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Town of Aurora  
**Information Report**  
No. PDS21-063

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**Subject:** Corporate Environmental Action Plan 2019 Progress Report

**Prepared by:** Natalie Kehle, Energy and Climate Change Analyst

**Department:** Planning and Development Services

**Date:** June 1, 2021

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**In accordance with the Procedure By-law, any Member of Council may request that this Information Report be placed on an upcoming General Committee or Council meeting agenda for discussion.**

## **Executive Summary**

The Corporate Environmental Action Plan (CEAP) is a five-year plan that outlines environmental sustainability action items directed at staff at the corporate level. An annual progress report is presented to the Environmental Advisory Committee (EAC) and to Council.

- The CEAP 2019 Progress Report show cases the Town's actions towards environmental sustainability and supports Council's commitments to the environment.
- Town staff implemented a tracking sheet to monitor progress and encourage accountability.

## **Background**

The Corporate Environmental Action Plan (CEAP) is a five-year action plan that allows The Corporation of the Town of Aurora to achieve its environmental goals for the period 2018 to 2023. The 2010 CEAP and the 2018 version received input from three Advisory Committees, staff and senior management.

The purpose of the 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. The CEAP is intended to provide corporate direction on key strategic environmental initiatives that will be

initiated over the next five years. The CEAP was developed to assist Council to plan for and implement specific actions to improve the Town's environmental performance and sustainability for future generations. The success of the Plan requires a coordinated approach to implementation that includes all of the Town's departments.

The overall themes in the CEAP cover:

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

## **Analysis**

**The CEAP 2019 Progress Report show cases the Town's actions towards environmental sustainability and supports Council's commitments to the environment.**

Aurora Council made two important environmental commitments in recent years; the Town joined the Blue Dot movement in 2016 and declared a climate emergency in 2019. The Blue Dot movement is a campaign based on the idea that everyone in Canada deserves the right to a healthy environment, including clean air and water, and a say in decisions that affect our health and well-being.

In October 2019, the Town Council joined 457 Canadian municipalities and declared a Climate Emergency. Those cities, have established a goal of reducing GHG emissions by 80% by 2050, as per the Paris Accord. The declaration solidifies the Town's commitments to implementing all the environmental plans completed or under development, such as the Corporate Energy Conservation and Demand Management Plan, the Corporate Environmental Action Plan, the Community Energy Plan, the Natural Heritage System Study and the Climate Change Adaptation Plan.

The following is a summary of the Town's 2019 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):

- Installed 600 residential meters and 200 commercial meters as part of its water loss reduction strategy;
- Received its LEED® Gold Standard certification for the JOC facility;

- The Library Square project is under development and includes 20 green design features, in line with LEED® Gold Standard;
- Received the Annual Smart Commute designation Award (Gold Standard);
- Added two new Adopt a Park partnerships;
- Successfully removed invasive species from Aurora Rotary Park;
- The Arboretum Committee continued work on phragmites control;
- Planted 2,600 trees and shrubs on Aurora lands;
- Council conditionally approved a climate change risk and vulnerability assessment for Town Assets as part of the 2020 capital budget process;
- Council approved \$50,000 for the implementation of energy efficiency measures at Town facilities under the 2020 capital budget;
- Acquired an energy management software to track progress from the Energy Conservation and Demand Management Plan;
- Generated 652,704 kilowatt-hours of electricity from Town solar rooftop systems;
- Created a Town Climate Change initiatives webpage; and
- Council approved Strategies to Reduce Single-Use Plastic Straws at all Town Facilities and Town-run events.

**Town staff implemented a tracking sheet to monitor progress and encourage accountability.**

The Progress Report consists of a summary document, highlighting the achievements for 2019 (see Attachment 1), and a separate tracking document, used by staff to monitor the progress of the action items (see Attachment 2).

The CEAP is reported annually, presented to Council and EAC and then posted on the Town's website. Ideally, reports are presented 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. Since the CEAP monitors facility energy consumption, utility bills often get adjusted or corrected and require additional time to finalize the data.

The CEAP 2019 Progress Report was delayed as the historic energy data took six months to receive from the utility companies for inputting into the new energy software. During 2020, the utility data was entered into the software and each facility building profile needed to be created and energy data analyzed. Now that the building profiles have been completed and contain all the historic energy data, reporting on Corporate energy use will be straightforward and timelier.

The CEAP 2020 Progress Report is scheduled to be presented to Council in September 2021 to provide sufficient time to consult with EAC in June 2021.

## **Advisory Committee Review**

The Environmental Advisory Committee (EAC) commented on the draft CEAP 2019 Progress Report on April 28, 2021. The Committee showed appreciation in including a tracking sheet with the progress report, allowing for more staff accountability in the implementation of the action plan.

Staff provided an overview of the memorandum highlighting the background and purpose of the Corporate Environmental Action Plan (CEAP) and the highlights of the progress report. Staff sought Committee's feedback and suggestions regarding the progress report and the associated tracking sheet.

The Committee sought clarification about using LIDs for the Town's Library Square project and possible LEED certification for the building. Staff provided clarification including the LEED features to be incorporated in the project. The Committee and staff discussed the possibility of a centralized process for new buildings which includes a form of incentive to ensure they are built in accordance with sustainable development standards and green development standards, the latter which are currently under study. The Committee further inquired about the Town's authority in enforcing sustainable development standards and staff agreed to follow up.

The Committee inquired about the access to information regarding invasive species around Town including a form of education avenue to inform the public. Staff advised that through the CEAP and Community Energy Plan (CEP) initiatives, the Corporate Communications division ensures any environmental awareness campaign information is communicated accordingly through social media or local print media. The Committee suggested that an educational campaign specifically regarding mitigation of invasive species would be beneficial for the public, including students. It was noted that further suggestions and information regarding invasive species could be forwarded to staff after the meeting.

The Committee inquired about grant opportunities for the Town from the recently announced Federal funding on various environmental initiatives and staff agreed to follow up.

The Committee further inquired about the consideration of tree genetics to maintain biodiversity within tree species which are planted in public places and the means of monitoring survivability of existing trees, and staff agreed to follow up.

## **Legal Considerations**

There are no legal considerations at this time.

## **Financial Implications**

All applicable Corporate Environmental Action Plan (CEAP) initiatives have been and will continue to be included in the Town's operating and capital budget for Council's consideration and approval as appropriate.

## **Communications Considerations**

The information contained in this report will be shared by way of the Council highlights as well as promoted through the Town's social media sites. Communication occurs on an ongoing basis as milestones are reached.

## **Link to Strategic Plan**

The CEAP 2019 Progress Report is aligned with Aurora's Strategic Plan, which is based on the three pillars of sustainability – environment, community, economy – and establishes a vision for Aurora as “an innovative and sustainable community where neighbours care and businesses thrive”.

## **Alternative(s) to the Recommendation**

1. That Council provide direction.

## **Conclusions**

The CEAP Progress Report celebrates the Town's environmental initiatives and helps track action plan items. The tracking sheet pilot is considered a success and will continue for future progress reports.

## **Attachments**

Attachment 1 – Corporate Environmental Action Plan 2019 Progress Report

Attachment 2 - Corporate Environmental Action Plan 2019 Tracking Sheet

## **Previous Reports**

PDS21-051, Corporate Environmental Action Plan 2019 Progress Report, April 28, 2021

## **Pre-submission Review**

Agenda Management Team review on May 13, 2021

## **Approvals**

**Approved by David Waters, MCIP, RPP, PLE, Director, Planning and Development Services**

**Approved by Doug Nadorozny, Chief Administrative Officer**



Corporate Environmental  
ACTION PLAN (CEAP)

# CORPORATE ENVIRONMENTAL ACTION PLAN (CEAP)

## 2019 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 Operations installed 600 residential meters and 200 commercial meters in 2019 as part of its water loss reduction strategy (W1).

- Though built in 2016, the JOC received its LEED® Gold Standard certification for its green design in 2019 and includes: water conservation low-flow hands-free plumbing fixtures, drought resistant plantings, pervious concrete drainage systems to control storm water, rain water harvesting used in green houses and for vehicle and equipment wash bay (W1 and 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**

- In an effort to promote sustainable transportation for Town staff, the Town participated and maintained the Annual Smart Commute designation Award, maintaining the Gold Standard every year since 2012 (S1).

- The JOC design includes the installation of solar panels, green houses to grow local plant materials for use within Town, white roofs reducing heat retention and the "heat island" effect, daylighting, interior and exterior LED lighting systems, high efficiency heating and cooling systems, building automation and control system and motion sensor lighting control (S1).

- Town's Library Square project includes 20 green design features (in line with LEED® Gold Standard) such as daylighting, high efficient HVAC, high water efficiency fixtures, thermal comfort and controls, improved thermal efficiency in the building envelope beyond the Ontario Building Code, low VOCs, electric vehicle charging stations, and LIDs such as permeable paving (S1).





## ► WASTE REDUCTION & 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**

- As part of the second floor renovation at the Town Hall, staff worked with a private company to remove office furniture. The company recycles and works with local charities to find a second life to used items (D1 and D2).
- Council approved Strategies to Reduce Single-Use Plastic Straws at all Town Facilities and Town-run events (D2).
- Town's Library Square project includes minimum recycled content requirements and a construction waste plan (D2).



## ► BIODIVERSITY & NATURAL HERITAGE

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



- A new park in 2C was designed to be a natural park including, community gardens, pollinator gardens, naturalized playgrounds and one of the main trail entry locations to Wildlife Park (B1).
- The Town successfully continued the Adopt a Park Program and built partnerships: two additional Adopt a Park partnerships were formed in 2019 (one promoting butterfly habitat and one eradicating invasive species and planting native species) (B1).
- Active control measures for invasive species were completed with the Town's Adopt a Park partner, at the Wildlife Park, Arboretum, road right of ways and Rotary Park (species are Garlic mustard, Giant Hog Weed, European Buckthorn, Wild Parsnip) (B1).
- The Town planted 2,600 trees and shrubs on Aurora lands, including the Towns street tree-planting program, planting days with Arboretum, Lake Simcoe Region Conservation Authority (LSRCA) and Neighbourhood Network (B1).

# ► CLIMATE CHANGE & 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**

• In an effort for staff to assess climate change impacts on Town assets, Town staff requested funds for a risk and vulnerability assessment in October 2019 as part of the 2020 capital budget process, which was conditionally approved by Council (C1).

• The Town entered into a Memorandum of Understanding with the Ontario Power Generation to seek Natural Resources Canada (NRCan) funding on the Town's behalf for the installation of nine dual head electric vehicle charging stations (Level 2) for Town properties (C2).

• Council approved \$50,000 for the implementation of energy efficiency measures at Town facilities under the 2020 capital budget (C3).

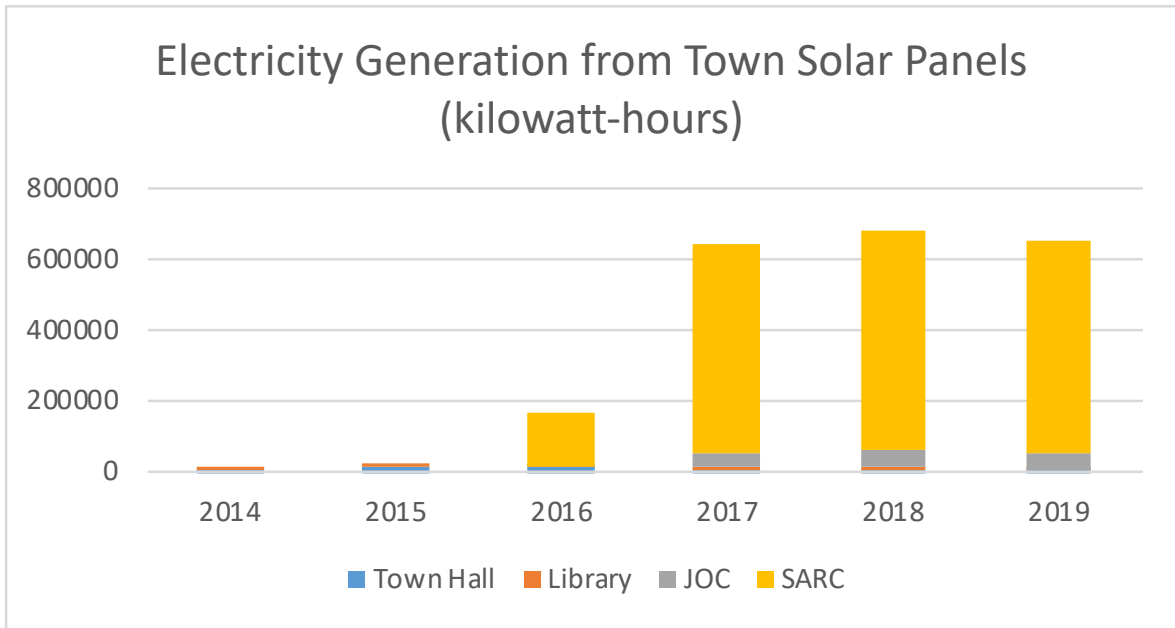
• An energy management software was acquired in 2019 and Town staff were trained on its use. The software allows staff to evaluate energy efficiency and renewable energy project feasibility, as well as ongoing energy, water and waste metrics at Town facilities and fleet (C3).

• Having an energy consumption tracking system that is updated monthly, staff are able to monitor energy consumption, see trends, and track changes to operations (for a deeper analysis, see Annex 1) (C3):

- Baseline energy consumption at Town Facilities (2018): 23,180,806 equivalent kilowatt-hours
- 2019 Update: 24,641,678 equivalent kilowatt-hours
- Overall energy consumption increased by 6% compared to 2018. This translates into an increase of 3% of greenhouse gas emissions compared to 2018 levels.

• Electricity generation from the Town's four solar power rooftop systems in 2019 is 652,704 kilowatt-hours (C3):





## ► ENVIRONMENTAL AWARENESS

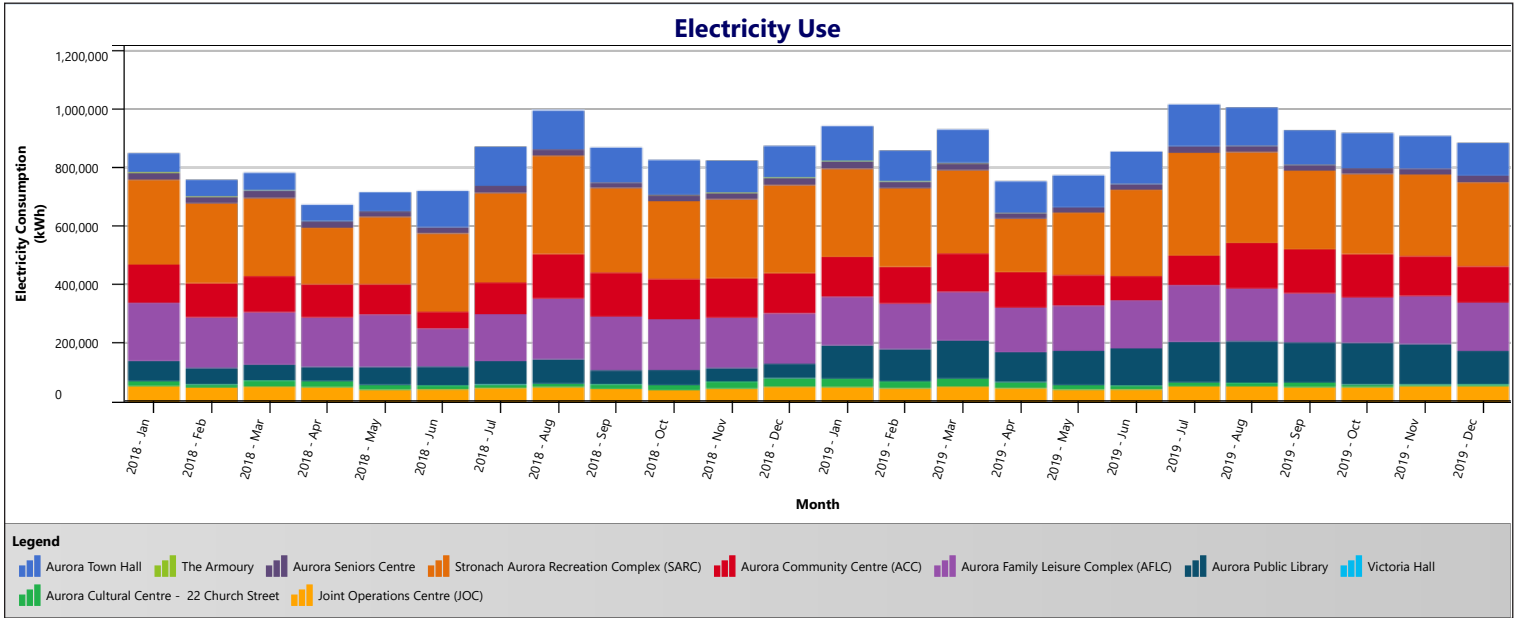
**Objective A1: Encourage the stewardship of Aurora’s natural resources and advance green initiatives by promoting community involvement**



- In an effort to increase community awareness on climate change and to seek public feedback on energy planning, the Town hosted two events at the Aurora Farmer’s Market in the summer of 2019 (A1).
- A designated Town Webpage was developed in 2019 dedicated to all the Town’s climate change initiatives, including public engagement on the Community Energy Plan (A1).

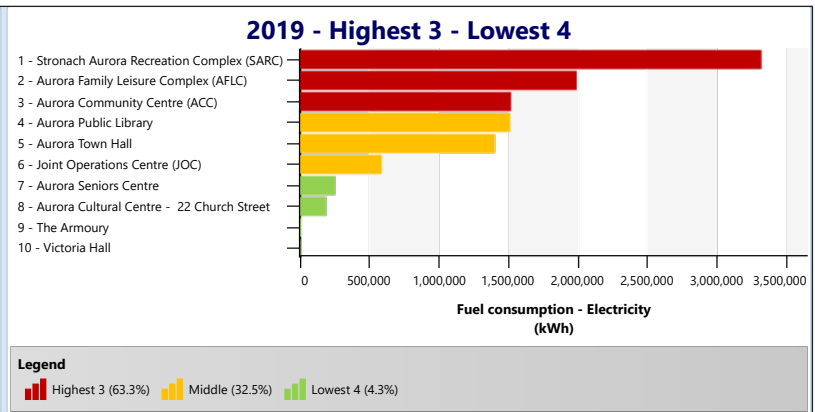
# ANNEX 1

## 2019 BUILDING ENERGY PERFORMANCE AT TOWN FACILITIES

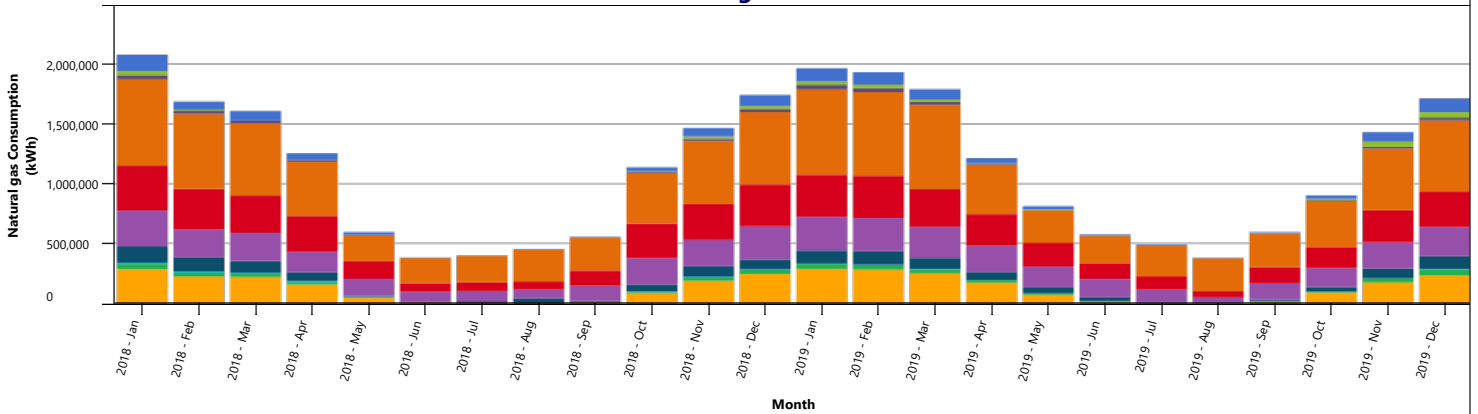


### Comparison - 2018 | 2019

	Fuel consumption			
	Reference 2018 kWh	Actual 2019 kWh	Difference kWh	Difference %
<b>Stonach Aurora Recreation Complex (SARC)</b>	3,292,409	3,318,357	-25,948	-0.79%
<b>Aurora Family Leisure Complex (AFLC)</b>	2,100,942	1,989,792	111,150	5.3%
<b>Aurora Community Centre (ACC)</b>	1,465,961	1,518,302	-52,341	-3.6%
<b>Aurora Public Library</b>	709,184	1,511,434	-802,250	-113%
<b>Aurora Town Hall</b>	1,147,487	1,401,983	-254,497	-22.2%
<b>Joint Operations Centre (JOC)</b>	561,820	587,831	-26,012	-4.6%
<b>Aurora Seniors Centre</b>	264,918	253,724	11,194	4.2%
<b>Aurora Cultural Centre - 22 Church Street</b>	208,338	189,707	18,630	8.9%
<b>The Armoury</b>	14,350	10,103	4,246	29.6%
<b>Victoria Hall</b>	7,210	6,155	1,055	14.6%
<b>Total</b>	<b>9,772,619</b>	<b>10,787,389</b>	<b>-1,014,770</b>	<b>-10.4%</b>



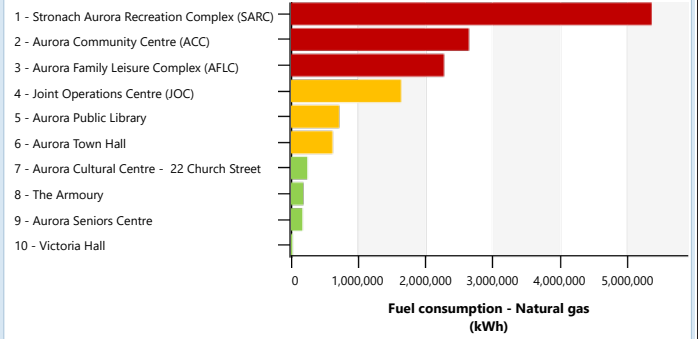
### Natural gas Use

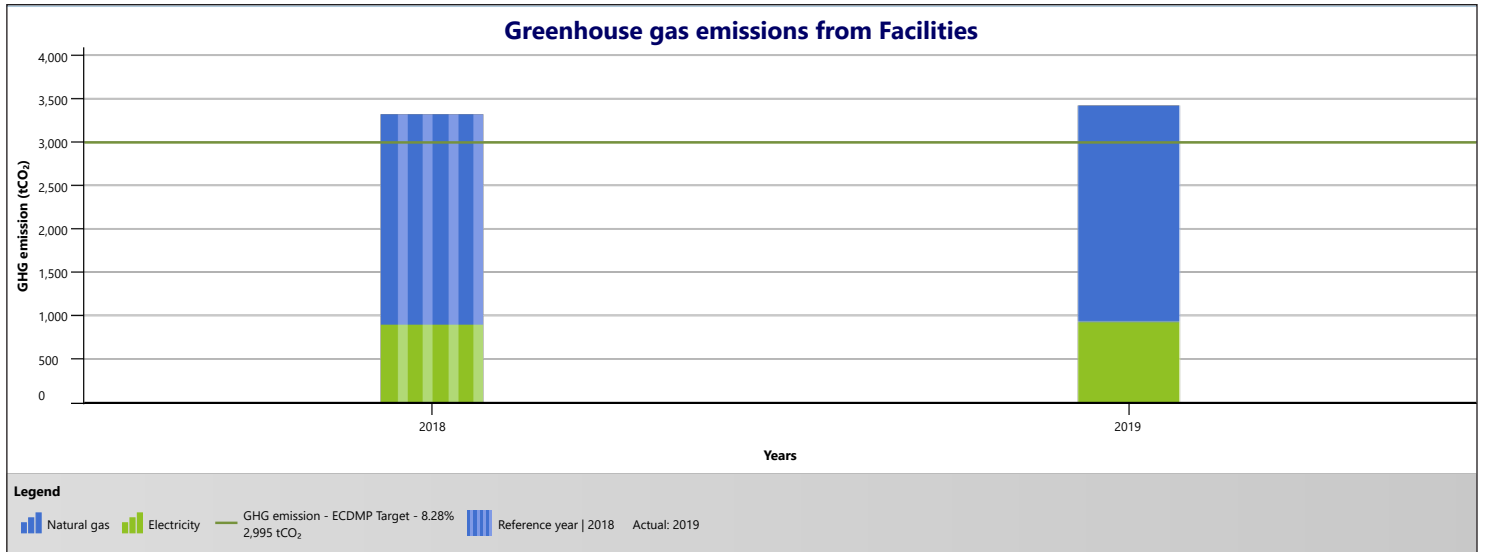


### Comparison - 2018 | 2019

	Fuel consumption			
	Reference   2018 kWh	Actual   2019 kWh	Difference kWh	Difference %
<b>Stonach Aurora Recreation Complex (SARC)</b>	5,159,204	5,357,368	-198,164	-3.8%
<b>Aurora Community Centre (ACC)</b>	2,753,596	2,643,184	110,412	4%
<b>Aurora Family Leisure Complex (AFLC)</b>	2,176,837	2,273,507	-96,670	-4.4%
<b>Joint Operations Centre (JOC)</b>	1,506,699	1,633,673	-126,975	-8.4%
<b>Aurora Public Library</b>	732,276	714,956	17,320	2.4%
<b>Aurora Town Hall</b>	561,685	616,869	-55,185	-9.8%
<b>Aurora Cultural Centre - 22 Church Street</b>	205,682	241,286	-35,605	-17.3%
<b>The Armoury</b>	95,403	183,678	-88,275	-92.5%
<b>Aurora Seniors Centre</b>	160,793	168,448	-7,655	-4.8%
<b>Victoria Hall</b>	56,015	21,319	34,695	61.9%
<b>Total</b>	<b>13,408,188</b>	<b>13,854,289</b>	<b>-446,101</b>	<b>-3.3%</b>

### 2020 - Highest 3 - Lowest 4





### Comparison - 2018 | 2019

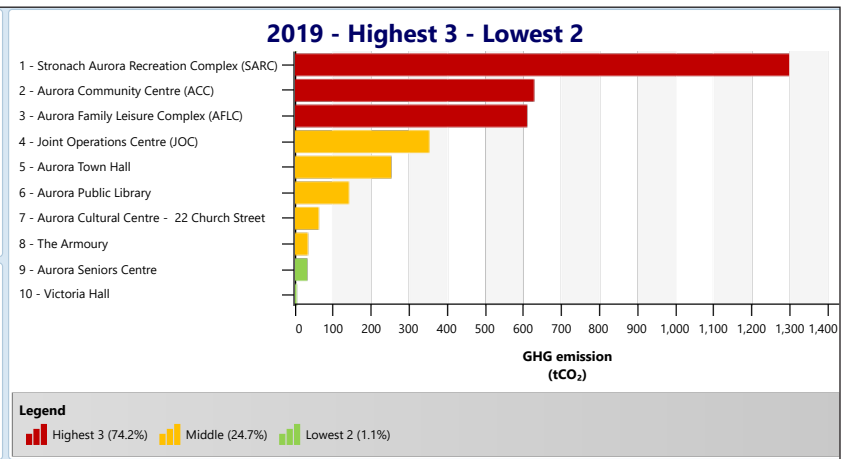
	GHG emission			
	Reference   2018	Actual   2019	Difference	Difference %
<b>Natural gas</b>	2,405	2,485	-80	-3.3%
<b>Electricity</b>	903	932	-29.7	-3.3%
<b>Total</b>	<b>3,308</b>	<b>3,418</b>	<b>-110</b>	<b>-3.3%</b>

### Greenhouse gas emissions by Facilities

**110 tCO<sub>2</sub>**

**3.3%**



## ATTACHMENT 2 - CORPORATE ENVIRONMENTAL ACTION PLAN 2019 TRACKING SHEET

Area	Item #	Actions	Responsibility	Measures/ Key Performance Indicator (KPI)	Tasks (Target)	Timeline	KPI result for 2019
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	1	Action 1: Reduce corporate water consumption (CWC)	CMS -Facilities	CWC Facility Total	Develop annual CWC reduction targets.	Q1 2020	Town acquired RETScreen Expert software to track/ monitor progress. Staff are collecting water data for analysis.
WATER CONSERVATION Objective W1: Reduce town owned facility water consumption	2	Action 1: Reduce corporate water consumption (CWC).	OPS- Parks	CWC Parks Total	Add CWC to Progress Report	Q2 2020	- The JOC desgin included drought resistant plantings and H5rain water harvesting used in green houses and for vehicle and equipment wash bay
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	600 residential meters and 200 commercial meters

<p>WATER CONSERVATION Objective W1: Reduce town owned facility water consumption</p>	<p>4</p>	<p>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.</p>	<p>OPS - Water</p>	<p>Sanitary sewer Km relined per year</p>	<p>Add KPI's to Progress Report</p>	<p>Ongoing</p>	<p>0 km The Town only relines as needed and nothing has come up in the last several years. Though some sanitary mains have been replaced through Capital Projects that are managed by Engineering.</p>
<p>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</p>	<p>5</p>	<p>Action 1: Investigate ways to enhance and optimize the functioning of the current storm water management facility inventory</p>	<p>PDS – Engineering</p>	<p># of storm water ponds enhanced &amp; optimized from their current function</p>	<p>(1 to 2 ponds enhanced &amp; optimized from their current function)</p>	<p>2023 Q4</p>	<p>A comprehensive investigation undertaken by LSRCA is ongoing with respect to the Town's SWM pond inventory. This will result in a series of recommendations related to the ponds' O&amp;M, clean-up, retrofit and enhancement</p>



<p>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</p>	6	Action 2: Improve storm water quality in all new road reconstruction projects.	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	no update for 2019
<p>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</p>	7	Action 3: Encourage at source storm water management control measures on private property.	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	0; Town is unaware of any stormwater management control measures on private property being installed in 2019

<p>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</p>	8	Action 4: Investigate new practices that may enhance pollution prevention	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	- staff investigated updating the Sewer Bylaw to include restrictive provisions for pools/ hot tub discharge. Due to limited staffing resources for enforcing such an update to the Bylaw, staff have postpone the update until resources come available.
<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.</p>	9	Action 1: Promote Sustainable Transportation to Town staff	PDS – Engineering / CS – HR	Annual Smart Commute designation Award (Maintain Gold Standard)	Annual update on Progress Report Q1	Ongoing	The Town maintained Gold Standard status for 2019

<p>SUSTAINABLE URBAN DEVELOPMENT</p> <p>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.</p>	<p>10</p>	<p>Action 2: Implement Sustainable features in the construction or reconstruction of Town infrastructure including buildings, facilities and roads</p>	<p>CMS -Facilities / PDS – Engineering</p>	<p># and types of sustainable features installed on construction projects</p>	<p>(1 sustainable feature per construction project, when feasible)</p>	<p>Ongoing, as construction projects arise.</p>	<ul style="list-style-type: none"> <li>- The JOC design includes water conservation low-flow hands-free plumbing fixtures, drought resistant plantings, rain water harvesting used in green houses and for vehicle and equipment wash bay.</li> <li>- Two road reconstruction projects will be tendered in 2020 which will include the use of LIDs.</li> <li>- Town's library square design includes 20 green design features (in line with LEED Gold) such as daylighting, high efficient HVAC, high water efficiency fixtures, thermal comfort and controls, improved thermal efficiency in the building envelope beyond the Ontario Building Code, low VOCs, electric vehicle charging stations, and LIDs such as permeable paving.</li> </ul>
<p>SUSTAINABLE URBAN DEVELOPMENT</p> <p>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.</p>	<p>11</p>	<p>Action 3: Set up new areas for additional community gardens in Aurora.</p>	<p>OPS- Parks</p>	<p># of community gardens</p>	<p>Continue to explore opportunities to add additional community gardens as appropriate</p>	<p>Ongoing</p>	<p>No new community gardens in 2019 however a community garden is planned for a new park construction in the 2C lands.</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.	12	Opportunity: Apply for green infrastructure grant funding.	FS	# of Town projects funded/year	(2 Town projects funded)	2023 Q2 Progress to be reported yearly in Q1	- The Town signed an MOU with OPG to seek NRCan funding for the installation of electric vehicle charging stations at Town properties (50% of the cost to install and procure equipment).
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	PDS – Engineering	# and types of sustainable construction practices implemented that will reduce waste	Development of best practices	2021 Q4	no update for 2019
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	CMS -Facilities	# and types of sustainable construction practices implemented that will reduce waste	Implementation of best practices	As opportunity arises	- The Town worked with a third party company for the disposal of Town Hall furniture from the second floor renovation. The third party works with local charities to reuse and recycle useful furniture. - Library square is being built in line with LEED Gold standard (including reduced waste strategies based on LEED such as minimum recycled content requirements and a construction waste plan).

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	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	no update for 2019
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	Procurement is planning a Modernization project for Town-wide procurement practices. Green procurement will be reviewed and incorporated into the new policy. Project expected to start in 2021.
WASTE REDUCTION and DIVERSION Objective D2: Reduce waste going to landfill disposal.	17	Action 1: Implement Waste Reduction Strategies.	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	- The Town is investigating costs to perform a waste audit of Town facilities.  - Council approved Strategies to Reduce Single-Use Plastic Straws at all Town Facilities and Town-run events.
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.	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	1 Park Naturalized Designed New park in 2C designed to be a natural park including, community gardens, pollinator gardens, naturalized playgrounds and one of the main trail entry locations to Wildlife Park.

<p>BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.</p>	19	Action 2: Improve natural heritage significant wildlife habitat.	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	<p>Continued the Adopt a Park Program and Partnership development: two additional adopt a park partnerships in 2019 (one promoting butterfly habitat and one eradicating invasive species and planting native species), making a total of 12 total partnerships.</p> <p>Eradication Efforts of Invasive Species: successful removal of invasive species from Rotary Park with assistance from the Town's Adopt a Park partner (species are Phragmites, Garlic mustard, Giant Hog Weed, European Buckthor). Arboretum Committee continued work on phramites control. Staff working to control phramites within Wildlife Park.</p> <p>Trees Planted on Aurora lands, included the Towns street tree planting program, planting days with Arboretum, LSRCA and Neighbourhood Network.</p>
<p>BIODIVERSITY and NATURAL HERITAGE Objective B1: Enrich Aurora's ecology by protecting and preserving biodiversity.</p>	20	Action 3: Implement the Urban Forest Management Plan	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	Planted 2600 trees and shrubs on Aurora lands, included the Towns street tree planting program, planting days with Arboretum, LSRCA and Neighbourhood Network

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.	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	Eradication Efforts of Invasive Species: successful removal of invasive species from Rotary Park with assistance from the Town's Adopt a Park partner (species are Phragmites, Garlic mustard, Giant Hog Weed, European Buckthor). Arboretum Committee continued work on phramites control. Staff working to control phramites within Wildlife Park.
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	A risk and vulnerability assessment of Town assets is part of the Climate Change Adaptation Plan. Staff requested funds to retain a consultant in 2019. Council conditionally approved the project, based on the outcome of the York Region Climate Change Action Plan being released in 2020.
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	2020 Budget was conditionally approved by Council for a Climate Change Adaptation Plan in October 2019.
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	Official Plan Review project planning occurred in 2019, with plans to start in 2020. The project plans to incorporate changes to the Municipal Act.

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	To be developed as part of the Green Development Standard - project to start in 2021.
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	The Green Development Standard - project to start in 2021.
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	OP Review will consider the parking requirement. Reduced parking in the Promenade due to space restrictions.
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	Official Plan Review to start in 2020 and will incorporate recommendations from the Community Energy Plan, updates to the Municipal Act and the Green Development Standard.



<p>CLIMATE CHANGE and ENERGY</p> <p>Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities.</p> <p>* Actions pulled from the Provincial Climate Change Plan</p>	30	Action 1: Implement an anti-idling initiative.	CS – HR: Organization of training timing OPS -Fleet	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.	<ul style="list-style-type: none"> <li>Staff initiated stakeholder consultation for a Town-wide Anti-Idling Policy, which aims to limit idling from residents, businesses and Town staff.</li> <li>- Town staff training for anti idling will be incorporated into the Town's Green Fleet Action Plan, under development.</li> </ul>
<p>CLIMATE CHANGE and ENERGY</p> <p>Objective C3: Reduce the town's greenhouse gas emissions by town staff and at town facilities.</p> <p>* Actions pulled from the Provincial Climate Change Plan</p>	31	Action 2: *Develop a Green Fleet Plan.	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	Under development, expected in 2021.

<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</p>	32	Action 3: Improve energy efficiency of existing building and business operations	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 Baseline 2018: 23,180,806 equivalent kilowatt-hours 2019 Update: 24,641,678 equivalent kilowatt-hours</p> <p>- Council approved \$50,000 for the implementation of energy efficiency measures at Town facilities under the 2020 capital budget.</p> <p>- Town acquired an energy management software to track energy and water use, analyze trends, estimate energy savings from significant energy saving projects, and track GHG emissions.</p> <p>- Historic energy consumption from Town Facilities were acquired from utility companies for software input.</p>
<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</p>	33	Action 4: Consider all green infrastructure options as part of new corporate builds.	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.	Town's library square project is in line with LEED Gold and will include the installation of electric vehicle charging stations.

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:	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	No update for 2019
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:	PDS – Engineering / CAO - Communications	# of existing community events sharing Climate Change information	Prepare messaging to share at existing community based events.	2019 Q3	- 2 Events: Town Staff presented the Community Energy plan to the public at two Farmer's Markets in the Summer of 2019.  - A designated Town Webpage was developed in 2019 dedicated to all the Town's climate change initiatives, including public engagement on the Community Energy Plan
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	OPS – Parks / CAO - Communications	annual # of trees planted	Continue to promote planting and naturalization projects	1000 trees planted / year	- Planted 2600 trees and shrubs on Aurora lands, included the Town's street tree planting program, planting days with Arboretum, LSRCA and Neighbourhood Network. Streets trees are monitored and have a survival rate of 90-95%.  - Designed a naturalized park: New park in 2C designed to be a natural park including, community gardens, pollinator gardens, naturalized playgrounds and one of the main trail entry locations to Wildlife Park.

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	OPS – Parks / CAO - Communications	# of public outreach campaigns promoting and protecting biodiversity	Increase signage Increase partnerships	Ongoing	no update for 2019
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