

DUFFERIN CLIMATE ACTION PLAN

REPORT CARD 2022







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On March 11, 2021 Dufferin County adopted the Dufferin Climate Action Plan, our first comprehensive strategy to achieve net-zero greenhouse gas (GHG) emissions by 2050 and build resilience to the impacts of climate change. This Report Card provides an update on the County's progress on the implementation of the Dufferin Climate Action Plan.

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 Dufferin Climate Action Plan is a strategy to achieve net-zero emissions by 2050 while also increasing community resilience to the impacts of climate change. 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

This Report Card, prepared for Dufferin County Council and residents, provides a summary of the actions taken in the 2022 calendar year towards our climate goals.

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Warming Stripes | Ed Hawkin

CLIMATE EMERGENCY

On September 8, 2022, Dufferin County Council passed a motion to declare a climate emergency, reaffirming the County's commitment to climate action.

The declaration of a climate emergency signals a commitment to urgent climate action to reduce greenhouse gas emissions and adapt to the impacts of a changing climate. With this declaration, Dufferin County is joining 644 Canadian municipalities and over 1,200 jurisdictions globally in acknowledging that climate change poses a serious risk to the environment, infrastructure, and people.

"Dufferin County is joining municipalities across the world in declaring a climate emergency and committing to further climate action.

As the County continues to integrate climate considerations in policies, strategies, and budgets, this climate emergency declaration will help us respond with the necessary urgency to ensure Dufferin County continues to thrive and embrace new opportunities in a changing climate."

~ Sonya Pritchard, Chief Administrative Officer

5 YEARS, 5 BIG MOVES

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 in 2022 is reported below:

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.

The development of a residential energy retrofit program is a priority of the Dufferin Climate Action Plan (DCAP). In 2022 Dufferin County joined the BetterHomes Ontario Consortium. The purpose of the Consortium is to develop a regional southern-Ontario Property-Assessed Clean Energy (PACE)-style home energy retrofit program.

Following the creation of the Consortium, and with funding from FCM, the Clean Air Partnership led feasibility studies with seven Ontario municipalities – Dufferin County, London, Huntsville, Barrie, Kawartha Lakes, Clarington, and Tay Valley Township. The BetterHomes Dufferin County Energy Retrofit Program: Design Considerations report was presented to committee on June 23, 2022. The report highlighted that in addition to helping Dufferin meet it's GHG reduction targets, the program will address housing affordability.

Moving forward, in 2023 the County will proceed to the next phase of the program to work with local municipalities to determine desired participation and financing mechanisms and explore FCM's Community Efficiency Financing (CEF) Capital and Grants Stream application process.

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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 20 Level-2 electric vehicle connectors to support the electrification of municipal fleets. As 37.5% of corporate emissions are attributed to fleet emissions, the promotion of zero-emission vehicles and electric vehicle infrastructure development was identified as a priority for corporate fleets. Dufferin County has 12 stations at three sites, the Town of Orangeville has six stations at two sites, and Melancthon Township has two stations at one site.

Regional Electric Vehicle Network

The development of a Regional Electric Vehicle network was also initiated in 2022 in partnership with Bruce, Dufferin, Huron and Perth, the City of Guelph and the Nuclear Innovation Institute. 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. Currently Dufferin and regional partners are seeking a consultant to support the installation of the network by the end of 2023.

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.

Community empowerment is central to the implementation of the Dufferin Climate Action Plan. In 2022 education and engagement activities focused on home flood protection, active transportation, residential energy efficiency, and the creation of volunteer programming.

Home Flood Protection Campaign

In collaboration with Emergency Management, the Home Flood Protection campaign ran from May 1 to May 31 with the goal of educating and encouraging residents to undertake low-cost measures to reduce home flood risk. The campaign included the creation of a resource webpage and the promotion of education materials through social media, newspaper and radio ads, and an instructive video featuring Warden Wade Mills. The campaign concluded with a webinar featuring Cheryl Evans, Director of Flood and Wildfire Resilience at the Intact Centre on Adaptation.

Bike Month

In celebration of Bike Month the County invited local cyclists and families to explore Orangeville through a self-guided community ride on June 25, 2022. Community stations were hosted by Sustainable Orangeville, Downtown Orangeville, Cycling Elements, Orangeville OPP, Orangeville Hydro, the Town of Orangeville, and the County's Climate and Energy, Forest, and Waste Services Divisions. 17 participants registered and Climate Action in Dufferin had about 50 community conversations during the event.

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Home Energy Efficiency Campaign

From October 5 to November 30 2022 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 creation of a resource webpage and the promotion of education materials through social media, newspaper ads, and the distribution of free home energy savings kits to residents. The campaign concluded with a Home Energy Savings workshop featuring Adam Dixon from Knowenergy.

Youth Climate Activation Circle

The County of Dufferin was 1 of 10 municipalities across Canada accepted into the Agents of Change Program delivered by ICLEI Canada. The program provided \$15,000 in funding and offered support in the design of a municipally-led volunteer engagement program. 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. Between October 2022 and October 2023 Youth Climate Ambassadors, will participate in climate change training and collectively design and implement a community project that supports greenhouse gas emission reductions in the County's priority sectors, while sharing their learnings and success to inspire the wider community.

In addition to primary engagement activities, in 2022 the Climate and Energy Division led 7 workshops and events including an Earth Day action workshop, Storytime at Shelburne Library, Coffee, Tea, and Connection at Grand Valley Library, a teacher information session, and a sustainable transportation workshop in collaboration with Upper Grand District School Board. In the community, staff hosted educational booths at 5 community events including Orangeville Lions Home Show, Blues and Jazz Festival, Orangeville Rotary Ribfest, Let's Make Mono Shine, and Melancthon Day.





PRIORITY ACTION 4

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

The Climate and Energy Division began a collaboration with Our Food Future and Wellington County to deliver the Experimental Acres Pilot, which provided \$6000 in funding to 7 Dufferin farmers to adopt regenerative agriculture practices on a small scale. 2022 projects included:

- No-till brussels sprouts
- Managed grazing of pigs
- Tarping to break hay
- Incorporation of hedge row into fence line
- Tallgrass prairie planting
- Cover cropping a market garden

The goal of the pilot is to backstop any risk, develop a community of support, and assist in capturing the business cases that can demonstrate what will be worth repeating.

In addition to the Experimental Acres Pilot, the County supported the Ontario Agroforest Network application to the Living Labs Initiative and allocated \$50,000 in 2023 Budget to develop a Master Plan for the former DEEP site.



PROGRESS SUMMARY

PRIORITY ACTION 5

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

Green Development Standards are measures created by municipalities to encourage environmentally, socially, and economically sustainable design. GDS are comprehensive principles to guide development at a level of planning and design that focuses on the community as a whole, while using resources effectively and efficiently.

The Counties of Dufferin, Grey, and Wellington are in the early stages of developing a tri-county Green Development Standard to find efficiencies in the process as well as creating a degree of alignment across the region to provide more consistency for developers. To support this project, funding support will be sought through the Federation of Canadian Municipalities.

The Report Card 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 specificed reasons, this action has been discontinued.

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Embracing diverse and low-emission transportation options is essential, as transportation represents 49% of Dufferin's total emissions.

This means making climate-friendly transportation options convenient, accessible, and maintainable for community members. In 2022, Dufferin County:



Installed 20 Level-2 electric vehicle charging stations throughout the County in collaboration with Town of Orangeville and the Township of Melancthon



Completed a Feasibility Study and began progressing towards the implementation of a regional electric vehicle charging station network with the Counties of Grey, Perth, Huron and Bruce.



Virtually visited classrooms at the Upper Grand District School Board to promote sustainable transportation options and electric vehicle awareness.



Hosted a Community Bike Ride on June 25 2022, with community patners including Sustainable Orangeville, Cycling Elements, Orangeville OPP, Orangeville Hydro, the Town of Orangeville, and the County's Forest and Waste Services Divisions.



Initiated the development of a Green Fleet Strategy through the Asset Management Initiative to electrify County fleet vehicles.

ACTION T1

Expand public transit options and support fleet electrification (See T5)

STATUS	SUB ACTION	PROGRESS NOTES
In Progress	Review bus routes and optimize connectivity and service within and between local and regional municipalities	2021 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.
Future Action	Advocate for increased GO transit service	Will support as opportunities arise.

ACTION T2

Increase public awareness of and education on climate friendly travel modes

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Develop an accessible educational campaign to prioritize active transportation and public transit, particularly for trips under 5km	Bike Month Scavenger Hunt and cycling safety campaign hosted from June 1 – 30, 2021.
		2022 Community Bike Ride hosted on June 25 2022.
		Workshop on Sustainable Transportation hosted with UGDSB in July 2022
		Ongoing social media promotion of active transportation options/benefits
Delayed	Develop an accessible educational campaign for trips over 10km to prioritize carpooling options (particularly for commuters) and telecommuting when possible	Workshop on Sustainable Transportation hosted with UGDSB in July 2022

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ACTION T3

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

STATUS	SUB ACTION	PROGRESS NOTES
Discontinued	Develop anti-idling campaigns to improve compliance with local anti-idling by-law	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.
Discontinued	Work with businesses and organizations to create anti-idling policies	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.
In progress	Promote and increase awareness of existing eco-driving courses and insurance programs	2022 Eco-driving courses and available insurance incentives promoted across Climate Action in Dufferin social media channels in March 2022



ACTION T4

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

STATUS	SUB ACTION	PROGRESS NOTES	
In progress	Partner with municipalities to develop a regional Electric Vehicle Strategy to achieve network connectivity	2021 Feasibility Study in development and regional EV survey distributed from Feb 1 – 15, 2022.	
	,	2022 Feasibility Study completed in May 2022.	
		Initiating Implementation Phase in progress.RFP developed for third-party implementation partner.	
Complete	Develop EV policy at the County level to ensure consistency throughout the development of a County charging network	2021 Electric Vehicle Charging Station Policy and User Fees passed at Council on September 9, 2021.	
Ongoing	Leverage funding opportunities to install charging stations throughout County	2021 Installation of Charge Up in Dufferin Network of 22 Level-2 2 Level-3 charging stations complete.	
		2022 20 Level 2 charging stations installed at 6 sites around the County in collaboration with Town of Orangeville and the Township of Melancthon	
Delayed	Work with local businesses and organizations to encourage low-emission and electric vehicles to be included in fleets	2021 & 2022 Likely to revisit in 2023 with action plan.	
Ongoing	Educate and raise awareness of the benefits of electric vehicles amoung residents and local businesses	2021 Education campaign implemented November 2021 including test-drive event, social media campaign, and webpage launch.	
		EV education workshops hosted Upper Grand District School Board in November 2021.	
		Applied to ZEVAI funding for an Electrifying Back Roads Campaign, but was unsuccessful	
		Promotion of Charge Up in Dufferin network and EV benefits across Climate Action in Dufferin platforms and at community events	
		Sustainable Transportation workshop hosted with Upper Grand District School Board in July 2022.	

ACTION T5

Encourage the electrification of public transit vehicles and fleet vehicles

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	Work with local municipalities to develop strategy to transition to electric public transit fleets	Green Fleet Strategy in development through the Asset Management Initiative Town of Orangeville is conducting a feasibility study to determine options for fleet electrification
Future Action	Investigate options to electrify school bus fleets	Will support as partnership and funding opportunities arise.

ACTION T6

Create accessible and walkable communities

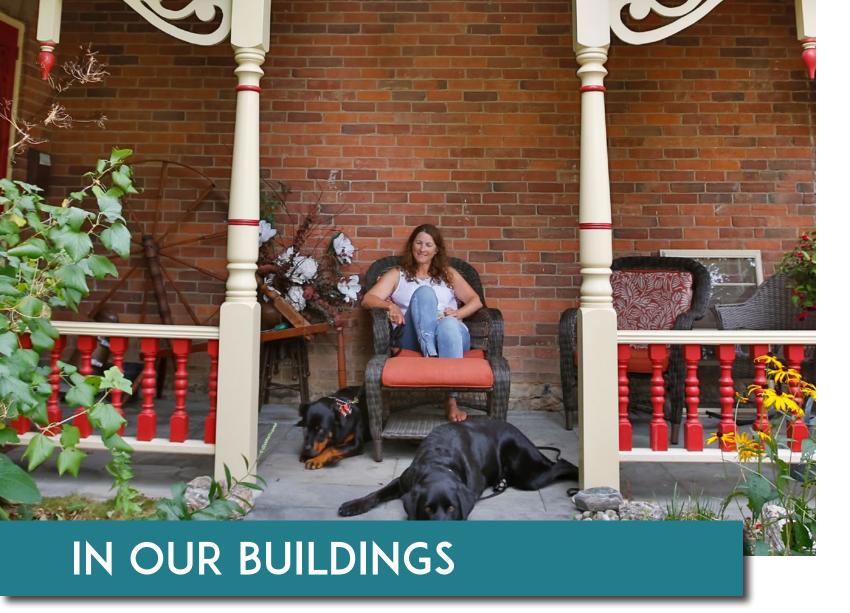
STATUS	SUB ACTION	PROGRESS NOTES
Future Action	Improve pedestrian crossing, comfortable walking route, and maps/ signage	Town of Orangeville exploring options to enhance active transportation routes including conversion of rail line to shared pathway.
In Progress	Coordinate and expand accessible trails, walking, and cycling infrastructure throughout the County	Rail Trail expansion project underway, Resurfacing expected to start in 2023. County Forest Division developed Outdoor Recreation Plan.

ACTION T7

Develop a TDM Plan and marketing strategy

STATUS	SUB ACTION	PROGRESS NOTES
Delayed	Create a TDM Plan in partnership with local employers and neighbouring municipalities	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.
Delayed	Develop an engagement process to include community members in the TDM planning process	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.





Residential, commercial, and industrial buildings account for 29% of Dufferin's total GHG emissions.

To reduce emissions Dufferin County has set a 2050 target of net-zero emissions buildings. In 2022, Dufferin County:



Joined the Ontario BetterHomes Consortium to leverage existing resources in the development of a municipally led financing program for deep energy retrofits.



Implemented a home energy efficiency campaign in November 2022, including a workshop for residents and the distribution of free home energy savings kits.

ACTION B1

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

STATUS	SUB ACTION	PROGRESS NOTES
Complete	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	2021 Completed a feasibility study for a deep energy retrofit financing program with Lightspark Software outlining existing housing stock and initial uptake analysis.
In Progress	Investigate options to develop municipally led financing program for residential deep energy and resiliency retrofits	2021 Exploration of financing options in progress.
		Joined the Ontario BetterHomes Consortium to leverage existing resources in the development of a municipally led financing program for deep energy retrofits. Engagement underway with local municipalties.
Future Action	Implement selected municipally led financing program for residential deep energy and resiliency retrofits with a strategic lens to address energy poverty	
Future Action	Support existing training programs for contractors to complete home energy work	
Ongoing	Educational campaign on home energy efficiency and fuel switching	Education campaign implemented throughout November 2022, including including workshop, distribution of free home energy savings kits, radio and social media campaign, and webpage launch.
Future Action	Explore options for customer utility data comparison	

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ACTION B2

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

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	Create resilience check-list for residences	Resilience measures for flood protection shared through Home Flood Protection campaign.
Ongoing	Improve homes and businesses capacity to manage stormwater on-site through education campaigns, trainings, programs, and on-site consultations	2022 Home Flood Protection campaign held throughout May 2022 including workshop, development of education video, radio and social media campaign, and webpage launch.
Early Stages	Support training programs for contractors to complete resilience work	2022 Exploring options to support through BetterHomes Consortium.

ACTION B3

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

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Educate building occupants and landlords on available energy retrofit programs and encourage participation in future financing options led by the County	Education campaign implemented throughout November 2022, including including workshop, distribution of free home energy savings kits. social media campaign, and webpage launch.
Delayed	Explore feasibility to require property standards by-law for maximum temperature in rented residences	2022 Case study review to be completed as student project in 2023

ACTION B4

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

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	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.)	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.
Early Stages	Prioritize climate resilient building designs (e.g. flood prevention strategies, passive cooling designs, expansion of hurricane clip program)	2022 Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.

ACTION B5

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

STATUS	SUB ACTION	PROGRESS NOTES
Discontinued	Investigate the potential for district energy systems to maximize energy efficiency	Current capacity constraints make this action infeasible at this time and ICI emissions locally are low, making this a lower-priority.
Discontinued	Work with local municipalities to review and enhance local Community Improvement Plans (CIP) to enable retrofits to commercial buildings	Current capacity constraints make this action infeasible at this time and ICI emissions locally are low, making this a lower-priority.

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ACTION B6

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

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Encourage ICI stakeholders to take advantage of energy efficiency programs and incentives for new and remodeled buildings	Climate and Energy Division shares programs, resources, and funding opportunities with ICI stakeholders as opportunities arise.
Ongoing	Support educational campaigns and training for owners and employees to maximize energy efficiency and options for retrofits	Climate and Energy Division shares programs, resources, and funding opportunities with ICI stakeholders as opportunities arise.





FOR OUR LAND

While agriculture accounts for 16% of Dufferin's GHG emissions, both natural and agricultural lands serve as carbon sinks and provide important services to the community.

Dufferin's natural systems play a key role in adapting to climate change by providing essential stormwater management and purification services, mitigating extreme heat, and supporting biodiversity. In 2022, Dufferin County:



Partnered with the County of Wellington to launch the Experimental Acres Farm Pilot to provide funding and support to 7 Dufferin farmers to adopt regenerative agriculture practices on a small scale.



Allocated \$50,000 in 2023 Budget to develop a Master Plan for the former DEEP site.



Implemented Home Flood Protection campaign in May 2022 including workshop, development of education video, radio and social media campaign, and webpage launch.

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

STATUS	SUB ACTION	PROGRESS NOTES
In progress	Complete a study detailing the barriers preventing the adoption of climate-friendly and resilient practices in agriculture and the values that facilitate adoption	2021 Initially had PhD student to do this work; however, their area of research changed
		Climate and Energy Division shares programs, resources, and funding opportunities with ICI stakeholders as opportunities arise.
In progress	Support evolving research opportunities investigating the carbon sequestration potential of agriculture sector	2021 Experimental Acres Project in progress with the County of Wellington.
		2022 Support of Ontario Agroforest Network application to the Living Labs Initiative.
		Research on soil carbon sequestration underway as component of Experimental Acres Pilot program.
Ongoing	Encourage regenerative and ecological agriculture practices where applicable such as no-till and cover crops to control run off, tile, or controlled drainage	2021 Experimental Acres Project in progress with the County of Wellington.
	systems	Hosted Agriculture Roundtable on September 15th promoting the Rural Water Quality Program.
		2022 7 Dufferin farmers participated in 1st year of Experimental Acres Pilot. Applications for 2023 cohort participants opened in December 2022.
Ongoing	Encourage mapping of existing crop varieties against future climate projections	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.

ACTION L2

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

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Promote co-learning and networking opportunities for sustainable and resilient agriculture, energy efficiency, crop diversification, new technologies, and water conservation	Experimental Acres Project in progress with the County of Wellington. Hosted Agriculture Roundtable on September 15th promoting the Rural Water Quality Program. 2022 7 Dufferin farmers participated in 1st year of Experimental Acres Pilot. Applications for 2023 cohort participants opened in December 2022. Climate and Energy Division shares programs, resources, and funding opportunities as opportunities arise.
Ongoing	Support a variety of educational opportunities tailored to diverse producers and their unique needs	2021 Experimental Acres Project in progress with the County of Wellington. Hosted Agriculture Roundtable on September 15th promoting the Rural Water Quality Program. 2022 7 Dufferin farmers participated in 1st year of Experimental Acres Pilot. Applications for 2023 cohort participants opened in December 2022. Climate and Energy Division shares programs, resources, and funding opportunities as opportunities arise.

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Encourage low-GHG energy alternatives on farms

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Explore on-site renewable energy production options	Promotion of resources as opportunities arise via Climate Action in Dufferin communication channels.
Delayed	Explore options to incentivize manure management and biogas recovery as an alternative fuel source	2022 Current capacity constraints make this action lower-priority at this time.

ACTION L4

Protect and enhance local natural assets

STATUS	SUB ACTION	PROGRESS NOTES
Complete	Complete a natural asset inventory for the County including a risk assessment	2021 Natural Asset Inventory was completedthrough the Municipal Natural Asset Initiative for Dufferin County and local municipalities.
Delayed	Develop municipal natural asset management plans based on inventory	2022 Scheduled to be completed by July 2024 by Finance Department.



ACTION L5

Increase tree coverage and protection in Dufferin County

STATUS	SUB ACTION	PROGRESS NOTES
In Progress	Create an urban forest/reforest strategy with climate resilient tree species	2022 Town of Orangeville currently developing an Urban Canopy Strategy.
Early Stages	Explore feasibility of developing a "Grown in Dufferin" tree supply program and or partner with conservation authorities to leverage existing nursery programs	\$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.
Early Stages	Amend the landscape regulations in both Zoning and Subdivision by-laws to increase tree protection and replacement requirement	Planner vacancy delayed initiation of action.
		ldentified as a component of forthcoming Tri-County Green Development Standards.
Delayed	Adopt both a private and heritage tree protection by-law	Planner vacancy delayed initiation of action.
		Identified as a summer intern project for 2023 to undertake survey of existing by-laws across municipalities and provide recommendations for next steps.
	Ensure tree planting requirements are executed through new construction	Initial research indicates Tri-County Green Development Standards should be avenue through which heritage tree protection is explored.



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

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Promote educational campaigns on options for and benefits of green infrastructure and low-impact development	Home Flood Protection campaign held throughout May 2022 including workshop, development of education video, radio and social media campaign, and webpage launch.
Ongoing	Support backyard habitat creation initiatives to protect native biodiversity Encourage uptake of natural stormwater management solutions such as raingardens, soak-away pits, bioswales, or permeable groundcovers (See P2)	2021 Hosted Introduction to Rainscaping Workshop with Credit Valley Conservation to encourage uptake of natural stormwater management solutions with 66 participants. 2022 Invasive Species Awareness Week social media campaign February 28 – March 7 2022.
Ongoing	Encourage uptake of natural stormwater management solutions such as raingardens, soak-away pits, bioswales, or permeable groundcovers (See P2)	2021 Hosted Introduction to Rainscaping Workshop with Credit Valley Conservation to encourage uptake of natural stormwater management solutions with 66 participants. 2022 Home Flood Protection campaign held throughout May 2022 including
		workshop, development of education video, radio and social media campaign, and webpage launch.

ACTION L7

Support conservation and rehabilitation of ecological systems in rural areas

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Support restoration of degraded lands using erosion control, organic and nutrient amendments	2021 Experimental Acres Project in progress with the County of Wellington. Hosted Agriculture Roundtable on September 15th promoting the Rural Water Quality Program.
		7 Dufferin farmers participated in 1st year of Experimental Acres Pilot. Applications for 2023 cohort participants opened in December 2022. Climate and Energy Division shares programs, resources, and funding opportunities as opportunities arise.
Future Initiative	Support conservation of marginal farmland to perennial grasses or trees	
Future Initiative	Support restoration of wetlands (See L8, P5)	

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Support water protection initiatives

STATUS	SUB ACTION	PROGRESS NOTES
Future Initiative	Support restoration of wetlands (See L7, P5)	
Future Initiative	Work with local municipalities to develop and/or update stormwater management plans	
Future Initiative	Work with local municipalities to develop and/or update stormwater management plans	





PLANNING OUR COUNTY

Dufferin County and local municipalities are planning to accommodate a population of 95,000 and 39,000 jobs to 2051.

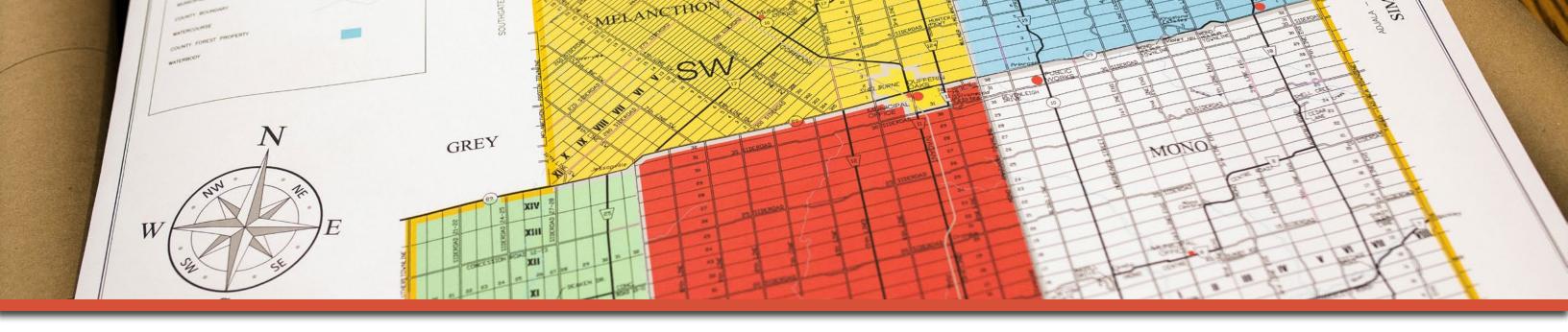
Planning policies and processes will play a significant role in reducing local GHG emissions in both new and existing communities, by addressing urban sprawl to create efficient systems for infrastructure, energy, transportation, and land use. In 2022 Dufferin County:



Initiated the development of tri-county green development standards in collaboration with the Counties of Wellington and Grey.



Supported development of Sustainability Framework as part of Municipal Comprehensive Review.



ACTION P1

Plan complete communities

STATUS	SUB ACTION	PROGRESS NOTES
In Progress	Prioritize the design of urban areas to reduce personal vehicle use, vehicle kilometers travelled, 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	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties. Municipal Comprehensive Review is currently in progress that addresses active transportation via Transportation Master Plan.
In Progress	Prioritize infill and high-density housing in the downtown core, commercial zones, and along transit routes through policies	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties. Municipal Comprehensive Review is currently in progress and will prioritize this action.

ACTION P2

Create green development standards (GDS) and practices

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	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	2022 Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.
Early Stages	Engage the building and development community to integrate experiences and leading practices into a GDS	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.
Early Stages	Create requirement for a 'climate impacts' section in all development applications and explore options to incentivize application of GDS by local developers	2022 Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.
Delayed	Embed GDS in the Official Plan, especially as an implementation tool to achieve goals concerning sustainability, health, growth, and infrastructure management	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties and will be integrated into a future Official Plan update.
Early Stages	Work with member municipalities to integrate GDS into development standards with a focus on regional alignment	2022 Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.

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ACTION P3

Minimize flood risks in communities through enhancement of green infrastructure

STATUS	SUB ACTION	PROGRESS NOTES
Completed	Conduct a study to identify priority areas to mitigate extreme heat across private and public properties	Preliminary project completed by students at University of Guelph mapping tree canopy cover overlaid with marginalization index.
Future Initiative	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	

ACTION P4

Minimize flood risks in communities through built infrastructure

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	Increase capacity to apply climate lens to infrastructure planning for stormwater management	This is being integrated into Local Municipal Implementation Plans that are currently in development.
Early Stages	Update floodplain mapping and develop/update natural stormwater management plans to ensure no increase in vulnerability	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.

ACTION P5

Minimize flood risks in communities through enhancement of green infrastructure

STATUS	SUB ACTION	PROGRESS NOTES
Early Stages	Enhance the amount of green space/ permeable surface incorporated into all communities	Early stages of a Tri-County Green Development Standard in collaboration with Grey and Wellington Counties.
Future Initiative	Support an increase in tree coverage through planning policy (See L5)	
Future Initiative	Strategically manage natural assets through the directives of the natural asset management plan (See L4)	
Ongoing	Increase uptake of low impact development technologies on private and public properties (See L6)	Home Flood Protection campaign held throughout May 2022 including workshop, development of education video, radio and social media campaign, and webpage launch.
Future Initiative	Support wetland restoration and creation initiatives (See L8)	

ACTION P6

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

STATUS	SUB ACTION	PROGRESS NOTES
Delayed	Determine renewable energy potential in Dufferin, including potential sites for wind and solar installations	Current capacity constraints have delayed initiation of this action.
Delayed	Identify options for local energy generation and storage options, such as microgrids that can also serve as back-up power supply during emergencies	2022 Current capacity constraints have delayed initiation of this action.
Delayed	Collaborate with the agricultural community and energy specialists to identify local options for on-farm renewable energy (See L3)	2022 Current capacity constraints have delayed initiation of this action.
Delayed	Identify opportunities for low GHG fuel use in the community such as hydrogen and renewable natural gas	2022 Current capacity constraints have delayed initiation of this action.

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ACTION P7

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

STATUS	SUB ACTION	PROGRESS NOTES
Future Initiative	Explore potential sites for a district energy system	
Delayed	Create a municipal energy map	2022 Current capacity constraints have delayed initiation of this action.
Future Initiative	Conduct an initial assessment to identify local fuel sources such as biomass or biogas products (See L3)	

ACTION P8

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

STATUS	SUB ACTION	PROGRESS NOTES
Delayed	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	2022 Current capacity constraints have delayed initiation of this action.
Future Initiative	Promote financing opportunities for neighbourhood level energy generation and ownership, such as solar installations	2022 Current capacity constraints have delayed initiation of this action.



Although waste only accounts for 2% of Dufferin's total GHG emissions, the County can continue to support waste initiatives to increase the reduction of organic waste and local circular economy initiatives.

In 2021, Dufferin County:



Composted 2,930 tonnes of organics through Dufferin Waste's Green Bin program.



Engaged over 100 people through Dufferin Waste's Plan to Save, Reduce Food Waste campaign, in which participants built skills to reduce food waste in their households.



Over 700 social media engagements on Dufferin Waste's Clothes'ing the Loop on Textiles campaign.

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ACTION W1

Increase diversion of organic waste

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Work with Waste Services to increase rates of, and participation in, composting through educational campaigns	2021 3,200 tonnes of organics through Dufferin Waste's Green Bin program.
		2022 2,930 tonnes of organics through Dufferin Waste's Green Bin program.
		2265 tonnes of yard waste diverted through Dufferin Waste
		Green Bin program promtoed through multi-residential engagement and neighbourhood campaign.
		BYC engagement
Ongoing	Work with Waste Services to support food waste reduction efforts	2021 Dufferin Waste engaged over 100 people through the Plan to Save, Reduce Food Waste campaign.
		2022 Dufferin Waste's Love Your Leftovers Draw reached 150 people.
		Climate Action in Dufferin amplified the Love Food, Hate Waste, campaign in March 2022.
Ongoing	Develop organic waste diversion educational opportunities for ICI stakeholders	2022 Service & engagement visits to 150 businesses.

ACTION W2

Support local circular economy initiatives

STATUS	SUB ACTION	PROGRESS NOTES
	Support individuals, businesses, and industry efforts to reduce waste through circular economy initiatives	Over 50 business and organization promtoed 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. Textiles feature blog on Climate Hub.
	Work with community stakeholders to increase knowledge of and participation in circular economy initiatives	Over 50 business and organization promtoed 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.

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EMPOWERING OUR COMMUNITY

The County is committed to building community capacity, addressing systems of inequality inequality, and, ultimately, empowering all community members to participate in and benefit from climate action.

In 2022, Dufferin County:



Launched 2 new webpages for Home Flood Protection and Residential Energy Efficiency for residents to access tools, resources, and local stories to support them in taking action.



Developed an annual Climate Engagement Strategy to empower residents to participate in the implementation of the Dufferin Climate Action Plan.



Attended 5 community events, including Orangeville Lions Home Show, Blues and Jazz Festival, Orangeville Rotary Ribfest, Let's Make Mono Shine, and Melancthon Day.



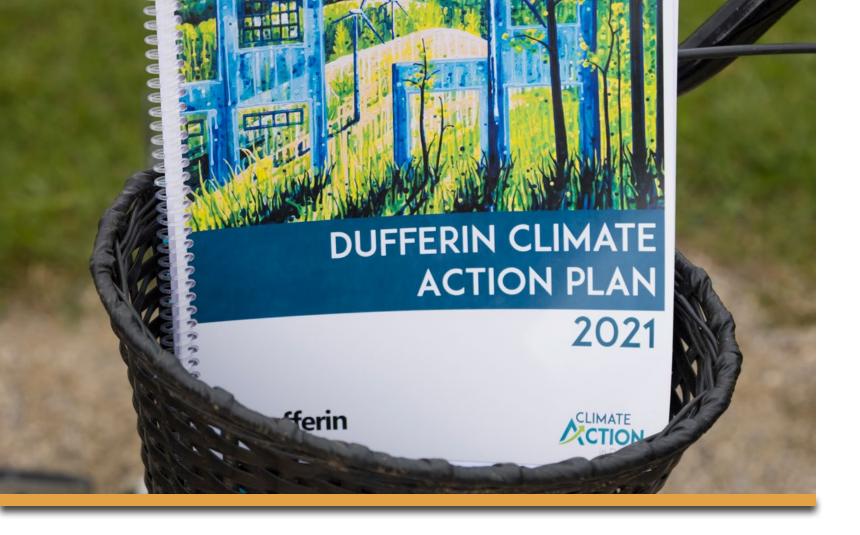
Hosted 7 workshops and events including an Earth Day action workshop, Community Bike Ride, Home Flood Protection webinar, Energy Efficiency Workshop, Storytime at Shelburne Library, Coffee, Tea, and Connection at Grand Valley Library, and a Climate Solutions Fair.

ACTION C1

Provide capacity building opportunities for residents, businesses, and institutions

STATUS	SUB ACTION	PROGRESS NOTES
Ongoing	Provide resources and learning opportunities for residents with detailed information on tools, resources, and supports to reduce GHG emissions	2021 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 webpages 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 Wellington, and Upper Grand District School Board.

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STATUS	SUB ACTION	PROGRESS NOTES
Complete	Create a "Community Climate Fund" to support existing programs in the community for organizations undertaking environmental or social justice work	2021 Climate Action stream incorporated into Community Grants Program.
Delayed	Develop a climate change toolkit for businesses to assist with climate change impact analysis and continuity planning for extreme weather	Current capacity constraints have delayed initiation of this action.
Delayed	Develop a green procurement guide for ICI stakeholders	2022 Current capacity constraints have delayed initiation of this action.

ACTION C2

Create a community culture around climate action

STATUS	SUB ACTION	PROGRESS NOTES
Complete	Create a "Climate Engagement and Cultural Plan" with diverse community groups, particularly with equity and sovereignty seeking groups	Annual communications strategy developed; however, it did not include consultation. Intention to co-create engagement strategy with DC4 during 2025 plan update.
Delayed	Conduct market research to identify barriers and motivations for desired sustainable behaviours	Student project to be completed as opportunities arise.
Ongoing	Promote educational campaigns to encourage sustainable behaviours, such as supporting local food and farming	2021 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.
Complete	Promote local stories and highlight success in the community	Spotlighted local climate champions through the Climate Stories of Dufferin Project. Ongoing amplification of submitted stories.
Complete	Establish a multi-level Climate Ambassadors Program to facilitate the inclusion of all community members in climate action initiatives	Proposal submitted to ICLEI Canada's Agents of Change Project.
		Youth Climate Activation Circle established through ICLEI Canada's Agents of Change Project.

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Looking ahead to 2023, the Climate and Energy Division will advance the following priority actions:

DUFFERIN CLIMATE ADAPTATION STRATEGY

In 2022 the Climate and Energy Division completed a draft of the Dufferin Climate Adaptation Strategy. The goal of the Strategy is to compliment the Dufferin Climate Action Plan by proactively identifying opportunities to advance climate resilience in our community's social, economic, built and natural systems. The development of this Plan was facilitated by the County's participation in the ICLEI Canada-led Advancing Adaptation project and contributed to by the Climate Adaptation Working Group, comprised of 25 community representatives.

In 2023 the Dufferin Climate Adaptation Strategy will be brought to Council for adoption and work will begin to implement the actions outlined in the Strategy.

MUNICIPAL CLIMATE ACTION IMPLEMENTATION PLANS

In 2022 the Climate and Energy Division collaborated with the Township of Mono to develop the Mono Climate Action Plan, adopted by Council on September 13, 2022. The Mono Climate Action Plan aligns with the Dufferin Climate Action Plan and is intended to maximize the efficiency, reach, and cost-effectiveness of climate action initiatives. Throughout 2023, the Climate and Energy Division will work with other local municipalities to develop their own climate action implementation plans.

YOUTH CLIMATE ACTIVATION CIRCLE

Dufferin's Youth Climate Activation Circle was launched in October 2022 to empower youth ages 16 – 25 to advance local climate solutions. Throughout 2023 the Climate and Energy Division will support 8 Youth Climate Ambassadors in designing and implementing a local climate action project, complete a program evaluation, and recruit for the 2024 cohort.

MASTER PLAN FOR 193-ACRE PROPERTY

The County of Dufferin currently owns a 193-acre parcel of land and is exploring options to utilize the land to support agriculture innovations in alignment with the Dufferin Climate Action Plan. In the 2023 budget, \$50,000 has been allocated for the development of a master plan for the parcel of land. The plan will investigate the potential of transforming the 193-acre parcel into a demonstration site for regenerative agriculture practices, and to explore revenue-generating activities to sustain the project into the future.

OTHER 2023 PRIORITIES

- Implement Regional EV Charging Network Strategy with partner municipalities
- Continue delivery of Experimental Acres Pilot to support farmers adopt regenerative agriculture practices
- Develop and deliver climate change training for County and local municipal staff
- 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 land, water, and air, stimulates local economies, creates healthy and equitable neighbourhoods, and is resilient in the face of climate change.

THE CLIMATE IS CHANGING. SO MUST WE.