



SHAKER HEIGHTS

**Sustainability Committee Agenda
Via Zoom Due to COVID-19
Public Health Emergency
Thursday, February 11, 2021 at 8:00 a.m.**

For the safety of staff and residents, in-person attendance is not permitted. Join the Zoom meeting online as a viewer or listener from a PC, Mac, iPad, iPhone or Android device at <https://zoom.us/j/95689437182?pwd=SUKyVjMvTWxBNDd6cWdKcG1QVi9VUT09>, Password: 33553400; Description: Sustainability Committee; or join by phone at 833-548-0282 (toll free); Webinar ID: [956 8943 7182](https://zoom.us/j/95689437182?pwd=SUKyVjMvTWxBNDd6cWdKcG1QVi9VUT09), Password: 33553400. International numbers available at <https://zoom.us/u/ahwKbeuA>.

1. Approval of the January 14, 2021 meeting minutes.

Documents:

[210114 SUSTAINABILITY COMMITTEE MINUTES.PDF](#)

2. Review of 2020 and Planning for 2021.

Documents:

[SUSTAINABILITY 2020 RECAP.PDF](#)

3. Request to approve purchase of electric vehicle for Recreation Department.

Documents:

[210211 EV ALLOCATION SUS 2021.PDF](#)

4. Request to approve acceptance of NOPEC Energized Community Grant.

Documents:

[210204 NOPEC ECG 2021 SUS.PDF](#)

5. Recommendation to approve contract renewal with Coventry Land for Sustainability Consulting Services for the period March 1, 2021 to February 28, 2022.

Documents:

[COVENTRY LAND CONTRACT RENEWAL 21.PDF](#)

6. Determination of EV Charging Rates at City Charging Stations.

7. Review of Existing Roadmap/Objectives.

A. Subcommittees - Update on Progress.

1. Storm water and Greenspace (Carmen Franks)
2. Renewable Energy (Norman Robbins)
3. High School Advisory Group (Julianne Potter)
4. Recycling (Anne Williams)

B. City Energy Efficiency/Conservation Update.

C. City Alternative Fuel Vehicle Update.

D. Solar Demonstration Project Update.

8. Update on LEED for Cities.

9. Old Business/New Business.

To request an accommodation for a person with a disability, call the City's ADA Coordinator at 216-491-1440, or Ohio Relay Service at 711 for TTY users.



**Sustainability Committee Minutes
Thursday, January 14, 2021
8:00 A.M.
Via Zoom Conference**

Members Present: Anne Williams, Committee Chair, Council Member
Carmen Franks, Citizen Member
Sean P. Malone, Council Member
Nancy Moore, Council Member
Julianne Potter, Citizen Member
Norman Robbins, Citizen Member

Others Present: David E. Weiss, Mayor
Jeri E. Chaikin, Chief Administrative Officer
Brendan Kelley, Clean Fuels Ohio
Michael Peters, Sustainability Coordinator
John Barber, Friends of Lower Lake
Barbara Bradley, League of Women Voters
Victoria Mills, Doan Book Watershed Partnership

The meeting was called to order by Committee Chair Anne Williams at 8:00 A.M.

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Approval of the December 10, 2020 Meeting Minutes

It was moved by Nancy Moore and seconded by Norman Robbins that the minutes of the December 10, 2020 meeting be approved as recorded; unanimously passed.

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Acceptance of NOPEC Electric Vehicle Charging Grant

The City received notice that the Northeast Ohio Public Energy Council (NOPEC) awarded it a grant to purchase and install electric vehicle charging equipment in an amount not to exceed \$35,000. This is a reimbursement grant and the City identified equipment, installation, software, and signage costs of \$34,816. This will add electric vehicle (EV) charging to City Hall, Thornton Park, the City-owned public parking lot at Larchmere Boulevard and Kendall Road, and replace an aging charger at The Dealership.

Councilman Malone asked how this grant differs from the Energized Community Grant and if the grant is expected to continue in future years. The EV Charging Grant is an unrelated one-off grant the City was invited to participate in while the Energized Community Grant is an ongoing program of NOPEC and is expected to continue (although it was announced at a slightly reduced amount for 2021).

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The Committee was requested to approve the acceptance of the grant and allocation to the City Facilities and Repair account. Councilwoman Nancy Moore motioned to approve and was seconded by Committee Member Julianne Potter. All members voted in favor. The matter will be forwarded to the Finance Committee and then City Council.

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Electric Vehicle Charging Update

The City is in the process of installing chargers at four sites. The equipment has been received, the initial software configured in anticipation of installation, and the electrician has been requested to schedule installation dates. There has been a slight delay due to illness but the installations are expected to start at the end of the month.

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Tree Lawn Inventory Update

The Cuyahoga County Information Technology department assisted the City with importing the spreadsheet-based Treelawn Tree Inventory into a GIS map layer (similar to the Streetlight Inventory work). A technical glitch prevented the map from being shared but a link to the map will be sent to Committee members.

The existing inventory document lists the trees on numerous streets by address and then location within the tree lawn. The import of the data was able to capture the number of trees per address but not the location on the tree lawn, which can be manually adjusted.

This exercise was meant to be a proof of concept to see if having the data on a map and presented spatially would be beneficial. The technology can also be used to collect data and assign attributes to the trees.

The matter will be discussed at the next Stormwater & Green Space Subcommittee meeting for recommendations on how to proceed.

A quick update of the Streetlight Inventory was also provided, noting that the City CERT volunteers are actively entering data. Thanks are extended to this group for their extremely helpful contributions to the City and program. A follow up meeting is being scheduled to get the feedback from the group on the process, such as consistency in determining attributes (such as pole quality).

Councilwoman Nancy Moore also updated the group on the tree master plan and how tree lawn trees are placed on treelawns. This can lead to proximity issues with utility lines and driveways, so location is one of the aspects the plan is reviewing.

The Mayor inquired on how many streetlights the City has (the City is billed for just under 4,000) and the timing of the CERT team. The initial feedback is that while the first entry takes some time to learn the process, the rest goes reasonably quickly. An estimate of half an hour for a typical residential street was proposed.

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Other Updates – Heights Tree People

Councilwoman Moore provided an update on discussions with Public Works and the volunteer group Heights Tree People. The group is applying for a \$1,000 grant from the Cuyahoga Soil & Water District to leverage \$800 remaining from a Hermes Foundation grant for tree planting in 2019 at Southerly Park. Doan Brook Watershed Partnership is also interested in collaborating and using a \$1,000 NOPEC sponsorship towards the effort through an event that would raise awareness of the program and help to plant trees. One possibility is three locations identified by the Stormwater & Greenspace Subcommittee as no mow areas near the Doan Brook, assisting with stormwater management. The group estimates it can plant about 10 trees per \$1,000 (depending on size, species).

Councilman Malone asked about incentivizing planting on private land, especially in residential yards, and how it might play into considerations of future discussions around the Tree Assessment. Councilwoman Moore noted that one of the issues is caring for the trees after they have been planted and Tori Mills from the Doan Brook Watershed Partnership noted that one of the purposes of Heights Tree People is to provide training to residents on how to properly plant and care for trees. She also noted that the City can, as funds allow, allocate some of the NEORS D cost share dollars to a NEORS D program promoting single tree rain gardens.

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Subcommittee Updates

- Storm water & Greenspace (Carmen Franks)
 - Committee Member Carmen Franks noted that work continues on The Nature Center’s residential lawn certification program that will also promote tree planting.

- Renewable Energy (Norman Robbins)
 - The subcommittee is organizing a community Zoom meeting on residential solar panels in conjunction with the Solar United Neighbors group that is organizing the County’s Solar Co-op. Subcommittee member Chris Kerr will also present. Any ideas around publicity are welcome. Deadline is February 28th for the current co-op.
 - A pilot was done with Master Marr’s to see how small businesses can be assisted with sustainability and efficiency efforts. This property has two electric meters, which is increasing their costs due to the fees. Solar panels may be considered and overall it was a positive experience all around. The subcommittee is looking at ways to expand this to other small commercial buildings in the City.

- High School Advisory Group (Julianne Potter)
 - The group met in January and continues to move forward with twice-monthly meetings to discuss goals and continuity considering the group has some seniors in leadership.

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There being no further business, the meeting was adjourned at 8:32 A.M. The next meeting is scheduled for February 11, 2021 at 8:00am.

Michael Peters
Sustainability Coordinator

2020 Highlights

City Facilities Utility Costs

- EnergyCAP
- Energy Audits

City Green Team

- Good start...
- Coordination
- CERT

Energy Conservation

- Green Team
- Streetlight GIS
- NOPEC Grants

Solar Power

- 3 Scenario Analysis
- Quote for P&C

Alternative Fuel Vehicles

- Fleet review - idle management, EV
- EV Charging

Other

- LEED for Cities
- Webinars, Conf.
- Local Gov't Meetings
- Treelawn GIS

Thoughts for 2021

Possible areas of interest:

- Certification such as SolSmart
- 100% Renewable for Residents
- EV Ready Legislation
- EV First Procurement
- Development Agreements with Minimum Green Features
- No Mow Process
- Transition to Electric Landscaping Equipment

EV Charging

EV Charging Costs

- No equipment costs (grant funded)
- Cost of electricity
- Cost of software/network (first year funded)

What can be collected

- As owner, can collect fees for charging
 - Time
 - Per kWh
- Permissible to collect per kWh fee (PUCO)
- More equitable by kWh as different vehicles charge at different rates

Competitive Market

- Many free (retailers, car dealers, Lakewood, Twinsburg)
- Not recommended
- Time based: \$0.50/hour (CCF), \$0.25/min (Walmart/EVgo), 1st hour free then \$2/hour (Meijer)
- Per kWh: \$0.20 (downtown K&D), \$0.28 (Tesla), \$0.31-\$0.43 (Electrify America), \$0.39-\$0.49 (Richmond Town Sq, McDonald's)

Gas Equivalent Costs

- Gas at \$2.50/gal for a 25mpg car = \$0.10/mile
- EV at 4w/mi and \$0.20/kWh = \$0.05/mile
- At \$0.25/kWh = \$0.06/mile

EV Charging Costs

- Electricity = ~\$0.12/kWh
- Software = \$11/month
- Total costs depend on utilization - how many kWh are "purchased"

EV Charging





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Memorandum

To: Members of the Sustainability Committee

From: Michael Peters, Sustainability Coordinator

cc: Mayor David E. Weiss
Jeri E. Chaikin, Chief Administrative Officer

Date: February 11, 2021

Re: **Electric Vehicle Addition to City Fleet**

The City replaces vehicles in its fleet periodically, often by re-assigning former public safety vehicles to the department that requires a vehicle. Some of these vehicles are now from the early 2000s, or nearly 20 years old. Since most driving is done within the city, annual mileage is relatively low and therefore vehicles have a long average service life.

The City has made a commitment to sustainability initiatives, including participation in programs such as LEED for Cities and support for the Paris Accord, which is an opportunity to consider a different approach to replacement vehicles for the City fleet. As a pilot, the purchase of an electric vehicle for use by the Parks and Recreation Department is being proposed.

The newest Recreation Department passenger vehicle is a 17-year old former Police vehicle that likely achieves about 14 miles per gallon and creates over 5,300 pounds of carbon dioxide per year. The odometer stopped working several years ago, so we cannot determine actual MPG and have no record of how many annual miles are driven (based on gasoline data it is likely 2,500 to 3,000 miles per year). This indicates it is mostly short-distance, city driving that results in most of the emissions staying within our community and high wear and tear that leads to increased maintenance costs.

Vehicle	Annual Fuel Use	Annual Electricity Use	Annual Fuel/Elec Cost	Annual Operating Cost	Cost Per Mile	Annual Emissions (lbs CO2)
2020 Chevrolet Bolt EV	0 gal	828 kWh	\$103	\$1,847	\$0.59	1,285
2004 Ford Crown Victoria Police Gasoline	223 gal	0 kWh	\$643	\$2,427	\$0.78	5,357

Source: Department of Energy Alternative Fuels Database

Replacing this vehicle with a 2020 Chevrolet Bolt, an all-electric vehicle with an EPA-estimated range of 259 miles, will accomplish several goals. The first is eliminating the point-source pollution from the existing vehicle, which is emitted within the City. Second is aligning the public perception and mission of the Recreation Department with the sustainability aspects of an electric vehicle, rather than a gas guzzler. Third is reinforcing the public EV charging program the City is implementing as the Bolt would be able to use the new chargers at Thornton Park. And fourth, but also importantly, the costs to operate and maintain the Bolt will be less than the vehicle it is replacing, especially as that vehicle continues to age, not to mention the increase in reliability.

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The Bolt can be purchased through a State of Ohio Department of Administrative Services contract from a local dealer. There is a vehicle immediately available at the DAS contract price of \$28,514. This represents over a \$10,000 savings from the sticker price as General Motors has an incentive for \$8,500 and the additional savings is attributable to the DAS pricing. This represents a tremendous value and to capture these savings we do need to receive approvals soon.

There is no specific allocation for an electric vehicle in the current budget, but a request is being made to allocate this purchase from the General Capital Fund.

The Committee is requested to approve this allocation in the amount of \$28,514 in order to send this matter to the Finance Committee and City Council for final approval.



Memorandum

To: Members of the Sustainability Committee

From: Michael Peters, Sustainability Coordinator

cc: Mayor David E. Weiss
Jeri E. Chaikin, Chief Administrative Officer

Date: February 11, 2021

Re: **Northeast Ohio Public Energy Council (NOPEC)
Energized Community Grant Application**

The City is a member of the Northeast Ohio Public Energy Council (NOPEC). NOPEC is a regional council of governments formed under Chapter 167 of the Ohio Revised Code to administer electric and/or gas aggregation programs for communities. NOPEC currently serves over 200 communities who have been authorized by ballot to purchase electricity or gas on behalf of their citizens.

Shaker Heights offers its residents electric aggregation through NOPEC but currently administers our own gas aggregation program approved by a vote of our residents.

NOPEC's Energized Community Grant Program provides funds to member communities to implement energy savings or energy infrastructure measures. In 2019 the City received \$55,958 in grant funds that were applied to the \$150,000 replacement of the aging generators and electrical service upgrades at City Hall at 3400 Lee Road. For 2020, the city has escrowed \$52,472 for the electrical service upgrade and emergency generator replacement at Fire Station II, 2801 Warrensville Center Road. For 2021, the City was notified of a grant of \$38,264, or \$5 per enrolled account (this information was supplied by NOPEC, despite \$38,264 not being evenly divisible by \$5). NOPEC announced at its General Assembly that it was reducing the grant down from the \$7 per account in previous years.

The grant agreement entered into in 2018 between the City and NOPEC remains in effect for the 2020 grant application, but Council approval is required for the application. We propose applying to use the \$38,264 to go toward the \$200,000 replacement of the Building Automation System at Fire Station 1 (17000 Chagrin Boulevard). The manufacturer of the Building Automation System no longer exists and parts are longer available. Replacing the system will significantly reduce annual maintenance costs, reduce energy costs, and improve the ability to control heating and cooling of the building and the dorm accommodations.

When we receive the \$38,264 in grant funds it will be deposited in Fund 401, the General Capital Fund, to offset the City funds allocated to this project.

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The Committee is requested to approve the grant application to NOPEC in the amount of \$38,264 for the Building Automation System project at Fire Station I in order to send this request to the Finance Commi



Memorandum

TO: Sustainability Committee

FROM: Jeri E. Chaikin, Chief Administrative Officer

CC: Mayor David E. Weiss

DATE: February 4, 2021

RE: Recommendation to Enter into a Contract with Coventry Land Company LLC. in the Amount Not-to-Exceed \$50,000 for Sustainability Consulting Services for the Period March 1, 2021 through February 28, 2022.

Council's Sustainability Committee was established in 2019 to formalize sustainability policies and priorities for the City. The Committee is currently chaired by Council member Anne Williams and includes other Council members and residents as its members. Michael Peters of Coventry Land Company LLC is the consultant who serves as the Sustainability Coordinator for the City and works with the Sustainability Committee. The contract with Coventry Land Company LLC expires on February 28, 2021, and it is recommended that the contract be renewed for a second year.

In 2019, Council began including funds in the General Fund budget for a Sustainability Coordinator to support the Sustainability Committee and provide assistance in making recommendations for, and implementing, energy-efficiency and cost-saving initiatives, and to research and recommend best practices for City-wide sustainability. Funding has been included in the 2021 General Fund budget to continue these services.

Coventry Land Company LLC was selected in 2018 after a competitive request for proposal process to provide consulting services for sustainability initiatives and the City has contracted with Coventry Land for the past two years. Current sustainability initiatives being led by Mr. Peters include:

- Liaison and coordinator of Council's Sustainability Committee and its subcommittees.
- EnergyCap utility bill tracking.
- Investigation of the conversion of streetlights to LED.
- City facilities composting program
- Successful grant applications including for energy-efficiency improvements in City buildings and electric vehicle charging stations.
- Compiling the complex LEED for Cities application to obtain national green building certification.
- Solar power generation research.
- Representing the City at various sustainability conferences.

Based on Mr. Peters' accomplishments to date, his successful work with the Sustainability Committee, and to provide for continuity in the leadership of the City's sustainability initiatives, it is requested that the Sustainability Committee recommend authorization of a contract with Coventry Land Company LLC in the not-to-exceed amount of \$50,000 for sustainability consulting services for the period March 1, 2021 through February 28, 2022.

Jcc21CoventryLandContractRenewal21