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**Date** December 5, 2023 **Report No.** 2023-688  
**To** Chair and Members  
Committee of the Whole - Operations  
**From** Inderjit Hans, P. Eng., PMP  
Commissioner, Public Works Commission

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### 1.0 Type of Report

Consent Item   
Item For Consideration

### 2.0 Topic **2023 Climate Change Action Plan and Emissions Inventory Annual Update [Financial Impact: None]**

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### 3.0 Recommendation

A. THAT Report 2023-688 “2023 Climate Change Action Plan and Emissions Inventory Annual Update” BE RECEIVED.

### 4.0 Executive Summary

This update report provides information on the progress made on Climate Action in the City of Brantford in 2023. Specifically, information is provided on the Partners for Climate Protection (PCP) Milestones, the Corporate Climate Change Action Plan (CCAP) 2023 Annual Update, Clean Brantford, the Community CCAP, and the 2021/2022 Emissions Inventory Update.

The PCP program has milestones to guide municipalities along the path to developing climate change mitigation and adaptation plans. The City of Brantford has now achieved Milestone 4 in this program for the Corporate and Community streams.

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The Corporate CCAP has been in implementation for three years and in 2023, the City has made progress on 12 action items such as converting high pressure sodium (HPS) streetlights to light-emitting diode (LED), tree canopy expansion, developing an anti-idling guideline, implementing an organic waste diversion program, etc. Some of this work has already led to measurable emissions reductions or avoidance totaling 122 T of CO<sub>2e</sub> annually and 6,751 T of CO<sub>2e</sub> over the lifetime of the projects.

The Community CCAP has been in implementation for one year and in 2023, the City has made progress on all five short term priority action items such as implementing an organic waste diversion program, developing a Sustainable Business Support Office, implementing a climate change communication strategy, etc.

A Clean Brantford campaign was launched in 2020 to promote litter reduction and the City received funding from the Great Lakes Local Action Fund to host two community litter pick up events in 2023 to help protect the Grand River from plastic pollution. The events were held on April 21 and 22, 2023 and October 27 and 28, 2023. Community members collected 650 kilograms of waste and diverted 240 kilograms from the landfill through recycling.

An update has been prepared for the greenhouse gas (GHG) emissions inventory for the past two years and compared to the 2018 baseline data. The Corporate emissions have reduced by 2% from the baseline and the Community emissions have reduced by 4% from the baseline. A detailed emissions inventory update report is attached as Appendix A.

## **5.0 Purpose and Overview**

The purpose of this report is to provide an update on all climate action implementation work under the Corporate and Community Climate Change Action Plans (CCAP) across the Corporation and community over the past year as well as an update on the 2021 and 2022 emissions inventory.

## **6.0 Background**

In December 2019, Brantford City Council declared a Climate Emergency, committing the City, in principle, to becoming carbon neutral by 2050. In response to this declaration, a carbon reduction strategy was developed in the form of the Corporate Climate Change Action Plan (CCAP), approved in November 2020 in Report 2020-472 titled “Corporate Climate Change Action Plan and Climate Lens Assessment”, and the Community Climate Change

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Action Plan, approved in July 2022 in Report 2022-428 titled “Brantford Community Climate Action Plan”. These Plans included emission reduction targets for both the Corporation and the Community as well as a list of action items to reduce emissions. The Reports also directed staff to bring forward annual updates on the progress of the CCAPs. This report provides an update on Brantford’s climate action in 2023.

Additionally, as part of the development of the Corporate and Community CCAPs and the City’s emission reduction targets, a baseline emissions inventory was completed in 2018. The baseline emissions inventory identified sources and sectors of Brantford’s greenhouse gas (GHG) emissions and was presented to City Council in November 2019 in Report 2019-659 titled “Climate Change Action Plan Update”. As outlined in the Corporate CCAP, emissions are tracked on an annual basis and emissions inventory reports are released bi-annually to track the City’s progress on reaching the emissions reductions targets of 30% by 2030, 80% by 2040, and net-zero by 2050 compared to the baseline year of 2018.

The second iteration of the emissions inventory report was released in December 2021 outlining the Corporate and Community emissions from 2019 and 2020. This report provides a summary of the Corporate and Community emissions from 2021 and 2022.

## **7.0 Corporate Policy Context**

- City of Brantford Strategic Priorities 2023-2026: Strategic Theme 10 Build a Greener Brantford: This report demonstrates advocating for green initiatives, planning for green initiatives, involving strategic green decision-making, and protecting and improving the Grand River and trail system.
- City of Brantford Official Plan (2023) Section 3.5: Promoting Sustainable Development and Adapting to Climate Change: This report demonstrates source water protection, energy conservation, air quality and carbon mitigation, and protecting forest resources.
- City of Brantford Corporate Climate Change Action Plan (2020): This report demonstrates the implementation of several short term goals including expanding the City’s tree canopy, reducing waste, reducing energy consumption, etc.

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- City of Brantford Community Climate Change Action Plan (2022): This report demonstrates the implementation of all short term goals to improve climate change mitigation efforts across the community and raise awareness on climate action.

## 8.0 Input From Other Sources

Input from many City departments and outside agencies was received for both the emissions inventory update and the annual CCAP update including: Business Support and Sustainability, Fleet and Transit Services, Environmental Services, Operational Services, Engineering Services, Parks and Recreation, Housing and Homelessness Services, Brantford Fire Department, Brantford Police Services, Brant-Brantford Paramedics, Enbridge, GrandBridge Energy.

## 9.0 Analysis

This update report provides information on the progress made on Climate Action in the City of Brantford and a summary of the 2021 and 2022 corporate and community emissions inventory.

### 9.1 Partners for Climate Protection Milestones

The City of Brantford has been a member of the Partners for Climate Protection (PCP) network since 1996. This network is managed by the Federation of Canadian Municipalities (FCM) and Local Governments for Sustainability (ICLEI) and provides valuable support and frameworks for municipalities to develop climate mitigation and adaptation plans.

1. The milestones within the PCP include the following:
2. Establish Baseline GHG Emissions Inventory
3. Set Emissions Reduction Targets
4. Prepare a Climate Change Action Plan
5. Implement Climate Change Action Plan
6. Monitor Results of Climate Change Action Plan

In 2023, the City of Brantford achieved Milestone 4 of 5 of the Community and Corporate streams by implementing a local CCAP. Additionally, with completion of the 2021 and 2022 emissions inventory update for both the

Corporation and the community, the City will be looking to achieve Milestone 5 for both the Corporate and Community streams by early 2024.

## 9.2 Corporate Climate Change Action Plan Annual Update

The Corporate CCAP has now been under implementation for three years. Table 1 summarizes the action items completed in 2023 by the various departments, the associated action item identified in the CCAP, a description of the work, and a measurable emissions reduction. Not all work has had measurable emissions reductions associated with them yet because it is either preparatory work for future emissions reductions or is a Corporate and community benefit that is difficult to quantify.

**Table 1 Corporate Climate Change Action Plan work completed in 2023**

Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO <sub>2</sub> e)
<b>Priority Actions</b>				
Fleet	Purchase electric vehicles	Convert Light Duty Autos to Electric	<ul style="list-style-type: none"> <li>4 EVs were purchased and delivered in 2023, 2 EVs were expansion, 2 EVs were replacements</li> <li>2 EVs purchased in 2023, to be delivered Q2 2024</li> <li>Purchased and delivered 6 hybrid pickup trucks</li> </ul>	5 (annual for the 2 replaced)  35 (lifetime)  No new emissions for expansion
Parks & Recreation	Tree Planting	Tree Canopy Expansion	<ul style="list-style-type: none"> <li>Planted 936 trees at City parks and streets</li> <li>Partnered with Brant Tree Coalition to plant 3,928 trees as part of community plants</li> <li>The first mini forest was planted in November 2023 with 200 trees</li> </ul>	111 (annual)  6,660 (lifetime)
Business Support and Sustainability (BSS)	Net-Zero Building Retrofit Guideline	Building Retrofit Strategy	<ul style="list-style-type: none"> <li>In progress</li> <li>Existing buildings to be retrofitted to net-zero between now and 2050</li> </ul>	Expected: 6,457 once all buildings retrofitted

Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO <sub>2</sub> e)
			<ul style="list-style-type: none"> <li>Building inventory and retrofit roadmaps to be developed in 2024</li> </ul>	
Environmental Services	Green Bin Program	Initiation of Organic Waste Diversion Program	<ul style="list-style-type: none"> <li>Program started November 1, 2023</li> <li>Expected to divert 5,000 to 8,000 tonnes of organics away from the landfill in the first year</li> </ul>	Additional emissions will be avoided
<b>Short Term Actions</b>				
Fleet	Transit Optimization Study	Route Planning	<ul style="list-style-type: none"> <li>In progress</li> <li>Involves transit route optimization to reduce emissions</li> <li>Improvements to transit service</li> </ul>	Not quantified
Fleet and BSS	Anti-Idling Guideline	Anti-Idling Policy	<ul style="list-style-type: none"> <li>Completed an anti-idling guideline to ensure staff are not idling vehicles unnecessarily to reduce GHG emissions</li> </ul>	Not quantified but potentially can avoid future emissions
Operational Services	LED Streetlight Upgrade	Convert HPS bulbs to LED	<ul style="list-style-type: none"> <li>From January to October 2023, 672 HPS bulbs were converted to LED</li> <li>Additional 420 planned to be replaced by the end of the year</li> <li>65% of all streetlights have been converted to LED to date</li> <li>Remaining 35% to be completed in approximately 3 years. Staff have expedited this conversion as much as possible, however there are</li> </ul>	<p>5.62 (annual for converted to LED)</p> <p>56.3 (lifetime)</p>

Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO <sub>2</sub> e)
			constraints to how quickly conversion can take place due to regulatory requirements of poles and approvals needed	
Environmental Services	Advanced Meter Infrastructure	Smart Water Meters	<ul style="list-style-type: none"> <li>Updating water meters throughout the City to help with water conservation</li> </ul>	Not quantified
<b>Other Actions</b>				
Environmental Services	WTP Energy Audit		<ul style="list-style-type: none"> <li>In progress</li> <li>To be completed Q1 2024</li> <li>Outline energy conservation measures for the water treatment plant</li> </ul>	Not quantified
BSS and Parks & Recreation	Public Tree By-law		<ul style="list-style-type: none"> <li>Public Tree Protection by-law implemented May 2023</li> <li>Purpose is to protect healthy trees from being cut down</li> </ul>	Current tree canopy sequesters ~15,000 T of CO <sub>2</sub> e per year
Operational Services	Active Transportation Master Plan		<ul style="list-style-type: none"> <li>To be implemented starting in November 2023</li> <li>Plan to improve active transportation and reduce emissions from vehicle use</li> </ul>	Not quantified
Engineering Services	Net-Zero Arenas Feasibility Study		<ul style="list-style-type: none"> <li>To be completed Q1 2024</li> <li>Outline pathway to reduce emissions in arenas by 80% within 20 years</li> </ul>	Expected: 1,210 (if all retrofits completed)
<b>Total Emission Reductions From 2023 Projects</b>				<b>122 T of CO<sub>2</sub>e (annual)* 6,751 T of CO<sub>2</sub>e (lifetime)</b>

\* Only those projects that have resulted in immediate reductions in 2023 are included in the total emissions calculations. The expected emissions reductions from retrofitting all Corporate existing buildings are omitted as the buildings have

not yet been retrofitted. As well, the emissions sequestered by the current tree canopy is omitted from the total.

Of the six short term priority action items, all six are now either in progress or complete. Of the 17 short term action items, 12 action items are also in progress / complete. In 2022, staff provided Council with an update on various action items that further explain the progress that has been made, attached as Appendix B “Memo – Additional information request from 2022 Climate Action Plan Update Report”.

### 9.3 Community Climate Change Action Plan Annual Update

In July 2022, Brantford City Council approved the Community CCAP. The Plan focuses on actions that community members can take to reduce their own emissions, equipping them with tools to make behavioural changes. Table 2 summarizes the action items completed in 2023. These action items are focused on spreading information about climate action and are preparatory in nature and do not have any quantifiable impact on emissions.

Table 2 Community Climate Change Action Plan work completed in 2023

Action Item	CCAP Item	Description	Metrics
<b>Short Term Priorities</b>			
Green Bin Program	Organic Waste Diversion	<ul style="list-style-type: none"> <li>Program started November 1, 2023</li> <li>Expected to divert 5,000 to 8,000 tonnes of organics away from the landfill in the first year</li> </ul>	Additional emissions will be avoided
Sustainable Business Support Office	Create a Sustainable Business Support Office	<ul style="list-style-type: none"> <li>Partnership with Brantford-Brant Chamber of Commerce</li> <li>Implemented July 2023</li> <li>Provide resources for businesses to reduce GHGs</li> </ul>	Impressions: 1,025 Reach: 988 Engagement: 32
Climate Change Communication Strategy	Climate Change Communication Strategy and Engagement	<ul style="list-style-type: none"> <li>Social media campaign began August 2023</li> <li>Sharing knowledge with residents to reduce emissions</li> </ul>	Impressions: 6,952 Reach: 8,322 Engagement: 131 Reel views: 8,225
Research on home energy retrofit loan/	Explore Home Energy Retrofit Loan/Grant	<ul style="list-style-type: none"> <li>Jurisdictional scan completed</li> <li>Funding opportunities being</li> </ul>	Not quantified



Action Item	CCAP Item	Description	Metrics
grant programs	Programs	explored	
Transit Optimization Study	Complete Transit Route Optimization Study	<ul style="list-style-type: none"> <li>In progress</li> <li>Involves transit route optimization to reduce emissions</li> <li>Improvements to transit service</li> </ul>	Not quantified
<b>Other Actions</b>			
Active Transportation Master Plan		<ul style="list-style-type: none"> <li>To be implemented starting in November 2023</li> <li>Plan to improve active transportation</li> </ul>	Not quantified
Climate Action at Home webpage		<ul style="list-style-type: none"> <li>Launched August 2023</li> <li>Provides information for residents to complete home retrofits and reduce emissions</li> </ul>	Not quantified

Of the five short term priority action items identified in the Community CCAP, all five items are either in progress or complete.

#### 9.4 Clean Brantford

A Clean Brantford Campaign was launched in 2020 to promote litter reduction amongst community members. Each year around Earth Day, the City hosts a Let's Clean Our City community litter pick up event. The spring event took place on April 21 and 22, 2023 where over 2,500 residents collected 630 kilograms of litter. Of the litter that was collected, 240 kilograms was diverted from the landfill by recycling. The City of Brantford also received funding through the Great Lakes Local Action Fund to host a second community litter pick up event to help reduce plastic pollution around the Grand River. The Fall Let's Clean Our City event took place on October 27 and 28, 2023.

#### 9.5 2021-2022 Emissions Inventory

An emissions inventory baseline was completed in 2018 and an update inventory was last completed in 2021 with data from 2019 and 2020. This inventory looks at Corporate and Community emissions separately. Data has been collected for the years 2021 and 2022 and compared to the baseline data from 2018 to monitor trends in emissions levels. High level information on both updated inventories are provided in this report but

detailed data and analysis can be found in the “Brantford GHG Emissions Inventory 2021 and 2022” as attached in Appendix A.

### 9.5.1 Corporate Emissions Inventory Update

The Corporate Emissions inventory looks at carbon emissions from the City’s owned and operated assets including buildings, vehicles, streetlights/traffic signals, and water and wastewater assets.

Table 3 provides the total carbon emissions for each sector within the Corporation from 2021 and 2022 compared to the baseline year of 2018. The total emissions for the Corporation as a whole are provided as well as the change from baseline percentage. By 2030, this number should be -30% to align with the 30% emission reduction target established by Brantford City Council.

**Table 3 Corporate emissions summary from the baseline**

Sector	GHG Emissions (Tonnes of CO <sub>2</sub> e)		
	2018	2021	2022
Buildings	7,192	6,462	6,457
Fleet	6,622	6,485	7,146
Water/Wastewater	1,436	1,517	1,415
Streetlights/Traffic Signals	235	174	140
<b>Total</b>	<b>15,485</b>	<b>14,637</b>	<b>15,158</b>
<b>Change from Baseline</b>		<b>- 5%</b>	<b>- 2%</b>

Figure 1 shows the annual percent change in emissions by sector relative to the 2018 baseline. Since 2018, buildings have experienced a decrease in emissions by 10% which is largely due to energy efficiency upgrades including installation of LED lights. Fleet emissions has seen an 8% increase since 2018 and this is likely due to fleet expansion each year required to respond to growth the City is experiencing and maintaining service levels. Water and wastewater operations saw a decrease of 1% in emissions compared to 2018. Emissions from this sector are largely dependent on the amount of water homes and businesses are using and wasting. Lastly, streetlights and traffic signals have reduced their emissions by 40% since 2018 and this is due to high pressure sodium streetlights being retrofitted with LED.

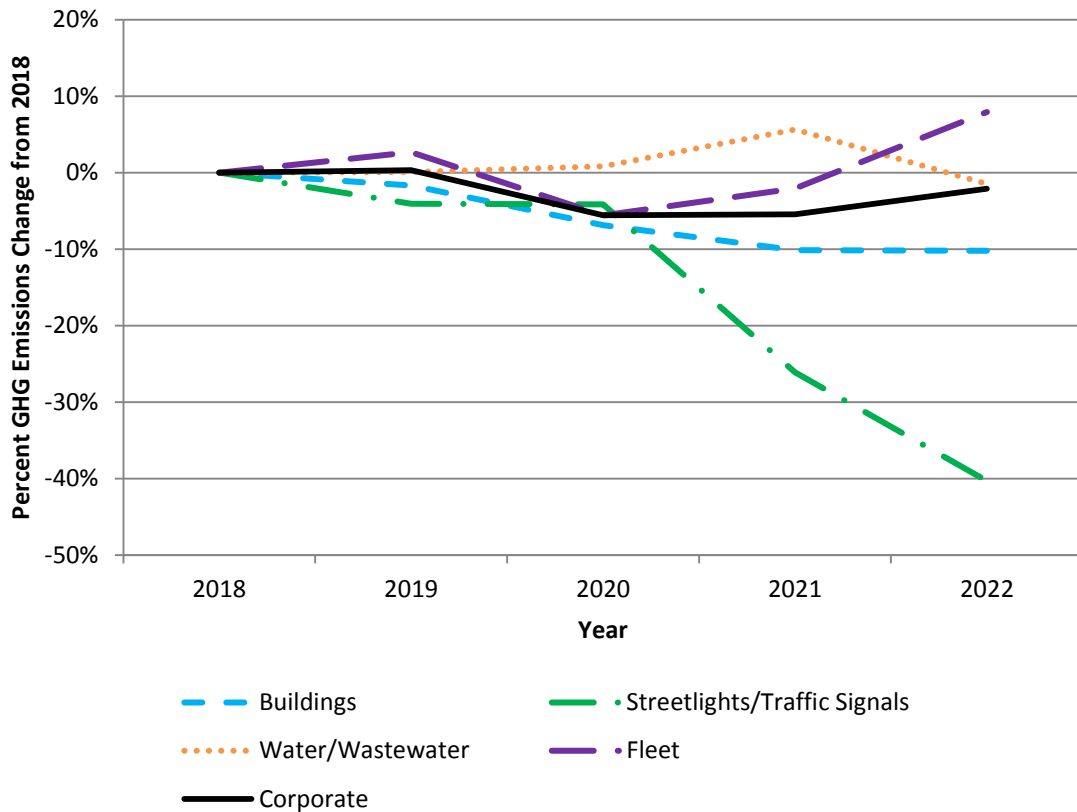


Figure 1 Annual percent change in emissions by sector relative to the 2018 baseline

The key drivers of GHG emissions for the City of Brantford are outlined in Figure 2. Natural gas consumption to heat buildings continued to be the largest source of corporate-wide emissions in 2022, accounting for 44% of all emissions. Diesel used for transit buses and City operation and maintenance vehicles and equipment accounted for approximately 35% of corporate-wide emissions and was the second largest source. Gasoline use for para-transit buses and City operations and maintenance vehicles and equipment accounted for 12% of emissions and electricity emissions accounted for 9%.

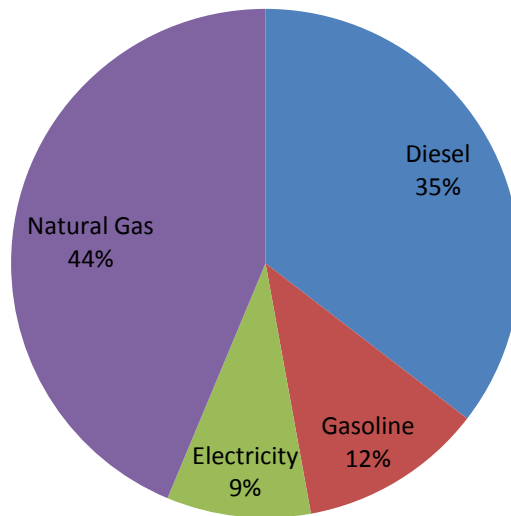


Figure 2 Key drivers of corporate-wide GHG emissions and percent of total emissions (2022)

### 9.5.2 How Brantford Compares

The City of Brantford and many of its comparator municipalities have developed GHG emission targets of becoming net-zero by 2050 and also track their emissions to monitor progress towards this goal. The following figures outlines how Brantford compares in terms of corporate emissions to its comparator municipalities.

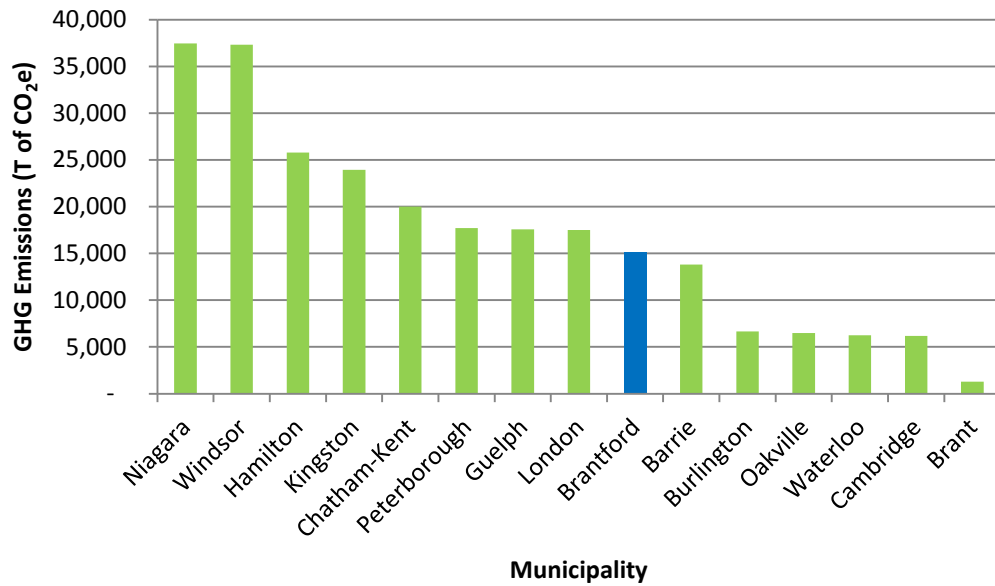


Figure 3 Brantford's corporate emissions relative to its comparator municipalities' emissions

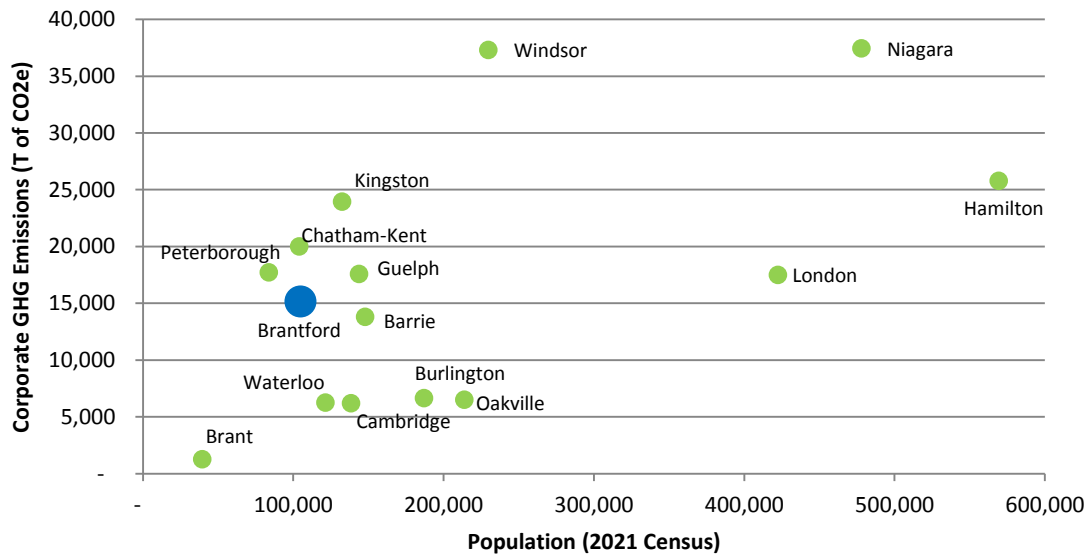


Figure 4 Brantford and its comparator municipalities' corporate emissions compared to 2021 census population data

Relative to its comparator municipalities, the City of Brantford has the fourth smallest population but is the seventh smallest corporate GHG emitter. However, when comparing Brantford to other municipalities, it should be noted that there are variations in the total number of assets captured in each municipality's

corporate GHG inventory that could affect the total emissions reported.

### 9.5.3 Community Emissions Inventory Update

The Community Emissions Inventory looks at carbon emissions from residential, commercial/ institutional, industrial, transportation, and landfill sectors from within the City of Brantford geographical boundaries.

Table 4 provides the total carbon emissions for each sector within the community for 2021 and 2022 compared to the baseline year of 2018. The total emissions for the Community as a whole are provided as well as the change from baseline percentage.

Table 4 Community emissions summary from baseline

Sector	GHG Emissions (Tonnes of CO <sub>2</sub> e)		
	2018	2021	2022
Transportation	220,669	225,714	216,851
Residential	146,801	130,406	142,563
Commercial/ Institutional	142,049	102,848	114,754
Industrial	132,207	145,688	153,605
Landfill	146,213	111,838	126,500
<b>Total</b>	<b>787,939</b>	<b>716,494</b>	<b>754,273</b>
<b>Change from Baseline</b>		<b>- 9%</b>	<b>- 4%</b>

Figure 3 shows the annual percent change in emissions by sector relative to the 2018 baseline. Since 2018, residential and commercial/institutional emissions have fluctuated but this is likely due to the COVID-19 pandemic with homes, schools, and businesses' operations being impacted and now returning to normal as well as more homes and Brantford's population increasing. Overall, community buildings have seen a decrease in emissions by 4% compared to 2018. Emissions from transportation has decreased by 2% compared to 2018 and this is likely due to residents driving less and working from home and/or people switching to EVs. Lastly, landfill emissions have also decreased by 13% since 2018. However, the change in landfill emissions year to year is due to a number of factors such as on-site transportation, amount of waste coming into the landfill,

number of trucks and their weight, strength of the leachate, emissions from electricity generation, etc.

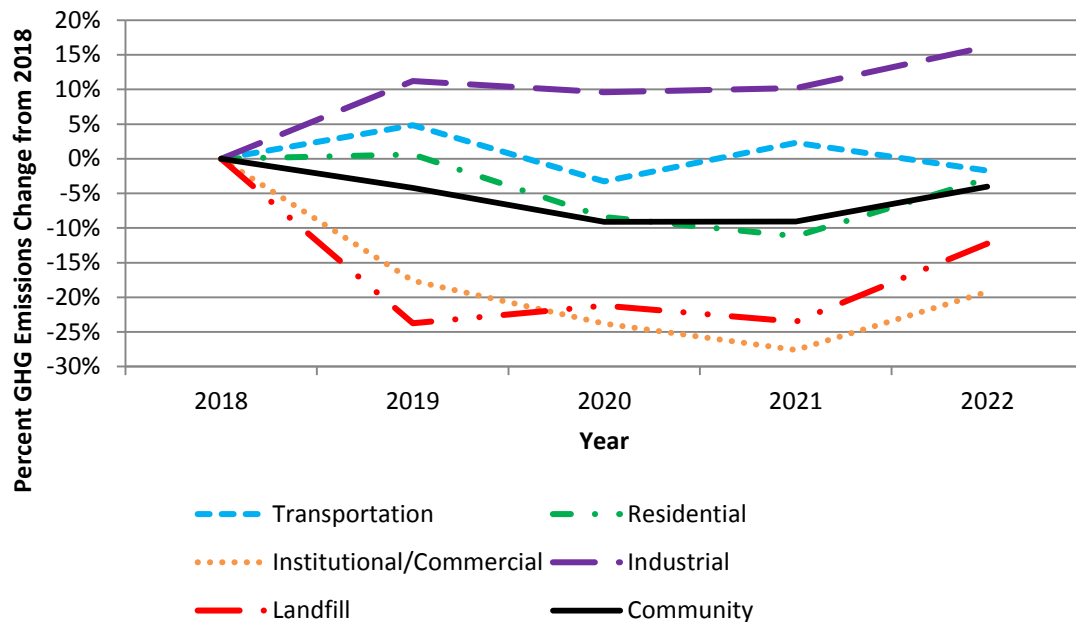


Figure 5 Annual percent change in emissions by sector relative to the 2018 baseline

The key drivers of community GHG emissions for the City of Brantford are outlined in Figure 4. Natural gas consumption to heat buildings continued to be the largest source of community-wide emissions in 2022, accounting for 50% of all emissions. Gasoline used for passenger vehicles accounted for approximately 27% of emissions and was the second largest source. Emissions from methane produced from waste at the landfill made up about 17% of total emissions. Emissions from electricity accounted for approximately 4% of community emissions and lastly emissions from diesel for passenger vehicles accounted for 2% of total emissions.

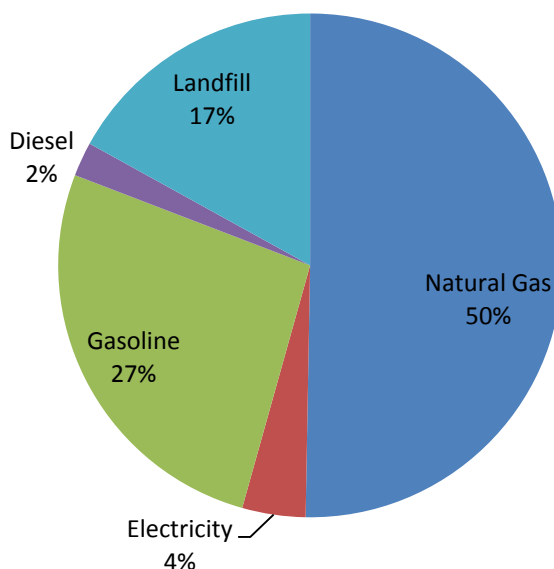


Figure 6 Key drivers of community-wide GHG emissions and percent of total emissions (2022)

### 9.5.4 Carbon Offsets

To help offset GHG emissions from corporate and community sources, the City of Brantford utilizes trees on City parcels, right-of-ways, and private parcels. As of Fall 2022, the City of Brantford has approximately 676,000 trees. The following tables outlines a summary of the carbon offsets provided by these trees for both the Corporate and the community.

Table 5 Carbon offset summary for 2022

	Corporate	Community
Total Emissions (T of CO <sub>2</sub> e)	15,158	754,273
Number of Trees (2022)	174,156	500,819
Carbon Offsets from Trees (T of CO <sub>2</sub> e)	3,831	11,018
Net Emissions (T of CO <sub>2</sub> e)	11,327	743,255
<b>Number of trees needed to reach net-zero</b>	<b>514,842</b>	<b>33,784,318</b>

Although carbon offsets will be needed for the City of Brantford to reach its net-zero goal, it is not feasible to solely rely on trees to offset current emissions. Therefore, for the City to reach its net-zero target by 2050, Brantford should reduce its emissions as much as possible and then use trees to offset the remaining amount that cannot be avoided.



### 9.5.5 Avoided Emissions

The City of Brantford has already taken actions to reduce its corporate footprint, resulting in some emissions savings. Without these actions, GHG emissions would have been higher.

Table 6 Emission reduction actions taken in 2021 and 2022

Actions Taken	Annual GHG Emissions Savings
Electric ice resurfacers	27 T of CO <sub>2</sub> e
Convert light duty autos to electric (14 EVs since 2018)	36 T of CO <sub>2</sub> e
Convert HPS streetlights to LED	99 T of CO <sub>2</sub> e
<b>Total</b>	<b>162 T of CO<sub>2</sub>e</b>

The total emissions savings of 162 T of CO<sub>2</sub>e is equivalent to taking approximately 52 cars off of the roads each year.

### 9.5.6 Current Emission Projections

The City of Brantford is continuing to take steps to reduce its corporate emissions which will result in further reduction. The following table outlines emission reduction projects that have been approved by Brantford’s City Council.

Table 7 Emission reduction projects approved by Brantford City Council

Project	Implementation Year	Annual Emissions Reductions (T of CO <sub>2</sub> e)
Convert HPS streetlights to LED	2024 - 2027	11
Implement a Green Bin Program	2023	No new emissions*
Net-Zero Building Standard	2023	No new emissions**
Convert all buses to EV	2024-2037	3,288
Net-Zero Police Building	2026	242
<b>Total reductions</b>		<b>3,541</b>
<b>Emissions remaining</b>		<b>12,695</b>

\* The Green Bin Program will divert organics from the landfill and will therefore not cause an increase in emissions at the landfill.

\*\* The Net-Zero Building Standard requires all new municipal buildings to be built net-zero and will therefore not cause an increase in corporate building emissions.

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The approved and expected projects will result in an 18% reduction in emissions compared to the baseline by 2037.

### **9.5.7 Recommendations and Next Steps**

With the corporate and community emissions inventories now updated, the City of Brantford can begin to notice trends as well as estimate the impact emission reduction projects will have on meeting targets. Further progress on emissions reductions since 2020 was hindered by budget constraints and vehicle supply chain issues. Additionally, many of the actions that have been taken to date were preparatory in nature and will result in future reductions. The City will continue to work towards its net-zero by 2050 target by prioritizing GHG reducing projects in the coming years, specifically projects to reduce energy consumption from buildings and fleet.

## **10.0 Financial Implications**

This update report has no financial implications.

## **11.0 Climate and Environmental Implications**

This report itself does not have a direct impact on the climate or the environment, but provides valuable data to be able to make future decisions on climate and environmental programming implemented through the City. In 2022, 15,158 T of CO<sub>2</sub>e were emitted from Corporate activities, a decrease by 2% compared to the baseline year of 2018. As well, in 2022, 754,273 T of CO<sub>2</sub>e were emitted from Community activities, a decrease of 4% compared to 2018.

This report also provides an opportunity to reflect on the work completed in 2023 and look at the work done collectively toward the City's emission reduction targets. A total of 122 T of CO<sub>2</sub>e will be avoided through the work done this year by planting trees, switching to EV fleet, and replacing high wattage high pressure sodium streetlights.

## **12.0 Conclusion**

This report provides updates on the corporate and community climate action undertaken at the City of the past year. The City has made progress on climate action, addressing 16 different projects and reducing emissions by 6,751 T of CO<sub>2</sub>e over the lifetime of the projects. The true emissions reductions caused by

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this work may not be visible for several years into the future as some programs will take time to initiate and see the full impacts of the programs.

The Emissions Inventory was updated for the years 2021 and 2022 and compared to the baseline 2018 data. Analysis shows that both the Corporate and Community emissions are down from the baseline. To meet the City's goal of net-zero by 2050, emission reduction efforts should be prioritized for buildings, fleet, and transportation across the Corporation and the community.



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Inderjit Hans, P. Eng., PMP  
Commissioner, Public Works Commission

Prepared By:

Rebecca Szczepanowski, Climate Change Officer, Business Support and Sustainability

Gagan Batra, Manager, Business Support and Sustainability

Attachments (if applicable)

Appendix A: Brantford GHG Emissions Inventory 2021 and 2022

Appendix B: Memo- Additional information requested from 2022 Climate Action Update Report

Copy to:

N/A

In adopting this report, is a by-law or agreement required? If so, it should be referenced in the recommendation section.

By-law required  yes  no

Agreement(s) or other documents to be signed by Mayor and/or City Clerk  yes  no

Is the necessary by-law or agreement being sent concurrently to Council?  yes  no