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Date December 12, 2024	Report No. 2024-633
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To Chair and Members

Environmental and Sustainability Policy Advisory Committee

From Gagan Batra

Manager, Business Support and Sustainability

1.0 Type of Report

Consent Item [X] Item For Consideration []

2.0 Topic 2024 Climate Change Action Plan Annual Update [Financial Impact: None]

3.0 Recommendation

A. THAT Report 2024-633 "2024 Climate Change Action Plan Annual Update" BE RECEIVED.

4.0 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 Action Plan, approved in July 2022 in Report 2022-428 titled "Brantford Community Climate Change 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. Progress against the emissions reduction targets are presented in the updated emissions inventories presented to Council every two years. The next emissions inventory is scheduled to be presented in 2025. 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 2024.

Additionally, in September 2024 in Report 2024-198 titled "Corporate Climate Change Action Plan Update", City Council approved the emissions reduction targets as outlined in the Corporate and Community CCAPs to remain the same. In 2025, staff will begin engagement for updating both Plans.

5.0 Analysis

This update report provides information on the progress made on climate action in the City of Brantford.

5.1 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 plans.

The milestones within the PCP program include the following:

- 1. Establish Baseline GHG Emissions Inventory
- 2. Set Emissions Reduction Targets
- 3. Prepare a Climate Change Action Plan
- 4. Implement Climate Change Action Plan
- 5. Monitor Results of Climate Change Action Plan

As of February 2024, the City of Brantford achieved Milestone 5 of 5 of the Corporate and Community streams by monitoring and reporting results of the Climate Change Action Plans and updating the Corporate and Community Emissions Inventories. Moving forward, the City will continue to implement its CCAPs and monitor results through updated emissions inventories.

5.2 Clean Brantford

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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 2024 event took place on April 21 and 22 where over 2,300 residents participated in picking up litter around their neighbourhoods, trails, and the Grand River. Residents were encouraged to dispose of any litter collected as part of their regular garbage collection or dispose of larger amounts at one of three disposal areas. A total of 170 kilograms of litter was collected across the three disposal sites and taken to the Mohawk Street Landfill.

5.3 Corporate Climate Change Action Plan Annual Update

The Corporate CCAP has now been under implementation for four years. Table 1 summarizes the action items completed in 2024 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 a measurable emissions reduction associated with them yet because it is either preparatory work for future emissions reduction or is a Corporate and community benefit that is difficult to quantify.

Table 1 Corporate Climate Change Action Plan work completed in 2024

Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO2e)
Priority Actions				
Fleet	Purchase electric vehicles	Convert light duty autos to electric	 2 EVs were delivered and replaced gas vehicles 3 EVS purchased in 2024, to be delivered in Q3 2025 	9.86 (annual) 69.02 (lifetime)
Parks and Recreation	Tree planting	Tree canopy expansion	 Planted 346 trees at City parks and City Right-of-Way Partnered with Brant Tree Coalition to plant 4,101 trees at community tree planting events 	98 (annual) 5,880 (lifetime)

Department	Action Item	CCAP Item	Description I	Emissions Reduction (T of CO2e)
Business Support and Sustainability (BSS)	Corporate Building Retrofit Guideline	Building Retrofit Strategy	Existing buildings to be retrofitted	Expected: 6,457 once all buildings retrofitted
Short Term Act				
Fleet	Transit Optimization Study	Route Planning	00	Not quantified
Fleet	EV Chargers	Convert light duty autos to electric	0 =0.0. = 0	Not quantified
Fleet and BSS	Fleet Optimization Strategy	Optimizing Fleet	Outlines strategies	Not quantified
Operational Services	LED Streetlight Upgrade	Convert HPS bulbs to LED	October 2024, 745 HPS bulbs were converted to LED and 302 new LED fixtures were installed Additional 350	3.68 (annual for difference in converted to LED and new LED) 66.3 (lifetime)

Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO2e)
BSS	Building Operations and Maintenance Standard	Building Operations and Maintenance Standard	 In progress Optimize how all City buildings are operated Provide scheduling and temperature set point standards to maintain indoor air quality and comfort while reducing energy 	Not quantified
Environmental Services	Wastewater Reduction Programs	Wastewater Reduction Programs	 Ongoing Implemented an aeration control program in April 2024 Electricity consumption reductions seen from April to August 2024, reductions expected to continue 	18 (over 5 month period) 396 (anticipated lifetime)
Other Actions			Continuo	
Environmental Services	WWTP Energy Audit		 In progress To be completed Q1 2025 Outline energy conservation measures for the wastewater treatment plant 	Not quantified
Environmental Services	WTP Building Commissioning		 In progress To be completed Q1 2025 Outline measures to improve BAS system and operate building more efficiently 	Not quantified

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Department	Action Item	CCAP Item	Description	Emissions Reduction (T of CO2e)
BSS and Parks & Recreation	Private Tree By-law		 Private Tree Protection by-law implemented June 2024 Purpose is to protect healthy trees from being cut down 	Current tree canopy sequesters ~ 15,000 T of CO ₂ e per year
Engineering Services	Animal Control Building		Designed to be net-zero or net- zero ready	Minimal additional emissions
BSS	Invasive Species Management Plan		 In progress Plan for the removal and management of invasive species 	Not quantified
Total Emissions Reductions		130 T of CO₂e (annual)* 6,411 T of CO₂e (lifetime)		
from 2024 Pro	jects		6,411 I of C	U2e (litetime)

^{*} Only those projects that have resulted in immediate reductions in 2024 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.

In addition to the above action items, through consultation with community members, suggestions to further reduce emissions have been incorporated. For example, City grass cutting operations have been reduced along Gilkinson Road, Rotary Park, Brier Park, the New Forest in the City, and Holmdale and this results in emissions reductions from decreased equipment use and also naturalizes the areas which has a positive impact on biodiversity, soil health, and water infiltration.

5.4 Community Climate Change Action Plan Annual Update

The Community CCAP has now been under implementation for two years. 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 2024. These action items are focused on spreading information about climate action and are preparatory in nature and no not have any quantifiable impact on emissions.

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Table 2 Community Climate Change Action Plan work completed in 2024

Action Item	CCAP Item	Description	Metrics
Transit Optimization Study	Complete Transit Route Optimization Study	 Complete Transit routes redesigned to encourage transit use Improvements to transit service 	Not quantified
Explore green development standards for new homes	Explore green development standards for new homes	 Staff partnered with ICLEI Canada to develop a roadmap and explore options 	Not quantified
Home Energy Retrofit Program	Explore Home Energy Retrofit Loan/Grant Programs	 In progress City partnered with Clean Air Partnership to conduct a study on implementing a Home Energy Retrofit Program 	Not quantified
Home Energy Savings Guide	Increase resources to educate the community on climate change	 In progress Resource for homeowners to reduce energy consumption 	Not quantified
Tree planting	Tree canopy expansion	 720 trees provided to residents as part of Free Tree Giveaway events These trees expand the community tree canopy 	16 (annual) 960 (lifetime)
Total Emissions Reductions from 2024 Projects		16 T of CO₂e (annua 960 T of CO₂e (lifetime	

6.0 Financial Implications

There are no financial implications associated with this report.

7.0 Climate and Environmental Implications

The report itself does not have a direct impact on the climate and the environment, but provides valuable data to be able to make future decisions on climate and environmental programming implemented through the City. It also

[] yes [x] no

[] yes [x] no

[] yes [x] no

provides an opportunity to reflect on the work completed in 2024 and look at the work done collectively toward the City's emissions reduction targets. A total of 130 T of CO₂e will be avoided through the work done this year by planting trees, replacing high wattage high pressure sodium streetlights, converting fleet to EVs, and improving Wastewater Treatment operations.

8.0 Conclusion

recommendation section.

By-law required

This report provides updates on the corporate and community climate action undertaken at the City over the past year. The City has made progress on climate action, addressing 19 different projects and reducing emissions by 7,371 T of CO₂e over the lifetime of the projects. The true emissions reduction caused by 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.

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Prepared By:
Rebecca Szczepanowski, Climate Change Officer
Attachments (if applicable)
None.
Copy to:
N/A
In adopting this report, is a by-law or agreement required? If so, it should be referenced in the

Agreement(s) or other documents to be signed by Mayor and/or City Clerk

Is the necessary by-law or agreement being sent concurrently to Council?