

Corporate Climate Change Action Plan

Condensed Version

Niagara Region // May 7, 2025



Table of Contents

Land Acknowledgement.....	2
Climate Change in Niagara.....	2
Action Plan Framework.....	2
Action Plan Overview.....	3
Targeted Reductions.....	3
Climate Action Benefits.....	3
Cost to Decarbonization.....	4
Setting the Foundation.....	4
The Action Plan.....	4
A Phased Approach.....	4
Short-term (0-5 years) – Foundational Policy Development and Strategic Investments:.....	4
Short-term Plan Focus (0-5 Years).....	7
A Phased, Strategic and Adaptive Path to Sustainable Energy Investment.....	7

Land Acknowledgement

Niagara Region is situated on treaty land. This land is steeped in the rich history of the First Nations such as the Hatiwendaronk, the Haudenosaunee, and the Anishinaabe, including the Mississaugas of the Credit First Nation. There are many First Nations, Métis, and Inuit from across Turtle Island that live and work in Niagara today. The Regional Municipality of Niagara stands with all Indigenous peoples, past and present, in promoting the wise stewardship of the lands on which we live. This commitment to stewardship aligns with Niagara's Corporate Climate Change Action Plan, reinforcing sustainable practices. By working together, we can honor these traditions and take meaningful action to address climate change for future generations.

Climate Change in Niagara

Niagara is experiencing significant climate challenges, including rising temperatures, increased precipitation, and more frequent extreme weather events. These shifts threaten both communities and the environment, disproportionately impacting vulnerable populations and escalating financial burdens.

Table 1 – Projected Climate Impacts in Niagara¹

Climate Parameter	2020	2050	2080	Difference from Baseline to Long-Term
Mean Annual Temperature (°C)	8.7	10.7	12.3	+3.6
Days Above 30°C	10.4	23.9	39.4	+29.0
Total Annual Precipitation (mm)	1080.6	1135.0	1192.0	+111.4
Mean Annual Temperature (°C)	8.7	10.7	12.3	+3.6

Action Plan Framework

Niagara Region uses the Partners for Climate Protection program as its framework for climate change action. Niagara Region has completed Milestones 1 and 2. The Climate Change Action Plan represents Milestone 3 of this framework. This milestone focuses on the measurement, management, and reduction of greenhouse gas emissions from regional activities and facilities.

¹ Toronto and Region Conservation Authority. (2022). Climate Projections for Niagara Region (p. 2).



Figure 1- Partners for Climate Protection Milestone Framework

Action Plan Overview

On May 22, 2023, Regional Council reinforced its pledge to combating climate change by approving a Net-Zero corporate greenhouse gas emission reduction goal by 2050 in principle. This target supports action on climate change mitigation and aligns Niagara Region with other municipalities working towards Canada's Net-Zero carbon emissions plan.

Targeted Reductions

Niagara Region plans to achieve this target with an initial focus set on practical actions to make meaningful progress in the short-term (by the end of 2028). To achieve this, Niagara Region aims to reduce Corporate emissions by 17.9 per cent. Targeted reductions in the short-term for the Region's major emissions contributors include:

- Buildings
- Water and Wastewater
- Operational Waste
- Fleet

Climate Action Benefits

Niagara Region's climate action initiatives will reduce greenhouse gas (GHG) emissions, lower operational costs, and enhance energy resilience through local energy generation. By prioritizing sustainability, the Region will lead by example, encouraging community collaboration

and driving long-term environmental and economic benefits. Additionally, these efforts will help future-proof operations by mitigating the impact of rising energy costs, ensuring cost avoidance and long-term financial stability.

Cost to Decarbonization

GHG emission reduction efforts will be integrated into operations and capital projects, aligning with asset renewal and the Corporate Asset Management Resource Allocation model (CAMRA) to ensure strategic, cost-effective investments. Projects will undergo business case analysis in the annual budget process, while external funding and master plan alignment will enhance efficiency. Given evolving technologies, energy costs, and policies, the plan remains adaptive, embedding climate action within core operations while supporting the Net-Zero goal.

Setting the Foundation

The longer-term path to Net-Zero will not be easy and will involve several financial, technological, and operational constraints. This plan recognizes these challenges and begins to set the required actions in motion to overcome them.

The Action Plan

Niagara Region has developed a pragmatic, phased approach that balances environmental responsibilities with cost restrictions, technological advances, and current operation practices. The following outlines a structured plan with three distinct phases (short, medium, and long-term) that gradually lead Niagara Region towards the Net-Zero target. Each phase is designed to strategically build upon the previous one, ensuring that impactful changes are made without overburdening financial resources. By focusing initially on cost-saving opportunities and policy development, a strong foundation is formed for the eventual capital investments needed to achieve deeper levels of decarbonization.

A Phased Approach

Short-term (0-5 years) – Foundational Policy Development and Strategic Investments:

Leverage end-of-life opportunities, understand life cycle costs to minimize expenses, increase efficiency, and establish foundational sustainability policies and processes.

Table 2 – Short-term Plan Actions

Actions	Type	Timing	GHG Impact	Cost
Complete a comprehensive review of existing policies.	Policy	Immediate	N/A	Internal resourcing
Begin fuel-switching natural gas heating assets (at end-of-life) in buildings and W&WW to low carbon sources.	Project	Ongoing	High	\$\$\$
Implement a decarbonization project assessment policy.	Policy	Immediate	N/A	Internal resourcing
Apply a Climate Lens to align investment decisions.	Policy	Immediate	N/A	Internal resourcing
Perform a review of internal resources to ensure appropriate resourcing for climate action efforts.	Process	Immediate and Ongoing	N/A	Internal resourcing
Implement a sustainable procurement policy prioritizing sustainable good or products.	Policy	Future	N/A	Internal resourcing
Secure top-down support.	Process	Immediate and Ongoing	N/A	Internal resourcing
Develop a corporate engagement, education, and awareness plan.	Plan	Immediate and Ongoing	N/A	Internal resourcing
Implement policy to investigate the prevention of like-for-like replacement of natural gas assets at end of life.	Policy	Immediate	N/A	Internal resourcing
Implement policy for Net-Zero requirement for all new constructed Regional buildings.	Policy	Immediate	N/A	Internal resourcing
Complete low/no-cost energy efficiency projects.	Project	Immediate	Low	\$
Enact a policy and provide training to reduce Fleet emissions.	Policy	Immediate	N/A	Internal resourcing
Complete a Green Fleet Plan and Policy.	Policy	Immediate	N/A	Internal resourcing
Electrify (to hybrid or fully electric) light-duty fleet vehicles.	Project	Immediate	High	\$\$



Actions	Type	Timing	GHG Impact	Cost
Develop a unified policy/procedure (between Waste Management and Facilities) to collect solid waste data.	Policy	Immediate	N/A	Internal resourcing
Conduct regular waste audits to identify the types and volumes of waste generated.	Process	Ongoing	N/A	Internal resourcing
Develop a waste reduction plan.	Plan	Immediate	N/A	Internal resourcing
Annual Update of GHG Inventory	process	Future	N/A	\$/Internal resourcing

Medium-term (5-15 years) – Policy and Process with Initial Capital Investments: Enhance and solidify sustainable policies and processes while beginning initial capital investment projects to support future large-scale investments.

Table 3 – Medium-term Plan Actions

Actions	Type	Timing	GHG Impact	Cost
Investigate potential partnerships with other municipalities and organizations to pool resources.	Process	Immediate	N/A	Internal resourcing
Stay current on decarbonization technologies.	Process	Ongoing	N/A	Internal resourcing
Create a process for and identify pilot small-scale decarbonization projects.	Process	Ongoing	N/A	Internal resourcing
Complete capital energy efficiency projects.	Project	Future	Medium	\$\$
Electrify or de-carbonize fleet.	Project	Future	High	\$\$\$
Review policies for energy management at leased facilities.	Policy	Immediate	N/A	Internal resourcing
Evaluate opportunities for building consolidation	Policy	Immediate	N/A	Internal resourcing
Complete 5-year Climate Change Action Plan updates.	Process	Future	N/A	\$\$

Long-term (15+ years) – Intensive Capital Investment and Tackling the Balance: Make significant capital investments (leveraging funding where available) in advanced technologies/infrastructure and refine established policies to achieve deeper sustainability gains towards the Net-Zero target.

Table 4 – Long-term Plan Actions

Actions	Type	Timing	GHG Impact	Cost
Complete capital-intensive energy efficiency and generation projects.	Project	Future	Medium	\$\$\$
Substitute the use of natural gas with low-carbon fuels.	Project	Future	High	\$\$\$
Investigate and evaluate methods for tackling “last-mile” emissions.	Project	Future	High	\$\$\$
Revisit and refine existing plans and policies in support of the Climate Change Action Plan.	Policy	Future	N/A	Internal resourcing

Short-term Plan Focus (0-5 Years)

The short-term phase focuses on driving immediate GHG reductions while laying the foundation for long-term decarbonization. Key actions include applying a climate lens to all projects and operations, refining, and developing policies, and launching staff engagement and awareness initiatives. Priority measures – such as energy efficiency upgrades, fuel switching, and electrifying the light-duty fleet – are selected for their potential to deliver quick and measurable emissions reductions. Asset replacements will be strategically leveraged to avoid like-for-like substitution of high-emission equipment. Life cycle cost analysis will support these efforts, ensuring that climate-focused decisions are also fiscally responsible and avoid future retrofit needs. Together, these actions demonstrate early progress toward Net-Zero while embedding emissions reduction into everyday decision-making.

A Phased, Strategic and Adaptive Path to Sustainable Energy Investment

To ensure sustained emissions reductions over time, a phased and adaptive investment strategy was adopted. This approach balances long-term GHG goals with the need to respond to evolving technologies, fluctuating energy markets, and regulatory changes. All projects will be evaluated through a GHG-focused business case analysis during the annual budget cycle, integrated into the CAMRA process to align with asset renewal timelines and climate priorities. External funding and alignment with master plans will be pursued to maximize impact. By



embedding climate action into the core of planning and operations, this strategy ensures that all investments remain flexible, future-ready, and anchored in the pursuit of Net-Zero