

INFRASTRUCTURE & ENVIRONMENTAL SERVICES COMMITTEE AGENDA

Thursday, May 23, 2024 at 9:00 am

W & M Edelbrock Centre, Dufferin Room, 30 Centre Street, Orangeville ON

The meeting will be live streamed on YouTube at the following link:

http://www.youtube.com/@DufferinOne

Land Acknowledgement Statement

We would like to begin by respectfully acknowledging that Dufferin County resides within the traditional territory and ancestral lands of the Tionontati (Petun), Attawandaron (Neutral), Haudenosaunee (Six Nations), and Anishinaabe peoples.

We also acknowledge that various municipalities within the County of Dufferin reside within the treaty lands named under the Haldimand Deed of 1784 and two of the Williams Treaties of 1818: Treaty 18: the Nottawasaga Purchase, and Treaty 19: The Ajetance Treaty.

These traditional territories upon which we live and learn, are steeped in rich Indigenous history and traditions. It is with this statement that we declare to honour and respect the past and present connection of Indigenous peoples with this land, its waterways and resources.

Roll Call

Declarations of Pecuniary Interest by Members

PUBLIC QUESTION PERIOD

Members of the public in attendance are able to ask a question. If you unable to attend and would like to submit a question, please contact us at info@dufferincounty.ca or 519-941-2816 ext. 2500 prior to 4:30 p.m. the day prior to the meeting.

DELEGATIONS

 INFRASTRUCTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #1 Envest Corp

A delegation from Jason Moretto, CEO, Envest Corp, to provide market-driven Infrastructure & Environmental Services Committee Agenda – May 23, 2024 Page 1 utility and sustainability solutions for communities, including energy from waste.

REPORTS

2. INFRASTRUCTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #2 2023 Climate Action Report Card

A report from the Director of Public Works/County Engineer, dated May 23, 2024, to present the third annual Climate Action Report Card highlighting the key initiatives undertaken in 2023.

Recommendation:

THAT the report, 2023 Climate Action Report Card, dated May 23, 2024, from the Director of Public Works/County Engineer, be received.

3. INFRASTRUCTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #3 2024 Road Needs Study – Authorization to Award

A report from the Director of Public Works/County Engineer, dated May 23, 2024, to seek authorization to proceed award the Road Needs Study tender.

Recommendation:

THAT the report of the Director of Public Works/County Engineer, dated May 23, 2024, Roads Needs Study – Authorization to Award, be received;

AND THAT the 2024 Road Needs Study be awarded in the amount of \$108,744 (excluding tax);

AND THAT the 2024 Road Needs Study be funded from the Rate Stabilization Reserve.

4. INFRASTRCUTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #4 Capital Workplan Update

A report from Manager of Corporate Finance, Treasurer, dated May 23, 2024, to update the 2024 Infrastructure and Environmental Services capital workplan.

Recommendation:

THAT the Capital Workplan Results report, dated May 23, 2024, from the Manager of Corporate Finance, Treasurer, be received;

AND THAT the 2024 capital workplan be adjusted by \$1,370,000 per the table

Infrastructure & Environmental Services Committee Agenda – May 23, 2024 Page 2

below:

Project	Funding Source	2024 Workplan Adjustment
004-2507 – Culvert No 2507	Structures Capital Asset Fund	\$25,000
004-2508 – Culvert No 2508	Structures Capital Asset Fund	\$25,000
Dufferin Road 124	Roads Capital Asset Fund	\$150,000
Dufferin Road 21	Roads Capital Asset Fund	\$650,000
Dufferin Road 21	Roads Capital Asset Fund	\$55,000
ATV Trailer	County Forest Reserve Fund	\$15,000
004-0007 – Walkers Creek Culvert	Roads Capital Asset Fund	\$450,000

5. INFRASTRUCTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #5
Road Safety Discussion

A discussion on road safety suggestions as a result of a recent conversation between the Township of Melancthon and community members.

CORRESPONDENCE

- 6. INFRASTRUCTURE & ENVIRONMENTAL SERVICES May 23, 2024 ITEM #6

 <u>Multi-Municipal Energy Working Group</u>
 - Correspondence from the Multi-Municipal Energy Working Group, dated May 1, 2024, to request Council pass a motion against any new wind turbine projects.
- 7. INFRASTRUCTURE & ENVIRONMENTAL SERVICES May 23, 2024 ITEM #7

 Ministry of Municipal Affairs and Housing

Correspondence from the Ministry of Municipal Affairs and Housing, dated May 6, 2024, to advise that delegation requests for the upcoming Association of Municipalities of Ontario (AMO) are being accepted until June 7, 2024.

NOTICE OF MOTIONS

8. INFRASTRUCTURE & ENVIRONMENTAL SERVICES – May 23, 2024 – ITEM #8

<u>Community Safety Zone – Hockley Road</u>

Moved by Councillor Creelman

WHEREAS Little Sprouts School located at 308618 Hockley Road in the heart of Hockley Village is expanding to provide badly needed daycare spaces to the community;

AND WHEREAS the speed limit approaching Hockley Village is reduced on Hockley Road;

AND WHEREAS it is desirous to encourage responsible driving in the vicinity of a school (daycare), a community hall, general store and hamlet;

THEREFORE BE IT RESOLVED the County of Dufferin investigates creating a Community Safety Zone on Hockley Road to mirror the already existing reduced speed zone.

Next Meeting

Thursday, June 27, 2024 W & M Edelbrock Centre, Dufferin Room, 30 Centre Street, Orangeville ON



ENVEST



Presentation May 2024

www.envestcorp.com

Agenda

- 1. Envest introduction
- 2. Southgate Renewables

1. Envest introduction

- Independent energy producer delivering private utility and recycling solutions to industrial and government off-takers.
- Finance, build, own and operate turnkey clean energy systems to meet environmental, social and governance ("ESG") objectives of off-takers.
- Infrastructure solutions focused on renewable distributed energy and bioenergy opportunities in the North American mid-market sector, and independent of regulated, utility-owned assets, with an emphasis on mid-size projects under \$150 million often over-looked by larger competitors.
- Sustainability solutions business providing thousands of corporate and residential customers with green energy through provision of environmental attributes and offsets from renewable energy sources.



Drivers:

- Energy generation
- Resource recovery
- Cost efficiencies
- Energy security
- On-site solutions
- Carbon mitigation
- Societal impact

Infrastructure Solutions

Distributed Energy

- Energy stability
- Behind-the-meter, private utility
- Metropolitan & remote locations
- Established technologies
- Integrated with industrial host

Bioenergy

- Organics recycling
- Government & industrial offtakers
- Metropolitan & rural locations
- Complex conversion technologies
- Independent operations

Sustainability Solutions



- Advisory
- Renewable energy certificates
- Virtual power purchase agreements
- Green natural gas & fuels
- Carbon offsets / mitigation



- Envest creates commercial-scale solutions for de-carbonization and the reduction of greenhouse gases by integrating technologies into systems that mitigate carbon and convert waste to beneficial use
- Envest provides sustainability & de-carbonization advisory solutions for thousands of corporate & residential consumers
- To date, Envest has:
 - ✓ Displaced over **3,200,000 tonnes of CO**₂ emissions
 - ✓ Diverted over **700,000 tonnes of organic waste** from landfills
 - ✓ Produced over 700,000 tonnes of organic fertilizer
- Climate change regulation in North America has driven increased demand for Envest's solutions
- Envest and its management are leaders in structuring equity partnerships with Indigenous communities on energy infrastructure projects, which provide economic benefits to Indigenous peoples
- Envest has implemented a Corporate Social Responsibility program, which includes formal Corporate Governance & Ethics, Health & Safety, Environmental Stewardship, Human Rights, Anti-Discrimination, Employee & Supplier Diversity and Data Privacy policies
- Envest's subsidiary, Bullfrog Power, is a B Corporation



- Envest was founded on principles based on commitments to Indigenous peoples, which is critical to the successful development of energy and infrastructure projects in Canada
- Envest believes in meaningful consultation, building respectful relationships, and the consideration of community partnerships where reasonably possible before proceeding with economic development projects
- Envest believes that advancing economic reconciliation with Indigenous peoples must include inclusive leadership actions; dedication to Indigenous business development; transparent and accessible procurement initiatives; and strengthening community relationships



Anaerobic digestion; cogeneration BIOENERGY

Recycling of municipal and commercial organics (permitted for 110,000 tonnes per year)

Renewable electricity, thermal, fertilizer

80% of recycling fees are under municipal contracts; 100% of electricity to Province of Ontario (20 years)

Increase contracted volumes from municipalities; convert CHP to RNG.

Inputs

Outputs

Contracts

Opportunities



Successful proponent of Durham Region (8 municipalities) 10-year organics contract procurement, awarded August 2023



Successful proponent of County of Simcoe (16 municipalities) 20-year organics contract procurement, awarded March 2024









Successful proponent of City of Toronto longterm organics contract procurement, awarded April 2021



Successful proponent of Essex-Windsor Solid Waste Authority (7 municipalities) initial longterm organics contract procurement, awarded August 2022



- Waste Free Ontario Act, 2016, S.O. 2016, c.12 Bill 151:
 - Provincial legislation enacted in 2016, comprising the Resource Recovery and Circular Economy Act and the Waste Diversion Transition Act.
 - Legislative and policy framework driving demand in Ontario's SSO Market
 - Legally obligates municipalities, and other entities, to act in accordance with resource recovery and waste reduction Policy Statements
 - Outlines waste reduction and waste diversion targets
- Waste reduction and resource recovery targets:
 - Southern Ontario Municipalities: 70% waste reduction and resource recov of organic waste by 2025
 - Northern Ontario Municipalities: 50% waste reduction and resource recov of organic waste by 2025
- Waste diversion from landfill targets:
 - 2020 30%
 - 2030 50%
 - 2050 80%
- Results:
 - In 2022, Ontario diverted 25% of its waste, reaching 83% of the 2020 targ





2. Southgate Renewables



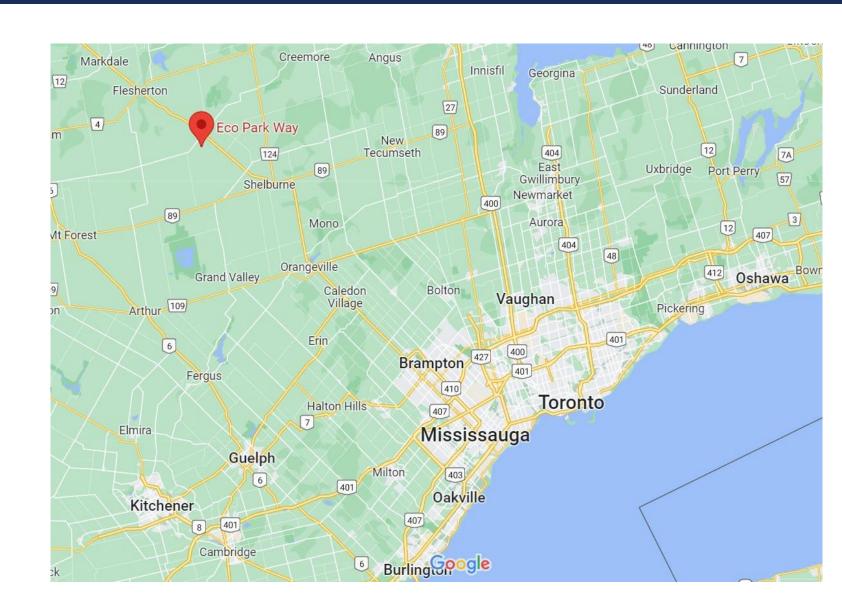
Inputs	Recycling of municipal and commercial organics (permitted for 73,000 tonnes per year)
Outputs	Renewable natural gas; organic fertilizer
Revenue	Recycling fees (68% revenues), renewable natural gas (32% revenues)
Contracts	57-75% of recycling fees under municipal contract; 100% of RNG to utility (20-year term)
Opportunities	Increase volume under environmental permit for future expansion

> 100 Eco Parkway, Dundalk, ON

- 10-acre site
- 100 km from Toronto

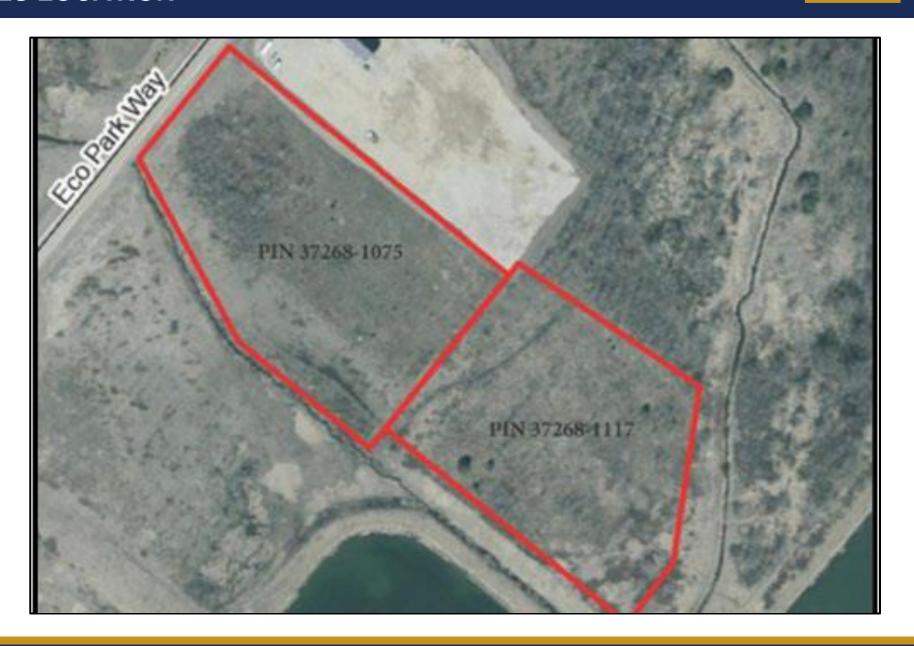
Good distance from major feedstock sources:

- Dufferin County
- Barrie
- County of Simcoe
- Toronto
- Durham Region
- Peel Region
- Halton
- York Region



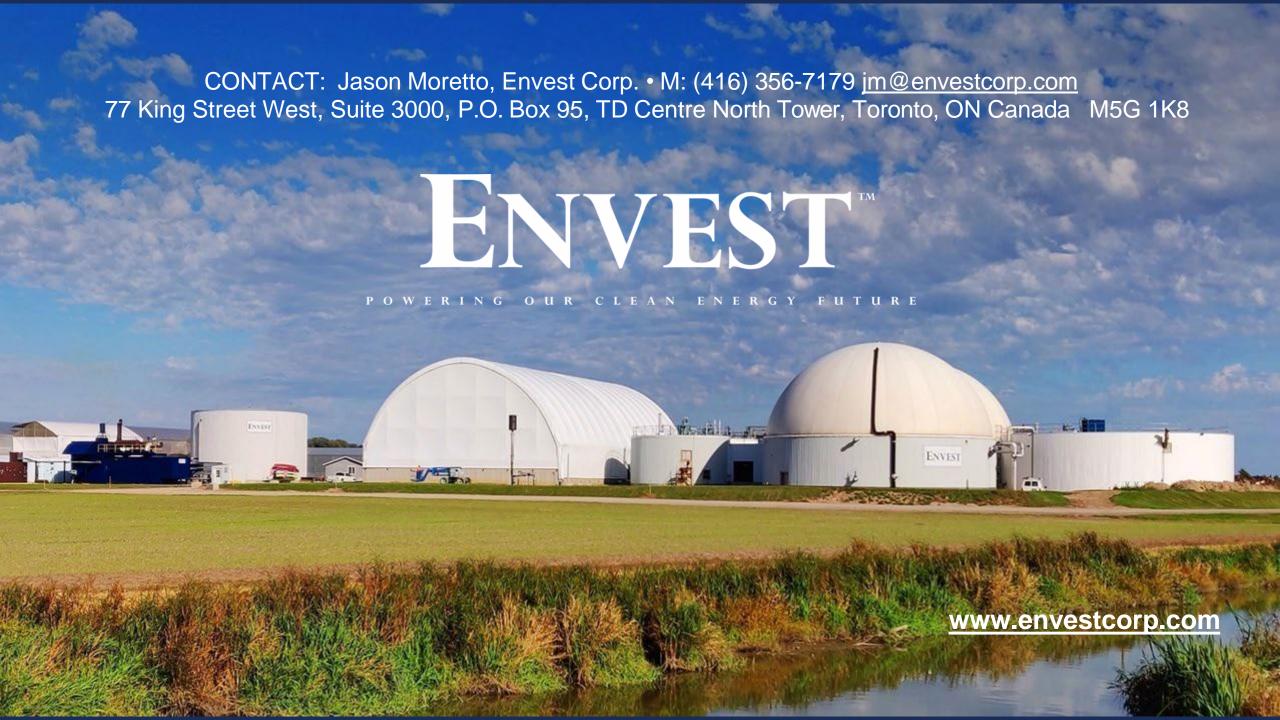
- **Fully permitted**: Anaerobic digestor project to process **73,000 tonnes per year** of incoming organic residuals to produce 200,000 GJ per year of RNG under ECA permit #1984-BD9NBD
- **Interconnection**: RNG will be injected into the adjacent Enbridge pipeline (Biogas Services Agreement signed in 2021)
- **Location**: Good proximity to GTA, less than 2 hours from Toronto in Dundalk's Industrial Park
 - Surrounded by similar facilities such as Walker (composting); Tomlinson (biosolids) & municipal WWTP
- **Public support**: Excellent local political and planning support
 - County of Simcoe 20-year SSO contract starting October 1, 2027
 - Grey County Council presentation on February 22, 2024
 - Open House on February 24, 2023 with Member of Provincial Parliament attending
- Experience: Similar in size to our Seacliff digestor, offering many opportunities in lessons-learned, planning, engineering, implementation, operations, staffing, etc.
- **Fertilizer**: Liquids effluent is organic fertilizer, displacing fossil nitrogen fertilizers, provided to local farmers
 - Pioneered by Seacliff Energy in Ontario

- ✓ Second 5-acre parcel acquired in 2022
- ✓ Total area = 10 acres











Report To: Chair Taylor and Members of the Infrastructure and Environmental Services Committee

Meeting Date: May 23, 2024

Subject: 2023 Climate Action Report Card

From: Scott Burns, Director of Public Works/County Engineer

Recommendation

THAT the 2023 Climate Action Report Card report, dated May 23, 2024, from the Director of Public Works/County Engineer, be received.

Executive Summary

The urgency of addressing the climate crisis in Dufferin County is paramount for safeguarding the well-being of current and future generations. Since 2018, the County's commitment to climate action has been evident through participation in the Partners for Climate Protection program and the declaration of a climate emergency in 2022. Guided by the Dufferin Climate Action Plan (DCAP) and Together for Change: Dufferin's Climate Adaptation Strategy (DCAS), the County has committed to achieve net-zero greenhouse gas emissions by 2050 while enhancing climate resilience across the community. In a commitment to transparency and accountability, the third annual Climate Action Report Card highlights the key initiatives undertaken in 2023. These include advancing home energy retrofits, progress in implementing an EV fast-charging network, and fostering youth climate activism. The report also spotlights priority projects for 2024.

Background & Discussion

The climate crisis requires urgent action. The social, cultural, environmental, and economic well-being of current and future generations of Dufferin County depends on the actions we take now to confront climate change. The County of Dufferin's climate action journey began in 2018 when the County joined the Partners for Climate

Protection (PCP) program, a national network of over 500 municipalities across Canada committed to reducing local greenhouse gas (GHG) emissions.

In 2022, Dufferin's commitment to climate action was reaffirmed as County Council passed a resolution to declare a climate emergency. This acknowledgment underscores the serious risks that climate change poses to our environment, infrastructure, and residents.

To guide our efforts, the County of Dufferin has adopted two essential climate plans. The Dufferin Climate Action Plan (2021) provides a clear pathway for the community to achieve net-zero greenhouse gas emissions by 2050. Additionally, Together for Change: Dufferin's Climate Adaptation Strategy (2023) complements the Dufferin Climate Action Plan by proactively identifying opportunities to enhance climate resilience across our social, economic, built, and natural systems. These plans serve as critical roadmaps for fulfilling our climate commitments and safeguarding the well-being of our community.

To ensure transparency and accountability, staff monitor progress throughout the year and provide updates on the status of each action outlined in the plans. The third Climate Action Report Card, included with this report, details the status of each action, and highlights key initiatives undertaken in 2023, including:

- Advancing the development of *BetterHomes Dufferin*, a municipally-led financing program for home energy retrofits, with a \$3.75M commitment from the County.
- Awarding a contract to the IVY Network to implement the *Rural ReCharge* network, a Regional EV Fast-Charging Network in partnership with the counties of Bruce, Grey, Huron, Perth, and Wellington.
- Participating in 24 community events and completing several community engagement campaigns, including Home Flood Protection, Electric Vehicle Awareness, and Home Energy Efficiency.
- Concluding the inaugural *Youth Climate Activation Circle*, which involved 8 local Youth Climate Ambassadors inspiring climate action through a Climate-Friendly Landscaping workshop series.
- Completing of the second year of the innovative, farmer-centred Experimental Acres Program.
- Initiating the Tri-County Green Development Standards initiative as a joint venture between Dufferin County, and the Counties of Grey and Wellington, supported by a \$445,600 grant from Natural Resources Canada.
- Initiating the development of an Equity and Climate Lens Tool in collaboration with the County's People and Equity department.

In 2024, the Climate and Energy Division will focus on key actions to advance the Dufferin Climate Action Plan, Together for Change: Dufferin's Climate Adaptation Strategy, and other corporate initiatives:

- Corporate Climate Action Plan: Developing a plan to reduce greenhouse gas emissions and adapt to climate impacts at the corporate level.
- Green Development Standards: Collaborating with Grey and Wellington Counties to create unified green development standards.
- BetterHomes Dufferin: Applying for funding to support energy retrofits for approximately 450 homes.
- Climate Risk Assessment on Road Infrastructure: Collaborating with the Engineering division to develop a road resiliency program that considers shifting road vulnerabilities in a changing climate.
- Equity and Climate Lens: Implementing an assessment tool across the organization to evaluate the impacts of policies and services in collaboration with the People and Equity Department.
- Climate Change Training: Providing staff with training to understand climate risks and commitments.
- Community Resilience Hub: In collaboration with the Emergency Preparedness
 division, climate staff are working together to design an outdoor space that will
 serve as a central hub for climate change adaptation, emergency preparedness,
 and community connection, engaging with the community throughout the
 process.

Other priorities include continuing initiatives like the Experimental Acres Pilot, Youth Climate Activation Circle, and updating the Rural Water Quality Program. These actions align with the ambitious climate goals of the County, aiming for a net-zero community that is resilient and sustainable for future generations.

Financial, Staffing, Legal, or IT Considerations

None as a result of this report.

In Support of Strategic Plan Priorities and Objectives

Climate & Environment – establish the County as a leader in Climate Action and enhance and conserve Dufferin's natural environment.

Respectfully Submitted By:

Scott Burns, P.Eng, C.E.T.
Director of Public Works and County Engineer

Attachment: 2023 Climate Action Report Card

Prepared by:

Sara MacRae, Manager of Climate & Energy

Reviewed by: Sonya Pritchard, Chief Administrative Officer



Climate Action in Dufferin

2023 Report Card







Introduction	3
Dufferin Climate Action Plan	4
5 Years, 5 Big Moves	5
Together for Change	11
First Priority Actions	12
Looking Ahead	17
Appendix A: DCAP Action Status	19
Appendix B: DCAS Action Status	48

Introduction

The climate crisis requires urgent action. The social, cultural, environmental, and economic well-being of current and future generations of Dufferin County depends on the actions we take now to confront climate change.

The County of Dufferin's climate action journey began in 2018 when we became part of the Partners for Climate Protection (PCP) program, joining a national network of over 500 municipalities across Canada in a commitment to reducing local greenhouse gas (GHG) emissions.

In 2022, we reaffirmed our commitment to climate action when Dufferin County Council passed a motion to declare a climate emergency acknowledging that climate change poses a serious risk to the environment, infrastructure, and people.

The County of Dufferin has adopted two climate plans that provide a roadmap to deliver on our climate commitments:



Dufferin Climate Action Plan

The Dufferin Climate Action Plan (2021) outlines a pathway for the community to reach net-zero greenhouse gas emissions by 2050. Net-zero means reducing our emissions to as close to zero as possible, while simultaneously taking action to remove unavoidable emissions through natural or technological solutions.



Together for Change

This adaptation strategy compliments the Dufferin Climate Action Plan by proactively identifying opportunities to advance climate resilience in the community's social, economic, built, and natural systems.

This Report Card, prepared for Dufferin County Council and residents, provides a summary of the actions taken in the 2023 calendar year towards the climate goals in the *Dufferin Climate Action Plan* and *Together for Change: Dufferin's Climate Adaptation Strategy*.



On March 11, 2021 Dufferin County adopted the *Dufferin Climate Action Plan*.

The <u>Dufferin Climate Action Plan</u> is a mitigation strategy to achieve net-zero emissions by 2050 while also increasing community resilience to the impacts of climate change. Mitigation means taking action to reduce the amount of climate change causing greenhouse gasses we release into the atmosphere. The goal of mitigation is to prevent further warming of our climate system.

The implementation of this plan will shift the community towards climate-friendly transportation modes, grow vibrant urban and rural communities, protect water and ecosystems, and create empowered communities that are ready to respond to a changing climate.

Under 6 Focus Areas, the *Dufferin Climate Action Plan* outlines 34 primary actions and 99 sub actions that the County will take to build a net-zero and resilient community:



On the Move



In Our Buildings



For Our Land



Planning Our County



In Our Bins



Empowering Our Community



In order to shift away from business as usual and respond quickly and effectively to the climate crisis, the *Dufferin Climate Action Plan* identified 5 priority actions for implementation between 2021 – 2025.

Progress on each of the 5 priority actions is reported below. A detailed status report on individual actions in the *Dufferin Climate Action Plan* is available in Appendix A.

Priority Action 1

Develop a municipally-led financing program for home energy retrofits to encourage and make the uptake of deep energy retrofitting and efficiency measures in residences more accessible for residents.

In 2022, Dufferin County joined the BetterHomes Ontario Consortium. The purpose of the Consortium is to support municipalities to develop and deliver community-based retrofit programs. Joining the consortium allows Dufferin to reduce the administrative burden associated with delivering energy retrofit programs and better support scale-up opportunities to meet GHG targets and address energy affordability.

Following the creation of the Consortium, and with funding from the Federation of Canadian Municipalities, the Clean Air Partnership led feasibility studies with 7 Ontario municipalities, including Dufferin County. The BetterHomes Dufferin County Energy Retrofit Program: Design Considerations report was presented to committee on June 23, 2022.

In March 2023 the County committed \$3.75 million from reserves as recoverable debt for the BetterHomes Dufferin project. This commitment maximizes the funding available from the Federation of Canadian Municipalities (FCM) Community Efficiency Financing Capital and Grants Stream, for which the County will submit an application for in 2024. If successful, the BetterHomes Dufferin program would have a total value of \$18.75 million to support energy retrofits on approximately 450 homes.



Priority Action 2

Accelerate the transition to low GHG transportation by developing an electric vehicle charging network across Dufferin and neighbouring municipalities.

Charging Ahead: Electrifying Fleets in Dufferin

In 2022, the Climate and Energy Division implemented the project Charging Ahead: Electrifying Fleets in Dufferin, which consisted of the installation of 12 Level-2 electric vehicle charging stations at three sites, the Town of Orangeville has six stations at two sites, and Melancthon Township has two stations at one site.

In March 2023, Dufferin County completed a Fleet Management Review and a Green Fleet Adoption Roadmap and Plan Report. The road map provides actionable recommendations for the transition to a green fleet, including a pilot for light duty vehicles. In July 2023, the County purchased its first electric fleet vehicle, the Ford F-150 Lightning.

Regional Electric Vehicle Network Charging Network

The development of a Regional Electric Vehicle Charging Network was initiated in 2022. The Community Energy Association was contracted to develop a Regional EV Charging Network Strategy, which has identified a need for 17 Level-3 Direct Current Fast Charger locations across the study area. In 2023, the Counties of Bruce, Dufferin, Grey, Huron, Perth, and Wellington in partnership awarded the contract to the Ivy Network to complete the installation of 34 direct current fast chargers across 17 locations.

Charge Up in Dufferin

In 2021 the County installed the Charge Up in Dufferin network of 24 public electric vehicle charging stations. Data for the use of the public stations, up to December 31, 2023, is reported below.

7,849 Charging Sessions 10,733 hours
Connection Time

116,709 kWh Energy Used 27,112 kg CO2 Saved

Priority Action 3

Empower the community to take climate action by institutionalizing climate action in municipal planning and supporting community awareness, education, and knowledge sharing initiatives.

In 2023 education and engagement activities focused on home flood protection, electric vehicle awareness, residential energy efficiency, and leading youth volunteer programming.

Home Flood Protection Campaign

In collaboration with Emergency Preparedness, the Home Flood Protection campaign ran from March 1 to April 3, 2023 with the goal of educating and encouraging residents to undertake low-cost measures to reduce home flood risk. Campaign activities included the promotion of home flood protection information via the County website, and social media channels, as well as through ads placed with local newspaper and radio stations. Climate Action in Dufferin and Dufferin Emergency Preparedness also distributed information to and spoke with residents at Grand Valley Home Hardware, Orangeville Home Hardware, Orangeville Canadian Tire, and the Orangeville Lions Home & Garden Show. Campaign highlights includes a reach of 16,640 across social media, 1,108 visits to the Home Flood Protection web page, and 8 campaign amplifications by local media outlets.

Electric Vehicle (EV) Awareness

To raise awareness of the benefits of electric vehicles, the Climate and Energy division collaborated with Plug'n Drive to host two electric vehicle test drive events in Summer 2023. The first event took place on June 10 as part of the Orangeville Farmer's Market, the second on September 24th at the Grand Valley Fall Fair. In total, members of the public completed 54 test-drives, with 52% of drivers reporting to be more likely to purchase an EV after the event.

To enhance capacity and optimize messaging, in 2023 the Climate and Energy division submitted an application to Natural Resource Canada's Clean Fuels Clean Transportation Fund for the Electrifying Back Roads project, valued in total at \$100,700. Electrifying Back Roads is a public outreach and education project intended to address the gaps in electric vehicle (EV) awareness, knowledge, and confidence specific to rural and small-town residents in Dufferin County. If successful, project activities will begin in 2024.

Home Energy Efficiency Campaign

From December 1 - 31, 2023, the Climate and Energy division ran a community-wide energy efficiency campaign to educate and encourage residents to take low-cost actions to reduce their climate impact, increase comfort, and unlock savings in their home. The campaign included the promotion of resource web page and the promotion of education materials through social media, newspaper ads, and the distribution of 200 free home energy savings kits to residents at the Orangeville, Grand Valley, Shelburne Public Libraries, as well as the STREAMS Hub Merry Market.

Youth Climate Activation Circle

In 2022, the County of Dufferin was 1 of 10 municipalities across Canada accepted into the Agents of Change Program delivered by ICLEI Canada. In 2022 the Climate and Energy division launched the Youth Climate Activation Circle, a volunteer program to empower 8 youth (ages 16 -25) to advance local climate solutions. In 2023, 8 Youth Climate Ambassadors, participated in climate change training and the design and implementation of a Climate-Friendly Landscaping workshop series, while sharing their learnings and success to inspire the wider community.

Community Events

In 2023, the Climate and Energy division hosted 13 events including a Climate Solutions Fair, popups booths at Grand Valley and Orangeville Home Hardware and Canadian Tire, an Earth Day Art Workshop, pop-up tick education booths, Storytime and STEM Club at Shelburne Public Library, electric vehicle test-drive events, and Youth Climate Activation Circle workshops.

The division also participated in 11 community events including Orangeville Lions Home Show, Emergency Management Forum, Blues and Jazz Festival, Celebrate Your Awesome, Orangeville Rotary Ribfest, Orangeville Hydro's annual event, Grand Valley Farmer's Market, International Plowing Match and Rural Expo, Dufferin Farm Tour, Dream Dufferin Career Fair, and STREAMS Hub Very Merry Market.















Priority Action 4

Support climate-resiliency initiatives in agricultural and natural systems to enhance food security, support local farmers, and protect natural systems.

2023 marked the second year of collaboration with Our Food Future and Wellington County to deliver the Experimental Acres Pilot. The program supports farmers in adopting experimental practices which will backstop risk, develop a community of support, and assist in capturing the business cases that can demonstrate what will be worth repeating.

Funding was provided to 4 Dufferin farmers to adopt regenerative agriculture practices on a small scale. 2023 projects included:

- Comparison of green manure and compost on market garden plots
- Integration of cover crop and animal grazing into crop rotation
- Incorporation of hedge row into fence line
- · Companion planting to reduce reliance on agro-chemicals for pest management



Priority Action 5

Create green development standards to ensure new development is environmentally, socially, and economically sustainable.

The Tri-Country Green Development Standards (GDS) project is a joint effort among Dufferin, Grey, and Wellington Counties (the Counties) to create unified Green Development Standards that are informed by best practices, existing building credentials programs, and input from stakeholder consultation. The document will incorporate standards and guidelines that can be applied through all phases of development planning applications right through to construction.

Each county involved in the project committed \$75,000, with Dufferin's share allocated in the 2023 budget. In April 2023, project staff jointly sought external funding from Natural Resource Canada's (NRCan) Codes Acceleration Fund to partially finance essential activities and value-added aspects of the project. In November 2023, NRCan conditionally approved the funding application, contingent on successful negotiation of a contribution agreement.

The potential NRCan contribution of \$445,600 brings the total project value to \$670,600, enabling an expanded scope for the Tri-County Green Development Standards project, including:

- Additional consultations with the public, municipal staff, and the development industry.
- Training and certification opportunities for targeted capacity building.
- Work with consultants and internal teams to create a talent attraction plan.
- Compilation and availability of resources developed for other municipalities.
- Project presentations through established networks and organizations.
- Hiring a full-time staff person for two years to facilitate implementation.
- Annual recognition events for outstanding achievements in local green development.



On April 13, 2023, County Council adopted *Together for Change: Dufferin's Climate Adaptation Strategy*. The Strategy complements the Dufferin Climate Action Plan by proactively identifying opportunities to advance climate resilience in the community's social, economic, built, and natural systems.

Local climate projections show that Dufferin can expect warmer year-round temperatures, including more frequent days with extreme heat. Annual precipitation is expected to increase with more frequent and intense rainfall and snowfall events. Investments in adaptation measures are critical to helping Dufferin adapt to a changing climate.

<u>Together for Change</u> is a strategy for the County, local municipalities, and community members to build climate resilience in the Dufferin County for current and future generations.

The Dufferin Climate Adaptation Strategy is organized under 5 Focus Areas:





In order to respond quickly and effectively to high-risk climate impacts, the strategy identified 5 priority actions for implementation.

Progress on each of the 5 priority actions is reported below. A detailed status report on individual actions in *Together for Change* is available in Appendix B.

Priority Action 1

Create framework for adopting a Green Development Standard to build resiliency and complete communities (e.g. low-impact development, flood mitigation measures, access to green space, enhanced tree canopy). (BH.3)

The Tri-Country Green Development Standards (GDS) project is a joint effort among Dufferin, Grey, and Wellington Counties to create unified Green Development Standards that are informed by best practices, existing building credentials programs, and input from stakeholder consultation. The document will incorporate standards and guidelines that can be applied through all phases of development planning applications right through to construction.

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- Additional consultations with the public, municipal staff, and the development industry.
- Training and certification opportunities for targeted capacity building.
- Work with consultants and internal teams to create a talent attraction plan.
- Compilation and availability of resources developed for other municipalities.
- Project presentations through established networks and organizations.
- Hiring a full-time staff person for two years to facilitate implementation.
- Annual recognition events for outstanding achievements in local green development.

Encourage homeowners and property owners to improve climate resilience of residential and private property through upgrades and/or retrofits. (BH.1)

Home Flood Protection Campaign

In collaboration with Dufferin Emergency Preparedness, the third annual Home Flood Protection campaign ran from March 1 to April 3, 2023 with the goal of educating and encouraging residents to undertake low-cost measures to reduce home flood risk. Campaign activities included the promotion of home flood protection information via the County website, and social media channels, as well as through ads placed with local newspaper and radio stations. Climate Action in Dufferin and Dufferin Emergency Preparedness also distributed information to and spoke with residents at Grand Valley Home Hardware, Orangeville Home Hardware, Orangeville Canadian Tire, and the Orangeville Lions Home & Garden Show. Campaign highlights includes a reach of 16,640 across social media, 1,108 visits to the Home Flood Protection web page, and 8 campaign amplifications by local media outlets.

Rain Barrel Program

In 2023, a feasibility study was initiated to explore a County-run rain barrel program including an environmental scan, cost analysis, education needs, and recommendations for implementation.

A community survey was also distributed among Dufferin residents to determine the interest in a rain barrel program. 275 respondents completed the survey with 93% expressing interest in purchasing a rain barrel at a discounted cost from the County. The feasibility study will be complete in 2024 and, if the County decides to move forward, a rain barrel program will be established in 2025.





Establish and enhance emergency preparedness communications and programs for residents to strengthen personal resiliency to climate impacts. (PH.2)

Emergency Support Service Trailers

As an initative of Dufferin County's Emergency Prepardness division, together, Dufferin County, Amaranth, East Garafraxa, Grand Valley, Melancthon, Mono, Mulmur, Orangeville and Shelburne have purchased and stocked eight municipal emergency support services (ESS) trailers to provide support in local crisis situations. These trailers are the first of their kind in Ontario at a regional level and will help ensure the safety and well-being of the community in emergency situations.

The ESS trailers will be stationed in each lower-tier municipality for rapid deployment to designated shelters. The trailers contain equipment and provisions to enable volunteers to provide support to up to 50 people per trailer in emergencies.

Community Resilience Hub

The Climate and Energy Division and Emergency Management division established a project charter to develop a community resilience hub. The scope of the Community Resilience Pilot Hub project encompasses the design, installation, and activation of a pilot outdoor structure within Dufferin County. This structure will function as a Community Resilience Pilot Hub, serving as a focal point for emergency preparedness, climate change adaptation, and community connection. In 2023, a funding application was submitted to the Ontario Resource Centre for Climate Adaptation (ORCCA) Staff Capacity grant program for 300 staff hours to support a community engagement process in 2024. If successful, with the support of ORCCA, engagement activities will begin in 2024.

Public Education

In 2023 the Emergency Preparedness division completed a variety of public education initiatives through community events, social media, workshops, and print materials. Additionally, a locally produced Camp, Cottage and RV emergency planning brochure was distributed through RV dealerships, campgrounds, trailer parks and community events.



Increase uptake of regenerative agricultural practices in partnership with farmers to increase soil organic matter, reduce soil erosion, and improve water security. (AN.3)

2023 marked the second year of collaboration with Our Food Future and Wellington County to deliver the Experimental Acres Pilot. The program supports farmers in adopting experimental practices which will backstop risk, develop a community of support, and assist in capturing the business cases that can demonstrate what will be worth repeating.

Funding was provided to 4 Dufferin farmers to adopt regenerative agriculture practices on a small scale. 2023 projects included:

- Comparison of green manure and compost on market garden plots
- Integration of cover crop and animal grazing into crop rotation
- Incorporation of hedge row into fence line
- · Companion planting to reduce reliance on agro-chemicals for pest management



Incorporate a climate lens into asset management, capital planning, and budgetary processes. (BH.4)

Equity and Climate Lens Assessment Tool

In 2023 the Climate and Energy Division began development of an Equity and Climate Lens tool, a joint project with the People and Equity Department.

The adoption of a climate lens was committed to in Dufferin County's 2023-2026 Corporate Strategic Plan. The lens will be applied across the entire County administration through our day-to-day operations, decision making processes, and policy design. These lenses will help us understand and evaluate the impacts of new or changing County policies, programs and services, ensuring that we are making decisions with social and environmental considerations foregrounded and in alignment with our long-term objectives. A community of practice has been established and work will continue throughout 2024 to refine the Equity and Climate Lens Tool.

Climate Risk Assessment on Road Infrastructure

The Climate and Energy division began a collaboration with the Engineering division in 2023 to develop a road resiliency program that considers shifting road vulnerabilities in a changing climate.

The first step will include an infrastructure risk assessment to characterize and rank potential climate vulnerabilities and recommend adaptation measures to inform the development and implementation of asset management plans.



Looking ahead to 2024, the Climate and Energy Division will advance the following priority actions in support of the *Dufferin Climate Action Plan* and *Together for Change: Dufferin's Climate Adaptation Strategy.*

Corporate Climate Action Plan

Dufferin County will be developing a Corporate Climate Action Plan in 2024 to reduce greenhouse gas emissions and adapt to climate impacts at the corporate level. The Corporate Climate Action Plan will support and be aligned with the *Dufferin Climate Action Plan* and *Together for Change: Dufferin's Climate Adaptation Strategy* to maximize impact and find efficiencies. Through the development and implementation of the corporate plan, Dufferin County will position itself as an example leader of climate action in the community.

Green Development Standards

The Climate and Energy Division will prioritize the Tri-Country Green Development Standards (GDS) project, a joint effort among Grey, Dufferin, and Wellington Counties (the Counties).

In 2024, the Counties will begin engagement activities with municipal staff, developers, and the public to create unified Green Development Standards document that outlines the standards and guidelines that will be applied through all phases of development planning applications right through to construction.

BetterHomes Dufferin

In 2024 the County will submit an application to the Federation of Canadian Municipalities (FCM) Community Efficiency Financing Capital and Grants Stream. If successful, the BetterHomes Dufferin program would have a total value of \$18.75 million to support energy retrofits on approximately 450 homes.

Equity and Climate Lens

The Climate and Energy Division will continue collaboration with the People and Equity Department to implement an Equity and Climate Lens Assessment Tool across the organization to help us understand and evaluate the impacts of new or changing County policies, programs and services.

In 2024, a Community of Practice will support the refinement of the tool and provide recommendations for roll-out and reporting mechanisms. A delivery plan will be established according to this feedback with the goal to require a mandatory application of the lens in 2025.

Climate Change Training

To support staff in applying a climate lens, training will be developed an delivered for non-union and union staff at the County. The training will help staff enhance their understanding of local climate risks and vulnerabilities, impacts to municipal operations and service delivery, and the County's climate plans and commitments. Ultimately, climate-empowered staff will increase the County's adaptive capacity, accelerate progress towards net-zero by 2050, and maximize the co-benefits of climate action to better serve the community.

Community Resilience Hub

The Climate and Energy and Emergency Management Divisions will continue to advance the Community Resilience Hub project beginning with community engagement activities to ensure the design of the outdoor structure realizes a community-defined vision of resilience.

Other 2024 Priorities

- Continue delivery of Experimental Acres Pilot to support regenerative agriculture practices
- Update of Rural Water Quality Program with climate lens
- Continue community engagement and capacity building

The Dufferin Climate Action Plan is ambitious, but with meaningful action from local municipalities, businesses, organizations, schools, and individuals we can create a prosperous future for the current and future generations of Dufferin County.

A net-zero community is dynamic community that embraces low-carbon transportation options, supports and enhances local agriculture, grows sustainable and vibrant urban centers, protects water and air, stimulates local economies, creates healthy and equitable neighborhoods, and is resilient in the face of climate change.

The Climate is Changing. So Must We.



This appendix identifies the County's progress to date on the implementation of the actions in the Dufferin Climate Action Plan since its release in March of 2021.

Each action is categorized in one of the following status categories:

Complete

The action has been implemented.

In Progress

Work on this action is actively underway.

Ongoing

This action will be implemented on an ongoing or reoccurring basis.

Early Stages

Early work has been started, but requires additional work and resources to develop and implement

Delayed

Implementation of this action is delayed to a later date.

Future Action

Implementation of this action is delayed to a later date.

Discontinued

For specified reasons, this action has been discontinued.

On the Move: Action T1

Expand public transit options and support fleet electrification

T1.1 Review bus routes and optimize connectivity and service within and between local and regional municipalities

Status: In Progress

2021	2022	2023
Transit Feasibility Study Report was completed on November 30, 2021	Dufferin County Council allocated \$25,000 to explore on-demand transit options through Dufferin County Community Support Services	Town of Orangeville established new transit terminal and is exploring feasibility of electrifying transit fleet

T1.2 Advocate for increased GO transit service

Status: Future Action

2021	2022	2023
Will support as opportunities arise	Dufferin County Council allocated \$25,000 to explore on-demand transit options through Dufferin County Community Support Services	Town of Orangeville established new transit terminal and is exploring feasibility of electrifying transit fleet

On the Move: Action T2

Increase public awareness of and education on climate friendly travel modes

T2.1 Develop an accessible educational campaign to prioritize active transportation and public transit, particularly for trips under 5km

2021	2022	2023
Bike Month Scavenger Hunt and cycling safety campaign hosted from June 1 – 30, 2021	Community Bike Ride hosted on June 25 2022 Workshop on Sustainable Transportation hosted with Upper Grand District School Board in July 2022	Ongoing social media promotion of active transportation options/benefits

T2.2 Develop an accessible educational campaign for trips over 10km to prioritize carpooling options (particularly for commuters) and telecommuting.

Status: Delayed

2022

Workshop on Sustainable Transportation hosted with Upper Grand District School Board in July 2022

On the Move: Action T3

Promote climate friendly driving habits to reduce GHG emissions associated with passenger vehicles

T3.1 Develop anti-idling campaigns to improve compliance with local anti-idling by-law

Status: Discontinued. Anti-idling by-laws are already in place in local municipalities such as Mono, Orangeville, and Shelburne. Initial research indicates the potential impact this action on GHG emissions reduce is low, making this action a low priority for implementation. County will support as opportunities arise.

T3.2 Work with businesses and organizations to create anti-idling policies

Status: Discontinued. Initial research indicates the potential impact on GHG emissions reduce is low, making this action a low priority for implementation. County will support as opportunities arise.

T3.3 Promote and increase awareness of existing eco-driving courses and insurance programs

Status: Ongoing

2022

Eco-driving courses and available insurance incentives promoted across Climate Action in Dufferin social media channels in March 2022

On the Move: Action T4

Work with regional and municipal partners to expand low and zero-emission vehicle uptake and charging networks

T4.1 Partner with municipalities to develop a regional Electric Vehicle Strategy to achieve network connectivity

Status: In Progress

2021	2022	2023
Feasibility Study in development and regional EV survey distributed from Feb 1 – 15, 2022	Feasibility Study completed in May 2022 Initiating Implementation Phase in progress. RFP developed for third-party implementation partner	Contract awarded to the Ivy Network to complete the installation of 34 direct current fast chargers across 17 locations in 2024 as part of the Rural ReCharge project, a collaboration between Bruce, Dufferin, Grey, Huron, Perth, and Wellington Counties

T4.2 Develop EV policy at the County level to ensure consistency throughout the development of a County charging network

Status: Complete

2021	2023
Electric Vehicle Charging Station Policy and User Fees passed at Council on September 9, 2021	Update of Electric Vehicle Charging Station Policy in progress for adoption in 2024

T4.3 Leverage funding opportunities to install charging stations throughout County

2021	2022	2023
Installation of Charge Up in Dufferin Network of 22 Level-2 and 2 Level-3 charging stations complete	installed at 6 sites around the	12 EV charging stations for fleet operational. Ford F-150 Lightning purchased for County fleet

T4.4 Work with local businesses and organizations to encourage low-emission and electric vehicles to be included in fleets

Status: Delayed

Climate and Energy Division lacks capacity to initiate action.

On the Move: Action T5

Encourage the electrification of public transit vehicles and fleet vehicles

T5.1 Work with local municipalities to develop strategy to transition to electric public transit fleets

Status: In Progress

2022	2023
Green Fleet Strategy in development through the Asset Management Initiative	Ford F-150 Lightning purchased for County fleet
Town of Orangeville is conducting a feasibility study to	Green Fleet Strategy Completed
determine options for fleet electrification	Town of Orangeville is exploring feasibility of electrifying transit fleet

T5.2 Investigate options to electrify school bus fleets

Status: Future Action. Will support as opportunities arise.

On the Move: Action T6

Create accessible and walkable communities

T6.1 Improve pedestrian crossing, comfortable walking routes, and maps/ signage

Status: In Progress

2022	2023
Town of Orangeville exploring options to enhance active transportation routes including conversion of rail line to shared pathway	Tri-County Green Development Standards in progress, which will advance this action

On the Move: Action T7

Create accessible and walkable communities

T7.1 Create a TDM Plan in partnership with local employers and neighbouring municipalities

Status: Discontinued. After evaluation, it is too premature to do a TDM without having a public transportation plan. Timeline should be shifted to the next DCAP update.

T7.2 Develop an engagement process to include community members in the TDM planning process

Status: Discontinued. After evaluation, it is too premature to do a TDM without having a public transportation plan. Timeline should be shifted to the next DCAP update.



In Our Buildings: Action B1

Promote deep energy retrofit programs and provide information on resources and financing programs

B1.1 Complete a feasibility study undertaking a baseline assessment of Dufferin County's housing stock and energy upgrade potential, including the cost benefit of different types of retrofits to maximize dollars spent

Status: Complete

2021

Completed a feasibility study for a deep energy retrofit financing program with Lightspark Software outlining existing housing stock and initial uptake analysis

B1.2 Investigate options to develop municipally-led financing program for residential deep energy and resiliency retrofits

Status: In Progress

2022	2023
Joined the Ontario BetterHomes Consortium to leverage existing resources in the development of a municipally-led financing program for deep energy retrofits	County committed \$3.75 million to the BetterHomes Dufferin project, with support of 7 out of 8 local municipalities
Engagement underway with local municipalities	Application expected to be submitted to Federation of Canadian municipalities in early 2024 – Green Municipal Fund and Community Efficiency Financing Program

B1.3 Implement selected municipally led financing program for residential deep energy and resiliency retrofits with a strategic lens to address energy poverty

Status: Early Stages

2023

Application expected to be submitted to Federation of Canadian municipalities in early 2024 – Green Municipal Fund and Community Efficiency Financing Program

B1.4 Support existing training programs for contractors to complete home energy work

Status: Early Stages

2023

Business, Talent, and Attraction Plan approved through Tri-County Green Development Standard project

B1.5 Educational campaign on home energy efficiency and fuel switching

Status: Ongoing

2022	2023
November 2022, including workshop, distribution of	Education campaign implemented throughout December 2023, including workshop, distribution of 200 free home energy savings kits, radio and social media campaign

B1.6 Explore options for customer utility data comparison

Status: Discontinued

Initial feasibility explored. Due to privacy concerns, this is not possible at this time.

In Our Buildings: Action B2

Promote home resilience programs and provide information on resources and financing program

B2.1 Create resilience check-list for residences

Status: Early Stages

2022	2023
Resilience measures for flood protection shared through Home Flood Protection campaign	Resilience measures for flood protection shared through Home Flood Protection campaign
	Exploring options to integrate resiliency measures into Tri-County Green Development Standards
	Resilience measures proposed as eligible through BetterHomes Dufferin

B2.1 Improve homes and businesses capacity to manage stormwater on-site through education campaigns, trainings, programs, and on-site consultations

2022	2023
2022 including workshop, development of education	Home Flood Protection campaign held throughout May 2023 including public education booths, video, radio, social media promotion, and earned media

B2.3 Improve homes and businesses capacity to manage stormwater on-site through education campaigns, trainings, programs, and on-site consultations

Status: Ongoing

2022	2023
Exploring options to support through BetterHomes Consortium	Business, Talent, and Attraction Plan approved through Tri-County Green Development Standard project
	Continuing to explore options to support through BetterHomes Consortium

In Our Buildings: Action B3

Support retrofit, energy, and resilience upgrades for rental homes and apartments

B3.1 Educate building occupants and landlords on available energy retrofit programs and encourage participation in future financing options led by the County

Status: Ongoing

2022	2023
	Education campaign implemented throughout December 2023, including workshop, distribution of 200 free home energy savings kits, radio and social media campaign

B3.2 Explore feasibility to require property standards by-law for maximum temperature in rented residences

Status: Delayed

2023	
Environmental scan initiated, and feasibility will continue to be explored	

In Our Buildings: Action B4

Ensure all new buildings are net-zero emissions ready through the implementation of green development standards (See Action P2)

B4.1 Prioritize building designs that reduce energy demand and increase efficiency (passive cooling, air source heat pump, ground source heat pump, triple pane windows, light coloured roofs, etc.)

Status: Early Stages

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in progress in collaboration with Grey and Wellington Counties \$445,000 conditionally awarded for GDS project by NRCan (Codes Acceleration Fund)

B4.2 Prioritize climate resilient building designs (e.g. flood prevention strategies, passive cooling designs, expansion of hurricane clip program)

Status: Early Stages

2022	2023
Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in progress in collaboration with Grey and Wellington Counties \$445,000 conditionally awarded for GDS project by NRCan (Codes Acceleration Fund)

In Our Buildings: Action B5

Develop eco-industrial park/business zone that is a low-GHG development zone

B5.1 Investigate the potential for district energy systems to maximize energy efficiency

Status: Discontinued. Current capacity constraints make this action infeasible at this time and ICI emissions locally are low, making this a lower-priority.

B5.2 Work with local municipalities to review and enhance local Community Improvement Plans (CIP) to enable retrofits to commercial buildings

Status: Discontinued. Current capacity constraints make this action infeasible at this time and ICI emissions locally are low, making this a lower-priority.

In Our Buildings: Action B6

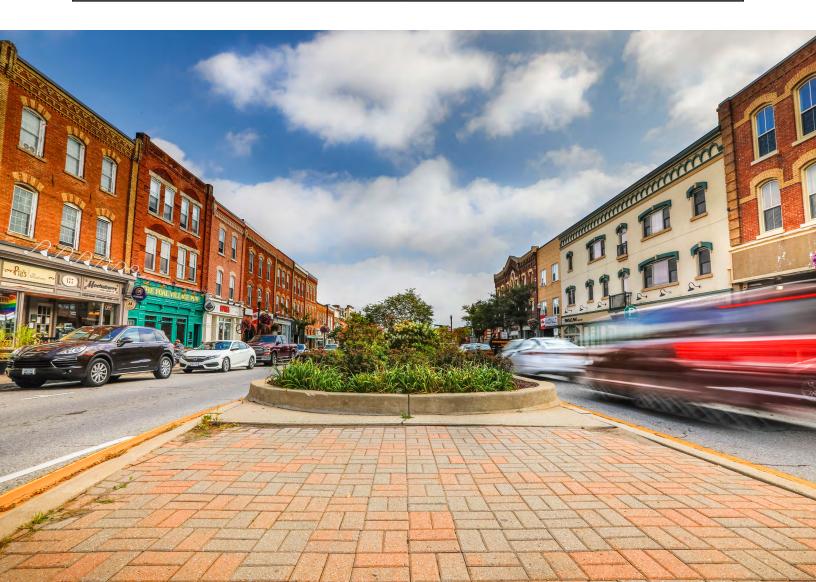
Increase capacity of ICI stakeholders to achieve energy efficiency and GHG reduction goals

B6.1 Encourage ICI stakeholders to take advantage of energy efficiency programs and incentives for new and remodeled buildings

Status: Ongoing. Climate and Energy Division shares programs, resources, and funding opportunities with ICI stakeholders as opportunities arise..

B6.2 Support educational campaigns and training for owners and employees to maximize energy efficiency and options for retrofits

2022	2023
Climate and Energy Division shares programs, resources, and funding opportunities with ICI stakeholders as opportunities arise	Business, Talent, and Attraction Plan approved through Tri-County Green Development Standard project



For Our Land: Action L1

Promote and incentivize the adoption of climate-friendly practices in agriculture sector

L1.1 Complete a study detailing the barriers preventing the adoption of climate-friendly and resilient practices in agriculture and the values that facilitate adoption

Status: In Progress

2022	2023
Insights on barriers and opportunities for uptake of regenerative agriculture practices reported through Experimental Acres Pilot program	Insights on barriers and opportunities for uptake of regenerative agriculture practices reported through Experimental Acres Pilot program and Experimental Acres Handbook for Municipalities

L1.2 Support evolving research opportunities investigating the carbon sequestration potential of agriculture sector

Status: Delayed

2021	2022	2023
Experimental Acres Project in progress with the County of Wellington	Support of Ontario Agroforest Network application to the Living Labs Initiative	Ontario Agroforest Network application to the Living Labs Initiative unsuccessful
	Research on soil carbon sequestration underway through Experimental Acres Pilot program	Work on developing RFP for Master Plan for 195620 Amaranth – Grand Valley Townline property delayed

L1.3 Encourage regenerative and ecological agriculture practices where applicable such as no-till and cover crops to control run off, tile, or controlled drainage systems

Status: Ongoing

2021	2022	2023
Experimental Acres Project in progress	7 Dufferin farmers participated in 1st year of Experimental Acres Pilot	4 Dufferin farmers participated in 2023 Experimental Acres Pilot
Hosted Agriculture Round Table promoting the Rural Water Quality Program.		Updates drafted for Rural Water Quality Program with climate lens for eligible measures

L1.4 Encourage mapping of existing crop varieties against future climate projections

Status: Complete (2021). University of Guelph research project completed to assess the impact of climate change on the sustainability to agricultural lands to grow a multiple crop varieties.

For Our Land: Action L2

Develop education partnership with agricultural community and partners to support long-term climate friendly practices and knowledge sharing

L2.1 Promote co-learning and networking opportunities for sustainable and resilient agriculture, energy efficiency, crop diversification, new technologies, and water conservation

Status: Ongoing

2021	2022	2023
Experimental Acres Project in progress	7 Dufferin farmers participated in 1st year of Experimental Acres Pilot.	4 Dufferin farmers participated in 2023 Experimental Acres Pilot.
Hosted Agriculture Round Table promoting Rural Water Quality Program		Updates drafted for Rural Water Quality Program with climate lens for eligible measures

L2.2 Support a variety of educational opportunities tailored to diverse producers and their unique needs

Status: Ongoing

2021	2022	2023
Experimental Acres Project in progress		4 Dufferin farmers participated in 2023 Experimental Acres Pilot.
Hosted Agriculture Round Table promoting Rural Water Quality Program		E-newsletter and social media promotion of events and resources

For Our Land: Action L3

Encourage low-GHG energy alternatives on farms

L3.1 Explore on-site renewable energy production options

Status: Ongoing. Promotion of resources as opportunities arise via Climate Action in Dufferin communication channels.

L3.2 Explore options to incentivize manure management and biogas recovery as an alternative fuel source

Status: Discontinued. Current capacity constraints make this action lower-priority at this time.

For Our Land: Action L4

Protect and enhance local natural assets

L4.1 Complete a natural asset inventory for the County including a risk assessment

Status: Complete (2021). Natural Asset Inventory was completed through the Municipal Natural Asset Initiative for Dufferin County and local municipalities.

L4.2 Complete a natural asset inventory for the County including a risk assessment

Status: Delayed. Scheduled to be completed by July 2024 by Finance Department.

For Our Land: Action L5

Increase tree coverage and protection in Dufferin County

L5.1 Create an urban forest/reforest strategy with climate resilient tree species

Status: In Progress

2022	2023
Town of Orangeville currently developing an Urban Canopy Strategy	Town of Orangeville completed Urban Canopy Study establishing a planting goal of 4030 trees per year to reach 2040 target of 40% canopy coverage

L5.2 Explore feasibility of developing a "Grown in Dufferin" tree supply program and or partner with conservation authorities to leverage existing nursery programs

Status: Delayed

2022	2023
\$50,000 allocated in 2023 Budget to develop a Master Plan for the 193-acre of municipally-owned property in Grand Valley, which may include feasibility of tree supply program	Work on developing RFP for Master Plan for 195620 Amaranth – Grand Valley Townline property delayed

L5.3 Amend the landscape regulations in both Zoning and Subdivision by-laws to increase tree protection and replacement requirement

Status: In Progress

2023

Tree protection and replacement requirements will be considered as a component of Tri-County Green **Development Standards**

L5.4 Adopt both a private and heritage tree protection by-law

Status: Delayed

2023

Identified as a potential student project to undertake survey of existing by-laws across municipalities and provide recommendations for next steps

Also being explored through Tri-County Green Development Standards

L5.5 Ensure tree planting requirements are executed through new construction

Status: Delayed

2023

It is planned that a tree planting requirement will be explored as part of the Tri-County Green Development Standard in 2024

For Our Land: Action L6

Encourage green infrastructure and low-impact development initiatives to support resiliency goals

L6.1 Promote educational campaigns on options for and benefits of green infrastructure and low-impact development

2022	2023
Home Flood Protection campaign held throughout May 2023 including public education booths, video, radio, social media promotion, and earned media	Home Flood Protection campaign held throughout May 2023 including public education booths, video, radio, social media promotion, and earned media

L6.2 Support backyard habitat creation initiatives to protect native biodiversity

Status: Ongoing

2021	2022	2023
Hosted Introduction to Rainscaping Workshop with Credit Valley Conservation to encourage uptake of natural stormwater management solutions with 66 participants	Invasive Species Awareness Week social media campaign February 28 – March 7 2022	Workshops held in August 2023 with Youth Climate Activation Circle and Credit Valley Conservation Authority to promote pollinator habitat

L6.3 Encourage uptake of natural stormwater management solutions such as raingardens, soak-away pits, bioswales, or permeable groundcovers (See P2)

Status: Ongoing

2021	2022	2023
Hosted Introduction to Rainscaping Workshop with Credit Valley Conservation to encourage uptake of natural stormwater management solutions with 66 participants	Home Flood Protection campaign held throughout May 2022 including workshop, development of education video, radio and social media campaign, and web page launch	Home Flood Protection campaign run in March 2023 promoted options for natural stormwater management solutions

L6.4 Support conservation and rehabilitation of ecological systems in rural areas

Status: Ongoing

2021	2022	2023
Experimental Acres Project in progress	7 Dufferin farmers participated in 1st year of Experimental Acres Pilot	4 Dufferin farmers participated in 2023 Experimental Acres Pilot
Hosted Agriculture Round Table promoting Rural Water Quality Program		E-newsletter and social media promotion of events and resources

For Our Land: Action L7

Support conservation and rehabilitation of ecological systems in rural areas

L7.1 Support restoration of degraded lands using erosion control, organic and nutrient amendments

2021	2022	2023
Experimental Acres Project in progress	7 Dufferin farmers participated in 1st year of Experimental Acres Pilot.	4 Dufferin farmers participated in 2023 Experimental Acres Pilot.
Hosted Agriculture Round Table promoting Rural Water Quality Program		E-newsletter and social media promotion of events and resources

L7.2 Support conservation of marginal farmland to perennial grasses or trees

Status: Ongoing

2023

1 Experimental Acres project converted marginal farmland to perennial grasses

Rural Water Quality Program updates drafted in 2023 with plans for 2024 adoption

L7.3 Support restoration of wetlands (See L8, P5)

Status: Future Initiative

Ongoing as opportunities arise. Ducks Unlimited purchased 96 acres of wetland in Amaranth for conversation.

For Our Land: Action L8

Support water protection initiatives

L8.1 Support restoration of wetlands (See L7, P5)

Status: Future Initiative. Ongoing as opportunities arise. Ducks Unlimited purchased 96 acres of wetland in Amaranth for conversation.

L8.2 Work with local municipalities to provide a climate lens to water quality and quantity protection initiatives

Status: Future Initiative. Will support local municipalities as funding opportunities arise.

L8.3 Work with local municipalities to develop and/or update stormwater management plans

Status: Discontinued. Discontinued due to capacity. Will support as opportunities arise.

Planning Our County: Action P1

Plan complete communities

P1.1 Prioritize the design of urban areas to reduce personal vehicle use, vehicle kilometers traveled, and to encourage active transportation. This can be achieved through the development of compact, accessible, and walkable neighbourhoods that integrate residential office and retail developments

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress
Municipal Comprehensive Review is currently in progress that addresses active transportation via Transportation	Municipal Comprehensive Review is currently in progress
Master Plan	Transportation Master Plan completed in October 2023

P1.2 Prioritize infill and high-density housing in the downtown core, commercial zones, and along transit routes through policies

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress
Municipal Comprehensive Review is currently in progress that will prioritize this action	Municipal Comprehensive Review is currently in progress that will prioritize this action



Planning Our County: Action P2

Create green development standards (GDS) and practices

P2.1 Create GDS that align with existing or upcoming policy goals and plans related to community energy, climate change, growth and intensification, resilience, and asset management

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress

P2.2 Engage the building and development community to integrate experiences and leading practices into a GDS

Status: In Progress

2022	2023
Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress. Planned engagement with building and development community in Spring 2024

P2.3 Create requirement for a 'climate impacts' section in all development applications and explore options to incentivize application of GDS by local developers

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Options are being explored through Tri-County Green Development Standard in collaboration with Grey and Wellington Counties

P2.4 Embed GDS in the Official Plan, especially as an implementation tool to achieve goals concerning sustainability, health, growth, and infrastructure management

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress

P2.5 Work with member municipalities to integrate GDS into development standards with a focus on regional alignment

Status: In Progress

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress

Planning Our County: Action P3

Reduce extreme heat risks across public and private properties

P3.1 Conduct a study to identify priority areas to mitigate extreme heat across private and public properties

Status: Complete

2022

Preliminary project completed by students at University of Guelph mapping tree canopy cover overlaid with marginalization index

P3.2 Implement potential recommendations from extreme heat study such as installation of reflective white roofs, urban street tree planting, shading park structures, and the conversion of streets to light colours

Status: Early Stages

2022

Ongoing work to mitigate extreme heat risks through Dufferin Climate Adaptation Strategy

Town of Orangeville completed Urban Canopy Study completed, establishing a planting goal of 4030 trees per year to reach 2040 target of 40% canopy coverage

Planning Our County: Action P4

Minimize flood risks in communities through enhancement of built infrastructure

P4.1 Increase capacity to apply climate lens to infrastructure planning for stormwater management

Status: Early Stages

2022	2023
This is being integrated into Local Municipal Implementation Plans that are currently in development	Will support local municipalities as funding opportunities arise

P4.2 Update floodplain mapping and develop/update natural stormwater management plans to ensure no increase in vulnerability

Status: Early Stages

2022

This is being integrated into Local Municipal Implementation Plans that are currently in development

Town of Orangeville undertaking update of floodplain mapping with Credit Valley Conservation

Planning Our County: Action P5

Minimize flood risks in communities through enhancement of green infrastructure

P5.1 Enhance the amount of green space/permeable surface incorporated into all communities

Status: Early Stages

2022	2023
, , , , , , , , , , , , , , , , , , , ,	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress

P5.2 Support an increase in tree coverage through planning policy (See L5)

Status: Early Stages

2022	2023
Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties	Tri-County Green Development Standard in collaboration with Grey and Wellington Counties in progress

P5.3 Strategically manage natural assets through the directives of the natural asset management plan (See L4)

Status: Future Initiative

2023

Natural Asset Management Plan scheduled to be completed by July 2024 by Finance Department; however, this action has been determined that it will be more effectively accomplished through other initiatives

P5.4 Increase uptake of low impact development technologies on private and public properties (See L6)

Status: Ongoing

2022	2023
Home Flood Protection campaign held throughout May 2023 including public education booths, video, radio, social media promotion, and earned media	Home Flood Protection campaign held throughout May 2023 including public education booths, video, radio, social media promotion, and earned media

P5.5 Support wetland restoration and creation initiatives (See L8)

Status: Future Initiative. Ongoing as opportunities arise. Ducks Unlimited purchased 96 acres of wetland in Amaranth for conversation.

Planning Our County: Action P6

Explore opportunities to implement low GHG fuels and/or renewable energy generation and storage

P6.1 Determine renewable energy potential in Dufferin, including potential sites for wind and solar installations

Status: Delayed

2022	2023
	Work on developing RFP for Master Plan for 195620 Amaranth – Grand Valley Townline property delayed, which could explore renewable energy potential

P6.2 Identify options for local energy generation and storage options, such as microgrids that can also serve as back-up power supply during emergencies

Status: Delayed

2022	2023
Current capacity constraints have delayed initiation of this action	Exploration of battery energy storage project by Enfinite Corporation in Amaranth

P6.3 Collaborate with the agricultural community and energy specialists to identify local options for on-farm renewable energy (See L3)

Status: Delayed. Current capacity constraints have delayed initiation of this action.

P6.4 Identify opportunities for low GHG fuel use in the community such as hydrogen and renewable natural gas

Status: Delayed. Current capacity constraints have delayed initiation of this action.

Planning Our County: Action P7

Explore opportunities to develop a district energy and cogeneration system to decentralize energy production

P7.1 Explore potential sites for a district energy system

Status: Discontinued. Current capacity constraints have discontinued this action until there is additional capacity or as opportunities arise.

P7.2 Create a municipal energy map

Status: Delayed. Current capacity constraints have delayed initiation of this action.

P7.3 Conduct an initial assessment to identify local fuel sources such as biomass or biogas products (See L3)

Status: Discontinued. Current capacity constraints have discontinued this action until there is additional capacity or as opportunities arise.

Planning Our County: Action P8

Enable the uptake of renewable and low GHG energy within the community through education

P8.1 Provide learning and training opportunities for residents, developers, building owners, and businesses on renewable energy options such as ground mount solar, rooftop PV, geothermal, and renewable natural gas

Status: Early Stages

2023

Business, Talent, and Attraction Plan approved through Tri-County Green Development Standard project. Additional trainings opportunities will also be offered through the project

P8.2 Promote financing opportunities for neighbourhood level energy generation and ownership, such as solar installations

Status: Delayed. Current capacity constraints have delayed initiation of this action. Will initiate as opportunities arise (e.g. Provincial support).



In Our Bins: Action W1

Enable the uptake of renewable and low GHG energy within the community through education

W1.1 Work with Waste Services to increase rates of, and participation in, composting through educational campaigns

Status: Ongoing

2021	2022	2023
3,200 tonnes of organics through Dufferin Waste's Green Bin program	930 tonnes of organics through Dufferin Waste's Green Bin program	2961 tonnes diverted for green bin
	, -	1800 tonnes diverted in yard waste
	2265 tonnes of yard waste diverted	
	through Dufferin Waste	Neighborhood campaign in Shelburne neighborhood
	Green Bin program promoted	(participation study and engagement
	through multi-residential	for Green Bin program)
	engagement and neighborhood	
	campaign.	

W1.2 Work with Waste Services to support food waste reduction efforts

Status: Ongoing

2021	2022	2023
Dufferin Waste engaged over 100 people through the Plan to Save, Reduce Food Waste campaign	Dufferin Waste's Love Your Leftovers Draw reached 150 people. Climate Action in Dufferin amplified the Love Food, Hate Waste, campaign in March 2022	Food Waste Friday Social Media Campaign collectively reached over 4100 accounts on social media

W1.3 Develop organic waste diversion educational opportunities for ICI stakeholders

2022	2023
Service & engagement visits to 150 businesses	Approximately 100 ICI service & engagement visits/calls to determine organics program (and garbage/recycling) participation.
	Distributed green bins/carts to those interested and/or needed new containers

In Our Bins: Action W2

Support local circular economy initiatives

W2.1 Support individuals, businesses, and industry efforts to reduce waste through circular economy initiatives

Status: Ongoing

2022	2023
Over 50 business and organization promoted through Dufferin Waste's Take it Back Directory	Dufferin Waste's Take it Back Directory reached over 22,000 through newspaper ads and reached over 1,100 social media accounts
Promotion of Clothes'ing the Loop on Textiles campaign & map tool with over 700 social media engagements Textiles feature blog on Climate Hub	Promotion of Clothes'ing the Loop on Textiles campaign & map tool with over 1,400 social media engagements. The map tool had over 1200 visits between March and December.
	Held 2 clothing swap parties. Over 15 staff members attended. Donated over 30 pieces of textiles after the event

W2.2 Work with community stakeholders to increase knowledge of and participation in circular economy initiatives

2022	2023
Over 50 business and organization promoted through Dufferin Waste's Take it Back Directory	Over 50 business and organization promoted through Dufferin Waste's Take it Back Directory
Promotion of Clothes'ing the Loop on Textiles campaign & map tool with over 700 social media engagements	Clothes'ing the Loop on Textiles map tool features 19 listings for textiles donations and recycling with 8 different businesses and organizations



Empowering Our Community: Action C1

Develop education partnership with agricultural community and partners to support long-term climate friendly practices and knowledge sharing

C1. 1 Provide resources and learning opportunities for residents with detailed information on tools, resources, and supports to reduce GHG emissions

2021	2022	2023
Launched the Climate Hub and Climate Action in Dufferin e-newsletter Educational resources shared on an ongoing basis via social media channels Saved 3,500 pounds of carbon dioxide and took 753 climate actions through the Earth Month Ecochallenge, led with Headwaters Communities in Action and Sustainable Orangeville	Launched two new web pages to provide resources on home flood protection and residential energy efficiency Hosted 7 workshops and events including an Earth Day action workshop, Community Bike Ride, Home Flood Protection webinar, Energy Efficiency Workshop, Storytime at Shelburne Library, Coffee, Tea, and Connection at Grand Valley Library, PD session at Upper Grand District School Board, and a Climate Solutions Fair Attended 5 community events including Orangeville Lions Home Show, Blues and Jazz Festival, Orangeville Rotary Ribfest, Let's Make Mono Shine, and Melancthon Day Educational resources shared on an ongoing basis via social media channels and e-newsletter Led the Earth Month Ecochallenge, in partnership with Headwaters Communities in Action, County of	Hosted 13 workshops and events including a Climate Solutions Fair, pop-ups booths at Grand Valley and Orangeville Home Hardware and Canadian Tire, Earth Day Art Workshop, pop-up tick education booths, Storytime and STEM Club at Shelburne Public Library, electric vehicle test-drive events, and Youth Climate Activation Circle workshops Attended 11 community events including Orangeville Lions Home Show, Emergency Management Forum, Blues and Jazz Festival, Celebrate Your Awesome, Orangeville Rotary Ribfest, EEE at Orangeville Hydro, Grand Valley Farmer's Market, International Plowing Match and Rural Expo, Dufferin Farm Tour, Dream Dufferin Career Fair, and STREAMS Hub Very Merry Market Educational resources shared on an ongoing basis via social media channels and e-newsletter
	Wellington, and Upper Grand District School Board	

C1. 2 Create a "Community Climate Fund" to support existing programs in the community for organizations undertaking environmental or social justice work

Status: Ongoing

2021	2022	2023
Climate Action stream incorporated into Community Grants Program	Community Grants Program accepting climate projects. Collaborating with HCIA to tailor promotional materials to support submissions to the Climate Stream	Community Grants Program accepting climate projects. Collaborating with HCIA to tailor promotional materials to support submissions to the Climate Stream

C1. 3 Develop a climate change toolkit for businesses to assist with climate change impact analysis and continuity planning for extreme weather

Status: Delayed. Current capacity constraints have delayed initiation of this action.

C1. 4 Develop a green procurement guide for ICI stakeholders

Status: Delayed. Current capacity constraints have delayed initiation of this action.

Empowering Our Community: Action C2

Create a community culture around climate action

C2. 1 Create a "Climate Engagement and Cultural Plan" with diverse community groups, particularly with equity and sovereignty seeking groups

Status: Discontinued. Annual communications strategy developed; however, it did not include consultation. Intention to co-create engagement strategy with DC4 during 2025 plan update.

C2. 2 Conduct market research to identify barriers and motivations for desired sustainable behaviours

Status: Early Stages

n	

Submitted an application to Natural Resource Canada's Clean Fuels Clean Transportation Fund for the Electrifying Back Roads project

C2. 3 Promote educational campaigns to encourage sustainable behaviours, such as supporting local food and farming

Status: Ongoing

2021	2022	2023
Lead and/or amplified 3 campaigns including Bike Month, Charge Up in Dufferin, and Climate Stories of Dufferin	Lead and/or amplified 5 campaigns including Invasive Species Awareness Week, Love Hate Food Waste, Home Flood Protection, Bike Month, and Residential Energy Efficiency	Lead and/or amplified 4 campaigns including Home Flood Protection, Electric Vehicle Awareness, Tick Talk, and Residential Energy Efficiency Engaged over 1200 students at the International Plowing Match in September 2023 on regenerative agriculture

C2. 4 Promote local stories and highlight success in the community

Status: Complete

2021

Spotlighted local climate champions through the Climate Stories of Dufferin Project. Ongoing amplification of submitted stories

C2. 5 Establish a multi-level Climate Ambassadors Program to facilitate the inclusion of all community members in climate action initiatives

Status: Complete

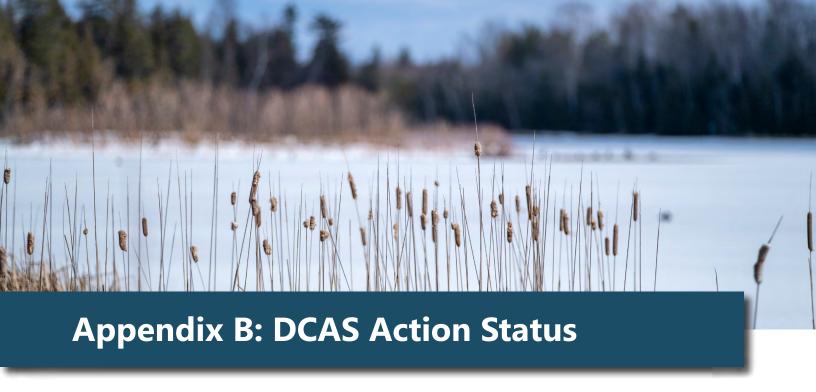
2021	2022	2023
Proposal submitted to ICLEI Canada's Agents of Change Project to establish youth programming	Youth Climate Activation Circle established through ICLEI Canada's Agents of Change Project	Youth Climate Activation Circle volunteer program launched concluded first cohort with 8 participants who hosted a Climate- Friendly Landscaping workshop series in summer 2023 Program evaluation in progress to enhance future programming

C2. 6 Support initiatives such as composting, sewing repair, bicycle repair hub

Status: Ongoing

2023

Planning for a community resiliency hub has begun and will receive 300 staff hours to support the project's community engagement courtesy of the Ontario Resource Centre for Climate Adaptation



This appendix identifies the County's progress to date on the implementation of the actions in *Together for Change: Dufferin's Climate Adaptation Strategy* since its release in April 2023.

Each action is categorized in one of the following status categories:

Complete

The action has been implemented.

In Progress

Work on this action is actively underway.

Ongoing

This action will be implemented on an ongoing or reoccurring basis.

Early Stages

Early work has been started, but requires additional work and resources to develop and implement

Delayed

Implementation of this action is delayed to a later date.

Future Action

Implementation of this action is delayed to a later date.

Discontinued

For specified reasons, this action has been discontinued.

Buildings and Infrastructure

Objective: Strengthen the resilience of private buildings and infrastructure to climate-related risks and impacts

Action	Status	Progress to Date
BI.1 Encourage homeowners and property owners to improve the climate resilience of residential and private property through upgrades and/or retrofit	In Progress	Pre-application for funding was submitted to support the BetterHomes Dufferin project Tri-County Green Development Standards project started, with \$445k in funding secured. Project will include resilience measures for new homes and encourage climate-resilient building materials and design
BI.2 Encourage home and property owners to implement best practices in stormwater management on their home or property to reduce flooding risk	In Progress	2023 Home Flood Protection Campaign hosted with Emergency Preparedness. Campaign achieved 16,640 social media reach, 1,108 visits to Home Flood Protection web page, 8 campaign amplifications by local media outlets, and 324 materials distributed across 4 community events Feasibility study initiated for County-run rain barrel program
BI.3 Create framework for adopting a Green Development Standard to build resiliency and complete communities (e.g. low-impact development, flood mitigation measures, access to green space, enhanced tree canopy)	In Progress	Tri-County Green Development Standards project started, with \$445k in funding secured. Project will include resilience measures for new homes and encourage climate-resilient building materials and design

Objective: Strengthen resilience of corporate assets and infrastructure to climate-related risks and impacts

Action	Status	Progress to Date
Bl.4 Incorporate a climate lens into asset management, capital planning, and budgetary processes	In Progress	Budget allocated in 2024 to support a climate risk assessment on roads infrastructure Climate lens tool is being developed with the support of an internal community of practice. It is anticipated to be applied in 2025 budget
Bl.5 Periodically review and implement best practices in climate resilient infrastructure, design, materials, stormwater management and flood mitigation measures.	Future Initiative	Not started
BI.6 Develop a County road infrastructure resiliency program.	Early Stages	Budget allocated in 2024 to support a climate risk assessment on roads infrastructure intended to support the development of a comprehensive road resiliency program

Energy and Economy

Objective: Enable local businesses and organizations to plan for climate-related risks

Action	Status	Progress to Date
EE.1 Provide guidance to local businesses on how to maintain business continuity	Future Initiative	Not started

Objective: Improve the resilience of energy infrastructure to weather-related disruptions

Action	Status	Progress to Date
EE.2 Increase the resilience of energy distribution infrastructure to extreme weather through strategic planning and retrofits	Future Initiative	Not started
EE.3 Ensure all municipal-owned facilities providing critical services (i.e. critical road intersections, vulnerable population facilities such as LTC homes, etc.) have reliable, low-carbon, backup power systems in place.	Future Initiative	Not started

Agriculture and Natural Environment

Objective: Support the protection, rehabilitation, and enhancement of natural systems to foster climate resiliency

Action	Status	Progress to Date
AN.1 Increase uptake of sustainable land use and management practices by residents and landowners	In Progress	5 farmers participated in 2023 Projects Experimental Acres program Eligible activities in the county-funded Rural Water Quality Program (RWQP) have been updated and expanded using a climate lens, including loosened criteria for program participation increase uptake. The budget for the RWQP has been increased from \$40k to \$60k to account for expected
AN.2 Implement and support nature-based solutions to enhance water security, habitat restoration, and reduce habitat fragmentation.	In Progress	increase in uptake Eligible activities in the county-funded Rural Water Quality Program (RWQP) have been updated and expanded using a climate lens, including loosened criteria for program participation increase uptake. The budget for the RWQP has been increased from \$40k to \$60k to account for expected increase in uptake

Objective: Support best practices within agricultural management systems to enhance climate resilience

Action	Status	Progress to Date
AN.3 Increase uptake of regenerative agricultural practices in partnership with farmers to increase soil organic matter, reduce soil erosion, and improve water security.	In Progress	5 farmers participated in 2023 Projects Experimental Acres program

People and Health

Objective: Minimize and manage climate-related health and safety risks for municipal staff

Action	Status	Progress to Date
PH.1 Review, develop and update policies, procedures, and training to ensure County staff are safe during extreme weather conditions and encourage local municipalities to adopt similar policies and procedures.	Ongoing	Conducted an annual review of all emergency response plan with the nine Emergency Management Program Committees Reviewed the Hazard Identification and Risk Assessment framework and the Community Risk Profile Provided training and conducted severe weather (tornado)
		drills at all County facilities

Objective: Enhance social infrastructure in order to minimize and manage climate-related health and safety risks for residents

Action	Status	Progress to Date
PH.2 Establish and enhance emergency preparedness communications and programs for residents to strengthen personal resiliency to climate impacts.	In Progress	Creation of emergency preparedness media toolkit initiated Emergency Management launch emergency support services (ESS) trailers
PH.3 Review, develop and update policies, and procedures to ensure residents, in particular those most vulnerable, are safe during extreme weather conditions.	Ongoing	Facilitated emergency exercises for all nine municipalities. This exercise focused on coordinating a multi-site Emergency Support Services response using supplies recently acquired by each lower tier municipality and supporting the staff and volunteers assigned to ESS shelters
PH.4 Enhance community connectivity to increase emergency response capacity during climate change related emergencies	In Progress	Provided training to more than 60 community members who volunteered to assist at ESS shelter sites during community emergencies Planning for a community resiliency hub has begun and will receive 300 staff hours to support the project's community engagement courtesy of the Ontario Resource Centre for Climate Adaptation
PH.5 Monitor and plan for increasing risk of vector-borne diseases in the community	Early Stages	Traveling tick education exhibit for youth, developed by Public Health Agency of Canada, hosted at Dufferin EarlyON Centers and Museum of Dufferin

Objective: Protect tenants in multi-residential buildings from excessive heat in their units

Action	Status	Progress to Date
PH.6 Establish maximum temperature by-law for rental properties.	Early Stages	Preliminary scans of municipal efforts began in 2023

Enabling Actions

Objective: Increase capacity of municipalities to respond to extreme weather (mitigating damages, restoring services, etc.)

Action	Status	Progress to Date
EA.1 Secure new tools and technologies to accelerate and enhance adaptation initiatives	Future Initiative	Not started
EA.2 Build redundancies into operations to ensure service continuity and improve response to significant weather events and emergencies.	Early Stages	Pre-project planning documents completed, and contract awarded for engineering analysis for Southern Operations Centre
EA.3 Establish mandatory training for County and local municipal staff on climate change	In Progress	Research and planning underway for the development of climate training modules to rolled out in 2024 to staff

Objective: Optimize public communications strategies for extreme weather and other climate impacts

Action	Status	Progress to Date
EA.4 Enhance efficacy of public communications for emergency preparedness and response	Future Initiative	Not started

Objective: Build financial capacity to plan for and respond to climate related threats

Action	Status	Progress to Date
EA.5 Create a Climate Reserve Fund to build financial capacity to respond to impacts of climate change and build resiliency	Future Initiative	Not started



Report To: Chair Taylor and Members of the Infrastructure and Environmental Services Committee

Meeting Date: May 23, 2024

Subject: Road Needs Study – Authorization to Award

From: Scott Burns, Director of Public Works/County Engineer

Recommendation

THAT the report of the Director of Public Works/County Engineer, dated May 23, 2024, Roads Needs Study – Authorization to Award, be received;

AND THAT the 2024 Road Needs Study be awarded in the amount of \$108,744 (excluding tax);

AND THAT the 2024 Road Needs Study be funded from the Rate Stabilization Reserve.

Executive Summary

In February 2024, staff received Council direction to proceed with a Roads Needs Study in 2024, one year earlier than initially planned. The purpose of moving this project forward now is to inform the immediate next steps towards implementation of the County Road Network Rationalization Plan. Following review of proposal documents in line with the County's Procurement By-Law 2017-33, the lowest compliant bid closed at \$108,744 excluding tax. This amount exceeds the estimated budget of \$60,000 and therefore staff seek direction from Council to award the project.

Background & Discussion

Road Network Rationalization Plans optimize a road network (roads and bridges/culverts) such that it holistically functions for the purpose it serves and aligns infrastructure with the appropriate standards and agency. Through optimizing a road network, associated

expenses align to these standards and costs transfer accordingly to the appropriate level of government. This offers more efficient allocation of funds overall in the long term.

Following presentation of a January 2024 staff report (2024-01-25 Infrastructure and Environmental Services Agenda (dufferincounty.ca)) Council adopted a mechanism for upcoming transfers of roads and bridges from the County to affected Member Municipalities. The adopted mechanism is to transfer infrastructure with concessions in line with the County's 10-Year Capital Work Plan. In addition, staff received further direction to proceed with the County's Roads Needs Study in 2024, one year earlier than initially planned. The overall purpose of the Roads Needs Study is to inform the County's Asset Management Plan and in the immediate, it also serves to ensure that the County's 10-year Capital Work Plan provides an accurate representation of concession values for upcoming infrastructure transfers.

Following review of the 2024 Roads Needs Study proposal documents in line with the County's Procurement By-Law 2017-33, the lowest compliant bid closed at \$108,744 excluding tax. The estimated budget for the project was \$60,000 and therefore staff seek direction from Council to award the project.

Financial, Staffing, Legal, or IT Considerations

Following the 2024 Roads Needs Study, the updated 10-year Capital Work Plan will include project/concession values for infrastructure transfers.

Funds to complete the Road Needs Study in 2024 are available through the Rate Stabilization Reserve.

In Support of Strategic Plan Priorities and Objectives

Climate & Environment – establish the County as a leader in Climate Action/enhance and conserve Dufferin's natural environment

Governance - identify opportunities to improve governance and service delivery **Equity** – align programs, services and infrastructure with changing community needs

Respectfully Submitted By:

Scott Burns

Director of Public Works and County Engineer

Reviewed by: Sonya Pritchard, Chief Administrative Officer



Report To: Chair Taylor and Members of the Infrastructure and Environmental Services Committee

Meeting Date: May 23, 2024

Subject: Capital Workplan Update

From: Aimee Raves, Manager of Corporate Finance, Treasurer

Recommendation

THAT the Capital Workplan Results report, dated May 23, 2024, from the Manager of Corporate Finance, Treasurer, be received;

AND THAT the 2024 capital workplan be adjusted by \$1,370,000 per the table below:

Project	Funding Source	2024 Workplan Adjustment
004-2507 – Culvert No 2507	Structures Capital Asset Fund	\$25,000
004-2508 – Culvert No 2508	Structures Capital Asset Fund	\$25,000
Dufferin Road 124	Roads Capital Asset Fund	\$150,000
Dufferin Road 21	Roads Capital Asset Fund	\$650,000
Dufferin Road 21	Roads Capital Asset Fund	\$55,000
ATV Trailer	County Forest Reserve Fund	\$15,000
004-0007 - Walkers Creek Culvert	Roads Capital Asset Fund	\$450,000

Executive Summary

The purpose of this report is to update the 2024 Infrastructure and Environmental Services capital workplan.

Background & Discussion

It is not unusual to require adjustments to the current year workplan. Such adjustments can be broken down into three ways: carry overs from prior years, new or missed projects

and projects where the final tender results are greater than budget. There are several such projects within Public Works which need to be added to the 2024 workplan.

Prior Year Carry Over

There are five projects that were part of the 2023 workplan that staff anticipate costs in 2024. These costs were included in the 2023 workplan but were not spent and thus are not budget overages. Funds are available in the respective capital asset funds to cover the cash outlays in 2024. They need to be shifted to the 2024 workplan to show costs aligning to budget at year end.

The first two projects relate to structures that although substantially completed in the fall require some minor corrections or finishing touches. An additional \$25,000 per structure needs to be added to the 2024 workplan. The next three projects relate to roads projects that were not completed in 2023. A total of \$855,000 for these three projects needs to be added to the 2024 workplan.

New Project

In 2023 the purchase of an ATV and trailer were included in the County Forest workplan. The cost of the ATV was higher than anticipated and thus the trailer was not purchased with the intention of adding the trailer to a future workplan. Staff would like to purchase this trailer sooner than later. There are sufficient funds within the County Forest Reserve Fund which can be used for this purchase.

<u>Budget Adjustment</u>

The final project requiring an adjustment to the workplan relates to a shared structure. It is the responsibility of the upper tier municipalities that border the structure to cover the costs of rehabilitation or replacement. Included in the 2024 workplan are two such structures both shared with Simcoe County. Simcoe County is the lead on both projects.

The construction tender for one of these shared structures closed recently higher than anticipated. The 2024 workplan includes \$1,070,542, for 004-0007 – Walkers Creek Culvert. Based on tender results the revised costs are projected to be nearly \$1.5 million. As such staff recommend increasing the workplan by \$450,000. There is sufficient funding within the structures capital asset fund to cover these additional costs.

Financial, Staffing, Legal, or IT Considerations

The chart below summarizes the projects that need to be added to the 2024 workplan, the amount and how they are to be funded. As stated previously most are unspent funds

from 2023 which are available in their respective capital asset funds, except for the ATV trailer. It should be noted any surpluses from these or any projects will remain in the respective capital asset fund which in turn will be considered when developing the 2025 capital budget.

Project	Funding Source	2024 Workplan Adjustment
004-2507 – Culvert No 2507	Structures Capital Asset Fund	\$25,000
004-2508 – Culvert No 2508	Structures Capital Asset Fund	\$25,000
Dufferin Road 124	Roads Capital Asset Fund	\$150,000
Dufferin Road 21 (Recon)	Roads Capital Asset Fund	\$650,000
Dufferin Road 21 (Honeywood)	Roads Capital Asset Fund	\$55,000
ATV Trailer	County Forest Reserve Fund	\$15,000
004-0007 - Walkers Creek Culvert	Roads Capital Asset Fund	\$450,000

In Support of Strategic Plan Priorities and Objectives

Climate & Environment – enhance and conserve Dufferin's natural environment

Governance – identify opportunities to improve governance and service delivery/improve the County's internal and external communication

Respectfully Submitted By:

Aimee Raves, CPA, CMA Manager of Corporate Finance, Treasurer

Reviewed by: Sonya Pritchard, Chief Administrative Officer

MULTI-MUNICIPAL ENERGY WORKING GROUP

TOM ALLWOOD, COUNCILLOR, GREY HIGHLANDS, CHAIR JIM HANNA, DEPUTY MAYOR, HURON-KINLOSS, VICE-CHAIR 1925 BRUCE ROAD 10, BOX 70, CHESLEY, ON NOG 1L0

519-363-3039 FAX: 519-363-2203 ihamilton@arran-elderslie.ca

May 1, 2024

Dear Mayor and Members of Council,

The Multi-Municipal Energy Working Group (MMEWG) continues to actively follow the procurement processes the Independent Electricity System Operator (IESO) is undertaking to procure additional capacity to meet projected future energy needs. Details released regarding the Long-Term 2 Request for Proposals (LT2 RFP) plus subsequent LT RFPs has raised many concerns.

The IESO RFPs call for 5 TWh of new energy generation, and proposes that this be mostly derived from 2000 MW of new energy generation produced by mostly wind and solar by 2030. It further proposes that a portion of this generation could be derived by repowering on the current footprint of existing wind turbines that will reach their end of contract life between 2026 and 2034.

Since existence, the now Multi-Municipal Energy Working Group, formerly known as the Multi-Municipal Wind Turbine Working Group, has continued to advocate for stronger safety measures and best practices related to wind turbine installations across the province. To date, many of the concerns raised have not been addressed with the Ministry of Environment, Conservation and Parks confirmed in a recent IESO engagement session that no changes to the existing setbacks are planned.

Severe health effects to many residents living within the vicinity of project sites have been identified and continue to jeopardized the health and well-being of many residents. The current setbacks from other activities are not sufficient to protect against the full range of noise emissions from wind turbines. The MMEWG will be making a presentation on this topic to the Grey Bruce Public Health Unit in the March in an effort to bring these concerns to the forefront in advance of the repowering of current projects.

Public safety continues to remain a paramount concern of the MMEWG. Setbacks for tower collapse remain insufficient. The current blade length plus 10 metres requirement not a strong enough protective measure for existing projects let alone repowered turbines on existing footprints. Setbacks for ice throw are also insufficient, as the blade

length plus 10 metre setback is less than the ice throw distance witnessed in Ontario. Ontario has witnessed turbine fire and flaming debris on the ground at 200 metres, while setback was 50 metres. A Ministry review failed to recommend industry standard protective barriers for fire suppression in spite of examples of fires in similar turbines.

In 2013, 115 municipalities declared themselves "Unwilling Hosts" for wind turbine projects. With the expected surge in proposals given the ambitious procurement efforts being undertaken by the IESO, and little change in the regulations, the MMEWG strongly recommends that municipalities reaffirm their unwillingness to host projects until the appropriate ministries address the concerns and make stronger rules and regulations to ensure that, as municipal leaders, provide measures necessary for the health, safety and well-being of citizens within our jurisdiction, as mandated by the Municipal Act, 2001, as amended. Over the past month, the municipalities of Arran-Elderslie, Chatsworth and East Zorra-Tavistock have taken this step.

For consideration, a DRAFT declaration has been attached. Should your municipality declare its intention, please let us and we will continue to keep you apprised of any advancements in the industry and regulations.

Warm Regards,

p.p.

Tom Allwood.

Chair, Multi-Municipal Energy Working Group Councillor, Municipality of Grey Highlands



Independent Electrical System Operator

By email: engagement@ieso.ca

Re: Municipality/Township of	– Wind Turbine Projects
Please be advised at the Municipality/Township of, the following resolution was approved	-
WHEREAS the Independent Electrical System Opera forward with three RFPs where new wind turbine pro the IESO; and	
WHEREAS people living near existing wind turbines relives due to noise and other emissions from the wind	•
WHEREAS there are gaps in the enforcement of key Approvals governing existing projects relative to no complaints; and	<u>.</u>
WHEREAS municipal approval is required to locate a Municipality/Township of; and	one of these projects in the
THEREFORE BE IT RESOLVED THAT the Council does n new wind turbine projects within the municipality; a	
THAT the IESO be directed to advise potential appli	cants of this resolution.
Sincerely,	
Clerk, Municipality/Township of	
c: The Hon. Todd Smith - Minister of Energy - <u>MinisterEr</u> David Donovan, Chief of Staff, david.donovan@on Association of Municipalities of Ontario - policy@am Local MPP Multi-Municipal Energy Working Group - <u>ihamilton@</u>	tario .ca no.on.ca

From: <u>Clerk</u>

To: <u>Michelle Hargrave</u>

Subject: FW: 2024 Association of Municipalities of Ontario (AMO) Delegation Form

Date: Tuesday, May 7, 2024 10:24:29 AM

Michelle Dunne, Dipl.M.M.|Clerk| Office of the CAO

County of Dufferin Phone: 519-941-2816 Ext. 2504 mdunne@dufferincounty.ca | 30 Centre

Street, Orangeville, ON L9W 2X1

Collaboration | Accountability | Innovation | Compassion | Courage

From: Delegations (MMAH) < Delegations@ontario.ca>

Sent: Monday, May 6, 2024 11:56 AM

Subject: 2024 Association of Municipalities of Ontario (AMO) Delegation Form

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hello/ Bonjour

Please be advised that the Municipal Delegation Request Form for the 2024 Association of Municipalities of Ontario (AMO) Annual Conference is available online. Information about delegations and a link to the form are available here: ______. The deadline to submit requests is **Friday June 7**, **2024**.

Le formulaire pour demander une rencontre avec le ministères pour le Congrès annuel de la AMO (Association of Municipalities Ontario) 2024 est disponible en ligne. Pour plus d'information sur les délégations et le formulaire, veuillez suivre le lien suivant : ______. Date limite pour présenter une demande: vendredi 7 juin 2024.

Thank you/ Merci

Delegations - Information and Analysis Unit Municipal Programs and Analytics Branch Ministry of Municipal Affairs and Housing Delegations@ontario.ca