

Municipality of Cumberland

CEEP Process & Emissions Summary

The Municipality of Cumberland has launched a process to develop a Community Energy and Emissions Plan (CEEP). The CEEP is a strategic plan to:

- assist us in becoming a more energy independent, resilient and sustainable community.
- allow us to contribute to reducing the impacts of climate change.

WHAT IS A CEEP?

As residents and businesses in Cumberland, our day-to-day activities are what ultimately define how much and the type of energy we consume, and how much we are contributing to climate change as a result. The CEEP will define goals and identify actions that the Municipality, stakeholders, and residents, can implement to drastically reduce greenhouse gas emissions.

Cumberland's CEEP will define:

- **Where we are:** The CEEP outlines how much greenhouse gas emissions producing energy we currently use in our community (e.g. in our homes, in our businesses, to get around), the type of energy we currently use (e.g. electricity from NS Power, natural gas, gasoline, diesel), and how much we are contributing to climate change by releasing greenhouse gas emissions.
- **Where we are going:** Cumberland will continue to change from now till 2050. The CEEP will include a forecast how much energy might be consumed in the future, where the energy is likely to come from, and how much greenhouse gas emissions could be released because of our ongoing energy consumption and the actions we choose to implement over the next 20+ years.
- **Where we want to be:** The CEEP will outline goals and targets that describe how the community aspires to change by 2030 and 2050 with respect to energy consumption and our contribution to climate change.
- **How we will get there:** The CEEP will articulate steps to move the community in the right direction toward achieving the goals and greenhouse gas emission reduction targets by outlining strategies, policies, and measures that can be undertaken by the community (the Municipality, residents, businesses, and other organizations).
- **How we are doing:** An important outcome of creating and following a long-term plan such as a CEEP is to make sure the actions being taken are moving the community towards the stated vision, goals and targets. The CEEP will therefore outline an implementation and monitoring plan for tracking progress over time.

WHY CREATE A CEEP?

The Municipality is committed to reducing our community's contribution to climate change. The CEEP describes a course for the community to achieve this commitment. There are many additional benefits to taking action to reduce energy consumption and greenhouse gas emissions, including:

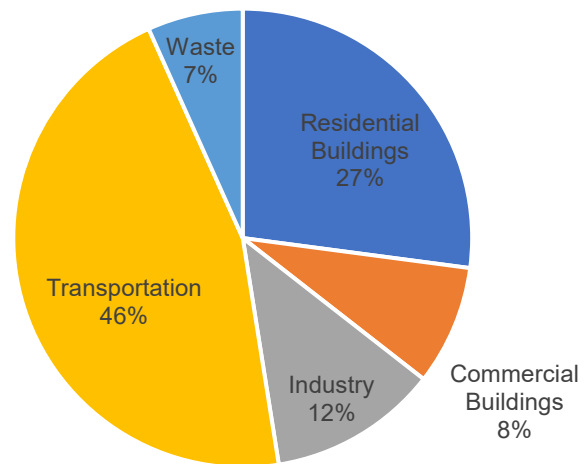
- Reducing energy costs for the community (for residents and businesses).
- Reducing vulnerability to energy markets through reduced reliance on fossil fuels.
- Creating local economic development opportunities in energy efficiency and green energy.

- Supporting the Municipality’s long-term goal of Cumberland being a community that is economically, environmentally, demographically, and culturally sustainable.¹

WHERE WE ARE

The first step in creating a CEEP is to understand which activities consume energy and release greenhouse gas emissions – this is called an energy and emissions inventory. The 2023 inventory reveals that residents and businesses consumed over 3.4 million Gigajoules of energy, primarily from electricity, heating oil, gasoline, and diesel fuel. This energy use, combined with industrial processes and waste generation, resulted in approximately 314,000 tonnes of carbon emissions (tCO₂e), equating to approximately 16 tonnes of greenhouse gases per person being released into the atmosphere. The main sources of greenhouse gas emissions in the County are as follows:

- **Residential Buildings:** 27% of community GHG emissions come from heating, cooling, and powering of residential buildings. The majority of these GHG emissions are from the consumption of heating oil and electricity with the remainder coming from propane, natural gas, and wood.
- **Commercial Buildings:** 8% of community GHG emissions come from heating, cooling, and powering commercial buildings. The majority of these GHG emissions are from the consumption of natural gas and electricity.
- **Industry:** The County encompasses a large area and a variety of land uses and industries: agriculture (both small and large), mining, forestry, manufacturing, renewable energy generation, housing, recreation, cottaging, offices, retail, and tourism are included in this category. Many of these activities release non-energy GHG emissions (for example livestock release methane, a potent GHG) because of the activities and processes that occur. For the 2023 reporting year, industry activities accounted for 12% of community GHG emissions.
- **Transportation:** 46% of GHG emissions come from using fossil fuels in on-road, off-road, waterborne and aviation vehicles. 98% of these transportation GHG emissions are related to on-road vehicle fuel consumption which is directly related to moving people and goods for businesses.
- **Waste:** Waste does not directly consume energy but when deposited into landfills, composted, or treated (like wastewater), the organic materials can decompose and release methane which is a potent greenhouse gas emission. For the 2023 reporting year, the County’s waste contributed approximately 7% to the community’s overall GHG emissions.
- **Land Sequestration:** Natural assets are natural resources and/or ecosystems that contribute to health, well-being and long-term sustainability of the community and its residents. These include urban trees and forests, wetlands, water bodies, and wilderness corridors, which can act as carbon sinks, help prevent flooding and act as habitats and means for travel for native



¹ [Land Use Bylaw Review – Plan Cumberland](#)

wildlife. It is estimated that Cumberland’s natural assets sequestered and stored approximately 488,000 tCO₂e – a value that exceeds the community’s current estimate of greenhouse gas emissions (314,000 tCO₂e) resulting from energy consumption, industrial activities and waste generation.

While the Cumberland’s net GHG emissions are currently negative in consideration of sources, sinks and reservoirs, we have a responsibility to seek opportunities to maintain or improve on land sequestration capacity and reduce our greenhouse gas emissions where feasible, thus reducing Cumberland’s contribution to the effects of climate change. Given that forestry is a significant industry in the County and our forests serve as a major carbon sink, it is important to apply sustainable forestry practices to protect this resource.

We have defined 2023 as our base reporting year. This is the year the Municipality will be establishing 2030 and 2050 greenhouse gas reduction targets against.

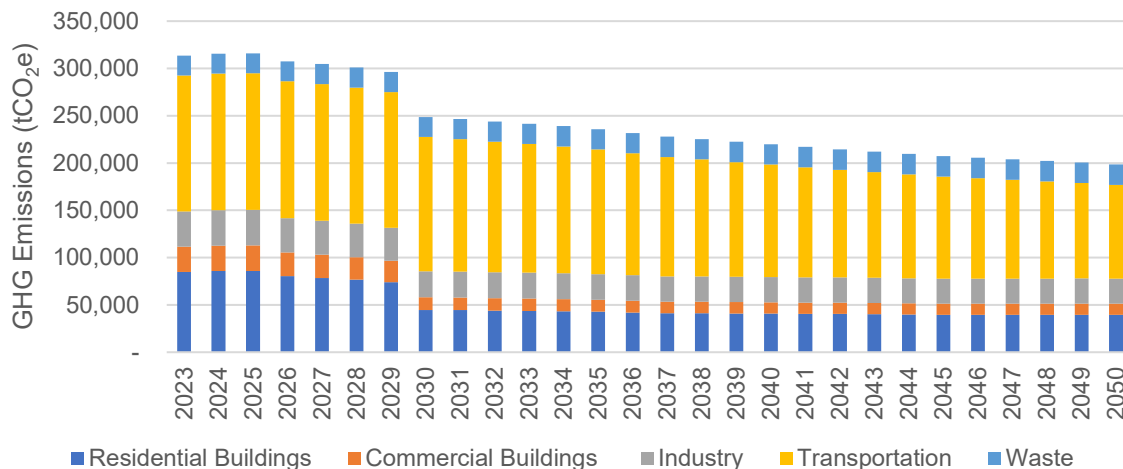
WHERE WE ARE GOING

In communities where population growth is anticipated, there is a corresponding increase in energy demand and greenhouse gas emissions as well as a potential reduction in natural assets as the community grows. However, our County, like many others, faces a different scenario where population projections indicate stagnation or even decline in certain areas. While this trend could potentially lead to a reduction in future greenhouse gas emissions, it also poses challenges to our quality of life and community cohesion.

Our 2018 Municipal Planning Strategy acknowledges the importance of addressing these demographic shifts. It emphasizes the need to balance the changing population dynamics with efforts to maintain strong community bonds. Additionally, the strategy highlights the necessity of reducing energy consumption and greenhouse gas emissions, while also adapting to the impacts of climate change. This comprehensive approach aims to ensure that our community remains resilient, sustainable, and cohesive in the face of evolving environmental and demographic challenges.

In 2021, the County’s population trend shifted from decline to growth. However, given the uncertainty around whether this change is temporary or indicates a longer-term upward trend, it has been assumed that the population would incrementally increase by 0.1% moving forward.

Based on changing demographics, the greening of the electrical grid planned in Nova Scotia, and policies, like phasing out of the sale of light duty fossil fuel powered vehicles in 2035 our projected GHG emissions, if we do nothing, are anticipated to decline by 37%.



Scientists are emphasizing that unless we drastically reduce our greenhouse gas emissions to achieve net zero by 2050, we risk causing irreversible damage to our planetary systems and communities. While this forecasted reduction is a significant step towards addressing the urgent warnings from scientists, more can be done to reduce greenhouse gas emissions from community sources.

WHERE WE WANT TO BE

Through the CEEP development process, goals and targets will be established that describe where we want Cumberland to be by the years 2030 and 2050 with respect to energy efficiency, energy sources, and our contribution on climate change. The CEEP development process will take place over the fall and involve staff, Council, stakeholders and residents through surveys and other events aimed at informing the content of the CEEP and raising awareness around energy and climate change issues in the community.

HOW WE WILL GET THERE

The CEEP will define strategies, policies and measures that will help the community reach its goals and targets. The Municipality is committed to reducing the community's contribution to climate change and will need to allocate resources to support implementation of the plan. Although the CEEP will focus on policies and measures for the Municipality to undertake, it will be imperative for residents, businesses and other organizations in the community to do their part in achieving the goals and targets.

What can residents, businesses and organizations do now to reduce greenhouse gas emissions? Some actions County residents and business owners can consider include:

- Renovating old buildings to be more energy efficient.
- Replacing old furnaces and hot water tanks with more energy efficient models.
- Installing solar panels for hot water, geo-exchange systems for heat, or other alternative energy systems.
- Walking, biking or riding transit whenever possible.
- Making sure your next vehicle is fuel efficient or consider a hybrid or electric vehicle.
- Shopping locally as much as possible.
- Choosing products with minimal or reusable packaging.
- Support wetland / forestland restoration and preservation to help capture GHG emissions and provide critical habitat for wildlife.
- Encourage ecological and sustainable forest practices to reserve natural carbon sinks.
- Plant native trees and vegetation in your yard/community to sequester GHG emissions. Native plants are also adapted to local conditions and thus require less water and fertilizer.
- Compost organic waste to reduce methane emissions from landfills.

MORE INFORMATION

For more information about the Community Energy and Emissions Plan, please contact:

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