

ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING

Wednesday, June 15 – 4:00 PM

REMOTE ACCESS MEETING

AGENDA

Please be advised that all of the Environmental Sustainability Committee members will be remotely attending this meeting by electronic means, in compliance with the recent amendments to the Open Meetings Act. The Chairman of the Committee has determined that it is not prudent or practical to conduct an in-person meeting due to the COVID-19 pandemic and that it is not feasible to have the Committee members or members of the public physically present at the meeting due to the pandemic disaster.

The City will be providing members of the public with various opportunities to watch or attend this meeting, as well as provide public comment at the meeting. For example, members of the public can participate remotely in the meeting by following the public audience link below which will provide both video and audio means to attend the meeting.

Public audience link:

<https://us02web.zoom.us/j/88596373608?pwd=ejhjWDlCaFFFRVkyMm42UzBxRmRLdz09>

Or dial by phone at: 312-626-6799

Webinar ID: 885 9637 3608

Passcode: 1861

AGENDA

- I. CALL TO ORDER AND OLL CALL**
- II. INFORMATIONAL ITEMS (:05 – :15 per item)**
 - a. UPDATE ON LAKE COUNTY FOREST PRESERVE BUCKTHORN CAMPAIGN – Catherine Czerniak, Director of Community Development**
- III. ACTION ITEMS (:10 - :15 per item)**
 - a. APPROVAL OF APRIL 20, 2022 MEETING MINUTES**
- IV. DISCUSSION ITEMS (:15 - :20 per item)**
 - a. REVIEW OF CITY-WIDE GREENHOUSE GAS EMISSIONS INVENTORY – Mike Strong, Assistant City Manager**
 - b. UPDATE ON ROOFTOP SOLAR PROJECT – Mike Strong, Assistant City Manager**
- V. ADDITIONAL ITEMS (Packet Material Only)**
 - a. STATUS REPORT ON SUSTAINABILITY INITIATIVES & PRIORITIES**
- VI. PUBLIC COMMENT**
- VII. NEXT MEETING DATE(S) – July 13, 2022 (Remote Access Meeting)**
- VIII. ADJOURNMENT**

1 **ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING**
2 **Wednesday, April 20, 2022 – 5:00 P.M.**
3 **City Council Conference Room**
4 **City Hall, 220 E. Deerpath**
5

6 **ROLL CALL/CALL TO ORDER**
7

8 Chairman Melanie Rummel called the meeting to order at 5:00 P.M. Aldermen
9 Jim Preschlack and Eileen Weber were present.

10
11 Staff in attendance included Mike Strong, Assistant City Manager; and Mark
12 Pruitt, Illinois Community Choice Aggregation Network
13

14
15 **INFORMATIONAL ITEMS**
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17 **I. REVIEW OF EARTH MONTH ACTIVITIES – Mike Strong, Assistant City Manager**
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19 Assistant City Manager, Mike Strong, provided a brief update regarding
20 the planned activities for Earth Month. He explained that the City had
21 partnered with various institutions throughout the community to develop
22 and aggregate programs, special events, and challenges throughout the
23 month to help promote the campaign. A brief video was shared at the
24 end of the update.
25

26 Chairman Rummel asked if there were any additional comments or
27 questions from the Committee.
28

29 Alderman Weber asked about any data or metrics that were available
30 regarding e-news articles, or the mobile application. She suggested that
31 future promotion could include push notifications through the mobile
32 application. She also suggested that the order of articles in the e-news be
33 reviewed, that perhaps moving topics around could help encourage
34 engagement.
35

36 Chairman Rummel asked if there were any additional questions or
37 comments from members of the public.
38

39 Seeing none, she moved to the next agenda item.
40

41 **II. UPDATE ON RAVINE MAINTENANCE/EDUCATION CAMPAIGN – Mike Strong,**
42 Assistant City Manager
43

44 Assistant City Manager, Mike Strong, provided a quick information update
45 to the committee regarding a letter that was sent out to approximately
46 215 properties adjacent to ravines. Mr. Strong explained that the City was
47 working collaboratively with Lake Forest Open Lands to promote property
48 inspections of ravines to help inform residents on how best to care for

49 them. He stated that the database was developed through a three-year
50 process whereby City staff inspected each ravine and categorized them
51 based on current conditions.

52
53 The Committee asked clarifying questions regarding how properties were
54 being targeted, and whether staff could target higher priorities properties
55 based on their condition. Mr. Strong stated he would update the letter
56 and track participation in the program.

57
58 Chairman Rummel asked if there were any comments or questions or
59 comments from the Committee.

60
61 Seeing none, Chairman Rummel asked if there were any questions or
62 comments from members of the public.

63
64 Seeing none, she moved to the next agenda item.

65

66 **ACTION ITEMS**

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68 **I. APPROVAL OF January 19, 2022, MEETING MINUTES**

69 Alderman Preschlack moved to approve the January 19, 2022,
70 Environmental Sustainability Committee meeting minutes subject to
71 changes discussed by the Committee. Alderman Weber seconded the
72 motion. The motion carried unanimously by voice vote.

73

74 **II. DISCUSSION AND DIRECTION ON NEW SOLAR GENERATION FACILITIES 75 PROJECT – Mike Strong, Assistant City Manager**

76

77 Assistant City Manger Mike Strong provided background regarding the
78 solar panel investigation that was underway. He reviewed a presentation
79 that included information concerning the procurement process, financial
80 proposal comparisons between respondents, type of financial
81 arrangement proposed, roof replacement schedules, and franchise
82 account information.

83

84 The Committee had a lengthy discussion, focusing on understanding the
85 financial arrangement that would be entered into with the solar
86 developer. Items discussed included contractual provisions that would be
87 included in a future agreement, including service level agreements, risk
88 mitigation, disruption impacts, and costs to the City, both upfront and
89 ongoing.

90

91 In addition, the Committee discussed the roofing conditions at each of
92 the proposed facilities and directed staff to focus on the portion of the
93 Public Safety Building that is planned for replacement this summer. Mr.
94 Strong stated that roofs at the proposed facilities are in the middle of their
95 estimated useful life and stated that most solar installations occur when
96 the roof is replaced. The Committee was supportive in considering only

97 the new portion of the public safety building at this time. The Committee
98 also discussed the City's franchise account, and how the City would
99 organize the accounts to benefit from the solar installation. The
100 Committee recommended that City staff connect with references for the
101 vendors to understand the conversion and installation of solar panels.

102
103 The Committee directed staff to follow up with the two finalist vendors to
104 request proposals for the public safety building portion that is being
105 replaced for future consideration.

106

107

DISCUSSION ITEMS

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109 **I. DISCUSSION ON FUTURE SUSTAINABILITY INITIATIVES & PRIORITIES – Mike**
110 **Strong, Assistant City Manager**

111

112 Assistant City Manager, Mike Strong, reviewed an update on the current
113 projects that are underway including an update on the greenhouse gas
114 emissions inventory and stormwater management projects.

115

116 The Committee had lengthy discussion, focusing on the initiatives
117 recommended to be brought forward by City staff. Items discussed
118 included the stormwater projects, green infrastructure incentives, and
119 composting opportunities. Each Committee member provided their
120 thoughts on the initiatives presented. Additionally, the Committee had
121 discussion regarding top initiatives identified to move forward with
122 discussion this summer. The Committee discussed various priorities
123 including anti-idling campaign, community gardening, coal tar
124 monitoring and potential implementation of licensing program, natural
125 area management program.

126

127 The Committee directed staff to focus on investigating community
128 gardening and licensing incentives related to coal tar-based sealants. The
129 Committee also directed staff to continue work on the solar panel
130 investigation.

131

132 Chairman Rummel asked if there were any additional questions or
133 comments from the Committee.

134

135 Seeing none, Chairman Rummel asked if there were any questions or
136 comments from members of the public.

137

138 Seeing none, she moved to the next agenda item.

139

PUBLIC COMMENT

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141 Chairman Rummel asked if there were any public comments on any non-
142 agenda items.

143

144

145 Seeing none, Chairman Rummel moved to the next agenda item.

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NEXT MEETING DATE(S)

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Assistant City Manager, Mike Strong stated that the next meeting would be scheduled for the week of May 23, 2022.

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152

ADJOURNMENT

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154

Alderman Preschlack moved to adjourn the meeting of the Environmental Sustainability Committee at 7:01 P.M. seconded by Weber. The motion carried unanimously by voice vote.

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158

Respectfully Submitted,

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161

Mike Strong

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Assistant City Manager



Greenhouse Gas (GHG) Inventory Overview & Results

Environmental Sustainability Committee

June 15, 2022



Agenda

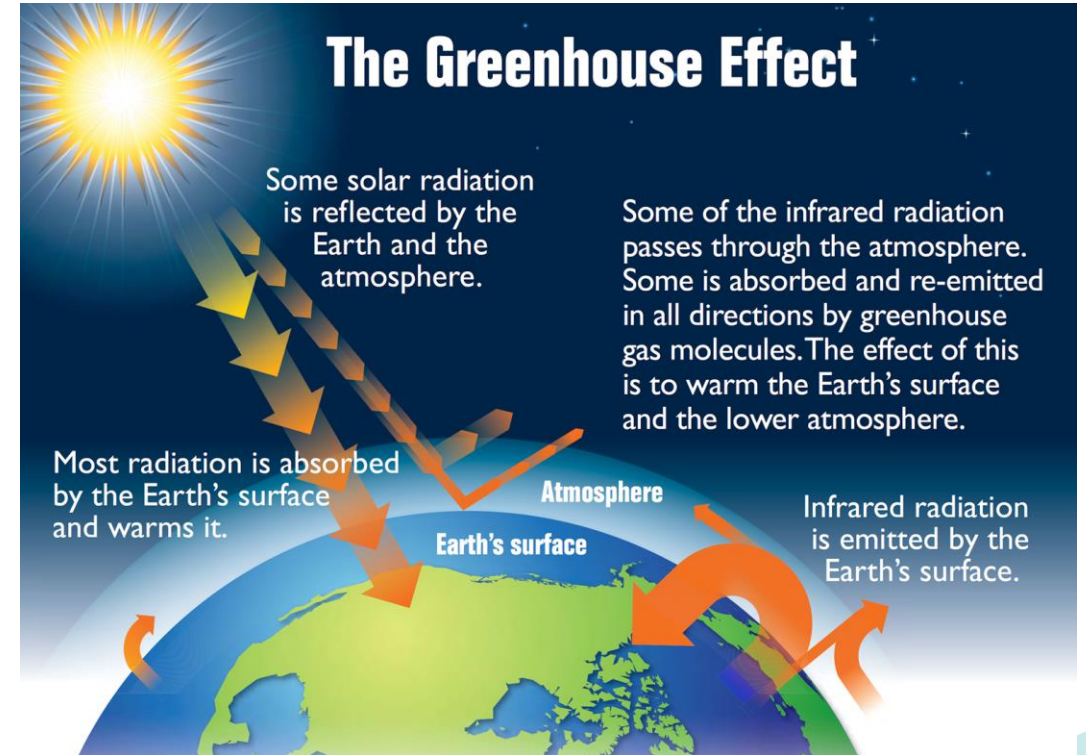


1. Greenhouse Gas and Inventory 101
2. Inventory and Forecasting Importance
3. Inventory Results
4. Reduction Goal Opportunity
5. Key Takeaways & Next Steps



What is a greenhouse gas?

- “GHG” for short
- Gases that act like the glass in a greenhouse, trapping the sun’s heat near the earth’s surface
- GHG emissions from human activities are largely responsible for our changing climate



What is a Community-wide GHG Inventory?



- Stationary energy use (e.g. buildings)
 - Electricity
 - Natural Gas
 - Other fuels (propane, kerosene, etc)
- Mobile fuel use (gas and diesel)
 - Vehicles
 - Off-road equipment
- Industrial processes
- Solid waste decomposition/combustion
- Wastewater treatment (such as digester gas combustion or nitrogen discharge)
- Agriculture, Forestry, and Land use
- Fugitive Emissions



Why is a GHG Inventory Important?



- A foundational element a **Climate Action Plan**
- Provides a baseline that helps understand baseline impacts, forecast emissions, and inform mitigation strategies
- Informs emissions reduction targets – “**Science Based Targets**”
 - Measurable, actionable, and time-bound climate targets
 - Aligned with:
 - Earth’s limits (1.5°C)
 - The Global need of 50% reduction by 2030 / net zero by 2050
 - Societal Sustainability Goals



ICLEI Five Milestones for Climate Mitigation

Why is a GHG Forecast Important?

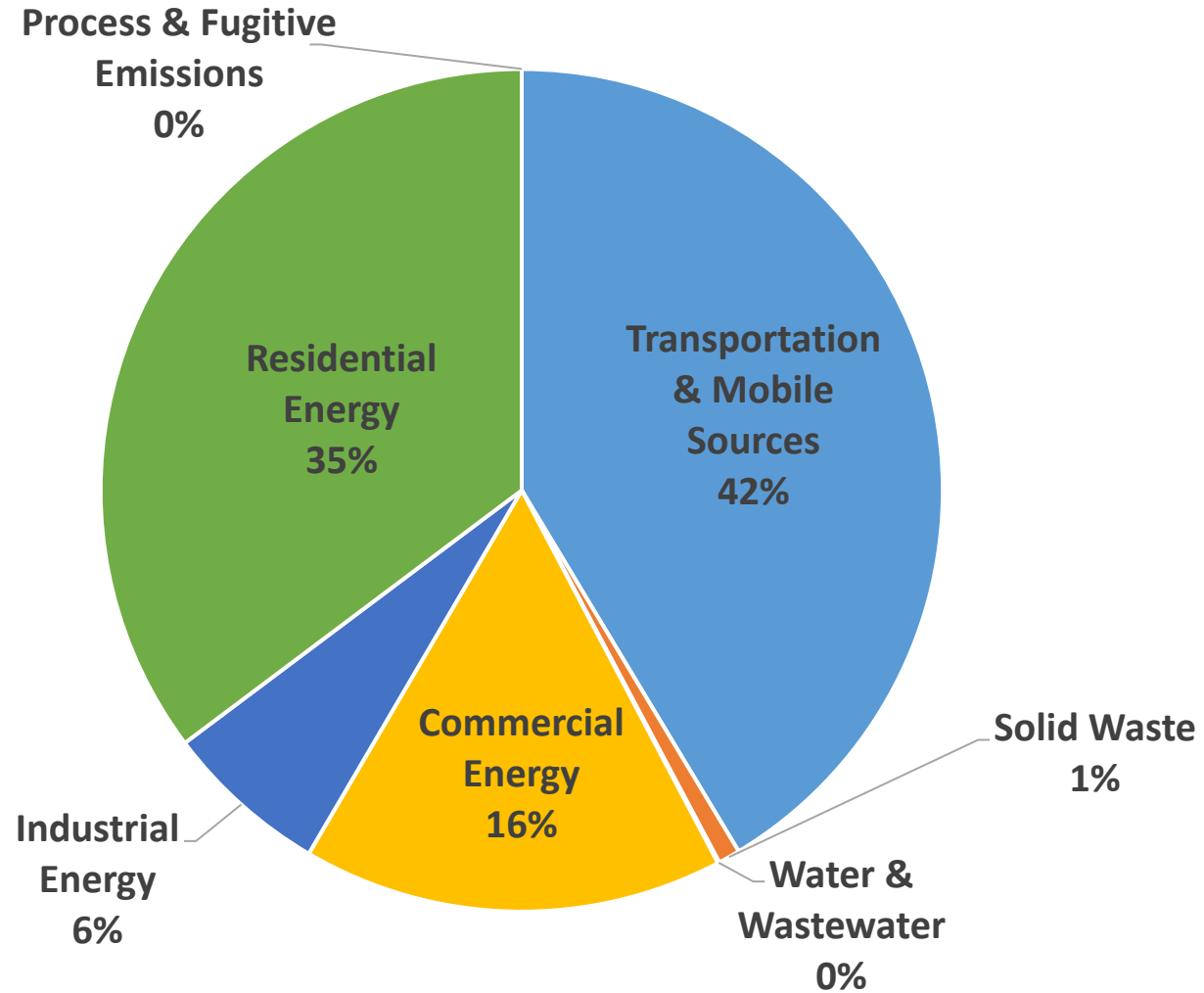


- Another foundational element of a Climate Action Plan
- Projects future emissions based on a Business-as-Usual Scenario
 - “BAU” = “on the books” expected emissions reductions/growth before reduction strategies are put in place
 - Examples: fuel efficiency standards for on-road vehicles, ComEd grid decarbonization, household/population growth rates
- GHG reduction strategies (e.g. energy efficiency) are then applied to forecasted emissions



ICLEI Five Milestones for Climate Mitigation

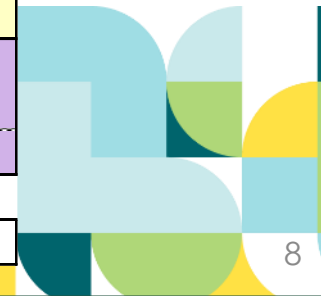
Inventory Results



Inventory Results



Sector	Fuel or Source	2019 Usage	Usage Unit	2019 Emissions
Residential Energy	Electricity	120,680,307	kWh	38,016
	Natural Gas	17,159,099	Therms	91,263
	Residential Energy Total			129,279
Commercial Energy	Electricity	79,283,595	kWh	24,975
	Natural Gas	6,447,085	Therms	34,290
	Commercial Energy Total			59,265
Industrial Energy	Electricity	72,643,438	kWh	22,884
	Natural Gas	57,465	Therms	305
	Industrial Energy Total			23,189
Transportation & Mobile Sources	Diesel	56,774,272	Vehicle Miles Traveled	75,745
	Gasoline	185,206,593	Vehicle Miles Traveled	76,081
	Other Fuels			1
Transportation & Mobile Sources Total			151,827	
Solid Waste	Waste Generated	6,918	Waste Generated (wet tons)	3,092
	Other (Green Waste)			116
	Solid Waste Total			3,208
Water & Wastewater	Wastewater Energy			205
	Fugitive Emissions			7
	Water & Wastewater Total			212
Total 2019 Communitywide Emissions				366,980

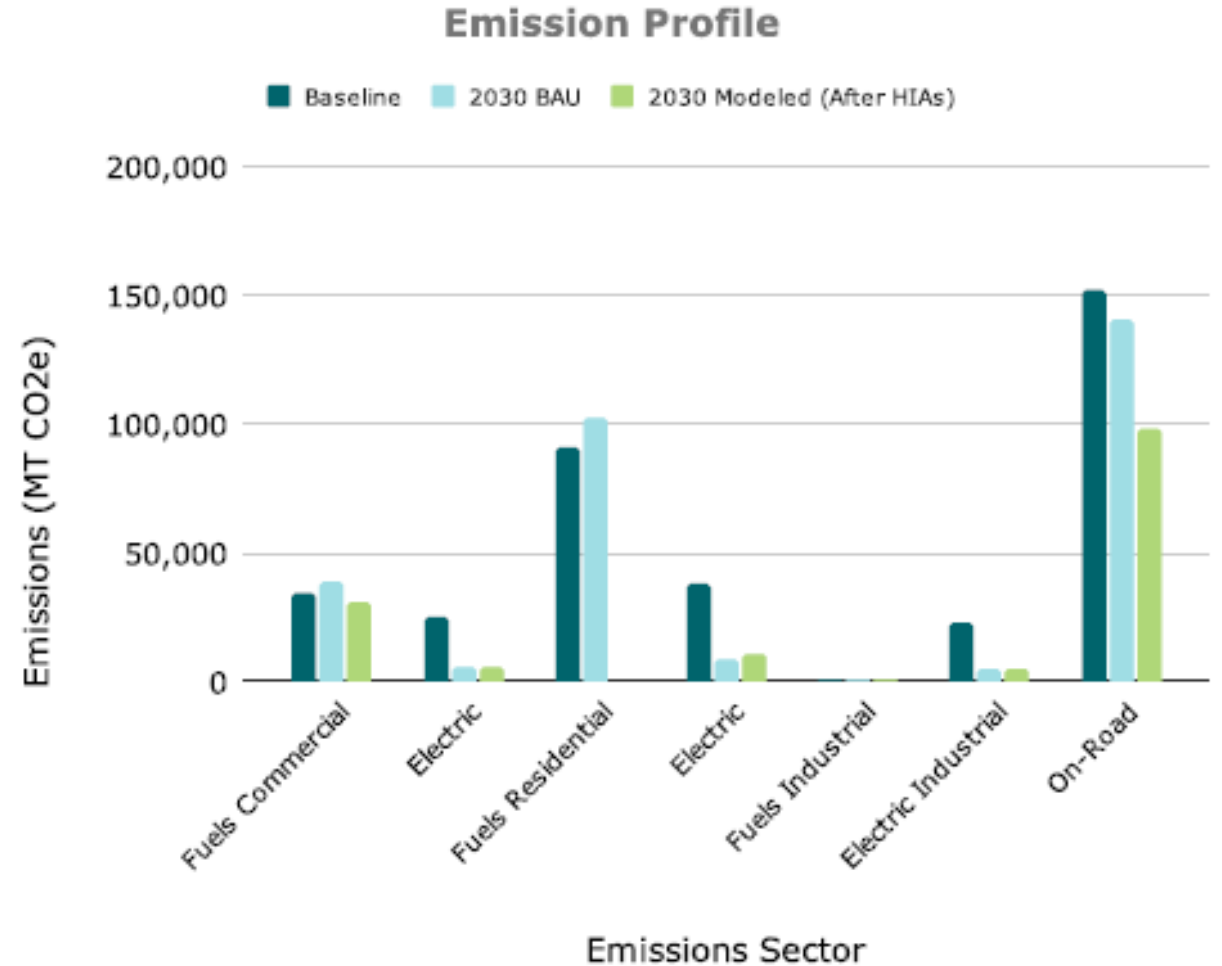


Results and Reduction Goals



- Absolute goal = **58.3%**
- Per capita goal = **62.8%**

- Total emissions reduction target is **151,694 MT CO₂e** by 2030



Key Takeaways



- Given that stationary combustion (natural gas) is the largest individual source (24.9%) of emissions, the City has an excellent opportunity to leverage **decarbonization and energy efficiency efforts** that are being led by North Shore Gas and Commonwealth Edison
- Given that mobile combustion (on-road transportation) is the second (20.7%) largest individual source of emissions, there may be opportunities to leverage **electric vehicle (EV) programs and promote transit-oriented development**
- When combining electrification with energy efficiency and renewable energy, The City of Lake Forest will see enhanced greenhouse gas mitigation
- Another great opportunity to reduce costs is to **increase local recycling and composting programs** as well as **reduce greenhouse gas emitting waste types** (e.g., papers, food waste, yard waste) from waste streams



Recommendations and Next Steps



- **Short Term:** Bolster community engagement around emissions results
 - Focused on high impact areas (e.g. fuel combustion, transportation, energy efficiency, etc.)
 - Leverage communication modalities, social media, newsletter, etc.
- **Medium Term:** Finalize forecast modeling to help inform Climate Action Planning work
- **Long Term:** Plan and implement a Climate Action Plan for community





Questions



Environmental Sustainability Committee
 Current/Future Sustainability initiatives & Priorities
 Updated June 2022

Project/Initiative	2022				2023	
	Q1	Q2	Q3	Q4	Q1	Q2
Greenhouse Gas Inventory						
Solar Facilities on City Facilities						
Community Gardening Discussion						
Composting Programs						
“Green Infrastructure” Incentives						
Vehicle Idling Campaign						
Single-Use Plastics Discussion						

Planning/Research
 Presentation/Recommendation

Current Projects/Status:

1. Greenhouse Gas Inventory

- Status: Completed collection of greenhouse gas inventory data from various sources (CMAP, Waste haulers, utilities)
- On Deck: Prepare initial report with ICLEI (Target is June 2022)
 - Target ESC Meeting in June to review report and discuss emission reduction targets (Based on ICLEI recommendations)
 - Develop list of recommendations/actions for ESC (July-Aug 2022)
- Target June/July ESC meeting for presentation; with follow-up to City Council in late summer/early fall (No formal action needed – report will inform future priorities/opportunities)

2. Investigation of Solar Facilities on City Facilities

- Status: Solicitation/Vendor Selection Phase (Final Recommendation Pending)
- On Deck: Prepare Vendor recommendation to ESC, and City Council
 - Week of 6/13/2022: Meeting with ComEd to discuss Franchise Account structure and conversion to Infrastructure Maintenance Fee
 - Late June: City Attorney Review of Power Purchase Agreement with Finalist Vendor
- Target ESC Meeting for Recommendation and Final Action: 7/13/2022
- City Council Meeting: 7/20/2022 or 8/1/2022

3. Develop Community Gardening Program

- Status: Research and planning underway
- On Deck: Develop internal work committee to discuss program opportunities, partnerships, and potential locations
- Target Timeline: Target initial meeting and discussion in early September, with recommendation to ESC in late fall

4. Provide greater access to composting programs or services for residents and businesses

- Status: Research and planning underway
- On Deck:
 - Reviewing organic waste impacts in context of emissions inventory
 - Exploring alternative options to Earth Machines (Foodcycler product)
- Target Timeline: Research services/options in May-June 2022, with recommendation to ESC in Summer
- Solicitation to follow in fall for winter launch (composting offerings in winter)

Future Projects/Initiatives (As directed by Committee in April 2022)

5. Promote the use of permeable pavers, rain gardens or other “green infrastructure” implements throughout the community

- Proposed Scope: Marketing/communications on City projects utilizing infrastructure
- Develop “green infrastructure” permit or reduced permit fees
- Explore cost-share opportunities or grant program for residents to offset infrastructure investment through (e.g. Overhead sewer cost-share program)
- Target Timeline: Research opportunities between July-September
- Potential recommendations to ESC in October; followed by Finance Committee (Capital workshop) in November

6. Develop strategies to further reduce the City’s use and collection of single-use plastics

- Proposed Scope: Explore opportunities to reduce the City’s use of single-use plastics (e.g. City facilities, meetings/events, etc.)
 - Can we eliminate use of single-use plastics at our community events?
 - Can we promote/incentivize special event permit holds to not sell bottled water? What alternatives might exist?
 - May need to discuss with the City Council further – how far do they want to go with banning/incentivizing these products
- Target Timeline: First quarter of 2023 for research/further policy decisions

Additional initiatives that have been discussed:

- Discouraging vehicle idling on City Properties – Discussions have commenced with schools and Lake Forest Open Lands; campaign planning underway. Anticipated for discussion late summer
- Coal tar sealants – Awaiting monitoring report from NBWW; anticipated in fall 2022
- Conversion of Mowed Areas to Natural Areas – No update/report
- Landscape Equipment recommendations (Leaf Blowers) – No update/report