

Subject: Corporate Climate Change Action Plan

Report to: Planning and Economic Development Committee

Report date: Wednesday, May 7, 2025

Recommendations

1. That the proposed Corporate Climate Change Action Plan (CCAP), attached as Appendix 2 to Report PDS 11-2025, **BE APPROVED**; and
2. That Report PDS 11-2025 **BE CIRCULATED** to the Local Area Municipalities.

Key Facts

- The purpose of this report is to seek Council's approval for the Corporate Climate Change Action Plan (CCAP).
- This report provides an overview of the plan to achieve the Net-Zero target, with an initial focus set on practical actions to make meaningful progress in the short-term (by the end of 2028).
- In early 2023, a Corporate Greenhouse Gas (GHG) Inventory was completed, which established baseline emissions, and a Target Report was presented to Council to review and approve efforts to significantly reduce corporate emissions. A Council Resolution was passed, for a Net-Zero (in principle) Corporate emissions target by 2050.
- In the short-term the CCAP aims to reduce corporate emissions by 17.9% by 2028, aligned with the Net-Zero trajectory. This includes targeted reductions for each of the Region's major emissions contributors (Buildings, Water and Wastewater, Operational Waste, and Fleet).
- In the first five years of the Plan's implementation, actions will focus on existing end-of-life or asset maintenance capital infrastructure projects, alongside the development of foundational policies that integrate climate considerations into Regional services and projects. Any capital projects aligned with the Plan will be subject to Council approval through the annual budget process.
- This plan will reduce GHG emissions, lower operational costs, enhance energy resilience, foster community collaboration, and future-proof against rising energy costs, with updates every five years to ensure effectiveness and adaptability.

Financial Considerations

Initiatives identified in the Climate Change Action Plan will be brought forward through the annual budget process with business case analysis, evaluating GHG reduction impacts, life-cycle costs, and associated benefits for Council's consideration. The first five years of the plan identify projects that are currently planned upgrades and end-of-life replacements or aligned with other master plans. As well, any new projects will go through the Corporate Asset Management Resource Allocation model (CAMRA) to ensure strategic investment and prioritization.

External funding opportunities (i.e. Provincial and Federal funding) will be sought after to offset costs and enhance financial viability for any related projects.

Providing a precise total cost estimate for a 25-year plan is inherently challenging due to numerous unpredictable factors. Rapid advancements in technology, fluctuations in energy prices, shifts in government policies, regulatory changes, and evolving market conditions all impact project feasibility and costs. Additionally, the availability of external funding sources, such as federal and provincial grants, will vary over time. These uncertainties make it impractical to define an exact long-term financial commitment. Some costing estimates and further details are available in the approved 2024-2028 Energy Conservation and Demand Management Plan (CDMP). As well, to support prioritization and funding impacts staff will be completing GHG Reduction Feasibility and Pathway Studies to provide insights into site-specific costs and impacts as we continue toward the Net-Zero target. Any funding requests will be brought to Council through the annual budget process.

Analysis

Setting a Reduction Target (PCP Milestone 2)

The Corporate GHG Inventory provided a solid foundation for setting a corporate GHG emissions reduction target. On May 10, 2023, a Target Report presented to Council proposed an 80% reduction by 2050 (from 2018 levels). Following discussion, Council committed to a more ambitious Net-Zero by 2050 target, aligning with other Ontario municipalities and reinforcing the Region's commitment to sustainability. This target, formally endorsed by Council, fulfills the Partners for Climate Protection (PCP) Milestone 2, and sets the stage for the CCAP – Milestone 3.

The Plan: Short, Medium and Long-Term Targets (PCP Milestone 3)

The CCAP not only sets a clear path to Net-Zero emissions but also establishes the organization as a leader in sustainability. By prioritizing practical decarbonization strategies with measurable outcomes, the initiative demonstrates a commitment to proactive climate action. Emission reduction targets are structured into short-term, medium-term, and long-term goals, ensuring steady progress while integrating emerging technologies and best practices. This leadership has inspired seven of our Local Area Municipalities (LAMs), through out Niagara Climate Change Municipal Community of Practice (NCCMCP), to undertake their own Corporate Climate Action Plans, amplifying the impact of GHG reductions across the region. Beyond environmental benefits, the plan drives economic efficiencies through energy savings, fosters innovation, and enhances resilience by mitigating climate-related risks. It also improves public health by reducing pollution and promoting cleaner air. By leading with accountability and long-term vision, the CCAP not only strengthens corporate sustainability but also encourages a broader movement toward climate resilience and responsible growth.

Table 1 presents the organization's Short-term (by 2028) emissions reduction targets by sector (% reduction from 2018 levels). The overall corporate reduction target is 17.9% (4,385 tCO₂e), reflecting the combined sector impact and alignment with the Net-Zero goal over 25 years.

Table 1: Short-term emissions reduction targets, by sector

Sector	Short-Term Goal (2028)	Emissions Reduction (tCO ₂ e)
Buildings	20.8%	2,630
Water and Wastewater	19.3%	1,213
Fleet	10%	353
Outdoor Lighting and Traffic Signals	0%	0
Operational Waste	10%	189
Total	17.9%* ¹ (reflects the Net-Zero trajectory)	4,385

¹ The 17.9% overall reduction goal represents the organization's aggregated corporate emissions reduction target by 2028, aligned with the Net-Zero trajectory, rather than the direct sum of sector-specific reductions.

We recognize the imperative to transition towards Net-Zero emissions. However, it is important to be aware of the considerations that pose challenges to this transformation:

- Cost
 - The cost to decarbonize remains high.
 - Departments operate within budgets derived from taxpayers/ratepayers or limited public funds.
 - Project prioritization remains a challenge due to evolving infrastructure needs.
- Technological
 - Low-carbon solutions/technologies for some emissions sources are not yet mature.
 - Solutions/technologies at these stages (e.g. heavy-duty vehicles) of maturity are costly and carry technical risk.
- Operations
 - Broad buy-in (top-down) is necessary.
 - Clear delineation of departmental responsibilities and allocation of staff resources is required.
 - Effective collaboration across departments is essential as efforts often overlap cross-functional teams.
 - Political shifts pose a risk to continued execution as focus and priority given to its actions can fluctuate.

To address this, a pragmatic, three phase approach that balances environmental responsibilities with the realities of these challenges is proposed.

Phase 1: 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.

- Examples: Apply a climate lens, review internal resources, develop a corporate engagement plan, implement a decarbonization project assessment policy, implement a sustainable procurement policy, develop a green fleet plan and policy, complete low/no cost energy efficiency projects, evaluate opportunities for building consolidation, begin fuel-switching natural gas heating assets (at end-of-life) in buildings and WWW.

Phase 2: 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.

- Examples: Investigate potential partnerships (e.g. municipalities/organizations), complete capital energy efficiency projects identified in CDMP, review policies for energy management at leased facilities, fleet transition, complete a 5-year CCAP update.

Phase 3: 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.

- Examples: Complete capital-intensive energy efficiency and generation projects, substitute the use of natural gas with low-carbon fuels (biogas/renewable natural gas (RNG) for WWW process heating, investigate and evaluate tackling “last mile” emissions, revisit and refine existing plans and policies.

Within Appendices 1 and 2 a structured plan is outlined in the form of action tables with these three distinct phases (short, medium, and long-term, respectively) that gradually lead the 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.

Climate Action Benefits and Future Forward

A strong CCAP enhances resilience, cost efficiency, and environmental responsibility in an era of economic and climate uncertainty. For example, with ongoing uncertainty with tariffs driving up energy costs, energy independence is crucial – local generation reduces reliance on volatile global markets while stabilizing expenses. Operational cost avoidance is achieved by optimizing energy efficiency and mitigating exposure to the Global Adjustment rate, which continues to rise due to peak demand charges and grid inefficiencies, ensuring long-term savings. Futureproofing through sustainable infrastructure will help the Region to adapt to regulatory shifts and climate risks, securing long-term viability. Additionally, lower emissions lead to reduced health impacts, improving air quality and community well-being.

The CCAP provides a strategic framework for reducing GHGs while integrating sustainability into core operations and long-term asset management. By aligning climate action with existing renewal cycles and leveraging external funding opportunities, it supports a fiscally responsible approach to decarbonization. The plan also ensures compliance with regulatory requirements, enables adaptation to emerging policies, and capitalizes on advancements in low-carbon technology. Endorsing the CCAP demonstrates leadership and a commitment to sustainability, positioning the Region to navigate future economic, environmental, and social challenges with confidence.

Alternatives Reviewed

Maintain the Status Quo

Failing to implement a Corporate Climate Change Action Plan would reduce our Regions' resilience to climate change impacts, lead to rising energy costs, and result in continued environmental harm, regulatory risks, and potential reputational damage.

Relationship to Council Strategic Priorities

- **Green and Resilient Region** – The Corporate Climate Change Action Plan is a key action under the Green and Resilient Region priority in Regional Council's 2023-2026 Strategic Priorities, helping to reduce emissions and build climate resilience.
- **Effective Region** – Implementing a Corporate Climate Change Action Plan enhances operational efficiency, reduces long-term costs, and ensures regulatory compliance, supporting a well-managed and future-ready region.
- **Equitable Region** – Climate action promotes environmental justice by reducing disproportionate climate impacts on vulnerable communities, ensuring a healthier and more sustainable future for all.
- **Prosperous Region** – By fostering low-carbon innovation and sustainable business practices, the plan supports economic growth, job creation, and long-term prosperity in the region.

Other Pertinent Reports

[PDS 17-2023 Climate Change Update](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=31292)

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[Conservation and Demand Management Plan \(2024-2028\)](https://www.niagararegion.ca/culture-and-environment/pdf/2024-2028-energy-conservation-demand-management-plan.pdf)

(<https://www.niagararegion.ca/culture-and-environment/pdf/2024-2028-energy-conservation-demand-management-plan.pdf>)

[CSD 7-2022 Appendix 1 2021 Corporate Asset management Plan](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=26693)

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Appendices

Appendix 1 Corporate Climate Change Action Plan – Condensed Version

Appendix 2 Corporate Climate Change Action Plan – Full Report