



**Agenda**  
**The Township of Cavan Monaghan**  
**Sustainability Advisory Committee Meeting**

Friday, March 15, 2024

2:00 p.m.

Council Chambers - Hybrid Room

Members in attendance are asked to please turn off all electronic devices during the Meeting. Any special needs requirements pertaining to accessibility may be directed to the Clerk's Office prior to the meeting. Please be reminded meeting are livestreamed and recorded. Members may be participating remotely.

**1. Call to Order**

**2. Land Acknowledgement**

We respectfully acknowledge that the Township of Cavan Monaghan is located on the Treaty 20 Michi Saagiig territory, in the traditional territory of the Michi Saagiig Anishnaabeg. We offer our gratitude to First Nations for their care for and teachings about these lands. May we honour these teachings.

**3. Approval of the Agenda**

**4. Disclosure of Pecuniary Interest and the General Nature Thereof**

**5. Closed Session**

**6. Minutes**

**6.1 Minutes of the meeting held September 26, 2023**

**7. Reports**

**8. General Business**

**8.1 Cavan Monaghan Climate Change Action Plan**

**8.1.1 Corporate Climate Change Action Plan Initiatives and Completed Projects**

**8.1.2 Community Climate Change Action Plan Initiatives and Completed Projects**

**8.2 2024 Workplan**

**8.3 Recruitment of Committee Members**

**8.4 2024 Meeting Schedule Discussion**

**9. Adjournment**

**Minutes**  
**The Township of Cavan Monaghan**  
**Sustainability Advisory Committee Meeting**  
**Tuesday, September 26, 2023**  
**1:00 p.m.**  
**Council Chambers – Hybrid Room**

**Those members in attendance:**

Leslie Bilcox  
Lisa Crawford  
Craig Onafrychuk  
Ryan Huntley, Deputy Mayor  
Cath D'Amico (remotely)

**Those members absent:**

Manny Borges (With regrets)  
Joanne Key (With regrets)

**Staff members in attendance:**

Cindy Page, Clerk  
Brigid Ayotte, Economic Development & Communications Officer

**1. Call to Order**

Chair Leslie Bilcox called the meeting to order at 1:02 p.m.

**2. Land Acknowledgement**

Chair Leslie Bilcox recited the land acknowledgement.

**3. Approval of the Agenda**

Moved by: Huntley

Seconded by: Crawford

That the agenda for the Sustainability Advisory Committee be approved as presented.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Onafrychuk	X	
Bilcox	X	
Crawford	X	
D'Amico	X	
Huntley	X	
<b>Results</b>	<b>5</b>	<b>0</b>
		<b>Carried</b>

**4. Disclosure of Pecuniary Interest and the General Nature Thereof**

There were no pecuniary interests noted.

**5. Closed Session**

There was no closed session.

**6. Minutes**

**6.1 Minutes of the meeting held August 22, 2023**

Moved by: Huntley

Seconded by: Crawford

That the minutes of the Sustainability Advisory Committee meeting held August 22, 2023 be approved as amended.

<b>Recorded</b>	<b>For</b>	<b>Against</b>	
Huntley	X		
Onafrychuk	X		
Bilcox	X		
Crawford	X		
D'Amico	X		
<b>Results</b>	<b>5</b>	<b>0</b>	<b>Carried</b>

**7. General Business**

**7.1 Update the Energy Conservation and Demand Management Plan**

Moved by: Huntley

Seconded by: Crawford

That the Sustainability Advisory Committee support the addition of the draft update to the Energy Conservation and Demand Management Plan and the amended presentation.

<b>Recorded</b>	<b>For</b>	<b>Against</b>	
Bilcox	X		
Crawford	X		
Onafrychuk	X		
D'Amico	X		
Huntley	X		
<b>Results</b>	<b>5</b>	<b>0</b>	<b>Carried</b>

Ms. Ayotte reviewed the draft updates to the Energy Conservation and Demand Management Plan with the Committee. Ms. Ayotte will circulate the updated plan encompassing the Committee's preliminary feedback discussed at the meeting. The Committee will review and provide their feedback to Ms. Ayotte, the compiled draft Energy Conservation and

Demand Management Plan will then be brought back to the Committee at the next meeting.

The Committee discussed budget considerations including the importance of accurate data to ensure the goals and targets are established properly, the Committee felt that a Data Analyst could assist with this. The Committee discussed potential Sustainable Community Initiatives such as tree planting and a rain barrel program, which could be done in collaborations with other Township departments. Staff will research funding grant opportunities and will also report back on the status of the Codes Acceleration Funds.

Moved by: Huntley

Seconded by: Crawford

That the Sustainability Advisory Committee request for the 2024 Budget up to \$30,000 for a Data Analyst and \$5,000 for Community Initiatives.

<b>Recorded</b>	<b>For</b>	<b>Against</b>	
D'Amico	X		
Huntley	X		
Bilcox	X		
Crawford	X		
Onafrychuk	X		
<b>Results</b>	<b>5</b>	<b>0</b>	<b>Carried</b>

## 8. Adjournment

Moved by: Huntley

Seconded by: Onafrychuk

That the Sustainability Advisory Committee adjourn. (2:26 p.m.)

<b>Recorded</b>	<b>For</b>	<b>Against</b>	
Crawford	X		
Onafrychuk	X		
D'Amico	X		
Huntley	X		
Bilcox	X		
<b>Results</b>	<b>5</b>	<b>0</b>	<b>Carried</b>

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**Leslie Bilcox**  
**Chair**

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**Cindy Page**  
**Clerk**



# Greater Peterborough Area Climate Change Action Plan

## Chapter 4 – Cavan Monaghan

### Community and Corporate Climate Action Plans

September 30, 2016



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## Section 1: Introduction and Overview

### Greater Peterborough Area Climate Change Action Plan

In 2014, the Greater Peterborough Area's (GPA) member communities joined more than 250 other communities across Canada to address climate change through participation in the Partners for Climate Protection (PCP) program aimed at reducing GHG emissions from both municipal/First Nation corporate operations and community sources.

As part of the PCP program, the Climate Change Action Plan sets a course to reduce local contributions to climate change and prepare communities for present and expected changes that will occur as a result of climate change. This plan represents an integrated approach to dealing with some of the most important issues related to the sustainability of our diverse region. The overall objective of the CCAP is to reduce our greenhouse gas emissions through a reduction in fossil fuel use and lowering our energy consumption, and to better prepare for our changing climate. The Plan identifies strategies, actions, and emission reduction targets that fit with and address the needs of each municipality and First Nation within the GPA. This regionally coordinated approach will ensure that we act together to safeguard the health of our residents and ensure the stability of our local economic and natural resources against impacts related to climate change.

### Climate Change Vision

In 2010, the GPA embarked on an exciting journey – the development of an Integrated Community Sustainability Plan, coined *Sustainable Peterborough*. Within the Sustainable Peterborough Plan, climate change was identified as one of the eleven key theme areas of focus. Each community of the GPA is working together to collectively achieve the following vision, as originally identified as the climate change goal in the Sustainable Peterborough Plan:

*We will reduce our contributions to climate change while increasing our ability to adapt to climate change conditions.*

### Cavan Monaghan's Community and Corporate Action Plans

Chapter 4 of the CCAP includes Cavan Monaghan's Community (Section 2) and Corporate (Section 3) Action Plans. Both of these build on the overarching components outlined in the main CCAP, but provide greater detail specific to Cavan Monaghan. They both include the following:

- *Where are we now* – a brief discussion of community and corporate baseline GHG emissions.
- *Where do we want to go* – GHG emissions reductions targets for the community and corporation.
- *How are we going to get there* – actions that the community and corporation will take to achieve its emissions reduction targets.



## Section 2: Community Action Plan

### Where are we now?

In 2011, 54,531 tonnes of CO<sub>2</sub>e were emitted by the Township of Cavan Monaghan community. Based on the projected growth for the Township of Cavan Monaghan, community emissions are expected to grow to 64,755 tonnes CO<sub>2</sub>e by 2031 if nothing is done to reduce GHG emissions. For further details on the Cavan Monaghan's baseline community emissions (PCP Milestone 1), please see the Appendix attached to this chapter entitled *Cavan Monaghan Corporate and Community Emissions Inventory*.

### Where do we want to go?

The Cavan Monaghan community is aiming to achieve a 31% reduction in its GHG emissions from the 2011 baseline by 2031. This is equivalent to 17,017 less tonnes of CO<sub>2</sub>e emitted per year by 2031, which would put the Township's community emissions at 37,514 tonnes of CO<sub>2</sub>e per year by 2031 compared to the current 54,531 tonnes per year.

### How are we going to get there?

The following tables detail the strategies and actions that Cavan Monaghan will use to achieve its community GHG emissions reduction target. Further detail on each strategy is provided in the main *Climate Change Action Plan* document.

#### Our Homes

Strategy H1: Help existing homes become more energy and water efficient and be more adaptable to climate risks		
Primary Action	Mitigation impact: direct	Adaptation impact: direct
	Support the development of a business case for a comprehensive multi-year deep energy retrofit program focused on existing households to achieve efficiency gains of at least 30% to 50% depending on the age and type of the building. Explore and investigate for Local Improvement Charges (LIC) and/or incentives available through a Community Improvement Plan (CIP).	
Primary Action Assumptions	The development of a business case for a comprehensive multi-year deep energy retrofit program would be initiated/led on a regional level i.e. through the City and/or County. The implementation of a LIC program and/or CIP is both financially and administratively feasible.	
GHG Emission Reduction Potential	5,107 tonnes of CO <sub>2</sub> e/per year	

Strategy H2: Build new homes to be more efficient and have a smaller environmental footprint		
Primary Action	Mitigation impact: direct	Adaptation impact: direct
	Implement gradual improvement in new home construction that aligns with amendments to the Ontario Building Code aimed at achieving near net-zero or equivalent (0.14 to 0.24 GJ/m <sup>2</sup> ) in all new buildings by 2031. Explore incentives available through a CIP.	
Primary Action Assumptions	The Ontario Government implements actions as part of the provincial Climate Change Action Plan particularly, incentives for near net-zero carbon homes,	

Strategy H2: Build new homes to be more efficient and have a smaller environmental footprint	
Supporting Actions/ Policies	lower carbon building code standards and electric vehicle rebate and electric vehicle charging station programs. The implementation of a CIP is financially and administratively feasible.
GHG Emission Reduction Potential	<b>Supporting Policies</b> <ul style="list-style-type: none"> <li>Ontario Building Code, Provincial Policy Statements, Ontario Climate Change Action Plan</li> </ul> 1,305 tonnes of CO <sub>2</sub> e/per year

Strategy H3: Reduce the amount of waste generated by residents that contribute to greenhouse gas emissions	
Primary Action	Mitigation impact: direct      Adaptation impact: none Support a regional initiative to explore feasibility of capturing energy from waste (e.g. anaerobic digestion) to manage organic material and to reduce emissions of methane gas (County and City partnerships).
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Educate residents on proper separation and disposal of waste under current regulatory requirements</li> <li>Work with the County of Peterborough to review efficiency of waste collection program</li> </ul>
GHG Emission Reduction Potential	388 tonnes of CO <sub>2</sub> e/per year

## Our Workplaces and Schools

Strategy W1: Improve energy and water efficiency of existing buildings and business operations	
Primary Action	Mitigation impact: direct      Adaptation impact: indirect Work with utilities (PDI, Hydro One, Enbridge as appropriate) to deliver a coordinated deep energy retrofit program to industrial, commercial, and institutional organizations.
Primary Action Assumptions	Utility companies expand upon existing retrofit programs and that a Township CIP is adopted and budget provides for energy incentives.
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Encourage local businesses to participate in energy benchmarking through the use of Energy Star Portfolio Manager provided through Natural Resources Canada</li> </ul>
GHG Emission Reduction Potential	1,388 tonnes of CO <sub>2</sub> e/per year

Strategy W2: Build new buildings to be more efficient and have a smaller environmental impact	
Primary Action	Mitigation impact: direct      Adaptation impact: direct Implement gradual improvement in efficiency of industrial, commercial, and institutional buildings.

Strategy W2: Build new buildings to be more efficient and have a smaller environmental impact		
Primary Action	<ul style="list-style-type: none"> <li>The Ontario Building Code will implement proposed changes as per the Ontario Climate Change Action Plan</li> </ul>	
Supporting Actions/ Policies	<b>Supporting Policies</b> <ul style="list-style-type: none"> <li>Explore completing a CIP that includes incentives for more efficient industrial, commercial and industrial buildings</li> <li>Review and where possible adjust zoning requirements and/or policy direction to encourage cycling and other sustainable modes of travel for new commercial development (e.g. reduced parking requirements, bike storage, employee showers)</li> </ul>	
GHG Emission Reduction Potential	868 tonnes of CO <sub>2</sub> e/per year	

  

Strategy W3: Facilitate climate change friendly business operations and practices		
Primary Action	Mitigation impact: indirect	Adaptation impact: direct
	Support Sustainable Peterborough Business Initiative to build a toolkit for Greater Peterborough Area businesses to assist with climate change impact analysis and business continuity planning for extreme weather.	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Engage with businesses and institutions to implement corporate sustainability initiatives aimed at reducing greenhouse gas emissions (County and City partnership)</li> <li>Work with institutions and businesses to support implementation of food waste reduction and/or diversion (County and City partnership)</li> </ul>	
GHG Emission Reduction Potential	Impact on GHG emissions nominal	

  

Strategy W4: Support local economic resilience and growth of the local green economy		
Primary Action	Mitigation impact: indirect	Adaptation impact: indirect
	Support Peterborough GreenUP as a “one-stop shop” for businesses to learn about and advance sustainability through the Green Business Peterborough Program.	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Explore opportunity and locations to establish a local eco business zone or “Partners in Project Green” program to share resources amongst businesses and encourage green industries (County and City partnership)</li> <li>Support the Greater Peterborough Chamber Of Commerce to establish a business leadership and mentorship program to support energy and climate leadership amongst businesses as part of the Peterborough Business Excellence Awards</li> </ul>	
GHG Emission Reduction Potential	Impact on GHG emissions nominal	

Strategy W5: Facilitate low carbon energy generation and local energy security		
Primary Action	Mitigation impact: direct	Adaptation impact: direct
	Participate in a regional study to explore the potential to implement local renewable energy generation and storage (institutional, commercial, industrial, and residential).	
Primary Action Assumptions	Solar PVs are to generate 5% of the electricity demand in IC&I and residential buildings, while 6% of the natural gas consumed in all buildings are to come from renewable sources by 2031.	
GHG Emission Reduction Potential	997 tonnes of CO <sub>2</sub> e/per year	

## On the Move

Strategy M1: Build an active transportation network and support active transportation		
Primary Action	Mitigation impact: direct	Adaptation impact: none
	Reduce vehicle trips and foster greater walking and cycling mode share through a coordination of efforts.	
Primary Action Assumptions	Active transportation in the County is expected to focus on recreational opportunities and a nominal shift in modal split is expected. Development of the Active Transportation Master Plan is currently underway.	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Continue to work towards implementing the Pedestrian and Cycling Routes &amp; Facilities policy within the Official Plan</li> </ul>	
GHG Emission Reduction Potential	Impact on GHG emissions nominal	

Strategy M2: Facilitate alternatives to single-occupant vehicle use to reduce frequency of personal vehicle use		
Primary Action	Mitigation impact: direct	Adaptation impact: none
	Explore feasibility of a carpool lot network (formal and informal spaces) (in partnership with the County and other Townships).	
Primary Action Assumptions	Carpooling, or travel as a passenger in a vehicle, to increase by 3% by 2031.	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Work with businesses and schools to implement preferred parking for carpoolers</li> </ul>	
GHG Emission Reduction Potential	289 tonnes of CO <sub>2</sub> e/per year	

Strategy M3: Make public transportation more appealing to increase its usage		
Primary Action	Mitigation impact: direct	Adaptation impact: none
	Explore feasibility and joint County-Townships delivery of County Transit services or alternative methods of public transportation as part of next County Transportation Master Plan Update.	

Strategy M3: Make public transportation more appealing to increase its usage	
Primary Action	Travel by public transportation to increase by 4% by 2031.
Assumptions	
GHG Emission	385 tonnes of CO <sub>2</sub> e/per year
Reduction Potential	

Strategy M4: Help transition vehicles to use cleaner and lower greenhouse gas emitting fuel sources	
Primary Action	Mitigation impact: direct                      Adaptation impact: none
Primary Action	Support a shift in vehicle technology to Electric Vehicles (EVs).
Assumptions	12% of all vehicles on the road in 2031 are to be EVs.
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>• Install electric vehicle charging stations for public usage (budget permitting)</li> <li>• Support [local organizations] to work with local businesses to transition corporate fleets to EV</li> </ul>
GHG Emission	9,034 tonnes of CO <sub>2</sub> e/per year
Reduction Potential	

## Our Food

Strategy F1: Support localization of the food system	
Primary Action	Mitigation impact: indirect                      Adaptation impact: indirect
Supporting Actions/ Policies	Support the undertaking of a regional community food system assessment to better understand local food production and movement within the GPA. <b>Supporting Policies</b> <ul style="list-style-type: none"> <li>• Continue to implement policies supporting agriculture and rural employment</li> </ul> <b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>• Continue to expand the network of community gardens throughout the Greater Peterborough Area and engage the broader community in the value of gardening</li> <li>• Support local organizations to provide community skill sharing programs to increase awareness among community members on how to grow, process, and store food</li> <li>• Support local organizations in training, facilitating access to land and promoting successful entrepreneurship of new farmers and food business to increase the production and processing, distribution and retailing of local food</li> </ul>
GHG Emission	Impact on GHG emissions nominal
Reduction Potential	

Strategy F2: Encourage purchasing of locally produced food	
	Mitigation impact: indirect                      Adaptation impact: indirect

Strategy F2: Encourage purchasing of locally produced food	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Support local organizations to promote the marketing of locally-produced food through initiatives such as the Purple Onion Festival and Local Food Month</li> <li>Expand and promote the Farmers Market Network across the Greater Peterborough Area</li> <li>Support and encourage farm gate sale of produce</li> </ul>
GHG Emission Reduction Potential	Impact on GHG emissions nominal

Strategy F3: Reduce the amount of wasted food	
Primary Action	Mitigation impact: direct                      Adaptation impact: none Implement a residential awareness campaign to encourage elimination of wasted food in the home, workplaces, and schools.
Primary Action Assumptions	Reduce the proportion of wasted food in the waste stream by 11% by 2031.
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Support establishment of a food rescue program in partnership with local food retailers, manufactures, restaurants, caterers to collect and redistribute excess food to those in need that would otherwise be disposed of (County and City partnership)</li> </ul>
GHG Emission Reduction Potential	74 tonnes of CO <sub>2</sub> e/per year

## Our Land

Strategy L1: Strengthen land use policy and the development review process to better support climate change mitigation and adaptation	
Primary Action	Mitigation impact: indirect                      Adaptation impact: direct Participate in a collaborative multidisciplinary review team to assess provincial and local land use planning legislation and tools and make recommendations to decision-makers on how to best implement an ecosystem-based approach to the development application process (partnership amongst all communities).
Supporting Actions/ Policies	<b>Supporting Policies</b> <ul style="list-style-type: none"> <li>Integrate climate change policies into Official Plans</li> <li>Continue to encourage new development that supports building complete communities that are mixed-use, compact, and higher density to achieve intensification targets outlined in the Provincial Growth Plan</li> </ul>
	<b>Supporting Actions &amp; Initiatives</b>



Strategy L1: Strengthen land use policy and the development review process to better support climate change mitigation and adaptation		
GHG Emission Reduction Potential	<ul style="list-style-type: none"><li>Sustainability metrics tool to predict, measure and report the sustainability performance (including GHG emissions) of proposed developments focusing on the built environment, mobility, natural environment, and infrastructure and buildings (e.g. Richmond Hill/Vaughan/Brampton)</li><li>Continue/enhance education opportunities on the need for increased housing density and implications related to climate change at all points of contact with decision-makers, stakeholders, and the public</li></ul>	
	Non-quantifiable with available information	

Strategy L2: Identify climate change risks and prepare for potential impacts		
Primary Action	Mitigation impact: none	Adaptation impact: direct
	Participate in a Greater Peterborough Area-wide vulnerability assessment of expected climate change impacts (including drought and lake levels) (coordinated amongst all communities).	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"><li>Consider the adoption of the Low Impact Development Stormwater Management Planning and Design Guide (CVC/TRCA) for landscape-based stormwater management planning and low impact development stormwater management practices</li><li>Consider updating engineering design standards to improve climate change readiness of new infrastructure by taking a green infrastructure approach first and increasing flood standards to a 200-year storm standard rather than the current 100-year standard</li></ul>	
GHG Emission Reduction Potential	None	

Strategy L3: Protect and enhance natural assets		
Primary Action	Mitigation impact: indirect	Adaptation impact: direct
	Support the development and implementation of a regional Natural Heritage System Plan (City and County with Townships).	
Supporting Actions/ Policies	<b>Supporting Policies</b> <ul style="list-style-type: none"><li>Investigate the possibility of a tree replacement policy</li></ul> <b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"><li>Support and promote local Conservation Authorities’ tree planting programs to encourage planting trees on public and private property</li><li>Support local Conservation Authorities to deliver planting and restoration projects at strategic high priority areas with climate ready species</li></ul>	
GHG Emission Reduction Potential	Non-quantifiable with available information	

Strategy L4: Facilitate best management practices for low emission farming and climate change adaptation		
Supporting Actions/ Policies	Mitigation impact: indirect	Adaptation impact: direct
	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Promote usage of Agriculture and Agri-Food Canada’s no-cost Holos GHG emissions modeling tool to assist farmers in assessing their GHG emissions and exploring various farm management scenarios</li> <li>Support [local agricultural organizations] to host local agricultural forums and training sessions to engage with farmers on how to implement climate change mitigation and adaptation related best management practices</li> <li>Support [local agricultural organizations] to promote local participation in the Canada-Ontario Environmental Farm Program to encourage farmers to increase knowledge, conduct assessments, and develop and implement Environmental Farm Plans for their farms</li> </ul>	
	GHG Emission Reduction Potential	
	2,780 tonnes of CO <sub>2</sub> e/per year <sup>1</sup>	

## Our People

Strategy P1: Prepare for the health impacts associated with a changing climate		
Primary Action	Mitigation impact: none	Adaptation impact: direct
	Support the development of a local community vulnerability assessment of public health impacts from climate change to identify climate risks on vulnerable populations (in partnership with all communities).	
	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Establish a protocol for extreme weather alerts and flooding updates</li> </ul>	
Supporting Actions/ Policies	None	
GHG Emission Reduction Potential		

Strategy P2: Foster a culture of climate change awareness		
Supporting Actions/ Policies	Mitigation impact: indirect	Adaptation impact: indirect
	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Support Sustainable Peterborough and other local organizations in hosting regular events focused on climate change (speaker series, annual event, etc.)</li> <li>Support Sustainable Peterborough in seeking buy-in and endorsement/support for the shared vision and goals of Community</li> </ul>	

<sup>1</sup> Total reduction potential per year based on uptake of anaerobic digesters (biogas), enteric fermentation reduction, changing manure management practices, and adopting best practices for soil management.

Strategy P2: Foster a culture of climate change awareness		
	Climate Change Action Plan from existing groups and organizations in the Greater Peterborough Area	
	<ul style="list-style-type: none"> <li>Support Sustainable Peterborough to host a community, youth, adult, and senior climate change champion through the annual Sustainable Peterborough Awards</li> </ul>	
GHG Emission Reduction Potential	Impact on GHG emissions nominal	

  

Strategy P3: Encourage civic engagement around climate change		
Primary Action	Mitigation impact: indirect	Adaptation impact: indirect
	Develop a charter and guidelines (engagement strategy) to foster meaningful community engagement in climate change issues and environmental stewardship (partnership amongst all communities).	
Supporting Actions/ Policies	<b>Supporting Actions &amp; Initiatives</b> <ul style="list-style-type: none"> <li>Support Sustainable Peterborough to establish a youth advisory committee on climate change to empower youth to take action on climate change</li> </ul>	
GHG Emission Reduction Potential	Impact on GHG emissions nominal	

### Decarbonization of the Electric Grid

Since the baseline year of 2011, the Province of Ontario has taken steps to reduce the GHG emissions associated with the electrical grid. For example, it closed all of its coal-fired power plants. This in turn will result in significant GHG Emission Reduction Potential for the Cavan Monaghan community, totalling 4,586 tonnes of CO<sub>2</sub>e/per year.

## Section 3: Corporate Action Plan

### Where are we now?

In 2011, 646 tonnes of CO<sub>2</sub>e were emitted by the Township of Cavan Monaghan's corporate operations. The business-as-usual forecast for the corporate operations is based on annual growth rates derived from official population projections. Emissions from corporate operations are projected to increase to 770 tCO<sub>2</sub>e per year by 2031 if the Township continued to operate as it did in the baseline year without taking any actions to reduce GHG emissions. For further details on the Cavan Monaghan's baseline corporate emissions (PCP Milestone 1), please see the Appendix attached to this chapter entitled *Cavan Monaghan Corporate and Community Emissions Inventory*.

### Where do we want to go?

Cavan Monaghan is aiming to achieve a 29% reduction in its corporate GHG emissions from the 2011 baseline by 2031. This is equivalent to 190 less tonnes of CO<sub>2</sub>e emitted per year by 2031, which would put the Township's corporate emissions at 456 tonnes of CO<sub>2</sub>e per year by 2031 compared to the current 646 tonnes per year.

### How are we going to get there?

The following table details the strategies and actions that Cavan Monaghan will use to achieve its corporate GHG emissions reduction target.

Township of Cavan-Monaghan Corporate Action Plan	Timeframe			
	Underway or Complete	Short (1-4 years)	Med (5-9 years)	Long (10+ years)
<b>Buildings</b>				
<b>Strategy 1: Institutionalize energy efficiency and low carbon thinking into the organization</b>				
Facilitate provincial funded employee training for energy efficiency		X	X	X
Establish a policy to consider highest energy efficiency as part of procurement requirements and evaluation		X		
Monitor incentive programs offered through electricity and natural gas providers to be leveraged for implementing energy efficiency improvements		X	X	X
<b>GHG Emission Reduction Potential: In-direct GHG reductions</b>				
<b>Strategy 2: Enhance operational efficiency of existing buildings</b>				
Implement a building/facility assessment tool/process to explore opportunities for improved efficiency (e.g. annual facility walk through)	X			
Conduct building re-commissioning to optimize operations		X	X	X
Implement/continue to deliver an equipment preventative maintenance program on an ongoing basis	X	X	X	X
<b>GHG Emission Reduction Potential: 16 tonnes of CO<sub>2</sub>e/per year</b>				

<b>Strategy 3: Build municipal facilities to ensure high environmental performance</b>				
Consider the establishment of a Green New Building Policy to require new municipal buildings and major renovations be built to high environmental standards in alignment with Official Plan direction		X		
Install electric vehicle charging stations at new facilities for public use if feasible		X	X	X
<b>GHG Emission Reduction Potential: 36 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Strategy 4: Improve environmental performance of existing municipal facilities</b>				
Consider implementing an interior and exterior LED lighting retrofit program in all facilities where feasible	X	X	X	X
Replace appliances with Energy STAR rated appliances as needed	X	X	X	X
Upgrade insulation/building envelope while conducting other essential building work (e.g. asbestos removal) where feasible		X	X	X
Replace windows and doors with high efficiency according to replacement schedule/need		X	X	X
Replace mechanical equipment with high efficiency according to replacement schedule/need		X	X	X
<b>GHG Emission Reduction Potential: 67 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Strategy 5: Utilize renewable energy sources</b>				
Continue to install solar photovoltaic panels and other renewable energy options when feasible	X	X	X	X
<b>GHG Emission Reduction Potential: 3 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Fleet</b>				
<b>Strategy 6: Transition the municipal fleet to be more efficient and less carbon emitting</b>				
Consider the development and implement a Green Fleet Strategy and replacement schedule				
<ul style="list-style-type: none"> <li>Right sizing vehicle/appropriate vehicle class (fit-for purpose vehicles) through replacement schedule</li> <li>Transitioning to low emission and alternative fuel vehicles (e.g. clean diesel, advanced natural gas, ethanol, or hybrid)</li> <li>Use of anti-idling technology</li> <li>Fuel and vehicle performance monitoring</li> </ul>		X	X	X
Develop and implement a no idling policy	X			
Implement an operator training and education program (e.g. eco driving)		X	X	X
Continue with preventative maintenance program for vehicles and equipment	X	X	X	X
<b>GHG Emission Reduction Potential: 101 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Water Services</b>				
<b>Strategy 7: Enhance operational efficiency of the water services system</b>				

Maintain mechanical equipment at the Millbrook Wastewater Treatment Plant as part of the expansion	X			
Review and optimize pumps and blowers	X			
Continue to deliver preventative maintenance program			X	X
Continue to deliver operator training and education program	X	X	X	X
Continue to monitor and track energy performance	X	X	X	X
<b>GHG Emission Reduction Potential: 8 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Streetlighting</b>				
<b>Strategy 8: Improve energy efficiency of the streetlighting system</b>				
Implement LED street lighting and parking lot lighting replacement program	X	X		
<b>GHG Emission Reduction Potential: 7 tonnes of CO<sub>2</sub>e/per year</b>				
<b>Solid Waste</b>				
<b>Strategy 9: Reduce the amount of organic waste generated through municipal operations</b>				
Continue to participant in the office waste diversion program	X	X	X	X
Consider implementing office organic waste diversion through use of backyard composters in conjunction with community gardens		X		
Implement staff education and awareness program related to waste minimization and diversion		X		
Explore source separation of waste in public areas (e.g. parks, downtown)			X	
<b>GHG Emission Reduction Potential: 13 tonnes of CO<sub>2</sub>e/per year</b>				

### Decarbonization of Electricity Grid

Since the baseline year of 2011, the Province of Ontario has taken steps to reduce the GHG emissions associated with the electrical grid. For example, it closed all of its coal-fired power plants. This in turn will result in significant GHG Emission Reduction Potential for Cavan Monaghan's corporate emissions, totalling 65 tonnes of CO<sub>2</sub>e/per year.



Corporate Strategy and Completed Initiatives		
Category	Strategy	Emission Reduction Potential (tonnes of CO2e/year)
Buildings	Institutionalize energy efficiency and low carbon thinking into the organization	3
	Enhance operational efficiency of existing buildings	
	Retrofitted existing Works Yard building for storage and built a new energy efficient depot	
	Build municipal facilities to ensure high environmental performance	
	Section 3.13 of the Township Official Plan - All major renovation projects requiring Planning Act approvals and resulting in a total gross floor area of 600 square metres or more for industrial, commercial, institutional and medium density residential buildings occurring after January 2012 shall meet LEED (NC) Canada Version 1.0 certification level "Silver" or equivalent. (Certification is an onerous task so we do work with developers to ensure they meet the intent of the standard/LEED concepts)	
	Improve environmental performance of existing municipal facilities	
	Door replacement - replacement of the double doors at the Community Centre to a higher U-Value	
	Window upgrades - window replacement at the Old Millbrook School	
	Retrofit of existing lighting in 4 Townships facilities	
Fleet	Utilize renewable energy sources	
	Ground mounted solar units - 8 installations of solar tracking units on various Township properties - LTEP	
	Transition the municipal fleet to be more efficient and less carbon emitting	101
Water Services	Enhance operational efficiency of the water services system	8
	Upgraded their Wastewater Treatment Plant. The effluent water quality surpasses MOE discharge criteria for phosphorus and other elements. The new facility employs ISAM™ technology which will reduce waste sludge by 75%	
	Installed a water bottle filling station at Maple Leaf Park and CMCC	
Streetlighting	Improve energy efficiency of the streetlighting system	

Category	Strategy	Emission Reduction Potential (tonnes of CO2e/year)
	LED Street Lighting - Replacement of entire street light inventory from high pressure sodium to LED.	
	All lighting is "dark sky compliant"	
	Speed limit and some cross walk signage is solar powered	
<b>Solid Waste</b>	Reduce the amount of organic waste generated through municipal operations	13
	Implemented an e-waste program as well as introduced Styrofoam recycling	
	Implemented organic waste collection program in Millbrook	
	Installed Molok's Organic Waste Containers at the Transfer Station	
	Leaf and Yard waste to a local vendor to convert to energy	

Community Strategies and Completed Initiatives		
Category	Strategy	Emission Reduction Potential (tonnes of CO2e/year)
Homes	Help existing homes become more energy and water efficient and be more adaptable to climate risks	5107
	Build new homes to be more efficient and have a smaller environmental footprint	1305
	Reduce the amount of waste generated by residents that contribute to greenhouse gas emission	388
	Implemented an e-waste program as well as introduced Styrofoam recycling	
	Implemented organic waste collection program in Millbrook	
	Implemented a Clear Bag System	
	Implemented a bag limit (2 per household)	
	Implemented a disposal fee at the transfer station	
	Installed Molok's Organic Waste Containers at the Transfer Station	
Workplaces and Schools	Improve energy and water efficiency of existing buildings and business operations	1388
	Installed a water bottle filling station at Maple Leaf Park and the new CMCC	
	Build new buildings to be more efficient and have a smaller environmental impact	868
	Implemented a Community Improvement Plan with programs that provides incentives for more efficient industrial, commercial and industrial buildings	
	The requirement for bicycle parking in the zoning by-law	
	Facilitate climate change friendly business operations and practices	0
	Mandate strict stormwater management principles for new development (use of infiltration trenches); eliminate phosphorous and groundwater recharge	
	Support local economic resilience and growth of the local green economy	0
On the Move	Facilitate low carbon energy generation and local energy security	997
	Build an active transportation network and support active transportation	
		0

Category	Strategy	Emission Reduction Potential (tonnes of CO2e/year)
	Partnered with the County of Peterborough, completed new walkways and railings on the Distillery Street Bridge in Millbrook, providing a more aesthetically pleasing and pedestrian friendly walkway.	
	Installed a bike rack and participate in the Peterborough & Kawartha Cycling Route	
	The requirement for bicycle parking in the zoning by-law	
	County of Peterborough Active Transportation Master Plan	
	Facilitate alternatives to single-occupant vehicle use to reduce frequency of personal vehicle use	289
	Carpool lot on County road 10 and Syer line	
	Make public transportation more appealing to increase its usage	385
	Help transition vehicles to use cleaner and lower greenhouse gas emitting fuel sources	
		9034
	CIP Sustainability Grant funds EV Chargers	
Our Food	Support localization of the food system	0
	Collaborated with Peterborough Economic Development, hosted the "Selling Food to Ontario" workshop designed for local producers.	
	Cavan Monaghan Libraries offer a starting from seed workshop	
	Encourage purchasing of locally produced food	0
	Reduce the amount of wasted food	74
	Implemented an e-waste program as well as introduced Styrofoam recycling	
	Implemented organic waste collection program in Millbrook	
	Implemented a Clear Bag System	
	Implemented a bag limit (2 per household)	
	Implemented a disposal fee at the transfer station	
	Installed Molok's Organic Waste Containers at the Transfer Station	
Our Land	Strengthen land use policy and the development review process to better support climate change mitigation and adaptation	0

Category	Strategy	Emission Reduction Potential (tonnes of CO2e/year)
	Section 3.13 of the Township Official Plan - All major renovation projects requiring Planning Act approvals and resulting in a total gross floor area of 600 square metres or more for industrial, commercial, institutional and medium density residential buildings occurring after January 2012 shall meet LEED (NC) Canada Version 1.0 certification level "Silver" or equivalent. (Certification is an onerous task so we do work with developers to ensure they meet the intent of the standard/LEED concepts)	
	Official Plan aims to preserve prime agricultural lands - Prohibiting fragmentation of agricultural lands and encouraging the consolidation of farming parcels to improve efficiency and productivity; and Encouraging small scale secondary uses to develop on farm properties to ensure value-added operations and to improve the livelihood of area farmers.	
	Identify climate change risks and prepare for potential impacts	0
	Protect and enhance natural assets	0
	Facilitate best management practices for low emission farming and climate change adaptation	2780
Our People	Prepare for the health impacts associated with a changing climate	0
	Utilized the CMCC as a cooling centre during extreme heat	
	Have a defined Emergency Response Plan with defined roles and responsibilities	
Our People	Foster a culture of climate change awareness	0
Our People	Encourage civic engagement around climate change	0
	Established the Sustainability Advisory Committee	

Sustainability Advisory Committee Work Plan 2024				
Item	Budget	Sub-Committee	Tasks/ Progress	Completion Date
#1. Sustainable Community Intiaitves	\$5,000			
#2. Data Analysis	\$30,000 Contracted services	Kyle Phillips Chris Allison		
#3. Energy Conservation Demand Management Plan Update	\$0	Committee	Staff will bring a draft plan back to the Committee.	
#4. Codes Acceleration Funds		Brigid	Unfortunately, we were turned down for the Codes Acceleration program.	