
COUNTY OF HALIBURTON

**CORPORATE
CLIMATE
CHANGE
MITIGATION
PLAN**

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GLOSSARY OF ACRONYMS

BAU Business as usual

CH₄ Methane

CO₂ Carbon dioxide

tCO₂e Tonnes of carbon dioxide equivalent

FCM Federation of Canadian Municipalities

GHG Greenhouse gas

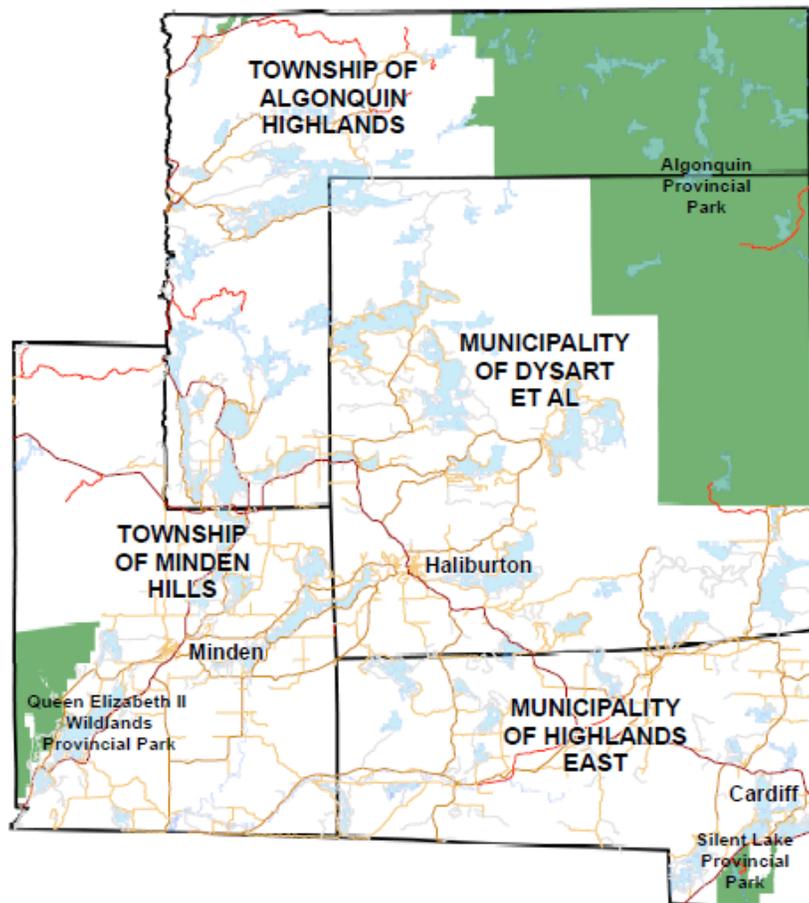
ICLEI Local Governments for Sustainability

PCP Partners for Climate Protection

HALIBURTON COUNTY



The County of Haliburton is over 4,000 square kilometers in size with 18,000 residents residing in four municipalities: the Township of Algonquin Highlands, the Municipality of Dysart et al, the Municipality of Highlands East and the Township of Minden Hills. The County is approximately 2.5 hours north of Toronto and 4 hours west of Ottawa. The area is known as the “Haliburton Highlands”, one of the higher points on the Canadian Shield containing over 500 lakes.





CLIMATE CHANGE CAUSES AND IMPACTS

The global average temperature is rising due to an increased concentration in greenhouse gas (GHG) emissions that trap heat in the atmosphere. Increased GHG emissions are a result of human activities, including the release of carbon dioxide from burning fossil fuels to heat our buildings and drive our vehicles, and the release of methane from the decomposition of organic waste in our landfills.

The global average temperature has already risen by 1°C above pre-industrial levels and is on track to reach 1.5°C of warming as early as 2030[1]. Although half of a degree may not seem significant, it will expose millions of more people to heat waves, droughts, floods, and storms. The more warming that occurs, the more sea ice and glaciers will melt, species will become extinct, sea levels will rise, crop yields will suffer, and economic losses will occur.

The County of Haliburton experiences flooding every spring due to heavy rainfall and rapidly melting snow, conditions that are exacerbated by climate change. In some years, the flooding is extreme and causes damages to property and infrastructure. The County is also experiencing drier summers and more frequent periods of drought. Additionally, there are more frequent heat waves which increases risks for human health, including heat exhaustion and heat stroke.

Limiting global average temperature rise below 1.5°C or 2°C will require transformational change across all sectors of the economy. Governments, businesses and individuals all have an important role to play in reducing GHG emissions.

CLIMATE CHANGE GOVERNANCE



Different levels of government depend on each other to further their climate goals. The County of Haliburton plays a part in achieving broader climate goals, including those at the global, national and provincial levels.

GLOBAL

In 2015, nearly 200 nations signed on to the Paris Agreement, an ambitious global plan to take action on climate change. The agreement aims to keep global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C [2]. Many countries have pledged to cut their emissions and strengthen these commitments over time.

NATIONAL

In 2020, the Government of Canada released a strengthened climate plan, A Healthy Environment and a Healthy Economy. The plan outlines measures to reduce emissions while growing the economy, including a national approach for carbon pricing. The framework sets a target to reduce GHG emissions by 40-45% below 2005 levels by 2030 [3].

PROVINCIAL

The Made-in-Ontario Environment Plan was released in 2018 as Ontario's plan to reduce GHG emissions through preserving and protecting land, air and water and addressing litter and reducing waste. The plan sets a target to reduce GHG emissions by 30% below 2005 levels by 2030 [4].

LOCAL

County Council has identified achieving appropriate climate change mitigation as a priority. The Corporate Climate Change Mitigation Plan sets a target to reduce GHG emissions across the county and its four local municipalities by 30% below 2018 levels by 2030.

CLIMATE ACTION PLANNING

In 2019, the County of Haliburton and its four local municipalities came together to begin the process of creating a county-wide Climate Change Plan. The plan consists of three phases: corporate climate change mitigation (phase one), corporate climate change adaptation (phase two), and community mitigation and adaptation (phase three). The County joined the Partners for Climate Protection (PCP) Program, a network of over 350 Canadian municipalities committed to reducing GHG emissions and transitioning to a low carbon future [5]. The PCP program consists of five milestones:

1

Create a Baseline GHG Inventory

2

Set Emissions Reduction Targets

3

Develop a Local Action Plan

4

Implement the Local Action Plan

5

Monitor Progress and Report Results

This document, along with the five municipal chapters, marks completion of milestone three for phase one. The Corporate Climate Change Mitigation Plan is a strategic document outlining a GHG baseline, targets and potential opportunities for reducing GHG emissions from our collective municipal operations. The plan provides direction for reducing corporate GHG emissions through building on existing efforts and identifying best practices and collective opportunities. This can be achieved through improving energy efficiency, investing in renewable and alternative forms of energy, reducing fuel consumption and reducing and diverting organic waste from landfills. The plan is a living document and will evolve over the next decade as changes occur and more information becomes available to allow for continuous improvement. In addition to lessening the impacts of climate change, reducing GHGs has many co-benefits, including cost savings, improved air quality, and local job creation. The County continues to grow in both permanent and seasonal residents, causing an increase in municipal service demands. Reducing GHG emissions while meeting increased service demands from the growing community will be a challenge. Ambitious climate action and the success of this plan will require dedication from council, municipal staff and the residents of the County of Haliburton.



PHASE 1

Corporate Mitigation

PHASE 2

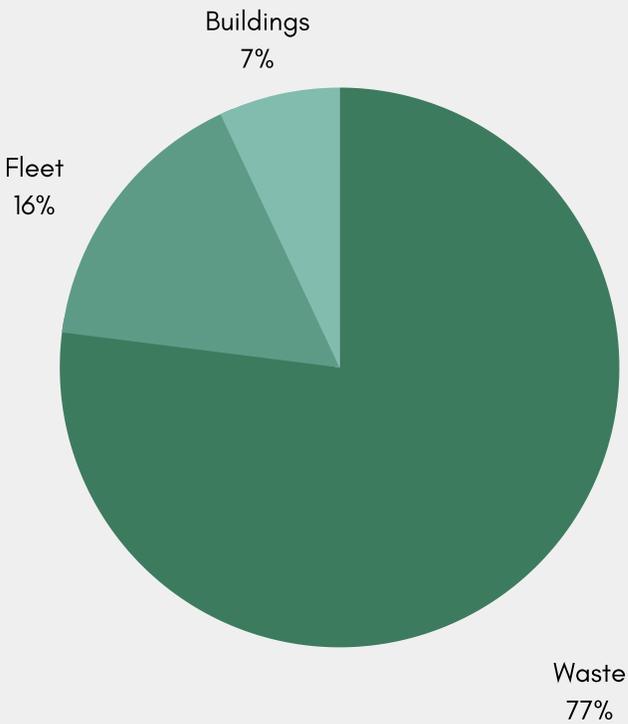
Corporate Adaptation

PHASE 3

Community Mitigation
and Adaptation

COUNTY-WIDE CORPORATE GHG INVENTORY

A GHG inventory was completed for the year of 2018 to understand the current state of GHG emissions from the corporate operations across the county. 2018 is the baseline year in which progress will be measured against. The total emissions in 2018 was 15,904 tCO₂e. Corporate GHG emissions primarily come from heating and powering municipal buildings (6%), operating municipal fleet (16%), and decaying waste in landfills (77%). Emissions from water and wastewater and streetlights and traffic signals account for less than 0.2% of corporate GHG emissions.

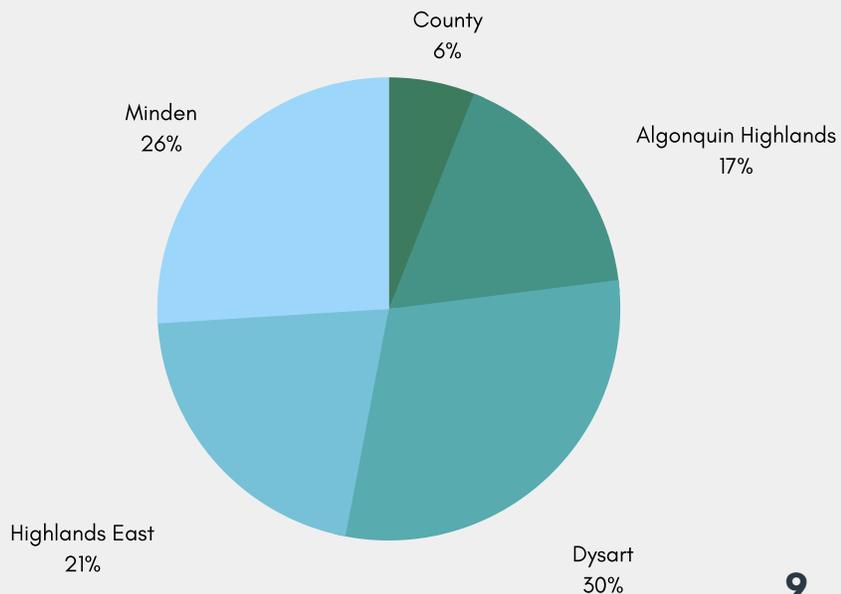


MILESTONE 1: CORPORATE GHG INVENTORY

Corporate GHG inventories include emissions across five sectors: buildings and facilities, fleet vehicles, streetlights and traffic signals, water and wastewater and solid waste. Sources of emissions include propane, fuel oil, electricity, diesel, gasoline and decomposing waste. Municipalities should report emissions over which they have direct control and influence, including sources that the municipality owns or has the ability to implement policies over. Emissions are expressed in terms of carbon dioxide equivalent (CO₂e), which equates the impact of different greenhouse gases, such as methane and nitrous oxide, in terms of the amount of carbon dioxide that would create the same amount of warming.

EMISSIONS BREAKDOWN BY MUNICIPALITY

County of Haliburton: 859 tCO₂e
 Township of Algonquin Highlands: 2,704 tCO₂e
 Municipality of Dysart et al: 4,740 tCO₂e
 Municipality of Highlands East: 3,348 tCO₂e
 Township of Minden Hills: 4,253 tCO₂e
Total: 15,904 tCO₂e



MILESTONE 2: GHG REDUCTION TARGETS

GHG reduction targets should provide a balance between being ambitious and achievable. Targets are measured relative to the baseline year, but also must consider mitigating against the projected growth in the business-as-usual forecast. The PCP program recommends a corporate target of a 20% reduction to be achieved within 10 years. The program suggests that municipalities setting their first target should establish the conditions for success early on by setting a target that can be realistically achieved. Target setting is not a one-time exercise. Targets will be re-evaluated regularly to ensure they are an appropriate fit as changes are likely to occur. Based on what the county and its local municipalities have the power and influence to change over the next 10 years, the following targets have been established:

COUNTY OF HALIBURTON	Reduce corporate GHG emissions by 15% below the 2018 baseline by 2030
TOWNSHIP OF ALGONQUIN HIGHLANDS	Reduce corporate GHG emissions by 15% for buildings, 10% for fleet and 12% for waste below the 2018 baseline by 2030
MUNICIPALITY OF DYSART ET AL	Reduce corporate GHG emissions by 20% for buildings, 10% for fleet and 80% for waste below the 2018 baseline by 2030
MUNICIPALITY OF HIGHLANDS EAST	Reduce corporate GHG emissions by 15% below the 2018 baseline by 2030
TOWNSHIP OF MINDEN HILLS	Reduce corporate GHG emissions by 20% for buildings, 10% for fleet and 10% for waste below the 2018 baseline by 2030
TOTAL	Reduce corporate GHG emissions by 30% below the 2018 baseline by 2030

MILESTONE 3: LOCAL ACTION PLAN



Reaching the target will involve a combination of policy, asset and behavioural changes, in addition to ensuring that future decisions do not cause a lock-in of GHG emissions. Actions taken to reduce our corporate GHG emissions are expected to be cost-effective and demonstrate what climate action can look like in a rural area. Actions were developed in collaboration with municipal staff from the departments that will be involved in implementation. The list of actions includes potential opportunities that have shown to be effective in other Canadian municipalities but will each require more analysis on local feasibility. Partnerships and external funding will be critical for the success of the recommended actions. The actions correspond with the overarching goals of:

01

Improve energy efficiency and transition to low carbon sources of energy in municipal facilities

02

Reduce fuel consumption in municipal fleet and transition to low carbon vehicles and fuels

03

Reduce and divert organic waste from landfills, improve corporate waste management and improve landfill data

04

Integrate climate change considerations across programs, policies and plans

MILESTONE 4: IMPLEMENTATION

The Climate Change Coordinator will work with the identified department supports from the County and the local municipalities to implement their Corporate Climate Change Mitigation Plan. An inter-municipal Climate Change Working Group should meet regularly to allow for the sharing of ideas and collaboration across municipalities during implementation, including combined programming and purchasing. Projects and initiatives related to the plan should be well documented as they are implemented. As a living document, implementation of the plan will involve both advancing the outlined opportunities and identifying new opportunities for consideration.

MILESTONE 5: MONITORING

Annual GHG inventories including energy consumption and expenditure are to be completed beginning for the year 2019 to assess progress from the 2018 baseline. Annual progress on GHG emissions reduction, along with details on the impact of projects and initiatives implemented in that year, should be presented to councils beginning in 2020. The Climate Change Coordinator is responsible for collecting GHG data for each municipality and reporting this data to councils and the PCP program to track progress toward climate change targets and goals. Changes in federal and provincial policy and action, variation in expected population growth and advances in technology will impact this plan in ways that cannot be predicted with certainty. At the time of writing this plan, municipal operations have undergone significant changes due to the COVID-19 global pandemic. At this time, the impacts of the pandemic on our corporate emissions are unknown. This plan is a living document that will be reviewed and updated every three years (2023, 2026 and 2029) or when major changes occur that have an impact on the plan. A new Corporate Climate Change Mitigation Plan is to be completed prior to 2030 to ensure that the transition to a low carbon future continues.

FOOTNOTES

[1] Intergovernmental Panel on Climate Change, Special Report: Global Warming of 1.5°C, 2018.

[2] United Nations Framework Convention on Climate Change, The Paris Agreement, 2020.

[3] Government of Canada, A Healthy Environment and a Healthy Economy, 2020.

[4] Ministry of the Environment, Conservation and Parks, A Made-in-Ontario Environment Plan, 2018.

[5] Federation of Canadian Municipalities, Partners for Climate Protection, 2020.