee. Use of convention chemical pesticides such as these should not be used, or if used only in spot treatments after other methods have proven ineffective.
 - If these products are used, the public has a right to know, and Ohio has notification requirements.
 - The policy can serve as a guideline for all parties, such as the City, Schools, and private landowners.
 - Questions and comments included an explanation of the process by Nancy Moore who indicated that the policy was approved by the Subcommittee and if approved by the Committee will it will be presented to the Administration for comments with recommendations returned to the Committee and Subcommittee; Sean Malone suggested summarizing the recommendation into a shorter format including practical recommendations for consideration by City Council; Anne Williams noted the importance of this information for residents as well and recommended passing it along in some form more widely; Jeff Isaacs commended the alternative recommendations section as a resource and noted it will bring good engagement with the Schools; Sean Malone noted that some areas have special considerations such as along the rapid transit tracks; Norman Robbins recalled a collaborative effort on West Nile where spraying was controversial and an alternative was employed reserving spraying for specific outbreaks and Julia Larouche noted that using the chemical pesticides would be allowed under the policy for the protection of human health, she also concurred with Sean Malone's recommendation to having a shorter version available.
 - The policy was recommended to be sent to the Administration through a motion made by Anne Williams and seconded by Sean Malone, with all in favor.

- The electric lawn mower rebate program is scheduled for April 29th and 30th at the Service Center (15600 Chagrin Blvd.) where 40 rebates of \$100 will be available on a first come first served basis. Burgers Ace Hardware will also help promote the rebate and assist residents in the purchase of an electric mower. This pilot will hopefully be extended in the future to commercial landscapers.
- The Subcommittee discussed a natives-only tree planting policy. The Tree Advisory Board is meeting to create a list of natives on March 16th at 4:00pm.
- The Subcommittee also continued its discussion of No Mow May recognizing that City Council would need to approve a program.

Renewable Energy (Norman Robbins)

- The Subcommittee has been discussing how best to publicize the incentives for homeowners in the Inflation Reduction Act along with awareness of the best process – for example having a home energy audit prior to sizing a heat pump or solar system.
- The group has consulted with outside sources on the best ways to do this, including the Yale Program on Climate Change Communication.
- It has also discussed topics such as how to pick a qualified and trained contractor.
- In anticipation of hosting a forum with the Unitarian Universalist congregation it is sorting through questions and hopes to engage with other faith communities and trusted sources.

Shaker Youth LEEDs / High School Advisory Group (Nancy Moore)

- Nancy Moore congratulated Shanna Keown on the birth of her child, which was why she was unable to join the meeting
- The 2023 EcoChallenge will begin soon, watch for more info.

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Chair’s Remarks/Old Business/New Business

- No additional remarks or business.

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There being no further business, the meeting was adjourned at 9:01 A.M. The next meeting is scheduled for April 13, 2023 at 8:00am.



Michael Peters
Sustainability Coordinator