



**Town of Aurora
Environmental Advisory Committee
Meeting Agenda**

Date: Monday, September 18, 2023
Time: 7 p.m.
Location: Holland Room, Aurora Town Hall

Meetings are available to the public in person and via live stream on the [Town's YouTube channel](#). To participate, please visit [aurora.ca/participation](https://www.aurora.ca/participation).

	Pages
1. Call to Order	
2. Land Acknowledgement	
3. Approval of the Agenda	
4. Declarations of Pecuniary Interest and General Nature Thereof	
5. Receipt of the Minutes	
5.1 Environmental Advisory Committee Meeting Minutes of May 15, 2023	1
1. That the Environmental Advisory Committee meeting minutes of May 15, 2023, be received for information.	
6. Delegations	
7. Matters for Consideration	
7.1 Memorandum from Energy and Climate Change Analyst; Re: Corporate Environmental Action Plan 2022 Progress Report	5
(Presentation to be provided by Sebastian Contarin, Energy and Climate Change Analyst)	
1. That the memorandum regarding Corporate Environmental Action Plan 2022 Progress Report and presentation be received; and	
2. That the Environmental Advisory Committee comments regarding the Corporate Environmental Action Plan 2022 Progress Report and presentation be received and referred to	

staff for consideration and further action as appropriate.

7.2 Memorandum from Energy and Climate Change Analyst; Re: Energy Conservation and Demand Management Plan Renewal

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(Presentation to be provided by Marlen Aleman, Project Manager, and Max Chute, Energy Analyst, WalterFedy)

1. That the memorandum regarding Energy Conservation and Demand Management Plan Renewal be received; and
2. That the Environmental Advisory Committee comments regarding the Energy Conservation and Demand Management Plan Renewal be received and referred to staff for consideration and further action as appropriate.

8. Informational Items

8.1 Memorandum from Deputy Town Clerk; Re: Committee Terms of Reference

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1. That the memorandum regarding Committee Terms of Reference be received for information.

9. New Business

10. Adjournment



**Town of Aurora
Environmental Advisory Committee
Meeting Minutes**

Date: Monday, May 15, 2023
Time: 7 p.m.
Location: Holland Room

Committee Members: Councillor Rachel Gilliland (Chair)
Councillor Wendy Gaertner* (Vice Chair) (arrived 7:15 p.m.)
Nicole Arsenault
Shun Chen*
Pippette Eibel
Denis Heng
Kristen Martens
Ken Turriff

Members Absent: Alain Godin

Other Attendees: Sebastian Contarin, Analyst, Energy and Climate Change
Nancy Fleming, Manager, Engineering Services
Palak Mehta, Council/Committee Coordinator

*Attended electronically

1. Call to Order

Councillor Gilliland called the meeting to order at 7 p.m.

2. Land Acknowledgement

The Committee acknowledged that the meeting took place on Anishinaabe lands, the traditional and treaty territory of the Chippewas of Georgina Island, recognizing the many other Nations whose presence here continues to this day, the special relationship the Chippewas have with the lands and waters of this territory, and that Aurora has shared responsibility for the stewardship of these

Environmental Advisory Committee Meeting Minutes
Monday, May 15, 2023

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lands and waters. It was noted that Aurora is part of the treaty lands of the Mississaugas and Chippewas, recognized through Treaty #13 and the Williams Treaties of 1923.

3. Approval of the Agenda

Moved by Ken Turriff

Seconded by Nicole Arsenault

That the agenda as circulated by Legislative Services be approved.

Carried

4. Declarations of Pecuniary Interest and General Nature Thereof

There were no declarations of pecuniary interest under the *Municipal Conflict of Interest Act, R.S.O. 1990, c. M.50*.

5. Receipt of the Minutes

None.

6. Delegations

None.

7. Matters for Consideration

None.

8. Informational Items

8.1 Memorandum from Energy and Climate Change Analyst; Re: Town of Aurora Climate Change Initiative Update

Sebastian Contarin, Energy and Climate Change Analyst provided an overview of the climate initiatives and environmental achievements that the Town of Aurora has accomplished since the last Environmental Advisory Committee meeting in June 2022, including an introduction to the upcoming climate initiatives in 2023. Staff to circulate links to the

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Committee, including environmental master plans and consultation reports for information.

The Committee inquired about its role and purpose, key performance indicators with respect to environmental initiatives, tree planting/removal and a tree canopy study, Green Development Standards (GDS), reviewing greenhouse gas (GHG) targets, the community efficiency financing and application deadline for the grant, economic value of natural capital assets, and water conservation initiatives. Staff provided a response.

The Committee further inquired about environmental initiatives of the draft Official Plan Amendment review. The Chair encouraged the Committee to provide comments at engageaurora.ca/opr.

The Committee also inquired about current communication initiatives and discussed how to increase outreach for environmental initiatives. Staff provided a response.

Moved by Pippette Eibel

Seconded by Denis Heng

1. That the memorandum regarding Town of Aurora Climate Change Initiative Update be received for information; and
2. That the Environmental Advisory Committee comments regarding Town of Aurora Climate Change Initiative Update be received and referred to staff for consideration and further action as appropriate.

Carried as amended

9. New Business

The Committee asked that the Clerk attend the next meeting to address questions and have an in-depth discussion with the Committee regarding their roles, purpose, and Terms of Reference.

The Committee recognized May 20, 2023 as "World Bee Day", and inquired about the Town's consideration of planting wildflowers for pollinators. The Chair advised that they would explore how to address this inquiry and report back.

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10. Adjournment

Moved by Kristen Martens

Seconded by Shun Chen

That the meeting be adjourned at 8:15 p.m.

Carried



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Aurora, Ontario
L4G 6J1
(905) 727-3123
aurora.ca

Town of Aurora

Memorandum

Planning and Development Services

Re: Corporate Environmental Action Plan 2022 Progress Report

To: Environmental Advisory Committee

From: Sebastian Contarin, Energy & Climate Change Analyst

Date: September 18, 2023

Recommendation

1. That the memorandum regarding Corporate Environmental Action Plan 2022 Progress Report and presentation be received; and
2. That the Environmental Advisory Committee comments regarding the Corporate Environmental Action Plan 2022 Progress Report and presentation be received and referred to staff for consideration and further action as appropriate.

Background

The 2018 Corporate Environmental Action Plan (CEAP) is a five-year plan intended to provide corporate direction on key strategic environmental initiatives. The CEAP is intended to protect and enhance the natural environment, promote environmental sustainability, integrity, and conservation of resources, and create a practice of environmental stewardship within the community.

The CEAP was developed to assist Council in planning and implementing specific actions to improve the Town's environmental performance and sustainability for future generations. The success of the CEAP requires a coordinated approach that includes Town Departments driving implementation of initiatives and providing input and data on achievements to date.

An annual progress report is presented to the Environmental Advisory Committee (EAC) and to Council and then posted on the Town's website. Reports are presented annually by mid-year for the previous reporting year. This timeframe allows staff to collect, verify, input, and analyze all the data needed for tracking and reporting purposes. Since the CEAP monitors facility energy consumption, utility bills often get adjusted or corrected and require additional time to finalize the data.

The CEAP 2022 Progress Report is scheduled to be presented to Council in the fourth quarter of 2023.

Analysis

The overall themes in the CEAP include:

- Water Conservation
- Sustainable Urban Development
- Waste Reduction and Diversion
- Biodiversity and Natural Heritage
- Climate Change and Energy; and
- Environmental Awareness

The following is a highlight of the Town's 2022 successes from the CEAP Progress Report. A more detailed summary can be found in Attachment 1.

Area of Focus	Completed Actions in 2022
Water Conservation	<ul style="list-style-type: none"> • The Town installed 1000 water meters, surpassing installations in 2021 by 104.2%. • The LSRCA conducted inspections of the Town's stormwater pond inventory and reported deficiencies as applicable. • Design for the installation of a new oil and grit separator (OGS) unit, along the Murray Drive culvert, was completed. • Operations conducted seven OGS cleanouts and 1,682 catch basin cleanouts. Total disposal of waste gathered from cleanout activities equated to 105 tonnes, a 2.5% increase compared to 2021. • Engineering Division adopted Ontario Regulation 406/19, On-Site and Excess Soil Management Regulation, into design and construction tenders to improve the reuse of soils during Town construction projects. • Engineering Division adopted York Region's Infiltration and Inflow (I&I) Standard to reduce I&I development on new sanitary sewers.
Sustainable Urban Development	<ul style="list-style-type: none"> • Engineering Division commenced a design project on the development of a wildlife crossing on Henderson Drive to address wildlife conservation considerations in this area.

Corporate Environmental Action Plan 2022 Progress Report
September 18, 2023

Page 3 of 4

Area of Focus	Completed Actions in 2022
	<ul style="list-style-type: none"> • Design of new sidewalk projects was undertaken along Edward Street and Industrial Parkway North, to continue to promote active transportation options for the community. • A community garden was planned as part of the construction of a new park in the 2C lands.
Waste Reduction and Diversion	<ul style="list-style-type: none"> • Frames and lids for catch basin and maintenance hole repairs were reused where possible. • The community waste diversion rate increased to 70% • The Bag Tag program was implemented. A total of 3,560 bag tags were purchased generating over \$17,800.00 in revenue. • Annual stewardship programs were implemented by the Town including eWaste, community cleanups, compost giveaways, community garage sales, and the blue box collection program.
Biodiversity and Natural Heritage	<ul style="list-style-type: none"> • Second phase expansion of the David Tomlinson Nature Reserve, located in the 2C lands was undertaken. The second phase included trails, boardwalks, native plantings, and ecological features. • Parks Division planted 1,933 trees, exceeding tree planting in 2021 by 1.72%. • Online promotions were administered to the public to deter individuals from feeding wildlife on Town-owned property. • The phragmites strategy was approved by Council, including operational funding for the next four years. • The Town continued ongoing partnerships with residents/community groups to remove invasive species including garlic mustard and buckthorn.
Climate Change and Energy	<ul style="list-style-type: none"> • The Climate Change Adaptation Plan was completed and endorsed by Council. • The Green Development Standards Phase I was completed and endorsed by Council. • A climate change lens was applied and included in the Town's updated Official Plan. • Fleet Division continued to upgrade their fleet with the purchase of more fuel and technologically efficient vehicles. • Facility annual energy consumption (natural gas/electricity) totaled approximately 19,386,242 equivalent kilowatt-hours; a 2.3% decrease compared to 2021. • A monthly building performance meeting undertaken with Facilities staff and the Energy and Climate Change Analyst, to

Area of Focus	Completed Actions in 2022
	<p>discuss ongoing energy projects, operational changes, energy consumption, trends, best practices for energy conservation, new technologies, utility incentives etc. continued as an ongoing practice.</p> <ul style="list-style-type: none"> • The Town's newly installed electric vehicle charging stations were been involved in 1,300 charging sessions across the community. • The Town's electric vehicle chargers consumed approximately 12,244 kilowatt-hours of electricity. • The Town generated approximately 649,131 kilowatt-hours of electricity through its solar PV systems across four Town-owned facilities. • Facilities Division conducted a Building Condition Assessment study across all Town facilities, which also included energy conservation measures. • Council approved \$50,000 in the 2022 budget for capital projects involving energy conservation measures at Town facilities.
Environmental Awareness	<ul style="list-style-type: none"> • The Town partnered with York Region to share social media messaging related to water quality and conservation. • Aurora Chamber Street Festival included Enbridge Gas as a sponsor, providing information on the Home Energy Rebate Plus (HER+) and Home Winterproofing Program (HWP). • Parks Division promoted the adopt-a-park program to Town residents, an ongoing initiative, as well as supported the Arboretum planting and the planting of trees and shrubs.

Attachments

Attachment 1 – DRAFT Corporate Environmental Action Plan 2022 Progress Report
Attachment 2 - CEAP 2022 Progress Report Presentation
Attachment 3 – Corporate Environmental Action Plan 2022 Tracking Sheet

Attachment 1 DRAFT Corporate Environmental Action Plan 2022 Progress Report

WATER CONSERVATION

Objective W1: Reduce Town owned facility water consumption.

Objective W2: Reduce the uncontrolled and inadequately controlled storm water areas with respect to both quality and quantity by following recommendations of the Town's Comprehensive Storm water Management Master Plan.

- Town Square Greywater system will be operational next year (2024) (W1)
- Number of water meter installations: (W1)
 - 2021: 315
 - 2022: 1000 (104.2% increase compared to 2021)
- Stormwater ponds inspections conducted by the LSRCA on an annual basis and reports are generated and provided to the Town with identified deficiencies. (W2)
- Design for the installation of a new OGS unit along the Murray Drive culvert was completed in 2022. Installation of OGS unit is anticipated to commence in 2023. (W2)
- Engineering and Operations completed a retrofit of a stormwater management pond facility (WC3 – near Deerhorn Crecent and Kennedy St W). Retrofit consisted of an enlargement permanent pool and a pond cleanout. (W2)
- Operations undertook maintenance on OGS units on an annual basis (W2)
 - Total number of OGS cleanouts in 2021: 10 units
 - Total number of OGS cleanouts in 2022: 7 units (35.3% decrease compared to 2021)
 - Total number of catch basin cleanouts in 2021: 1,499 units
 - Total number of catch basin cleanouts in 2022: 1,682 units (11.5% increase compared to 2021)
- Total disposal of waste gathered from cleanout activities in 2022: 105 tons (2.5% increase compared to 2021). (W2)
- Operations Division provided maintenance to the LID located at the Aurora

Cultural Centre parking lot. (W2).

- Engineering Division adopting soil regulations (O.Reg 406/19) into design and construction tenders to improve the reuse of soils during construction projects. (W2).
- Engineering Divisions adopting York Region's Infiltration and Inflow Standard for future projects to reduce I&I development on new sanitary sewers. (W2)

SUSTAINABLE URBAN DEVELOPMENT

Objective S1: Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff.

- The establishment of the formal policy on Alternative Work Arrangements was developed in 2022 and approved in 2023. Approximately 65% of Town employees are participating in hybrid which reduces the amount of commuting. (S1 and C3)
- Engineering Division introduced a project on the development of a turtle crossing project on Henderson Drive to address wildlife conservation. The project was in its design phase in 2022 with construction anticipated to commence in 2024. (S1)
- Design of new sidewalk projects, located along Edward Street and Industrial Parkway North, to promote active transportation for residents (S1)
- Community garden was planned for a new park construction in the 2C lands. Construction anticipated to commence in 2023, provided available funding. (S1)
- The Town applied for a grant offered through the Green Municipal Fund involving the development of a Feasibility Study for a Community Efficiency Financing Program within the Town. (S1)

WASTE REDUCTION and DIVERSION

Objective D1: Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.

Objective D2: Reduce waste going to landfill disposal.

- Engineering Division incorporated sustainable construction practices for 2022 road reconstruction projects: (D1 and D2)
 - Recycled concrete for granular use for right-turn construction (road widening) project at Yonge and Wellington.
 - Asphalt grindings were used to improve deteriorated pavement at the end of Dunning
- Reuse of existing frames and lids incorporated for catch basin or manhole repairs. (D1 and D2)
- Community waste diversion tracking: (D2)
 - 2018: Aurora's diversion rate: 65% (Baseline)
 - 2019: Aurora's diversion rate: 65%
 - 2020: Aurora's diversion rate: 64%
 - 2021: Aurora's diversion rate: 66%
 - 2022: Aurora's diversion rate: 70% (Increase of 5% compared to 2018)
- Front-end multi-residential recycling program tracking: (D2)
 - 2019: Multi-res participation: 28 buildings
 - 2020: Multi-res participation: 29 buildings
 - 2021: Multi-res participation: 30 buildings
 - 2022: Multi-res participation: 30 buildings (Increase participation rate by 6.9% compared to 2019)
- Bag Tag Program was implemented in January 2022. (D2)
 - The total number of bag tags purchased in 2022: 3,560.
 - The total revenue generated from the bag tag program in 2022: \$17,800.00
- Annual Stewardship Programs (D2 and A1)
 - Event 1: eWaste – January, May, and October
 - Event 2: Cleanup – April and September/October – to be implemented in 2023
 - Event 3: Compost giveaway program – held once a year
 - Event 4: Community garage sale – normally held in summer
 - Event 5: Blue Box Collection Program – continues annually up to 2026

BIODIVERSITY and NATURAL HERITAGE

Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.

- Expansion of the David Tomlinson Nature Reserve, located in the 2C lands, into the second phase. Second phase includes trails, boardwalks, native plantings, and ecological features. (S1 and B1)
- Parks Division planted 1,933 trees in 2022. This exceeded tree planting in 2021 by 1.72%. Tree plantings are not part of the tree compensation program. (S1 and B1)
- Online promotions were administered to the public to promote against feeding wildlife on Town-owned property. (B1 and A1)
- The Phragmites strategy was approved by Council in 2022, including operational funding for the next four (4) years. (B1)
- The Town is involved with ongoing partnerships with residents/community groups to remove invasive species including Garlic Mustard and Buckthorn; outreach programs also implemented on this effort. (B1)

CLIMATE CHANGE and ENERGY

Objective C1: Prepare a Climate Change Adaptation Plan

Objective C2: Implement the Provincial Climate Change Plan Actions

Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities. * Actions pulled from the Provincial Climate Change Plan

- The Climate Change Adaptation Plan was completed and endorsed by Council in 2022. (C1)
- The Green Development Standards Phase I was completed and endorsed by Council in 2022. (C1)
- Climate change lens included in the Town's updated Official Plan. (C2)
- Fleet Division continued to upgrade their vehicle fleet with the purchase of more fuel and technologically efficient vehicles. Also in the process of the procurement of an EV Ice Re-surfacer and Ice Edger. (C3)
- Facility Annual Energy Consumption (Natural Gas/Electricity) (C3)
 - Base year: 2018
 - 2018: 23,180,806 equivalent kilowatt-hours
 - 2019: 24,641,678 equivalent kilowatt-hours
 - 2020: 19,860,541 equivalent kilowatt-hours
 - 2021: 19,828,350 equivalent kilowatt-hours
 - 2022: 19,386,242 equivalent kilowatt-hours (2.3% decrease compared to 2021)
- Monthly Building Performance meeting setup with Facility staff and Energy and Climate Change Analyst, to discuss ongoing energy projects, operational changes, energy consumption, trends, best practices for energy conservation, new technologies, utility incentives etc. (ongoing since 2020) (C3)
- EV Charging Station Data (C3)
 - Total charging sessions in 2022: 1,300 sessions
 - Total electricity consumption used in 2022: 12,244 kWh
- The Town generated 649,131 kWh of electricity through its solar PV systems across four (4) Town-owned facilities. (C3)
- Facilities Division hired a consultant to conduct a Building Condition Assessment study across all Town-owned buildings which included energy conservation measures. (C3)

- Council approved \$50,000 in 2022 budget for capital projects involving energy conservation measures at Town-owned facilities. (C3)

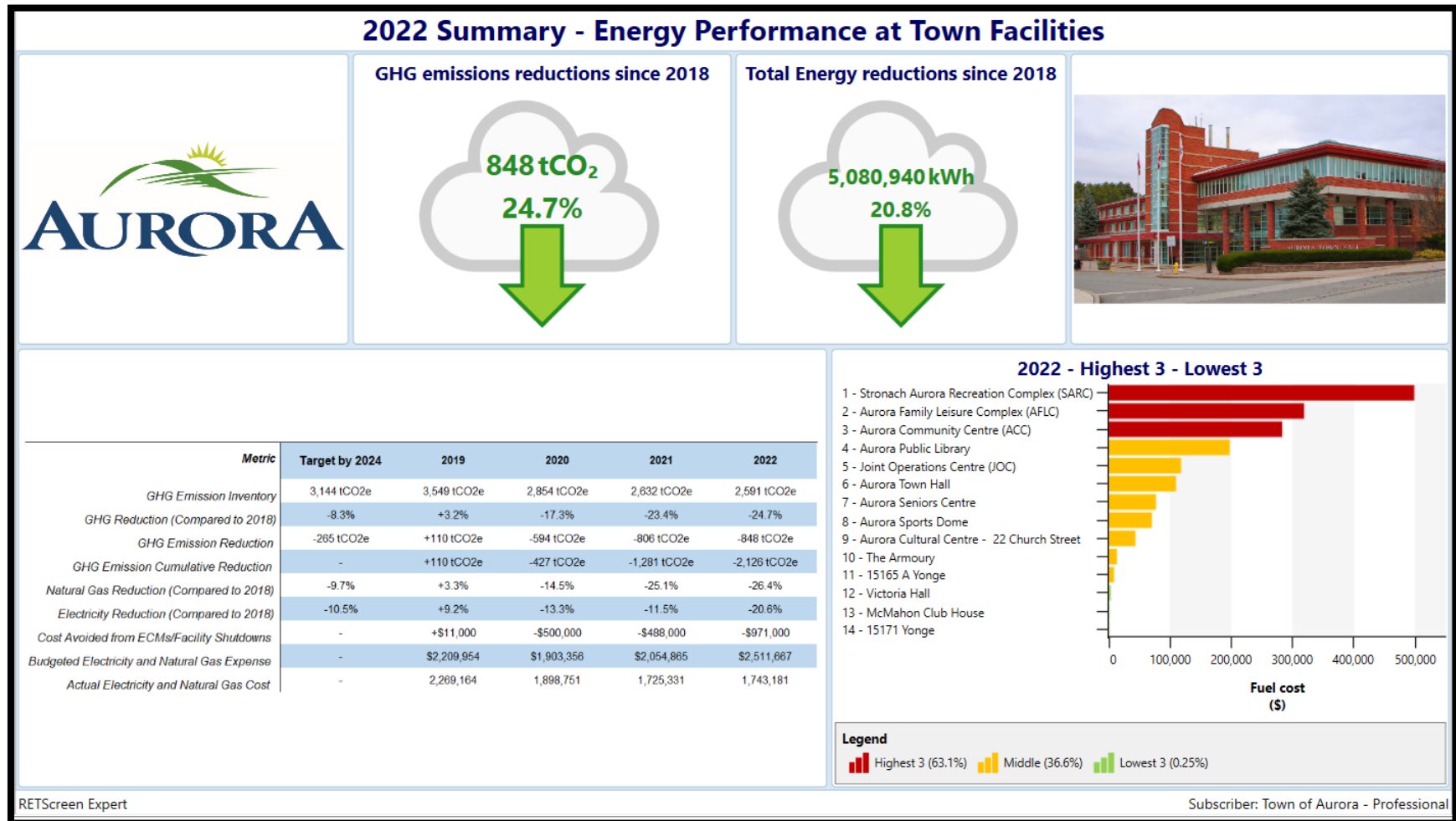
ENVIRONMENTAL AWARENESS

Objective A1: Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement.

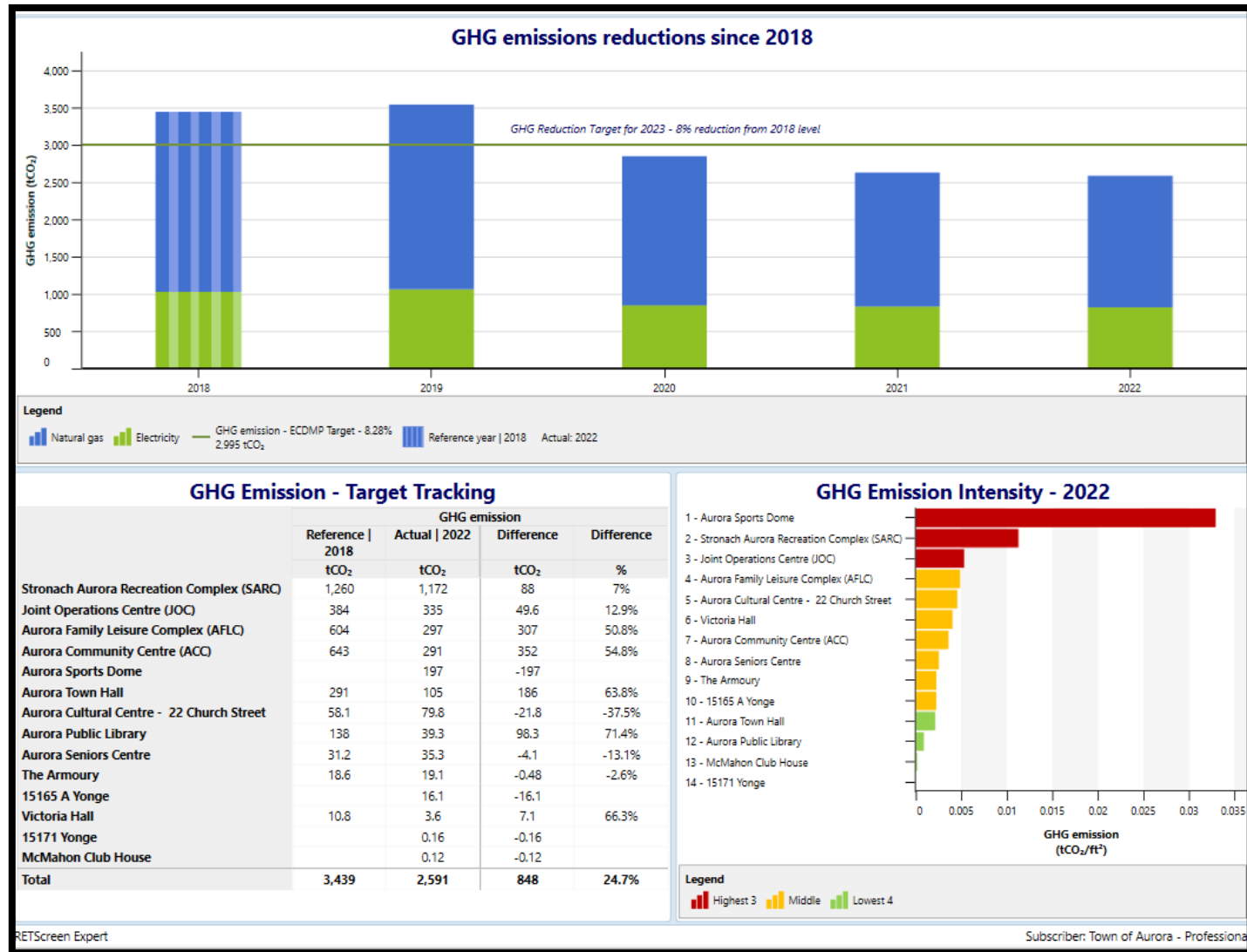
- Shared York region social media messaging related to water quality. Partnered with the region to access Water related print materials that are given out at Access Aurora. (A1)
- Aurora Chamber Street Festival - Presence of Enbridge Gas, as a Presenting Sponsor, providing information on Home Energy Rebate Plus (HER+) and Home Winterproofing Program (HWP). KPIs from event: (A1 and C3)
 - # of interactions: 210
 - # of sign-ups for HER+: 45
- Shared LEAF social media messaging regarding Backyard planting program, as well as Arboretum and LSRCA efforts. (A1)
- Parks promoted the adopt-a-park program to Town residents (Ongoing initiative), as well as supported the Arboretum planting, Neighborhood work, and the planting of trees and shrubs. (A1)

ANNEX 1

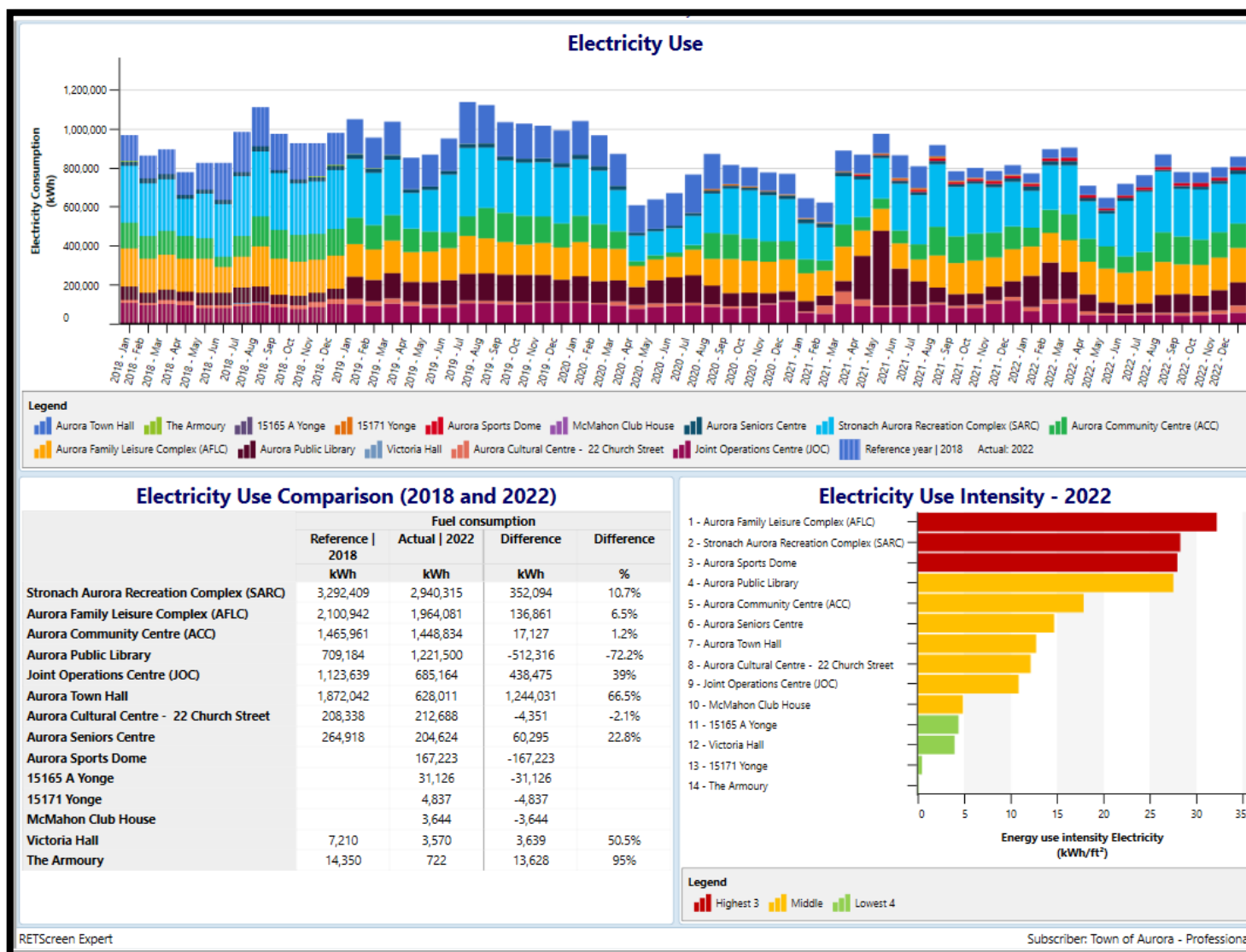
2022 Building Energy Performance at Town Facilities



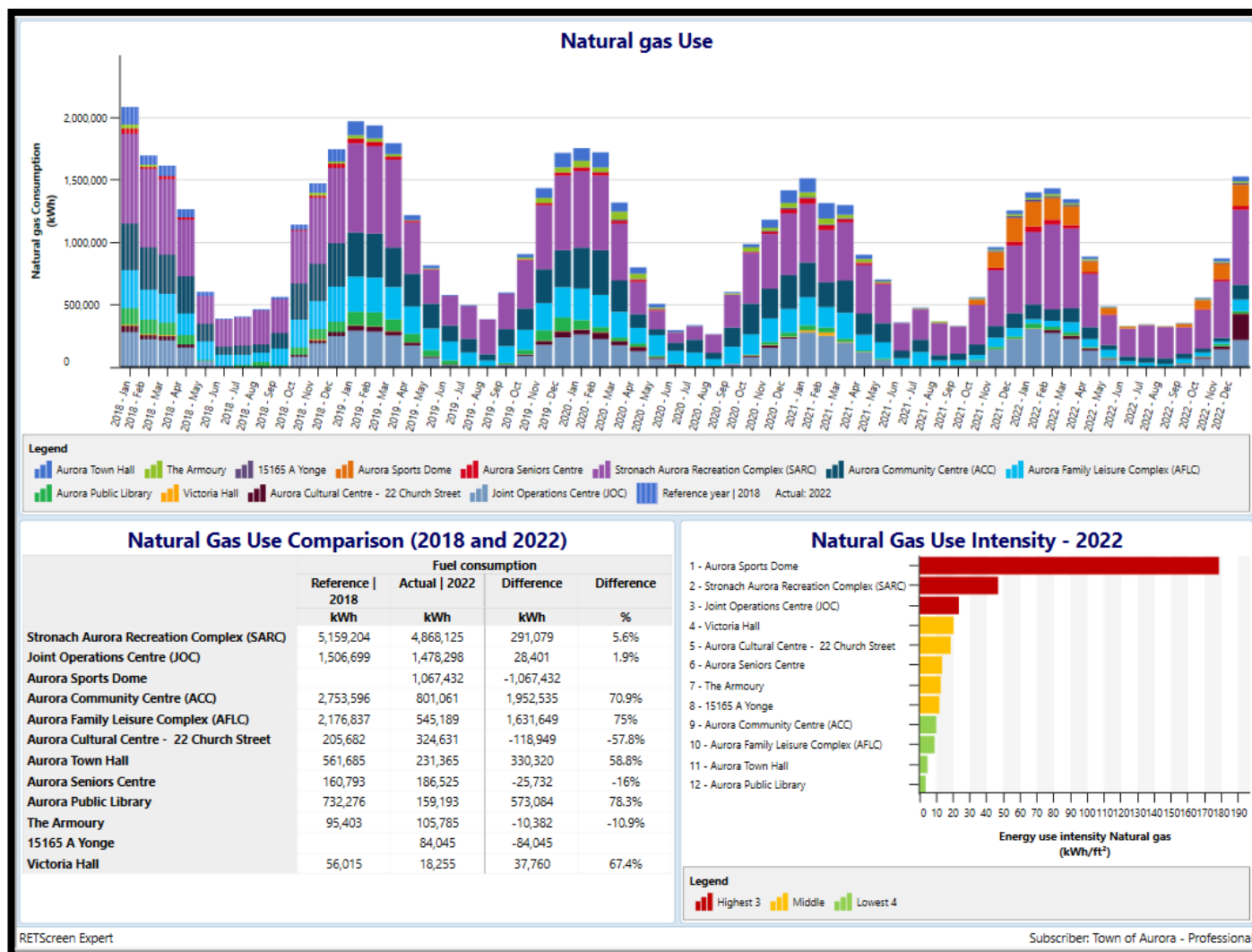
GHG Emissions from Town Facilities



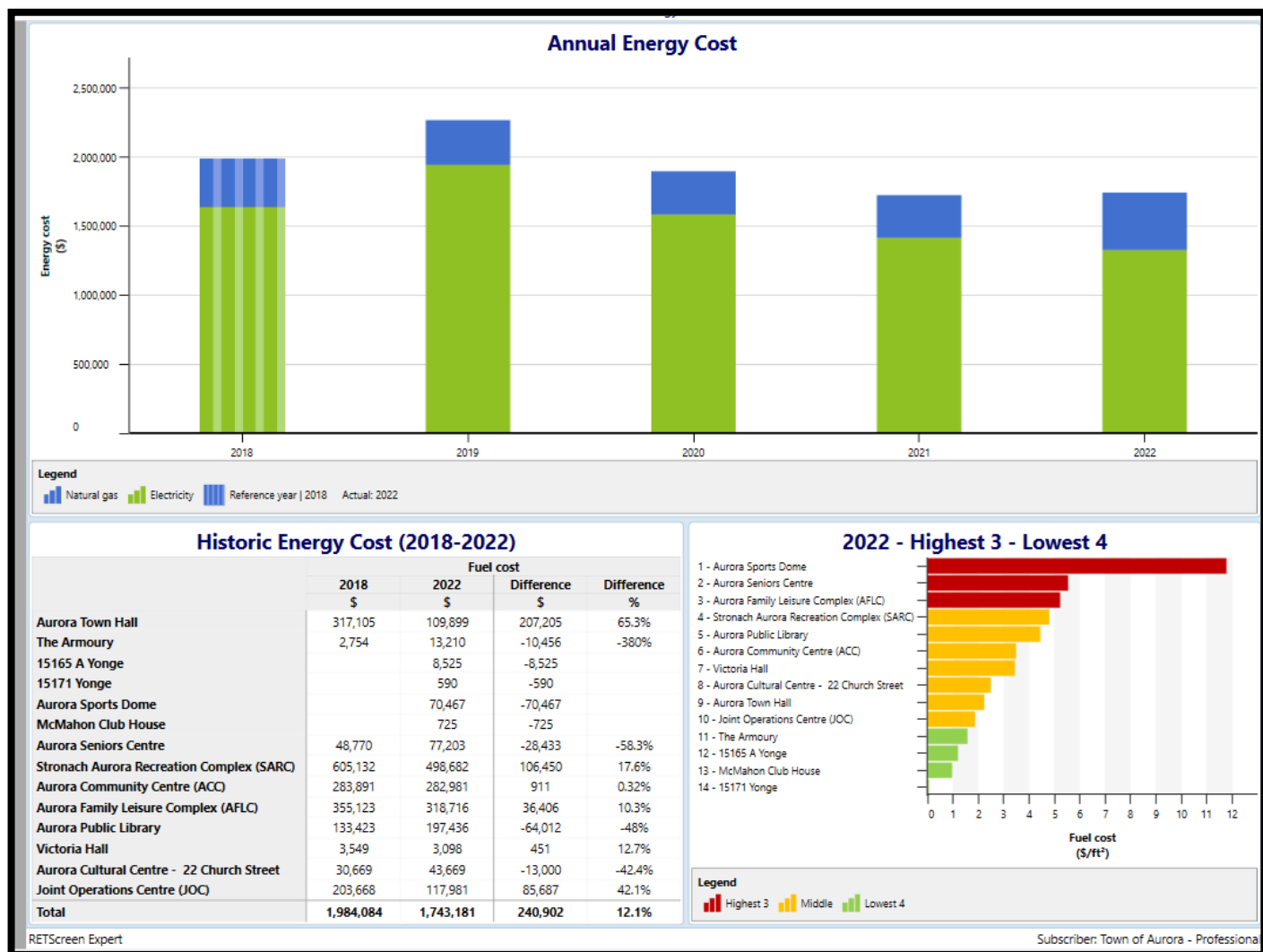
Electricity Use Portfolio



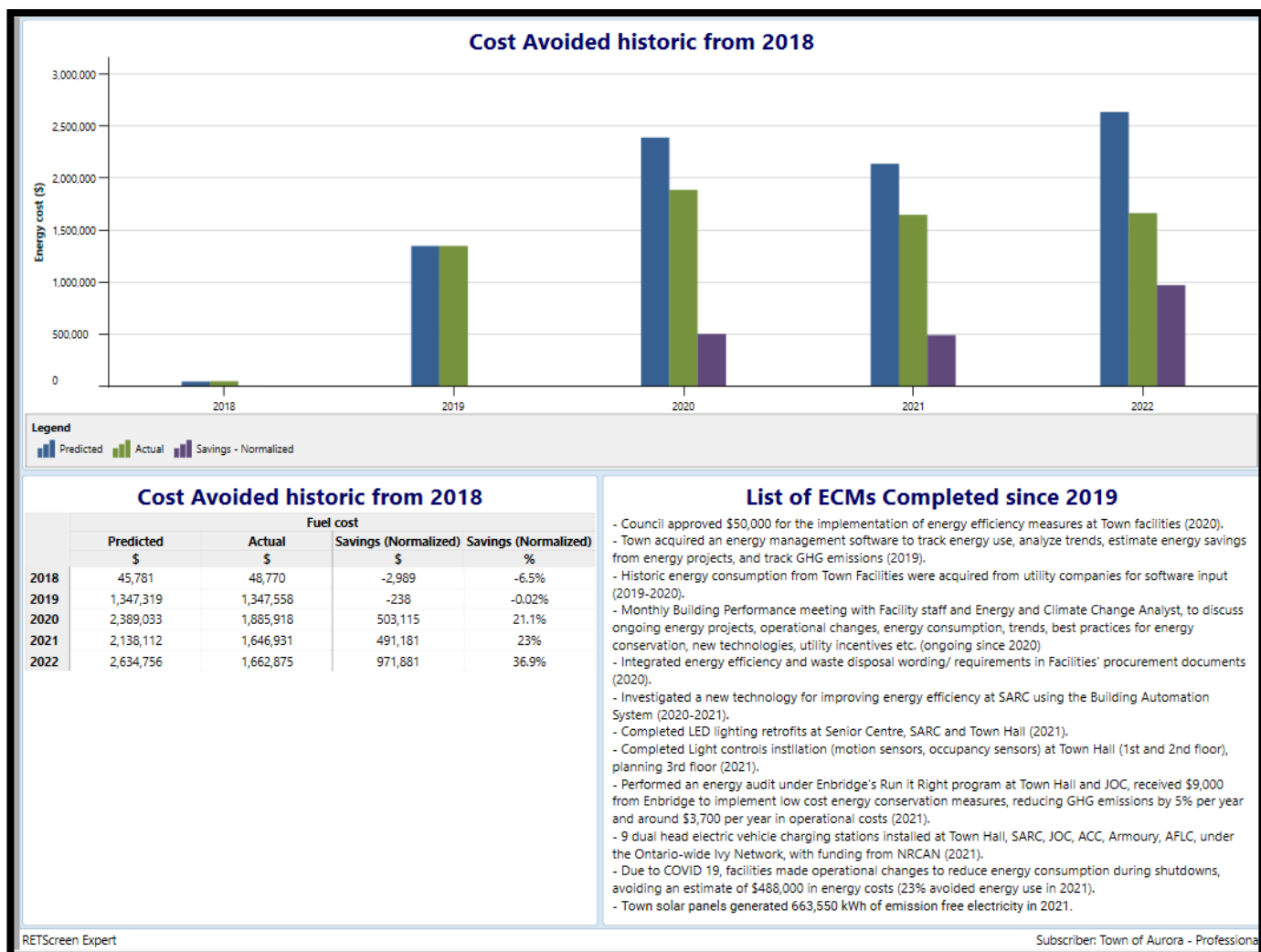
Natural Gas Use Portfolio



Annual 2022 Energy Cost at Town Facilities



Energy Costs Avoided Due to ECMs





Corporate Environmental Action Plan

2022 | Progress Report

Environmental Advisory
Committee Meeting

Monday, September 18, 2023
7:00pm

Engineering & Capital
Delivery Division

CEAP Overview

Corporate Climate Action Plan (CEAP) is a **five (5)-year plan** that outlines environmental sustainability action items directed at staff at the corporate level.

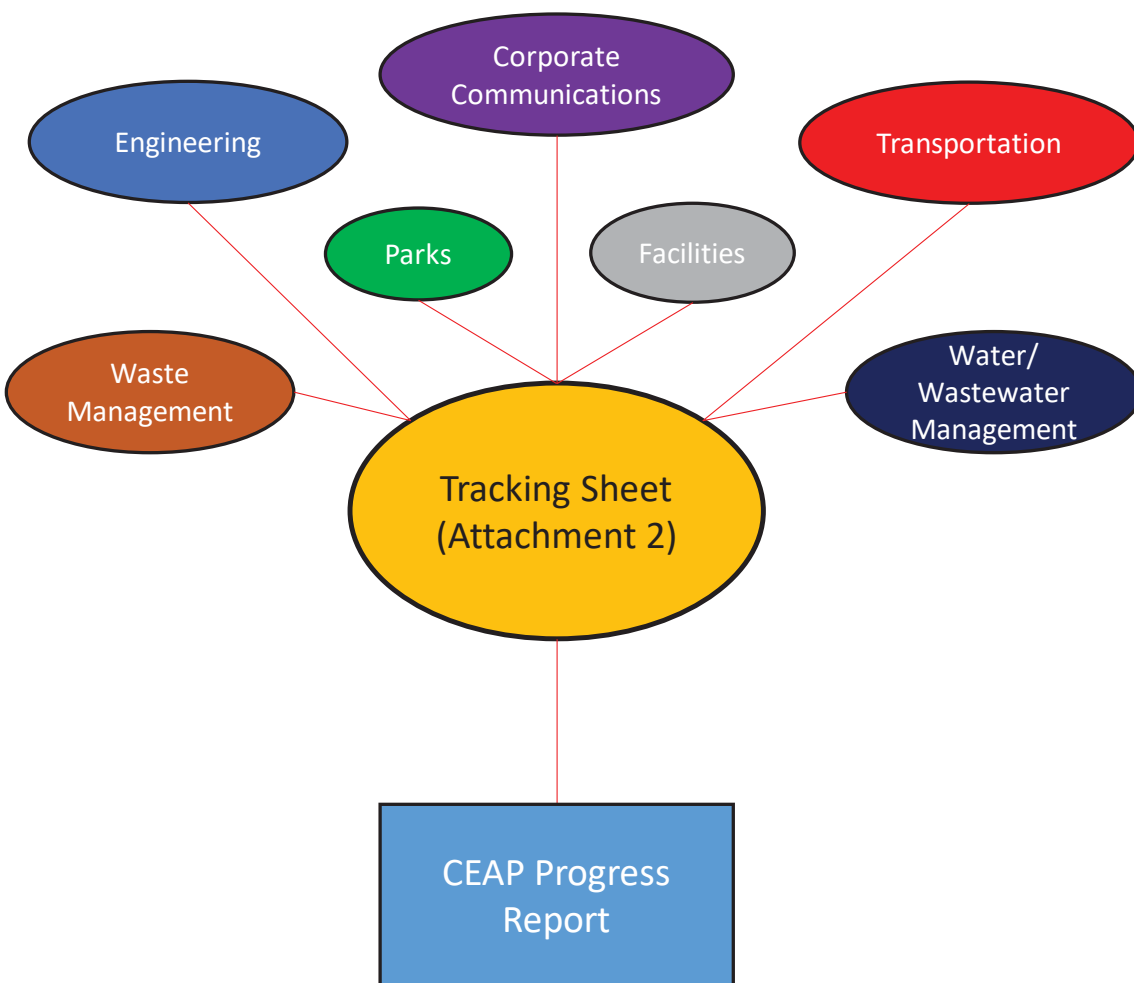
Purpose of CEAP:

Is to protect and enhance the natural environment, promote environmental sustainability, integrity and conservation of resources, and create a practice of environmental stewardship within the community.

Provide corporate direction on key strategic environmental initiatives to be implemented over next five (5) years

Assist Council to plan for and implement specific actions to improve the Town's environmental performance and sustainability for future generations.





Development and Process of Progress Report

The success of the Plan required a coordinated approach to implementation that included all the Town's departments.

A tracking sheet was used to monitor progress and encourage accountability by all staff.

All documented data from the tracking sheet was compiled and included in the final Progress Report.

CEAP Themes



Water
Conservation



Sustainable
Urban
Development



Waste
Reduction
and Diversion



Biodiversity
and Natural
Heritage



Climate
Change and
Energy



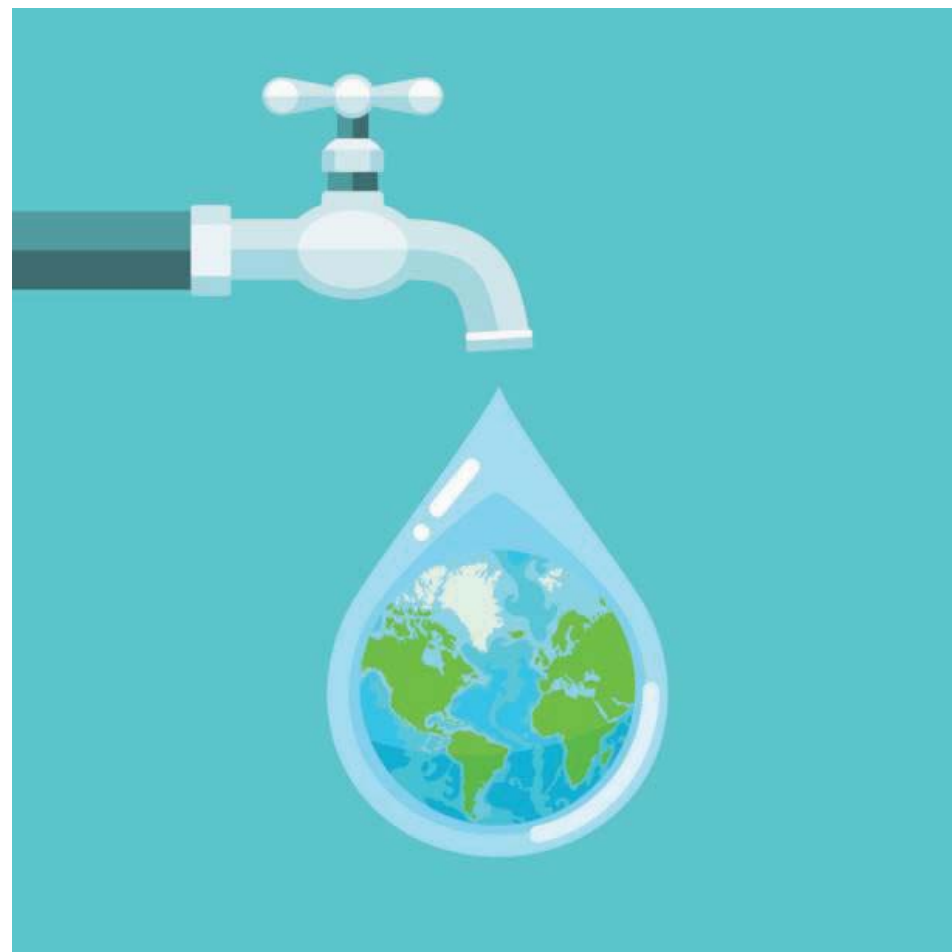
Environmental
Awareness

Successfully Implemented CEAP Objectives Summary: 2022

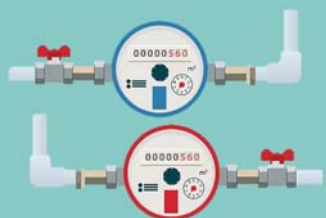
The following slides provide a summary of some of the Town's 2022 successes from the CEAP Progress Report.

A more detailed summary of the Town's environmental objectives by theme and the Town's initiatives are found in Attachment 1.

Water Conservation



Water Conservation Objectives



In 2022, a total of **1 000 water meters** were installed as part of its water loss reduction strategy.

Stormwater pond inspection were conducted by the Lake Simcoe Region Conservation Authority (LSRCA) in 2022 for the purpose of identifying deficiencies



Design for the installation of a new OGS unit along the Murray Drive culvert was completed in 2022. Installation of OGS unit is anticipated to commence in 2023.



Engineering and Operations Division completed a retrofit of a stormwater management pond facility, near Deerhorn Crecent and Kennedy Street West.



Operations Division performed a total of **7 OGS** and **1,682 catch basin** cleanouts in 2022.



Total waste collected from cleanout activities and disposed of equated to **105 tons** in 2022.

Engineering Division adopted soil regulations (O.Reg 406/19) into design and construction tenders to improve the reuse of soils for construction projects.



Engineering Division adopts York Region's Infiltration and Inflow Standard for future projects to reduce I&I development on new sanitary sewers.

Comparing the Numbers to 2021

Water meter installations



104.2%

OGS cleanouts



35.3%

Catch basin cleanouts



11.5%

Total waste disposal



2.5%

Looking Beyond the Numbers

Water metering is the practice of measuring water use. The more water meters installed the better able the Town is on accurately reporting its water consumption at the residential and commercial levels.

The benefits of metering water include:

- Provides incentive for water conservation
- Helps detect water leaks in distribution network, thus providing a basis for reducing the amount of non-revenue water

Oil Grit Separators (OGS) are used to trap and retain oil and sediment in detention chambers usually located below ground. OGS are used for spill control, as pretreatment devices, and for water control.

Cleaning includes removal of accumulated oil and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device.

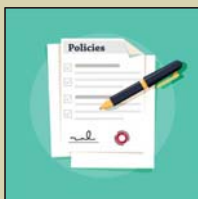
The more frequent the cleaning of OGS and catch basins the less likely sediments will be resuspended and subsequently discharged.

Sustainable Urban Development



Sustainable Urban Development Objectives

The establishment of the formal policy on Alternative Work Arrangements was developed in 2022 and approved in 2023.



The Town applied for a grant offered through the Green Municipal Fund involving the development of a Feasibility Study for a Community Efficiency Financing Program within the Town.



Design of new sidewalk projects, located along Edward Street and Industrial Parkway North, to promote active transportation for residents



Engineering Division introduced a project on the development of a turtle crossing project on Henderson Drive to address wildlife conservation. The project was in its design phase in 2022 with construction anticipated to commence in 2024.



Community garden planned for a new park construction in the 2C lands. Construction anticipated to commence in 2023, provided available funding.



Comparing the Numbers to 2021

Commuting from Town Staff



Participation in hybrid work arrangements



65%

Looking Beyond the Numbers

The Alternative Work Arrangement Policy has provided an opportunity for Town Staff to work remotely, and therefore limiting/reducing commuting frequency.

This has helped reduce the Town's Scope 3 GHG emissions.

What are Scope 3 Emissions?

The Greenhouse Gas Protocol, a resource that provides the most widely recognized accounting standards for Greenhouse Gas emissions, categorizes GHG emissions into three scopes.

Scope 2 and 3 emissions are classified as indirect emissions. Scope 2 is exclusive to emissions generated from the purchase and use of electricity, steam, heating, and cooling. Scope 3 emissions in contrast include all other indirect emissions that occur in the upstream and downstream activities of an organization.

Examples include:

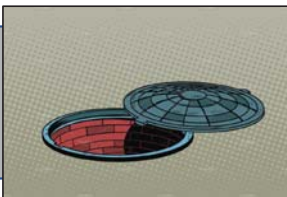
- Purchased goods and services
- Business travel
- **Employee commuting**
- Waste disposal
- Use of sold products
- Transportation and distribution (up-and downstream)
- Investments
- Leased assets and franchises

Waste Reduction and Diversion



Waste Reduction and Diversion Objectives

Operations Division incorporated the reuse of existing frames and lids for catch basin and man-hole repairs.



Engineering Division incorporated sustainable construction practices for 2022 road reconstruction projects. Practices included:

- Recycled concrete
- Asphalt grindings



The Town of Aurora's front-end multi-residential recycling program reached participation from 30 buildings.



The Town of Aurora's waste diversion rate, in 2022, equated to 70%

The Bag Tag Program was implemented in January 2022 was resulted to the purchase of 3,560 bag tags.

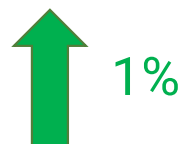


The Town had hosted four (4) waste reduction stewardship programs in 2022.



Comparing the Numbers to 2021

Town's waste diversion rate



1%

Participation of multi-residential recycling program



0%

Participation (Sales) generated from the Bag Tag Program



185%

Looking Beyond the Numbers

Waste Diversion Rate

As stated in the Community Energy Plan, the community target for waste diversion by 2030 is 80%. In order for the Town to reach this goal, a diversion rate of 1.25% must be achieved each year until 2030.

In 2021, York Region reported a diversion rate of 65%. Based on the Town's numbers in 2021, this total was exceeded by 1%.

Bag Tag Program

The program will education residents on what is to be placed in the garbage, recycling and compost and how to correctly sort their waste, limiting the amount of waste being placed at the curb. The program will also provide residents with an option to place extra waste past the three bag limit out on their regularly scheduled pickup day.

Waste Reduction and Diversion



Biodiversity and Natural Heritage Objectives

Expansion of the David Tomlinson Nature Reserve, located in the 2C lands, into the second phase of development; which includes trails, boardwalks, native plantings, and ecological features.



Parks Division planted **1,933 trees** in 2022.



The Phragmites Strategy was approved by Council in 2022, including operational funding for the next four (4) years.



Online promotions were administered to the public to promote against feeding wildlife on Town-owned property.

The Town is involved with ongoing partnerships with residents/community groups to remove invasive species including Garlic Mustard and Buckthorn; outreach programs also implemented on this effort.



Comparing the Numbers to 2021

Tree Plantings



1.72%

Looking Beyond the Numbers

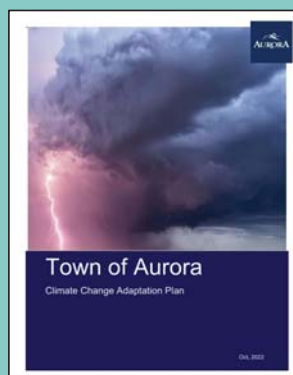
Annual tree plantings are NOT part of the tree compensation program.

Climate Change and Energy



Climate Change and Energy Objectives

The Climate Change Adaptation Plan was completed and endorsed by Council in 2022.



Fleet Division continued to upgrade their vehicle fleet with the purchase of more fuel and technologically efficient vehicles. Also, in the process of the procurement of an EV Ice Re-surfacer and Ice Edger.



Climate change lens included in the Town's Official Plan.

The Green Development Standards Phase I was completed and endorsed by Council in 2022.

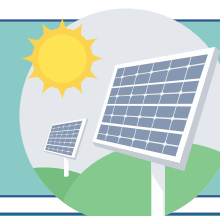


The Town's annual energy consumption, across all facilities, in 2022 equated to 19,386,242 kWh



Total charging sessions completed in 2022 equaled 1,300, consuming about 12,244 kWh of energy.

The Town generated 649,131 kWh of electricity through its solar PV systems across four (4) Town-owned facilities.



Council approved \$50,000 in 2022 budget for capital projects involving energy conservation measures at Town-owned facilities.



Facilities Division hired a consultant to conduct a Building Condition Assessment study across all Town-owned buildings which included energy conservation measures.



Comparing the Numbers to 2021

Annual Electricity Consumption



2.3%

Solar Energy Generation



5.6%

Looking Beyond the Numbers

Some solar PV systems experienced prolonged technical issues throughout 2022, limiting their energy output potential.

Electric Vehicle Charging Stations at Town-Owned Facilities



EV Charging Station Summary

Total Charging Station Sessions: **1300**

Total Energy Consumption: **12,243.81 kWh**

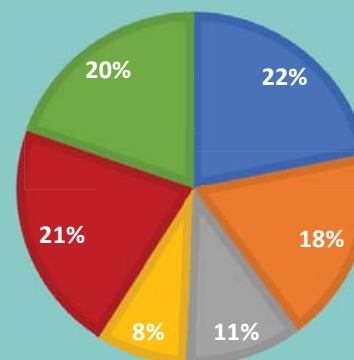
Average Energy Use/Session: **9.48 kWh/sess**

Total Revenue: **\$5,879.19**

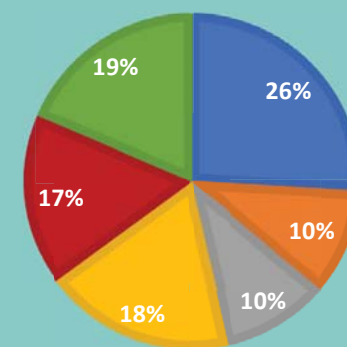
Total Operational Costs: **\$1,959.01**

Total Net Profit: **\$3,920.18**

EV CHARGING STATION SESSIONS



TOTAL ENERGY (KWH)



The Armory

Aurora Community Centre

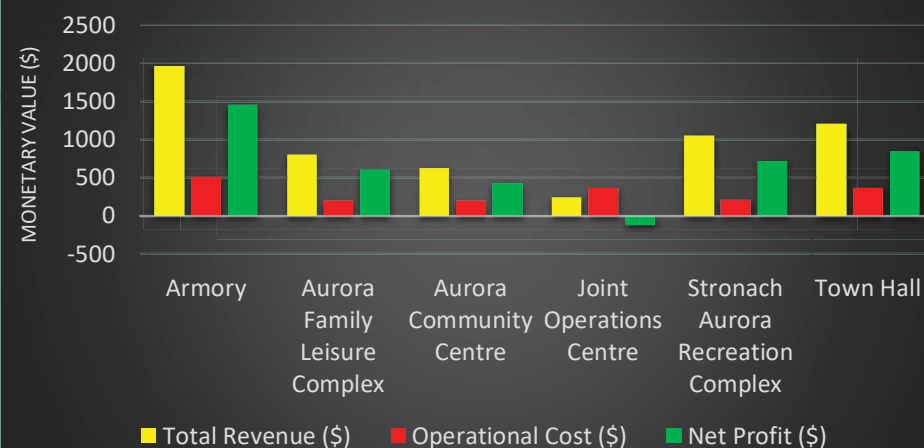
Stronach Aurora Recreation Complex

Aurora Family Leisure Complex

Joint Operations Centre

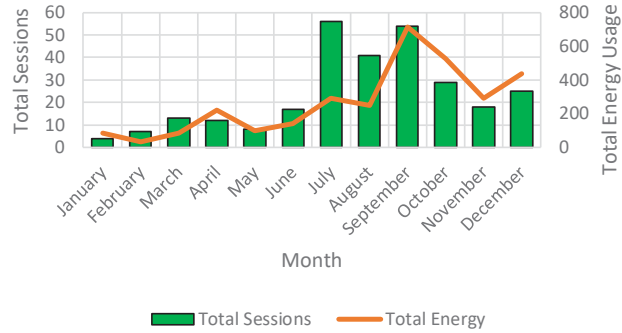
Town Hall

EV Charging Station 2022 Financial Outlook

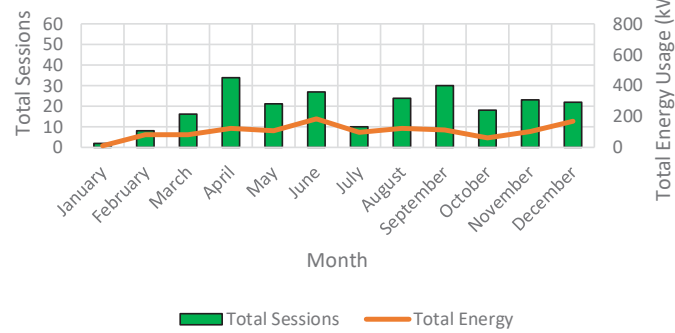


EV Station Use

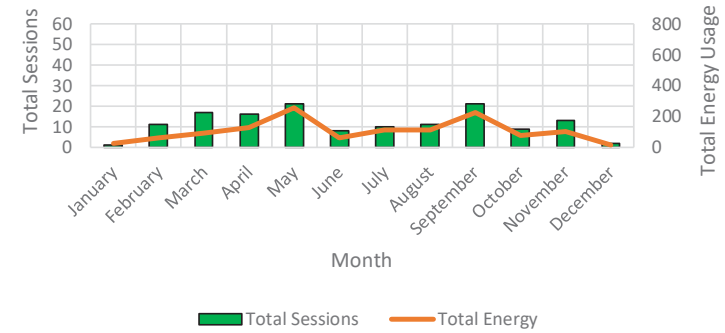
Total EV Charging Sessions and Energy Usage at **Armory 1**



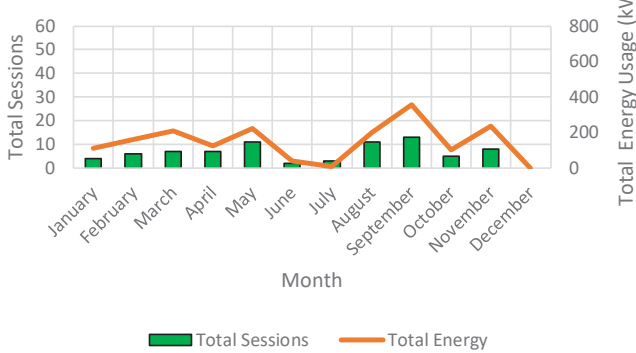
Total EV Charging Sessions and Energy Usage at **Family Leisure Complex 1**



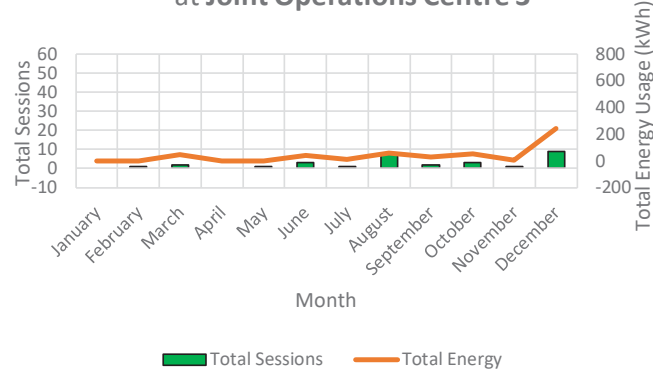
Total EV Charging Sessions and Energy Usage at **Community Centre 1**



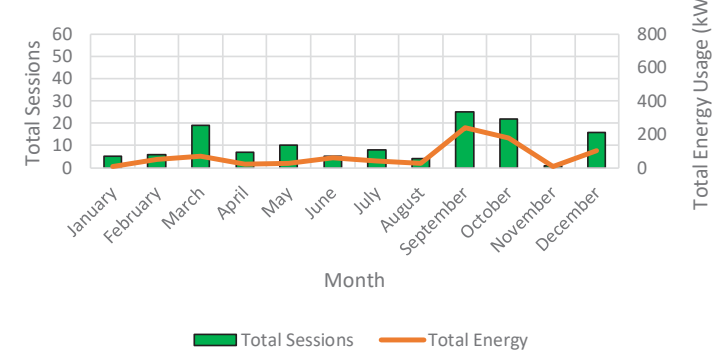
Total EV Charging Sessions and Energy Usage at **Joint Operations Centre 2**



Total EV Charging Sessions and Energy Usage at **Joint Operations Centre 3**

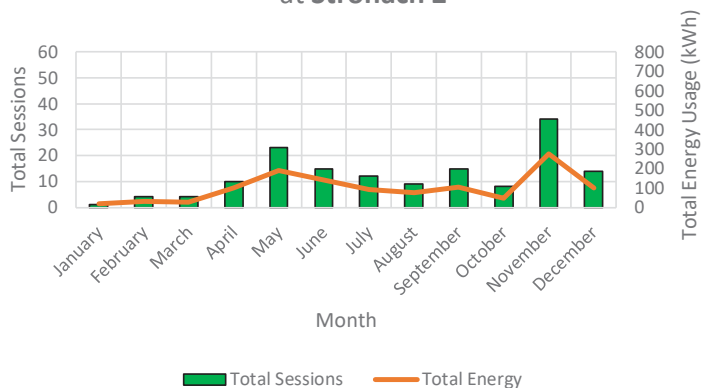


Total EV Charging Sessions and Energy Usage at **Stronach 1**

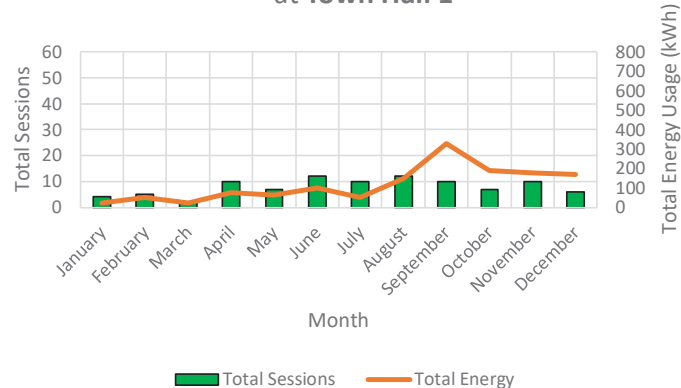


EV Station Use Continued

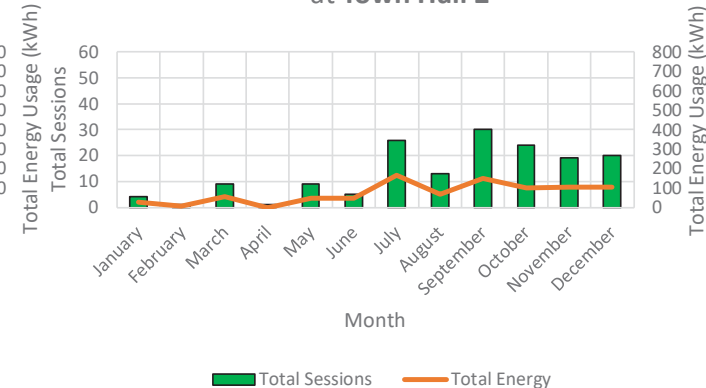
Total EV Charging Sessions and Energy Usage
at **Stronach 2**



Total EV Charging Sessions and Energy Usage
at **Town Hall 1**



Total EV Charging Sessions and Energy Usage
at **Town Hall 2**

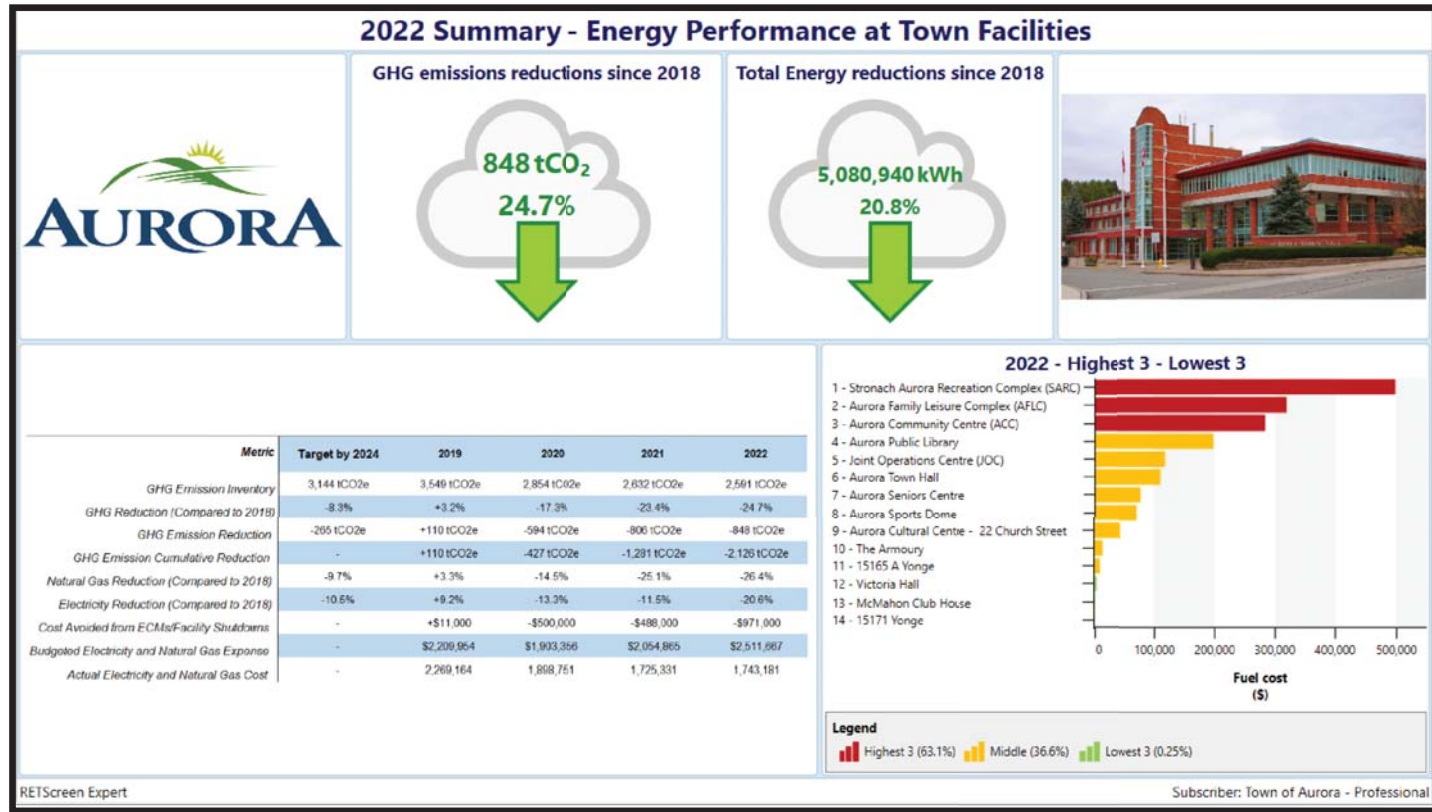


Key Takeaways

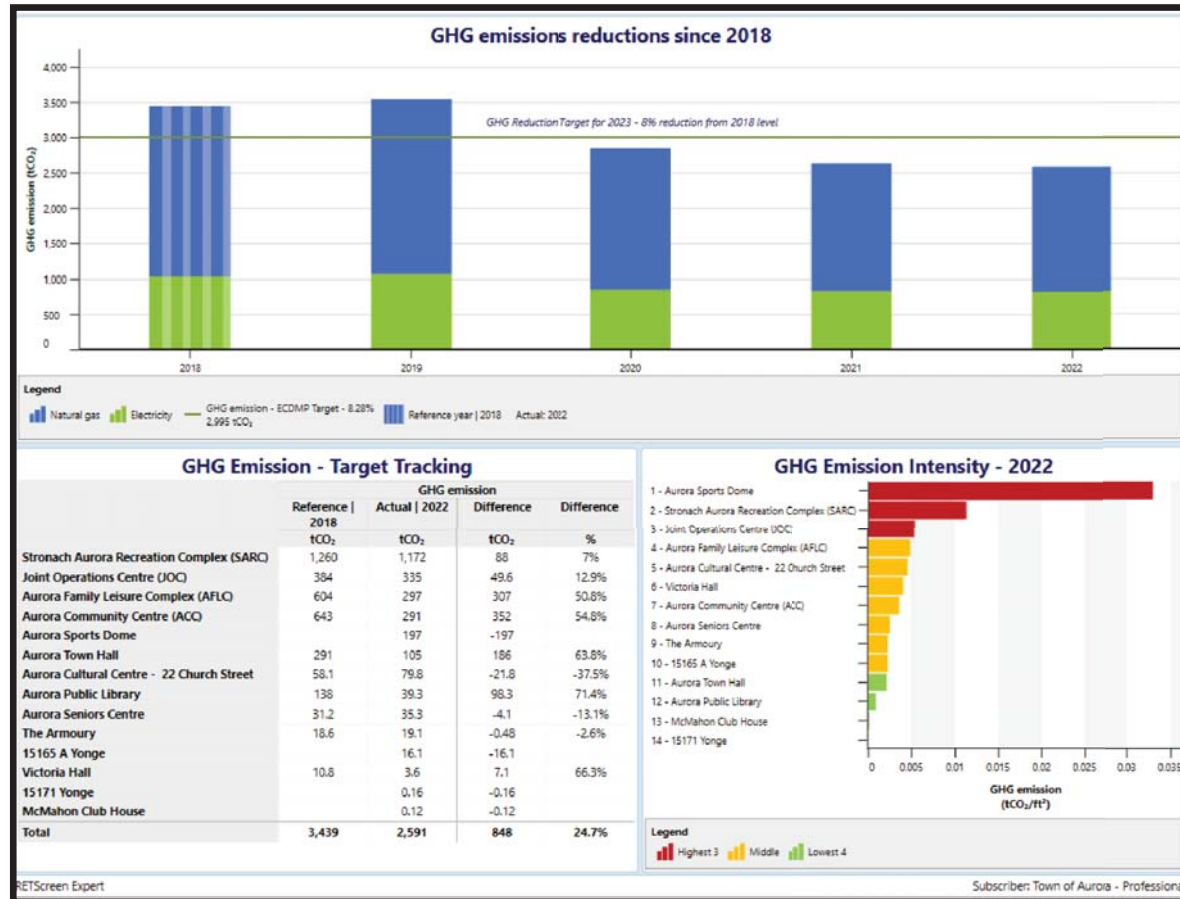
- EV charging sessions most frequent between July-December and less frequent between January-June.
- Highest EV charging usage experienced at the Armory
- Lowest EV charging usage experience at the Joint Operations Centre



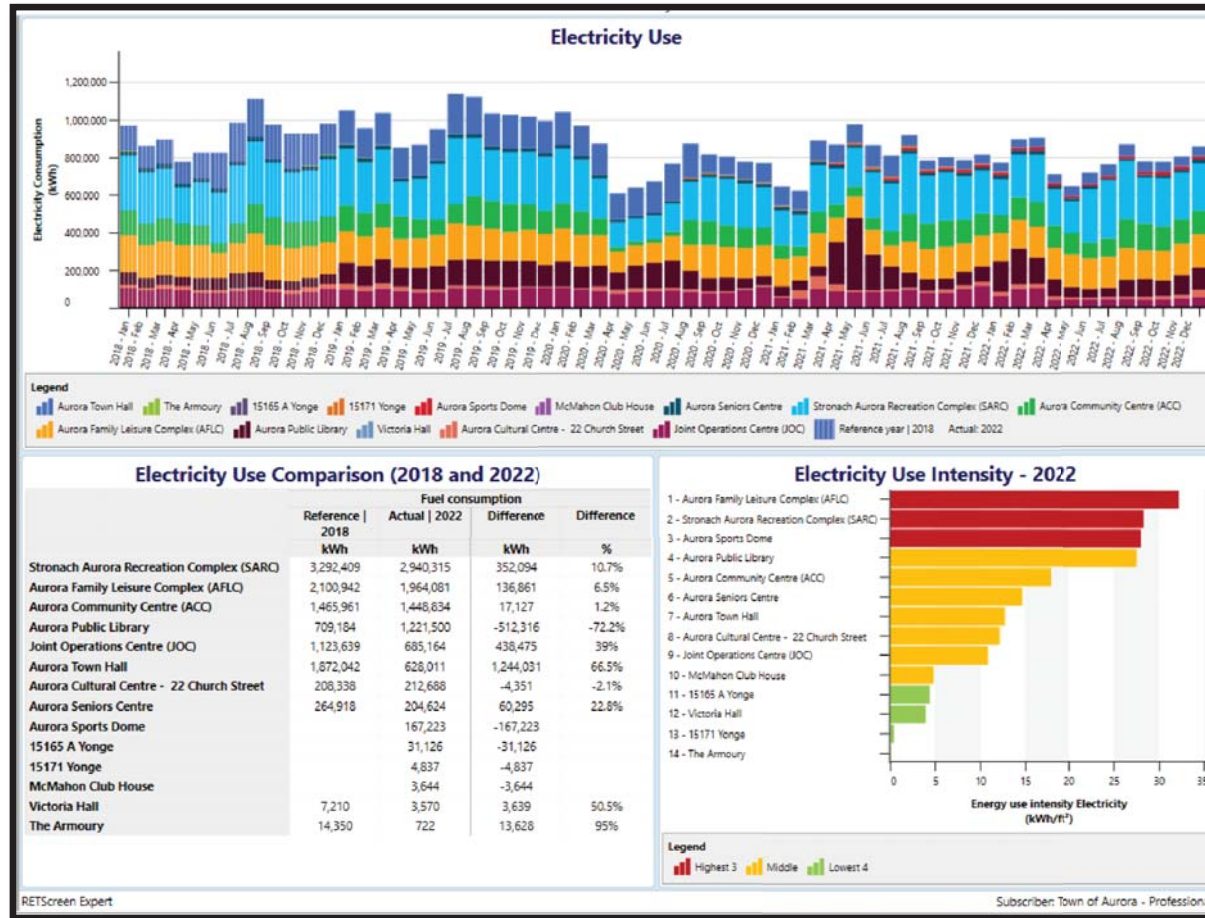
2022 Building Energy Performance at Town Facilities



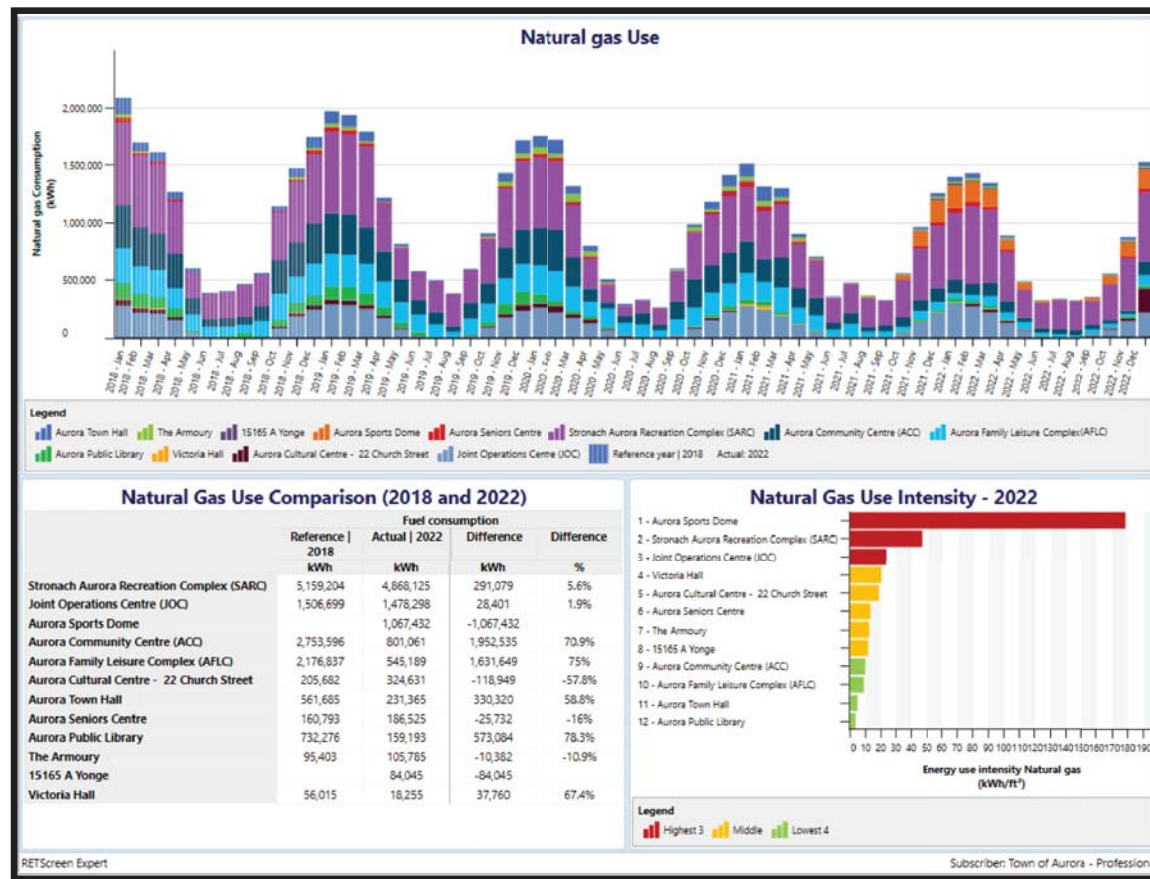
2022 Building Energy Performance at Town Facilities



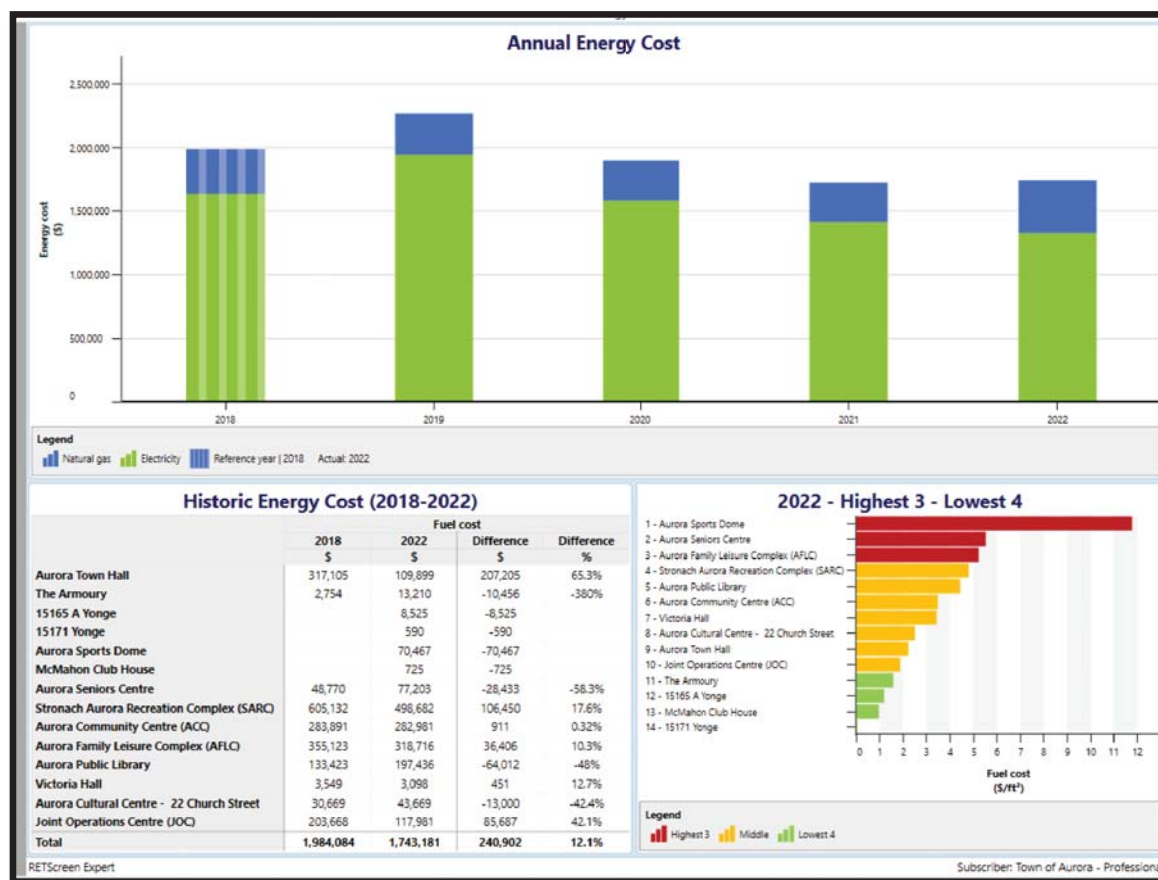
2022 Building Energy Performance at Town Facilities



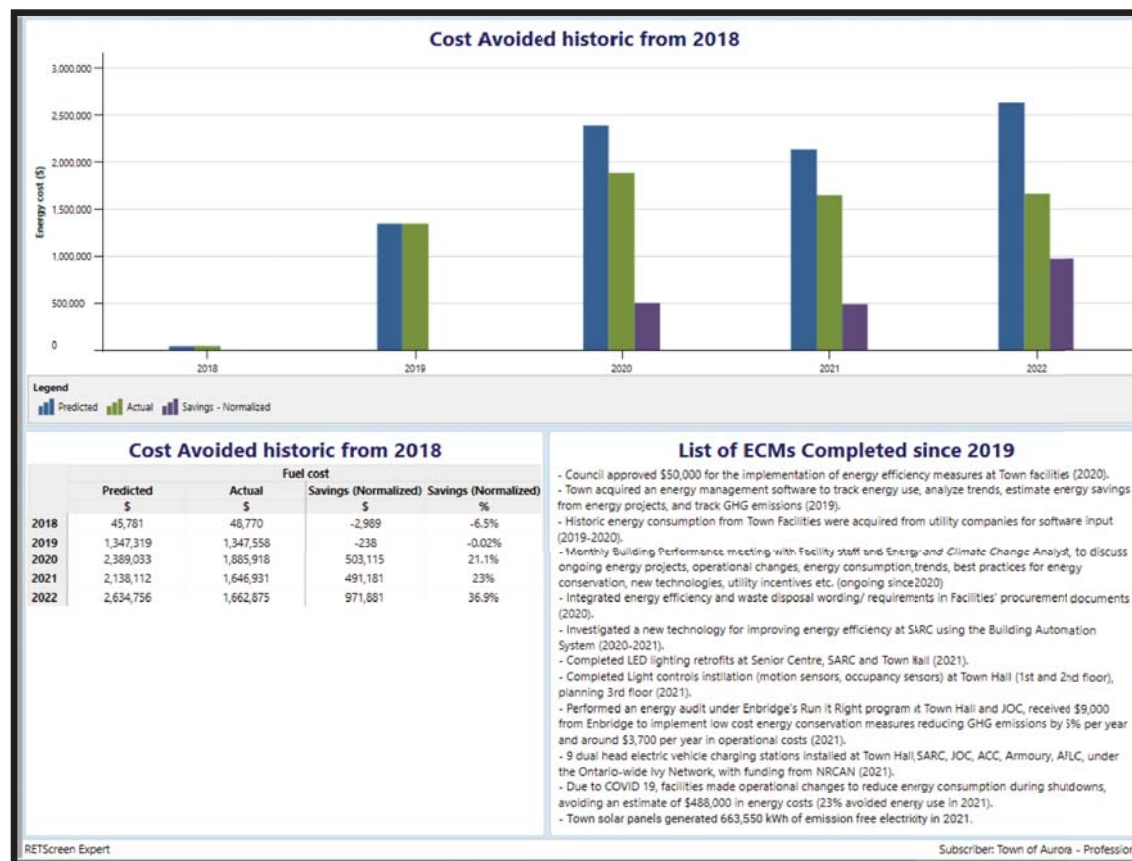
2022 Building Energy Performance at Town Facilities



2022 Building Energy Performance at Town Facilities



2022 Building Energy Performance at Town Facilities



Environmental Awareness



Environmental Awareness

Shared York Region social media messaging related to water quality. Partnered with the region to access water related print materials that are given out at Access Aurora.



Annual Emergency Preparedness Social Media Campaign, Annual Anti-Idling Campaign, First Annual EV Showcase, and Community GO Green Challenge.



Shared LEAF social media messaging regarding Backyard planting program, as well as Arboretum and LSRCA efforts.

Aurora Chamber Street Festival – Enbridge Gas was a presenting sponsor, providing information on Home Energy Rebate Plus (HER+) and Home Winterproofing (HWP) Programs.

Parks and Corporate Communications worked collectively to promote the adopt-a-park program across the community.



Thank you!



ATTACHMENT 3 - CORPORATE ENVIRONMENTAL ACTION PLAN 2022 TRACKING SHEET

Area	Item #	Actions	Initiatives from CEAP	Responsibility	Measures/ Key Performance Indicator (KPI)	Tasks (Target)	Timeline	KPI result for 2022, please mention updates to the listed initiatives under column "D"
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	1	Action 1: Reduce corporate water consumption (CWC)	To reduce corporate water consumption through increased efficiency techniques such as: • Computer-automated irrigation systems; • Water-efficient landscaping; • Rainwater harvesting; and • Greywater collection and reuse	CMS -Facilities	CWC Facility Total	Develop annual CWC reduction targets.	Q1 2020	Nothing was done in terms of new water reduction methods. Coming in 2023 is Town Square which will be conducting rainwater harvest through underground storage tank installations; water capture will be used for irrigation. Corporate water consumption 2021: Corporate Water Consumption 2022:
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	2	Action 1: Reduce corporate water consumption (CWC).	To reduce corporate water consumption through increased efficiency techniques such as: • Computer-automated irrigation systems; • Water-efficient landscaping; • Rainwater harvesting; and • Greywater collection and reuse	OPS- Parks	CWC Parks Total	Add CWC to Progress Report	Q2 2020	Nothing more implemented in terms of Greywater systems; Town square system will be operational next year (2024) Nothing else in terms of water reduction strategies for 2022.
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	3	Action 2: Implement a water loss reduction strategy	To implement a water loss reduction strategy, involving the installation of updated water meters to both residents and businesses and the relining of aged sanitary sewer incrementally each year.	OPS - Water	# of Water meters installed per year	Add KPI's to Progress Report	Ongoing	Number of water meters installed (changed) in 2021: 315 Number of water meters installed (changed) in 2022: 1000 (104.2% increase compared to 2021)
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	4	Action 2: Implement a water loss reduction strategy	To implement a water loss reduction strategy, involving the installation of updated water meters to both residents and businesses and the relining of aged sanitary sewer incrementally each year.	OPS - Water	Sanitary sewer Km relined per year	Add KPI's to Progress Report	Ongoing	Total kms of sewers relined in 2022: Nothing from last year. Big project 2023, bid going out with consultant to go over CCTV data, put a workplan together, and put a package together with specifications to repair those spots. Ongoing project for the next 4 years.
WATER CONSERVATION Objective W2: To reduce the uncontrolled and inadequately controlled storm water areas with respect to both quality and quantity by following recommendations of the Town's Comprehensive Storm water Management Master Plan	5	Action 1: Investigate ways to enhance and optimize the functioning of the current storm water management facility inventory	• Reducing the amount of phosphorus entering Lake Simcoe via Tannery Creek and East Holland River; • Restoring a self-sustaining coldwater fishery, where possible; • Improving water quality to meet Town's, LSRCA, and Lake Simcoe Protection Plan requirements;	PDS – Engineering	# of storm water ponds enhanced & optimized from their current function	(1 to 2 ponds enhanced & optimized from their current function)	2023 Q4	Later on this year, Luigi maintains stormwater ponds. Consultant working on tender package for the Town. Maintenance includes: Fence repair, signage, driveway entrances, phragmite spraying, cleanouts of inlets and outlets, vegetation removal. LSRCA inspects ponds and provides reports with identified deficiencies. Tender package is made every year as LSRCA inspects all Town-owned ponds for deficiencies. Ongoing projects. Funding approved by Council this year (\$400,000 total for 2023) Engineering = reconstruction Operations = maintenance Engineering Snow disposal facility substantially completed with new quantity and quality controls including new OGS. Garry - Installation of OGS unit design completed in 2022 and installation will be conducted in 2023 (Murray Drive culvert) 2022 engineering divisions with Operations completed a pond retrofit of SWM facility WC3 near Deerhorn Crescent and Kennedy Street west; with upgrade - enlarged permanent pool provided and pond cleaned out. Total ponds enhanced/optimized: 1 SWP
WATER CONSERVATION Objective W2: To reduce the uncontrolled and inadequately controlled storm water areas with respect to both quality and quantity by following recommendations of the Town's Comprehensive Storm water Management Master Plan	6	Action 2: Improve storm water quality in all new road reconstruction projects.	To improve stormwater quality for all road reconstruction projects, where possible, by installing oil/grit separators or using Low Impact Development (LID's) to treat the road's stormwater runoff. • Implement the Stormwater Management (SWM) Rate Program • Develop a stormwater infrastructure maintenance program and facility monitoring and inspection program • Update SWM Design Standards • Develop low impact development (LID) design guidelines/ incentives • Apply LID techniques during construction/renovation of infrastructure and Town buildings	PDS – Engineering	Km's of road treated by oil/grit separators or Low Impact Development controls	As opportunity arises as determined during design of road reconstruction projects	Ongoing Progress to be reported yearly in Q1	Contact with OGS - email Dan Vaccaro and copy Luigi, ask how many OGS were cleaned out in 2022 and 2023. Every year OPS cleanout a specific amount of OGS. Total Number of OGS Cleaned Out in 2021: 10 units Total Number of Catch Basin Cleaned Out in 2021: 1,499 units Total Number of OGS Cleaned Out in 2022: 7 units (35.3% decrease compared to 2021) Total Number of Catch Basin Cleaned Out in 2022: 1,682 units (11.5% increase compared to 2021) Total Disposal in 2022: 105 Tonnes (2.5% increase compared to 2021) Unit represents: one structure = 1 OGS structure and 1 catch basin sump Total km's of road treated with OGS 2022: Glen: oil/grit separator in Lambert Wilson Snow Disposal Facility.

WATER CONSERVATION Objective W2: To reduce the uncontrolled and inadequately controlled storm water areas with respect to both quality and quantity by following recommendations of the Town's Comprehensive Storm water Management Master Plan	7	Action 3: Encourage at source storm water management control measures on private property.	<ul style="list-style-type: none"> • By developing and implementing a marketing strategy to raise awareness within the community of how they can manage their storm water within their private properties and the positive impact this can have; and • By refining, updating or altering existing by-laws as required related to implementing source control measures on private property • Source control measures on private properties include rain barrels and rain gardens and on private site plans include green roofs, vegetated swales, rain gardens and permeable pavement. 	PDS – Planning / PDS – Engineering	# of source storm water management control measures on private property installed that the Town is aware of / year	Encourage residents to install private LIDs such as rain barrels during public engagement & design of road reconstruction projects	Ongoing Progress to be reported yearly in Q1	2022 Operations provided maintenance to LID (Permeable Pavers) at the ACC parking lot. Operations will perform maintenance on LIDs that require maintenance, and is based on recommendations listed by the LSRCa which is conducted every year, in terms of inspections.
WATER CONSERVATION Objective W2: To reduce the uncontrolled and inadequately controlled storm water areas with respect to both quality and quantity by following recommendations of the Town's Comprehensive Storm water Management Master Plan	8	Action 4: Investigate new practices that may enhance pollution prevention	<ul style="list-style-type: none"> • Safer Alternative Products; • Materials Storage Controls; • Pool Drainage Controls; • Erosion and Sediment Control; • Cross Connection Control Program (ensuring sanitary services do not outlet to a storm drainage system); • Public Education; • Business Education and Awareness; • Yellow Fish Road Program, in cooperation with York Region; • Salt Management measures; and • Snow Disposal practices. 	PDS – Engineering	# of new practices implemented to enhance pollution prevention	(5 new practices to enhance pollution prevention by 2023	2023 Progress to be reported yearly in Q1	<p>Adopting access soil regulations into Engineering designs and construction tenders. O.Reg 406/19 to improve the reuse of soils.</p> <p>York Region reduction of I&I Standard (Infiltration and Inflow of sanitary sewers), this will be adopted in Engineering standard for future projects.</p> <p>Bylaw on pool drainage controls implemented - Public Education</p> <p>Upgraded snow disposal facility became operational - Lambert Wilson Park, connects to Town-JOC</p>
SUSTAINABLE URBAN DEVELOPMENT Objective S1: Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff.	9	Action 1: Promote Sustainable Transportation to Town staff	<p>Various Sustainable Transportation initiatives to reduce single occupancy vehicle use and maintain the smart commute gold designation such as:</p> <ul style="list-style-type: none"> • Creating and offering flexible work hours opportunity for staff • Creating and supporting a telecommuting policy • Designating carpooling parking spots at Town hall • Encouraging employees to actively transport themselves to work (cycle, walk) • Encourage staff utilization of the e-bike share program • Offer discounted transit passes for Town staff • *Increase bike parking at Town owned public facilities for both staff and residents; and • *Improve walking / cycling network including safer grade-separated routes and cycling signals <p>Continue to implement and promote the Active and Safe Routes to School Program: This program focuses on active transportation to increase physical activity of students to promote healthy, active travel to and from school in the Town of Aurora. Town staff in coordination with School Boards and York Region community and health services work with each school to develop a plan to reduce barriers to walking, reduce traffic congestion and increase walking and cycling safety skills.</p>	PDS – Engineering / CS – HR	Annual Smart Commute designation Award (Maintain Gold Standard)	Annual update on Progress Report Q1	Ongoing	Formal policy on Alternative Work Arrangements was approved in Feb 2023. This includes a Hybrid work option for those roles that are suitable. Approximately 65% of our employees are participating in hybrid which reduces the amount of commuting. a Project Team is continuing to automate HR processes including recruitment and onboarding as well as digitizing our HR files in an effort to create efficiencies and move away from paper / print environments to a digital file.
SUSTAINABLE URBAN DEVELOPMENT Objective S1: Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff.	10	Action 2: Implement Sustainable features in the construction or reconstruction of Town infrastructure including buildings, facilities and roads		CMS -Facilities / PDS – Engineering	# and types of sustainable features installed on construction projects	(1 sustainable feature per construction project, where feasible)	Ongoing, as construction projects arise.	<p>No construction projects other than Town square (still in progress)</p> <p>Design of turtle crossing on Henderson Drive for wildlife conservation efforts.</p> <p>Designing new sidewalk on Edward street promoting Active Transportation for residents.</p> <p>Design new sidewalk projects in 2022 and construction planned for 2023; this is located at Industrial Parkway North.</p>
SUSTAINABLE URBAN DEVELOPMENT Objective S1: Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff	11	Action 3: Set up new areas for additional community gardens in Aurora.		OPS- Parks	# of community gardens	Continue to explore opportunities to add additional community gardens as appropriate	Ongoing	Community garden is planned for a new park construction in the 2C lands - construction in 2022 Construction was deferred; Parks needs more funding from Council to commence construction. Hopefully 2023 start construction.
SUSTAINABLE URBAN DEVELOPMENT Objective S1: Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff	12	Opportunity: Apply for green infrastructure grant funding.		FS - Finance	# of Town projects funded/year	(2 Town projects funded)	2023 Q2 Progress to be reported yearly in Q1	The Town applied for a grant from the GMF for the development of a Feasibility Study on the implementation of a Deep Energy Retrofit Program; Grant title: Community Efficiency Financing.

WASTE REDUCTION and DIVERSION Objective D1: Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.	13	Action 1: Implement sustainable construction and building practices for all Town infrastructure including buildings, facilities and roads	that considers 'Sustainable Sites Guidelines': . • Reuse/recycle existing materials and support sustainable production practices • Maximize the efficient use of aggregates through the recycling of recovered materials to minimize waste volumes and utilize non-aggregate supplements (e.g. shredded tires) to minimize demand for new aggregates. • Minimize effects of construction-related activities • Maintain the site for long-term sustainability • Utilize biodegradable and low impact green building cleaning products.	PDS – Engineering	# and types of sustainable construction practices implemented that will reduce waste	Development of best practices	2021 Q4	Engineering: Right Turn construction (road widening) lane used recycled concrete used for granular at Yong and Wellington
WASTE REDUCTION and DIVERSION Objective D1: Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.	14	Action 1: Implement sustainable construction and building practices for all Town infrastructure including buildings, facilities and roads	that considers 'Sustainable Sites Guidelines': . • Reuse/recycle existing materials and support sustainable production practices • Maximize the efficient use of aggregates through the recycling of recovered materials to minimize waste volumes and utilize non-aggregate supplements (e.g. shredded tires) to minimize demand for new aggregates. • Minimize effects of construction-related activities • Maintain the site for long-term sustainability • Utilize biodegradable and low impact green building cleaning products.	CMS -Facilities	# and types of sustainable construction practices implemented that will reduce waste	Implementation of best practices	As opportunity arises	No updates in 2022.
WASTE REDUCTION and DIVERSION Objective D1: Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.	15	Action 1: Implement sustainable construction and building practices for all Town infrastructure including buildings, facilities and roads	that considers 'Sustainable Sites Guidelines': . • Reuse/recycle existing materials and support sustainable production practices • Maximize the efficient use of aggregates through the recycling of recovered materials to minimize waste volumes and utilize non-aggregate supplements (e.g. shredded tires) to minimize demand for new aggregates. • Minimize effects of construction-related activities • Maintain the site for long-term sustainability • Utilize biodegradable and low impact green building cleaning products.	OPS - Roads	# and types of sustainable construction practices implemented that will reduce waste	Update tender specifications to promote sustainable construction practices and waste reduction where feasible	2019 Q1 Progress to be reported yearly in Q1	Engineering: At the end of Dunning, asphalt grindings were used to improve deteriorated pavement. Dan Nacarato look for additional information. When doing catch basin or manhole repairs try to reuse existing frames and lids. - Dan
WASTE REDUCTION and DIVERSION Objective D1: Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.	16	Action 2: Develop a Green Procurement Policy for the Town of Aurora and its contractors.		FS - Procurement	Develop KPI as part of the Green Procurement Policy	Prepare a Green Procurement Policy for Council consideration	2020 Q1	
WASTE REDUCTION and DIVERSION Objective D2: Reduce waste going to landfill disposal.	17	Action 1: Implement Waste Reduction Strategies.	<ul style="list-style-type: none"> • A bag tag system and enforce 3 bag maximum • A full recycling program with parks and open spaces • Increase the number of multi-residential buildings within the recycling and green bin program • Develop initiative to promote reduction and re-use with radio, e-advertising and newspaper • Develop a video campaign to increase awareness about the current blue box and waste programs • Amend the current by-law requiring residents to source separate recyclables and organic materials from the waste stream, including textiles, electronic waste, household hazardous waste-batteries • Capture baseline data of 3 stream diversion and complete business case of effectiveness • New Diversion options to be developed for public events • Implement fee for bulky waste items and appliances 	OPS- Solid Waste	% reduction of waste from facilities community/ year	Develop baseline to measure the opportunities to reduce waste from Town facilities/ year	2020 Q1 Progress to be reported yearly in Q1	<p>Community Waste Diversion Tracking: 2018 Aurora's diversion rate: 65% 2019 Aurora's diversion rate: 65% 2020 Aurora's diversion rate: 64% 2021 Aurora's diversion rate: 66% 2022 Aurora's diversion rate: 70%</p> <p>Front end multi-residential recycling program tracking: 2019 Multi-res participation: 28 buildings 2020 Multi-res participation: 29 buildings 2021 Multi-res participation: 30 buildings 2022 Multi-res participation: 30 buildings</p> <p>Bag Tag Program - The total number of bag tags purchased in 2021 totalled 138 - The total number of bag tags purchased in 2022 totalled 3,560 (Increase of 185% compared to 2021) - The total revenue generated from the bag tag program in 2022 totalled \$17,800, refund into GL account and use it as needed for programs in environment - Recycling Operations Grants GL</p> <p>Stewardship Programs: - Continue Ewaste events (3 events per year) - Spring cleaing Event 1: ewaste Jan, May, Oct Event 2: Cleanup event: April and Sept/Oct - this to be implemented in 2023 Event 3: Compost givaway program - Once a year Event 4: Community garage sale; people take items and discount them at a better price. This is held in June, and been running for 3-4 years now</p>
BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.	18	Action 1: * Encourage ecological design in landscaping of parks and retrofit projects.	<ul style="list-style-type: none"> • Extending the area of natural grassland, wood edge and increasing the core areas of existing woodlands where possible • Implement options to naturalize parks and include landscaping for shade • Develop a maintenance protocol to improve survival of newly planted/restored areas 	OPS- Parks	Add 1 ecological design feature in new parks and park retrofits / year	Consideration of ecological design in all new park design and retrofits	Progress to be reported yearly in Q1	Expanding second phase of the David Tomlinson Nature Reserve located in the 2C lands. Includes trails, boardwalks, native plantings, ecological features (all consistent of second phase project).
BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.	19	Action 2: Improve natural heritage significant wildlife habitat.	<ul style="list-style-type: none"> • Re-evaluate by-laws that address wildlife feeding 	OPS- Parks	List existing partnerships and note partnerships as they occur	Ongoing partnerships with schools, Arboretum, Adopt-aPark and bird box program	Ongoing Progress to be reported yearly in Q1	Online promotions were made to promote against feeding wildlife on town-property.

BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.	20	Action 3: Implement the Urban Forest Management Plan	<ul style="list-style-type: none"> Promote Conservation authorities' tree planting programs to encourage planting trees on public and private property Update standards and specifications for tree health, including soil 	OPS- Parks	Track the # of trees planted on Town property / year	Plant an average of 1000 trees or shrubs / year on Town property.	Progress to be reported yearly in Q1	Parks planted 1,933 trees in 2022.
BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.	21	Action 4: Implement the Invasive Species Act in partnership with York Region and the Province.	<ul style="list-style-type: none"> Apply for grant funding to help annually reduce the spread of invasive plant species Eradicate Noxious weeds within proximity to trails and actively used public areas to make them pedestrian friendly 	OPS- Parks	Complete 1 invasive species pilot project per year. Apply for 1 grants per 3 years	Document partnership with other organizations.	Progress to be reported yearly in Q1	Parks department/ Council approved Phragmites strategy in 2022, and operational funding for the next 4 years. Ongoing partnerships with residents/community Groups to remove invasive species; including Garlic mustard and Buckthorn; outreach programs implemented as well too.
CLIMATE CHANGE and ENERGY Objective C1: Prepare a Climate Change Adaptation Plan	23	Action 1: Identify climate change risks by completing a vulnerability risk assessment of key departmental priorities.		PDS – Engineering All relevant departments to contribute to risk assessment Creation	Completion date of each climate change risk assessment	Apply for funding, document proposal approvals	2020 Q3 for first risk category 2021 Q3 for second category	Implementation Plan was included as part of the Climate Change Adaptation Plan. Preliminary follow-up meetings have been conducted to all relevant departments.
CLIMATE CHANGE and ENERGY Objective C1: Prepare a Climate Change Adaptation Plan	24	Action 2: Develop a Climate Change Adaptation Action Plan that will assist the Town to mitigate the risks of climate change. The Plan would benefit from climate change planning partnerships with other municipalities, conservation authorities and York Region.		PDS – Engineering	The preparation of a climate change action plan approved by Council	consultant fee - 2020 budget	2021 Q1	Implementation Plan was included as part of the Climate Change Adaptation Plan. Preliminary follow-up meetings have been conducted to all relevant departments.
CLIMATE CHANGE and ENERGY Objective C2: Implement the Provincial Climate Change Plan Actions	25	Action 1: *Province Propose amendments to Municipal Act.		PDS - Planning	RMOY is the approval authority for Official Plan, amendments & municipal consolidation	Update the Town of Aurora's Official Plan	Ongoing	
CLIMATE CHANGE and ENERGY Objective C2: Implement the Provincial Climate Change Plan Actions	26	Action 2: *Require electric charging in surface lots.		PDS - Planning	Develop KPI as part of GDS	Add this requirement to the Town's Development Policy	2021 Q4	Minimum charging infrastructure added under the Green Development Standard Tier 1 requirements - Phase 1 project completed in 2022. Town Municipal Parking Lot Management Plan completed in 2022 includes requirement for any resurfacing or new parking lots to assess EV infrastructure needs within Design phase - Ask Michael
CLIMATE CHANGE and ENERGY Objective C2: Implement the Provincial Climate Change Plan Actions	27	Action 3: *Set green development standards.		PDS - Planning	Develop KPI as part of GDS	Prepare Green Development Standards (GDS) for Council	2020 Q4	Green Development Standards Phase 1 completed in July 2022. The GDS applies to most new development applications including residential, commercial, and institutional land uses where a plan of subdivision application containing at least 5 units, or, a major site plan application is proposed. The Town's GDS are developed on five areas of focus including Energy, Ecology, Water, Complete Communities, and Building Materials. Based on these five areas, and municipal best practice review, a series of criteria have been developed to measure green development performance
CLIMATE CHANGE and ENERGY Objective C2: Implement the Provincial Climate Change Plan Actions	28	Action 4: *Eliminate minimum parking requirements over the next 5 years for municipal zoning bylaws.		PDS - Planning	Develop KPI as part of GDS	Add this requirement to the Official Plan policy. Encourage TDM to replace parking requirements within development approval process	2024 Q4	Not looking into this at all. Maybe look into eliminating parking requirements in the DT area. Mayor put a motion in for this a few months back. Wanted to have zero parking in the Aurora Promenade. This was not favored by Councilors. Marketability of new and existing developments would be affected if parking requirements were removed. This was said by the developers too.
CLIMATE CHANGE and ENERGY Objective C2: Implement the Provincial Climate Change Plan Actions	29	Action 5: *Make climate change mitigation and adaptation mandatory in municipal official plans.		PDS - Planning	Develop KPI as part of GDS	Add this requirement to the Official Plan policy	2021 Q4	Yes this was devised in the new Plan that speaks to climate change.
CLIMATE CHANGE and ENERGY Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities. * Actions pulled from the Provincial Climate Change Plan	30	Action 1: Implement an anti-idling initiative	<ul style="list-style-type: none"> To implement an anti-idling initiative that will include working with schools to educate parents and public. This will also include the implementation of an anti-idling education campaign for town staff and contractors. 	CS – HR: Organization of training timing OPS -Fleet FSP- procurement	Full time staff completing anti-idling training / year.	Year 1 include full time staff who drive Town vehicles. Train remainder of staff.	All Staff trained by Q2 2020.	Town launched Fall 2021 the Every Second Counts anti-idling public education campaign based on Council-approved Anti-Idling Policy. - Education campaign included: dedicated Town website on anti-idling education, business and school resources, Quiz, ByLaws provided education in the community, Mobile signs throughout the community, social media campaign, etc. - Town staff training for anti idling also included. - Social media outreach on Anti-Idling initiatives was pursued this year.

CLIMATE CHANGE and ENERGY Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities. * Actions pulled from the Provincial Climate Change Plan	31	Action 2: *Develop a Green Fleet Plan.	<ul style="list-style-type: none"> • To develop a corporate Green Fleet Plan that addresses new green fleet procurement and replacement to reduce greenhouse gas emissions. The Plan should consider alternative fuels, higher efficiency vehicles, hybrid and electric options that meet the required need. • Develop Electric Vehicle Charging Station usage fee Policy and maintenance plan • *Consider installing an EV charging station at SARC 	PDS – Engineering / OPS - Fleet	Develop a KPI in process of preparing the Green Fleet Plan	Prepare a Green Fleet Plan Add to 2020 budget	2021 Q3	<p>Green Fleet Action Plan was developed in 2019 and is a working, living document in which the Fleet division is always looking for improvement.</p> <p>Fleet is still in progress of procuring an Electric Ice Re-surfacer and Ice Edger. The Fleet Division purchased a propane Ice Edger.</p> <ul style="list-style-type: none"> - Purchased 2 x 6 Ton Plow Trucks, most advanced higher Tier Diesel Engine (cleaner burning technologies and better fuel economy). - All new trucks are purchased with LED lights and auxiliary batteries that reduced the need to idle a vehicle for long periods in order to operate lights and other necessary tools and equipment. - Replaced lower tier diesel equipment. - Resizing the Fleet which included disposal of antiquated equipment. (ongoing) - Incorporate AGM batteries that do not emit gasses. - Incorporated ethanol fuel with a 10 per cent ethanol blend in all its gasoline-fuelled vehicles. - AFS has incorporated green practices, such as using synthetic oils and extending the time between oil changes. - Purchase fuel efficient, right-sized vehicles as a standard practice, if they are commercially available and meet operational needs. - Replaced the oldest vehicles with cleaner, modern technology by continuing to accelerate the replacement of overdue vehicles through efficient life cycling procedures. - Automatic lubrication systems have been installed on all apparatus to extend the life of expensive parts, create less waste, and actually use less grease. - Participation in the SARIT project
CLIMATE CHANGE and ENERGY Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities. * Actions pulled from the Provincial Climate Change Plan	32	Action 3: Improve energy efficiency of existing building and business operations	<ul style="list-style-type: none"> • Engage with town owned facility operators, businesses and institutions to implement corporate sustainability initiatives aimed at reducing GHG emissions • *Reduce emissions/ energy costs by implementing energy conservation measures 	CMS - Facilities	Estimated Annual energy savings of newly implemented energy retrofits in Town owned facilities	Implement facility energy and water conservation measures within the Capital Plan	List new energy conservation measures implemented on Progress Report yearly in Q1	<p>Base year: 2018 2018: 23,180,806 equivalent kilowatt-hours 2019: 24,641,678 equivalent kilowatt-hours 2020: 19,860,541 equivalent kilowatt-hours 2021: 19,828,350 equivalent kilowatt-hours 2022: 19,386,242 equivalent kilowatt-hours (2.3% decrease compared to 2021)</p> <ul style="list-style-type: none"> - Monthly Building Performance meeting setup with Facility staff and Energy and Climate Change Analyst, to discuss ongoing energy projects, operational changes, energy consumption, trends, best practices for energy conservation, new technologies, utility incentives etc. (ongoing since 2020) <p>EV Charging Station 2022 Data</p> <ul style="list-style-type: none"> - A total of 1,300 EV charging sessions were recorded across nine (9) of Town-owned EV stations across six (6) Town-owned facilities. - A total of 12,244 kWh of energy was used in EV charging sessions. - Energy use for EV charging helped offset emissions of approximately 5.3mTCO₂e or 5,297 kgCO₂e for 2022. - This is equivalent to GHG emissions from 1.2 gas-powered passenger vehicles driven for one year; 21,852 km driven by an average gas-powered passenger vehicle; 2,709.5 litres of gasoline consumed <p>Solar PV Systems</p> <ul style="list-style-type: none"> - The Town had generated 649,131 kWh of energy through its solar PV systems across four (4) Town-owned facilities. <p>Building (Facilities) Initiatives/Projects in 2022</p> <p>BCA studies included energy conservation measures to all facilities. BAS projects coming in 2023-2024; upgrades systems. Have capital money. Council approved \$50,000 in 2022 budget for capital projects for energy conservation measures at Town-owned facilities. Council approved budget 2023: Potentially \$50,000</p>
CLIMATE CHANGE and ENERGY Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities. * Actions pulled from the Provincial Climate Change Plan	33	Action 4: Consider all green infrastructure options as part of new corporate builds.	<ul style="list-style-type: none"> • Placing trees in and around Parking lots • Redesign and retrofit water collection and conveyance infrastructure due to climate change • Implement water quality and water and wastewater conservation strategies and incentives 	OPS - Parks / OPS - Roads / CMS - Facilities / PDS – Engineering	# of green infrastructure options included in new corporate projects	List chosen green infrastructure items implemented on Progress Report	Ongoing, as construction projects arise.	<p>No input for 2022 - Doug LIDs, raingardens, permeable paving are things Parks are constantly looking at in respect to development and applications. Also internal designs for new parks. - Sara Tienkamp</p> <p>Trees cut down during construction projects are replaced.</p> <p>Retaining wall project located at 28 Wellington Street West to appease property owner, planted 50 white cedars (these were not present before).</p>
ENVIRONMENTAL AWARENESS Objective A1: Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement	34	Action 1: Promote the use of reusable water bottles in conjunction with the new water bottle filling stations. Communication campaign is aimed at the community including staff and should include but may not be limited to the following:	<ul style="list-style-type: none"> • Waste caused by disposable water bottles • Promote town's municipal water as being clean, safe and drinkable • Promotion of Blue W, web application in order to fill water bottles at no cost in participating businesses • Town to partner with York Region's education and outreach programs for water conservation and local water source protection • Minimize disposable water bottle usage at group organized events or meetings 	PDS – Engineering	# of existing community events sharing reusable water bottle information	Prepare messaging to share at existing community based events.	First awareness campaign to take place in 2018	Shared York region social media messaging related to water quality. Partnered with the region to access Water related print materials that are given out at Access Aurora.

ENVIRONMENTAL AWARENESS Objective A1: Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement	35	Action 2: Increase overall community awareness of climate change:	<ul style="list-style-type: none"> • Increase awareness of natural hazards from flooding and erosion • Increase public awareness and education on stormwater management • Promote idling reduction and education campaigns (community/corporate) • Public awareness campaigns encouraging good behaviour using incentives supported by corporate sponsorship • Increase uptake of sustainable transportation options • Promote actions to reduce the creation of GHG emissions and support our ability to adapt to climate change 	PDS – Engineering / CAO - Communications	# of existing community events sharing Climate Change information	Prepare messaging to share at existing community based events.	2019 Q3	<p>Annual Emergency Preparedness Social Media Campaign, Annual Anti Idling Campaign, First Annual EV Showcase, Community Green Challenge</p> <p>Aurora Chamber Street Festival - Presence of Enbridge Gas, as a Presenting Sponsor, providing information on Home Energy Rebate Plus (HER+) and Home Winterproofing Program (HWP).</p> <p>KPIs from event: # of interactions: 210 # of sign-ups for HER+: 45</p>
ENVIRONMENTAL AWARENESS Objective A1: Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement	36	Action 3: Develop an urban forest communication plan that delivers key messages to target audiences within the community	<ul style="list-style-type: none"> • Promote "Adopt a Park" Program as "Community Stewardship Program" • Support and promote LEAF's Backyard Planting Program • Support stewardship programs through planting trees/shrubs/maintenance with partners LSRCA, Arboretum, and Neighbourhood work 	OPS – Parks / CAO - Communications	annual # of trees planted	Continue to promote planting and naturalization projects	1000 trees planted / year	<p>Shared LEAF social media messaging regarding Backyard planting program, as well as Arboretum and LSRCA efforts.</p> <p>Parks always promotes adopt-a-park program to town residents. Also supported Arboretum planting, Neighborhood work, and tree planting and shrubs.</p>
ENVIRONMENTAL AWARENESS Objective A1: Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement	37	Action 4: Develop a community based communications strategy to help protect and enhance our biodiversity	<ul style="list-style-type: none"> • Provide targeted outreach for residents surrounding the natural system via stewardship and education programs • Maintain an invasive species web page on the town website linking residents to additional informational websites 	OPS – Parks / CAO - Communications	# of public outreach campaigns promoting and protecting biodiversity	Increase signage Increase partnerships	Ongoing	<p>Shared LEAF social media messaging regarding Backyard planting program, as well as Arboretum and LSRCA efforts.</p> <p>Parks always promotes adopt-a-park program to town residents. Also supported Arboretum planting, Neighborhood work, and tree planting and shrubs.</p>
CEAP IMPLEMENTATION	38	Action 1: CAO to support the ongoing role of the Environmental Management Team (EMT) to manage the implementation of the CEAP. The implementation team will include representatives from all departments and will report to ELT.		CAO and ELT			Ongoing	
CEAP IMPLEMENTATION	39	Individual Departments, with the assistance of EMT, will consider the implementation of this Plan when developing departmental priorities and preparing budgets.		ELT and EMT			As part of annual budget process	
CEAP IMPLEMENTATION	40	Implementation of CEAP to flow through directors and CAO, who will be responsible for assigning respective departmental staff to implement.		CAO and ELT			ongoing	
CEAP IMPLEMENTATION	41	Staff are strongly encouraged to reference the relevant CEAP objectives in the Link to the Strategic Plan section of all Council reports.		Staff report writers			New / ongoing	
CEAP IMPLEMENTATION	42	The Program Manager of Environmental Initiatives, to include a semi-annual informal progress update of CEAP's implementation to Council.		PDS – Engineering			*New / Annual in Q3	
CEAP IMPLEMENTATION	43	EMT, through department heads, to report to council by way of annual Progress Report regarding the progress of the CEAP's implementation.		ELT and EMT			Annually in Q1	

CEAP IMPLEMENTATION	44	The Green Initiatives Reserve Fund (the "Fund") is hereby established to receive and hold donations or budgetary contributions for purposes of funding or lending funding for projects or initiatives which further the objectives or support the strategic directions of the Town's Corporate Environmental Action Plan as amended from time to time. Council may direct that portions of revenues or savings arising from certain projects are to be contributed to the Reserve Fund. Balances in the Fund will be planned for specific projects recommended to or by Council during the annual budget process, or other times throughout the year, having consulted with the Environmental Advisory Committee. The Green Initiatives Reserve Fund was established in September of 2012.		FS- Finance			Ongoing	
CEAP IMPLEMENTATION	45	During the next (second) review and enhancement of this plan, Stakeholders are seeking to strengthen the community component which will include a thorough and varied community consultation process which engages community members, local businesses, staff and council with the renewal of this Plan.		PDS-Engineering CAO- Communications			CEAP update to be added to 2022 capital budget	
CEAP IMPLEMENTATION	46	Develop, distribute and promote a staff Environmental Handbook; to be maintained and updated on the intranet and printed and distributed to new and existing staff during Earth Week annually. The handbook will highlight some new environmental initiatives as well as some basic energy saving and environmentally friendly living tips.		PDS-Engineering CAO- Communications			Complete version 1 of handbook by Q2 2020	
CEAP IMPLEMENTATION	47	Set up a green team of staff who are passionate about specific environmental initiatives to advise the project lead until the project is being implemented. This team should also help raise awareness, promote various environmental program and choose to help at various environmental events throughout the year.		PDS-Engineering CAO- Communications			Form green team by Q1 2020	
CEAP IMPLEMENTATION	48	Youth Engagement on Environmental Topics		PDS-Engineering CAO- Communications			ongoing	



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Town of Aurora

Memorandum

Planning and Development Services

Re: Energy Conservation and Demand Management Plan Renewal

To: Environmental Advisory Committee

From: Sebastian Contarin, Energy & Climate Change Analyst

Date: September 18, 2023

Recommendation

1. That the memorandum regarding Energy Conservation and Demand Management Plan Renewal be received; and
2. That the Environmental Advisory Committee comments regarding Energy Conservation and Demand Management Plan Renewal be received and referred to staff for consideration and further action as appropriate.

Background

The Energy Conservation and Demand Management Plan (ECDMP) was created in accordance with the requirements described in Ontario Regulation 25/23 made under the *Electricity Act, 1998*. The plan serves as a roadmap for energy management in the Town over a five (5) year period and consists of the following objectives:

- Examining historical energy consumption and GHG emissions, as well as energy conservation measures (ECM) that have been implemented since the previous ECDMP.
- Examining whether the goals of the previous ECDMP have been met and set goals for the next ECDMP.
- Examining what ECMs are already planned, as well as additional ECMs that should be completed to meet plan goals and targets.

The successful integration of all three objectives will help determine the priorities, technologies, projects, and opportunities required to achieve the Town's corporate energy and GHG reduction goals and targets.

The capital project for the update of the ECDMP has been awarded to WalterFedy. The consultants working on the ECDMP update from WalterFedy have been invited to the Environmental Advisory Committee meeting on September 18th to introduce themselves and present their project workplan and methodology on the development of the ECDMP renewal for 2024-2029.

Attachments

Attachment 1 - Presentation

A photograph of the Aurora Town Hall building, a multi-story red brick structure with large windows and a prominent brick chimney. The building is surrounded by trees and a paved area. A red rectangular overlay is positioned in the center of the image, containing white text.

Town of Aurora Energy Conservation and Demand Management Plan

2024-2029 Update

KITCHENER | HAMILTON | TORONTO | CALGARY

WALTERFEDY

AURORA TOWN HALL

ECDM Plan **Town of Aurora**

WALTERFEDY **PRESENTATION AGENDA**

- Meet our Team – 5 mins
- Project and Goals – 5 mins
- Project milestones – 5 mins
- Next Steps

MEET OUR TEAM

WALTERFEDY – ENERGY AND CARBON SOLUTIONS

- Marlen Aleman – Project Manager
- Max Chute – Energy Analyst
- Cory Rosa – Energy Engineer



PROJECT & **GOALS**

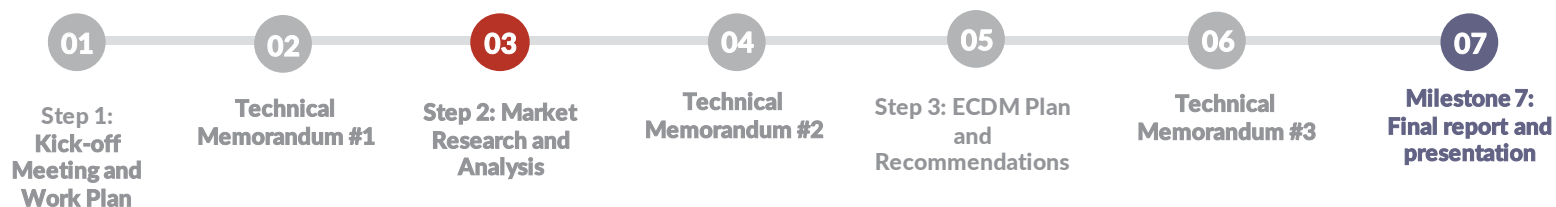
OVERALL GOAL

- 80% reduction in GHG emissions by 2050 from 2018 levels

PROJECT TARGETS

- Create interim targets to help achieve the 2050 goal by building scenarios for the short-term (2025-2030), medium-term (2030-2035), and long-term (2025-2050).

PROJECT MILESTONES



Step 2 Market Research and Analysis: Currently we are researching what other municipalities are doing for their ECDM plans so that we can incorporate the latest ideas into the Town of Aurora 2024-2029 ECDM plan. We are also analyzing data we have received from the Town of Aurora to begin summarizing the existing emissions and creating the proposed plan.



NEXT STEPS



WALTERFEDY



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Town of Aurora
Memorandum
Corporate Services

Re: Committee Terms of Reference

To: Environmental Advisory Committee

From: Jaclyn Grossi, Deputy Town Clerk

Date: September 18, 2023

Recommendation

1. That the memorandum regarding Committee Terms of Reference be received for information.

Background

Roles and Responsibilities of Ad Hoc/Advisory Committees and Local Boards

Committees and Local Boards provide an opportunity for engaged citizens to give formal, public input to Town staff on programs and initiatives that staff are bringing to Council. Committees and Local Boards provide advice, and information through lived experiences on specific areas of municipal service delivery and policy, as set out in the Terms of Reference, to Town staff. This role is fulfilled in formal meetings by discussing issues brought before the Committees.

Comments from Committee to Council

As items are brought to the Environmental Advisory Committee for comment, staff are actively taking notes and incorporating the comments into their work. If an item requires a staff report to be placed on an upcoming General Committee or Council meeting agenda, staff will incorporate the Committee's comments into the report as well.

New Business

If a member presents an idea during the new business portion of the meeting, a couple outcomes may occur:

-
- Staff can confirm if the item is already being reviewed by staff, has been tackled in the past, or provide an update (if available); or
 - A Member of Council can decide to bring forward the item to a future General Committee meeting as a Notice of Motion and ask their Council colleagues to support direction to staff. This will be put to a vote at the subsequent Council meeting.

Attachments

Attachment 1 – 2022 - 2026 Environmental Advisory Committee Terms of Reference



100 John West Way
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Town of Aurora

Environmental Advisory Committee

Terms of Reference

Purpose

The Environmental Advisory Committee is established to address ongoing climate change, adaptation and mitigation initiatives, energy conservation, environmental matters, and to contribute comments on the development of the Climate Change Adaptation Plan and toward implementation of the Community Energy Plan, the Corporate Energy Conservation and Demand Management Plan, the Corporate Environmental Action Plan, and York Region's Climate Change Action Plan.

Membership

The Committee will be composed of up to ten (10) members, as follows:

- Two (2) members of Council; and
- Up to eight (8) citizen members selected by Council.

Members will be appointed for a two-year term.

Term

The 2022-2026 Term of Council.

Remuneration

None.

Duties and Functions

- To act as a link between citizens and Town staff to facilitate the resolution of environmental concerns and to assist in implementing projects that will enhance our community environment.
- To support and advise Town staff on initiatives and matters relating to:
 - environmental issues impacting Aurora;
 - environmental policies, procedures and regulations;
 - environmental education, outreach, public awareness, public consultation; and
 - the promotion of green space, environmental restoration, environmental rehabilitation and enhancement projects.

Reporting

The Committee shall advise staff on initiatives and matters that will go before General

Committee and Council for approval.

Meeting Time and Location

The Committee will meet on the third Monday of every second month at 7 p.m., with the exception of July and August. Additional meetings of the Committee may be called by the Chair to address urgent matters.

Staff Support

Staff Liaisons will consist of staff from the Planning and Development Services department. The Legislative Services division will provide administrative support services to the Committee.