

Policy Development Committee Report

To: The Chair and Members of the Policy Development Committee

From: Halie Gilmore, Project Manager, Corporate Strategy

Date: November 5, 2024

Report #: RPT-0233-24

Subject: Draft Climate Action Plan (CAP)

Purpose: For Information

Recommendation

That report RPT-0233-024- Draft Climate Action Plan (CAP) be received as information;

And that staff be directed to share the Climate Action Plan for Council and community feedback and bring forward the final plan for approval at the November 26 County of Brant Council meeting.

Executive Summary

Since May 2024, the Corporate Strategy team has been working with staff across the County of Brant (the County) to develop the first-ever Climate Action Plan (CAP). This plan presents actions to help the County and community reduce greenhouse gas emissions, support resiliency, and encourage environmental sustainability. The CAP is an essential roadmap to guide the County towards a vibrant, thriving, and sustainable future.

This plan has been informed by data analysis, research, staff expertise, and feedback from the community. Recommendations span seven different categories and are divided into short to long term implementation timelines. The plan focuses on ways the County can directly respond to climate change and encourage community action while also recognizing that coordinated effort from other levels of government, industries, and residents is needed to respond to the climate emergency. Some key actions in the CAP include developing a sustainable and resilient standard for new County buildings, enhancing emissions data collection and reporting, and increasing efforts for tree planting and preserving natural spaces. Investing in climate action is necessary to preserve our environment, support the health and safety of the community, and advance cost savings.

Strategic Plan Priority

Strategic Priority 5 - Healthy, Safe, and Engaged Citizens

Impacts and Mitigation

Social Impacts

The actions in the CAP will help the County mitigate and adapt to the impacts of climate change and ultimately support a safe, vibrant, and resilient community.

Environmental Impacts

The CAP outlines action items to reduce corporate and community emissions, adapt to the impacts of climate change, and support environmental sustainability. Implementing this plan will result in profound, positive environmental impacts throughout the County.

Economic Impacts

Many actions in the CAP will generate positive economic benefits for the County and community. These initiatives will help reduce energy costs and lower maintenance, repair, and replacement expenses associated with infrastructure damage caused by our changing climate.

Implementing actions will require both financial resources and dedicated staff time. From 2025 to 2028, the annual cost of implementing the short-term actions is estimated to range from \$230,000 to \$600,000. Costs will be covered through existing budgets and/or grant opportunities when possible. Any new budgetary requests will be identified in future capital or operating budgets or brought forward to the Council in separate reports for review and approval.

Two actions to be implemented by the Corporate Strategy team in 2025, adding staff resources and developing a climate data framework, are currently unfunded but vital to the initial success of implementing the CAP. Staff recommend that these fiscal items be approved at the time of final approval of the CAP by Council, noting that staff are exploring available grant opportunities to cover a large portion of the forecasted costs (\$150,000) to minimize their impact on the tax supported budget.

Report

Background

In 2019, the County of Brant Council (the Council) declared a climate emergency, joining other municipalities across Canada in recognizing the urgent need to address climate change. To respond to this emergency, Council set the objective of becoming net carbon neutral by 2050. For years, the County has been promoting smart, sustainable solutions, such as investing in renewable energy, improving our trail systems and outdoor spaces, supporting tree planting, and retrofitting our facilities to promote energy conservation.

The first phase of the climate action planning process involved creating the Energy Conservation and Demand Management (ECDMP) plan. This plan was approved by Council in July 2024 to guide the County until 2029. In alignment with provincial requirements, the County prepares ECDMPs every five years to report on greenhouse gas (GHG) emissions from corporate owned and operated buildings and outline solutions to promote energy efficiency and emission reductions. Since the baseline year of 2013, the County has seen a 19% decrease in GHG emissions from County owned and operated buildings and water and wastewater treatment facilities. A significant portion of this reduction is attributable to the greening of the provincial electricity grid and efforts to reduce use of fossil fuels (like fuel oil) at our facilities.

To build on these successes and prepare for the future, the Corporate Strategy team partnered with staff across the organization and consulted members of the community, to create the County's first-ever Climate Action Plan (CAP). Building on the ECDMP, the CAP is a comprehensive roadmap to help the County advance a greener, healthier, and more sustainable future. This plan supports climate action both at the corporate level and within our community with recommendations that are cost-effective and meet the needs and priorities of our diverse municipality.

Analysis

The analysis section provides rationale for the CAP, an overview of the plan development process, key findings from data analysis and community engagement, and an overview of action items included in the plan.

Rationale

The County must take action to reduce our corporate and community emissions and become more resilient to the impacts of our changing climate. Weather data shows the devastating effects of climate change. Over the coming years, the County will experience warmer temperatures and more extreme weather events including heat waves and instances of torrential rainfall. The changing climate negatively affects our health and safety, nature and eco-systems, and results in considerable financial costs and infrastructure damage. Provincial data shows that since 2009 insured losses in Canada due to severe weather events have averaged \$1.4 billion per year.

The risks of inaction are incredibly high. Without a plan in place the County could miss out on important funding opportunities, lose out on energy and maintenance cost savings, compromise community health and well-being, and fail to respond to the requests from the community. The CAP provides a comprehensive roadmap to ensure we have the policies, strategies, and resources in place to support effective climate action.

Developing the Plan

The Corporate Strategy team worked through different phases to develop a smart, community-driven plan:

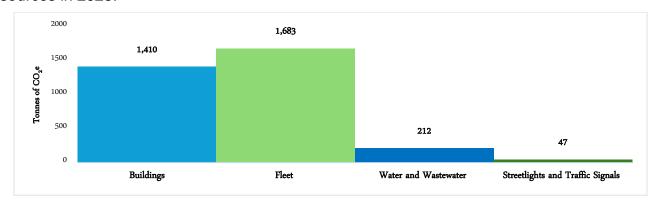
- Research and Data Analysis: The County conducted research and data analysis to better understand the impacts of climate change in Brant, prospective solutions from comparable municipalities, and estimate corporate and community GHG emission levels.
- 2. **Staff Engagement:** The project team connected with staff to learn more about climate action. Through conversations, staff identified work that has been completed, initiatives in progress, and future actions to explore.
- 3. **Community Engagement**: Connecting with the community and local partners helped the County identify key priorities and prospective actions to explore.

Overall, the final plan and the recommendations are reflective of available data and research, staff expertise, and feedback from the community

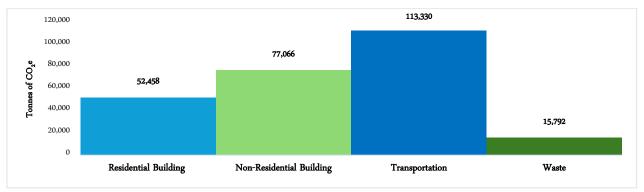
Findings from Data Analysis

To create a data driven plan, the County estimated corporate and community emission levels, evaluated waste diversion statistics, and reviewed carbon offsets and avoided emissions.

Corporate emissions are calculated by evaluating key sources of emissions created by the County, including buildings, fleet, water and wastewater processing, and streetlights and traffic signals. The chart below shows an approximate breakdown of emissions from these sources in 2023.



In contrast, community emissions look at the County more broadly and focus on emissions from residential and non-residential buildings (energy use), transportation, and waste. The chart below shows an approximate breakdown of emissions from these sources in 2023.



Beyond emission levels, waste diversion data from 2023 shows that 33.6% of waste collected is diverted from entering the landfill. This exceeds the provincial target of diverting 30% of waste from landfills by 2020. To meet the provincial goal of diverting 50% of waste by 2030, the County must take decisive action over the coming years.

Data on carbon offsets and avoided emissions show that investing in trees, natural assets, and renewable energy has been beneficial. Studies show that 39% of County owned property is covered by trees and shrubs which equates to roughly 3,513 tonnes of CO₂e being sequestered per year. Solar projects throughout the County also produce green, renewable energy that allow us to offset electricity use at County facilities and sell renewable energy back to the grid. Estimates show that the electricity produced through these systems helps the County offset and avoid producing 108 tonnes of CO₂e per year.

Overall, data analysis helped the County understand current emission levels and identify gaps in available data. Moving forward, it will be important for the County to enhance data collection, monitoring, and reporting to develop a more complete picture of corporate and community emissions and accurately assess how we are progressing towards our target of being net carbon neutral by 2050.

What We Heard from the Community

Community engagement was an important step to help the County learn more about climate change impacts, priorities, and solutions to explore. Through an online Engage page, survey, pop-up events, and focused community partner connections, the County collected valuable feedback that is reflected throughout the plan.

Key findings from the survey reveal that 53.5% of respondents consider addressing climate change and environmental protection to be "very important," with another 24.4% rating it as "important." Furthermore, 72.7% of participants believe that climate change is already affecting the County of Brant, with 27.2% feeling the impacts significantly and 53.6% moderately. The survey also highlighted the most impactful local effects of climate change, including extreme weather events (storms, floods), heatwaves, and concerns over wildlife and biodiversity, and agricultural productivity.

Through in-person interactions and direct connections with community partners key priorities and concerns emerged as central to the community's vision for climate action. These included a strong focus on promoting sustainable land use practices, enhancing waste diversion and prevention, reducing corporate and community emissions, preparing for extreme weather events, supporting the agriculture sector, protecting natural ecosystems, and supporting biodiversity. In addition, community members emphasized the importance of educational initiatives to build awareness around climate change and its impact on the County.

Taking Climate Action

The CAP action items focus on advancing three broad goals:

- 1. Decreasing corporate and community emissions through reducing energy use, improving efficiency, and switching to cleaner sources of energy when suitable
- 2. Fostering resiliency to adapt and cope with the impacts of climate change
- 3. Promoting overall environmental sustainability

In addition, the plan sets ten measurable targets to track our progress and encourage ambitious action.

- Reduce emissions from County owned and operated facilities by 40% by 2035 from the baseline year of 2013.
- Reduce emissions from County owned and operated facilities by 60% by 2040 from the baseline year of 2013.
- Offset 50% of electricity used at corporate facilities through generation of renewable energy by 2040.
- Replace a minimum of 10 gas- or diesel-powered vehicles with hybrid/EV alternatives by 2035.
- Add a minimum of 5 new EV charging stations in high priority areas throughout the County by 2030.
- Reduce solid waste disposed in landfill by 20% from 2023 levels by 2035.
- Plant 55,000 trees throughout the County (public and private land) by 2035.
- Plant 110,000 trees throughout the County (public and private land) by 2045.

- Increase tree canopy on all County land to a minimum of 30% by 2050.
- Add more naturalized area on County property by reducing mowing requirements by 5% by 2035.

As the County continues to enhance data collection and measurement, staff will explore adding additional targets to guide our actions.

The 50 recommendations are divided into seven categories and are assigned an implementation timeline (short, medium, long term and ongoing). The actions aim to build on the work already happening and introduce new strategies, plans, policies, and projects to advance our goals and targets. An overview of actions is included in the table below:

Buildings and Infrastructure	 Develop sustainable and resilient building standards for new County facilities, devise a strategic approach to retrofitting existing facilities by 2050, create a renewable energy roadmap, and explore new technologies to enhance efficiency of water and wastewater treatment facilities. Create educational resources for the community, conduct a feasibility study to assess a Property Assessed Clean Energy (PACE) financing program, and explore sustainable development guidelines for future land use.
Transportation	 Optimize the County fleet and replace gas- and diesel-powered light-duty fleet with EV and hybrid alternatives. Support sustainable roadway design, enhance flow of traffic and reduce idling through education, design, and use of technology. Invest in infrastructure and information sharing to support more active transportation and use of efficient vehicles throughout the community.
Nature	 Continue to implement policy directives in the Official Plan to protect our agricultural land and natural heritage system. Adopt practices to reduce emissions associated with maintaining our parks and natural spaces. Support biodiversity, create new wetlands, design resilient park spaces, and preserve and enhance the community canopy and other natural assets. Help the community advance naturalization projects through various means including boulevard planting opportunities and education on the value of planting native pollinators.
Waste	 Explore ways to reduce and divert waste through the development of the Solid Waste Management Master Plan (SWMMP), complete a corporate waste audit, and investigate opportunities to reduce emissions associated with the waste collection process. Provide programs, resources, and information to help support a more circular economy and reduce waste.

Economic • Explore ways to reduce barriers and better support businesses Development that advance the circular economy. and Tourism Help farmers, business owners, and event planners mitigate climate change and become more resilient through creating educational resources, offering funding, and encouraging uptake in programs offered by community partners (like the Grand River Conservation Authority). Safety and Advance resilient buildings and invest in technologies and **Emergency** solutions to enhance the County's emergency preparedness. **Preparedness** Continue to advance solutions to boost community-level preparedness. Data, Improve data collection, monitoring and reporting on climate Outreach, and change indicators. Education Incorporate climate change considerations into reports, policies, strategies, and procurement practices moving forward. Enhance education opportunities for staff, Council, and the community and create informational and learning resources as needed (webpage, guides, training modules, etc.) Develop an internal climate change working group.

As the first plan of this nature, many actions focus on developing plans, strategies, and policies to set the County up for success. To support the implementation, the plan identifies additional resources that will be beneficial, including support from leadership, additional staff, and funding.

Overall, the plan focuses on ways that the County can directly respond to climate change and encourage community action. Beyond the County's area of influence, efforts from other levels of government, businesses, and community members are needed to respond to the climate emergency. For example, important policies such as carbon pricing, additional funding to support local efforts, greening the electricity grid, and modifying the building code, are important practices under the purview of other levels of government. Climate change requires an all-hands-on-deck approach, and the County will work to advocate for change and encourage other partners to act.

Summary and Recommendations

Overall, the CAP provides a roadmap that positions the County to take meaningful climate action. Municipal governments set the tone and intention of a community, and it is the responsibility of the County to be a leader in this space and to guide Brant to a sustainable future.

Due to the unique nature of the CAP and its focus on community-centered actions, the Corporate Strategy Team is recommending the following review and approval timeline:

- November 6 to 18 Review period for members of Council and the community to provide their feedback. The draft CAP will be posted on Engage Brant.
- November 26 A report summarizing the feedback received and any resulting revisions, will be presented, along with the finalized CAP, for approval at the County of Brant Council meeting on November 26, 2024.

This approval process ensures that members of Council and the community have adequate time to review this comprehensive plan and provide comment.

Upon final approval, the Corporate Strategy team will work with relevant departments to secure necessary resources and guide the implementation of the 50 action items. The Corporate Strategy team will also prepare annual reports to monitor climate change data and track the implementation of the CAP. As technology evolves and new data becomes available, the County will continue to explore new and innovative solutions to support sustainability. At a minimum, the plan will be reviewed and updated every five years.

Attachments

Draft Climate Action Plan (CAP)
Draft CAP – Presentation

Reviewed By

Adam Crozier, Director of Corporate Strategy Senior Management Team

Copied To

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Zach Gable, Director of Economic Development

By-law and/or Agreement

By-law Required	No
Agreement(s) or other documents to be signed by Mayor and /or Clerk	No