

Chief Administrative Office Memo

To: Mayor Shantz and Members of Council

From: Anna Harrison, Climate Action & Sustainability Coordinator

Subject: Climate Action Update

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Meeting Date: November 18, 2024

Purpose:

That the Council of the Township of Woolwich receive an update on current and future climate action and sustainability efforts in Woolwich.

Background:

Greenhouse gas (GHG) emissions are having a significant impact on human health, the environment, and the economy. These impacts, such as a reduction in snow and sea ice cover, extreme weather events, increased diseases, and damage to infrastructure, are expected to become more severe, unless united efforts are taken to reduce emissions. Fortunately, the Township of Woolwich understands the importance of these impacts to its community, and has made various strides toward a more sustainable future:

- In 2018, the Township of Woolwich became a member of Sustainable Waterloo Region (SWR) and established the corporate Green Team.
- In 2019, the Township of Woolwich declared a Climate Emergency, acknowledging that Canada has disproportionately contributed to the climate crisis and that urgent action is required. By making this declaration, Woolwich committed to taking steps to address and mitigate this global crisis. This was also the year the Climate Action/Greening Levy was established.
- In 2021, the Township of Woolwich Council supported a request from GreenWR to endorse the TransformWR Strategy, which committed the Township to reduce their GHG emissions 50% by 2030 (50 x 30) and 80% by 2050 (80 x 50).
- In 2024, Township of Woolwich Council approved a new Climate Action & Sustainability Coordinator position to facilitate the implementation of the TransformWR Strategy in addition to other sustainability projects, to achieve GHG reductions across the corporation and community of Woolwich.

Although there has been commendable progress made to date, there is still much more work we must do to reach our GHG reduction targets. A corporate GHG emissions

inventory was completed for 2019 – 2023, which revealed that our absolute GHG emissions are increasing each year. The inventory also indicates that the Township's main sources of emissions come from natural gas and fleet (Scope 1 emissions). These areas provide a significant opportunity for future GHG reductions and a transition to a lower carbon energy source such as electricity.

	2019	2020	2021	2022	2023
Natural Gas (Scope 1)	941	1109	1106	1384	1428
Fleet (Scope 1)	456	250	369	474	468
Electricity (Scope 2)	150	111	63	92	92
TOTAL	1,547	1,470	1,539	1,949	1,989

Included within this report is a brief overview of the recent climate action work undertaken since June 2024, and the plans for future climate action, specifically a Woolwich Climate Action Plan.

Comments:

Recent Climate Action Projects

Corporate Initiatives, Events and Engagement:

Waste Reduction Week and Carbon Cleanse

The Green Team hosted a series of events and activities during Waste Reduction Week to raise awareness about different types of waste (textiles, electronics, plastic and food waste). During this week, the Green Team also collected electronic waste, which was brought to Staples in Waterloo for recycling, and used clothing, which was donated to local thrift stores. This not only reduces the amount of waste ending up in landfill and spreads awareness about how to properly dispose of unwanted items, but also help those in need within our community. Staff also participated in a series of waste and GHG reduction activities as part of ClimateActionWR's annual Carbon Cleanse campaign.

Internal Quarterly Newsletter

The Green Team released its inaugural internal newsletter to educate and inform staff of upcoming climate action events or campaigns (internal and external) and provide tips or advice for how to be more sustainable at the office and at home. These newsletters will be released on a quarterly basis going forward.

Corporate GHG Emissions Inventory

An inventory of GHG emissions generated in 2023 from Township of Woolwich operations was completed. A robust methodology for monitoring and calculating these emissions on an annual basis was also developed to ensure consistency. In addition to this emissions inventory, every 5 years the Township is also provincially

legislated to report its corporate GHG emissions through the completion of an Energy Conservation and Demand Management (ECDM) Plan. The 2024-2029 ECDM Plan was released earlier this year.

Woolwich Climate Action Plan (WCAP)

As a first step in the development of the Woolwich Climate Action Plan (WCAP), (which will be discussed in more detail in the Future Planned Actions section of this document), the actions identified in TransformWR were mapped to each Township of Woolwich department and additional actions were identified. Each department reviewed the draft list of actions and provided feedback to ensure that the actions were appropriate, realistic and achievable.

Region of Waterloo High Performance Development Standards (HPDS)

Woolwich is directly involved in the development of the High-Performance Development Standards (HPDS) for Waterloo Region (formerly known as the Green Development Standards), bringing the perspective of the Township and the specific needs of our unique rural community.

Community Initiatives, Events and Engagement:

Community Climate Change Engagement Survey

A Community Climate Change Engagement Survey was released to the public to gain a better understanding of local perceptions and concerns about climate change in order to tailor impactful climate actions to the Woolwich community.

A brief summary of findings:

- o 79% of respondents expressed that they were concerned or very concerned about the impacts of climate change. The climate change impacts that are most important to the Woolwich community are air quality/pollution, extreme weather events, waste pollution, food security, and human health impacts.
- o 61% of respondents were not aware of any actions or initiatives undertaken by the Township of Woolwich to address climate change. For the remaining 39%, the most common response was that they were aware of tree planting initiatives and programs as part of TWEEC and Trees for Woolwich.
- 75% of respondents expressed interest in attending community workshops or events to learn more about climate action in Woolwich.

TerraCycle Program

Woolwich launched a pilot TerraCycle recycling program at the Woolwich Memorial Centre in an effort to reduce waste and promote environmental stewardship within the community. Through the TerraCycle program, residents can collect waste streams that are not collected as part of the municipal blue bin recycling program

and drop them off in the appropriate bin to be recycled into new products. As this is a pilot program, only three waste streams were selected to assess uptake: writing instruments, McCafe coffee capsules, and home and air care products.

By recycling items that would otherwise end up in landfills, Woolwich is making a positive impact on our planet. If the program is successful, we will consider expanding the location to other Community Centres within Woolwich and adding more waste streams.

Woolwich Climate Action Events

Woolwich Climate Action hosted a Heat Pump 101 event on July 17. There are another two planned Heat Pump events on February 5th and 12th. Woolwich is exemplifying this decarbonization transition with the installation of 6 air source heat pumps in 2024 at various Township owned facilities.

On November 28th, the Township in collaboration with ClimateActionWR will be hosting a 'Taking on Climate Change' workshop at CHANGE Apparel in St. Jacob's. This community event will teach attendees how to calculate their own carbon footprints and share practical steps on how to reduce their carbon footprint and work together towards our community GHG emissions targets.

Future Planned Actions

Completion of the Woolwich Climate Action Plan (WCAP)

The intent of the Woolwich Climate Action Plan (WCAP) is to provide Woolwich with a personalized guidebook for reducing our carbon footprint. The WCAP will identify short-term, medium-term, and long-term actions to achieve the 50 x 30 and 80 x 50 GHG reduction targets, as well as our own corporate GHG reduction targets (which are to be determined). Each action will be assessed and prioritized (high, medium, low) to determine the urgency of the action. Although this plan will have a defined time period, it is intended to be a living document, and therefore can be revised or amended as needed. The WCAP will also be informed by other Woolwich plans such as the TransformWR Strategy, the Pathway to Net Zero Feasibility Study, and Energy Conservation and Demand Management Plan.

Vision

The draft vision for the WCAP is:

To create a resilient, sustainable, and low-carbon future for Woolwich through strategic planning, environmental conservation, and community collaboration.

It is important that the WCAP maintains alignment with existing Township plans and strategies, so therefore, in developing the first draft of the vision, the following elements were considered:

- Incorporate climate change considerations into the short and long-term plans for Woolwich to help drive decision-making focused on adaptation and resilience (aligns with Woolwich 2024 Asset Management Plan)
- Strategically navigate the planning and development of our communities through phased and managed growth that supports environmental, economic, and social sustainability and wellbeing (aligns with Woolwich 2024-2034 Strategic Plan)
- Preserve and enhance the environmental health and biodiversity of Woolwich and the Grand River watershed (aligns with Woolwich Official Plan)
- Work collaboratively with upper and lower tiers of government and residents to advance the TransformWR strategy and create a low carbon future for Woolwich (aligns with TransformWR)

Goals

Based on the above vision statements, a set of eight goals were developed for the WCAP, which help to visualize a future of Woolwich that would be achieved by implementing the actions identified in the WCAP. They are the following:

- **1. Circular Communities:** Woolwich is a community that prioritizes repairing and reusing products, hosting waste-free events, fostering a culture of sustainability among residents, and creating healthy communities that people can thrive in.
- 2. Conscious Consumption: Woolwich residents are equipped with the knowledge to make deliberate choices that have minimal impact on the environment when purchasing and consuming goods and services. They recognize the direct link between personal consumption habits and their broader environmental consequences, such as pollution or greenhouse gas emissions. Woolwich residents reduce their carbon footprint by making more sustainable choices, thereby contributing to climate change mitigation actions.
- 3. Energy Efficient Buildings & Homes: The buildings and homes within Woolwich use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy to produce goods. This energy efficiency saves Woolwich residents money, increases the resilience and reliability of the electric grid, and provides environmental, community, and health benefits.
- 4. Engaged & Empowered Residents: Woolwich residents are actively involved in climate action and have the capacity to influence climate-related decisions and actions within their communities. They participate in local climate action initiatives, contribute to policy discussions, and implement sustainable practices that address climate challenges. Woolwich residents have access to the necessary information, resources, and platforms to make meaningful contributions to climate mitigation and adaptation efforts.
- 5. Inclusive & Just Transitions: The social implications of climate action are well understood amongst residents, and the burdens are not disproportionately borne by the most vulnerable populations. Woolwich residents and stakeholders are actively

- engaged in the decision-making process to create opportunities for decent work and to prevent exacerbating existing inequalities.
- 6. Low Methane Agriculture: The agricultural industry within Woolwich operates in such a way that reduces methane emissions, a greenhouse gas that is 25X more potent than carbon dioxide. Farmers are equipped with the necessary resources and knowledge to improve livestock feed efficiency, manage manure, and adopt other farming methods that minimize methane production.
- 7. Resilient Communities: Woolwich has robust emergency response systems in place and adapts infrastructure and other assets to be able to withstand the impacts of climate change. This allows communities to proactively prepare for any natural disasters that may occur due to climate change, and thereby remaining environmentally, socially, and economically stable.
- 8. Sustainable Transportation: Woolwich residents use modes of transportation that are environmentally friendly, energy-efficient, and socially responsible. They have a range of low-carbon transportation options available to them, including the use of electric and alternative-fuel vehicle charging stations, e-bike and e-scooter renting programs, robust public transit systems, and active transportation corridors such as biking and walking.

Scope

The WCAP will focus largely on how Woolwich as a corporation will reduce its GHG emissions from Township owned assets within its direct and indirect control – that is, operations, processes, facilities and equipment, and staff education and awareness. Responding to the Climate Emergency and all the actions laid out in the TransformWR Strategy will mean different things for different departments within the Township of Woolwich, and therefore we will take a holistic, integrated approach to identifying climate actions across the corporation. By focusing primarily on corporate climate actions, Woolwich can lead by example and inspire broader societal shifts toward sustainability.

The WCAP will include Scope 1 emissions, which are the emissions generated by sources that are in direct control of the Township, such as natural gas and fleet; Scope 2 emissions, which are generated by grid-supplied electricity; and Scope 3 emissions, which are generated indirectly by the Township, such as employee commute and paper usage.

Woolwich recognizes that the emissions resulting from the community are much greater in comparison to corporate emissions, and as such, the WCAP will also incorporate community climate actions as well. Therefore, in addition to providing a corporate GHG emissions inventory, the WCAP will also include a profile of GHG emissions produced by the community of Woolwich for certain energy sources, including natural gas and electricity. The Township has obtained community natural gas data from Enbridge and will continue to work with the Region of Waterloo and Sustainable Waterloo Region to acquire data for other sources of emissions, such as agriculture, transportation and waste. In the meantime, we use the regional data from the TransformWR Strategy.

Finally, the WCAP will consider both mitigation and adaptation responses to climate change. This is because we want to reduce our emissions, as well as adapt our operations, infrastructure and communities to become more resilient to the anticipated local impacts of climate change.

Timeline

Key Milestone	Status	Completion Date
Complete the 2023 corporate GHG emissions inventory and develop a reduction target	In progress	December 2024
Develop first draft of Woolwich Climate Action Plan	In progress	March 2025
Develop final draft of Woolwich Climate Action Plan	Not yet started	May 2025
Approval of Woolwich Climate Action Plan by Council	Not yet started	June 2025
Implement Woolwich Climate Action Plan	In progress	Ongoing
Measure and report on progress and update staff and Council	Not yet started	Annually (Spring)

Other Future Planned Projects

- Joint project with Woolwich's Economic Development and Tourism Officer to support Regional Tourism Organization 4 (RTO4) with research on tourism supplychain analysis for St. Jacob's, Stratford, and Elora-Fergus. The goal of this research is to inform more local and sustainable procurement and events-management policies that will assist in improving the regenerative performance of the tourism supply chain within these areas.
- Investigate ways in which the Woolwich community can be involved in the development of the Woolwich Climate Action Plan
- Facility upgrades/retrofits:
 - Continue to work towards decarbonization of our facilities, including the replacement natural gas fuelled HVAC and hot water system with electric and heat pump installations
 - Identify and apply for funding to support GHG reduction actions identified within the Pathway to Net Zero Feasibility Study
 - Replacement of gas-powered hand tools with electric
 - Addition of organics collection to Woolwich Community Centres (where appropriate)

- o Transition to electric fleet vehicles where feasible
- Expand the TerraCycle recycling programs to other waste streams and other Woolwich Community Centres
- Identify funding sources to support GHG mitigation or adaptation actions
- Continue to work closely with our strategic climate partners, including: ClimateActionWR (CAWR), Sustainable Waterloo Region (SWR), Waterloo Region Community Energy (WRCE), and our internal committees of council Woolwich Environmental Advisory Committee (WEAC), Township of Woolwich Environmental Enhancement Committee (TWEEC), and Woolwich Climate Action.

Attachments:

1. N/A