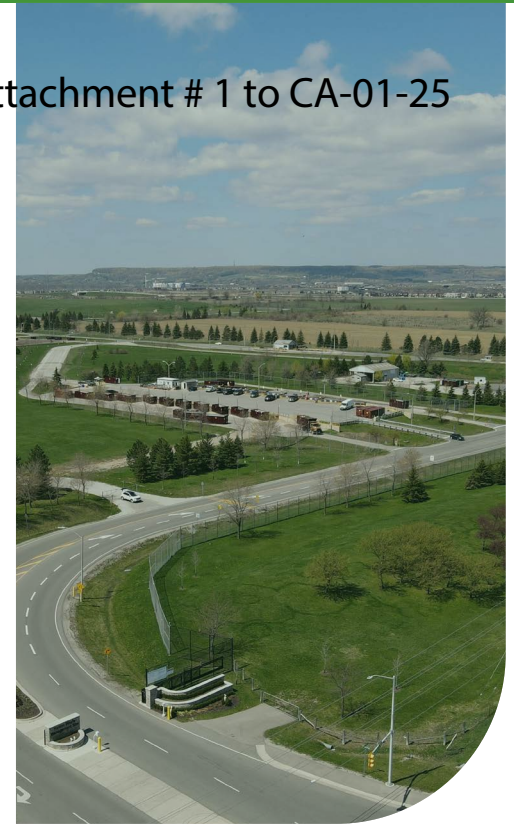


# HALTON REGION CORPORATE CLIMATE ACTION PLAN

## Progress Report 2024



JANUARY 22, 2025

# Table of Contents

Progress Report	3
Climate Change Impacts and Risks in Halton	5
Climate Change Opportunities in Halton	6
Climate Action Response Team (CART)	7
Greenhouse Gas (GHG) Emissions and Targets	8
Halton Region's Themes	10
Theme 1: Climate Ready	10
Theme 2: Climate Lens	15
Theme 3: Climate Finance	16
Theme 4: Engagement and Advocacy	18
Moving Forward	21
Glossary	22
Appendix 1: Progress 2024 – Action Cross-Alignment	26

## Indigenous Land Acknowledgment

Boozhoo, She:kon , Tanshi, Greetings!

Halton Region acknowledges the Treaty Lands of the Mississaugas of the Credit First Nation as well as the Traditional Territory of the Haudenosaunee, Huron-Wendat and Anishinabek on which we gather.

In stewardship with Mother Earth and the enduring Indigenous presence connected to these lands we acknowledge the Indigenous Nations of the past, present and future.

In the spirit of ally-ship and mutual respect, we will take the path of Truth and Reconciliation to create change, awareness and equity as we strive to elevate the collective consciousness of society.

Miigwetch, Nia:wen, Marsi, Thank you



# Halton Region's Corporate Climate Action Plan: Progress Report

Halton Regional Council declared a climate emergency on September 11<sup>th</sup>, 2019, recognizing the urgency of addressing the economic, environmental, and social challenges posed by climate change.

In response Regional Council endorsed the Corporate Climate Action Plan (report number CA-16-23) and Corporate emission reduction target of Net Zero by 2045 in November 2023. The Plan acts as a guiding framework, supporting the Region in advancing climate change adaptation and mitigation work to increase resiliency and achieve the Corporate emission reduction target of Net Zero by 2045.

This Report ensures transparency in the Region's climate efforts. It assesses progress, identifies improvements, and explores additional actions. The Report highlights the Region's progress over the last year and covers mitigation and adaptation efforts. It tracks the Climate Action Response Team's progress, and showcases the achievements in the four key themes of the Corporate Climate Action Plan.

Halton Region's 2023-2026 Strategic Business Plan prioritizes climate change and environment as one of its strategic themes. The Corporate Climate Action Plan, with its four key themes, guides Halton's efforts in supporting the Strategic Business Plan's priorities, emphasizing the need to advance action to transition to a resilient, low-carbon future.

The need for accelerated action is clear. To support this transition and implementation of the Corporate Climate Action Plan, the Climate Action Response Team was updated. The Climate Action Response Team plays a vital role in providing oversight, accountability, and strategic direction to the Region's climate change work. Collaboration across departments is integral to the Climate Action Response Team, driving a connected approach to advance the corporate emissions reduction goal of Net Zero by 2045. The Climate Action Response Team is positioned to support the Region's climate change goals and targets now and into the future.



## HALTON REGION'S CORPORATE VISION



A welcoming and inclusive community that is sustainable, economically strong, equitable and safe.

## HALTON REGION'S CORPORATE CLIMATE MISSION



A resilient corporation that achieves Net Zero by 2045 that provides a safe and healthy community for all Halton residents now and into the future.

## GOALS



- Achieve the Milestones of the Partners for Climate Protection (PCP) Program
- Reduce Greenhouse Gas (GHG) Emissions to Achieve Net Zero by 2045
- Increase Climate Resiliency and Preparedness

## THEMES



Climate Ready



Climate Lens



Climate Finance



Engagement and Advocacy

## ACTIONS



### Mitigation

- Buildings
- Transportation
- Energy Conservation and Sources
- Waste Management
- Water and Wastewater Treatment Plants and Facilities

### Both

- Finance
- Asset Management
- Climate Change Considerations
- Partnerships
- Climate Literacy
- Natural Environment
- Water Conservation

### Adaptation

- Emergency preparedness
- Safeguarding our Corporate Assets & Service Deliverables
- Human Health
- Flooding Protection
- Climate Migration

## IMPLEMENTATION



- Reporting and Transparency
- Capacity Building
- Brokering Partnerships
- Readiness and Timing

# Climate Change Impacts and Risks in Halton

Since the release of Halton Region's Corporate Climate Action Plan in November 2023, the Region has and will continue to experience the impacts of our changing climate.

Between 1971 – 2000, the annual average temperature in Halton was **7.5 °C**; in high emissions scenarios this average is expected to increase to **10.1 °C** between 2021 – 2050, **12.3 °C** between 2051 – 2080 and **14.0 °C** between 2071 – 2100. Rising temperatures result in increases in direct heat-related illnesses and deaths and exacerbate pre-existing health conditions affecting the cardiac, respiratory, and cerebrovascular systems. Extreme precipitation in July 2024 resulted in flood events that led to significant damages to properties and infrastructure. Warmer temperatures, changes in precipitation, and other factors are increasing the risk of exposure to vector borne diseases such as Lyme disease and West Nile virus. Blacklegged ticks collected in Halton during active tick surveillance displayed an increase in the positivity rate of Lyme disease from 0% in 2018 to 17% in 2023, which increases the risk of Lyme disease in humans. We are also seeing a mismatching of ecological timings affecting numerous native species.

These climate impacts have direct results on both risks and opportunities to regional programs and services. It is important to effectively respond to the following potential impacts:

- changing policies and regulations, such as carbon pricing and increased regulations around greenhouse gas (GHG) emissions;
- impacts to the Region's infrastructure;
- escalating energy costs; and
- potential risks around litigation for failures to mitigate or adapt.



An effective and proactive response will help eliminate these risks and provide opportunities for increased efficiency, cost savings and additional access to funding.

Climate Data. Halton, ON. Retrieved from [https://climatedata.ca/explore/location/?loc=FBLID&location-select-temperature=tn\\_min&locationselect-precipitation=r1mm&location-select-other=tr\\_20](https://climatedata.ca/explore/location/?loc=FBLID&location-select-temperature=tn_min&locationselect-precipitation=r1mm&location-select-other=tr_20)

Halton Region. (July 11, 2018). Halton Region Emergency Program and Plan. Regional Municipality of Halton. <https://www.halton.ca/Repository/By-law-No-39-18-Halton-Region-Emergency-Program>

## Climate Change Risks in Halton



Freezing Rain/Ice Storms



Tornadoes



Flood – Urban



Critical Infrastructure Failure – Watermain Network, Pumping Stations



Energy Emergency (Supply) – Power Outages



Air Quality



Flood – Riverine



Extreme Temperatures – Cold Waves, Heat Waves



Human Health Epidemics



Windstorms



Financial Risks

Adapted from the Region's Hazard Identification and Risk Assessment (HIRA)

# Climate Change Opportunities in Halton Region



Align with [Moody's](#) best practice policies to maintain the Region's AAA Credit rating. This will allow the Region to access the best possible capital financing rates and minimize long-term infrastructure and capital financing costs.



Explore and implement opportunities to optimize buildings and fleet operations.



Increasing the resiliency of corporate assets, services, and operations.



Cost savings through shifting to low emission energy sources.



Advancing mitigation measures will allow the Region to generate offset credits that can be utilized to meet climate change targets.



Increased partnership opportunities between Regional departments and partners.



Increase the adaptive capacity of Regional services that serve the community.



Access to climate financing opportunities.



Advocate for a safe and healthy community for all Halton residents now and into the future.



Demonstrating climate leadership and advancing climate advocacy.



Integrate Indigenous knowledge and Equity, Diversity and Inclusion (EDI) practices to shape and advance climate solutions.

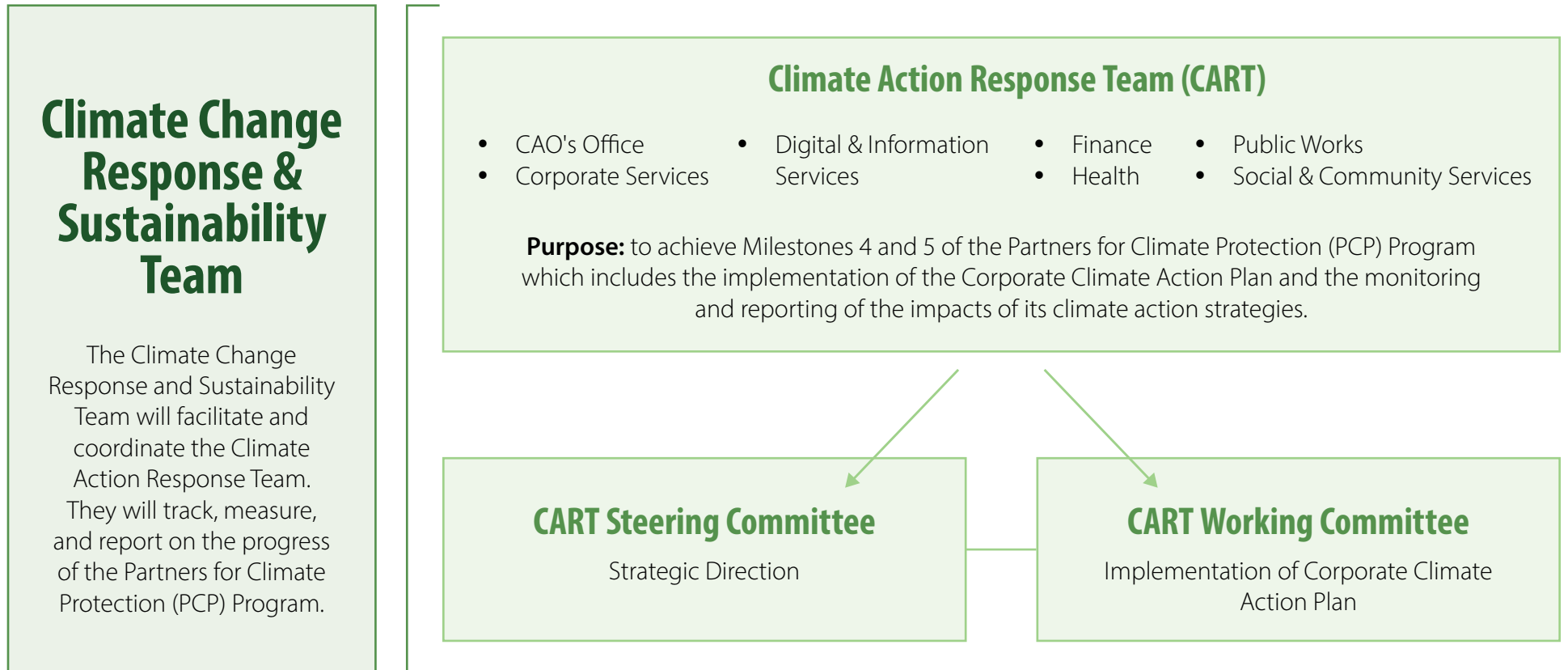


Advance renewable energy sources and improved methods of energy management to sustain reliable energy sources.

# Climate Action Response Team (CART)

In order to advance Milestones 2 and 3 and support the Region's climate response, Halton Region established the Climate Action Response Team in 2022. This group achieved its set out goals in November 2023 through the endorsement of the Corporate Climate Action Plan and Corporate emissions reduction target by Regional Council.

In 2024, the Climate Action Response Team was updated for a new purpose: the implementation of the Region's Corporate Climate Action Plan (Milestone 4) and the monitoring and the reporting of the progress of this work (Milestone 5). To support the accomplishment of this new purpose, the Climate Action Response Team now contains a new governance structure that includes: Steering Committee, Working Committee, Subcommittees, and Action Tables.



# Greenhouse Gas (GHG) Emissions and Targets

In November 2023, Halton Regional Council endorsed the Region's Corporate emissions reduction target of Net Zero by 2045 with an emissions baseline year of 2019. However, as indicated in the Corporate Climate Action Plan, the Region acknowledges that this baseline inventory does not fully represent all the contributors of greenhouse gas (GHG) emissions.

The 2019 baseline emissions inventory focused primarily on emissions from electricity use, natural gas consumption, fuel consumption and corporate waste. Progress from 2019 can be found within the Region's 2024 – 2028 Conservation and Demand Management Plan as part of Ontario Regulation 25/23: Broader Public Sector: Energy Reporting and Conservation Demand Management (CDM) Plans.

As detailed within the 2024 – 2028 Conservation and Demand Management Plan, since 2019 the Region has:

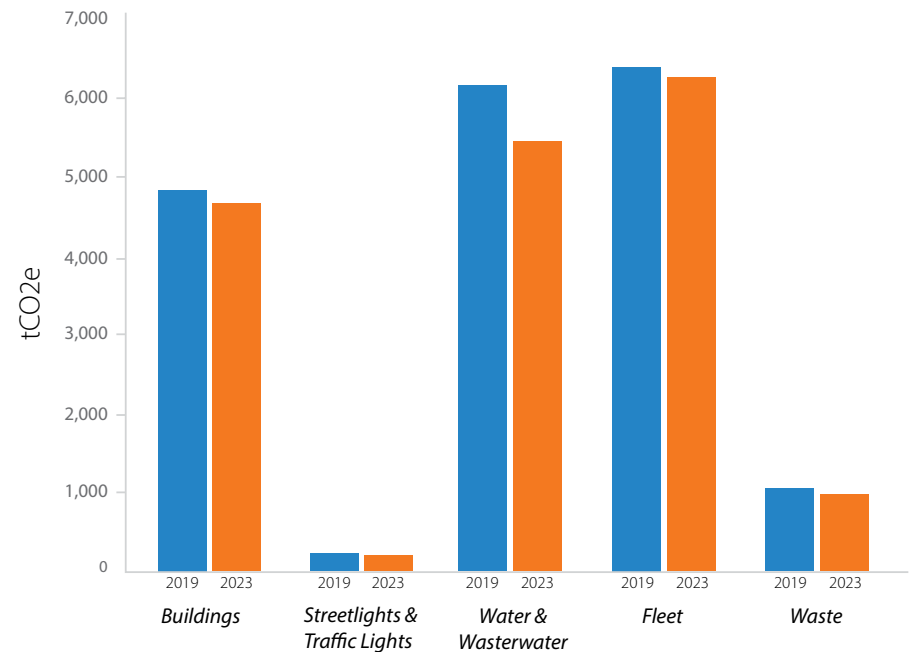
- reduced energy consumption by **8%**; and
- reduced greenhouse gas (GHG) emissions by **1,115 tonnes**.



A breakdown of emissions from 2019 to 2023 can be found in the figure on the right.

The Conservation and Demand Management Plan outlines several initiatives that will be implemented between 2024 and 2028 that will reduce energy consumption and subsequently emissions.

## Greenhouse Gas (GHG) Emissions Corporate - 2019 (baseline) vs 2023 (normalized)



**Data Normalization:** The process of adjusting data to a standard scale to allow for comparison.



The Region has an opportunity to do better and is currently developing a comprehensive greenhouse gas (GHG) emissions inventory which will include Scope 1, 2, and 3 emissions. This work will be completed with the support of Regional staff across departments and in alignment with global best practices.

The emissions update will be an ongoing process as technology, science, regulations, and policies progress.

Advancing a comprehensive emissions inventory also supports regulations that include Ontario Regulations 588/17 (Asset Management Planning for Municipal Infrastructure) and 25/23 (Broader Public Sector: Energy Reporting and Conservation Demand Management (CDM) Plans).

It is anticipated that the first iteration of this new inventory will be completed in 2025.



# Halton Region's Themes

The 2023-2026 Corporate Climate Action Plan is the strategic foundation for Halton Region's efforts to accelerate its climate response. It is structured around four key themes: Climate Ready, Climate Lens, Climate Finance, and Engagement and Advocacy. Each theme includes Halton's commitment to advancing climate actions and achieving the Region's Net Zero goal by 2045. This progress report tracks the progress of actions under each theme and progress of fulfilling the Region's climate commitments.

Many of the activities undertaken as part of the Region's climate action are multisolving - meaning they can address more than one action. This is highlighted in the tables in Appendix 1, that lists the 2024 activities and their alignment with the actions set out in the Corporate Climate Action Plan, further demonstrating the interconnected benefits of climate action work.



## Theme 1: Climate Ready

Climate Ready allows the Region to mitigate and adapt to the impacts of climate change, safeguarding corporate assets, and service deliverables. This theme advances greenhouse gas (GHG) emissions reduction efforts and ensures that the Region is planning, preparing and poised to respond to future climate impacts. To ensure a holistic approach to address the complexity of climate change, both mitigation and adaptation have been integrated within this theme.

### PROGRESS UPDATE OF ACTIONS:

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CR1	Incorporate climate change considerations into asset management planning	Increase the resiliency of corporate assets	<ul style="list-style-type: none"><li>Through completion of updates to Halton's 2021 Asset Management Plan and departmental Master Plans, adaptation strategies are being identified to reduce vulnerability in municipal infrastructure to climate hazards such as extreme temperatures, heavy rainfall, seasonal flooding, and freeze-thaw cycles.</li><li>Halton Region's Asset Management Policy is being updated.</li></ul>	2026

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CR2	Optimize building efficiencies	Reduce energy usage across corporate facilities	<ul style="list-style-type: none"> <li>The micro-hydro turbine at the Mid-Halton Wastewater Treatment Plant was upgraded, resulting in greenhouse gas (GHG) reductions of 19 tCO<sub>2</sub>e.</li> <li>A Consultant has been engaged to prepare detailed designs for optimizing operational efficiencies of the Halton Waste Management Site.</li> <li>A Buildings Action Table has been established as part of the Climate Action Response Team (CART) to support and coordinate building efficiency and optimization.</li> <li>In 2024, Halton Community Housing Corporation (HCHC) was awarded \$7 million from the Federal government (CMHC) to undertake energy efficiency measures, with an additional \$16.9 million committed by the Region through the annual capital budget. HCHC is currently on track to meet the goal of achieving a 25% reduction in greenhouse gas (GHG) emissions by the end of 2025 for its building portfolio through a series of sub projects on fuel switching and building optimization.</li> </ul>	2045
CR3	Advance greenhouse gas (GHG) emissions inventory and reduction efforts	Move forward with Council direction, the Partners for Climate Protection (PCP) program, and Strategic Business Plan	<ul style="list-style-type: none"> <li>The Region's greenhouse gas (GHG) emissions baseline inventory is being updated and will include Scope 1, 2, and 3 emissions. This will provide a more comprehensive and accurate inventory and support the Region's alignment with best practice for reporting.</li> <li>The Region updated its Conservation and Demand Management (CDM) Plan in 2024, in compliance with O.Reg.25/23. The CDM Plan outlines the Region's strategy for managing energy use to 2028 and reports on progress made between 2020-2024. Measures that have been implemented include lighting retrofits, HVAC upgrades, building automation systems, water heating improvements, window and building envelope upgrades, and various heat recovery and energy efficiency improvements.</li> </ul>	2045
CR4	Explore opportunities for greater efficiencies of water & wastewater treatment plants, facilities, and landfill site buildings and processes	Explore opportunities for greater efficiencies of wastewater/ water treatment plants, facilities, and landfill site	<ul style="list-style-type: none"> <li>Compactors and dozers used to bury the waste at the landfill sites were replaced with new equipment that allows operators to use GPS technology to more efficiently utilize space at the landfill.</li> <li>An Environmental Assessment is underway to determine the optimal location for a proposed facility that would process biosolids from the wastewater treatment plants into compost.</li> </ul>	2045

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
			<ul style="list-style-type: none"> <li>Through the Climate Action Response Team a Sewage Heat Recovery Subcommittee was established to develop a framework.</li> <li>Advanced Metering Infrastructure (AMI) upgrades to the Region's water meter system have been initiated. This new technology enhances water usage tracking, promotes conservation efforts, and eliminates the need for meter readers to drive through communities to collect data, reducing greenhouse gas (GHG) emissions. The pilot project in Burlington has successfully installed new water meters and radio transmitters at 280 homes and businesses. Similar pilots in Oakville, Milton, and Halton Hills are expected to be completed by 2026.</li> </ul>	
CR5	Measuring, tracking, monitoring, and mitigating greenhouse gas (GHG) emissions	Ensure the Region is making progress with its greenhouse gas (GHG) emissions reduction efforts	<ul style="list-style-type: none"> <li>A study is underway to assess opportunities and make recommendations to support mitigation of nitrous oxide (NOx) emissions at the Region's wastewater treatment plants. The data from this project will help refine Halton Region's greenhouse (GHG) emissions inventory and support future emission reduction strategies.</li> <li>In 2023, 100 tCO2e of greenhouse gas (GHG) emissions were reduced through lighting, control, and mechanical retrofits at various corporate and Halton Community Housing Corporation (HCHC) facilities.</li> </ul>	2045
CR6	Electrify (rightsizing) corporate fleet	Reduce greenhouse gas (GHG) emissions as a result of fuel usage	<ul style="list-style-type: none"> <li>Hybrid vehicle options have been included in recent tenders.</li> <li>An RFP has been issued to advance a Green Fleet Implementation Strategy.</li> </ul>	2040
CR7	Increase internal electric vehicle (EV) Infrastructure	Support the switch to electric vehicles (EV) for the Region's corporate fleet		2040
CR8	Advance a Regional electric vehicles (EV) strategy	Increase electric vehicles (EV) uptake across the Halton Community	<ul style="list-style-type: none"> <li>Not started.</li> </ul>	2040

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CR9	Conclude a renewable energy generation study	Explore reducing the Region's reliance on natural gas and electricity grids and ensure resiliency to climate impacts	<ul style="list-style-type: none"> <li>Advancing a renewable energy generation study to identify the most effective renewable energy solution for wastewater treatment plants. This study includes an evaluation of three alternative solar technologies—solar wall thermal systems, ground-mounted systems, and superstructures over wastewater tanks.</li> </ul>	2025
CR10	Establish climate change and health vulnerability assessments	Identify the top climate risks for Halton Region and the Halton Community	<ul style="list-style-type: none"> <li>The Climate Change and Health in Halton Region Report was completed to better understand the health risks associated with current and projected future climate change variability in the context of existing inequities and the unique sensitivities of Halton residents. The report covers seven key climate-related health impact categories of concern: extreme temperature; UV radiation; extreme weather; food- and water-borne illnesses; food systems and food security; air quality; and vector-borne disease. Public Health programs and policies that address current and projected health risk are also identified in the report.</li> </ul>	2024
CR11	Ensure Regional infrastructure and assets are resilient	Ensure that corporate services and assets can serve the Halton Community during extreme weather events	<ul style="list-style-type: none"> <li>An update of the Region's 20-year Forest Management Plan is currently in progress, led by local forestry consultant Williams &amp; Associates Forestry Consulting Ltd. The Plan is being completed in alignment with maintaining the Region's Forest Stewardship Council certification through the Eastern Ontario Model Forest's Forest Certification Program.</li> </ul>	2045
CR12	Update Regional Emergency Response Plan	Increase the Region's ability to respond to extreme weather events	<ul style="list-style-type: none"> <li>The Region's Emergency Management Program and Regional Emergency Response Plan was updated with an emphasis on climate change impacts. These updates will enhance the flexibility of the Region's emergency responses, ensuring that services are restored quickly and disruptions to residents and businesses are minimized under extreme weather events.</li> </ul>	2024

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
			<ul style="list-style-type: none"> <li>The Regional Hazard Identification and Risk Assessment (HIRA) has been updated to include a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of community capabilities. This assessment identifies key hazards faced by Halton Region including severe weather. Opportunities to further align the HIRA with Climate Action Response Team (CART) objectives is being explored.</li> </ul>	
CR13	Update Emergency Preparedness Actions	Maintain business continuity for Halton Region to ensure services and operations are functional during extreme weather events	<ul style="list-style-type: none"> <li>An Emergency Management Monitoring Tracker has been developed and is now operational, providing data on emergency events occurring in Halton Region.</li> <li>The newly formed Volunteer Severe Weather Watch Halton group has been trained and established, replacing the previous Halton CANWARN team.</li> </ul>	2025
CR14	Explore circular economy initiatives for applicability to the Region's services and operations	Increase efficiency and reduce waste	<ul style="list-style-type: none"> <li>Plans are underway to transition the Waste Diversion Fund into a Community Circular Economy Fund, broadening the scope of the current funding program for non-profit organizations that operate reuse programs to include circular economy initiatives. A proposal is being presented to the Council for approval in Q4 2024.</li> <li>A mattress recycling program is being researched to evaluate its costs. This program aims to recycle and repurpose the materials used in mattresses, further supporting the principles of the circular economy.</li> </ul>	2040
CR15	Fuel switching	Decrease greenhouse gas (GHG) emissions	<ul style="list-style-type: none"> <li>Electrical and structural assessments have been completed for nine regional facilities. Solar photovoltaic (PV) panels will be installed as part of scheduled roof replacements. Design work will begin in Q4 2024, with construction planned for 2025.</li> <li>The use of solar photovoltaic (PV) systems and battery energy storage is being explored to reduce greenhouse gas (GHG) emissions from energy use at water and wastewater facilities.</li> <li>The inclusion of requirements for alternative fuel sources in the next waste collection contract has been endorsed by Regional Council, as outlined in report PW-14-24. This initiative aims to reduce greenhouse gas emissions in the Region's contracted waste management vehicles by integrating cleaner fuel options.</li> </ul>	2040

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CR16	Update Regional Community Emergency Notification System	Ensure Halton residents are notified of imminent or ongoing extreme weather events	<ul style="list-style-type: none"> <li>This action has been addressed through upgrades and improvements to the Federal Alert Ready public emergency notification system.</li> </ul>	N/A

## Theme 2: Climate Lens

A climate lens provides a pathway to integrate climate change considerations, impacts, risks, and vulnerabilities into all decisions, reports, policies, and initiatives. By operationalizing climate change into processes, the Region will be poised to create better climate solutions and encourage behavioral change across the organization. The Region's interpretation of a climate lens builds upon this definition by recognizing that inequalities exist in climate action. The inclusion of Equity, Diversity, and Inclusion (EDI) efforts and the incorporation of Indigenous Knowledge will elevate a deeper understanding of climate change across Regional staff, departments and divisions.

### PROGRESS UPDATE OF ACTIONS:

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CL1	Explore establishing Climate Considerations into all Council Reports	Currently, many other municipalities and Regions include a climate considerations component in their Council reports, including Burlington, Halton Hills and Oakville.	<ul style="list-style-type: none"> <li>Not started.</li> </ul>	2028
CL2	Explore Climate considerations to be incorporated into internal policies and reports	It is recommended Halton aligns with current practice and ensures that climate impacts, risks, and vulnerabilities are considered as part of the decision making process	<ul style="list-style-type: none"> <li>A review of the Region's climate related policies and benchmarking was initiated in 2024 and will continue into 2025 to determine needs and next steps.</li> <li>A number of presentations, external meetings, and educational activities have engaged key regional staff to support knowledge mobilization around the evaluation and integration of an Environmental, Social, and Governance (ESG) lens to enhance reporting mechanisms, ensuring alignment with broader sustainability and corporate responsibility goals.</li> </ul>	2028

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CL3	Explore the use of a project tracker to measure, track, report and communicate Regional climate change work	Mechanism for the Region to monitor progress and effectively communicate its climate change work	<ul style="list-style-type: none"> <li>A Climate Dashboard Subcommittee was established as part of the Climate Actions Response Team (CART) to explore the procurement of a Climate Dashboard. A Dashboard has now been approved and implementation has been initiated.</li> </ul>	2025
CL4	Integrate Equity, Diversity, and Inclusion (EDI) into climate change efforts	Ensure equity across the Region's climate change initiatives	<ul style="list-style-type: none"> <li>A briefing note has been completed to address the implications of Bill C-226 and its focus on climate equity.</li> <li>An EDI lens was included as part of the Climate Change and Health in Halton Region Report.</li> </ul>	2026
CL5	Incorporate Indigenous Knowledge into climate change efforts	Elevate a deeper understanding of climate change	<ul style="list-style-type: none"> <li>Interactive and nature-based learning activities were organized for the Mississaugas of the Credit First Nation (MCFN) camp day on August 21. These activities aimed to foster a deeper connection to nature, promote environmental stewardship, and support Indigenous knowledge-sharing.</li> <li>Regional climate staff provided a Climate workshop to members of the Mississaugas of the Credit First Nation.</li> <li>As part of Earth Week events in 2024, a webinar featuring climate change champion, renowned Inuit leader, author and nobel prize nominee Sheila Watt-Cloutier was held for Regional staff.</li> </ul>	2026



### Theme 3: Climate Finance

Respected organizations such as the [Chartered Professional Accountants of Canada](#) note the importance of involving finance professionals in preparing for climate change. Additionally, [Moody's](#), a major financial risk assessment agency, supports the critical role of climate finance in making better, faster decisions to support an organization's bottom line. Halton Region has a long standing commitment to financial stability and a reputation for prudent management. A focus on climate finance supports the means to ensure credible forecasting and increment preparation and sets the Region up to benefit from partnerships, external funding sources and investments.



## PROGRESS UPDATE OF ACTIONS:

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CF1	Explore the advancement of a carbon budget, offering a data driven approach to understanding our greenhouse gas (GHG) emissions based on recognized accounting principles	Supports Halton Region advance climate change initiatives and targets	<ul style="list-style-type: none"> <li>A finance white paper has been completed for Regional staff to support knowledge mobilization on key topics, including financing climate action, greenhouse gas (GHG) emissions accounting, offset credits, and carbon budget.</li> </ul>	2028
CF2	Explore the use of the Task Force on Climate Related Financial Disclosures (TCFD)	Provide Halton Region with a standardized and transparent framework to assess and communicate the impacts of climate related risks and opportunities. It proactively sets the Region up for potential regulatory disclosure requirements as well as access to significant funding opportunities that require Task Force on Climate Related Financial Disclosures (TCFD)	<ul style="list-style-type: none"> <li>A Climate Finance Subcommittee has been established as part of the Climate Action Response Team (CART) to advance the planning and implementation of a carbon budget and developing a transparent climate disclosure framework.</li> <li>An Offset Credits Subcommittee was established as part of the Climate Action Response Team (CART) to develop a Climate Offset Credit Framework that would provide high level guidance on navigating the Region's use of Offset credits. The Framework is pending approval.</li> </ul>	2026

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
CF3	Explore alignment with Moody's climate change recommendations	<p>Supports the Region in ensuring that the Region's credit rating accounts for climate change risks.</p> <p>Supports Halton Region to determine financial quantification of climate risks and their impact on the Region's credit rating</p>	<ul style="list-style-type: none"> <li>• A review and tracking of Regional investments in climate action has been developed.</li> <li>• A review and tracking of external funding opportunities for climate action has been developed.</li> <li>• A number of presentations, external meetings, and educational activities have engaged key Regional staff to support knowledge mobilization around the alignment of climate and financial interests.</li> </ul>	2026
CF4	Establish a green procurement policy	To reduce Halton's greenhouse gas (GHG) emissions, support climate friendly options for products and services, and encourage innovation	<ul style="list-style-type: none"> <li>• A green procurement policy is currently under review to determine next steps with a target to implement by 2025.</li> <li>• Regional staff are in regular communication with other municipalities on their sustainability and climate related purchasing policies as well as participating in communities of practice.</li> </ul>	2025

## Theme 4: Engagement and Advocacy

Engagement and Advocacy builds Regional capacity to increase climate literacy, knowledge mobilization, broker partnerships, reinforce mutually beneficial activities, and strengthen corporate climate action.

## PROGRESS UPDATE OF ACTIONS:

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
EA1	Advance partnerships that align with Regional climate change initiatives	Advance collective synergies and opportunities that will reinforce mutually beneficial work	<ul style="list-style-type: none"> <li>An Adaptation Table has been established through the Climate Action Response Team (CART) to coordinate departmental efforts, create efficiencies in resources and data sharing, support external funding opportunities and advance adaptation and resiliency actions for the Region’s assets, services and operations.</li> </ul>	2045
EA2	Work with local municipalities to ensure alignment and mutually reinforcing activities	Ensure there is no duplication of work and elevate the work already being done	<ul style="list-style-type: none"> <li>Severe Weather Workshop featuring a speaker from Climate Environment and Climate Change Canada was hosted in July 2024 for Regional staff and partners. The session provided a greater understanding of extreme weather events and necessary precautionary measures in a changing climate.</li> </ul>	2045
EA3	Work with diverse stakeholders to deepen climate action	Collaboration will help advance climate change work across the region	<ul style="list-style-type: none"> <li>Regional staff actively participate in knowledge exchange, information sharing and communities of practice on climate-related initiatives for public services, including water and wastewater treatment. This is facilitated through representation in key industry organizations such as the Regional Public Works Commissioners of Ontario (RPWCO), the Water Environmental Association of Ontario (WEAO), and the Ontario Water Works Association (OWWA).</li> </ul>	2045
EA4	Develop a corporate climate change communication strategy	Clearly communicate work to Regional staff and the Halton Community	<ul style="list-style-type: none"> <li>A climate communications workplan is developed annually and includes the development and management of an internal and an external website. The advancement of a climate communications strategy is being explored in 2025.</li> </ul>	2026

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
EA5	Provide climate change training opportunities	Increasing climate change literacy will create climate change leaders to advance climate change work	<ul style="list-style-type: none"> <li>A climate training program for Regional staff is currently under development with an anticipated roll out in 2025.</li> <li>Advanced best practices for climate action through staff participation in conferences, courses and webinars, including those organized by Federation of Canadian Municipalities (FCM), Green Municipal Fund (GMF), Local Governments for Sustainability (ICLEI), Six Nations of the Grand River, and Evergreen.</li> <li>Staff conducted research and participated in continuous learning opportunities to ensure the Region remains up to date on the rapidly evolving field of climate actions including trends, knowledge, technology, regulations and policies and financial considerations.</li> </ul>	2025
EA6	Outreach and engagement to foster climate knowledge		<ul style="list-style-type: none"> <li>Earth Week (April) was celebrated at Halton Region with two events – an Electric Vehicle showcase and panel, featuring staff owned vehicles and a webinar featuring Sheila Watt-Cloutier, a renowned Inuit author and nobel prize nominee.</li> </ul>	2045
EA7	Create experiential opportunities to deepen learning		<ul style="list-style-type: none"> <li>The "50 Trees for 50 Years" event held on September 19 celebrated the Region's 50th anniversary and incorporated the planting of 50 trees sourced from Kayanase Greenhouse, a restoration and native plant business led by members of the Six Nations of the Grand River. Councillor Fawn Sault of the Mississaugas of the Credit First Nation attended the event and a commemorative plaque in English, Anishinaabemowin/Ojibwe and Haudenosaunee/Mohawk was installed at Halton Regional Centre (HRC) to mark the occasion.</li> </ul>	2045
EA8	Knowledge mobilization to increase climate literacy		<ul style="list-style-type: none"> <li>5 white papers, 29 briefing notes, 3 rationale documents and 3 business cases were developed by staff to advance knowledge mobilization on climate related issues of relevance to the corporation.</li> <li>The Compendium, an internal searchable database was developed and is currently being updated for Climate Action Response Team (CART) members. It provides curated, Regionally-topical information for staff to keep abreast of current trends, information, best management practices, regulations and policies and technology related to climate.</li> <li>A range of targeted communications and outreach efforts have been implemented to promote Lyme disease and other tick-borne disease awareness: subscription e-newsletter for physicians was distributed in May 2024; an E-fax was sent to all Halton physicians on tick-borne diseases in May 2024; a follow-up E-fax was sent to Halton pharmacists on Lyme disease in July 2024; and a continuing medical education (CME) event was held in June 2024.</li> </ul>	2045

#	ACTIONS	PURPOSE	2024 PROGRESS	TIMELINE
EA9	Emergency preparedness actions	Help the Halton Community understand measures they can take to protect themselves from climate change risks and impacts	<ul style="list-style-type: none"> <li>The Enhanced Basement Flooding Prevention Subsidy Program was launched. This program provides residents with financial assistance for home improvements that reduce flood risk, including downspout disconnection, weeping tile disconnection and sump pump installation, backwater valve installation, and sewer lateral lining and repair.</li> <li>A Emergency Preparedness Public Education materials are being updated to enhance public understanding of severe weather events and clarify the key responsibilities of residents and businesses in preparing for and responding to emergencies.</li> </ul>	2026



## Moving Forward

The need for accelerated action is clear. Halton Region remains committed to combating climate change and transitioning to a resilient, low-carbon future. The Climate Action Response Team will continue to act as the Region's climate change implementation body; ensuring the implementation of the Corporate Climate Action Plan through its various committees, subcommittees, and action tables. This implementation will evolve over time, with Subcommittees and Action tables being retired and new ones being enacted. This will support the Region in increasing the Corporation's resiliency and achieving its target of Net Zero by 2045.

The Region is optimistic as it faces the global challenge of climate change and as it advances towards the path of a strong, healthy, and resilient corporation that is equitable, diverse, and inclusive.

# Glossary

**Adaptation:** Preparation and adjustment in natural or human systems to reduce the negative impacts of a changing climate, which moderates, harms, or takes advantage of beneficial opportunities.

**Adaptive Capacity:** The ability of a system to adjust to the effects or impacts of climate change while mitigating potential damages, taking advantage of opportunities, or coping/responding to consequences. <sup>1</sup>

**Carbon Budget:** The cumulative amount of carbon dioxide (CO<sub>2</sub>) emissions allowed over a period of time while remaining within a certain temperature threshold. Exceeding this limit will result in higher temperatures. <sup>2</sup>

**Carbon Dioxide (CO<sub>2</sub>):** A naturally occurring, heat-trapping gas that is a by-product of burning fossil fuels and biomass, and is released from other human activities such as land-use changes, deforestation, and other industrial processes. <sup>1</sup>

**Carbon Footprint:** The total greenhouse gas (GHG) emissions that are released into the atmosphere each year caused by an individual, family, organization, company, event, or service. <sup>1</sup>

**Carbon Pricing:** A fee placed on emitting carbon and/or an incentive that is offered for emitting less carbon. <sup>3</sup>

**Carbon Sequestration:** The process of capturing and removing carbon from the atmosphere and storing it in a reservoir. Terrestrial or biological carbon sequestration is where plants and trees absorb carbon dioxide, release the oxygen, and store the carbon. <sup>1</sup>

**Climate:** The long term and average weather conditions for a specific area. <sup>1</sup>

**Climate Action Response Team (CART):** Established in September 2022, this was the initial cross departmental team whose function was to support and drive the development of the Region's Corporate Climate Action Plan.

**Climate Action Response Team (CART) Implementation Body:** Established as part of the 2023-2026 Halton Corporate Climate Action Plan, this entity is comprised of members from across the corporation and will be responsible for driving the implementation of the Corporate Climate Action Plan.

**Climate Equity:** Ensures everyone, regardless of income, race and other characteristics receives a just distribution of environmental benefits and climate protection while simultaneously removing unequal burdens. <sup>4</sup>

**Climate Change:** The long term changes in current climatic conditions such as temperature, wind patterns and/or precipitation. <sup>1</sup>

**Climate Change Response and Sustainability Team (CCRST):** Regional staff team under Strategic Initiatives and Government Relations responsible for coordinating the metrics and annual reporting of the 2023-2026 Halton Corporate Climate Plan to Council and the public, with the support of CART.

<sup>1</sup> [Glossary of Climate Change Terms | Climate Change | US EPA](#)

<sup>2</sup> [Carbon Budget Explained - Carbon Tracker Initiative](#)

<sup>3</sup> [About Carbon Pricing – United Nations Climate Change](#)

<sup>4</sup> [Defining Climate Equity | Louisiana Government; Climate Equity | UCLA Luskin Center for Innovation](#)

**Climate Justice:** Acknowledges that the impacts of climate change are greater on low-income communities, communities of colour and immigrant communities who are the least responsible for climate change emissions around the world.<sup>5</sup>

**Climate Literacy:** An understanding of human influence on climate and the influence of climate on human systems and society.<sup>6</sup>

**Climate Ready:** Actions under this theme will allow Halton Region to mitigate and adapt to the impacts of climate change, safeguarding corporate assets and service deliverables.

**Data Normalization:** The process of adjusting data to a standard scale to allow for comparison.

**Decarbonization:** The process of reducing carbon dioxide emissions to achieve a lower output of greenhouse gases into the atmosphere.<sup>7</sup>

**Ecological Mismatch:** Ecological mismatch is a concept that refers to the consequences of climate change to the natural environment. It occurs when the timing of natural events, such as the blooming of plants or the migration of animals, is disrupted by changes in the environment. This can cause problems for species that rely on these events to survive and reproduce.<sup>8</sup>

**Electric Vehicle (EV):** Contain a battery instead of a gasoline tank, and have an electric motor instead of an internal combustion engine.<sup>9</sup>

**Electric Vehicle (EV) Infrastructure:** Charging equipment for electric vehicles including public and private charging stations.<sup>10</sup>

<sup>5</sup> [What is Climate Justice? | University of California Center for Climate Justice; Climate Justice | MIT Climate Portal](#)

<sup>6</sup> [What is Climate Literacy? – Georgia State University](#)

<sup>7</sup> [What is Decarbonisation? - TWI](#)

<sup>8</sup> <https://naturalresources.anthro-seminars.net/concepts/ecological-concept-ecological-mismatch/>

**Emissions:** The release of greenhouse gases (GHG) into the Earth's atmosphere.<sup>1</sup>

**Emissions Baseline Year:** A reference point in time against which future emission reductions are calculated.<sup>11</sup>

**Federation of Canadian Municipalities (FCM):** An advocacy group bringing together around 2,000 municipalities across Canada.<sup>12</sup>

**Fleet Rightsizing:** A management practice used to build and maintain a vehicle inventory that reduces emissions without compromising fleet activities.<sup>13</sup>

**Fossil Fuel:** Comes from decomposing plants and animals that have been turned into crude oil, coal, natural gas, or heavy oils. This occurs from the exposure to heat and pressure in the earth's crust over hundreds of millions of years.<sup>1</sup>

**Fuel Switching:** Changing from one type of fuel source to another.<sup>1</sup>

**Global Average Temperature:** The Earth's mean surface air temperature averaged over the entire planet.<sup>1</sup>

**Global Warming:** The global average increase in the Earth's surface temperature.<sup>1</sup>

**Greenhouse Effect:** The trapping of the sun's heat by gases in the Earth's atmosphere near the surface.<sup>1</sup>

<sup>9</sup> [Explaining Electric & Plug-In Hybrid Electric Vehicles - EPA](#)

<sup>10</sup> [Developing Infrastructure to Charge Electric Vehicles – U.S. Department of Energy](#)

<sup>11</sup> [What is a Baseline Year and Why Does it Matter? – Climate Council](#)

<sup>12</sup> [About FCM - FCM](#)

<sup>13</sup> [Rightizing Your Vehicle Fleet to Conserve Fuel – U.S. Department of Energy](#)

**Greenhouse Gas (GHG):** The atmospheric gases responsible for causing climate change. The major greenhouse gases (GHG) are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Less prevalent, but very powerful greenhouse gases (GHG) include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).<sup>1</sup>

**Greenhouse Gas (GHG) Inventory:** An estimate of greenhouse gas (GHG) emissions within a defined boundary in a given year. Sources of greenhouse gas (GHG) emissions can include transportation, residential and commercial energy, wastewater treatment, and the decomposition of solid waste.<sup>14</sup>

**Halton Climate Collective (HCC):** Comprised of environmental leaders from the greater Halton area, the Halton Climate Collective looks to lead the effort of transforming to a more climate resilient, low carbon communities.<sup>15</sup>

**Halton Environmental Network (HEN):** A non-profit organization that educates and builds awareness in the community in the hopes of propelling climate action and sustainability.<sup>16</sup>

**Heat Waves:** Lengthy time periods in which excessive heat and high humidity values are seen.<sup>1</sup>

**Indigenous Knowledge:** Refers to the unique cultures, languages, values, histories, governance and legal systems of Indigenous Peoples.<sup>17</sup>

**Key Performance Indicators (KPIs):** Quantifiable indicators used to set targets and track progress towards an intended result.<sup>18</sup>

<sup>14</sup> [Greenhouse gas inventories | Indiana University](#)

<sup>15</sup> [Our Mission – Halton Climate Collective](#)

<sup>16</sup> [About Us | Halton Environmental Network | Quality of Life for all Living Things \(haltonenvironet.ca\)](#)

**Knowledge Mobilization:** Knowledge Mobilization occurs when research knowledge is applied to help facilitate real-world impact on policy and society. It is the process of adapting knowledge to increase research uptake and inform decisions.<sup>19</sup>

**Mitigation:** Relates to strategies and programs that aim to reduce greenhouse gas (GHG) emissions and the impact that humans have on the environment.<sup>1</sup>

**Natural Gas:** Underground deposits of gas mainly consisting of methane that is used as fuel.<sup>1</sup>

**Partners for Climate Protection (PCP):** A joint venture of ICLEI and the Federation of Canadian Municipalities, the Partners for Climate Protection program helps municipalities reduce emissions by providing a five step framework to plan the journey.<sup>20</sup>

**Renewable Energy:** Sources of energy that replenish naturally such as solar, wind, geothermal, hydro, and biomass.<sup>1</sup>

**Resilience:** The capability to have minimum damage to the environment, social wellbeing, and the economy from multi hazard threats. This is achieved through anticipation, preparation, and recovery planning.<sup>1</sup>

**Strategic Business Plan (SBP):** Halton Region's Strategic Business Plan sets the strategic direction and priorities for Council's four-year term of office. Through Halton's Strategic Business Plan (2023-2026), Climate is identified as a key pillar.<sup>21</sup>

<sup>17</sup> [Indigenous Knowledge – Canada.ca](#)

<sup>18</sup> [What is a Key Performance Indicator \(KPI\)? \(kpi.org\)](#)

<sup>19</sup> <https://www.torontomu.ca/research/resources/km/>

<sup>20</sup> [About - Partners for Climate Protection \(pcp-ppc.ca\)](#)

<sup>21</sup> [Strategic Planning for 2023-2026 – Halton Region](#)



**Sustainable Development Goals (SDGs):** An integrated set of 17 goals adopted by the United Nations in 2015 recognizing that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.<sup>22</sup>

**Task Force on Climate-Related Financial Disclosures (TCFD):** The TCFD reports on the impact that an organization has on the global climate by streamlining information to make it easier to compare with. This clearer information will help organizations incorporate climate risks into decision making processes.<sup>23</sup>

**Vector-borne disease:** Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors. Vectors are living organisms that can transmit infectious pathogens between humans, or from animals to humans.<sup>24</sup>

**Vulnerability:** Vulnerability is dependent on magnitude, sensitivity, and adaptive capacity and relates to a system's susceptibility and ability to cope with climate events/variations.<sup>1</sup>



<sup>22</sup> [Sustainable Development Goals | United Nations Development Programme \(undp.org\)](https://www.undp.org/sustainable-development-goals)


<sup>23</sup> [What is the TCFD and why does it matter? \(deloitte.com\)](https://www.deloitte.com/what-is-the-tcfd-and-why-does-it-matter/)




<sup>24</sup> <https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>

# APPENDIX 1: PROGRESS 2024 – ACTION CROSS-ALIGNMENT

Many of the Region’s climate action initiatives serve to fulfill more than one of the Actions outlined in the Corporate Climate Action Plan. To demonstrate the cross-cutting nature of the actions and the multiple benefits that they deliver, the following table highlights each of the initiatives completed in 2024 and the actions they intersect with.

## Corporate Climate Action Plan: Actions

THEME	#	ACTIONS
 <b>CLIMATE READY</b>	CR1	Incorporate climate change considerations into asset management planning
	CR2	Optimize building efficiencies
	CR3	Advance greenhouse gas (GHG) emissions inventory and reduction efforts
	CR4	Explore opportunities for greater efficiencies of water & wastewater treatment plants, facilities, and landfill site buildings and processes
	CR5	Measuring, tracking, monitoring, and mitigating greenhouse gas (GHG) emissions
	CR6	Electrify (rightsizing) corporate fleet
	CR7	Increase internal electric vehicle (EV) Infrastructure
	CR8	Advance a Regional electric vehicles (EV) strategy
	CR9	Conclude a renewable energy generation study
	CR10	Establish climate change and health vulnerability assessments
	CR11	Ensure Regional infrastructure and assets are resilient
	CR12	Update Regional Emergency Response Plan

THEME	#	ACTIONS
	CR13	Update Emergency Preparedness Actions
	CR14	Explore circular economy initiatives for applicability to the Region's services and operations
	CR15	Fuel switching
	CR16	Update Regional Community Emergency Notification System
 <b>CLIMATE LENS</b>	CL1	Explore establishing Climate Considerations into all Council Reports
	CL2	Explore Climate considerations to be incorporated into internal policies and reports
	CL3	Explore the use of a project tracker to measure, track, report and communicate Regional climate change work
	CL4	Integrate Equity, Diversity, and Inclusion (EDI) into climate change efforts
	CL5	Incorporate Indigenous Knowledge into climate change efforts
 <b>CLIMATE FINANCE</b>	CF1	Explore the advancement of a carbon budget, offering a data driven approach to understanding our greenhouse gas (GHG) emissions based on recognized accounting principles
	CF2	Explore the use of the Task Force on Climate Related Financial Disclosures (TCFD)
	CF3	Explore alignment with Moody's climate change recommendations
	CF4	Establish a green procurement policy
 <b>ENGAGEMENT AND ADVOCACY</b>	EA1	Advance partnerships that align with Regional climate change initiatives
	EA2	Work with local municipalities to ensure alignment and mutually reinforcing activities
	EA3	Work with diverse stakeholders to deepen climate action
	EA4	Develop a corporate climate change communication strategy

THEME	#	ACTIONS
	EA5	Provide climate change training opportunities
	EA6	Outreach and engagement to foster climate knowledge
	EA7	Create experiential opportunities to deepen learning
	EA8	Knowledge mobilization to increase climate literacy
	EA9	Emergency preparedness actions

## Corporate Climate Action Plan: 2024 Initiatives

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
The Climate Change and Health in Halton Region Report was completed to better understand the health risks associated with current and projected future climate change variability in the context of existing inequities and the unique sensitivities of Halton residents.	CR1; CR11
Halton Region's Asset Management Policy is being updated.	CR1; CR11
A Buildings Action Table has been established as part of the Climate Action Response Team (CART) to support and coordinate building efficiency and optimization.	CR2; CR4; CR15
An RFP has been issued to advance a Green Fleet Implementation Strategy.	CR6; CR7
An Adaptation Table has been established through the Climate Action Response Team (CART) to coordinate departmental efforts, create efficiencies in resources and data sharing, support external funding opportunities and advance adaptation and resiliency actions for the Region's assets, services and operations.	CR11; CR13; CR14; EA1; EA5; EA6; EA8; EA9;

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
In 2023, 100 tCO <sub>2</sub> e of greenhouse gas (GHG) emissions were reduced through lighting, control, and mechanical retrofits at various corporate and Halton Community Housing Corporation (HCHC) facilities.	CR2, CR3, CR5
The Region updated its Conservation and Demand Management (CDM) Plan in 2024, in compliance with O.Reg.25/23. The CDM Plan outlines the Region's strategy for managing energy use to 2028 and reports on progress made between 2020-2024. Measures that have been implemented include lighting retrofits, HVAC upgrades, building automation systems, water heating improvements, window and building envelope upgrades, and various heat recovery and energy efficiency improvements.	CR2; CR3; CR4; CR5; CR6; CR7; CR15
A study is underway to assess opportunities and make recommendations to support mitigation of nitrous oxide (NO <sub>x</sub> ) emissions at the Region's wastewater treatment plants. The data from this project will help refine Halton Region's greenhouse gas (GHG) emissions inventory and support future emission reduction strategies.	CR4; CR5
The micro-hydro turbine at the Mid-Halton Wastewater Treatment Plant was upgraded, resulting in greenhouse gas (GHG) reductions of 19 tCO <sub>2</sub> e.	CR2; CR4
Compactors and dozers used to bury the waste at the landfill sites were replaced with new equipment that allows operators to use GPS technology to more efficiently utilize space at the landfill.	CR4
A Consultant has been engaged to prepare detailed designs for optimizing operational efficiencies of the Halton Waste Management Site.	CR2; CR4
The use of solar photovoltaic (PV) systems and battery energy storage is being explored to reduce greenhouse (GHG) emissions from energy use at water and wastewater facilities.	CR4; CR9; CR15
Electrical and structural assessments have been completed for nine regional facilities. Solar photovoltaic (PV) panels will be installed as part of scheduled roof replacements, with a pilot project at the Mid-Halton Wastewater Treatment Plant. Design work will begin in Q4 2024, with construction planned for 2025.	CR4; CR9; CR16
An Environmental Assessment is underway to determine the optimal location for a proposed facility that would process biosolids from the wastewater treatment plants into compost.	CR4

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
The Region's greenhouse gas (GHG) emissions baseline inventory is being updated and will include Scope 1, 2, and 3 emissions. This will provide a more comprehensive and accurate inventory and support the Region's alignment with best practice for reporting.	CR3; CR5
Hybrid vehicle options have been included in recent tenders.	CR7
Advancing a renewable energy generation study to identify the most effective renewable energy solution for wastewater treatment plants. This study includes an evaluation of three alternative solar technologies—solar wall thermal systems, ground-mounted systems, and superstructures over wastewater tanks.	CR4; CR9; CR15
The Climate Change and Health in Halton Region Report was completed to better understand the health risks associated with current and projected future climate change variability in the context of existing inequities and the unique sensitivities of Halton residents. The report covers seven key climate-related health impact categories of concern: extreme temperature; UV radiation; extreme weather; food- and water-borne illnesses; food systems and food security; air quality; and vector-borne disease. Public Health programs and policies that address current and projected health risk are also identified in the report. Highlight reports that provide a high-level overview of these impact categories, will be posted on halton.ca.	CR10; CL4
Advanced Metering Infrastructure (AMI) upgrades to the Region's water meter system have been initiated. This new technology enhances water usage tracking, promotes conservation efforts, and eliminates the need for meter readers to drive through communities to collect data, reducing greenhouse gas (GHG) emissions. The pilot project in Burlington has successfully installed new water meters and radio transmitters at 280 homes and businesses. Similar pilots in Oakville, Milton, and Halton Hills are expected to be completed by 2026.	CR3, CR4; CR5
The Enhanced Basement Flooding Prevention Subsidy Program was launched. This program provides residents with financial assistance for home improvements that reduce flood risk, including downspout disconnection, weeping tile disconnection and sump pump installation, backwater valve installation, and sewer lateral lining and repair.	EA9
The Region's Emergency Management Program and Regional Emergency Response Plan was updated with an emphasis on climate change impacts. These updates will enhance the flexibility of the Region's emergency responses, ensuring that services are restored quickly and disruptions to residents and businesses are minimized under extreme weather events.	CR12; CR13
An Emergency Management Monitoring Tracker has been developed and is now operational, providing data on emergency events occurring in Halton Region.	CR12; CR13

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
A Severe Weather Workshop featuring a speaker from Climate Environment and Climate Change Canada was hosted in July 2024 for Regional staff and partners. The session provided a greater understanding of extreme weather events and necessary precautionary measures in a changing climate.	CR13; EA2; EA5; EA8; EA9
The newly formed Volunteer Severe Weather Watch Halton group has been trained and established, replacing the previous Halton CANWARN team.	CR13; EA1; EA3
The Regional Hazard Identification and Risk Assessment (HIRA) has been updated to include a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of community capabilities. This assessment identifies key hazards faced by Halton Region including severe weather. Opportunities to further align the HIRA with Climate Action Response Team (CART) objectives is being explored.	CR12; CR13
Emergency Preparedness Public Education materials are being updated to enhance public understanding of severe weather events and clarify the key responsibilities of residents and businesses in preparing for and responding to emergencies.	CR12; CR13; EA8
Plans are underway to transition the Waste Diversion Fund into a Community Circular Economy Fund, broadening the scope of the current funding program for non-profit organizations that operate reuse programs to include circular economy initiatives. A proposal is being presented to the Council for approval in Q4 2024.	CR14
A mattress recycling program is being researched to evaluate its costs. This program aims to recycle and repurpose the materials used in mattresses, further supporting the principles of the circular economy.	CR14
In 2024, Halton Community Housing Corporation (HCHC) was awarded \$7 million from the Federal government (CMHC) to undertake energy efficiency measures, with an additional \$16.9 million committed by the Region through the annual capital budget. HCHC is currently on track to meet the goal of achieving a 25% reduction in greenhouse gas (GHG) emissions by the end of 2025 for its building portfolio through a series of sub projects on fuel switching and building optimization.	CR2; CR3; CR5; CR15
The inclusion of requirements for alternative fuel sources in the next waste collection contract has been endorsed by Regional Council, as outlined in report PW-14-24. This initiative aims to reduce greenhouse gas emissions in the Region's contracted waste management vehicles by integrating cleaner fuel options.	CR3; CR4; CR15

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
An update of the Region's 20-year Forest Management Plan is currently in progress, led by local forestry consultant Williams & Associates Forestry Consulting Ltd. The Plan is being completed in alignment with maintaining the Region's Forest Stewardship Council certification through the Eastern Ontario Model Forest's Forest Certification Program.	CR11
A review of the Region's climate related policies and benchmarking was initiated in 2024 and will continue into 2025 to determine needs and next steps.	CL2
A Climate Dashboard Subcommittee was established as part of the Climate Actions Response Team (CART) to explore the procurement of a Climate Dashboard. A Dashboard has now been approved and implementation has been initiated.	CR3; CR5; CL3
A briefing note has been completed to address the implications of Bill C-226 and its focus on climate equity.	CL4; EA8
An EDI lens was included as part of the Climate Change and Health in Halton Region Report.	CR10; CL4
The "50 Trees for 50 Years" event held on September 19 celebrated the Region's 50th anniversary and incorporated the planting of 50 trees sourced from Kayanase Greenhouse, a restoration and native plant business led by members of the Six Nations of the Grand River. Councillor Fawn Sault of the Mississaugas of the Credit First Nation attended the event and a commemorative plaque in English, Anishinaabemowin/Ojibwe and Haudenosaunee/Mohawk was installed at Halton Regional Centre (HRC) to mark the occasion.	CL5; EA1; EA3; EA6; EA7; EA8
Interactive and nature-based learning activities were organized for the Mississaugas of the Credit First Nation (MCFN) camp day on August 21. These activities aimed to foster a deeper connection to nature, promote environmental stewardship, and support Indigenous knowledge-sharing.	CL5; EA1; EA3; EA6; EA7; EA8
Regional climate staff provided a Climate workshop to members of the Mississaugas of the Credit First Nation.	CL5; EA1; EA3; EA5; EA6
As part of Earth Week events in 2024, a webinar featuring climate change champion, renowned Inuit leader, author and nobel prize nominee Sheila Watt Cloutier was held for Regional staff.	CL5; EA6; EA8
A finance white paper has been completed for Regional staff to support knowledge mobilization on key topics, including financing climate action, greenhouse gas (GHG) emissions accounting, offset credits, and carbon budget.	CF1; CF2; CF3; EA8



2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
A Climate Finance Subcommittee has been established as part of the Climate Actions Response Team (CART) to advance the planning and implementation of a carbon budget and developing a transparent climate disclosure framework.	CF1; CF2; CF3
A review and tracking of Regional investments in climate action has been developed.	CF3
A review and tracking of external funding opportunities for climate action has been developed.	CF3
A number of presentations, external meetings, and educational activities have engaged key Regional staff to support knowledge mobilization around the alignment of climate and financial interests.	CF1; CF3; EA6; EA8
A number of presentations, external meetings, and educational activities have engaged key Regional staff to support knowledge mobilization around the evaluation and integration of an Environmental, Social, and Governance (ESG) lens to enhance reporting mechanisms, ensuring alignment with broader sustainability and corporate responsibility goals.	CL2; CF2; CF3; EA6; EA8
A green procurement policy is currently under review to determine next steps with a target to implement by 2025.	CF4
Regional staff are in regular communication with other municipalities on their sustainability and climate related purchasing policies as well as participating in communities of practice.	CF4; EA2; EA3; EA6
An Offset Credits Subcommittee was established as part of the Climate Action Response Team (CART) to develop a Climate Offset Credit Framework that would provide high level guidance on navigating the Region's use of Offset credits. The Framework is pending approval.	CR3; CF2
A range of targeted communications and outreach efforts have been implemented to promote Lyme disease and other tick-borne disease awareness: subscription e-newsletter for physicians was distributed in May 2024; an E-fax was sent to all Halton physicians on tick-borne diseases in May 2024; a follow-up E-fax was sent to Halton pharmacists on Lyme disease in July 2024; and a continuing medical education (CME) event was held in June 2024.	EA3; EA5; EA8
Earth Week (April) was celebrated at Halton Region with two events – an Electric Vehicle showcase and panel, featuring staff owned vehicles and a webinar featuring Sheila Watt-Cloutier, a renowned Inuit author and nobel prize nominee.	CL5; EA6; EA7; EA8

2024 PROGRESS (INITIATIVES)	ACTIONS CROSS ALIGNMENT
Through the Climate Action Response Team a Sewage Heat Recovery Subcommittee was established to develop a framework.	CR4; EA1; EA2; EA3
Regional staff actively participate in knowledge exchange, information sharing and communities of practice on climate-related initiatives for public services, including water and wastewater treatment. This is facilitated through representation in key industry organizations such as the Regional Public Works Commissioners of Ontario (RPWCO), the Water Environmental Association of Ontario (WEAO), and the Ontario Water Works Association (OWWA).	CR4; EA1; EA3; EA6
Staff conducted research and participated in continuous learning opportunities to ensure the Region remains up to date on the rapidly evolving field of climate actions including trends, knowledge, technology, regulations and policies and financial considerations.	EA5; EA8
Advanced best practices for climate action through staff participation in conferences, courses and webinars, including those organized by Federation of Canadian Municipalities (FCM), Green Municipal Fund (GMF), Local Governments for Sustainability (ICLEI), Six Nations of the Grand River, Evergreen.	EA5; EA6; EA8
A climate communications workplan is developed annually and includes the development and management of an internal and an external website. The advancement of a climate communications strategy is being explored in 2025.	EA4; EA8
The Compendium, an internal searchable database was developed and is currently being updated for Climate Action Response Team (CART) members. It provides curated, Regionally-topical information for staff to keep abreast of current trends, information, best management practices, regulations and policies and technology related to climate.	EA8
5 white papers, 29 briefing notes, 3 rationale documents and 3 business cases were developed by staff to advance knowledge mobilization on climate related issues of relevance to the corporation.	EA8
A Climate training program for Regional staff is currently under development with an anticipated roll out in 2025.	EA5; EA8



