



Draft Corporate Greenhouse Gas Emissions Reduction Plan

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Background

- ▶ Climate change is upon us. The past ten years were the warmest on record.
- ▶ The global community signed on to the Paris Agreement in 2016, with the goal to limit global average temperature rise to well below 2°C and pursue efforts to limit it to 1.5°C above pre-industrial levels.
- ▶ To date, the Earth has experienced 1.2°C of warming. We are on track to lock in approximately 3°C rise in global average temperature.
- ▶ While climate change is a global issue, it requires action at the local level. In Canada, municipalities have influence over approximately 50% of greenhouse gas (GHG) emissions and are on the front lines of responding to the impacts.

Actions Completed to Date

- ▶ Northumberland County has completed several actions to date that have reduced GHG emissions. These include:
 - ▶ Implementing waste diversion programs such as the green bin program, seasonal leaf and yard waste collection, and two stream recycling collection.
 - ▶ Developing and implementing a telecommute program for employees.
 - ▶ Purchasing hybrid vehicles for the fleet.
 - ▶ The phase out of coal from the provincial electricity grid.
 - ▶ Constructing new corporate buildings to energy efficient standards (e.g., LEED certification.)
 - ▶ Completing LED lighting upgrades for streetlights and corporate buildings.
 - ▶ Completing energy efficiency upgrades for buildings (e.g., heat pump installation.)

Looking Forward

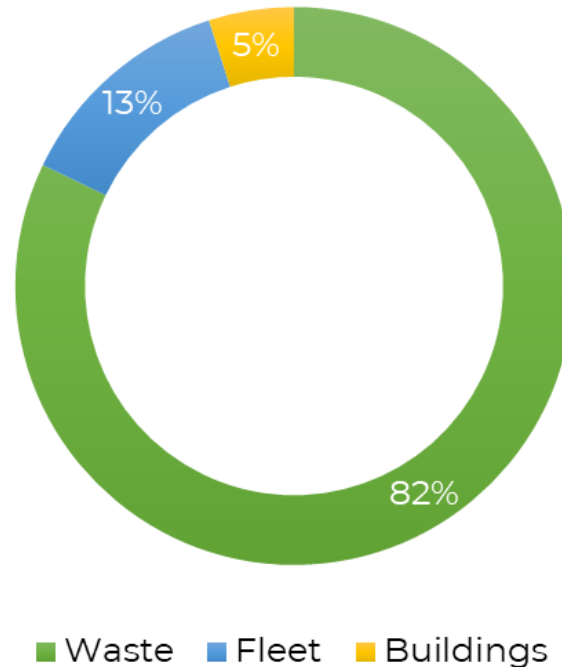
- ▶ Northumberland County's Strategic Plan sets the goal to respond to the climate crisis through reducing the carbon footprint of County operations through the development of a Climate Action Plan.
- ▶ In 2024, Northumberland County hired a permanent Environmental Officer to complete a Climate Action Plan.
 - ▶ The first stage of the plan addresses **climate change mitigation**, which involves reducing greenhouse gas emissions and increasing carbon sequestration.
 - ▶ The second stage of the plan addresses **climate change adaptation**, which involves coping with the impacts that have already occurred and will occur because of climate change.

Why Develop Climate Action Plans?

- ▶ Reducing GHG emissions can result in:
 - ▶ Reduced operating costs for the County
 - ▶ Improved public health
 - ▶ Improved air quality/reduced noise pollution
 - ▶ Job creation
 - ▶ Energy security/resilience against power outages

- ▶ Adapting to the impacts of climate change pays off:
 - ▶ The Canadian Climate Institute estimates that for every \$1 spent on climate adaptation measures today, \$13-\$15 will be returned in years ahead in savings and benefits.

GHG Inventory

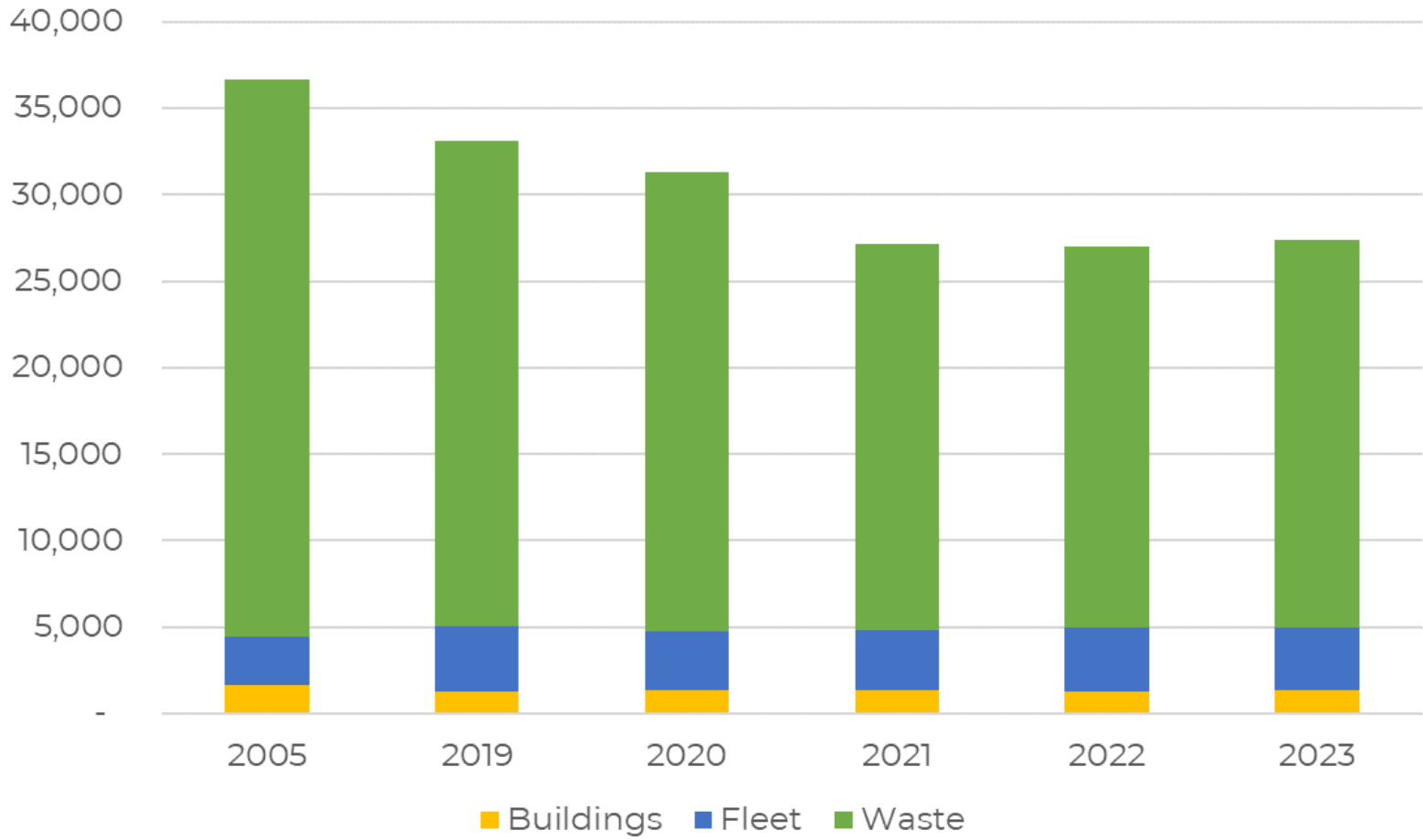


- ▶ In 2023, total Northumberland County corporate emissions were 27,355 tCO₂e. These emissions resulted from our landfill (82%), our fleet and employee commuting (13%) and our buildings and facilities (5%).

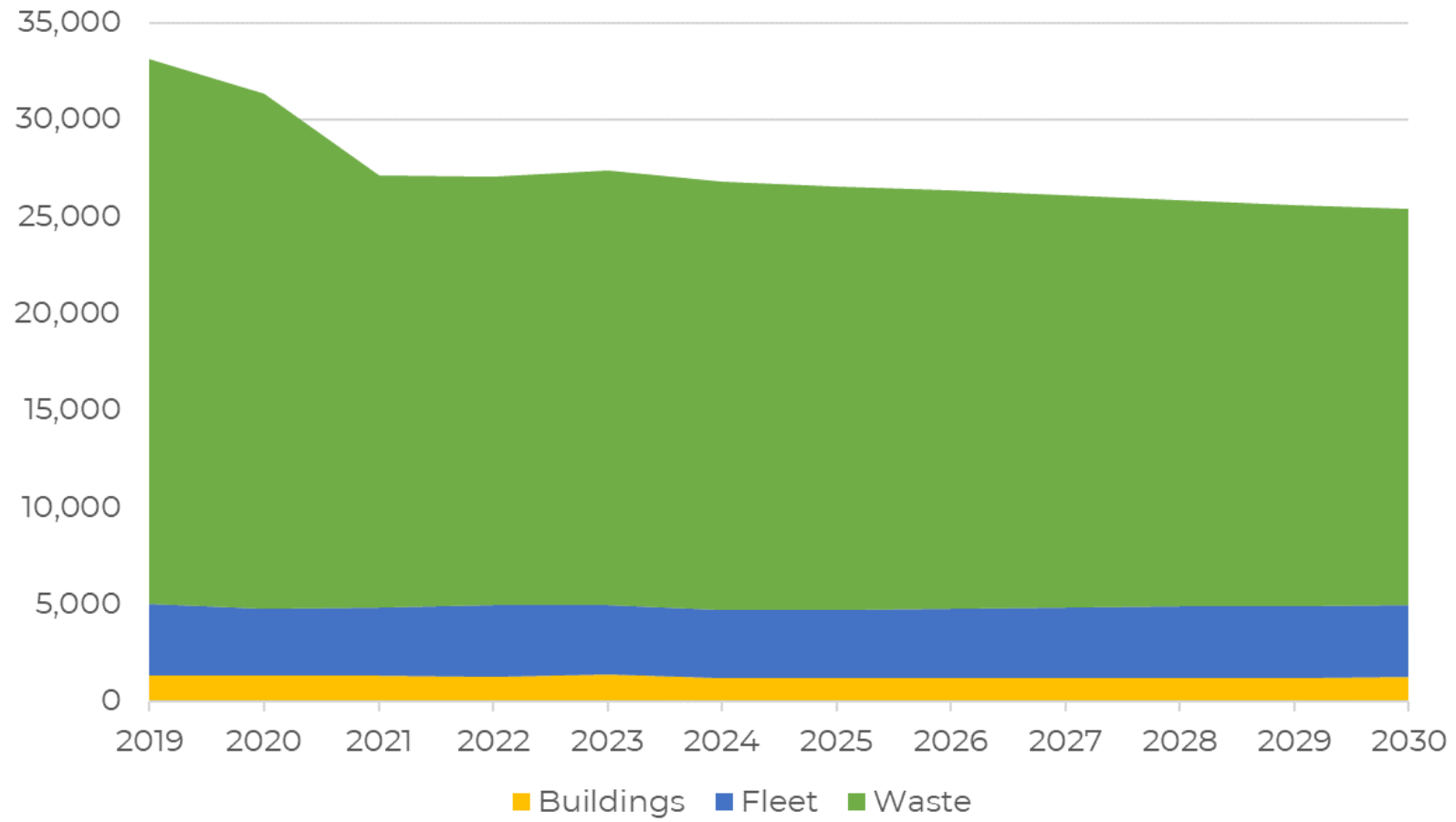
GHG Reduction Targets

- ▶ In 2019, County Council committed to a goal of reducing GHG emissions by 30% by 2030, and by 80% by 2050, as compared to 2005 levels.
- ▶ In 2023, there had been a 25% reduction in GHG emissions since 2005 despite increased levels of service.
- ▶ The draft Corporate Greenhouse Gas Emissions Reduction Plan recommends an updated target of a 65% reduction in emissions by 2030 as compared to 2005 levels, and net-zero emissions by 2050.

GHG Inventory (tCO₂e)



Business-as-Usual Scenario (tCO₂e)



Proposed Actions

Focus Area 1: Waste Management

- Increase waste diversion.
- Capture methane from the Brighton Landfill.

Focus Area 2: County Fleet and Staff Commuting

- Establish a Green Fleet and Equipment Policy and Action Plan.
- Provide solutions for sustainable employee commuting.

Focus Area 3: County Buildings and Facilities

- Construct new buildings and major renovations to net-zero or near net-zero carbon emissions where feasible.
- Retrofit existing County buildings and facilities for increased energy efficiency.

Focus Area 4: Building a Culture of Climate Action

- Implement a climate change lens on strategic plans, policies, and decisions that come to council.
- Identify and manage current and future climate impacts on County operations.
- Facilitate local collaboration on climate action.

Proposed Actions Continued

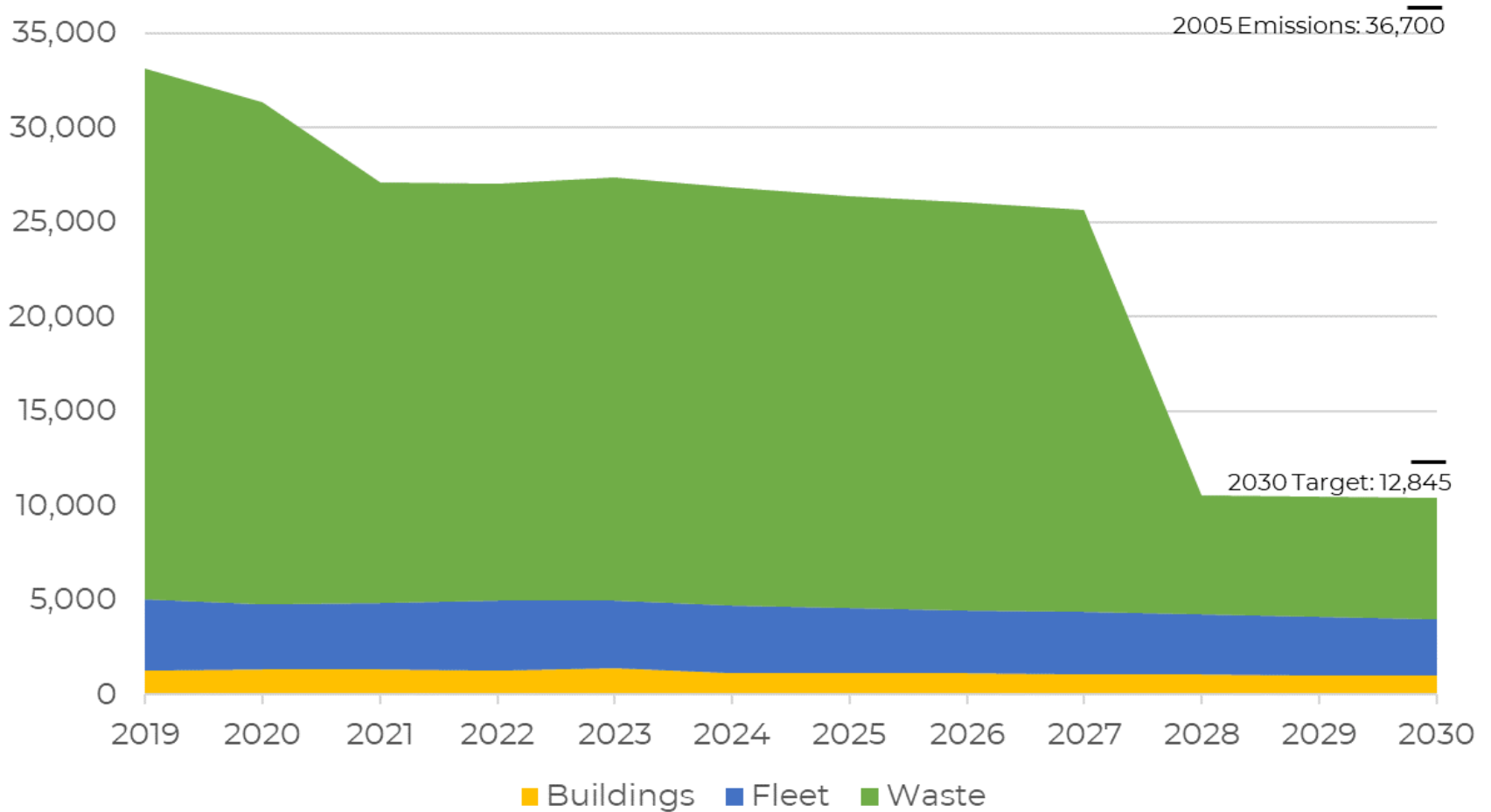
Focus Area 5: The Natural Environment

- Continue to preserve and protect natural heritage.
- Maintain and enhance naturalization in the County.
- Enlarge the County Forest.

Focus Area 6: Advocate and Influence

- Advocate for continued decarbonization of Ontario's electrical grid.
- Advocate to the provincial and federal governments for increased funding for climate change mitigation initiatives.
- Encourage member municipalities to develop green development standards.
- Support and encourage the expansion of public transportation options.
- Integrate active transportation infrastructure into capital projects.
- Promote sustainable business and tourism and share decarbonization resources with local businesses and operators.
- Advocate for home retrofit financing for low-income households including renters.
- Communicate the importance and benefits of climate action to the community.
- Encourage the expansion of electric vehicle infrastructure to support the community shift to electric vehicles.

Low Carbon Scenario (tCO₂e)



Timeline

- ▶ **Spring 2024:** Staff engagement and review of draft
 - ▶ **Summer 2024:** Present to Management Operating Committee and Public Works Committee
 - ▶ **Summer/Fall 2024:** Community engagement on draft plan
 - ▶ **Fall 2024:** Present plan to County Council
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- ▶ Monitor plan progress through the Public Dashboard Tool and annual progress reports to senior leadership and County Council